

Last updated: 17 January 2026

## **TACHYSPHEX**

*Tachysphex* Kohl, 1883a:166. Type species: *Tachysphex filicornis* Kohl, 1883 [= *Tachytes fugax* Radoszkowski, 1877], designated by Bingham, 1897:192.

*Schistosphex* Arnold, 1922:137. Type species: *Schistosphex breijeri* Arnold, 1922 [= *Tachysphex marshalli* R. Turner, 1917], by original designation and monotypy.

*Atelosphex* Arnold, 1923a:177. Type species: *Atelosphex miscophoides* Arnold, 1923 [= *Tachysphex brevipennis* Mercet, 1909], by original designation and monotypy.

Revisions: Arnold, 1923a, 1924 (southern African species); Pulawski, 1971 (Palearctic Region), 1974a (South America), 1977a (Australian Region), 1988 (North America); Krombein and Pulawski, 1994 (Sri Lanka); Pulawski, 2007a (Africa including Madagascar and Arabian Peninsula); Straka, 2016 (*pompiliformis* species group).

Keys: Alayo Dalmau, 1976:7 (Cuba); Tsuneki, 1983a:67 (Philippines and Japan); Hinrichsen and Saure, 1997:31 (females of black German species).

Nesting habits: Alcock, 1980b.

Review of biology: Kazenas, 2001b:153.

Biological monograph: Kurczewski, 2010 (North American, Central American, and Caribbean species).

### **1. *aborigenus* Pulawski**

*Tachysphex aborigenus* Pulawski, 1977a:312, ♀, ♂. Holotype: ♀, Australia: Western Australia: Perth (BMNH). – Cardale, 1985:238 (in catalog of Australian Sphecidae).

### **2. *aburi* Pulawski**

*Tachysphex aburi* Pulawski, 2007a:79, ♀, ♂. Holotype: ♀, Ghana: Aburi ca 35 km north of Accra (CAS).

### **3. *acanthophorus* Pulawski**

*Tachysphex acanthophorus* Pulawski, 1982b:39, ♀, ♂. Holotype: ♀, USA: Arizona: Cochise County: Willcox (UCD). – S. Frommer, 1988:96 (California: Riverside County: Deep Canyon); Pulawski, 1988a:187 (in revision of Nearctic *Tachysphex*); Amarante, 2002:34 (in catalog of Neotropical Crabronidae); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### **4. *actites* Pulawski**

*Tachysphex actites* Pulawski in Krombein and Pulawski, 1994:81, ♀, ♂. Holotype: ♀, Thailand: Rayong Province: Island of Ko Samet (CAS).

### **5. *acutemarginatus* Strand**

*Tachysphex acutemarginatus* Strand, 1910a:162, ♀. Holotype: ♀, Paraguay: Asunción (ZMHU). – Strand, 1927:255 (in list of species described by the author); Pulawski, 1974a:51 (in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Amarante, 1993:19 (northeastern Brazil), 2002:34 (in catalog of Neotropical Crabronidae).

### **6. *acutus* (Patton)**

*Larra acuta* Patton, 1880b:390, ♀. Syntypes: USA: Connecticut: New Haven County: Waterbury (destroyed). Neotype: ♀: Connecticut: Lichtfield County: Colebrook, August 1918, W. M. Wheeler (MCZ), designated by Pulawski, 1988a:34. – Patton, 1880b:388 (in checklist of North American Larrini); Kohl,

1885:240 (in checklist of World *Larra*); Cresson, 1887:277 (in catalog of North American Hymenoptera). – As *Tachysphex acutus*: W. Fox, 1894a:521 (new generic assignment, in revision of North American Larrinae); C. Robertson, 1894:455 (visiting flowers of *Solidago canadensis* Linnaeus, as *acuta*); Dalla Torre, 1897:677 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); H. Smith, 1908:380 (in revision of Nebraskan Sphecidae); J. Smith, 1910:683 (in new list of insects of New Jersey: N. Woodbury); F. Williams, 1914a:171 (in revision of Larrinae of Kansas, as *acuta*); Rohwer, 1916b:687 (in catalog of Hymenoptera of Connecticut); Mickel, 1918b:423 (in catalog of Nebraskan Sphecidae); Rohwer *in* Viereck, 1925:687 (in key to Sphecidae of Connecticut; not yet found in the State); Robertson, 1928:71, 92, 121, 128, 163, 195, 201 (floral records); Brimley, 1938:443 (North Carolina: Fayetteville); Rau, 1938b:543 (sleeping habits, as *acuta*); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Krombein, 1979b:1627 (in catalog of North American Hymenoptera); Finnamore, 1982:101 (in Sphecidae Fauna of Southern Quebec); Pulawski, 1988a:34 (in revision of Nearctic *Tachysphex*); Kurczewski, 1989:44 (nesting habits); Spofford, Kurczewski, and Downes, 1989:257, 260 (summary of records for nest parasites *Phrosinella fulvicornis* (Coquillett) and *Taxigramma heteroneura* (Meigen), miltogrammine flies); Kurczewski and Acciavatti, 1990:60 (New York: Cayuga County); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Kurczewski, 1998d:250 (pine barrens in upstate New York), 1998e:252 (the original type material might have been *Tachysphex*, current usage of name recommended); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Manitoba, New Brunswick, Ontario, Quebec, first records from Alberta and Saskatchewan: no specific locality).

*Tachysphex bruesi* Rohwer, 1911b:577, ♀. Holotype: ♀, USA: Wisconsin: Milwaukee County: no specific locality (USNM). Synonymized with *Tachysphex acutus* by G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950.

As *Tachysphex laevifrons*: Harrington, 1902:221 (Canada: Ontario: Ottawa), corrected to *Tachysphex acutus* by Buck, 2004:75.

As *Tachysphex sepulcralis*: Krombein, 1958a:52 (USA: West Virginia: Lost River State Park), corrected to *Tachysphex acutus* by Pulawski, 1988a:34.

### 7. *adjunctus* Kohl

*Tachysphex adjunctus* Kohl, 1885a:362, ♂. Holotype: ♂, Spain: no specific locality (NHMW). – Kohl, 1885a:356 (in key to Palearctic *Tachysphex*); Dalla Torre, 1897:677 (in catalog of world Hymenoptera); Antiga and Bofill, 1904:10 (in catalog of Catalanian Hymenoptera); Mercet, 1910b:165 (listed from Spain, as *rufipes* var. *adjunctus*); Gribodo, 1924a:267 (Libya: Bir Gandula, determination tentative); Guiglia, 1934b:303 (Libya: bibliography and summary of locality records); de Beaumont, 1936a:196 (in revision of French *Tachysphex*); Giner Marí, 1943a:141 (in Sphecidae Fauna of Spain, as *spoliatus* var. *adjunctus*); de Beaumont, 1947c:669 (in key to Mediterranean species of *bicolor* group), 1950f:405 (Algeria), 1953b:14 (variation), 1955a:182 (Morocco); Ceballos, 1956:375 (in catalog of Hymenoptera of Spain), 378 (as *spoliatus* var. *adjunctus*); de Beaumont, 1956a:198 (Libya); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Suárez, 1959:57 (Spain: Almería Province); de Beaumont, 1960b:238 (Libya), 1962b:26 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Diniz, 1964a:5 (Portugal: Rezende, Seixal, Sines); Pulawski, 1971:210 (in revision of Palearctic *Tachysphex*); Erlandsson, 1974:70 (Spain); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Gayubo, 1982a:100 (northern Spain: Sierra de Béjar), 1982f:250 (Spain: Cádiz Province: San Roque); Gayubo and Tormos, 1984:14 (Spain: Valencia Province); Gayubo, 1984b:83 (Spain: Salamanca Province); Gayubo and Tormos, 1986a:12 (Spain: **Castellón**: Castellón de la Plana); Asís and Jiménez, 1988:271 (Spain: Castellón Province); Gayubo and Mingo, 1988:77 (Spain); Dollfuss, 1989:13

(type material in NHMW); Gayubo, Asís, and Tormos, 1990a:17 (Spain); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); K. Schmidt and Bitsch *in* Bitsch et al., 2001:237 (in Sphecidae Fauna of Western Europe); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Baños-Picon, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park); Ben Khedher, Yildirim, and Braham, 2020b:310 (in Tunisia known from several localities); Cross, Baldock, and Wood, 2021:40 (in catalog of Sphecidae *sensu lato* of Portugal); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:204 (in revision of Sphecidae *sensu lato* of Europe).

As *Tachysphex denisi* de Beaumont, 1936a:197, ♀ only, corrected to *Tachysphex adjunctus* by de Beaumont, 1953b:14.

### 8. *adventus* Pulawski

*Tachysphex adventus* Pulawski, 1974a:32, ♀, ♂. Holotype: ♂, Brazil: Mato Grosso: Fazenda Itaquê: Boa Esperanca do Sul (Mus. Zool. Univ. São Paulo). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Amarante, 1993:19 (northeastern Brazil); Amarante, 2002:34 (in catalog of Neotropical Crabronidae); Menezes de Jesus, Onody, dos Santos Ramos, de Oliveira Andrade, Doria dos Santos, and Ferreira Brandão, 2019:2 (holotype and paratypes in Mus. Zool. Univ. São Paulo).

### 9. *aemulus* Kohl

*Tachysphex aemulus* Kohl, 1906a:216, ♀, ♂. Syntypes: Yemen: Aden: Ras Fartak; Socotra: Abd el Kuri (NHMW). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Dollfuss, 1989:13 (type material in NHMW); Seyoum and Pulawski, 2001:323 (potential control agent of acridid pests in Ethiopia; Ethiopia: Sidamo: 20 km north of Moyale at 3°41'N 38°53'E, 35 km north of Moyale at 3°43'N 38°50'E, 120 km north of Moyale at 4°09'N 38°16'E); Pulawski, 2007a:81 (in revision of African *Tachysphex*); Roche, 2007a:79 (in checklist of Egyptian Crabronidae), 2007b:4 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, identification needs confirmation); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:353 (in new catalog of Sphecidae of Saudi Arabia); Gadallah, 2020b:49 (in list of aculeate wasps of Arabian Peninsula).

*Tachysphex liriformis tenax* Pulawski, 1971:311, ♀, ♂. Holotype: ♀, Israel: Jerusalem (originally H. Bytinski-Salz coll., now Tel Aviv Univ.). Synonymized with *Tachysphex aemulus* by Pulawski, 2007a:81. – de Beaumont, Bytinski-Salz, and Pulawski, 1973:11 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Guichard, 1980:227 (Oman).

### 10. *aequalis* W. Fox

*Larra rufitarsis* Cameron, 1889a:50, ♂, junior secondary homonym of *Tachysphex rufitarsis* (Spinola, 1851). Holotype: ♂, Mexico: Sinaloa: Presidio near Mazatlán (BMNH). Synonymized with *Tachysphex aequalis* by Bohart and Menke, 1976:272 and with *Tachysphex mundus* by Pulawski *in* Krombein, 1979b: 1632. – Dalla Torre, 1987:672 (in catalog of world Hymenoptera); Ashmead, 1899d:249 (in checklist of North American Sphecidae, as *rubritarsis*).

*Tachysphex aequalis* W. Fox, 1894a:517, ♂. Lectotype: ♂, USA: Washington: no specific locality (ANSP), designated by Cresson, 1928:43. – Dalla Torre, 1897:677 (in catalog of world Hymenoptera); G. Bohart

in Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); Horning and Barr, 1970:103 (USA: Idaho: Craters of the Moon National Monument); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski in Krombein, 1979b:1632 (as new synonym of *Tachysphex mundus*); Pulawski, 1988a:172 (as valid species, in revision of Nearctic *Tachysphex*); Amarante, 2002:34 (in catalog of Neotropical Crabronidae); Ratzlaff, 2016:26 (Canada: British Columbia: from Pulawski, 1988 and Blades and Maier, 1992); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality). – **As *Tachysphex mundus aequalis***: Rust, Menke, and Miller, 1985:46 (new status, California: Channel Islands).

*Tachysphex opwanus* Rohwer, 1911b:574, ♂. Holotype: ♂, USA: Colorado: Jefferson County: Golden (USNM). Synonymized with *Tachysphex aequalis* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 and Pulawski, 2007a:172, and with *Tachysphex mundus* by Pulawski in Krombein, 1979b:1632.

*Tachysphex washingtoni* Rohwer, 1917b:172, ♀. Holotype: ♀, USA: Washington State: Columbia River: Grand Coulee (USNM). Synonymized with *Tachysphex aequalis* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 and Pulawski, 2007a:172, and with *Tachysphex mundus* by Pulawski in Krombein, 1979b:1632.

### 11. *aethiopicus* Arnold

*Tachysphex Panzeri* var. *aethiopicus* Arnold, 1923a:167, ♀, ♂. Lectotype: ♂, Zimbabwe: Sawmills (SAM), designated by Pulawski, 2007a:83. – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae), 1951:157 (Ghana: Labadi); Hancock, Chahwanda, and Mhlanga, 1995:40 (syntype in Bulawayo Museum). – **As *Tachysphex aethiopicus***: Pulawski in R. Bohart and Menke, 1976:272 (full species status); Gess, 1981:19 (South Africa; nesting in friable soils); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:83 (in revision of African *Tachysphex*).

### 12. *aethiops* (Cresson)

*Larrada aethiops* Cresson, 1865b:465, ♀ (as *Aethiops*, incorrect original capitalization). Lectotype: ♀, USA: Colorado Territory: no specific locality (ANSP), designated by Cresson, 1916:95. – **As *Larra aethiops***: Patton, 1879:354 (new generic assignment, USA: northwestern Kansas), 1880b:389 (in checklist of North American Larrini); Kohl, 1885a:240 (in checklist of world *Larra*); Cresson, 1887:277 (in catalog of North American Hymenoptera); Ashmead, 1890:33 (in checklist of Hymenoptera of Colorado); Bridwell, 1899:208 (Kansas: no specific locality). – **As *Tachysphex aethiops***: W. Fox, 1894a:529 (new generic assignment, in revision of North American Larrinae); Dalla Torre, 1897:677 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Rohwer, 1908a:223 (Colorado); G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); Krombein, 1958f:188 (in supplement to catalog of North American Hymenoptera); Evans, 1970:489 (Wyoming: Jackson Hole, preying on immature grasshoppers), 497; Horning and Barr, 1970:103 (USA: Idaho: Craters of the Moon National Monument); Elliott and Kurczewski, 1973:80 (Alberta: near Whitecourt); Evans, 1973c:149 (nesting habits); Steiner, 1973:23 (Canada: Northwest Territories: Fort Providence, Frank Channel, Hay River, Prelude Lake, Yellowknife); Alcock, 1974a:329 (nesting behavior); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Krombein, 1979b:1627 (in catalog of North American Hymenoptera); Finnamore, 1982:103 (in Sphecid Fauna of Southern Quebec); O'Brien, 1987:71 (Michigan: Upper Peninsula; nesting habits); Pulawski, 1988a:26 (in revision of Nearctic *Tachysphex*); Finnamore, 1997:888 (Canada: Yukon); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario); Ratzlaff, 2016:26 (Canada: British Columbia: from Krombein,

1979 and Pulawski, 1988); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Alaska: no specific locality; Canada: Alberta, British Columbia, Northwest Territories, Ontario, Quebec, Saskatchewan, Yukon Territory, first record from Manitoba: no specific locality).

### 13. *agilis* (F. Smith)

*Tachytes agilis* F. Smith, 1856:301, ♂. Holotype or syntypes: ♂, South Africa: Kwazulu-Natal: Port Natal, now Durban (BMNH). – Radoszkowski, 1881:210 (Angola); Dalla Torre, 1897:686 (in catalog of world Hymenoptera). – **As *Tachysphex agilis***: R. Turner, 1917d:43 (new generic assignment); Arnold, 1923a:175 (recorded from Afrotropical Region but unknown to the author); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2007a:88 (in revision of African *Tachysphex*).

### 14. *agnus* Pulawski

*Tachysphex agnus* Pulawski, 1971:152, ♀, ♂. Holotype: Tunisia: Djerba (RMNH). Paratypes: Algeria, Israel, Turkey. – de Beaumont, Bytinski-Salz, and Pulawski, 1973:8 (Israel); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Dollfuss, 1989:13 (paratype in NHMW); Pulawski, 2007a:90 (in revision of African *Tachysphex*); Ljubomirov and Yildirim, 2008:199 (in catalog of Crabronidae of Turkey); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:353 (in new catalog of Sphecidae of Saudi Arabia); Yıldırım, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Ben Khedher, Yildirim, and Braham, 2020b:310 (in Tunisia known from several localities); Gadallah, 2020b:49 (in list of aculeate wasps of Arabian Peninsula); Kaplan and Yildirim, 2021:61 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:204 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

### 15. *alayi* Pulawski

*Tachysphex alayi* Pulawski, 1974a:84, ♀, ♂. Holotype: ♀, Cuba: Oriente: Juraguya near Guantanamo (USNM). – Alayo Dalmau, 1976:7 (in key to Cuban *Tachysphex*), 22 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Krombein, 1979b:1632 (in catalog of North American Hymenoptera); Elliott, Kurczewski, Claflin, and Salbert, 1979:356 (Bahama Islands: San Salvador Island, prey); Pulawski, 1988a:198 (in revision of Nearctic *Tachysphex*); Elliott, 1992:45 (in list of wasps of Bahama Islands: occurring on Long Island and San Salvador); Snelling, 1992:14 (British Virgin Islands: Guana and Mona Islands), 1993:18 (British Virgin Islands: Guana Island), 19 (British Virgin Islands: Mona Island); Amarante, 2002:31 (in catalog of Neotropical Crabronidae); Genaro, 2004a:19 (nesting habits); Portuondo and Fernández, 2004:135 (Cuba: Sierra Maestra and Nipe-Sagua-Baracoa mountains); Snelling, 2005:291 (British Virgin Islands: Guana Island); Genaro, 2006:55 (in checklist of Cuban Sphecidae and Crabronidae; also: Florida, Bahamas, Isla de la Juventud, Little Cayman, Hispaniola, Mona, Jamaica, Guana Island, Puerto Rico, Virgin Islands); Perez-Gelabert, 2008:240 (in list of arthropods of island of Hispaniola).

### 16. *albocinctus* (Lucas)

*Tachytes albocinctus* Lucas, 1849:250, ♀ (as *albo cincta*, incorrect original division and termination, spelled *albocincta* on line 20 and plate 14). Holotype or syntypes: ♀, Algeria: La Calle (MNHN). – F. Smith, 1856:300 (in catalog of Hymenoptera in British Museum); Magretti, 1884c:588 (Eritrea or Sudan: Doka, Khor Gergabb); Kohl, 1885:399 (in checklist of world *Tachytes*); Dalla Torre, 1897:687 (in catalog of world Hymenoptera); Bingham, 1898a:104 (Yemen: Aden). – **As *Tachysphex albocinctus***: Kohl, 1885a:393 (tentative new generic assignment, original description copied); de Beaumont, 1940b:172 (new generic assignment, in revision of *Tachysphex* of Egypt); Honoré, 1942:55 (Egypt: Hawamdieh,

Mazghouna, Fayum = Kom Osheim); de Beaumont, 1947a:182 (in new revision of *Tachysphex* of Egypt), 1950f:405 (Algeria), 1955a:181 (Morocco), 1956a:197 (Libya); Suárez, 1959:57 (Spain: Almería Province); de Beaumont, 1960b:238 (Libya), 1962b:25 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Diniz, 1964a:5 (Portugal: nine localities); de Beaumont, 1965a:65 (Greece: Island of Crete: Canea), 1966:212 (Egypt: Amrye near Alexandria); Pulawski, 1971:427 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:13 (Israel); Erlandsson, 1974:70 (Spain); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Kazenas, 1978b:114, 127 (in key to Sphecidae of Kazakhstan and Central Asia); Gess, 1981:19 (South Africa: Eastern Cape Province: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils; nest structure, prey); Gayubo, 1982f:251 (Spain: Cádiz Province: Palmones, Puerto de Santa María, San Enrique de Guadiaro, San Roque), 1984c:362 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:15 (Spain: Valencia Province); Gayubo and Tormos, 1986a:12 (Spain: Castellón: Castellón de la Plana); Asís, Gayubo, and Tormos, 1987:15 (description of larva); Tormos and Jiménez, 1987b:316 (Spain: Valencia Province: Dehesa de El Saler); Asís and Jiménez, 1988:271 (Spain: Castellón Province); Gayubo and Mingo, 1988:77 (Spain); Asís, Gayubo, and Tormos, 1989a:234 (male behavior, nest, prey); Gayubo, Asís, and Tormos, 1990a:17 (Spain); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Krombein and Pulawski, 1994:13 (summary of nesting habits), 100 (in revision of Sri Lankan *Tachysphex*); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia), 156 (review of known biology); K. Schmidt and Bitsch *in* Bitsch et al., 2001:238 (in Sphecid Fauna of Western Europe); S. Gess and F. Gess, 2003:108 (South Africa: visiting flowers of *Feniculum vulgare* Mill., Apiaceae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Straka, 2005b:275 (Turkey: Adana: Çiçekli 25 km north of Adana, Karataş 48 km south of Adana; Antalya; Göynük 25 km southwest of Antalya); Pulawski, 2007a:92 (in revision of African *Tachysphex*); Roche, 2007a:86 (in checklist of Egyptian Crabronidae), 2007b:4 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:200 (in catalog of Crabronidae of Turkey, as *albocincta*); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero, as *albocincta*); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park, as *albocincta*); Murai and Amr, 2011:120 (recorded from Syria by Kohl, 1888, and de Beaumont, 1940); Yıldırım, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:33 (Turkey: Tunceli: Pülümür: Pülümür Vadisi); Straka and Schmid-Egger, 2017:418 (United Arab Emirates), 419 (color photograph); Gadallah, 2020b:49 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:77 (in catalog of *Tachysphex* of Iran); Ben Khedher, Yildirim, and Braham, 2020b:311 (Tunisia: new locality records from Kairouan, Mahdia, and Tataouine provinces); Cross, Baldock, and Wood, 2021:40 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:61 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:204 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Mawadda and Girish Kumar, 2023:110 (in checklist of Crabroninae of Northern India); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

*Tachytes ruficrus* Dufour, 1854a:378, sex not stated. Holotype or syntypes: Algeria: Pontéba, now Oumm ed Drou (MNHN). Synonymized with *Tachysphex albocinctus* by de Beaumont, 1940b:172 who studied types. – **As *Tachysphex ruficrus***: Kohl, 1885a:397 (tentative new generic assignment, original description copied); Dalla Torre, 1897:685 (new generic assignment, in catalog of world Sphecidae).

- Tachysphex syriacus* Kohl, 1888a:146, ♂. Holotype or syntypes: ♂, Syria: no specific locality (NHMW). Synonymized with *Tachysphex albocinctus* by de Beaumont, 1940b:172. – Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Morice, 1911:100 (Algeria: Biskra; La Calle, Le Tarf, Médéa; description of ♀); Arnold, 1923a:152 (Zimbabwe; redescription); Bristowe, 1925:280 (Somalia: Hargeisa; nest and prey); Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); Nadig, 1933:79 (Morocco; comparison with *Tachysphex heliopolites*); Arnold, 1935a:498 (South Africa: Kalahari); Guiglia, 1943c:76 (Ethiopia: Gamo Gofa: Sagan–Omo region), 1950:252 (Ethiopia: Gamo Gofa: Caschei); Dollfuss, 1989:13 (type material in NHMW).
- As *Tachysphex heliopolites*: Morice, 1897:306 (♂ only), corrected to *Tachysphex albocinctus* by de Beaumont, 1940b:172.
- Tachysphex mantiraptor* Ferton, 1912a:360, ♀, ♂. Lectotype: ♀, Algeria: La Calle, now El Kala (MNHN), designated by Pulawski, 2007a:92. Synonymized with *Tachysphex albocinctus* by de Beaumont, 1940a:172. – Ferton, 1912a:360 (nesting habits and prey), 402 (review of structural and behavioral characters), 1923:124 (nest, prey); E. Nielsen, 1933:293 (summary of nesting habits); Piek and Spanjer, 1986:190 (in list of Sphecidae with known prey); Steiner, 1986:103 (references to papers on nesting habits).
- Tachysphex peculator* Nurse, 1909:515, ♂. Syntypes: ♂, India: Gujarat: Deesa (BMNH). Synonymized with *Tachysphex syriacus* by R. Turner, 1917e:198, synonymy confirmed by Pulawski in Krombein and Pulawski, 1994:101. – Ramakrishna Aiyar, 1916:552 (in catalog of Indian aculeates described after Bingham, 1897). – As *Tachysphex albocinctus peculator*: Pulawski, 1971:431 (new status); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae).
- Tachysphex argyrius* Gussakovskij, 1933b:280, ♀, ♂ (♂ = *Tachysphex grandissimus*). Lectotype: ♀, Iran: mountains south of Bampur (ZIN), designated by Pulawski, 1971:432. Synonymized with *Tachysphex albocinctus peculator* by Pulawski, 1971:431. – Gussakovskij, 1952:237 (description of ♂). – As *Tachysphex albocinctus argyrius*: Myartseva, 1972a:78 (new status, Turkmenistan).
- Tachysphex dusmeti* Giner Marí, 1934:133 and 142, ♀, ♂. Syntypes: Spain: Valencia: Dehesa and Bétera (MNCN). Synonymized with *Tachysphex albocinctus* by de Beaumont, 1950d:18. – Giner Marí, 1943a:139 (in Sphecidae Fauna of Spain), 1945b:360 (eastern Morocco: Muley Rechid; as *Tachytes*); de Andrade, 1949:15 (Portugal: Évora, Vale de Gaio); nec de Beaumont, 1947a:184 and 1950f:405 (Algeria, corrected to *Tachysphex nubilipennis* by de Beaumont, 1950d:18); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain); Diniz, 1959:29 (Portugal: Evora, Vale de Gaio).
- As *Tachytes etruscus*: Bischoff, 1933:5 (Morocco: Rabat), corrected to *Tachysphex albocinctus* by Pulawski, 1962b:407.
- NOTE: Arnold (1923a:152) synonymized *Tachytes nigroannulatus* Bischoff with *Tachysphex syriacus*, but subsequently (1927:117) recognized that *nigroannulatus* is a valid species in *Tachytes*.

### 17. *alpestris* Rohwer

- Tachysphex foxii* var. *alpestris* Rohwer, 1908a:223, ♀. Holotype: ♀, USA: Colorado: Teller County: Florissant (USNM). – As *Tachysphex alpestris*: G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 (new status, in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Krombein, 1979b:1630 (in catalog of North American Hymenoptera); Elliott and Kurczewski, 1985:294 (prey); Rust, Menke, and Miller, 1985:46 (California: Channel Islands); Pulawski, 1988a:151 (in revision of Nearctic *Tachysphex*); Finnamore, 1997:888 (Canada: Yukon); Amarante, 2002:34 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario), 30 (distribution within Ontario), 46 (first record from Ontario: list of localities, some specimens are intermediate to *Tachysphex terminatus*); Amarante, 2005a:10 (correction to his 2002 catalog); Kurczewski, 2009:8 (review of known behavioral information), 81–86 (discussion of nesting

behavior); Ratzlaff, 2016:26 (Canada: British Columbia: from Krombein, 1979 and Pulawski, 1988); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Alaska: no specific locality; Canada: Alberta, British Columbia, Manitoba, Northwest Territories, Ontario, Saskatchewan, Yukon Territory: no specific locality).

As *Tachysphex terminatus* (present correction based on geographic distribution): Rohwer, 1917a:244 (California: Alameda County and Santa Barbara foothills), G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); Horning and Barr, 1970:103 (USA: Idaho: Craters of the Moon National Monument); also Evans, 1970:491 (Wyoming: Jackson Hole, nesting habits), corrected to *Tachysphex alpestris* by Kurczewski and Evans, 1986:270.

### 18. *ambiguus* Arnold

*Tachysphex ambiguus* Arnold, 1923a:156, ♀, ♂. Holotype: ♀, Zimbabwe: Bulawayo (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); Schouteden, 1930:91 (Zaire: Lubumbashi); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2007a:101 (in revision of African *Tachysphex*).

### 19. *ambositrae* Leclercq

*Tachysphex ambositrae* Leclercq, 1967b:67, ♀. Holotype: ♀, Madagascar: Ambositra (MNHN). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2003b:797 (in checklist of Malagasy Sphecidae), 2007a:104 (in revision of African *Tachysphex*); Madl, 2014a:979 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

### 20. *ampijoroa* Pulawski

*Tachysphex ampijoroa* Pulawski, 2007a:688, ♀, ♂. Holotype: ♂, Madagascar: Mahajanga: Ampijoroa (= Ankarafantsika) National Park at 16°19.16'S 46°48.8'E (CAS). – Madl, 2014a:979 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

### 21. *amplus* W. Fox

*Tachysphex amplus* W. Fox, 1894a:522, ♀, ♂. Lectotype: ♀, USA: Nevada: no specific locality (ANSP), designated by Cresson, 1928:43. – Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Cockerell, 1899a:143 (New Mexico); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); Gittins, 1960:136 (Idaho); Krombein, 1967c:392 (Nevada, Idaho); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Krombein, 1979b:1627 (in catalog of North American Hymenoptera); Rust, Menke, and Miller, 1985:46 (California: Channel Islands); Pulawski, 1988a:115 (in revision of Nearctic *Tachysphex*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Kurczewski, Kurczewski, and Abela, 2015:243 (California: San Luis Obispo County: Montana de Oro State Park); Ratzlaff, 2016:26 (first record from Canada: British Columbia: Southern Interior), 36 (British Columbia: Kamloops); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta: no specific locality).

*Tachysphex gillettei* Rohwer, 1911b:571, ♀. Holotype: ♀, USA: Colorado: Rocky Ford (USNM). Synonymized with *Tachysphex amplus* by G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950.

*Tachysphex neomexicanus* Rohwer, 1911b:575, ♀. Holotype: ♀, USA: New Mexico: Rio Ruidoso in White Mountains (USNM). Synonymized with *Tachysphex amplus* by G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950.

**22. *anceps* Arnold**

*Tachysphex anceps* Arnold, 1945:102, ♀. Holotype: ♀, Madagascar: Bekily (MNHN). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2003b:797 (in checklist of Malagasy Sphecidae), 2007a:105 (in revision of African *Tachysphex*); Madl, 2014a:979 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

**23. *angelicus* Pulawski**

*Tachysphex angelicus* Pulawski, 1988a:33, ♀, ♂. Holotype: ♀, USA: California: San Diego County: 1 mi south of Del Mar (CAS).

**24. *angustatus* Pulawski**

As *Tachysphex nitidus*: Gussakovskij, 1934a:10 (Mongolia), corrected to *Tachysphex angustatus* by Pulawski, 1971:170.

*Tachysphex angustatus* Pulawski, 1967a:405, ♀, ♂. Holotype: ♂, Turkmenistan: Ashkhabad (originally W.J. Pulawski coll.now CAS). Paratypes: Kazakhstan, Uzbekistan, Tajikistan, Turkey. – Pulawski, 1971:170 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Kazenas, 1978b:122, 132 (in key to Sphecidae of Kazakhstan and Central Asia); Islamov, 1986:526 (Uzbekistan: Tashkent Oblast'); Hensen and van Ooijen, 1987:12 (Turkey); Nazarova and Shomirsaidov, 1997:23 (Tajikistan: fruit tree orchards in Vakhsh River valley); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Esenbekova and Kazenas, 2000:29 (southeastern Kazakhstan: nine localities); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:65 (geographic distribution, collecting localities in Kazakhstan); Straka, 2005b:248 (Turkey: Malatya: Kale; Urfa: Halfeti); T. Li, Q. Li, and Cai, 2008:142 (first record from China); Ljubomirov and Yildirim, 2008:200 (in catalog of Crabronidae of Turkey); Kazenas, 2013b:494 (southeastern Kazakhstan: nearly everywhere in Ili River valley); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Mokrousov, Shlyakhtenok, and Grebennikov, 2016:25 (first record from Russia: Astrakhan' Oblast': near Volzhski village at 46.965°N 47.53°E); Antropov, 2017b:237 (in catalog of Crabroninae of Russia); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:69 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:61 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:205 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

**25. *angustus* Arnold**

*Tachysphex hermia* var. *angustus* Arnold, 1924:54, ♂. Syntypes: ♂, Zimbabwe: Bulawayo (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae). – As *Tachysphex hermia angustus*: R. Bohart and Menke, 1976:274 (new status, in checklist of world Sphecidae). – As *Tachysphex angustus*: Pulawski, 2007a:107 (full species status, in revision of African *Tachysphex*).

**26. *antennatus* W. Fox**

*Tachysphex antennatus* W. Fox, 1894a:516, ♀. Holotype: ♀, USA: Texas: no specific locality (ANSP). – Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Rohwer, 1911b:580 (in key to *Tachysphex antennatus*, *hitei*, *semirufus*, *tarsatus* and *wheeleri*); Cresson, 1928:43 (holotype in ANSP); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Krombein, 1979b:1628 (in catalog of North American Hymenoptera); Elliott and Kurczewski, 1985:293 (prey); Kurczewski and Kurczewski, 1987:408 (nesting habits; nest founded under

stones); S. Frommer, 1988:96 (California: Riverside County: Deep Canyon); Pulawski, 1988a:72 (in revision of Nearctic *Tachysphex*); Spofford, Kurczewski, and Downes, 1989:257, 260 (nest parasites: *Metopia luggeri* (Townsend) and *Metopia* sp., miltogrammine flies, summary of records for nest parasite *Sphenometopa tergata* (Coquillett), a miltogrammine fly); Spofford and Kurczewski, 1990:745, 746, 750 (nest parasites: *Metopia luggeri* (Townsend), *Phrosinella aurifacies* Downes, and *Sphenometopa tergata* (Coquillett), Sarcophagidae), 1992:997 (species of miltogrammine parasites listed); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario), 30 (distribution within Ontario), 46 (first record from Ontario: list of localities); Ratzlaff, 2016:26 (Canada: British Columbia: from Pulawski, 1988 and Buck, 2004); Vanoye-Eligio, Meléndez-Ramírez, Ayala-Barajas, Delfin-González, and Horta-Vega, 2019:8 (Mexico: Yucatán); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: British Columbia, Ontario: no specific locality).

*Tachysphex sculptiloides* F. Williams, 1914a:166, ♀. Holotype: ♀, USA: Kansas: Barton County: no specific locality (Kansas Univ). Synonymized with *Tachysphex antennatus* by Pulawski in Krombein, 1979b:1628. – G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); LaBerge, 1956:528 (holotype in Snow Entomological Museum); Arnaud, 1970:33 (in list of species described by F.X. Williams); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae).

*Tachysphex nigrocaudatus* F. Williams, 1914a:167, ♀, ♂. Holotype: ♀, USA: Kansas: Rush County: no specific locality (Kansas Univ). Synonymized with *Tachysphex antennatus* by Pulawski in Krombein, 1979b:1628. – Mickel, 1918b:424 (in catalog of Nebraskan Sphecidae); Brimley, 1938:443 (North Carolina: Aberdeen, Raleigh); G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); LaBerge, 1956:527 (holotype in Snow Entomological Museum); Arnaud, 1970:32 (in list of species described by F.X. Williams); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae).

### 27. *anthracinus* Pulawski

*Tachysphex anthracinus* Pulawski in Krombein and Pulawski, 1994:31, ♀, ♂. Holotype: Sri Lanka: Mannar District: Kondachchi (USNM).

### 28. *antillarum* Pulawski

*Tachysphex antillarum* Pulawski, 1974a:44, ♀, ♂. Holotype: ♀, Puerto Rico: Isla Verde (USNM). – Alayo Dalmau, 1976:7 (in key to Cuban *Tachysphex*); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 1988a:149 (in revision of Nearctic *Tachysphex*); Genaro and Sánchez, 1992b:218 (nesting and prey in Cuba); Sánchez and Genaro, 1992b:150 (Cuba: La Habana: Güines); Amarante, 2002:34 (in catalog of Neotropical Crabronidae); Portuondo and Fernández, 2004:135 (Cuba: Sierra Maestra); Genaro, 2006:55 (in checklist of Cuban Sphecidae and Crabronidae; also: Isla de la Juventud and Puerto Rico); Kurczewski, 2009:7 (review of known behavioral information), 81-86 (discussion of nesting behavior).

### 29. *anubis* Pulawski

*Tachysphex anubis* Pulawski, 1964:98, ♀, ♂. Holotype: ♀, Egypt: Abu Rawash northwest of Cairo (originally W. Pulawski coll., now CAS). – Pulawski, 1971:196 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2007a:110 (in revision of African *Tachysphex*); Roche, 2007a:73 (in checklist of Egyptian Crabronidae), 2007b:4 (in checklist of Egyptian

Ampulicidae, Sphecidae, and Crabronidae); Gadallah, 2020b:49 (in list of aculeate wasps of Arabian Peninsula).

### 30. *apakensis* Tsuneki

*Tachysphex apakensis* Tsuneki, 1971m:20, ♀, ♂. Holotype: ♀, China: Inner Mongolia: Apaka (originally K. Tsuneki coll., now USNM). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Nuhn and Menke, 1994:25 (holotype transferred to USNM); Hua, 2006:282 (in list of Chinese insects, geographic distribution).

### 31. *apicalis* W. Fox

*Tachysphex apicalis* W. Fox, 1893c:53, ♀, ♂. Lectotype: ♀, USA: southern Florida: no specific locality (ANSP), designated by Cresson, 1928:43. – W. Fox, 1894a:521 (in revision of North American Larrinae); Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); W. Schulz, 1906:212 (correction to Dalla Torre: page number); Rohwer, 1916b:687 (in catalog of Hymenoptera of Connecticut); Britton, 1920:340 (in checklist of insects of Connecticut); Rohwer *in* Viereck, 1925:687 (in key to Sphecidae of Connecticut; Poquonock); Brimley, 1938:443 (North Carolina: Aberdeen); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); Krombein and Evans, 1954:232, 1955:231 (Florida: Miami); Evans, 1964b:288 (description of larva); Krombein, 1964c:15 (nest, prey); Kurczewski, 1966c:436-453 (comparative male behavior); Krombein, 1967c:392 (in supplement to catalog of North American Hymenoptera); Kurczewski and Snyder, 1968:30, 31 (nesting in cliffs); Kurczewski, 1971:114 (in key to Floridan species); Pulawski, 1974a:48 (in revision of Neotropical *Tachysphex*); Alayo Dalmau, 1976:22 (Cuba: Oriente: Santiago de Cuba, Tortuguilla); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Rust, Menke, and Miller, 1985:46 (California: Channel Islands); Parks, 1986:34 (California: Torrey Pine State Reserve, as *apicalis*); Steiner, 1986:102 (references to papers on nesting habits); Pulawski, 1988a:164 (in revision of Nearctic *Tachysphex*); G. Scudder, 1994:75 (in checklist of rare and endangered invertebrates of British Columbia); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Kurczewski, 2000c:114 (locality records from North and South Carolina, nest and prey); Amarante, 2002:34 (in catalog of Neotropical Crabronidae); Ohl and Linde, 2003:150 (number of ovarioles); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario), 30 (distribution within Ontario), 47 (first record from Ontario: Windsor); Portuondo and Fernández, 2004:135 (Cuba: Sierra Maestra and Nipe-Sagua-Baracoa mountains); Genaro, 2006:55 (in checklist of Cuban Sphecidae and Crabronidae; also: North America, Mexico, Hawaii); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Ratzlaff, 2016:26 (Canada: British Columbia: from Pulawski, 1988 and Scudder, 1994); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Ontario, Saskatchewan: no specific locality). – **As *Tachysphex apicalis apicalis***: Pulawski *in* Krombein, 1979b:1630 (in catalog of North American Hymenoptera); Kurczewski, 2009:65 (review of known behavioral information, field observations), 81-86 (discussion of nesting behavior).

*Tachysphex fumipennis* W. Fox, 1894a:518, ♀. Lectotype: ♀, USA: Florida: St. John's County: near St. Augustine (ANSP), designated by Cresson, 1928:44. Synonymized with *Tachysphex apicalis* by G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950. – Dalla Torre, 1897:680 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae, as *fuscipennis*).

*Tachysphex fusus* W. Fox, 1894:519, ♀, ♂. Lectotype: ♀, USA: Texas: no specific locality (ANSP), designated by Cresson, 1928:44. Synonymized with *Tachysphex apicalis* by Pulawski, 1988:164. – Dalla

Torre, 1897:680 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Cockerell, 1899a:144 (New Mexico); F. Williams, 1914a:172 (in revision of Larrinae of Kansas), 201 (nesting habits); Rohwer, 1916b:687 (in catalog of Hymenoptera of Connecticut, as *fuscus*); Stevens, 1917:422 (North Dakota: Dickinson); Mickel, 1918b:422 (in catalog of Nebraskan Sphecidae); Rau and Rau, 1918:149 (as *fuscus*); Rohwer in Viereck, 1925:687 (in key to Sphecidae of Connecticut; not yet found in the State, as *fuscus*); F. Williams, 1931:239 (Hawaii: Oahu: Waiane, introduced from North America), 1932b:17 (Hawaii: Oahu); Brimley, 1938:443 (North Carolina: Raleigh); F. Williams, 1940:367 (Hawaii: Oahu); Fullaway and Krauss, 1945:36 (as *fuscus*); Strickland, 1947:129 (Canada: Alberta: Medicine Hat, Vermilion; as *fuscus*); G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); Yoshimoto, 1960:331 (Hawaiian Islands: Oahu; as *fuscus*); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Kurczewski and Snyder, 1968:30, 31 (nesting in cliffs); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae). – **As *Tachysphex apicalis fuscus***: Pulawski in Krombein, 1979b:1630 (new status, in catalog of North American Hymenoptera); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Blow Sand Mountains); Elliott and Kurczewski, 1985:294 (nesting habits); S. Frommer, 1988:96 (California: Riverside County: Deep Canyon); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Kurczewski, 2009:76 (review of known behavioral information, field observations), 81-86 (discussion of nesting behavior).

*Tachysphex foxii* Rohwer, 1908a:222, ♀. Holotype: ♀, USA: Colorado: Boulder County: Boulder (USNM). Synonymized with *Tachysphex fuscus* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:951.

### 32. *apoctenus* Pulawski

*Tachysphex apoctenus* Pulawski, 1974a:33, ♀, ♂. Holotype: ♂, Argentina: Tucumán: Horco Molle (MCZ). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Dollfuss, 1989:13 (paratype in NHMW); Amarante, 2002:34 (in catalog of Neotropical Crabronidae).

### 33. *apricus* Pulawski

*Tachysphex apricus* Pulawski, 1982b:29, ♀, ♂. Holotype: ♂, USA: California: San Diego County: Borrego Valley (UCD). – Elliott and Kurczewski, 1985:293 (prey: *Parabacillus hesperus* Hebard, Heteronemidae, Phasmatodea); S. Frommer, 1988:96 (California: Riverside County: Deep Canyon); Pulawski, 1988a:94 (in revision of Nearctic *Tachysphex*); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### 34. *araucanus* Pulawski

*Tachysphex araucanus* Pulawski, 1974a:15, ♀, ♂. Holotype: ♀, Chile: Coquimbo: El Tofo (AMNH). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Sielfeld, 1980b:73 (in checklist of Chilean Sphecidae); Amarante, 2002:34 (in catalog of Neotropical Crabronidae).

### 35. *argentatus* Gussakovskij

*Tachysphex argentatus* Gussakovskij, 1952:242, ♀, ♂ (♀ = *Tachysphex erythrophorus*). Lectotype: ♂, Tajikistan: Stalinabad, now Dushanbe (ZIN), designated by Pulawski, 1967a:398. – Pulawski, 1967a:398 (Turkey, description of ♀), 1971:369 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:12 (Israel); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Kazenas, 1978b:115, 128 (in key to Sphecidae of Kazakhstan and Central Asia); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:65 (geographic distribution, collecting localities in Kazakhstan); Straka, 2005b:273 (Turkey: Batman: Kozluk); Pulawski, 2007a:112 (in revision of African *Tachysphex*); Roche,

2007a:83 (in checklist of Egyptian Crabronidae), 2007b:4 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Ljubomirov and Yildirim, 2008:201 (in catalog of Crabronidae of Turkey); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:353 (in new catalog of Sphecidae of Saudi Arabia: Hutet Beni Tamim 180 km south of El Riyadh); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Rezaei and Fallahzadeh, 2015:8 (Iran: Fars: Dasht e Arzhan at 29°38'N 51°58'E and Shiraz at 29°36'N 52°28'E); Mokrousov, Shlyakhtenok, and Grebennikov, 2016:25 (first record from Russia: Kalmykia: Davsna sands 20 km east of Khulhuta at 46.292°N 46.672°E and 22 km east of Yashkul' at 46.153°N 45.646°E); Antropov, 2017b:237 (in catalog of Crabronidae of Russia); Mokrousov, 2017d:59 (South-East of European Russia: no specific locality); Straka and Schmid-Egger, 2017:418 (United Arab Emirates), 419 (color photograph); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:268 (Iran: Fars: three localities); Gadallah, 2020b:49 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:75 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:61 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:205 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

As *Tachytes rufiventris*: Magretti, 1884c:587 (Sudan: Kassala; Eritrea: Kor Cheru), corrected to *Tachysphex argentatus* by Pulawski, 2007a:112.

As *Tachysphex julliani*: Pulawski, 1964:95 (Egypt: Maadi), corrected to *Tachysphex argentatus* by Pulawski, 1971:369.

### 36. *argenteopilosus* Straka and Schmid-Egger

*Tachysphex argenteopilosus* Straka and Schmid-Egger, 2017:418, ♀, ♂. Holotype: ♂, United Arab Emirates: El-Ajban (OÖLM). – Straka and Schmid-Egger, 2017:421-423 (color photographs); Gadallah, 2020b:49 (in list of aculeate wasps of Arabian Peninsula).

### 37. *argenteiceps* Arnold

*Tachysphex argenteiceps* Arnold, 1959:328, ♂. Holotype: ♂, Tanzania: Itumba in Rukwa Valley (BMNH). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2007a:115 (in revision of African *Tachysphex*).

### 38. *argentifrons* Arnold

*Tachysphex argentifrons* Arnold, 1924:58, ♀, ♂ (♀ = *Tachysphex melanius*). Lectotype: ♂, South Africa: Eastern Cape Province: Algoa Bay (TMP), designated by Pulawski, 2007a:120. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:120 (in revision of African *Tachysphex*).

As *Tachysphex hippolyta*: de Beaumont, 1967b:509 (South Africa: Cape Province), corrected to *Tachysphex argentifrons* by Pulawski, 2007a:120.

### 39. *arizonac* Pulawski

*Tachysphex arizonac* Pulawski, 1982b:30, ♀, ♂. Holotype: ♂, USA: Arizona: Cochise County: 2 mi northeast of Portal (UCD). – S. Frommer, 1988:96 (California: Riverside County: Deep Canyon); Pulawski, 1988a:129 (in revision of Nearctic *Tachysphex*); Amarante, 2002:34 (in catalog of Neotropical Crabronidae, as *arizonae*); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correas-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

**40. *armatus* Pulawski**

*Tachysphex armatus* Pulawski, 1982b:40, ♀, ♂. Holotype: ♀, USA: Nevada: Clark County: Sandy (UCD). – Pulawski, 1988a:191 (in revision of Nearctic *Tachysphex*); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

**41. *ashmeadii* W. Fox**

*Tachysphex ashmeadii* W. Fox, 1894a:509, ♀ (as *Ashmeadii*, incorrect original capitalization). Holotype: ♀, USA: California: San Diego (ANSP). – Dalla Torre, 1897:678 (in catalog of world Hymenoptera, as *ashmeadis*); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Cresson, 1928:43 (holotype in ANSP); Strickland, 1947:129 (Canada: Alberta: Medicine Hat); G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); Gittins, 1960:136 (Idaho); Krombein, 1967c:392 (in supplement to catalog of North American Hymenoptera); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Krombein, 1979b:1631 (in catalog of North American Hymenoptera); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain); Elliott and Kurczewski, 1985:293 (nesting habits); Parks, 1986:34 (California: Torrey Pine State Reserve); Kurczewski, 1987a:122 (nesting habits); S. Frommer, 1988:96 (California: Riverside County: Deep Canyon); Pulawski, 1988a:141 (in revision of Nearctic *Tachysphex*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Ratzlaff, 2016:26 (Canada: British Columbia: from Pulawski, 1988); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Saskatchewan: no specific locality).

*Tachysphex posterus* W. Fox, 1894a:510, ♀. Holotype: ♀, USA: Washington: no specific locality (ANSP). Synonymized with *Tachysphex ashmeadii* by R. Bohart in R. Bohart and Menke, 1976:272. – Dalla Torre, 1897:684 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Cresson, 1928:45 (holotype in ANSP); G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera).

*Tachysphex spinosus* W. Fox, 1894a:511, ♀. Holotype: ♀, USA: California: Los Angeles County: no specific locality (USNM). Synonymized with *Tachysphex ashmeadii* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:950. – Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Blow Sand Mountains).

*Tachysphex spissatus* W. Fox, 1894a:514, ♂. Holotype: ♂, USA: California: no specific locality (ANSP). Synonymized with *Tachysphex ashmeadii* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:950. – Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae, as *pissatus*); Cresson, 1928:46 (holotype in ANSP).

*Larra rufipes* Provancher, 1895:129, ♀, junior secondary homonym of *Tachysphex rufipes* (F. Smith, 1858), of *Tachysphex rufipes* (von Aichinger, 1870), and of *Tachysphex rufipes* (Reed, 1894). Holotype: ♀, USA: California: Los Angeles (Laval Univ. Quebec). Synonymized with *Tachysphex ashmeadii* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:950. – Ashmead, 1899d:249 (in checklist of North American Sphecidae); Gahan and Rohwer, 1917:433 (type examined). – **As *Tachysphex rufipes***: Steiner, 1986:103 (new generic assignment, references to papers on nesting habits).

*Tachysphex propinquus* Viereck, 1904:87, ♀. Holotype: ♀, USA: Arizona: Pinal County: Florence (ANSP). Synonymized with *Tachysphex ashmeadii* by Pulawski in Krombein, 1979b:1632. – Snow, 1906:134

(Arizona: Oak Creek 20 mi. southwest of Flagstaff); Viereck, 1906:235 (Arizona: Oak Creek 20 mi. southwest of Flagstaff); F. Williams, 1914a:162 (in revision of Larrinae of Kansas), 202 (nesting habits); Mickel, 1918b:425 (in catalog of Nebraskan Sphecidae); Cresson, 1928:45 (holotype in ANSP); G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); Krombein, 1961a:82 (visiting flowers of mat euphorbia, *Euphorbia albomarginata* Torr. and A. Gray); Lavigne and Pfadt, 1966:31 (Wyoming; preying on *Agenotettix deorum* (Scudder, 1876) and *Cordillacris occipitalis* (Thomas, 1873), Acrididae); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Alcock and Gamboa, 1975b:164 (nesting habits); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae).

#### 42. *asinus* Arnold

*Tachysphex asinus* Arnold, 1923a:166, ♀. Holotype: ♀, Zimbabwe: Sawmills (SAM). – Arnold, 1924:66 (description of ♂), 1930:3 (in checklist of Afrotropical Sphecidae), 1935a:497 (South Africa: Kalahari); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2007a:124 (in revision of African *Tachysphex*).

#### 43. *asmara* Pulawski

*Tachysphex asmara* Pulawski, 2007a:128, ♀, ♂. Holotype: ♀, Eritrea: Asmara (CAS). Paratype: Ethiopia: Shewa: Ambo.

#### 44. *aterrimus* Arnold

*Tachysphex aterrimus* Arnold, 1924:56, ♀, ♂. Lectotype: ♀, Zimbabwe: Bulawayo (SAM), designated by Pulawski, 2007:130. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:130 (in revision of African *Tachysphex*).

#### 45. *atris* Straka and Schmid-Egger

*Tachysphex atris* Straka and Schmid-Egger, 2017:424, ♀, ♂. Holotype: ♂, United Arab Emirates: Wadi Maidaq (OÖLM). – Straka and Schmid-Egger, 2017:425-427 (color photographs); Gadallah, 2020b:49 (in list of aculeate wasps of Arabian Peninsula).

#### 46. *atlanteus* de Beaumont

*Tachysphex atlanteus* de Beaumont, 1955a:177, ♀, ♂. Holotype: ♀, Morocco: Tafraout (Lausanne). – Pulawski, 1971:341 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2007a:133 (in revision of African *Tachysphex*); Yildirim, and Braham, 2020b:311 (in Tunisia known from Kasserine province).

#### 47. ? *atratus* (Lepeletier de Saint Fargeau, 1845)

*Tachytes atratus* Lepeletier de Saint Fargeau, 1845:245, ♀, ♂. Syntypes: Italy: Piemonte: no specific locality (originally coll. Serville, now?). – Dalla Torre, 1897:687 (in catalog of world Hymenoptera). – **As *Tachysphex atratus***: Kohl, 1885a:393 (tentative new generic assignment, original description copied); Balthasar, 1972:272 (in Sphecid Fauna of Czechoslovakia: original description translated into German); R. Bohart and Menke, 1976:257 (in checklist of world Sphecidae, may be a *Liris*).

#### 48. *aureopilosus* Tsuneki

*Tachysphex aureopilosus* Tsuneki, 1972e:385, ♀, ♂. Holotype: ♀, Mongolia: Zavhan Aymag: 15 km west of Somon Songino (TMB). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae).

#### 49. *aureorufoniger* Pulawski

*Tachysphex aureorufoniger* Pulawski, 2007a:135, ♂. Holotype: ♂, Zambia: Eastern Province: eastern side of Luangwa bridge at 14°59'S 30°13'E (CAS). Paratypes: Tanzania: Morogoro: 128 road km northwest of Morogoro.

### 50. *auriceps* Cameron

*Tachysphex auriceps* Cameron, 1889c:145, ♀, ♂. Lectotype: ♀, India: Maharashtra: Poona, now Pune (OXUM), designated by Pulawski in Krombein and Pulawski, 1994:82. – Bingham, 1897:194 (in revision of Indian and Pakistani aculeates); Dalla Torre, 1897:678 (in catalog of world Hymenoptera); nec Giner Marí, 1945c:856 (= *Tachysphex panzeri*); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Krombein and Pulawski, 1994:82 (in revision of Sri Lankan *Tachysphex*).

### 51. *auropilosus* R. Turner

*Tachysphex auropilosus* R. Turner, 1917b:321, ♀. Lectotype: ♀, Kenya: Simba (BMNH), designated by Pulawski, 2007a:136. – Arnold, 1923a:173 (original description copied), 1930:4 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2007a:136 (in revision of African *Tachysphex*).

### 52. *austriacus* Kohl

*Tachysphex austriacus* Kohl, 1892:215, ♀. Holotype: ♀, Austria: Vienna area (NHMW). – Kohl, 1893a:32 (Austria: Niederösterreich: Wien: Türkenschanze, redescription); Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Schmiedeknecht, 1907:232 (in key to Hymenoptera of Central Europe), 1930:693 (in keys to Hymenoptera of North and Central Europe); Zavadil, Šusterka, and Bař'a, 1937:201 (in catalog of Sphecidae of Czechoslovakia); Zavadil in Zavadil and Šnoflák, 1948:150 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); Franz, 1949:13 (Austria: Hohe Tauern); Vogrin, 1955:37 (Yugoslavia: Krapina); Pulawski, 1971:62 (as new synonym of *Tachysphex pompiliformis*); Balthasar, 1972:264 (in Sphecidae Fauna of Czechoslovakia: may be expected in the country); Dollfuss, 1989:13 (type material in NHMW); Straka, 2004:1107 (resurrected from synonymy, redescription, comparison with *Tachysphex pompiliformis*); Reder, 2005:954 (Germany: Rheinland-Pfalz: Eisenberg, Worms); Wiesner, 2006:237 (Germany: first record from Brandenburg: Mallnow, Libbenichen); Jacobs, 2007:96, 99, 100 (in key to Crabronidae of Germany); Saure, 2007:83 (Germany: in checklist of Aculeata of Land Brandenburg); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia), 222 (resurrected from synonymy by Straka, 2004); Schmid-Egger, 2010a:19 (in red list of Aculeata of Germany: rare); van der Smissen, 2010b:387 (France: Vaucluse: Bédoin); Saure, 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg); Tischendorf, S. Frommer, Flügel et al., 2011:96 (Germany: Hessen: insufficient data to evaluate degree of endangerment); Olszewski, Wiśniowski, Pawlikowski, and Straka (first records from Poland: Łętowice, Pustynia Błędowska, Sierakowo, Toruń); Saure, 2013:22 (Berlin: Treptow-Köpenick: Gosener Wiesen); Bitsch, 2014:402 (record from France by van der Smissen, 2010b noticed); Haris, 2016:15 (in list of species described by F. Kohl from Carpathian Basin); Straka, 2016:66 (in revision of *Tachysphex pompiliformis* species group); Saure, 2020:277 (Germany: Sachsen-Anhalt: sand dunes); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:206 (in revision of Sphecidae *sensu lato* of Europe); Olszewski, Wiśniowski, and Ljubomirov, 2021:100 (in commented list of Sphecidae *sensu lato* of Poland).

*Tachysphex pompiliformis* forma *tenebricosus* K. Schmidt in Bitsch, Dollfuss, Bouček, K. Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2001:267, ♀, ♂, not available (infrasubspecific name, Article 1.3.4). Syntypes: Germany: Rhein River valley between Mannheim and Bingen. Synonymized with *Tachysphex austriacus* by Straka, 2004:1110 and Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:459.

**53. *bara* Pulawski**

*Tachysphex bara* Pulawski, 2007a:139, ♀, ♂. Holotype: ♀, Madagascar: Fianarantsoa: Isalo National Park at 22°36'S 45°10'E (CAS). – Madl, 2014a:980 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

**54. *barkeri* Arnold**

*Tachysphex barkeri* Arnold, 1923a:158, ♀ (as *Barkeri*, incorrect original capitalization). Holotype: ♀, South Africa: Natal: Umbogintwini (Durban Mus.). – Arnold, 1929c:385 (variation), 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2007a:142 (in revision of African *Tachysphex*).

*Tachysphex braunsi* var. *debilis* Arnold, 1924:64, ♂, junior primary homonym of *Tachysphex debilis* Pérez, 1907 [a junior synonym of *Tachytes argyreus* (F. Smith)], and of *Tachysphex debilis* R. Turner, 1908. Holotype: ♂, South Africa: Mpumalanga: Piet Retief (TMP). Synonymized with *Tachysphex barkeri* by Pulawski, 2007a:142

*Tachysphex braunsi* var. *boer* Arnold, 1929:387. Substitute name for *Tachysphex debilis* Arnold. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae). – As *Tachysphex braunsi boer*: R. Bohart and Menke, 1976:272 (new status, in checklist of world Sphecidae).

As *Tachysphex diabolicus*: de Beaumont, 1967b:509 (South Africa: Kwazulu-Natal), corrected to *Tachysphex barkeri* by Pulawski, 2007a:142

**55. *beaumonti* Pulawski**

*Tachysphex beaumonti* Pulawski, 1971:104, ♀, ♂. Holotype: ♂, Turkmenistan: Tedzhen (originally W.J. Pulawski coll., now CAS). Paratypes: Kazakhstan. – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Kazenas, 1978b:118, 133 (in key to Sphecidae of Kazakhstan and Central Asia); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:29 (southeastern Kazakhstan: 8 km south of Borandysu); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:65 (geographic distribution, collecting localities in Kazakhstan); T. Li, Q. Li, and Cai, 2008:142 (first record from China).

**56. *beidzimiao* Tsuneki**

*Tachysphex beidzimiao* Tsuneki, 1971m:26, ♂. Holotype: ♂, China: Inner Mongolia: Apaka (originally K. Tsuneki coll., now USNM). – Nuhn and Menke, 1994:25 (holotype transferred to USNM); Hua, 2006:282 (in list of Chinese insects, geographic distribution).

**57. *belfragei* (Cresson)**

*Larrada belfragei* Cresson, 1873:215, ♀ (as *Belfragei*, incorrect original capitalization). Holotype: ♀, USA: Texas: Bosque County: no specific locality (USNM). – Cresson, 1916:95 (type in USNM). – As *Larra belfragei*: Patton, 1880b:389 (new generic assignment, in checklist of North American Larrini); Kohl, 1885a:242 (in checklis of world *Larra*); Cresson, 1887:277 (in catalog of North American Hymenoptera). – As *Tachysphex belfragei*: W. Fox, 1894a:509 (new generic assignment, in revision of North American Larrinae); Dalla Torre, 1897:678 (in catalog of world Hymenoptera, as *belfragii*); Ashmead, 1899d:250 (in checklist of North American Sphecidae); H. Smith, 1908:381 (in revision of Nebraskan Sphecidae); F. Williams, 1914a:164 (in revision of Larrinae of Kansas); Mickel, 1918b:421 (in catalog of Nebraskan Sphecidae); Robertson, 1928:121, 128, 163, 199, 203 (floral records); G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); Krombein, 1958f:188 (in supplement to catalog of North American Hymenoptera: South Carolina), 1967c:392 (Florida, preying of *Conocephalus* sp., a tettigoniid); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Krombein, 1979b:1632 (in catalog of North American Hymenoptera); Pulawski, 1988a:180 (in revision of Nearctic *Tachysphex*); Ahlstrom, 1995:109 (in checklist of insects of North Carolina).

*Tachytes minimus* W. Fox, 1892e:248, ♂. Lectotype: ♂, USA: Texas: no specific locality (ANSP), designated by Cresson, 1928:45. Synonymized with *Tachysphex belfragei* by R. Bohart in R. Bohart and Menke, 1976:272. – Bridwell, 1899:209 (Kansas: no specific locality); Brimley, 1938:443 (North Carolina: Raleigh), 1942:35 (deleted from list of North Carolina insects). – **As *Tachysphex minimus***: W. Fox, 1894a:532 (new generic assignment, in revision of North American Larrinae); Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); J. Smith, 1900:518 (in checklist of insects of New Jersey: Camden County: no specific locality); H. Smith, 1908:381 (in revision of Nebraskan Sphecidae); J. Smith, 1910:683 (in new list of insects of New Jersey: Camden County: no specific locality); F. Williams, 1914a:173 (in revision of Larrinae of Kansas); Mickel, 1918b:424 (in catalog of Nebraskan Sphecidae); Brimley, 1938:443 (North Carolina: Raleigh); Krombein, 1939:139 (New York: Long Island); G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); Krombein and Evans, 1954:232 (Florida: Arcadia), 1955:231 (Florida: Arcadia); Kurczewski, 1971:114 (in key to Floridan *Tachysphex*).

### 58. *bemba* Pulawski

*Tachysphex bemba* Pulawski, 2007a:145, ♀, ♂. Holotype: ♀, Zambia: Northern Province: 54 road km north-east of Serenje at 13°05'S 30°35'E (CAS). Paratypes: Namibia: Keetmanshoop and Okavandja Districts.

### 59. *bengalensis* Cameron

*Tachysphex bengalensis* Cameron, 1889c:144, ♀. Lectotype: ♀, India: "Bengal: Tirhoot" = Bihar: Muzalfarpur (OXUM), designated by Pulawski, 1975a:311. – Dalla Torre, 1897:678 (in catalog of world Hymenoptera); R. Turner, 1917e:198 (Bingham's 1897 interpretation of this species is incorrect); Piek and Spanjer, 1986:190 (in list of Sphecidae with known prey); Krombein and Pulawski, 1994:58 (in revision of Sri Lankan *Tachysphex*); S. Gupta, 1995:86 (India: Uttar Pradesh); Wu and Zhou, 1996a:90 (in revision in Economic Insect Fauna of China); Wu, Zhou, Q. Li, and Yang, 2003:814 (China: Fujian Province); Najeer-E-Noor and Begum, 2020:89 (blunt barbs on stinger dorsolateral surface); Mawadda and Girish Kumar, 2023:110 (in checklist of Crabroninae of Northern India). – **Nec following authors** (= *Tachysphex morosus*): Bingham, 1897:193, F. Williams, 1928a:92, Krombein, 1949b:382, 393; Iwata and Yoshikawa, 1961:399; Tsuneki, 1963c:7; Iwata, 1964b:369; Baltazar, 1966:329; Tsuneki, 1967b:12, 17, 49, Haneda, 1971b:30; Tsuneki, 1976b; Paik, 1985:199; Ohl and Linde, 2003:150; Li and He, 2004:1100; Terayama, 2020:17. Nec Yasumatsu, 1940b:97 (= *Tachysphex nigricolor*).

*Tachysphex brevitaris* Kohl, 1901c:783, ♀. Syntypes: Sri Lanka: Badurelia (NHMW). Synonymized with *Tachysphex bengalensis* by Pulawski, 1975a:311. – Ramakrishna Aiyar, 1916:551 (in catalog of Indian aculeates described after Bingham, 1897); Dollfuss, 1989:13 (type material in NHMW).

### 60. *bipustulosus* Arnold

*Tachysphex bituberculatus* Arnold, 1923a:162, ♀, junior primary homonym of *Tachysphex bituberculatus* Cameron, 1905. Holotype: ♀, Zimbabwe: Bulawayo or Khami Ruins (SAM). – Arnold, 1924:61 (description of ♂), 1930:3 (in checklist of Afrotropical Sphecidae).

*Tachysphex bipustulosus* Arnold, 1949:275. Substitute name for *Tachysphex bituberculatus* Arnold. – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pulawski, 2007a:147 (in revision of African *Tachysphex*).

### 61. *bituberculatus* Cameron

*Tachysphex bituberculatus* Cameron, 1905c:223, ♀. Holotype or syntypes: ♀, India: Assam: Khasia Hills (OXUM, Rothney coll.). – Ramakrishna Aiyar, 1916:552 (in catalog of Indian aculeates described after Bingham, 1897); nec Weber, 1948:203 and Yoshimoto, 1960:331 (= *Tachysphex morosus*); Baltazar, 1966:329 (in catalog of Hymenoptera of Philippines); R. Bohart and Menke, 1976:272 (in checklist of

world Sphecidae); Krombein and Pulawski, 1994:79 (in revision of Sri Lankan *Tachysphex*); Jonathan, Ray, and Kundu, 2000:198 (India: previously recorded from Meghalaya: East Khasi Hills).

### 62. *blattivorus* Gussakovskij

*Tachysphex blattivorus* Gussakovskij, 1952:244, ♀, ♂. Lectotype: ♀, Tajikistan: Mikoyanabad, now Kabadian (ZIN), designated by Pulawski, 1971:236. – Pulawski, 1971:234 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Kazenas, 1978b:117, 129 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:216, 220 (in key to Sphecidae of European part of USSR); Islamov, 1986:526 (Uzbekistan: Tashkent Oblast'); Gayubo, Tormos, and Asís, 1993a:203 (first record from Spain: Valencia: Porta Coeli); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province: Viana de Cega); Esenbekova and Kazenas, 2000:29 (southeastern Kazakhstan: 45 km northwest of Suzak); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia), 156 (review of known biology); Gayubo, González, Tormos, and Asís, 2002:84 (distribution in Iberian Peninsula); Kazenas, 2002a:65 (geographic distribution, collecting localities in Kazakhstan), 2004b:103 (Kazakhstan: western Tien Shan); Shkuratov, 2004a:76 (Russia: Rostov Oblast: Avilo-Uspenka); Gayubo, González, de la Nuez, Asís, and Tormos, 2006:208 (Spain: Huesca: Ainsa; Zamora: Cabañas de Aliste); Baños-Picón, Gayubo, Asís, and González, 2007a:255, 258 (Spain: Zamora: Cabañas de Aliste); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:459 (included into the key of European *Tachysphex* by Bitsch et al., 2001, recorded from Spain by Gayubo et al., 1993, 2002, 2006); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia), 141 (Salamanca: El Maíllo); Baños-Picon, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Kazenas, 2014a:134 (Kazakhstan: Karatau Mountain Range); Antropov, 2017b:237 (in catalog of Crabroninae of Russia); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:206 (in revision of Sphecidae *sensu lato* of Europe); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

### 63. *bohartorum* Pulawski

*Tachysphex bohartorum* Pulawski, 1982b:30, ♀, ♂. Holotype: ♀, USA: California: Nevada County: Boca (UCD). – Pulawski, 1988a:51 (in revision of Nearctic *Tachysphex*).

### 64. *bohemicus* Straka

*Tachysphex bohemicus* Straka, 2016:73, ♀, ♂. Holotype: ♂, Czech Republic: Okna near Doksy (NMPC). – K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:207 (in revision of Sphecidae *sensu lato* of Europe).

### 65. *bostryx* Pulawski

*Tachysphex bostryx* Pulawski, 2007a:150, ♀, ♂. Holotype: ♀, Ethiopia: Sidamo: 63 km south of Yabelo at 4°22'N 38°17'E (CAS). Paratypes: Kenya, Tanzania.

### 66. *bouceki* Straka

*Tachysphex bouceki* Straka, 2005b:249, ♀, ♂. Holotype: ♂, Turkey: Kayseri: 7 km northwest of Develi (OÖLM). – F. Gusenleitner and Schwarz, 2013:312 (holotype in Biologiezentrum, Linz, Austria); Yıldırım, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces), 19 (is an endemic of Turkey); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:35 (seems to be identical to *Tachysphex mocsaryi*); Kaplan and Yıldırım, 2021:61 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:207 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

**67. *brachypus* Pulawski**

*Tachysphex brachypus* Pulawski, 2007a:152, ♀, ♂. Holotype: ♀, Zambia: Southern Province: 7 km southwest of Kalomo at 17°02'S 26°26'E (CAS). Paratypes: Malawi, Namibia, South Africa, Zimbabwe. – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

**68. *brasilianus* Pulawski**

*Tachysphex brasilianus* Pulawski, 1974a:95, ♀, ♂. Holotype: ♂, Brazil: Paraíba: Mun. Soledade, Joazeirinho (Kansas Univ.). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Amarante, 2002:34 (in catalog of Neotropical Crabronidae).

**69. *braunsi* Arnold**

*Tachysphex braunsi* Arnold, 1923a:150, ♀, ♂ (as *Braunsi*, incorrect original capitalization). Lectotype: ♀, South Africa: Eastern Cape Province: Willowmore (SAM), designated by Pulawski, 2007a:154. – Arnold, 1924:64 (additional description; nesting in the ground), 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:154 (in revision of African *Tachysphex*).

**70. *breviceps* Pulawski**

*Tachysphex breviceps* Pulawski, 1974a:24, ♀, ♂. Holotype: ♂, Argentina: Jujuy: Volcán (MCZ). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Dollfuss, 1989:13 (paratype in NHMW); Amarante, 2002:34 (in catalog of Neotropical Crabronidae).

**71. *brevicornis* Pulawski**

*Tachysphex brevicornis* Pulawski, 1977a:263, ♂. Holotype: ♂, Australia: Northern Territory: Bessie Spring 8 km east-southeast of Cape Crawford (ANIC). – Cardale, 1985:238 (in catalog of Australian Sphecidae).

**72. *brevipecten* de Beaumont**

*Tachysphex brevipecten* de Beaumont, 1955:177, ♀, ♂. Holotype: ♀, Morocco: Marrakech: Oued Tensift (Lausanne). – de Beaumont, 1956a:197 (Libya), 1960b:238 (Libya); Pulawski, 1971:336 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Dollfuss, 1989:13 (paratype in NHMW); Guichard, 1991a:339 (Jordan); Pulawski, 2007a:157 (in revision of African *Tachysphex*); Straka and Schmid-Egger, 2017:427 (United Arab Emirates: Wadi Bih), 429 (color photograph); Ben Khedher, Yildirim, and Braham, 2020b:311 (Tunisia: new locality records from Kasserine and Tozeur provinces); Gadallah, 2020b:49 (in list of aculeate wasps of Arabian Peninsula).

**73. *brevipennis* Mercet**

*Tachysphex brevipennis* Mercet, 1909b:197, ♀, ♂. Syntypes: Spain: Escorial (MNCN). – Mercet, 1910b:165 (listed from Spain); Giner Marí, 1934:133 (Spain: Balearic Islands: Ibiza), 1943a:138 (in Sphecid Fauna of Spain); de Beaumont, 1947c:671 (redescription); de Andrade, 1949:16 (Portugal); Ceballos, 1956:375 (in catalog of Hymenoptera of Spain); Diniz, 1959:29 (Portugal: Cascais, Lisboa, Trafaria); de Beaumont, 1962b:26 (Spain); Diniz, 1964a:6 (Portugal: nine localities); Suárez, 1969:31 (Spain: Almería Province); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Pulawski, 1971:240 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Guichard, 1978:271 (first record from Greece: Kalambaka); Gayubo, 1982a:100 (northern Spain: Sierra de Béjar), 1982f:251 (Spain: Cádiz Province: Arcos de la Frontera, Los Barrios, Cortijo de Ahojiz, Puerto de Santa María, San Roque), 1984b:83 (Spain: Salamanca Province), 1984c:363 (Portugal: El Algarve Province); Gayubo, 1986c:32 (Spain: Zamora Province); Gayubo and Sanza, 1986:43 (Spain: Burgos Province); Gayubo and Tormos, 1986a:12 (Spain: Castellón: Castellón de la Plana); Asís and Jiménez, 1988:2711 (Spain: Castellón Province); Gayubo and Mingo, 1988:77 (Spain); Dollfuss, 1989:13 (type

material in NHMW); Gayubo, Asís, and Tormos, 1990a:17 (Spain); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); Gonzáles, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); K. Schmidt and Bitsch *in* Bitsch et al., 2001:239 (in Sphecid Fauna of Western Europe); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Pulawski, 2007a:159 (in revision of African *Tachysphex*); Roche, 2007a:77 (in checklist of Egyptian Crabronidae), 2007b:4 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:201 (in catalog of Crabronidae of Turkey); Baños-Picon, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Pagliano, 2009:183 (Italy: recorded from Sicilia by Krombein and Pulawski, 1994); Shorenko and Kononov, 2010:22 (Ukraine: Crimea: Opukskiy Nature Reserve, village Shcherbatovka near Feodosiya); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire), 501 (exclusive species of burned areas); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharrawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Samin, Bagriacik, and Monaem, 2015:196 (Iran: Khorasan: Sabzevar); Shorenko, 2015:327 (in list of Sphecidae *sensu lato* of Crimea); Antropov, 2017b:237 (in catalog of Crabroninae of Russia); Shorenko, 2017:77 (in Crimea collected in June); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:629 (Iran: Hormozgan: Sar Kahn at 27°24'N 57°07'E); Maharramov, Aliyev, and Mammadov, 2018:455 (Azerbaijan: Baku: Shuvelyan); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Ben Khedher, Yildirim, and Braham, 2020b:311 (Tunisia: new locality records from Mahdia and Tozeur provinces); Gadallah, 2020b:49 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:72 (in catalog of *Tachysphex* of Iran); Cross, Baldock, and Wood, 2021:40 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:61 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:208 (in revision of Sphecidae *sensu lato* of Europe); Can, 2022:222 (incomplete 1r- m crossvein), 223 (incomplete supernumerary discoidal cell); Can and Saboori, 2023:81 (Turkey: parasitized by larvae of mite *Leptus tridentatus* Saboori, Hakimitabar and Khademi (Trombidiformes: Erythraeidae)); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Mawadda and Girish Kumar, 2023:110 (in checklist of Crabroninae of Northern India).

*Tachysphex minutus* Nurse, 1909:516, ♀, ♂. Lectotype: ♂, India: Gujarat: Deesa (BMNH), designated by Pulawski, 1975a:311. Synonymized with *Tachysphex brevipennis* by Pulawski, 2007a:159. – Ramakrishna Aiyar, 1916:552 (in catalog of Indian aculeates described after Bingham, 1897); Pulawski, 1975a:311 (diagnostic characters); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Krombein and Pulawski, 1994:85 (in revision of Sri Lankan *Tachysphex*); K. Schmidt and Bitsch *in* Bitsch et al., 2001:257 (in Sphecid Fauna of Western Europe); Shkuratov, 2004a:77 (Russia: Rostov Oblast'), 2004b:166 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova); Straka, 2005b:270 (Turkey: Hatay: Antakya); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces, as *minutus*); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:227 (as valid species, in revision of Sphecidae *sensu lato* of Europe).

- Tachysphex lilliputianus* R. Turner, 1917e:198, ♂. Holotype: ♂, India: Bihar: Pusa (BMNH). Synonymized with *Tachysphex minutus* by Pulawski, 1975a:311.
- Tachysphex fulvicornis* R. Turner, 1918b:363, ♀. Holotype: ♀, India: West Bengal: Chapra (BMNH). Synonymized with *Tachysphex brevipennis* by Pulawski, 2007a:159, resurrected from synonymy by Straka and Schmid-Egger, 2017:434 without sufficient evidence. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Guichard, 1980:227 (Oman); Roche, 1981:2 (in checklist of Sphecidae of United Arab Emirates); Krombein and Pulawski, 1994:87 (in revision of Sri Lankan *Tachysphex*); Straka and Schmid-Egger, 2017:434 (United Arab Emirates), 438 (color photograph).
- Atelosphex miscophoides* Arnold, 1923a:178, ♀. Holotype: ♀, South Africa: Cape Province: Willowmore (SAM). Synonymized with *Tachysphex brevipennis* by Pulawski, 2007a:159. – Arnold, 1924:72 (description of ♂, South Africa), 1930:4 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex miscophoides***: R. Bohart and Menke, 1976:275 (new generic assignment, in checklist of world Sphecidae).
- Atelosphex lugubris* Arnold, 1924:72, ♀. Holotype: ♀, Zimbabwe: Sawmills (SAM). Synonymized with *Tachysphex minutus* by Pulawski in Krombein and Pulawski, 1994:85. – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae), 1951:157 (Ghana: Accra). – **As *Tachysphex lugubris***: R. Bohart and Menke, 1976:274 (new generic assignment, in checklist of world Sphecidae).
- Tachysphex imperfectus* de Beaumont, 1940b:178, ♀. Syntypes: Egypt: Cairo area: Kerdassa (A. Alfieri coll., now in USNM?) and Gebel Asfar (originally A. Mochi coll., now Torino). Holotype illegally designated (should be lectotype) by de Beaumont, 1947a:210: ♀, Algeria: Biskra (OXUM). Synonymized with *Tachysphex fulvicornis* by Pulawski, 1975a:312. – Honoré, 1943:56 (Egypt: Kerdassa); de Beaumont, 1947a:210 (in new revision of *Tachysphex* of Egypt); Balthasar, 1954b:269 (Palestine: Wadi el Kelt near Jericho); de Beaumont, 1955a:187 (Morocco), 1960b:241 (Libya); Pulawski, 1971:248 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:9 (Israel); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province).
- Tachysphex rugosus* Gussakovskij, 1952:245, ♀, ♂. Lectotype: ♂, Tajikistan: Mikoyanabad, now Kabadian (ZIN), designated by Pulawski, 1971:244. Synonymized with *Tachysphex minutus* by Pulawski in Krombein and Pulawski, 1994:85. – Pulawski, 1971:243 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:9 (Israel); Pulawski, 1974c:715 (prey: grasshopper *Omocestus petraeus* (Brisout)); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Kazenas, 1978b:111, 124 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:214 (in key to Sphecidae of European part of USSR); Roche, 1981:3 (in checklist of Sphecidae of United Arab Emirates); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 160 (review of known biology), 2002a:74 (geographic distribution, collecting localities in Kazakhstan); Józán, 2011:181 (in checklist of Sphecidae *sensu lato* of Hungary); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).
- Tachysphex heterochromus* de Beaumont, 1955a:187, ♀, ♂. Holotype: ♀, Morocco: Port Lyautey, now Kenitra (Lausanne). Synonymized with *Tachysphex brevipennis* by Pulawski, 2007a:159. – Pulawski, 1971:250 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).
- As *Tachysphex* sp.: Pulawski, 1958a:181 (Bulgaria: mouth of Ropotamo River), corrected to *Tachysphex rugosus* by Pulawski, 1971:243.
- Tachysphex rhodius* de Beaumont, 1960a:19, ♀, ♂. Holotype: ♀, Greece: Island of Rhodes: Kamiros (RMNH). Synonymized with *Tachysphex rugosus* by Pulawski, 1971:243. – de Beaumont, 1965a:53 (Greece); Pulawski, 1967a:408 (Turkey).
- Tachysphex sinaiticus* Pulawski, 1964:108, ♀. Holotype: ♀, Egypt: Sinai Peninsula: Feiran oasis (originally W.J. Pulawski coll., now CAS). Synonymized with *Tachysphex brevipennis* by Pulawski, 2007a:160. –

Pulawski, 1971:245 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:9 (Israel); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Roche and Zalot, 1994:115 (Egypt: Sinai Peninsula).

As *Tachysphex* aff. *rhodius*: Pulawski, 1967a:408, corrected to *Tachysphex rugosus* by Pulawski, 1971:243.

*Tachysphex quadrifurci* Pulawski, 1971:246, ♀, ♂. Holotype: ♂, Turkmenistan: Askhabad (originally W.J. Pulawski coll., now CAS). Synonymized with *Tachysphex minutus* by Pulawski in Krombein and Pulawski, 1994:85, resurrected from synonymy by Straka and Schmid-Egger, 2017:444 without sufficient evidence. – R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Kazenas, 1978b:111, 124 (in key to Sphecidae of Kazakhstan and Central Asia); Guichard, 1991a:340 (Jordan); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve), 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia); Straka and Schmid-Egger, 2017:444 (United Arab Emirates), 445 (color photograph).

*Tachysphex convexus* Pulawski, 1971:248, ♀. Holotype: ♀, Turkmenistan: Murgab (ZIN). Paratype: Kazakhstan: Tartugay 75 km southeast of Kzyl-Orda. Synonymized with *Tachysphex brevipennis* by Pulawski, 2007a:160. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Kazenas, 1978b:111 (in key to Sphecidae of Kazakhstan and Central Asia); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:66 (geographic distribution, collecting localities in Kazakhstan).

#### 74. *brevipes* Pulawski

*Tachysphex brevipes* Pulawski, 1971:238, ♀. Holotype: ♀, Uzbekistan: Altyn-Kul 20 km west of Andizhan (ZIN). – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Kazenas, 1978b:117 (in key to Sphecidae of Kazakhstan and Central Asia), 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

#### 75. *brinckerae* R. Turner

*Tachysphex brinckerae* R. Turner, 1917b:323, ♀. Holotype: ♀, South Africa: Gauteng: Pretoria (BMNH). – Arnold, 1923a:173 (original description copied), 1930:4 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:109 (Namibia, South Africa: visiting flowers of *Bergia glomerata* L. f., Elatinaceae, and *Zygophyllum simplex* L., Zygophyllaceae); Pulawski, 2007a:168 (in revision of African *Tachysphex*).

*Tachysphex consanguineus* Arnold, 1924:67, ♀, ♂. Lectotype: ♂, South Africa: North-West Province: Lichtenburg (TMP), designated by Pulawski, 2007a:168. Synonymized with *Tachysphex brinckerae* by Pulawski, 2007a:168. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae).

#### 76. *brullii* (F. Smith)

*Tachytes bicolor* Brullé, 1833:373, ♀. Holotype: ♀, Greece: Koubeh Forest (MNHN), junior secondary homonym of *Tachytes bicolor* (Fabricius, 1804) F. Smith, 1856, now in *Larra*. – Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces). – **As *Tachysphex bicolor***: Kohl, 1885a:394 (new generic assignment, original description copied); Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Dominique, 1901a:506 (France: Loire-Inférieure, now Loire-Atlantique: Le Pouliguen); W. Schulz, 1911a:68 (new generic assignment); de Beaumont, 1947c:666 (study of holotype), 669 (in key to Mediterranean species of *bicolor* group); Nouvel and Ribaut, 1953:179 (France: recorded as *Tachysphex spoliatus* from Hautes-Pyrénées: Barèges, by Berland, 1925); de Beaumont, 1954a:57 (Italy), 1954e:90 (Italy); Grandi, 1954:238 (Italy); Steiner, 1955:139 (France: Dordogne); Grandi, 1957:389 (Italy); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); de Beaumont, 1959a:27 (Italy: Sicilia: Monte Etna); Noskiewicz and Pulawski, 1960:121, 124 (in key to Polish Sphecidae, not yet found in Poland); Grandi, 1962:96 (Italy); de Beaumont, 1964c:75 (in Sphecid Fauna of Switzerland), 1965a:48 (Greece); Pulawski, 1967a:400 (Turkey); Scobiola-Palade, 1967b:43

(Romania); Suárez, 1969:31 (Spain: Almería Province); Oehlke, 1970:712 (not recorded from Democratic Germany); Pulawski, 1971:203 (in revision of Palearctic *Tachysphex*); Simon Thomas, 1972:181 (France: Gironde, Landes, Lot-et-Garonne), 1976:5 (France: Lot-et-Garonne: Forêt de Campet); Koleznikov, 1977:318 (Russia: Bryansk Oblast'); Kazenas, 1978b:117, 133 (in key to Sphecidae of Kazakhstan and Central Asia); Marion, 1978:88 (France: Departments of Nièvre, Pyrénées-Orientales, and Vendée); Pulawski, 1978:216, 220 (in key to Sphecidae of European part of USSR); Dathe, 1980:208 (Russia: northern Caucasus: Teberda); Tormos and Jiménez, 1987a:125 (Spain: Valencia Province); Kuznetzova, 1990:20 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Józán, 1992b:173 (Hungary: Boronka-melléki Protected Area), 1995:104 (Hungary: projected Duna-Dráva National Park); Cretin, 1999:8 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane); Józán, 2000:107 (Hungary: Bakony Mountains: Hegymagas), 2001:279 (Hungary: Somogy County), 2002:53 (Hungary: Mecsek Mountains).

*Tachytes brullii* F. Smith, 1856:296 (as *Brullii*, incorrect original capitalization). Substitute name for *Tachytes bicolor* Brullé, 1833. – As *Tachysphex brullii*: R. Bohart and Menke, 1976:272 (new generic assignment, in checklist of world Sphecidae); Pagliano, 1980:127 (Italy: Piemonte); Dollfuss, 1983a:75 (endangered in Niederösterreich, Austria), 80 (endangered in Tirol, Austria), 1983b:10 (in catalog of Sphecidae of Austria); Chevin and Chevin, 1985:39 (France: Aude); Gayubo and Mingo, 1988:77 (Spain); Jacobs and Oehlke, 1990:163 (unknown from Democratic Germany); Pagliano, 1990:102 (in catalog of Italian Sphecidae); Day, 1991:xix (in summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:105 (in key to Sphecidae of North and Central Europe); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Shkuratov, 1998a:97 (Russia: Rostov Oblast'); Ljubomirov, 1999b:49 (Bulgaria: Mount Vitosha near Sofia); Pagliano and Scaramozzino, 1999:162 (Italy: Piemonte: Borgomale); Blösch, 2000:227 (in Sphecid Fauna of Germany); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Vicidomini, 2000b:28 (Italy: previously recorded from Campania); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia); K. Schmidt and Bitsch *in* Bitsch et al., 2001:239 (in Sphecid Fauna of Western Europe); Zettel, Gross, and Mazzucco, 2001:72 (Austria: Wien); Shkuratov, 2002b:140 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Drewes, 2003:142 (Turkey: Kars: Soganli west of Sarikamis); Gayubo, Özbek, and Yıldırım, 2003:88 (Turkey: Erzurum: Palandöken, Çat, Pasinler, Rabat); Shkuratov, 2004a:76 (Russia: Rostov Oblast'), 2004b:166 (Russia: Rostov Oblast': Gosudarstvennyi Muзей-Zapovednik M.A. Sholokhova); Ebrahimi, 2005:124 (in key to selected Iranian Sphecidae); Jacobs, 2005a:451 (Bulgaria: Asenovgrad, Arkutino near Burgas, Topolovgrad, Troyanska Planina south of Troyan); Pagliano and Negrisoló, 2005:363 (in Sphecid Fauna of Italy); Shorenko, 2005a:164 (Ukraine: Crimea); Straka, 2005a:399 (critically endangered in Czech Republic), 2005b:268 (Turkey: Erzurum: Tekederesi 15 km southwest of Erzurum, as *brullii brullii*); Gorobchishin, 2006:109 (Ukraine: Kyïv Oblast': village Khotiv); Ljubomirov, 2006:543 (Bulgaria: Rhodope Mountains: Yurukovo village, as *brullii brullii*); Magdalou, 2006a:7, 10 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Burguet, 2007:unnumbered p. 21 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Jacobs, 2007:94, 98 (in key to Crabronidae of Germany, not yet found in Germany); Sipos and Móczár, 2007:204 (Hungary: Bács-Kiskun megye: vicinity of Foktő); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia); Ljubomirov and Yıldırım, 2008:202 (in catalog of Crabronidae of Turkey); Guéor-guiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Józán, 2009:166 (Croatia: Dvigrad, Omišalj); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Burguet *in* Durand and Burguet, 2010:51 (France Département d'Ardèche: Ardèche Gorges); Shorenko and Konovalov, 2010:22 (Ukraine: Dnepropetrovsk Oblast': Ingulets); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:102 (Western Slovakia: recorded from Borská

Nížina); Tüzün and Yüksel, 2010:4470 (Turkey: Niğde Province); van der Smissen, 2010b:387 (France: Gard: Collias; Vaucluse: Bédoin); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Schmid-Egger, 2011a:39 (France: Parc National du Mercantour: Le Pra; also Italy: Parco delle Alpi Marittime: Lago Rovine, Tetti Grella, Valle Maira: Macra); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:4 (France: Puy-de-Dôme: sands Giraults-Faures in Orléat commune); Japoshvili and Ljubomirov, 2012:96 (Turkey: Isparta: Gölcük Nature Park 8 km southwest of city of Isparta, as *brullii brullii*); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Bayındır, Gürbüz, Ljubomirov, and Pohl, 2013:146 (Turkey: Isparta: Kasnak Oak Forest Nature Reserve, as *brullii brullii*); Ebrahimi, 2014:40 (Iran: Fārs and Tehrān provinces); Józán, 2014:133 (Croatia: six localities); Yıldırım, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces, as *brullii brullii*); Shorenko, 2015:327 (in list of Sphecidae *sensu lato* of Crimea); Lett, 2016:135 (France: Loir-et-Cher: Gièvres at 47°16'39"N 1°41'52"E); Mokrousov and Popov, 2016:578 (Russia: Krasnodarskiy Krai); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:33 (Turkey: Kars, Osmaniye, and Tunceli provinces, as *brullii brullii*); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Gülmez and Can, 2017:82 (Turkey: Erzincan Province); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Forêt de la Massane, Julols); Shorenko, 2017:77 (in Crimea collected in August); Maharramov, Aliyev, and Mammadov, 2018:455 (first record from Azerbaijan: Salyan: Bendovan); Lett, 2018:203 (France: Loir-et-Cher: Gièvres at 47°16'39"N 1°41'52"E); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:17 (Azerbaijan: Nakhichevan Autonomous Republic); Ben Khedher, Yıldırım, and Braham, 2020b:312 (in Tunisia known from Kairouan); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:72 (in catalog of *Tachysphex* of Iran); Cross, Baldock, and Wood, 2021:41 (in catalog of Sphecidae *sensu lato* of Portugal, as doubtful); Kaplan and Yıldırım, 2021:61 (in catalog of Crabronidae of Turkey, as *brullii brullii*); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:208 (in revision of Sphecidae *sensu lato* of Europe); Can and Saboori, 2023:81 (Turkey: parasitized by larvae of mite *Leptus rosellae* Haitlinger (Trombidiformes: Erythraeidae)); Kaplan and Yıldırım, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey, as *brullii brullii*).

*Tachytes spoliatus* Giraud, 1863a:24, ♀ (as *spoliata*, incorrect original termination). Syntypes: ♀, France: Hautes-Alpes: Narreirou near Vallouise (MNHN). Synonymized with *Tachysphex bicolor* by de Beaumont, 1947c:666 and 1953b:14. – Kirchner, 1867:216 (in catalog of European Hymenoptera); Dours, 1874:139 (in catalog of Hymenoptera of France); Kohl, 1880:179 (Austria: Tirol, and Italy: Trentino-Alto Adige), 233 (preying on larval tettigoniids, redescription); Radoszkowski, 1893a:62 (Turkmenistan); Chyzer, 1902:33 (Hungary). – **As *Tachysphex spoliatus***: Kohl, 1883e:671 (new generic assignment, Switzerland), 1885a:397 (original description copied); Dalla Torre, 1897:685 (in catalog of world Hymenoptera); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Berland, 1925d:120 (in Sphecidae Fauna of France), 1928b:178 (France: Var: Callian), 1932a:23 (France: Var Department; utilizing old charcoal preparation sites for nesting); Giner Marí, 1934:133 (Spain: Montarco); Vergne, 1935:118 (France: Auvergne: Besse); de Beaumont, 1936a:195 (in revision of French *Tachysphex*), 1936c:8 (specimen in coll. A. Costa); Zavadil, Šustera, and Bat'a, 1937:201 (in catalog of Sphecidae of Czechoslovakia); Balthasar, 1941a:105 (Czech Republic: Bzenecko area); Guiglia, 1941c:166 (Italy: Calabria: Grande Sila); Giner Marí, 1943a:140 (in Sphecidae Fauna of Spain); Guiglia, 1944b:27 (Italy); Balthasar, 1948:142 (Slovakia: Streda); Zavadil *in* Zavadil and Šnoflák, 1948:150, 152 (in key to Sphecidae of Czechoslovakia); de Beaumont, 1953b:14 (*Tachysphex spoliatus* is a junior synonym of *bicolor*); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain); Bajári, 1957a:51, 55 (in key to Hungarian Sphecidae); Diniz, 1959:29 (Portugal: Mata da Trafaria); Balthasar, 1972:266 (in Sphecidae Fauna of Czechoslovakia); Józán, 1983:99 (Hungary), 1985a:181 (Hungary), 1985b:57 (Hungary south of Lake Balaton),

78 (floral records), 83 (ecological and zoogeographic characteristics); Pádr *in* Šedivy, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Pádr, 1990:74 (Czech Republic: Praha area).

*Tachytes brullei* Kirchner, 1867:215 (emendation of *Tachytes brullii*, as *Brulléi*, incorrect capitalization and diacritic mark).

*Tachytes rufipes* von Aichinger, 1870:330, ♀. Holotype: ♀, Austria: Innsbruck (depository?). Synonymized with *Tachysphex bicolor* by Kohl, 1880:233, W. Schulz, 1911a:68, and de Beaumont, 1947c:666. – von Aichinger, 1870:320 (Austria: Tirol). – **As *Tachysphex rufipes***: Kohl, 1885a:352 and 355 (in key to Palearctic *Tachysphex*), 379 (new generic assignment, in revision of Palearctic *Tachysphex*), 1893a:32 (Austria: Niederösterreich); Schletterer, 1894:31 (Istria Peninsula, now part of Croatia, Slovenia, and Italy); Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Mocsáry, 1897:77 (Kingdom of Hungary, some localities are in today's Croatia and Romania); Ferton, 1899:336 (stinging prey just behind mouth), 340 (prey capture), 1901a:99 (preying on tettigoniids); de Cobelli, 1903:111 (Italy: Province of Trentino: Dietropozzo, Rovereto); Adlerz, 1904:137 (known prey: tettigoniids); Antiga and Bofill, 1904:11 (in catalog of Catalanian Hymenoptera); Šusterka, 1909:35 (Czech Republic: vicinity of Praha); Mantero, 1905:73 (Italy: Toscana: Isola del Giglio); Schmiedeknecht, 1907:232, 234 (in key to Hymenoptera of Central Europe); Mercet, 1910b:165 (listed from Spain); Dubois, 1920:88 (specimen in coll. Wesmael); Maidl, 1922:70 (Albania, Croatia); Ferton, 1923:85 (prey paralyzing); von Schulthess, 1926b:214 (Tunisia, determination tentative); Schmiedeknecht, 1930:694, 695 (in keys to Hymenoptera of North and Central Europe); Bischoff, 1931:9 (Spain); Dusmet y Alonso, 1931:7 (Portugal: Mitra, determination tentative); Vogrin, 1955:37 (Yugoslavia); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Hagieni).

*Tachytes montanus* Radoszkowski, 1886a:31, ♂, junior secondary homonym of *Tachysphex montanus* (Cresson, 1865). Holotype: ♂, Caucasus: no specific locality (Inst. Zool. Kraków). Synonymized with *Tachysphex spoliatus* by de Beaumont, 1936b:614. – Radoszkowski, 1892:590 (reference to Radoszkowski, 1886). – **As *Tachysphex montanus***: Dalla Torre, 1897:465 (new generic assignment, in catalog of world Hymenoptera).

*Tachytes monticola* Dalla Torre, 1897:681. Substitute name for *Tachytes montanus* (Radoszkowski, 1886).

### **ssp. galileus de Beaumont**

*Tachysphex galileus* de Beaumont, 1947c:667, ♀. Holotype: ♀, Israel: Galilea (BMNH). – **As *Tachysphex bicolor galileus***: Pulawski, 1967a:401 (new status, Turkey), 1971:209 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:9 (Israel). – **As *Tachysphex brullii galileus***: R. Bohart and Menke, 1976:273 (new subspecific generic assignment, in checklist of world Sphecidae); Straka, 2005b:268 (Turkey: Kütahya: 30 km north of Kütahya); Yildirim and Ljubomirov, 2005:1796 (Turkey: Dutçu, Pasinler), 2007a:119 (Turkey: Erzurum, Kars, and Konya provinces); Ljubomirov and Yildirim, 2008:202 (in catalog of Crabronidae of Turkey); Yildirim, 2012:79 (Turkey: Erzurum: university campus); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Kaplan and Yildirim, 2021:62 (in catalog of Crabronidae of Turkey).

### **77. bruneiceps Arnold**

*Tachysphex bruneiceps* Arnold, 1923a:153, ♀, ♂. Lectotype: ♀, Zimbabwe: Sawmills (SAM), designated by Pulawski, 2007a:171. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae), 1945:97 (Madagascar), 1951:155 (Ethiopia: River Hawash); Leclercq, 1960a:98 (Madagascar), 1961d:109 (Madagascar); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Leclercq, 1990b:117 (Madagascar: Tamiatave); Hancock, Chahwanda, and Mhlanga, 1995:40 (syntypes in Bulawayo Museum); Madl, 1997:821 (in checklist of Nosy Boraha Sphecidae); Pulawski, 2003b:797 (in checklist of Malagasy Sphecidae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing

venation); Pulawski, 2007a:171 (in revision of African *Tachysphex*); Madl, 2014a:980 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

#### 78. *buccalis* Pulawski

*Tachysphex buccalis* Pulawski, 1977a:280, ♂. Holotype: ♂, Australia: South Australia: Mount Davies in Tomkinson Range (ANIC). – Cardale, 1985:239 (in catalog of Australian Sphecidae).

#### 79. *buyssoni* Morice

*Tachysphex buyssoni* Morice, 1897:307, ♀, ♂. Lectotype: ♀, Egypt: Koubbeh near Cairo (OXUM), designated by Pulawski, 1971:295. – Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Giarabub); nec Guiglia, 1932d:475 (= *Tachysphex costae*); Guiglia, 1934b:304 (Libya: bibliography and summary of locality records); de Beaumont, 1940b:164 (in revision of *Tachysphex* of Egypt); Honoré, 1942:55 (Egypt: Fayum = Kom Osheim, Sinai); de Beaumont, 1947a:158 (in new revision of *Tachysphex* of Egypt), 1956a:196 (Chad: Tibesti), 1961e:4 (Iraq); Pulawski, 1971:293 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:10 (Israel); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Dollfuss, 1989:13 (type material in NHMW); Roche and Zalat, 1994:115 (Egypt: Sinai Peninsula); Pulawski, 2007a:173 (in revision of African *Tachysphex*); Roche, 2007a:78 (in checklist of Egyptian Crabronidae), 2007b:4 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Straka and Schmid-Egger, 2017:427 (United Arab Emirates: Jebel Hafit near al-Ain at 24.56°N 55.75°E); Gadallah, 2020b:50 (in list of aculeate wasps of Arabian Peninsula); Gadallah, Abu el-Ghiet, and Edmardash, 2021:1722 (first record from Saudi Arabia: Jazan Province); Gadallah and Abu El-Ghiet, 2024:86 (Saudi Arabia: Jazan Province: Damad).

#### 80. *caliban* Arnold

*Tachysphex Panzeri* var. *caliban* Arnold, 1923a:169, ♀, ♂ (as *Caliban*, incorrect original capitalization). Lectotype: ♂, Zimbabwe: Sawmills (SAM), designated by Pulawski, 2007a:175. – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae), 1935a:497 (South Africa: Kalahari); Bohart and Menke, 1976:275 (as synonym of *Tachysphex panzeri pentheri*); Hancock, Chahwanda, and Mhlanga, 1995:40 (syntype in Bulawayo Museum). – **As *Tachysphex caliban***: Pulawski, 2007a:175 (new status, in revision of African *Tachysphex*).

#### 81. *calidus* Pulawski

*Tachysphex calidus* Pulawski, 2007a:178, ♀, ♂. Holotype: ♂, Namibia: Karibib District: Khan River 23 km north of Karibib at 21°47'S 15°57'E (CAS). Paratypes: Botswana, Burkina Faso, Ethiopia, Kenya, Mali, Mauritania, South Africa, Tanzania, Yemen. – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

#### 82. *camptopygus* Pulawski

*Tachysphex camptopygus* Pulawski, 2007a:183, ♀, ♂. Holotype: Namibia: Karibib District: Khan River 23 km north of Karibib at 21°47'S 15°57'E (CAS). – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

#### 83. *capensis* (de Saussure)

*Tachytes capensis* de Saussure, 1867:71, ♂. Holotype or syntypes: ♂, South Africa: Cape Province: Cape of Good Hope (NHMW). – Kohl, 1985:400 (in checklist of world *Tachytes*). – **As *Tachysphex capensis***: Dalla Torre, 1897:678 (new generic assignment, in catalog of world Hymenoptera); Arnold, 1923a:174 (recorded from Afrotropical Region but unknown to the author); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Dollfuss, 1989:13 (type in NHMW); Pulawski, 2007a:187 (in revision of African *Tachysphex*).

*Tachysphex tuckeri* Arnold, 1923a:172, ♂ (as *Tuckeri*, incorrect original capitalization). Holotype: ♂, South Africa: Cape Province: Montagu (SAM). Synonymized with *Tachysphex capensis* by Pulawski, 2007a:187. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae).

#### 84. *carinatus* Pulawski

*Tachysphex carinatus* Pulawski, 2007a:191, ♀, ♂. Holotype: ♀, Tanzania: Coast Region: 17 km east of Chalinzé at 6°39.2'S 38°30.2'E (CAS). Paratype: Zimbabwe.

#### 85. *carli* de Beaumont

*Tachysphex carli* de Beaumont, 1947c:673, ♀, ♂. Holotype: ♀, Morocco: Tanger (MHNG). Paratype: Gibraltar. – Ceballos, 1956:376 (in catalog of Hymenoptera of Spain); Pulawski, 1971:251 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Gayubo, 1982f:251 (Spain: Cádiz Province: Alcalá de los Gazules, Palmones, San Roque); K. Schmidt and Bitsch in Bitsch et al., 2001:240 (in Sphecid Fauna of Western Europe); Gayubo, González, Tormos, and Asís, 2002:84 (distribution in Iberian Peninsula); Gayubo, González, Tormos, and Asís, 2002:84 (in Spain known from Badajoz and Cádiz provinces); Gayubo, González, de la Nuez, Asís, and Tormos, 2006:208 (Spain: Sevilla: Cazalla de la Sierra); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:459 (recorded from Spain by Gayubo et al., 2002, 2006); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:209 (in revision of Sphecidae *sensu lato* of Europe).

#### 86. *cavatus* Pulawski

*Tachysphex cavatus* Pulawski, 2007a:192, ♂. Holotype: ♂, Madagascar: Mahajanga Province: Parc National d'Ankarafantsika: Station Forestière Ampijoroa 40 km northwest of Andranofasika at 16°19'15"S 46°48'38"E (CAS). – Madl, 2014a:980 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

#### 87. *changi* Tsuneki

*Tachysphex changi* Tsuneki, 1967b:53, ♀, ♂. Holotype: ♂, Taiwan: Chiayi Prefecture: Chuchi (originally K. Tsuneki coll., now USNM). – Tsuneki, 1967b:12, 17 (in key to Larrinae of Taiwan), Haneda, 1971b:30 (Taiwan); Tsuneki, 1971h:20 (Japan: Ryukyu Islands); Haneda, 1972a:4 (Taiwan); Tano, 1972:24 (Japan: Ryukyu Islands); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Krombein, 1981, *Spolia Zeylanica*: 123 (Sri Lanka); Tsuneki, 1982g:60 (known from the Ryukyu archipelago), 1983a:68, 69 (in key to *Tachysphex* of Philippines and Japan); Krombein and Pulawski, 1994:53 (in revision of Sri Lankan *Tachysphex*); Porter, Stange, and Wang, 1999:9 (in checklist of Sphecidae of Taiwan); Hua, 2006:282 (in list of Chinese insects, geographic distribution); Munasinghe and Edirisinghe, 2007:78 (Sri Lanka: Meewathura Agriculture Farm); Pham and Antropov, 2021:320 (recoed from Vietnam by Krombein and Pulawski, 1994).

*Tachysphex nambui* Tsuneki, 1973a:5, ♀. Holotype: ♀, Ryukyu Islands: Iriomote Island: Komi (T. Nambu coll.). Synonymized with *Tachysphex changi* by Tsuneki, 1983a:60. – R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Tsuneki, 1982g:60 (known from the Ryukyu archipelago); Yamane, Ikudome, and Terayama, 1999:518 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan).

#### *ssp. luzonicus* Tsuneki

*Tachysphex changi luzonicus* Tsuneki, 1983a:60, ♂. Holotype: ♂, Philippines: Luzon: Laguna Province: Los Baños (originally K. Tsuneki coll., now?). – Tsuneki, 1983a:68, 69 (in key to *Tachysphex* of Philippines and Japan); Nuhn and Menke, 1994:27 (holotype not transferred to USNM, possibly returned to T.

Murota, the collector); Menke, 1995:14 (type still in K. Tsuneki collection); Tano, 1995:45 (holotype in K. Tsuneki collection), 2020:26 (holotype in USNM).

### 88. *cheops* de Beaumont

*Tachysphex cheops* de Beaumont, 1940b:163, ♀, ♂. Holotype: ♀, Egypt: Cairo-Suez road (originally A. Mochi coll., now Entomological Society of Egypt?). – Honoré, 1942:55 (Egypt: Cairo-Suez road); de Beaumont, 1947a:158 (in new revision of *Tachysphex* of Egypt), 1950d:17 (Egypt: Siwa oasis), 1953a:175 (Mauritania), 1966:212 (Egypt: Agami near Alexandria); Pulawski, 1971:291 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:10 (Israel); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Roche and Zalat, 1994:115 (Egypt: Sinai Peninsula); Pulawski, 2007a:194 (in revision of African *Tachysphex*); Roche, 2007a:78 (in checklist of Egyptian Crabronidae), 2007b:4 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Atbaei, Fallahzadeh, and Ljubomirov, 2015:24 (first record from Iran: Fars Province); Straka and Schmid-Egger, 2017:428 (United Arab Emirates), 429 (color photographs); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:629 (Iran: Hormozgan: Band e Molla at 27°25'N 57°09'E); Gadallah, 2020b:50 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:73 (in catalog of *Tachysphex* of Iran).

As *Tachysphex panzeri*: Guiglia, 1940:289 fig. 1 (Libya), corrected to *Tachysphex cheops* by Pulawski, 1971:291.

### 89. *chephren* de Beaumont

*Tachysphex chephren* de Beaumont, 1940:164, ♀, ♂. Holotype: ♀, Egypt: Wadi Hoff near Cairo (originally A. Alfieri coll., now USNM). – Honoré, 1942:55 (Egypt: Wadi Hoff); de Beaumont, 1947a:165 (in new revision of *Tachysphex* of Egypt); Pulawski, 1971:311 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:11 (Israel); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Roche and Zalat, 1994:115 (Egypt: Sinai Peninsula); Pulawski, 2007a:197 (in revision of African *Tachysphex*); Roche, 2007a:78 (in checklist of Egyptian Crabronidae), 2007b:4 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Straka and Schmid-Egger, 2017:428 (United Arab Emirates: Wadi al-Helo), 430 (color photograph); Gadallah, 2020b:50 (in list of aculeate wasps of Arabian Peninsula).

### 90. *chiastotrichus* Pulawski

*Tachysphex chiastotrichus* Pulawski in Krombein and Pulawski, 1994:52, ♀, ♂. Holotype: ♀, Sri Lanka: Hambantota District: Palatupana (USNM).

### 91. *circulans* Pulawski

*Tachysphex circulans* Pulawski, 1977a:224, ♀, ♂. Holotype: ♀, Australia: Western Australia: Yallingup (BMNH). – Cardale, 1985:239 (in catalog of Australian Sphecidae).

### 92. *clarconis* Viereck

*Tachysphex clarconis* Viereck, 1906:211, ♀. Holotype: ♀, USA: Kansas: Clark County: no specific locality (Kansas Univ.). – F. Williams, 1914a:173 (in revision of Larrinae of Kansas); G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); LaBerge, 1956:527 (holotype in Snow Entomological Museum); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Krombein, 1979b:1631 (in catalog of North American Hymenoptera); Elliott and Kurczewski, 1985:294 (nesting habits); Rust, Menke, and Miller, 1985:46 (California: Channel Islands), 53 (color forms); Pulawski, 1988a:147 (in revision of Nearctic *Tachysphex*); Kurczewski, 2009:6 (review of known behavioral information), 81-86 (discussion of nesting behavior); Kurczewski, Kurczewski, and Abela, 2015:243 (nesting habits; prey: eumastacid *Morsea californica* Scudder is new family record for

North American *Tachysphex*); Ratzlaff, 2016:26 (Canada: British Columbia: from Krombein, 1979 and Pulawski, 1988); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: British Columbia, first record from Saskatchewan: no specific locality).

*Tachysphex plesius* Rohwer, 1917a:245, ♀ (as *plesia*, incorrect original termination). Holotype: ♀, USA: California: Eldorado County: Tahoe (USNM). Synonymized with *Tachysphex clarconis* by Pulawski in Krombein, 1979b:1631. – G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae).

*Tachysphex* sp. near *linsleyi*: Evans, 1970:490 (Wyoming: Jackson Hole, nesting habits), corrected to *Tachysphex clarconis* by Kurczewski and Evans, 1986:720.

### 93. *claripes* Arnold

*Tachysphex diabolicus* var. *claripes* Arnold, 1924:51, ♀, ♂. Lectotype: ♀, Zimbabwe: Bulawayo (SAM), designated by Pulawski, 2007a:199. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex diabolicus claripes***: R. Bohart and Menke, 1976:273 (new status, in checklist of world Sphecidae). – **As *Tachysphex claripes***: S. Gess and F. Gess, 2003:109 (full species status, South Africa: visiting flowers *Conicosia* sp., Aizoaceae); Pulawski, 2007a: 199 (in revision of African *Tachysphex*).

*Tachysphex diabolicus* var. *trifasciatus* Arnold, 1924:51, ♀, ♂. Lectotype: ♀, South Africa: Eastern Cape Province: Algoa Bay near Port Elizabeth (TMP), designated by Pulawski, 2007a:199. Synonymized with *Tachysphex claripes* by Pulawski, 2007a:199. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex diabolicus trifasciatus***: R. Bohart and Menke, 1976:273 (new status, in checklist of world Sphecidae).

### 94. *clypeatus* Arnold

*Tachysphex clypeatus* Arnold, 1947:147, ♀, ♂. Lectotype: ♀, Northern Rhodesia: Abercorn, now Zambia: Mbala (SAM), designated by Pulawski, 2007a:204. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 2007a: 204 (in revision of African *Tachysphex*).

### 95. *clypedentalis* T. Li, Q. Li, and Cai

*Tachysphex clypedentalis* T. Li, Q. Li, and Cai, 2008:140 and 146, ♀. Holotype: ♀, China: Nei Mongol: Uxin Qi County: Ordos City (Yunnan Agricultural University, Kunming).

### 96. *cockerellae* Rohwer

*Tachysphex cockerellae* Rohwer, 1914:518, ♂. Holotype: ♂, Guatemala: Amatitlán (USNM). – Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera: California, Guatemala); Pulawski, 1974a:88 (in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Krombein, 1979b:1632 (in catalog of North American Hymenoptera); Elliott and Kurczewski, 1985:296 (prey); Pulawski, 1988a:204 (in revision of Nearctic *Tachysphex*); Cambra and Santos, 2000:56 (first record from Panama: Provincia de Chiriquí: Las Layas; Provincia de Panamá: Puerto Caimito); Amarante, 2002:34 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Horta-Vega, Vannoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### 97. *cocopa* Pulawski

*Tachysphex cocopa* Pulawski, 1988a:191, ♀, ♂. Holotype: ♀, Mexico: Sonora: southwestern part of Isla Tiburón (CAS). – Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

**98. *conceptus* Pulawski**

*Tachysphex conceptus* Pulawski, 1974a:29, ♀, ♂. Holotype: ♂, Chile: Concepción (MCZ). – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Sielfeld, 1980b:73 (in checklist of Chilean Sphecidae); Dollfuss, 1989:13 (paratype in NHMW); Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

As *Tachysphex rufitarsis*: Brèthes, 1913:149 (synonymy, Argentina: Mendoza: Chubut), corrected to *Tachysphex conceptus* by Pulawski, 1974a:29.

**99. *conclusus* Nurse**

*Tachysphex conclusus* Nurse, 1903a:517, ♀, ♂. Syntypes: India: Gujarat: Deesa; and Rajasthan: Mount Abu (BMNH). – Ramakrishna Aiyar, 1916:551 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Krombein and Pulawski, 1994:84 (in revision of Sri Lankan *Tachysphex*); Mawadda and Girish Kumar, 2023:110 (in checklist of Crabroninae of Northern India).

**100. *confrater* Pulawski**

*Tachysphex confrater* Pulawski, 1971:123, ♀. Syntypes: ♀, Turkmenistan: Uch-Adji (ZIN). – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Kazenas, 1978b:123 (in key to Sphecidae of Kazakhstan and Central Asia), 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia).

**101. *congoensis* Arnold**

*Tachysphex ambiguus* var. *congoensis* Arnold, 1924:53, ♀. Holotype: ♀, Zaire: Lubumbashi (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); Schouteden, 1930:91 (Zaire: Lubumbashi). – As *Tachysphex ambiguus congoensis*: R. Bohart and Menke, 1976:272 (new status, in checklist of world Sphecidae). – As *Tachysphex congoensis*: Pulawski, 2007a:205 (full species status, in revision of African *Tachysphex*).

**102. *consocius* Kohl**

*Tachysphex consocius* Kohl, 1892:217, ♀. Holotype: ♀, Azerbaijan: Helenendorf, now Göygöl (NHMW). – Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Pulawski, 1971:185 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:275 (in Sphecid Fauna of Czechoslovakia); Erlandsson, 1974:71 (Italy); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Kazenas, 1978b:121, 131 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Guichard, 1980:227 (Oman); Pagliano, 1980:128 (Italy: Lazio); Gayubo, 1982a:100 (northern Spain: Sierra de Béjar), 1982f:251 (Spain: Cádiz Province: Palmones, Zahora); Rodgers and Homewood, 1982:233 (Tanzania: Usambara Mountains); Schmidt and Westrich, 1983:123 (Greece); Gayubo, 1984b:84 (Spain: Salamanca Province), 1984c:363 (Portugal: El Algarve Province); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Gayubo, 1986c:32 (Spain: Zamora Province); Gayubo and Sanza, 1986:44 (Spain: Burgos Province); Islamov, 1986:526 (Uzbekistan: Tashkent Oblast'); Gayubo and Mingo, 1988:77 (Spain); Asís, Gayubo, and Tormos, 1989a:236 (nest and prey); Pádr *in* Šedivý, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Gayubo, Asís, and Tormos, 1990a:17 (Spain); Pagliano, 1990:103 (in catalog of Italian Sphecidae); Dollfuss, 1991:105 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1992:281 (France: Corse); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Krombein and Pulawski, 1994:10 (nesting habits), 28 (in revision of Sri Lankan *Tachysphex*); Tormos, Asís, and Gayubo, 1994:188, 204 (Spain: Albacete Province); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Dollfuss, Gusenleitner, and Bregant, 1998:515 (Austria: summary of collecting records from Burgenland); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Nazarova, 1998:40 (Tajikistan: Tigrovaya Balka Nature Reserve); Gayubo, García, Torres,

and González, 1999:89 (Spain: Soria Province); Esenbekova and Kazenas, 2000:20 (southeastern Kazakhstan: seven localities); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Vicidomini, 2000b:28 (Italy: previously recorded from Campania); Ivanov and Ljubomirov, 2001:211 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia); Ljubomirov, 2001b:49 (Bulgaria: Mount Vitoshka near Sofia); K. Schmidt and Bitsch *in* Bitsch et al., 2001:241 (in Sphecid Fauna of Western Europe); Seyoum and Pulawski, 2001:323 (potential control agent of acridid pests in Ethiopia; Ethiopia: Gamo Gofa: 58 km north-northeast of Arba Minch at 6°24'N 37°45'E, western shore of Lake Chamo at 5°56'N 37°32'E, 49 km southeast of Sodo at 6°29'N 37°40'E, Harerge: 37 km southeast of Jijiga at 9°11'N 43°05'E, 43 km southeast of Jijiga at 9°09'N 43°08'E, Sidamo: 35 km north of Moyale at 3°43'N 38°50'E; prey: early stage nymph of an acridid); Kazenas, 2002a:66 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:140 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Gayubo, Özbek, and Yıldırım, 2003:88 (Turkey: Erzurum: University campus); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavalero); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Schmid-Egger, 2003:758 (Italy: Sicilia: Piano); Gayubo et al. 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Kazenas, 2004b:103 (Kazakhstan: western Tien Shan); Shkuratov, 2004a:76 (Russia: Rostov Oblast' and Ukraine: Donetsk Oblast'), 2004b:166 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Jacobs, 2005a:451 (Bulgaria: Michurin, Krasnovo near Hissarya); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Nazarova, 2005:93 (alfalfa fields in southwestern Tajikistan); Pagliano and Negrisoló, 2005:375 (in Sphecid Fauna of Italy); Shoreenko, 2005a:164 (Ukraine: Crimea); Straka, 2005b:251 (Turkey: Içel: Büyükeçeli; *consocius* sensu Pulawski and Krombein, 1994, is a complex of species); Gorobchishin, 2006:109 (Ukraine: Kyïv Oblast': Koncha-Ozerna); Ljubomirov, 2006:543 (Greece: Rhodope Mountains: earlier records by Schmidt and Westrich, 1983, reported); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Baños-Picón, Gayubo, Asís, and González, 2007a:255, 258 (Spain: Zamora: Cabañas de Aliste); Pulawski, 2007a:207 (in revision of African *Tachysphex*); Roche, 2007a:73 (in checklist of Egyptian Crabronidae, as *consocius consocius*), 2007b:4 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *consocius consocius*); G. Turrisi and R. Turrisi, 2007:120 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Slovakia); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:203 (in catalog of Crabronidae of Turkey); Baños-Picón, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Shoreenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Burguet *in* Durand and Burguet, 2010:51 (France Département d'Ardèche: Ardèche Gorges); Mokrousov, 2010a:62 (Russia: Nizhniy Novgorod Oblast': no specific localities), 2010b:100 (Russia: Nizhniy Novgorod Oblast': no specific localities); Shoreenko and Kononov, 2010:22 (Ukraine: Khar'kov Oblast': village Rogan'); van der Smitsen, 2010b:387 (France: Vaucluse: Bédoin); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Gogala, 2011:15

(Slovenia: Podčetrtek); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Gros, 2013:322 (nesting habits); Kazenas, 2013b:494 (southeastern Kazakhstan: Ili River valley, river and stream valleys in foothills and low mountains); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park); Bitsch, 2014:402 (recent records from Bulgaria and France reported); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Kazenas, 2014a:134 (Kazakhstan: Karatau Mountain Range); Yıldırım, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:24 (Iran: Fars Province); Rezaei and Fallahzadeh, 2015:8 (Iran: Fars: Fars: Kaftarak at 29°34'N 52°41'E); P. Rosa and Pagliano, 2015:105 (Italy: Lombardia and Piemonte: Parco del Ticino); Samin, Bagriacik, and Monaem, 2015:197 (Iran: East Azarbaijan: Miyaneh); Shorenko, 2015:327 (in list of Sphecidae *sensu lato* of Crimea); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:33 (Turkey: Erzurum Province); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Shorenko, 2017:77 (in Crimea collected in July); Straka and Schmid-Egger, 2017:428 (United Arab Emirates), 430 (color photograph); Maharramov, Aliyev, and Mammadov, 2018:454 (Azerbaijan: Göygöl, Shakhbuz, Sheki); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Ljubomirov, 2019:101 (Bulgaria: Vratschanska Planina); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:17 (Azerbaijan: Nakhichevan Autonomous Republic); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:268 (Iran: Fars: Estahban: Mobarak Abad, and Jahrom); Ben Khedher, Yıldırım, and Braham, 2020b:312 (Tunisia: new locality records from Le Kef and Kebili provinces); Gadallah, 2020b:50 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:69 (in catalog of *Tachysphex* of Iran); Shorenko, 2020:52 (Crimea: Karadag Nature Reserve); Cross, Baldock, and Wood, 2021:41 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yıldırım, 2021:62 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:209 (in revision of Sphecidae *sensu lato* of Europe); Abu el-Ghiet, Gadallah, Gasib, Al-Fifi, and Edmardash, 2023:170 (Saudi Arabia: Farasan Island); Kaplan and Yıldırım, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Gadallah and Abu El-Ghiet, 2024:83 (Saudi Arabia: Jazan Province: Fayfa, Farasan); Kochetkov and Korsun, 2025:10 (Russia: Zabaikalskiy Krai: Dauriski Nature Reserve); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

*Tachysphex cabrerai* Mercet, 1909b:196, ♀, ♂ (as *Cabrerai*, incorrect original capitalization). Syntypes: Spain: Madrid (MNCN). Synonymized with *Tachysphex consocius* by Pulawski, 1971:185. – Mercet, 1910b:165 (listed); de Beaumont, 1936a:209 (in revision of French *Tachysphex*), 1940b:176 (in revision of *Tachysphex* of Egypt); Honoré, 1942:55 (Egypt: Gebel Asfar, Helwan); Giner Marí, 1943:138 (in Sphecid Fauna of Spain); de Beaumont, 1947a:201 (in new revision of *Tachysphex* of Egypt), 1947b:393 (Cyprus); de Andrade, 1949:15 (Portugal); de Beaumont, 1950d:20 (Egypt: Siwa oasis); Pittioni, 1950:25 (Cyprus); de Beaumont, 1954a:59 (Italy), 1954e:91 (Italy); Grandi, 1954:238 (Italy), 238 (*cabrerai* var. ?); de Beaumont, 1955a:184 (Morocco); Ceballos, 1956:375 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:199 (Libya); Grandi, 1957:389 (Italy); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Pulawski, 1958a:181 (Bulgaria: Aitos, Sozopol); Diniz, 1959:29 (Portugal: Cascais, Lisboa, Paço do Rei, Trafaria); Suárez, 1959:58 (Spain: Almería Province); de Beaumont, 1960a:19 (Greece: Island of Rhodes), 1960b:239 (Libya), 1961c:50 (Greece: Island of Crete), 1962b:26 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Diniz, 1964a:6 (Portugal: thirteen localities); Pulawski, 1964:95 (Egypt: Abu Rawash, Dahshur, Ghiza, Maadi, Kom Osheim); de Beaumont, 1965a:51 (Greece), 1966:212 (Egypt: Amrye near Alexandria); Pulawski,

1967a:408 (Turkey); de Beaumont, 1970a:401 (Afghanistan); Georghiou, 1977:192 (Cyprus); Dollfuss, 1989:13 (type material in NHMW).

*Tachysphex minutulus* Arnold, 1923a:160, ♀, ♂. Lectotype: ♂, Zimbabwe: Bulawayo (SAM), designated by Pulawski, 2007a:207. Synonymized with *Tachysphex consocius* by Pulawski in R. Bohart and Menke, 1976:273. – Arnold, 1924:57 (correction to original description), 1930:3 (in checklist of Afrotropical Sphecidae).

*Tachysphex grandii* de Beaumont, 1965a:51, ♀, ♂. Holotype: ♂, Italy: Bologna: Gaibola (Bologna). Synonymized with *Tachysphex consocius* by Pulawski in Krombein and Pulawski, 1994:28. – Pulawski, 1967a:408 (Turkey), 1971:182 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:277 (in Sphecidae Fauna of Czechoslovakia); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:121, 131 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Gayubo, 1982a:102 (northern Spain: Sierra de Béjar), 1982f:252 (Spain: Cádiz Province: Guadiaro); Dollfuss, 1983a:76 (endangered in Niederösterreich, Austria), 1983b:10 (in catalog of Sphecidae of Austria); Gayubo, 1984b:96 (Spain: previously recorded from Salamanca Province), 1984c:364 (Portugal: El Algarve Province), 1986c:33 (Spain: Zamora Province); Gayubo and Sanza, 1986:45 (Spain: Burgos Province); Islamov, 1986:526 (Uzbekistan: Tashkent Oblast'); Dollfuss, 1987:21 (Austria: Niederösterreich: St. Christofen); Gayubo, 1987a:112 (Spain: Ciudad Real Province); Gayubo and Mingo, 1988:79 (Spain); Karsai, 1988:100 (Hungary: Kiskunság National Park); Józán, 1989:101 (Hungary: Tihany Nature Reserve); Pádr in Šedivý, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Gayubo, Asís, and Tormos, 1990a:17 (Spain); Day, 1991:xix (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:105 (in key to Sphecidae of North and Central Europe); Gusenleitner, 1992:685 (Austria: Steiermark: Therme Loipersdorf); Józán, 1992b:173 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Dollfuss, 1994:100 (endangered in Austria); Tormos, Asís, and Gayubo, 1994:188, 205 (Spain: Albacete Province); Józán, 1995:104 (Hungary: projected Duna-Dráva National Park); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); Ljubomirov, 1999b:49 (Bulgaria: Mount Vitoshka near Sofia); Esenbekova and Kazenas, 2000:30 (south-eastern Kazakhstan: 10 km south, 20 km west, and 12-15 km southwest of Alma Ata, near Bakanas, 45 km southwest of Chundzha); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Józán, 2000:107 (Hungary: Bakony Mountains), 2001:279 (Hungary: Somogy County); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Zettel, Gross, and Mazzucco, 2001:72 (Austria: Wien); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:68 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:141 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Józán, 2003:227 (Hungary: Látrányi Pusztá Nature Conservation Area); Kazenas, 2004b:103 (Kazakhstan: western Tien Shan), 2004d:30 (Kazakhstan: northern Caspian region); Straka, 2005a:402 (endangered in Czech Republic), 2005b:252 (valid species, diagnosis, locality records from Europe, Turkey, and Kazakhstan); Józán, 2007:179 (Hungary: Zselic hills); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia), 222 (listed from Bohemia, Moravia, and Slovakia by Straka, 2005; specimens published as *Tachysphex tarsinus* by Vepřek, 2000 include *Tachysphex grandii*); Baños-Picon, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Burguet in Durand and Burguet, 2010:51 (France Département d'Ardèche: Ardèche Gorges); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tymer, Vepřek, and Zeman, 2010:102 (Western Slovakia: recorded from Borská Nížina);

van der Smissen, 2010b:387 (France: Ardèche: Plateau de Coiron, Saint-Maurice d'Ibie, Vogüé; Vaucluse: Bédoin); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Bitsch, 2014:402 (records from Austria by Zettel et al., and from France by van der Smissen noted); Kazenas, 2014a:134 (Kazakhstan: Karatau Mountain Range); Yıldırım, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Zettel, Ockermüller, and Wiesbauer, 2014:165 (Austria: Niederösterreich); Mokrousov and Popov, 2016:580 (Russia: Abkhazia, Krasnodarskiy Krai); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:33 (may be a synonym of *Tachysphex consocius*); Akulov, Proshchalykin, and Mokrousov, 2020:49 (Russia: central Krasnoyarsk Krai); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:220 (as valid species, in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

As *Tachysphex cabrerai* var. ? : Grandi, 1954:238 (Italy), corrected to *Tachysphex grandii* by de Beaumont, 1965a:51.

As *Tachysphex* species 1 (part) and 3 (part): van Noort, Prinsloo, and Compton, 2000:348 (Namibia), corrected to *Tachysphex consocius* by Pulawski, 2007a:208.

### 103.contrarius Pulawski

*Tachysphex contrarius* Pulawski, 1977a:241, ♀, ♂. Holotype: ♀, Western Australia: Kalamunda 30 km east of Perth (BMNH). – Cardale, 1985:239 (in catalog of Australian Sphecidae); McCorquodale and Thomson, 1989:94 (prey: nymph of *Laxta*, a blattid); K. Walker, Naumann, Austin, Taylor, and Cardale, 1992:48 (in catalog of insects of Tasmania).

### 104.coquilletti Rohwer

*Tachysphex coquilletti* Rohwer, 1911b:572, ♀, ♂. Holotype: ♀, California: Los Angeles County: no specific locality (USNM). – G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); Krombein, 1961a:81 (visiting flowers of mat euphorbia, *Euphorbia albomarginata* Torr. and A. Gray); Kurczewski, 1966:317 (prey); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Alcock and Gamboa, 1975b:164 (nesting habits); Hurd and Linsley, 1975:116 (Arizona: Cochise County: Portal, and Pinal County: Casa Grande; on flowers of *Larrea tridentata* (De Candolle) Coville, Zygophyllaceae); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Krombein, 1979b:1632 (in catalog of North American Hymenoptera); S. Frommer, 1988:96 (California: Riverside County: Deep Canyon); Pulawski, 1988a:200 (in revision of Nearctic *Tachysphex*); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

*Tachysphex dentatus* F. Williams, 1914a:169, ♀. Holotype: ♀, Kansas: Morton County: no specific locality (Kansas Univ). Synonymized with *Tachysphex coquilletti* by G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950. – LaBerge, 1956:527 (holotype in Snow Entomological Museum); Arnaud, 1970:32 (in list of species described by F.X. Williams).

### 105.coriaceus (A. Costa)

As *Tachysphex nigripennis*: A. Costa, 1867b:85 (in revision of Italian Sphecidae), corrected to *Tachysphex coriaceus* by de Beaumont, 1936c:5.

*Tachytes coriaceus* A. Costa, 1867b:95, ♂ (as *coriacea*, incorrect original termination). Holotype: ♂, Italy: Campania: Portici (Napoli). – As *Tachysphex coriaceus*: Kohl, 1885a:394 (new generic assignment,

original description copied); Dalla Torre, 1897:678 (in catalog of world Hymenoptera); de Beaumont, 1936c:5 (redescription), 1954a:57 (Italy), 1954e:91 (Italy); Grandi, 1954:239 (Italy), 1957:389 (Italy); Zangheri, 1969:1704 (Italy: in catalog of flora and fauna of Romagna Region); Pulawski, 1971:232 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:268 (in Sphecid Fauna of Czechoslovakia: Slovakia: Kamenica nad Hronom); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 1978:216, 218 (in key to Sphecidae of European part of USSR); Pádr *in* Šedivy, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Pagliano, 1990:103 (in catalog of Italian Sphecidae); Dollfuss, 1991:105 (in key to Sphecidae of North and Central Europe); Negrisol *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Kuhlmann, 1996:220 (Portugal: Serra de Estrela); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Majzlan, Rychlík, and Deván, 1999:146 (Slovakia: Čenkovská Step Nature Reserve); Vicidomini, 2000a:135 (Italy: Portici), 2000b:28 (Italy: previously recorded from Campania); Ivanov and Ljubomirov, 2001:211 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); K. Schmidt and Bitsch *in* Bitsch et al., 2001:242 (in Sphecid Fauna of Western Europe; first record from Spain); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Shkuratov, 2004a:76 (Russia: Rostov Oblast': 4 km south of Bol'shekrepińskaya); Pagliano and Negrisol, 2005:363 (in Sphecid Fauna of Italy); Straka, 2005b:269 (first record from Turkey: Bursa: Çagliyan); Standfuss and Standfuss, 2006b:97 (first record from Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:459 (recorded from Greece by Standfuss and Standfuss, 2006b); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Slovakia); Pagliano, 2009:183 (Italy: Piemonte: Macra; Sardegna: Platamona; France: Corse: Travo); Shorenko and Konovalov, 2010:22 (Ukraine: Lugansk Oblast': village D'yakovo); Japoshvili and Ljubomirov, 2012:96 (Turkey: Isparta: Gölcük Nature Park 8 km southwest of city of Isparta); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Pankov, 2013:230 (Russia: Ivanovo Oblast'); Bitsch, 2014:402 (record from Corsica by Pagliano, 2009 reported); Yıldırım, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Cross, Baldock, and Wood, 2021:41 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yıldırım, 2021:62 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:210 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

*Tachysphex coriaceus* A. Costa, 1867c:39. Objective synonym of *Tachysphex coriaceus* A. Costa, 1867b:95. *Tachysphex reiseri* Kohl, 1901c:777, ♀ (as *Reiseri*, incorrect original capitalization). Holotype or syntypes: ♀, Bosnia and Herzegovina: Fojnica near Tješilo (NHMW). Synonymized with *Tachysphex coriaceus* by de Beaumont, 1936c:5. – Grandi, 1935a:110 (Italy); Dollfuss, 1989:13 (type material in NHMW); Haris, 2016:15 (in list of species described by F. Kohl from Carpathian Basin).

### **106.costae (De Stefani Perez)**

*Tachytes costae* De Stefani Perez, 1882:42, ♀ (as *Costae*, incorrect original capitalization). Syntypes: ♀, Italy: Sicilia: Sciacca (depository unknown). – De Stefani Perez, 1895:226 (in catalog of Sicilian Hymenoptera). – **As *Tachysphex costae***: Kohl, 1885a:352 and 354 (in key to Palearctic *Tachysphex*), 365 (new generic assignment, in revision of Palearctic *Tachysphex*); Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Ferton, 1901b:680 (France: found in Marseille area, but not in Corsica); Adlerz, 1904:137 (known prey: nymphs of *Gryllus campestris* according to Lichtenstein); Antiga and Bofill, 1904:10 (in catalog of Catalanian Hymenoptera); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Mercet, 1910b:165 (listed from Spain); Morice, 1911:102 (Algeria: Biskra); Berland, 1925d:120 (in Sphecid Fauna of France); von Schulthess, 1929:135 (Greece: Astypalaia); Grandi, 1930:318 (nesting habits), 327 (description of mature larva), and 341 (Italy: Toscana: Maremma), 1931:47 (reference to earlier observations); Guiglia, 1932d:475 (Libya: 20 km south of Gialo); Nadig, 1933:78 (Morocco:

Goundafa); E. Nielsen, 1933:294 (summary of nesting habits); Giner Marí, 1934:134 (Spain); Grandi, 1934:59 (nest in cavities made by insects other than ants, mantid prey, description of mature larva); Guiglia, 1934b:304 (Libya: bibliography and summary of locality records); Nadig, 1934:32 (France: Corse: Ajaccio; Italy: Sardegna: Cagliari, Iglesias); Bernard, 1935:65 (France: Var: Fréjus area); de Beaumont, 1936a:198 (in revision of French *Tachysphex*), 1936c:8 (specimen in A. Costa collection), 1940b:170 (in revision of *Tachysphex* of Egypt, not found in Egypt); Guiglia, 1940a:291 (Libya: El-Hag), 1942b:234 (Libya); Giner Marí, 1943:140 (in Sphecidae Fauna of Spain); Guiglia, 1943b:71 (Albania: Kopliku); Giordani Soika, 1944:9 (Italy: Sicilia: Taormina); Guiglia, 1944b:27 (Italy); Deleurance, 1945:25 (nesting habits); Giner Marí, 1945b:360 (eastern Morocco: Muley Rechid); de Beaumont, 1947a:175 (in new revision of *Tachysphex* of Egypt: not found in Egypt; Libya: Cyrenaica), 1947b:391 (Cyprus); Guiglia, 1948c:201 (Italy: Sardinia: Villasalto); de Andrade, 1949:15 (Portugal); Pittioni, 1950:25 (Cyprus); de Beaumont, 1954a:55 (Italy), 1954e:91 (Italy), 1955a:181 (Morocco); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:197 (Libya); Morel, Nouvel, and Ribaut, 1956:338 (France: Département des Pyrénées-Orientales); de Beaumont, 1958b:61 (Algeria: Tassili des Ajjer); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Pulawski, 1958a:180 (Bulgaria: Aitos, Nesebar, Sandanski, Sozopol); Ceballos, 1959:229 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1959a:27 (Italy); Diniz, 1959:29 (Portugal: Cruz Quebrada, Vale de Gaio); Grandi, 1959b:287 (Italy: Livorno: Quercianella); de Beaumont, 1960a:16 (Greece: Island of Rhodes), 1960b:238 (Libya), 1961c:49 (Greece: Island of Crete); Grandi, 1961:194 (nesting habits), 506 (description of larva); de Beaumont, 1962b:25 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Diniz, 1964a:5 (Portugal: Monchique, Rezende, Sines, Trafaria); de Beaumont, 1965a:48 (Greece), 1966:212 (Egypt: Amrye near Alexandria); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nesebar); Pulawski, 1967a:397 (Turkey); Evans, 1968c:119 (discussion of larval descriptions by Grandi); Königsman, 1971:106 (Spain: Gerona: Palamós); Pulawski, 1971:400 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:270 (in Sphecidae Fauna of Czechoslovakia: may be expected in the country); de Beaumont, Bytinski-Salz, and Pulawski, 1973:12 (Israel); Erlandsson, 1974:71 (France, Italy, Malta, Spain); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Simon Thomas, 1976:5 (France: Lot-et-Garonne: Forêt de Campet); Georgiou, 1977:192 (Cyprus); Guichard, 1978:271 (Greece); Kazenas, 1978b:115, 127 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:215, 229 (in key to Sphecidae of European part of USSR); Pagliano, 1980:128 (Italy: Toscana); Gayubo, 1982a:101 (northern Spain: Sierra de Béjar), 1982f:251 (Spain: Cádiz Province: Puente Mayorga), 1984c:363 (Portugal: El Algarve Province), 1985c:168 (Spain: Valladolid: Valladolid), 1986c:32 (Spain: Zamora Province); Gayubo and Tormos, 1986a:12 (Spain: Castellón: Castellón de la Plana); Steiner, 1986:102 (references to papers on nesting habits); Gayubo, 1987a:111 (Spain: Ciudad Real Province); Asís and Jiménez, 1988:271 (Spain: Castellón Province); Gayubo and Mingo, 1988:78 (Spain); Pagliano, 1990:103 (in catalog of Italian Sphecidae); Dollfuss, 1991:105 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:401 (Italy: Toscana, Sicilia); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Schembri, 1991:180 (Malta); Gayubo, Borsato, and Osella, 1992:281 (Greece: Euboea); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Pagliano and Scaramozzino, 1995:731 (Italy: Island of Lampedusa); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Kuhlmann, 1996:220 (Portugal: Serra de Estrela); Wu and Zhou, 1996a:8 (in revision in Economic Insect Fauna of China); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); Esenbekova and Kazenas, 2000:29 (southeastern Kazakhstan: 5 km southwest of village Kazakhstan on Ili River, 45 km northwest of Suzak); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Vicidomini, 2000b:28 (Italy: previously recorded from Campania); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia), 156 (review of known biology); K. Schmidt

and Bitsch *in* Bitsch et al., 2001:244 (in Sphecidae Fauna of Western Europe); Kazenas, 2002a:66 (geographic distribution, collecting localities in Kazakhstan); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast: Chernomorskiy Nature Reserve); Kazenas, 2004b:103 (Kazakhstan: western Tien Shan), 2004d:30 (Kazakhstan: northern Caspian region); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Jacobs, 2005a:451 (Bulgaria: Melnik); Pagliano and Negrisoló, 2005:369 (in Sphecidae Fauna of Italy); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Straka, 2005b:274 (Turkey: Kayseri: Hisarcik 10 km south of Kayseri); Yildirim and Ljubomirov, 2005:1796 (Turkey: Erzurum: Tortum); Gorobchishin, 2006:111 (Ukraine: Kyiv); Hua, 2006:282 (in list of Chinese insects, geographic distribution); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:462 (Spain: Tarragona: El Perello, prey: Dictyoptera Mantidae: *Empusas pennata* (Thunberg), *Ameles spalanzannia* (Rossi), *Ameles decolor* (Charpentier), *Iris oratoria* (Linnaeus), and *Geomantis larvoides* Pantel, nests comprising 3-16 cells); Pulawski, 2007a:218 (in revision of African *Tachysphex*); Roche, 2007a:85 (in checklist of Egyptian Crabronidae), 2007b:4 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *costae costae*); Shorenko, 2007b:258 (Ukraine: Crimea: Otuzy valley); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:203 (in catalog of Crabronidae of Turkey); Baños-Picon, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Gros, 2010:144 (nesting behavior); van der Smissen, 2010b:387 (France: Vaucluse: Bédoin); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Kazenas, 2013a:62 (color photograph of male, short information on geographic distribution and nesting habits), 2013b:494 (southeastern Kazakhstan: rivers Ili and Sharyn valleys), 2014a:135 (Kazakhstan: Karatau Mountain Range); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Shorenko, 2015:327 (in list of Sphecidae *sensu lato* of Crimea); Schmid-Egger, Dandria, and Xuereb, 2016:80 (in checklist of Crabronidae of Maltese Islands); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:34 (Turkey: Konya: Guneyssınır: Güragaç); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Shorenko, 2017:77 (in Crimea collected in June); Maharramov, Aliyev, and Mammadov, 2018:456 (first record from Azerbaijan: Nakhchivan: Sirab); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:18 (Azerbaijan: Nakhichevan Autonomous Republic); Ben Khedher, Yildirim, and Braham, 2020b:313 (in Tunisia known from Nabeul); Gadallah, 2020b:50 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:76 (in catalog of *Tachysphex* of Iran); Shorenko, 2020:52 (Crimea: Karadag Nature Reserve); Turrisi, Altadonna, Lo Cascio, Nobile, and Selis, 2020:730 (Italy: Aeolian Archipelago: island of Vulcano); Cross, Baldock, and Wood, 2021:41 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:62 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:211 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

*Tachysphex laticeps* Arnold, 1924:58, ♀, ♂. Lectotype: ♀, Zimbabwe: Sawmills (SAM), designated by Pulawski, 2007:219. Synonymized with *Tachysphex costae* by Pulawski, 2007a:219. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).

- Tachysphex zarudnyi* Gussakovskij, 1933b:284, ♀. Holotype: ♀, Iran: Khorassan: Khulut-s-Langher (ZIN).  
Synonymized with *Tachysphex costae* by Pulawski, 1971:400 and 404.
- Tachysphex tadjikus* Gussakovskij, 1952:239, ♀. Holotype: ♀, Tajikistan: Stalinabad, now Dushanbe (ZIN).  
Synonymized with *Tachysphex costae* by Pulawski, 1971:400 and 404.
- Tachysphex costai canariensis* de Beaumont, 1968a:261, ♀, ♂. Holotype: ♀, Canary Islands: Gran Canaria: Maspalomas (BMNH). Synonymized with *Tachysphex costae* by Pulawski, 2007a:219. – Pulawski, 1971:406 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Báez and Ortega, 1978:192 (Canary Islands); Wolf, 1980:73 (Canary Islands); Hohmann, La Roche, Ortega, and Barquín, 1993:232 (detailed locality records from Canary Islands).
- Tachysphex costai fertoni* Pulawski, 1971:406, ♀, ♂. Holotype: ♀, Algeria: La Calle (MNHN). Synonymized with *Tachysphex costae* by Pulawski, 2007a:219. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae).
- As *Tachysphex fluctuatus*: Móczár, 1938d:80 (Hungary: Pótharasz puszta), corrected to *Tachysphex costai* by Pulawski, 1971:401.
- As *Tachysphex fluctuatus* (corrected to *Tachysphex costai fertoni* by Pulawski, 1971:406): Ferton, 1912a:399 (Algeria: Mascara and La Calle; nesting habits); Grandi, 1931:47 (reference to Ferton, 1912); Cros, 1936:355 (nesting habits); Piek and Spanjer, 1986:190 (in list of Sphecidae with known prey).
- As *Tachysphex buyssoni*: Guiglia, 1932b:475 (Libya: Gialo), corrected to *Tachysphex costai* by Guiglia, 1940:291.
- As *Lyrops leucozona* (a manuscript name): Pagliano, 2008:546 (specimen in M. Spinola collection, Torino).
- As *Lyrops panzeri*: Pagliano, 2008:549 (one specimen in M. Spinola collection, Torino).
- Le Tachyte manticide: Fabre, 1886:229 (preying on mantids), 233 (list of prey, nesting in small vertical cliffs, carrying prey in flight). Synonymized with *Tachysphex costae* by Berland, 1923a:174. – Adlerz, 1904:137 (known prey: mantids, as *Tachysphex manticida*); de Gaulle, 1908:121 (in catalog of French Hymenoptera, as *Tachytes manticida*); Berland, 1928b:178 (add Bristowe, 1925 and Fabre, 1886 to bibliography in Berland, 1925d).

### 107.coxalis Pulawski

*Tachysphex coxalis* Pulawski, 2007a:225, ♀, ♂. Holotype: ♀, Mali: 40 km southwest of Segou (CAS). Paratype: Niger.

### 108.crassiformis Viereck

*Tachysphex crassiformis* Viereck, 1906:210, ♀. Holotype: ♀, USA: Kansas: Hamilton County: no specific locality (Kansas Univ.). – F. Williams, 1914a:168 (in revision of Larrinae of Kansas); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); LaBerge, 1956:527 (holotype in Snow Entomological Museum); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Krombein, 1979b:1627 (in catalog of North American Hymenoptera); Kurczewski, 1987b:720 (nesting habits); S. Frommer, 1988:96 (California: Riverside County: Deep Canyon); Pulawski, 1988a:75 (in revision of Nearctic *Tachysphex*); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta: no specific locality).

*Tachysphex wheeleri* Rohwer, 1911b:579, ♀. Holotype: ♀, USA: Texas: Lee County: no specific locality (USNM). Synonymized with *Tachysphex crassiformis* by Pulawski *in* Krombein, 1979b:1628. –

Rohwer, 1911b:580 (in key to *Tachysphex antennatus*, *hitei*, *semirufus*, *tarsatus* and *wheeleri*); G. Bohart in Muesebeck, Krombein, and Townes, 1951:953 (in catalog of North American Hymenoptera); Krombein, 1967c:394 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae).

*Tachysphex plenoculiformis* F. Williams, 1914a:167, ♀. Holotype: ♀, USA: Kansas: Ness County: no specific locality (Kansas Univ). Synonymized with *Tachysphex crassiformis* by Pulawski in Krombein, 1979b:1628. – F. Williams, 1914:201 (nesting habits); G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); LaBerge, 1956:527 (holotype in Snow Entomological Museum); Arnaud, 1970:32 (in list of species described by F.X. Williams); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae).

*Tachysphex* n. sp.: Krombein, 1949:267 and 1953a:330, 1953b:132, corrected to *Tachysphex crassiformis* by Pulawski, 1988a:75.

*Tachysphex* sp. No. 4: Krombein and Evans, 1955:231, corrected to *Tachysphex crassiformis* by Pulawski, 1988a:75.

*Tachysphex boharti* Krombein, 1963b:177, ♀, ♂. Holotype: ♀, USA: North Carolina: Dare County: Kill Devil Hills (USNM). Synonymized with *Tachysphex crassiformis* by Pulawski in Krombein, 1979b:1628. – Krombein, 1967c:392 (in supplement to catalog of North American Hymenoptera); Wray, 1967:123 (North Carolina: Dare County: Kill Devil Hills, Salvo); Kurczewski, 1971:114 (in key to Floridan *Tachysphex*); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Steiner, 1986:102 (references to papers on nesting habits).

*Tachysphex gibbus* Pulawski, 1974:20, ♀, ♂, junior primary homonym of *Tachysphex gibbus* Kohl, 1885. Holotype: ♀, El Salvador: Quezaltepeque (UCD). Synonymized with *Tachysphex crassiformis* by Pulawski in Krombein, 1979b:1628. – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).

### 109. *crassipes* Arnold

*Tachysphex crassipes* Arnold, 1923a:157, ♀, ♂. Lectotype: ♀, Zimbabwe: Matobo (SAM), designated by Pulawski, 2007a:227. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a: 227 (in revision of African *Tachysphex*).

*Tachysphex crassipes* var. *claripennis* Arnold, 1924:53, ♀. Holotype: ♀, Zimbabwe: Essexvale (SAM). Synonymized with *Tachysphex crassipes* by Pulawski, 2007a:227. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae). – As *Tachysphex crassipes claripennis*: R. Bohart and Menke, 1976:273 (new status, in checklist of world Sphecidae).

### 110. *crenulatus* W. Fox

*Tachysphex crenulatus* W. Fox, 1894a:512, ♀. Holotype: ♀, USA: California: no specific locality (ANSP). – Dalla Torre, 1897:679 (in catalog of world Hymenoptera); Cresson, 1928:44 (holotype in ANSP); G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Krombein, 1979b:1628 (in catalog of North American Hymenoptera); Pulawski, 1988a:65 (in revision of Nearctic *Tachysphex*); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correas-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### 111. *cretensis* Straka

*Tachysphex cretensis* Straka, 2016:76, ♂. Holotype: ♂, Greece: Crete: Kato Simi at 35°02'N 27°29'E (NMPC). – K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:211 (in revision of Sphecidae *sensu lato* of Europe).

**112. *crinitus* Pulawski**

*Tachysphex crinitus* Pulawski in Krombein and Pulawski, 1994:49, ♀. Holotype: ♀, Sri Lanka: Monaragala District: Nilgala (CNC).

**113. *crocodilus* Pulawski**

*Tachysphex crocodilus* Pulawski, 1971:373, ♀, ♂. Holotype: ♀, Egypt: Kom Osheim on Cairo-Fayum road (USNM). – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 2007a:230 (in revision of African *Tachysphex*); Roche, 2007a:83 (in checklist of Egyptian Crabronidae), 2007b:4 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

**114. *ctenophorus* Pulawski**

*Tachysphex ctenophorus* Pulawski, 1971:101, ♀, ♂. Holotype: ♂, Kazakhstan: Ilekykol Lake, left shore of Terisakkan River (ZIN). Paratypes: European Russia (Sarepta, now Krasnoarmeysk), Siberia (Troitskosavsk). – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Kazenas, 1978b:119, 133 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Nemkov in Nemkov, Kazenas, Budrys, et Antropov, 1995:410 (in key to Sphecidae of Russian Far East); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:66 (geographic distribution, collecting localities in Kazakhstan); Nemkov, 2008b:19 (in catalog of Crabronidae of Asiatic Russia), 2009b:78 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Maharramov, Aliyev, and Mammadov, 2018:454 (first record from Azerbaijan: Khachmaz: Akhmedoba); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:212 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Kochetkov and Korsun, 2025:10 (Russia: Zabaikalskiy Kray: Daurskiy Nature Reserve).

**115. *cubanus* Pulawski**

*Tachysphex cubanus* Pulawski, 1974a:17, ♀, ♂. Holotype: ♀, Cuba: Oriente: Ciudadmar (USNM). – Alayo Dalmau, 1976:7 (in key to Cuban *Tachysphex*), 22 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 1988a:77 (in revision of Nearctic *Tachysphex*); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Portuondo and Fernández, 2004:135 (Cuba: Sierra Maestra and Nipe-Sagua-Baracoa mountains); Genaro, 2006:55 (in checklist of Cuban Sphecidae and Crabronidae; also: Jamaica).

**116. *curvipes* Pulawski**

*Tachysphex curvipes* Pulawski, 2007a:232, ♀, ♂. Holotype: ♂, Egypt: Sina (= Sinai): 51 km southeast of Nakhl (CAS).

**117. *denisi* de Beaumont**

*Tachysphex denisi* de Beaumont, 1936a:197, ♀, ♂ (♀ = *Tachysphex adjunctus*). Holotype: ♂, Algeria: Oran (NHMW). – de Beaumont, 1947c:669 (in key to Mediterranean species of *bicolor* group), 1953b:14 (description of ♀, diagnostic characters), 1955a:183 (Agadir, Casablanca, Fedhala, Ifrane, Port Lyautey, now Kenitra); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:198 (Libya); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); de Beaumont, 1960b:239 (Libya), 1962b:26 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Pulawski, 1971:229 (in revision of Palearctic *Tachysphex*); Erlandsson, 1974:71 (Spain); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Gayubo, 1982a:101 (northern Spain: Sierra de Béjar), 1983a:123 (prey: blattids *Phyllodromica subaptera* (Rambur) and *Phyllodromica carpetana* Bolívar); Gayubo and Tormos, 1984:15 (Spain: Valencia Province); Gayubo, 1984b:84 (Spain: Sala-

manca Province), 1985c:168 (Spain: Alicante: Villajoyosa); Gayubo and Tormos, 1986a:12 (Spain: Castellón: Castellón de la Plana); Gayubo and Mingo, 1988:78 (Spain); Hohmann, La Roche, Ortega, and Barquín, 1993:233 (first record from Canary Islands: Fuerteventura); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province), 1999:355 (Spain: Valladolid: Viana de Cega); K. Schmidt and Bitsch *in* Bitsch et al., 2001:245 (in Sphecidae Fauna of Western Europe); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Magdalou, 2006b:109 (France: Pyrénées-Orientales: Mas-Larrieu Nature Reserve near Argelès-sur-Mer), 2006c:7 (France: Pyrénées-Orientales: Réserve Naturelle du Mas-Larrieu); Roche, 2007a:77 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Baños-Picon, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castromoño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); van der Smissen, 2010b:387 (France: Drôme: Dieulefit; Vaucluse: Bédoin); Gros, 2012:515 (nesting habits); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park); Bitsch, 2014:402 (record from France by van der Smissen, 2010b and biological observations by Gros, 2012 noted); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Forêt de la Massane, Julols); Ben Khedher, Yildirim, and Braham, 2020b:313 (Tunisia: new locality record from Siliana: Kisra); Cross, Baldock, and Wood, 2021:41 (in catalog of Sphecidae *sensu lato* of Portugal); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:212 (in revision of Sphecidae *sensu lato* of Europe).

### 118. *depressiventris* R. Turner

*Tachysphex depressiventris* R. Turner, 1916b:256, ♀. Lectotype: ♀, Australia: Western Australia: Yallingup (BMNH), designated by Pulawski, 1977a:270. – R. Turner, 1916b:255 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Evans, Matthews and Pulawski, 1976:441 (nesting habits); Pulawski, 1977a:270 (in revision of Australian *Tachysphex*); Alcock, 1980b:259 (nest, prey: nymphal cockroaches); Cardale, 1985:239 (in catalog of Australian Sphecidae); McCorquodale and Thomson, 1989:94 (prey: a blattellid nymph); K. Walker, Naumann, Austin, Taylor, and Cardale, 1992:48 (in catalog of insects of Tasmania); Naumann, 1993:186 (Australia: Queensland: Heathlands area in Cape York).

### 119. *descendentis* Mercet

*Tachysphex descendentis* Mercet, 1909b:198, ♀. Syntypes: Spain: Madrid and Alicante (MNCN). – Mercet, 1910b:165 (listed from Spain); Giner Marí, 1943a:142 (in Sphecidae Fauna of Spain); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain); Pulawski, 1971:192 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Gayubo, 1982a:101 (northern Spain: Sierra de Béjar), 1982f:252 (Spain: Cádiz Province: Acalá de los Gazules), 1984b:96 (Spain: previously recorded from Salamanca Province), 1987a:112 (Spain: Ciudad Real Province); Gayubo and Mingo, 1988:78 (Spain); Gayubo, Asís, and Tormos, 1990a:17 (Spain); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); K. Schmidt and Bitsch *in* Bitsch et al., 2001:246 (in Sphecidae Fauna of Western Europe: status unclear); Baños-Picón, Gayubo, Asís, and González, 2007a:255, 258 (Spain: Zamora: Cabañas de Aliste); Baños-Picon, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo,

Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:213 (in revision of Sphecidae *sensu lato* of Europe).

### 120. *deserticola* de Beaumont

*Tachysphex deserticola* de Beaumont, 1940:173, ♀. Holotype: ♀, Egypt: Kharga oasis (Ministry of Agriculture of Egypt). – Honoré, 1942:55 (Egypt: Kharga Oasis); de Beaumont, 1947a:193 (in new revision of *Tachysphex* of Egypt); Pulawski, 1964:95 (Egypt: Abu Rawash, Dahshur, Kom Osheim, Saqqara); Osborn and Krombein, 1969:16 (northwestern Sudan: Gebel 'Uweinat: Wadi Ain el Brins); Pulawski, 1971:385 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Roche and Zalut, 1994:115 (Egypt: Sinai Peninsula); Pulawski, 2007a:234 (in revision of African *Tachysphex*); Roche, 2007a:83 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia: Hutet Beni Tamim 180 km south of El Riyadh); Gadallah, 2020b:50 (in list of aculeate wasps of Arabian Peninsula); Gadallah and Abu El-Ghiet, 2024:83 (Saudi Arabia: Jazan Province).

### 121. *desertorum* F. Morawitz

*Tachysphex desertorum* F. Morawitz, 1894:342, ♀. Holotype or syntypes: ♀, Turkmenistan: Serax (ZIN). – Dalla Torre, 1897:679 (in catalog of world Hymenoptera); Pulawski, 1971:376 (in revision of Palearctic *Tachysphex*); Kazenas, 1972b:161 (Kazakhstan); Myartseva, 1972a:78 (Turkmenistan); de Beaumont, Bytinski-Salz, and Pulawski, 1973:12 (Israel); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp. in Kazakhstan); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Kazenas, 1978b:115, 128 (in key to Sphecidae of Kazakhstan and Central Asia), 1992c:26 (Turkmenistan: Repetek Nature Reserve); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:30 (southeastern Kazakhstan: sixteen localities); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:66 (geographic distribution, collecting localities in Kazakhstan), 2004d:30 (Kazakhstan: northern Caspian region); Pulawski, 2007a:237 (in revision of African *Tachysphex*); Roche, 2007a:83 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Kazenas, 2013a:63 (color photograph of male, short information on geographic distribution and nesting habits), 2013b:494 (southeastern Kazakhstan: almost everywhere in deserts); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:75 (in catalog of *Tachysphex* of Iran); Mokrousov and Proshchalykin, 2021a:320 (Russia: Astrakhan' Oblast', Kazakhstan, Uzbekistan).

*Tachysphex abjectus* Kohl, 1901c:782, ♂. Holotype: ♂, Transcaspiya: Bala-Ishem (NHMW). Synonymized with *Tachysphex desertorum* by Pulawski, 1971:376. – de Beaumont, 1936b:614 (China: Tsaidam), 1940b:173 (in revision of *Tachysphex* of Egypt); Honoré, 1942 (Egypt: Wadi Hoff); de Beaumont, 1947a:190 (in new revision of *Tachysphex* of Egypt), 1958b:61 (Algeria: Tassili des Ajjer), 1960b:239 (Libya), 1961e:5 (Iraq); Dollfuss, 1989:12 (type material in NHMW).

*Tachysphex julliani nigripes* Tsuneki, 1972e:391, ♀, junior primary homonym of *Tachysphex nigripes* Pulawski, 1967. Holotype: ♀, Mongolia: Bayanhongor Aymag: oasis Ehingol 90 km northeast of border post Tsaganbulag (TMB). Synonymized with *Tachysphex desertorum* by Pulawski, 2007a:237. – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae)

### 122. *detritus* Arnold

*Tachysphex schönlandi* var. *detritus* Arnold, 1924:69, ♂. Holotype: ♂, South Africa: Eastern Cape Province: Willowmore (TMP). – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex schoenlandi detritus***: R. Bohart and Menke, 1976:276 (new status, in checklist of world Sphecidae). – **As *Tachysphex detritus***: S. Gess and F. Gess, 2003:109 (full species status, Namibia: visiting flowers of *Deverra denudate* (Viv.) Pfisterer and Podl., Apiaceae); Pulawski, 2007a:240 (in revision of African *Tachysphex*); Roche, 2007a:85 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian

Ampulicidae, Sphecidae, and Crabronidae); Ben Khedher, Yildirim, and Braham, 2020b:313 (in Tunisia known from Medenine); Gadallah, 2020b:50 (in list of aculeate wasps of Arabian Peninsula).

*Tachysphex maidli* de Beaumont, 1940:169, ♀, ♂. Holotype: ♀, Egypt: Sinai: El Arish (originally A. Alfieri coll., Cairo, now USNM). Synonymized with *Tachysphex detritus* by Pulawski, 2007a:240. – Honoré, 1942:56 (Egypt: Cairo area, El Arish, Helwan, Mariut); de Beaumont, 1947a:175 (in new revision of *Tachysphex* of Egypt), 1950f:405 (Algeria), 1955a:181 (Morocco); Pulawski, 1971:414 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:13 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:115, 127 (in key to Sphecidae of Kazakhstan and Central Asia); Roche and Zalat, 1994:115 (Egypt: Sinai Peninsula); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia).

*Tachysphex simillimus* Gussakovskij, 1952:235, ♀, ♂ (♂ = *Tachysphex erythropus*). Lectotype: ♀, Tajikistan: Ayvaj (ZIN), designated by Pulawski, 1971:414 and 416. Synonymized with *Tachysphex maidli* by Pulawski, 1971:415.

*Tachysphex* species 2 (part): van Noort, Prinsloo, and Compton, 2000:348 (Namibia), corrected to *Tachysphex detritus* by Pulawski, 2007a:241.

### 123. *diabolicus* Arnold

*Tachysphex diabolicus* Arnold, 1923a:149, ♀, ♂. Lectotype: ♀, Zimbabwe: Sawmills (SAM), designated by Pulawski, 2007a:243. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); de Beaumont, 1967b:509 (South Africa: Natal); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:109 (South Africa: visiting flowers of *Ziziphus mucronata* Willd., Rhamnaceae); Pulawski, 2007a:243 (in revision of African *Tachysphex*).

*Tachysphex diabolicus* var. *analis* Arnold, 1924:51, ♀. Holotype: ♀, South Africa: Eastern Cape Province: Algoa Bay (TMP). Synonymized with *Tachysphex diabolicus* by Pulawski, 2007a:243. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae). – As *Tachysphex diabolicus analis*: R. Bohart and Menke, 1976:273 (new status, in checklist of world Sphecidae).

### 124. *diadelus* Pulawski

*Tachysphex diadelus* Pulawski in Krombein and Pulawski, 1994:70, ♀, ♂. Holotype: ♀, Sri Lanka: Monaragala District: Angunakolapelessa (USNM).

### 125. *difficilis* Straka and Schmid-Egger

*Tachysphex difficilis* Straka and Schmid-Egger, 2017:428, ♀, ♂. Holotype: ♂, United Arab Emirates: Wadi Wurayah at 25.40°N 46.28°E (OÖLM). – Straka and Schmid-Egger, 2017:432, 433, 435 (color photographs); Gadallah, 2020b:50 (in list of aculeate wasps of Arabian Peninsula).

### 126. *dignus* Kohl

*Tachysphex dignus* Kohl in Kohl and Handlirsch, 1889:278, ♂. Holotype: ♂, Turkmenistan: Nukhur in Kopet-Dagh (Georgia State Museum, Tbilisi?). – Dalla Torre, 1897:679 (in catalog of world Hymenoptera, as *digenus*); Pulawski, 1967a:398 (Turkey, description of ♀); de Beaumont, 1970c:15 (Iran: Baluchistan); Pulawski, 1971:357 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:12 (Israel); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Kazenas, 1978b:115, 128 (in key to Sphecidae of Kazakhstan and Central Asia); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia); Gayubo, Özbek, and Yıldırım, 2003:88 (Turkey: Erzinçan: Üzümlü); Straka, 2005b:273 (Turkey: Adana: Boztahta 45 km north of Adana; Adiyaman: Nemrut dag; Eskişehir: Sakariilica 30 km north of Eskişehir); Pulawski, 2007a:246 (in revision of African *Tachysphex*); Ljubomirov and Yildirim, 2008:203 (in catalog of Crabronidae of Turkey); Murai and Amr,

2011:112 (Syria: Al Thawrah Nature Reserve at 35°51'N 28°38'E), 120 (recorded from Syria by Pulawski, 1971); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia, first record from the country, but no specific locality); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:25 (Iran: Fars Province); Maharramov, Aliyev, and Mammadov, 2018:456 (Azerbaijan: Ordubad: Dasta, and Nakhchivan: Nehram); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:18 (Azerbaijan: Nakhichevan Autonomous Republic); Gadallah, 2020b:50 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:75 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:62 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:213 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

As *Tachytes incertus* (corrected to *Tachysphex dignus* by Pulawski, 1971:357): Radoszkowski, 1886a:33 (male genitalia), 1891:590 (reference to Radoszkowski, 1886a); de Beaumont, 1936b:615 (specimens in Radoszkowski collection, as *Tachysphex*).

### 127.*dimidiatus* (Panzer)

*Larra dimidiata* Panzer, 1807-1809, Heft 106:13, [♀]. Holotype or syntypes: ♀, Germany: no specific locality (originally Iokisch coll., now lost). Neotype: ♀, Germany: Bayern: Tennenloher Forst north of Nürnberg at 49°57'N 11°04'E (ZSBS), designated by Straka, 2016:77. Synonymized with *Tachytes pompiliformis* by Herrich-Schaeffer, 1840:297. – Peets, 1909-1911:68 (*Larra dimidiata* of Panzer = *Tachysphex nitidus*). – As *Tachysphex dimidiatus*: Straka, 2016:77 (in revision of *Tachysphex pompiliformis* species group, as valid species, description of ♂); Kejval, Blažej, and Erhart, 2020:106 (western Czech Republic); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:213 (in revision of Sphecidae *sensu lato* of Europe).

### 128.*discrepans* R. Turner

*Tachysphex discrepans* R. Turner, 1915:555, ♀. Lectotype: ♀, Australia: Tasmania: Eaglehawk Neck (BMNH), designated by Pulawski, 1977a:264. – R. Turner, 1916b:255 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 1977a:264 (in revision of Australian *Tachysphex*); Cardale, 1985:239 (in catalog of Australian Sphecidae); K. Walker, Naumann, Austin, Taylor, and Cardale, 1992:48 (in catalog of insects of Tasmania).

### 129.*dissimulatus* Pulawski

*Tachysphex dissimulatus* Pulawski, 2007a:248, ♀, ♂. Holotype: ♂, Zimbabwe: Kami Ruins (CAS). Paratypes: Botswana, Namibia, South Africa. – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

### 130.*diversilabris* Arnold

*Tachysphex diversilabris* Arnold, 1960a:83, ♀, ♂. Lectotype: ♂, South Africa: Kwazulu-Natal: Drakensberg Mountains: Fire Lookout in Cathedral Peak Forestry (SAM), designated by Pulawski, 2007a:251. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 2007a:251 (in revision of African *Tachysphex*).

### 131.*dolosus* Arnold

*Tachysphex Panzeri* var. *dolosus* Arnold, 1923a:171, ♀, ♂. Syntypes: Zimbabwe: Sawmills (SAM). – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae). – As *Tachysphex panzeri dolosus*: R. Bohart and Menke, 1976:275 (new status, in checklist of world Sphecidae). – As *Tachysphex dolosus*: S. Gess and F. Gess, 2003:109 (full species status, Namibia: visiting flowers of *Psilocaulon glareosum* (Berger) Din-

ter and Schwant., Aizoaceae, *Limeum argute-carinatum* Wawra and Peyr., Molluginaceae, and *Zygophyllum simplex* L., Zygophyllaceae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:254 (in revision of African *Tachysphex*).

### 132. *dominicanus* Pulawski

*Tachysphex dominicanus* Pulawski, 1988a:79, ♀, ♂. Holotype: ♂, Dominican Republic: Distrito Nacional: Haina (CAS). Paratype: Cuba: Oriente: La Farola near Baracoa. – Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Portuondo and Fernández, 2004:135 (Cuba: Sierra Maestra); Genaro, 2006:55 (in checklist of Cuban Sphecidae and Crabronidae; also: Hispaniola, first record from Navassa Island); Perez-Gelabert, 2008:240 (in list of arthropods of island of Hispaniola).

### 133. *drymobius* Pulawski

*Tachysphex drymobius* Pulawski in Krombein and Pulawski, 1994:57, ♀, ♂. Holotype: ♀, Sri Lanka: Galle District: Kanneliya Jungle (USNM) – Krombein in Krombein and Pulawski, 1994:11 (nesting habits).

### 134. *dzinghis* Tsuneki

*Tachysphex dzinghis* Tsuneki, 1972e:390, ♀. Holotype: ♀, Mongolia: Bayanhongor Aymag: Ekhingol oasis (TMB). – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae).

### 135. *ebeninus* Arnold

*Tachysphex ebeninus* Arnold, 1929c:385, ♀, ♂. Syntypes: Zimbabwe: Redbank, Nyamandhlovu (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 2007a:258 (in revision of African *Tachysphex*).

### 136. *eldoradensis* Rohwer

*Tachysphex eldoradensis* Rohwer, 1917a:245, ♀. Holotype: ♀, USA: California: Eldorado County: Tahoe (USNM). – G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Krombein, 1979b:1628 (in catalog of North American Hymenoptera); Pulawski, 1988a:46 (in revision of Nearctic *Tachysphex*); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: first record from Canada: British Columbia: no specific locality).

### 137. *erectus* Pulawski

*Tachysphex erectus* Pulawski, 2007a:261, ♂. Holotype: ♂, South Africa: Northern Cape Province: Geogap (= Hester Malan) Nature Reserve (AMG).

### 138. *erythrophorus* Dalla Torre

*Tachysphex erythrogaster* Cameron, 1889c:143, ♀, junior secondary homonym of *Tachysphex erythrogaster* (A. Costa, 1882). Holotype or syntypes: ♀, India: Maharashtra: Pune (OXUM). – Bingham, 1897:195 (in revision of Indian and Pakistani aculeates); Nurse, 1909:14 (description of ♂); Ramakrishna Aiyar, 1916:552 (in catalog of Indian aculeates described after Bingham, 1897); van Vondel, 1995:30 (specimens from India in Natuurmuseum Rotterdam);. – As *Larra erythrogaster*: Rothney, 1903:104 (India: West Bengal: Barrackpore).

*Tachysphex erythrophorus* Dalla Torre, 1897:679. Substitute name for *Tachysphex erythrogaster* Cameron, 1889. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Roche, 1981:2 (in checklist of Sphecidae of United Arab Emirates); Krombein and Pulawski, 1994:76 (in revision of Sri Lankan *Tachysphex*); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia); Pulawski, 2007a:262 (in revision of African *Tachysphex*); Roche, 2007a:73 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Straka and

Schmid-Egger, 2017:434 (United Arab Emirates), 436 (color photograph); Gadallah, 2020b:50 (in list of aculeate wasps of Arabian Peninsula); Mawadda and Girish Kumar, 2023:110 (in checklist of Crabroninae of Northern India).

*Tachysphex latissimus* R. Turner, 1917e:199, ♀, ♂. Lectotype: ♀, India: Bihar: Pusa (BMNH), designated by Pulawski, 1975a:310. Synonymized with *Tachysphex erythrophorus* by Pulawski, 1975a:310.

As *Tachysphex* No. 18 (part, other specimens = *Tachysphex gujaraticus*): de Beaumont, 1940b:178 (Egypt), corrected to *Tachysphex pectoralis* by Pulawski, 1971:126.

As *Tachysphex argentatus*: Gussakovskij, 1952:242 (♀ only), corrected to *Tachysphex pectoralis* by Pulawski, 1971:126.

*Tachysphex pectoralis* Pulawski, 1964:101, ♀, ♂. Holotype: ♀, Egypt: Abou Rawash northwest of Cairo (originally W.J. Pulawski coll., now CAS). Synonymized with *Tachysphex erythrophorus* by Pulawski, 1975a:310. – Pulawski, 1971:126 (in revision of Palearctic *Tachysphex*); Kazenas, 1978b:122, 129 (in key to Sphecidae of Kazakhstan and Central Asia).

### 139. *erythropus* (Spinola)

*Lyrops erythropus* Spinola, 1839:479, "♀" = ♂. Lectotype: ♂, Egypt: no specific locality (Torino), designated by de Beaumont, 1952e:48. – Casolari and Casolari Moreno, 1980:113 (specimens in M. Spinola collection, Torino); Pagliano, 2008:547 (lectotype in M. Spinola collection, Torino). – **As *Larrada erythropus***: F. Smith, 1856:281 (new generic assignment, in catalog of Hymenoptera in British Museum). – **As *Tachytes erythropus***: A. Costa, 1867b:84 and 1867c:28 (new generic assignment, in revision of Italian Sphecidae); Kohl, 1883d:226 (*Tachytes erythropus* of A. Costa, 1867 = *Lyrops fluctuata*, synonymy impossible for geographic reasons). – **As *Tachysphex erythropus***: Kohl, 1883a:175 (new generic assignment, comparison with *T. graecus*), 1885a:394 (original description copied); Dalla Torre, 1897:679 (in catalog of world Hymenoptera); de Beaumont, 1952e:47 (study of type material), 1955a:181 (Morocco), 1956a:197 (Libya); Grandi, 1957:389 (Libya: Tripolitania: Wadi Kaam); Suárez, 1959:57 (Spain: Almería Province); de Beaumont, 1960a:16 (Greece: Island of Rhodes), 1960b:238 (Libya); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:48 (Greece), 1966:212 (Egypt: Amrye near Alexandria); Myartseva, 1965:77 (Turkmenistan: Akibay; Bayram-Ali district); Pulawski, 1967a:397 (Turkey), 1971:408 (in revision of Palearctic *Tachysphex*); Myartseva, 1972a:78 (Turkmenistan); Kazenas, 1972b:161 (Kazakhstan); de Beaumont, Bytinski-Salz, and Pulawski, 1973:12 (Israel); Krombein, 1974b:452 (Egypt: Gebel 'Uweinat); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Kazenas, 1978b:115, 127 (in key to Sphecidae of Kazakhstan and Central Asia); Guichard, 1980:227 (Oman); Roche, 1981:2 (in checklist of Sphecidae of United Arab Emirates); Gayubo, 1982f:252 (Spain: Cádiz Province: Algodonales, Bosque, San José del Valle), 1984c:363 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:15 (Spain: Valencia Province); Islamov, 1986:525 (Uzbekistan: Tashkent Oblast'); Gayubo, 1987a:112 (Spain: Ciudad Real Province); Tormos and Jiménez, 1987a:125 (Spain: Valencia Province); Asís and Jiménez, 1988:271 (Spain: Castellón Province); Gayubo and Mingo, 1988:78 (Spain); Pagliano, 1990:103 (in catalog of Italian Sphecidae); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Gayubo and Borsato, 1994:207 (Italy: Sicilia); Krombein and Pulawski, 1994:95 (in revision of Sri Lankan *Tachysphex*); Roche and Zalut, 1994:115 (Egypt: Sinai Peninsula); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Pagliano and Scaramozzino, 1995:732 (Italy: Island of Pantelleria); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:30 (southeastern Kazakhstan: near Chilik, 30-60 km east of Chilik, 5 km southwest of village Kazakhstan, near Kapchagay); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia); K. Schmidt and Bitsch *in* Bitsch et al., 2001:246 (in Sphecid Fauna of Western Europe); Kazenas, 2002a:67 (geographic distribution, collecting localities in Kazakhstan); Jacobs,

2005a:451 (first record from Bulgaria: Melnik); Nazarova, 2005:93 (alfalfa fields in southwestern Tajikistan); Pagliano and Negrisola, 2005:369 (in Sphecida Fauna of Italy); Straka, 2005b:274 (Turkey: Adana: Karataş 48 km south of Adana; Bursa: Çaglian); Pulawski, 2007a:265 (in revision of African *Tachysphex*); Roche, 2007a:85 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:204 (in catalog of Crabronidae of Turkey); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Pagliano, 2009:183 (Italy: Sardegna: lake Baratz); Shorenko and Konovalov, 2010:22 (Ukraine: Khar'kov Oblast': village Skripai); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Baldock, 2014:356 (Spain: Island of Mallorca); Bitsch, 2014:402 (first record from Sardinia by Pagliano, 2009 noted); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Gros, 2015:61 (nesting habits); Mokrousov, Shlyakhtenok, and Grebennikov, 2016:25 (first record from Russia: Astrakhan' Oblast', Dagestan, and Kalmykia: 11 localities); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Mokrousov, 2017d:59 (South-East of European Russia: no specific locality); Straka and Schmid-Egger, 2017:434 (United Arab Emirates), 436 (color photograph); Maharramov, Aliyev, and Mammadov, 2018:456 (Azerbaijan: Ganja, and Shamkir: Shishtepe); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:18 (Azerbaijan: Nakhichevan Autonomous Republic); Ben Khedher, Yildirim, and Braham, 2020b:313 (Tunisia: new locality records from Kasserine, Kebili, Mahdia, Nabeul, and Sidi Bouzid provinces); Gadallah, 2020b:51 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:76 (in catalog of *Tachysphex* of Iran); Cross, Baldock, and Wood, 2021:41 (in catalog of Sphecidae *sensu lato* of Portugal); Gadallah, Abu el-Ghiet, and Edmardash, 2021:1722 (Saudi Arabia: Jazan Province); Kaplan and Yildirim, 2021:62 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:215 (in revision of Sphecidae *sensu lato* of Europe); Mawadda and Girish Kumar, 2023:112 (in checklist of Crabroninae of Northern India); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution); Gadallah and Abu El-Ghiet, 2024:86 (Saudi Arabia: Jazan Province: Damad).

*Tachytes maracandica* Radoszkowski, 1877:26, ♂ (as *Maracandica*, incorrect original capitalization and termination). Lectotype: ♂, Uzbekistan: Durman-kul (ZMMU), designated by Pulawski, 1971:411. Synonymized with *Tachysphex erythropus* by Pulawski, 1971:408 and 411. – Magretti, 1884c:588 (Sudan: Khor el Langhebb); Radoszkowski, 1887a:44 (China: Tsaidam region: no specific locality); nec Radoszkowski, 1886a:32, 1892:590, and de Beaumont, 1936b:612 (= *Tachysphex persa confinis*). – **As *Tachysphex maracandicus***: Kohl, 1885a:396 (tentative new generic assignment, original description copied); Dalla Torre, 1897:681 (in catalog of world Hymenoptera).

*Tachytes flavogeniculatus* Taschenberg, 1880:778, ♂. Lectotype: ♂, Ethiopia: no specific locality (Halle), designated by Pulawski *in* Krombein and Pulawski, 1994:97. Synonymized with *Tachysphex erythropus* by Pulawski *in* Krombein and Pulawski, 1994:97. – **As *Tachysphex flavogeniculatus***: Kohl, 1885:402 (new generic assignment, in checklist of world *Tachytes*); Dalla Torre, 1897:679 (in catalog of world Hymenoptera); Arnold, 1923a:174 (recorded from Afrotropical Region but unknown to the author); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae).

*Tachysphex heliopolites* Morice, 1897:306, ♀, ♂ (♂ = *Tachysphex albocinctus*). Lectotype: ♀, Egypt: Zeitun near Cairo (OXUM), designated by Pulawski, 1971:411. Synonymized with *Tachysphex mantivorus* by de Beaumont, 1947a:172. – Mercet, 1910b:165 (listed from Spain); von Schulthess, 1926b:215 (Tunisia, as *helioplites*); Giner Marf, 1943a:139 (in Sphecida Fauna of Spain); Nadig, 1933:79 (comparison with *Tachysphex syriacus*); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain).

*Tachysphex inventus* Nurse, 1903a:516, ♂. Lectotype: ♂, India: Gujarat: Deesa (BMNH), designated by Pulawski, 1975a:313. Synonymized with *Tachysphex erythropus* by Pulawski, 1975a:313. – Ramakrishna Aiyar, 1916:551 (in catalog of Indian aculeates described after Bingham, 1897).

*Tachysphex mantivorus* de Beaumont, 1940:169, ♀, ♂ (as *mantivora*, incorrect original termination). Lectotype: ♀, Greece: no specific locality (NHMW), designated by de Beaumont, 1947:175. Synonymized with *Tachysphex erythropus* by de Beaumont, 1952e:47. – de Beaumont, 1947a:172 (in new revision of *Tachysphex* of Egypt); de Andrade, 1949:16 (Portugal: Trafaria, Vale de Gaio); de Beaumont, 1950d:18 (Egypt: Siwa oasis), 1950f:405 (Algeria: Tindouf); Balthasar, 1954b:269 (Palestine: Dead Sea and Wadi el Kelt near Jericho); Bytinski-Salz, 1956:226 (Turkey: Kemer); Diniz, 1959:29 (Portugal: Trafaria, Vale de Gaio), 1964a:5 (Portugal: Pegões, Trafaria, Vale de Gaio).

As *Tachysphex fluctuatus* (collectively corrected to *Tachysphex mantivorus* by de Beaumont, 1940:169): Kohl, 1885a:350 and 353 (in key to Palearctic *Tachysphex*), 365 (in revision of Palearctic *Tachysphex*); nec F. Morawitz, 1894:342 (= *Tachysphex sordidus*); W. Schulz, 1904b:102 (Greece: Epirus); von Schulthess, 1909:441 (Libya: Tripoli); Mercet, 1910b:165 (listed from Spain); Morice, 1911:101 (Algeria: Biskra, Bône); Dusmet, 1915:87 (Spain: Aragón); von Schulthess, 1926b:215 (Libya); Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Giarabub, es Scegga, now Shatib ash Ahaqqah, as *finctuosus*); nec Grandi, 1931:47 (= *Tachysphex costae fertoni*); Guiglia, 1932d:474 (Libya: Cufra, Es-Sahabi, Gialo); Gussakovskij, 1933b:280 (Iran); Nadig, 1933:79 (Morocco: Marrakech); Guiglia, 1934b:303 (Libya: bibliography and summary of locality records); Gussakovskij, 1935:426 (Tajikistan: Kulab); de Beaumont, 1936b:614 (Caucasus, Transcaspia), 1936c:8 (specimens in A. Costa collection); Rungs, 1936:24; nec Móczár, 1938d:80 (= *Tachysphex costae*); Guiglia, 1939c:187 (Libya Fezzan: Elbarkat, Gat, Tunin), 1940a:292 (Libya: El-Hag), 1942b:234 (summary of Libyan records); Honoré, 1942:56 (Egypt: Cairo area, Fayum = Kom Oshim, Hawamdieh, Mariut, Sinai); Giner Marí, 1943a:139 (in Sphecid Fauna of Spain), 1947:25 (Western Sahara); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain); Myartseva, 1963b:58 (Turkmenistan: lower Murgab River); Balthasar, 1972:274 (in Sphecid Fauna of Czechoslovakia: can be expected in the country); Steiner, 1986:103 (references to papers on nesting habits).

As *Tachytes sericea*, present correction: De-Stefani, 1886:171 (Italy: Sicilia: Monti di Renda near Palermo), 1895:226 (in catalog of Sicilian Hymenoptera).

As *Tachysphex simillimus* (♂ only): Gussakovskij, 1952:235, corrected to *Tachysphex erythropus* by Pulawski, 1971:409.

#### **140.erythrurus Pulawski**

*Tachysphex erythrurus* Pulawski, 2007a:271, ♀, ♂. Holotype: ♀, Kenya: Rift Valley Province: Marich Pass Field Studies Centre at 1°32.2'N 35°27.4'E (CAS). Paratypes: Tanzania.

#### **141.eucalypticus Pulawski**

*Tachysphex eucalypticus* Pulawski, 1977a:251, ♀, ♂. Holotype: ♀, Australia: Victoria: 5-15 mi. south of Rainbow (ANIC). – Cardale, 1985:239 (in catalog of Australian Sphecidae).

#### **142.eucharistus Pulawski**

*Tachysphex eucharistus* Pulawski in Krombein and Pulawski, 1994:47, ♀, ♂. Holotype: ♀, Sri Lanka: Mannar District: 0.8 km northeast of Kokmotte Bungalow in Wilpattu National Park (USNM).

#### **143.eurystoma Pulawski**

*Tachysphex eurystoma* Pulawski, 2007a:273, ♀, ♂. Holotype: ♂, South Africa: Kwzulu-Natal: Weenen (BMNH).

**144. *euxinus* Pulawski**

*Tachysphex euxinus* Pulawski, 1958a:178, ♀, ♂. Holotype: ♀, Bulgaria: Akhtopol (originally W.J. Pulawski coll., now CAS). Paratypes: Bulgaria: Nesebar, Sozopol – Pulawski, 1965a:401 (Turkey), 1971:199 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:269 (in Sphecidae Fauna of Czechoslovakia: may be expected in the country); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 1978:217, 220 (in key to Sphecidae of European part of USSR); K. Schmidt and Bitsch *in* Bitsch *et al.*, 2001:247 (in Sphecidae Fauna of Western Europe); Gorobchishin and Protsenko, 2004:40 (first record from Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Jacobs, 2005a:451 (Bulgaria: Melnik); Straka, 2005b:268 (Turkey: Bursa: Çagliyan, 10 km south of Karacabey; Kütahya: Simav); Ljubomirov and Yildirim, 2008:204 (in catalog of Crabronidae of Turkey); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Kaplan and Yildirim, 2021:62 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:215 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

**145. *excavatus* Pulawski**

*Tachysphex excavatus* Pulawski, 2007a:275, ♀, ♂. Holotype: ♂, Senegal: Ndangane 45 air km southeast of Mbour (CAS). Paratypes: Burkina Faso, Mauritania, Niger. – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

**146. *excelsus* R. Turner**

*Tachysphex excelsus* R. Turner, 1917b:320, ♀. Lectotype: ♀, China: Tibet: Gyantse (BMNH), designated by Pulawski, 1975a:310. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Kuhlmann, 1996:220 (Portugal: Serra de Estrela); K. Schmidt and Bitsch *in* Bitsch *et al.*, 2001:247 (in Sphecidae Fauna of Western Europe; first records from Italy and Spain); Gayubo, González, Tormos, and Asís, 2002:84 (distribution in Spain); Yildirim and Ljubomirov, 2005:1796 (Turkey: Erzurum: Ilıca); Hua, 2006:282 (in list of Chinese insects, geographic distribution); Ljubomirov and Yildirim, 2008:205 (in catalog of Crabronidae of Turkey); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Mokrousov, , and Grebennikov, 2016:25 (Russia: Altai Republic: 15 km southeast of of Kurai on Chuya River at 50.186°N 88.118°E); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Cross, Baldock, and Wood, 2021:42 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:62 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:216 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

*Tachysphex mysticus* Pulawski, 1971:81, ♀, ♂. Holotype: ♀, Mongolia: Ulan Baator (ZIN). Paratypes: Spain (Sierra Nevada), France (Basses Alpes), Russia (Altai), Pakistan . Synonymized with *Tachysphex excelsus* by Pulawski, 1975a:310. – Kazenas, 1978b:120, 134 (in key to Sphecidae of Kazakhstan and Central Asia).

**147. *excisus* Arnold**

*Tachysphex dimidiatus* de Saussure, 1892:483, ♂, junior secondary homonym of *Tachysphex dimidiatus* (Panzer, 1809), which is a junior synonym of *Tachysphex pompiliformis* (Panzer, 1809). Holotype: ♂, Madagascar: Bezanozano: Anosibé (MHNG). – Dalla Torre, 1897:679 (in catalog of world Hymenoptera); Leclercq, 1960a:98 (Madagascar), 1961d:111 (Madagascar); Madl, 2014a:980 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

*Tachysphex dimidiatus* var. *excisus* Arnold, 1945:104, ♀, ♂. Lectotype: ♂, Madagascar: Bekily (MNHN), designated by Pulawski, 2007a:278. Tentatively synonymized with *Tachysphex dimidiatus* de Saussure by Menke *in* R. Bohart and Menke, 1976:273, and definitely by Pulawski, 2007a:278. – Leclercq,

1960:198 (Madagascar). – As *Tachysphex excisus*: Menke in R. Bohart and Menke, 1976:273 (full species status); Leclercq, 1990b:117 (Madagascar: Ihosy, Tamatave, Tsimbazaza); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae).

#### 148. *eximius* Pulawski

*Tachysphex eximius* Pulawski, 1971:124, ♀. Holotype: ♀, Turkmenistan: Uch-Adzhi (ZIN). – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Kazenas, 1978b:122 (in key to Sphecidae of Kazakhstan and Central Asia), 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia); Mokrousov and Gromenko, 2015:126 (Uzbekistan: 3 km northwest of Uchkyzyl at 37°21'56"N 67°17'3"E); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

#### 149. *fanuiensis* Cheesman

*Tachysphex fanuiensis* Cheesman, 1928a:174, ♀, ♂. Syntypes: Tuamotu Archipelago: Fakarava; Society Islands: Tahiti, Raiatea, and Bora Bora (BMNH). – F. Williams, 1932a:150 (Marquesas Islands), 1945:446 (New Caledonia, preying on cockroaches); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 1977a:290 (in revision of Australian *Tachysphex*), 292 (redescription; as *fanuiensis fanuiensis*); Cardale, 1985:239 (in catalog of Australian Sphecidae); Callan, 1990a:22 (New Caledonia: no specific locality, as *fanuiensis fanuiensis*); Naumann, 1998:186 (Australia: northwestern Queensland: Musselbrook area, approximately 18°40'S 138°23'E); Kuhlmann, 2006:29 (Cook Islands, as *fanuiensis fanuiensis*); Jennings, Krogmann, and Burwell, 2013:31 (in checklist of Hymenoptera of New Caledonia).

#### ssp. *corallinus* Pulawski

*Tachysphex fanuiensis corallinus* Pulawski, 1977a:295, ♀, ♂. Holotype: ♀: Australia: Queensland: Heron Island, off Gladstone (ANIC). – Cardale, 1985:239 (in catalog of Australian Sphecidae); Naumann, 1993:186 (Australia: Queensland: Heathlands area in Cape York).

#### ssp. *howeanus* Pulawski

*Tachysphex fanuiensis howeanus* Pulawski, 1977a:294, ♀, ♂. Holotype: ♀, Australia: Lord Howe Island (ANIC). – Cardale, 1985:239 (in catalog of Australian Sphecidae).

#### 150. *fasciatus* Morice

*Tachysphex fasciatus* Morice, 1897:306, ♀. Holotype: ♀, Egypt: Zeitun near Cairo (OXUM). – nec de Beaumont, 1940b:178 (= *Tachysphex pseudofasciatus*); nec Honoré, 1942:55 (= *Tachysphex pseudofasciatus*); nec de Beaumont, 1947a:207 (♀ = *Tachysphex pseudofasciatus*, ♂ = *Tachysphex speciosissimus*); nec Pulawski, 1971:118 (= *Tachysphex pseudofasciatus*); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 2007a:292 (in revision of African *Tachysphex*); Roche, 2007a:74 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

#### 151. *ferrugineus* Pulawski

*Tachysphex* sp.: Romanova, 1969:134 (Russia: North Caucasus). Corrected to *Tachysphex ferrugineus* by Pulawski, 1971:70.

*Tachysphex ferrugineus* Pulawski, 1971:401, ♀, ♂. Holotype: ♂, Turkey: Trabzon: Boztepe (BMNH). – Pulawski, 1971:70 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Kazenas, 1978b:120, 134 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Dathe, 1980:208 (Russia: northern Caucasus: Teberda); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia); K. Schmidt and Bitsch in Bitsch et al.,

2001:248 (in Sphecidae Fauna of Western Europe); Kazenas, 2002a:67 (geographic distribution, collecting localities in Kazakhstan); Gorobchishin, 2004:34 (Ukraine: Zaporiz'ka Oblast': Obitichna Kosa Nature Reserve); Straka, 2005b:252 (Turkey: Artvin: Damar; Trabzon: Boztepe); Gorobchishin, 2006:108 (Ukraine: Kyiv Oblast': Kyiv, Stavishche); Ljubomirov and Yildirim, 2008:205 (in catalog of Crabronidae of Turkey); Mokrousov, 2010a:62 (Russia: Nizhniy Novgorod Oblast': no specific localities), 2010b:100 (Russia: Nizhniy Novgorod Oblast': no specific localities); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Mokrousov and Popov, 2016:578 (Russia: Abkhazia, Krasnodarskiy Kray); Straka, 2016:82 (in revision of *Tachysphex pompiliformis* species group); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:34 (Turkey: Ağrı: Doğubeyazıt); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Maharramov, Aliyev, and Mammadov, 2018:454 (Azerbaijan: Khachmaz, Lerik: Gilidara); Ruchin and Antropov, 2019a:13232 (Russia: Mordovia State Nature Reserve); Kaplan and Yildirim, 2021:62 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:216 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

### 152. *flavofimbriatus* Arnold

*Tachysphex fluctuatus* var. *flavofimbriatus* Arnold, 1945:97, ♂. Holotype: ♂, Madagascar: Bekily (MNHN). – Leclercq, 1960a:98 (Madagascar: Bekily). – **As *Tachysphex fluctuatus flavofimbriatus***: R. Bohart and Menke, 1976:276 (new status, in checklist of world Sphecidae); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae). – **As *Tachysphex flavofimbriatus***: Pulawski, 2007a:283 (full species status, in revision of African *Tachysphex*); Madl, 2014a:981 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

*Tachysphex villosus* Arnold, 1947:164, ♀. Holotype: ♀, Madagascar: Bekily (MNHN). Synonymized with *Tachysphex flavofimbriatus* by Pulawski, 2007a:283. – R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae).

### 153. *foliaceus* Pulawski

*Tachysphex foliaceus* Pulawski, 1977a:267, ♀, ♂. Holotype: ♀, Australia: Northern Territory: Cooper Creek 11 km southeast of Nimbuwah Rock (ANIC). – Cardale, 1985:240 (in catalog of Australian Sphecidae).

### 154. *formosanus* Tsuneki

*Tachysphex formosanus* Tsuneki, 1971h:16, ♀, ♂. Holotype: ♀, Taiwan: Taitung Prefecture: Taoyeh (originally K. Tsuneki coll., now USNM). – Tsuneki, 1971h:10 (in key to *Tachysphex* of Taiwan), 21 (Japan: Ryukyu Islands); Haneda, 1972a:4 (Taiwan); Tano, 1972:24 (Japan: Ryukyu Islands); Murota, 1973b:118 (Taiwan); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Tsuneki, 1977c:6 (Island of Botel Tobago, now Lan-hsu), 1982g:60 (known from the Ryukyu archipelago), 1983a:67 (in key to *Tachysphex* of Philippines and Japan); Nuhn and Menke, 1994:25 (holotype transferred to USNM); Hashimoto and Nakanishi, 1997:29 (holotype transferred to Hyogo Mus.); Porter, Stange, and Wang, 1999:9 (in checklist of Sphecidae of Taiwan); Yamane, Ikudome, and Terayama, 1999:500 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Hua, 2006:282 (in list of Chinese insects, geographic distribution).

### 155. *fortior* R. Turner

*Tachysphex fortior* R. Turner, 1908:486, ♀. Holotype: ♀, Australia: Western Australia: no specific locality (BMNH). – R. Turner, 1916b:255 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 1977a:220 (in revision of Australian *Tachysphex*); Cardale, 1985:240 (in catalog of Australian Sphecidae).

**156. *frigidus* Pulawski**

*Tachysphex frigidus* Pulawski, 2007a:285, ♀, ♂. Holotype: ♀, Namibia: Lüderitz District: Grosse Bucht at 26°41'S 15°10'E (AMG).

**157. *fugax* (Radoszkowski)**

*Tachytes fugax* Radoszkowski, 1877:30, ♂. Holotype: ♂, Uzbekistan: Samarkand (ZMMU). – Dalla Torre, 1897:690 (in catalog of world Hymenoptera); de Beaumont, 1936b:619 (interpretation of the species). – As *Tachysphex fugax*: Kohl, 1885:394 (tentative new generic assignment, original description copied); Pulawski, 1971:178 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:8 (Israel); Erlandsson, 1974:71 (Malta); Frilli and Pizzaghi, 1975:76 (Italy: Badagnano in Piacenza Province); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Báez and Ortega, 1978:192 (Canary Islands); Kazenas, 1978b:122, 132 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Guichard, 1980:227 (Oman); Wolf, 1980:73 (Canary Islands); Pagliano, 1980:127 (Italy: Lazio); Gess, 1981:19 (South Africa: Eastern Cape Province: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils; 2-celled nests, prey: Lentulidae grasshoppers); Gayubo, 1982a:101 (northern Spain: Sierra de Béjar), 1982f:252 (Spain: Cádiz Province); Rodgers and Homewood, 1982:234 (Tanzania: Usambara Mountains); Schmidt and Westrich, 1983:123 (Greece); Gayubo, 1984b:84 (Spain: Salamanca Province), 1985a:487 (nests established in flat area), 1985c:168 (Spain: Valladolid: San Miguel de Arroyo); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Gayubo, 1986c:33 (Spain: Zamora Province); Gayubo and Heras, 1986:40 (Spain: Segovia and Valladolid Provinces; floral records); Gayubo and Sanza, 1986:44 (Spain: Burgos Province); Hensen and van Ooijen, 1987:12 (Turkey); Gayubo and Mingo, 1988:78 (Spain); Dollfuss, 1990:122 (Central African Republic); Gayubo, Asís, and Tormos, 1990a:17 (Spain); Pagliano, 1990:103 (in catalog of Italian Sphecidae); Dollfuss, 1991:105 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:402 (Italy: Toscana); Gayubo and Torres, 1991:Table I and p. 81 (Spain: Salamanca; effects of urban pressure); Schembri, 1991:180 (Malta); Józán, 1992c:289 (first record from Hungary: Zselic Hills); Hohmann, La Roche, Ortega, and Barquín, 1993:233 (detailed locality records from Canary Islands); Luchetti, 1993:106 (Italy: Sardegna: Maddalena archipelago); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Roche and Zalát, 1994:115 (Egypt: Sinai Peninsula); Gayubo and Borsato, 1994:207 (Italy: Toscana); Tormos, Asís, and Gayubo, 1994:188, 204 (Spain: Albacete Province); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Negrisolo, 1995a:23 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Gusenleitner, 1998:498 (first record from Austria: Steiermark: Sernau southwest of Gamlitz); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); Esenbekova and Kazenas, 2000:30 (southeastern Kazakhstan: 5 km southwest of village Kazakhstan, Zhabagly); Shkuratov, 2000:58 (Russia: Rostov Oblast: Vëshenskaya village area at 49°37'N 41°45'E); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia); K. Schmidt and Bitsch *in* Bitsch et al., 2001:249 (in Sphecid Fauna of Western Europe); Seyoum and Pulawski, 2001:324 (potential control agent of acridid pests in Ethiopia; Ethiopia: Gamo Gofa: 49 km southeast of Sodo at 6°29'N 37°40'E, Harerge: 37 km southeast of Jijiga at 9°11'N 43°05'E, Sidamo: 16 km north of Moyale at 3°39'N 38°57'E, 22 km north of Moyale at 3°40'N 38°55'E, 35 km north of Moyale at 3°43'N 38°50'E, 4 km east of Yabelo at 4°53'N 38°09'E); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:67 (geographic distribution, collecting localities in Kazakhstan); Drewes, 2003:142 (Croatia: Mošćenska Draga); Gayubo, Özbek, and Yıldırım, 2003:89 (Turkey: Trabzon: Kadirga Yalası); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); S. Gess and F. Gess, 2003:109 (Namibia: visiting flowers of *Melolobium candicans* (E. Mey.) Eckl. and Zeyh., Fabaceae); Kazenas, 2004b:103 (Kazakhstan: western Tien Shan);

Pagliano and Negrisolo, 2005:375 (in Sphecidae Fauna of Italy); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Straka, 2005b:252 (Turkey: Bursa: Çagliyan); Gorobchishin, 2006:109 (Ukraine: Cherkasy Oblast': Kanev Nature Reserve, *Parnopes carnea* given as prey, probably in error); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Józán, 2007:179 (Hungary: Zselic hills); Pulawski, 2007a:287 (in revision of African *Tachysphex*); Roche, 2007a:74 (in checklist of Egyptian Crabronidae, as *fugax fugax*), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *fugax fugax*); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Kazenas, 2008a:101 (southeastern Kazakhstan: near Alma Ata and 5 km southwest of village Kazakhstan in Ili River valley); Ljubomirov and Yildirim, 2008:206 (in catalog of Crabronidae of Turkey); Baños-Picon, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Pagliano, 2009:184 (Italy: Liguria: Garlenda); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire), 501 (exclusive species of burned areas); Burguet in Durand and Burguet, 2010:51 (France Département d'Ardèche: Ardèche Gorges); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Baldock, 2014:356 (Spain: Island of Mallorca); Bitsch, 2014:402 (record from France by Burguet, 2010 reported); Madl, 2014a:981 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); P. Rosa and Pagliano, 2015:105 (Italy: Lombardia and Piemonte: Parco del Ticino); Mokrousov and Popov, 2016:579 (Russia: Abkhazia, Krasnodarskiy Krai); Schmid-Egger, Dandria, and Xuereb, 2016:80 (in checklist of Crabronidae of Maltese Islands); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:34 (Turkey: Tunceli: Demirkapı); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:629 (Iran: Hormozgan: Band e Molla at 27°25'N 57°09'E); Maharramov, Aliyev, and Mammadov, 2018:454 (Azerbaijan: Mingechevir); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:18 (Azerbaijan: Nakhichevan Autonomous Republic); Ben Khedher, Yildirim, and Braham, 2020b:314 (in Tunisia known from several localities); Gadallah, 2020b:51 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:69 (in catalog of *Tachysphex* of Iran); Cross, Baldock, and Wood, 2021:42 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:62 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:217 (in revision of Sphecidae *sensu lato* of Europe); Abu el-Ghiet, Gadallah, Gasib, Al-Fifi, and Edmardash, 2023:170 (Saudi Arabia: Farasan Island); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Gadallah and Abu El-Ghiet, 2024:87 (Saudi Arabia: Jazan Province: Fayfa, Farasan).

*Tachysphex filicornis* Kohl, 1883a:169, ♀. Lectotype: ♀, France: Marseille (NHMW), designated by Pulawski, 1971:181. Synonymized with *Tachysphex fugax* by Pulawski, 1971:178. – Kohl, 1883e:670 (Switzerland), 1885a:349 and 354 (in key to Palearctic *Tachysphex*), 369 (in revision of Palearctic *Tachysphex*); Dalla Torre, 1897:679 (in catalog of world Hymenoptera); Bingham, 1898a:104 (Yemen: Aden); Ferton, 1901b:680 (found in Marseille area, France, but not in Corsica); Antiga and Bofill, 1904:10 (in catalog of Catalan Hymenoptera); Saunders, 1904:604 (Spain: Mayorca); Schmiedeknecht, 1907:231, 233 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Mercet, 1910b:165 (listed from Spain); Graeffe, 1911:45 (Italy: Trieste

area); Morice, 1911:101 (Algeria: Alger, Biskra); Dusmet, 1915:87 (Spain: Aragón); R. Turner, 1917b:321 (Ethiopia: Harar; Zimbabwe: Harare); Arnold, 1923a:159 (Zimbabwe, South Africa; redescription); Ferton, 1923:333 (known from continental France but not found in Corsica); Arnold, 1924:57 (South Africa, variation); Berland, 1925d:118 (in Sphecidae Fauna of France); Grandi, 1928:14 (Italy); Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); Grandi, 1930:341 (Italy: Toscana: Maremma); Schmiedeknecht, 1930:692, 694 (in keys to Hymenoptera of North and Central Europe); Bernard, 1933:62 (France: Drôme: Dieulefit); Nadig, 1933:79 (Morocco: Ifrane); Giner Marí, 1934:133 (Spain); Bernard, 1935:64 (France: Var: Fréjus area); Richards, 1935a:164 (*Tachysphex filicornis* is the type species of the genus); de Beaumont, 1936a:208 (in revision of French *Tachysphex*), 1936b:619 (interpretation of the species); Giordani Soika, 1939b:73 (Italy: Lido di Venezia); de Beaumont, 1940b:176 (in revision of *Tachysphex* of Egypt); Honoré, 1942:55 (Egypt: Cairo area, Hawamdieh); Giner Marí, 1943a:137 (in Sphecidae Fauna of Spain); de Beaumont, 1947a:201 (in new revision of *Tachysphex* of Egypt); Zavadil and Šnoflák, 1948:148, 152 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:15 (Portugal); de Beaumont, 1950f:406 (Algeria); nec Heldmann, 1953:112 (= *Tachysphex nitidus*); de Beaumont, 1954a:60 (Italy), 1954e:91 (Italy); Grandi, 1954:179 (nesting habits), 239 (Italy); de Beaumont, 1955a:183 (Morocco); Steiner, 1955:138 (France: Dordogne); Vogrin, 1955:37 (Yugoslavia); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:338 (France: Département des Pyrénées-Orientales); Grandi, 1957:389 (Italy: Sardegna); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Compte Sart, 1959:133 (Spain: Mayorca); de Beaumont, 1959a:29 (Italy: Lazio: Ostia); Diniz, 1959:29 (Portugal: Lisboa, Paço de Rei, Seixal, Vale de Gaio); Suárez, 1959:58 (Spain: Almería Province); Vogrin, 1955:37 (Croatia); Wolf, 1959b:24 (Heldmann's 1953 record from Nassau, Germany is doubtful); Grandi, 1961:201 (nesting habits); de Beaumont, 1962b:26 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Diniz, 1964a:6 (Portugal: seventeen localities); de Beaumont, 1965a:50 (Greece); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nessebar); de Beaumont, 1967b:509 (South Africa: Cape Province), 1968a:263 (Canary Islands: Tenerife); Schmidt, 1969:164 (Heldmann's record from Germany actually refers to *Tachysphex nitidus*); Simon Thomas, 1969a:120 (Canary Islands: Tenerife); Zangheri, 1969:1704 (Italy: in catalog of flora and fauna of Romagna Region); Königsmann, 1971:106 (Spain: Gerona: Palamós); Balthasar, 1972:271 (in Sphecidae Fauna of Czechoslovakia: may be expected in the country); Simon Thomas, 1972:182 (France: Gironde); Báez and Ortega, 1978:192 (Canary Islands); Dollfuss, 1989:13 (lectotype in NHMW); Steiner, 1986:102 (references to papers on nesting habits); van der Smissen, 2010b:387 (France: Vaucluse: Bédoin); Tischendorf, Frommer, Flügel et al., 2011:185 (Germany: record from Hessen by Heldmann, 1953 was a misdetermination); Bitsch, 2014:402 (record from France by van der Smissen reported).

*Tachysphex micromegas* de Saussure, 1892:481, ♀, ♂. Lectotype: ♀, Madagascar: no specific locality (MHNG), designated by Pulawski, 2007a:288. Synonymized with *Tachysphex fugax* by Pulawski, 2007a:288. – Dalla Torre, 1897:681 (in catalog of world Hymenoptera); R. Turner, 1911b:370 (Seychelles Islands); Arnold, 1945:102 (redescription); 1960a:98 (Madagascar, comparison with *Tachysphex perniger*), Leclercq, 1961d:111 (Madagascar); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Leclercq, 1990b:118 (Madagascar: faunal records); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae).

*Tachysphex sikorae* de Saussure, 1892: pl. 27, fig. 2 (as *Sikorae*, incorrect original capitalization). Objective synonym of *Tachysphex micromegas*. Synonymized with *Tachysphex micromegas* by Menke in R. Bohart and Menke, 1976:274.

*Tachysphex filicornis excerptus* R. Turner, 1917b:321, sex not stated. Holotype of syntypes: Zimbabwe: Salisbury, now Harare (BMNH). Synonymized with *Tachysphex filicornis* by Arnold, 1923a:160 ("can hardly

be maintained"). – **As *Tachysphex fugax excerptus***: R. Bohart and Menke, 1976:273 (new subspecific generic assignment, in checklist of world Sphecidae).

### 158. *fulgidus* Arnold

*Tachysphex fulgidus* Arnold, 1924:67, ♀, ♂. Lectotype: ♀, South Africa: Eastern Cape Province: Willowmore (TMP), designated by Pulawski, 2007a:297. – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Pulawski, 2007a:297 (in revision of African *Tachysphex*).

### 159. *fulviantennatus* Tsuneki

*Tachysphex fulvicornis* Tsuneki, 1972e:393, ♀, junior primary homonym of *Tachysphex fulvicornis* R. Turner, 1918. Holotype: ♀, Mongolia: Bayanhongor Aymag: Ehin-gol oasis (TMB).

*Tachysphex fulviantennatus* Tsuneki, 1976e:434. Substitute name for *Tachysphex fulvicornis* Tsuneki, 1972. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae).

### 160. *fulvitaris* (A. Costa)

*Tachytes fulvitaris* A. Costa, 1867b:86, ♀. Holotype: ♀, Italy: Campania: Napoli area (Napoli). – nec A. Costa, 1883:57 (= *Tachysphex fulvitaris erythrogaster*); Baldini, 1894:63 (Italy: Modena area). – **As *Tachysphex fulvitaris***: A. Costa, 1883:57 (new generic assignment); Kohl, 1885a:395 (original description copied); Dalla Torre, 1897:680 (in catalog of world Hymenoptera); de Beaumont, 1936c:6 (study of type); Zavadil, Šustera, and Bat'a, 1937:202 (in catalog of Sphecidae of Czechoslovakia); Zavadil, 1939:121 (Czech Republic: Morava: Čejč); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Carl and de Beaumont, 1947:68 (Switzerland: Graubünden = Grisons Canton: Swiss National Park); Guiglia, 1948c:202 (Italy: Sardegna: Villasalto); Zavadil in Zavadil and Šnoflák, 1948:151, 153 (in key to Sphecidae of Czechoslovakia); Noskiewicz and Chudoba, 1949:423 (Poland: Dolny Śląsk: Mirków near Oleśnica); Benno, 1951b:15 (in checklist of Aculeates of Netherlands); de Beaumont, 1953b:15 (France: Corse), 1954a:62 (Italy), 1954e:91 (Italy); Grandi, 1954:239 (Italy); de Beaumont, 1955a:186 (Morocco); Steiner, 1955:139 (France: Dordogne); Bytinski-Salz, 1956:226 (Turkey: Kalkan); Bajári, 1957a:53, 54 (in key to Hungarian Sphecidae); Grandi, 1957:389 (Italy); Benno, 1958b:12 (in review of Dutch Sphecidae); de Beaumont, 1958c:205 (Swiss National Park); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Pulawski, 1958a:181 (Bulgaria: Aitos, Achtopol, Nesebar, Sandanski, Sozopol, Varna); de Beaumont, 1959a:28 (Italy: Lazio: Roma); Wolf, 1959b:24 (Germany: Nassau); de Beaumont, 1960a:18 (Greece: Island of Rhodes); Noskiewicz and Pulawski, 1960:123, 125 (in key to Polish Sphecidae); de Beaumont, 1961c:50 (Greece: Island of Crete), 1962b:26 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae, as *fulvitaris*); de Beaumont, 1964c:76 (in Sphecid Fauna of Switzerland); Diniz, 1964a:6 (Portugal: twelve localities); de Beaumont, 1965a:49 (Greece); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nessebar); Benno, 1967:36 (in checklist of Sphecidae of Netherlands); Gauss, 1967:554 (Germany: Baden-Württemberg: Nördliches Rheinvorland); J. Heinrich, 1967:75 (Germany: Bayern: Unterfranken District); Niedl and Deneš, 1967:81 (Czech Republic: Třeboň area); Pulawski, 1967a:405 (Turkey); Scobiola-Palade, 1967b:43 (Romania); Schmidt, 1969:163 (Germany: Hessen: Weiterstadt); Leclercq, 1970c:map 36 (distribution in Belgium); Schmidt, 1969:163 (Germany: Rhein-Main area: Mainzer Sand, Weiterstädter Exerzierplatz near Darmstadt); Oehlke, 1970:712 (Democratic Germany); Dathe, 1971:234, 237 (Germany: Berlin Zoological Garden; phenology); Königsmann, 1971:106 (Spain: Gerona: Palamós); nec Lefeber, 1971a:17 (= *Tachysphex pompiliformis*); Pulawski, 1971:90 (in revision of Palearctic *Tachysphex*); Schmidt, 1971b:35 (Germany: Rheinland-Pfalz: Gonsenheimer Wald, Mainzer Sand); Balthasar, 1972:265 (in Sphecid Fauna of Czechoslovakia); Myartseva, 1972a:78 (Turkmenistan); Scobiola-Palade, 1972:150 (Romania: delta of Danube: Caraorman); de Beaumont, Bytinski-Salz, and Pulawski, 1973:7 (Israel); Lefeber, 1973:153 (Netherlands); Erlandsson, 1974:71 (Spain); Kazenas, 1974b:109 (feeding

on flowers of *Tamarix* sp. in Kazakhstan), 112 (feeding on flowers of *Salsola laricifolia* Turcz., Chenopodiaceae, in Kazakhstan); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Lomholdt, 1976:249 (in Sphecidae Fauna of Fennoscandia and Denmark); Guichard, 1978:271 (Greece); Kazenas, 1978b:118, 133 (in key to Sphecidae of Kazakhstan and Central Asia); Marion, 1978:88 (France: Nièvre Department); Pulawski, 1978:216, 220 (in key to Sphecidae of European part of USSR); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 69 (Netherlands: distribution map); Kazenas, 1980e:89 (Russia: Primorskiy Krai); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:117 (Russia: Siberia: Altayskiy Krai: basin of Aley River); Pagliano, 1980:128 (Italy: Lazio); Schmidt, 1981:182 (Germany: Baden-Württemberg); Gayubo, 1982a:102 (northern Spain: Sierra de Béjar), 1982f:252 (Spain: Cádiz Province: Arcos de la Frontera, Facinas, Palmones); Dollfuss, 1983b:10 (in catalog of Sphecidae of Austria); Gayubo, 1984b:84 (Spain: Salamanca Province), 1984c:364 (Portugal: El Algarve Province); Schmidt and Westrich, 1984:240 (Germany: Rheinland-Pfalz: Bad Münster); Gayubo and Tormos, 1984:15 (Spain: Valencia Province); Chevin and Chevin, 1985:39 (France: Aude); Eiroa and Novoa, 1985:23 (Spain: Pontevedra: Barra beach near Cangas); Józán, 1985b:57 (Hungary south of Lake Balaton), 83 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Westrich and Schmidt, 1985a:117 (Germany: Baden-Württemberg), 1985b:112 (Germany: endangered in Baden-Württemberg); Gayubo, 1986b:38 (Spain: Andalucía Autonomous Community), 1986c:33 (Spain: Zamora Province); Gayubo and Heras, 1986:40 (Spain: Valladolid Province: floral records); Gayubo and Sanza, 1986:44 (Spain: Burgos, Segovia); Islamov, 1986:526 (Uzbekistan: Tashkent Oblast); Józán, 1986:370 (Hungary: Kiskunság National Park); Gayubo, 1987a:112 (Spain: Ciudad Real Province); Scobiola-Palade, 1987:65 (Romania: Dobrogea); Tormos and Jiménez, 1987b:316 (Spain: Valencia Province: Dehesa de El Saler); Schmidt and Westrich, 1987:363 (Germany: Mainz area); Gayubo and Mingo, 1988:79 (Spain); Karsai, 1988:99 (Hungary: Kiskunság National Park); Jacobs, 1989:11 (Germany: Mecklenburg-Vorpommern); Józán, 1989:101 (Hungary: Tihany Nature Reserve); Pádr *in* Šedivý, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Gayubo, Asís, and Tormos, 1990a:17 (Spain); Jacobs, 1990:10 (Germany: Rostock area); Jacobs and Oehlke, 1990:163 (new records from Democratic Germany); Pádr, 1990:74 (Czech Republic: Praha area); Pagliano, 1990:103 (in catalog of Italian Sphecidae); Dollfuss, 1991:105 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:402 (Italy: Lazio); Guichard, 1991a:339 (Jordan); Jacobs, 1991:46, 47 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Platycleis intermedia* (Aud. Serv.)); Negrisoló, 1991:318 (Italy: Udine and Venezia Provinces); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Gayubo, Borsato, and Osella, 1992:282 (Greece: Tymphristos); Józán, 1992c:289 (Hungary: Zselic Hills); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Dollfuss, 1994:101 (endangered in Austria); Tormos, Asís, and Gayubo, 1994:188, 204 (Spain: Albacete Province); Jansen and Kaluza, 1995:8 (Germany: endangered in Sachsen); Negrisoló, 1995a:23 (Italy: Veneto); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:410, 412 (in key to Sphecidae of Russian Far East); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:24 (Austria: Niederösterreich: Marchfeld, Oberweiden; Croatia: Island of Krk; Germany: Bayern: Kahl, Lohr); Schmid-Egger, Risch, and Niehuis, 1995:211 (Germany: summary of records from Rheinland-Pfalz Province); Gusenleitner, 1996a:7 (Austria: Steiermark); Kuhlmann, 1996:220 (Portugal: Serra de Estrela); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast); Saure, 1996:503 (Germany: Berlin-Pankow: sewage irrigation field); Schmid-Egger, Schmidt, and Doczkal, 1996:378 (Germany: Baden-Württemberg: endangered); Witt, 1996:106 (Germany: Brandenburg), 111 (locality records); Celary, 1997:58 (in checklist of Animals of Poland); Schnee, 1997:99 (Germany: Sachsen); Schmidt and Schmid-Egger, 1997:29 (in checklist of German

Sphecidae); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg); Dollfuss, Gusenleitner, and Bregant, 1998:515 (Austria: summary of collecting records from Burgenland); Flügel, 1998:60 (Germany: Brandenburg: Unteres Odertal National Park); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Józán, 1998:311 (Hungary: Duna-Dráva National Park); Kulik, 1998:132 (Germany: Niedersachsen; prey: *Metriopoteria roeseli* (Nadig)); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); N. Schneider, Olinger, and Cungs, 1998:162 (Luxemburg: Dudelange); H.-J. Schulz, 1998b:9 (Germany: Brandenburg: Unteres Odertal National Park); van der Smissen, 1998:69 (Germany: Niedersachsen: Laasche, Neu Darchau); K. Weber, 1998:149 (Germany: Bayern: Bamberg area); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); W. Klein, 1999:18 (occurrence in Luxemburg noted); Majzlan, Rychlík, and Deván, 1999:146 (Slovakia: Čenkovská Step Nature Reserve); Pauly, 1999:109 (in catalog of Belgian aculeates); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:228 (in Sphecid Fauna of Germany); Dressler, 2000:34 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:30 (southeastern Kazakhstan: sixteen localities); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:106 (Greece); Jacobs, 2000:12, 17 (Germany: Land Mecklenburg-Vorpommern: vulnerable); Józán, 2000:107 (Hungary: Bakony Mountains); Schmid-Egger, 2000b:276, 281 (Germany: Baden-Württemberg: shores of Rhine River); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Vicidomini, 2000b:28 (Italy: previously recorded from Campania); Cungs and Jakubzik, 2001:122, 123 (Luxemburg); Ivanov and Ljubomirov, 2001:211 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia), 157 (review of known biology); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ljubomirov, 2001b:49 (Bulgaria: Mount Vitosha near Sofia); Mazzucco, 2001:203 (Austria: Niederösterreich: Steinfeld); Ohl et al., 2001:142 (distribution in Germany by provinces); K. Schmidt and Bitsch in Bitsch et al., 2001:250 (in Sphecid Fauna of Western Europe); Zettel, Gross, and Mazzucco, 2001:72 (Austria: Wien); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:67 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:140 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Ziska, 2002:9 (Germany: Berlin-Köpenick: Krumme Lake); Gayubo, Özbek, and Yıldırım, 2003:89 (Turkey: Bilecik and Samsun Provinces); Józán, 2003:227 (Hungary: Látványi Puszta Nature Conservation Area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:70 (Germany: in catalog of wasps and bees of Bayern,); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Schmid-Egger, 2003:758 (Italy: Sicilia: Randazzo in Nebrodi Range); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:193, 196 (Germany: Bayern: Bamberg, recently collected, not extinct); Gayubo et al. 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Gorobchishin, 2004:34 (Ukraine: Zaporiz'ka Oblast': Obitichna Kosa Nature Reserve); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Kazenas, 2004b:103 (Kazakhstan: western Tien Shan), 2004d:30 (Kazakhstan: northern Caspian region); Klein and Lefebvre in Peeters, van Achterberg, et al., 2004:423 (in Wasp and Ant Fauna of Netherlands); Majzlan and Deván, 2004:33 (Slovakia: Malacky-Široké); Shkuratov, 2004a:76 (Russia: Rostov Oblast'), 2004b:166 (Russia: Rostov Oblast': Gosudarstvennyi Muзей-Zapovednik M.A. Sholokhova); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:357 (in catalog of Polish Crabronidae); Stolle et al., 2004:373 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Vago,

2007:175 (France: départements du Nord); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:44 and 60 (in checklist of Polish Sphecidae); Burger, 2005:35 (Germany: Thüringen); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Jacobs, 2005a:451 (Bulgaria); Pagliano and Negrisoló, 2005:376 (in Sphecidae Fauna of Italy); Reder, 2005:954 (Germany: Rheinland-Pfalz: seven localities); Saure, 2005:19 (Germany: Berlin); Shorenko, 2005a:164 (Ukraine: Crimea); Straka, 2005a:402 (endangered in Czech Republic), 2005b:252 (Turkey: five localities); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1796 (Turkey: Palandöken, Oltu); Ziska and Saure, 2005:81 (Germany: Berlin: Biesenhorster Sand); Gorobchishin, 2006:108 (Ukraine: Kyiv Oblast': Koncha-Ozerna, village Kruglyk 10 km north of Kyiv, Stavishche); Liebig, 2006:40 (Germany: Sachsen: Muskauer Heide); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Baños-Picón, Gayubo, Asís, and González, 2007a:256, 258 (Spain: Zamora: Cabañas de Aliste); Cungs, Jakubzik, and Cölln, 2007:140 (Luxemburg: Haardt Nature Reserve); Jacobs, 2007:95, 100 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:26 (Germany: northwestern Sachsen); Józán, 2007:179 (Hungary: Zselic hills); Kazenas, 2007a:90 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Kowalczyk and Nadolski, 2007:284 (Poland: Łódź: railway areas); Pulawski, 2007a:299 (in revision of African *Tachysphex*); Saure, 2007:83 (in checklist of Aculeata of Land Brandenburg, Germany); G. Turrisi and R. Turrisi, 2007:120 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity, as *fulvitaris fulvitaris*); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov and Tshernyshev, 2008:43 (Russia: Novosibirsk Oblast': Karasuk area); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Kazenas, 2008b:112 (Kazakhstan: foothills of Zailiskiy Alatau: occurring among others on loess cliffs); Ljubomirov and Yildirim, 2008:206 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:19 (in catalog of Crabronidae of Asiatic Russia); Protsenko and Drozdovskaya, 2008:126 (Ukraine: Sumy Oblast': Mogritsa village); Theunert, 2008:83 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picón, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Belkheir, 2009:17 (France: Pyrénées-Orientales: commune d'Eyne); Debuysse and Vago, 2009:4 (in list of Sphecidae *sensu lato* of northern France); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Józán, 2009:166 (Croatia: Marčana, Most-Raša); Kowalczyk, Kurzac, and Nadolski, 2009:63 (Poland: between Warta and Widawka rivers); Kowalczyk, Kurzac, and Soszyński, 2009:129 (Poland: Spała Landscape Park: Inowłódz); Livory, Chevin, Lair, Sagot, and Baldock, 2009:26 (France: Département de la Manche); Nemkov, 2009b:78 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Pagliano, 2009:184 (Italy: Molise: Mafalda; recorded from Trentiono-Alto Adige by Kohl, 1880); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Burguet *in* Durand and Burguet, 2010:51 (France Département d'Ardèche: Ardèche Gorges); Ermilov and Mokrousov, 2010:90 (phoretic mites in Middle Volga Region of Russia: undetermined Prostigmata); Mokrousov, 2010a:62 (Russia: Kirov and Nizhniy Novgorod Oblast's: no specific localities); Rudoiskatel', 2010:152 (Russia: southern Ural Mountains); Saure, 2010a:88 (Germany: Berlin-Reinickendorf: Baumberge), 2010b:175 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:19 (in red list of Aculeata of Germany: rare); Shorenko and Konovalov, 2010:22 (Ukraine); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:102 (Western Slovakia: recorded from Borská nížina); van der Smissen, 2010a:353 (Germany: Schleswig-Holstein: locality records), 2010b:387 (France: Ardèche, Gard, Vaucluse: locality records); Burger, 2011a:288

(Germany: in red list of Sphecidae *sensu lato* of Thüringen), 2011b:73 (Germany: Thüringen: Bottendorf, rediscovery in Thüringen after more than 100 years); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wild-fire); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Murai and Amr, 2011:112, 120 (first record from Syria: Al Thawrah Nature Reserve at 35°51'N 28°38'E); Saure, 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg), 2011d:200 (Germany: Sachsen-Anhalt: conservation area “Heide südlich Burg”; Schmid-Egger, 2011a:39 (France: Parc National du Mercantour: Fontan; and Italy: Lago Rovine); Theunert, 2011a:21 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:64 (Germany: Hessen: strongly endangered); Ziska and Saure, 2011:109 (Germany: Berlin: Tegeler Fließ valley); Bayındır, Gürbüz, Ljubomirov, and Pohl, 2013:146 (Turkey: Isparta: Kasnak Oak Forest Nature Reserve); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Japoshvili and Ljubomirov, 2012:96 (Turkey: Isparta: Gölcük Nature Park 8 km southwest of city of Isparta); Kazenas, 2012b:169 (Kazakhstan: Korgalzhin State Nature Reserve); Nemkov, 2012c:438 (in catalog of Crabronidae of Russian Far East); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Yildirim, 2012:80 (Turkey: Erzurum province: several localities); Flügel, 2013a:120 (Germany: Brandenburg: Pimpinellenberg near Oderberg); Kazenas, 2013a:64 (color photograph of female, short information on geographic distribution and nesting habits), 2013b:495 (southeastern Kazakhstan: everywhere in foothills and low mountains, in river valleys, in adjacent deserts and semideserts); Mokrousov, Ruchin, and Egorov, 2013:201 (Russia: Mordovian Republic: Mordovian State Nature Reserve); Olszewski, Wiśniowski, Pawlikowski, and Szpila, 2013:132 (Poland: Glinki, Krzyżanowice, Ludowice, Sierakowo, Sobota, Sutno); Saure, 2013:22 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:26 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:165 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park and Serras de Aire e Candeeiros Natural Park); Wiśniowski and Szczepko, 2013:50 (Poland: Kampinos National Park near Warszawa); Bitsch, 2014:402 (France: Aisne: Rocourt-Saint-Martin; Haut-Rhin: Biesenheim, Fessenheim, and Giesheim); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Józán, 2014:133 (Croatia: 8 km south of Karlobag); Kazenas, 2014a:134 (Kazakhstan: Karatau Mountain Range); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Mokrousov and Zryanin, 2015:42 (Uzbekistan: Surkhandarya Oblast’); Shorenko, 2015:327 (in list of Sphecidae *sensu lato* of Crimea); Simon, Lorthiois, and Macé, 2015:55 (France: alluvial terraces in Eure Department: Courcelles-sur-Seine); Mokrousov and Popov, 2016:579 (Russia: Krasnodarskiy Krai); Stolle and Saure, 2016:925 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:34 (Turkey: Burdur, Kars, and Tunceli provinces); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Vallée d’Eyne); Shorenko, 2017:77 (in Crimea collected in June); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:7 (Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Franken and Berg, 2018:67 (Netherlands: North Holland: sand dunes); Nicolas and Vago, 2018:14 (France: Pas-de-Calais: Mont Saint-Frieux); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Maharramov, Aliyev, and Mammadov, 2018:454 (Azerbaijan: Ordubad, Sheki); Carminati, Mora, and Cretin, 2019:18 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:18 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:110 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13232 (Russia: Mordovia State Nature Reserve); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:268 (Iran: Fars: Maharloo: Posht Par); Yalmız and Tüzün, 2019:16 (Turkey:

Adana Province: no specific locality); Akulov, Proshchalykin, and Mokrousov, 2020:49 (Russia: central Krasnoyarsk Krai); Ben Khedher, Yildirim, and Braham, 2020b:314 (in Tunisia known from Jendouba); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:70 (in catalog of *Tachysphex* of Iran); Saure, 2020:277 (Germany: Sachsen-Anhalt: sand dunes); Danilov, Odintseva, and Odintsev, 2021:22 (Russia: Omsk Oblast'); Cross, Baldock, and Wood, 2021:42 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:63 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:100 (in commented list of Sphecidae *sensu lato* of Poland); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:218 (in revision of Sphecidae *sensu lato* of Europe); Can, 2022:223 (supernumerary submarginal cell); Budrys, Budrienė, Lazauskaitė, and Orlovskytė, 2023:110 (first record from Lithuania: three localities); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution); Olszewski, Sparks, Twerd, and Wiśniowski, 2024:5 (central Poland: common in river valleys: no specific localities, not endangered); Pytel-Huta and Franchuk, 2024:82 (Ukraine: Rivno Nature Reserve).

*Tachytes fulvitaris* A. Costa, 1867c:30, ♀. Objective synonym of *Tachytes fulvitaris* A. Costa, 1867a.

*Tachytes acrobates* Kohl, 1878:705, ♀. Lectotype: ♀, Austria: Tirol: Zams (NHMW), designated by Pulawski, 2007a:299. Synonymized with *Tachysphex fulvitaris* by de Beaumont, 1936a:203, 1936b:617, and 1936c:6. – Kohl, 1880:180 (Austria: Tirol, and Italy: Trentino-Alto Adige), 233 (preying on Hemiptera, an observation not confirmed by subsequent authors), 234 (description of ♂). – **As *Tachysphex acrobates***: Kohl, 1883e:671 (new generic assignment, Switzerland), 1885a:353 and 355 (in key to Palearctic *Tachysphex*), 390 (in revision of Palearctic *Tachysphex*); Gasperini, 1887:16 (recorded from Dalmatia, now Croatia, by Kohl, 1885a), 1889:69 (Dalmatia: Spalato, now Croatia: Split); Kohl, 1893a:32 (Austria: Niederösterreich; Wien: Türkenschanze); Dalla Torre, 1897:677 (in catalog of world Hymenoptera); Mocsáry, 1897:77 (Kingdom of Hungary, some localities are now in Romania and Slovakia); Dominique, 1901a:506 (France: Loire-Inférieure, now Loire-Atlantique: Le Pouliguen); Fertton, 1901a:100 (nesting habits); Adlerz, 1904:137 (known prey: nymphal Hemiptera, in error, nymphs of *Decticus*, a terrigoniid); Antiga and Bofill, 1904:11 (in catalog of Catalan Hymenoptera); Kohl, 1905c:233 (Turkey: Kayseri: Erciyes Dağı); Moczár and Henter, 1907:205 (Romania: Caraș-Severin: Mehadia); Schmiedeknecht, 1907:233, 234 (in key to Hymenoptera of Central Europe); Mercet, 1910b:165 (listed from Spain); Schmiedeknecht, 1907:233, 234 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Šusterka, 1909:35 (Czech Republic: vicinity of Praha); Mercet, 1910b:165 (listed from Spain); Graeffe, 1911:45 (Italy: Trieste area); Fertton, 1912a:388 (Algeria: La Calle; prey: tettigoniid larva); Schirmer, 1912:167 (Germany: Berlin area); O. Meyer, 1919:154 (Germany: Posen Province, now Poland: Poznań Region); A. Wagner, 1920:39 (Germany: Lower Elbe region, not found but can be expected); Hedicke, 1922:271 (Germany: Brandenburg: Gross Machnower Weinberg); Fertton, 1923:316 (nest and prey identical in Algeria and Corsica), 320 (preys exclusively on tettigoniid larvae); Berland, 1925d:121 (in Sphecidae Fauna of France); Hémon, 1926:199 (France: Finistère: Fouesnant; as *acrobatus*); Benoist, 1928:410 (France: Basses-Alpes: Saint-Pons); Berland, 1928b:178 (France: Finistère: Fouesnant, département d'Allier); Bouwman, 1928b:25, 26 (in key to *Tachysphex* of Netherlands, not yet found in Netherlands); Grandi, 1929:288 (Italy: Toscana: valle della Limentra); Hedicke, 1930b:XI (...); Schmiedeknecht, 1930:694, 695 (in keys to Hymenoptera of North and Central Europe); Grandi, 1931:59 (Italy: Emilia-Romagna: Cervia); Bernard, 1933:62 (France: Drôme: Dieulefit), 1934b:250 (prey: *Metrioptera tessellata* (Charpentier)); Grandi, 1934:129 (Italy: Lazio: Acilia); Jansson, 1934:290 (first record from Sweden: Island of Öland); Bernard, 1935:65 (France: Var: Fréjus area; prey: *Merotropis tessellata*); de Beaumont, 1936a:203 (in revision of French *Tachysphex*); Noskiewicz, 1936:158 (Poland: Podole Region: Sinków, now Ukraine); Goebel,

1937:51 (Poland: Poznań area); Kuntze and Noskiewicz, 1938:408 (Poland: Podole region, now Ukraine, also known from more northern parts of Poland); Guiglia, 1941c:166 (Italy: Calabria: Grande Sila); Paul, 1941:46 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area, and Germany: Mecklenburg-Vorpommern: Stralsund); Schneid, 1941:1045 (Germany: Bayern: Bamberg area); Blüthgen, 1942:10 (Germany: Sachsen: known from Saal Valley but not from Kyffhäuser); Guiglia, 1942a:60 (Greece: Island of Rhodes: Villanova); J. Perkins, 1942:200 (Sweden: Skåne: Löderup); Verhoeff, 1942:37 (first record from Netherlands: Noordwijk); Giner Marí, 1943a:143 (in Sphecid Fauna of Spain); Guiglia, 1944b:28 (Italy); Deleurance, 1946b:63 (nest open during provisioning, prey: locustids), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Cavro, 1950:35 (France: Département du Nord); Leininger, 1953:18 (Germany: Baden-Württemberg); Bischoff and Stadler, 1954:126 (Germany: Bayern: Romberg Nature Reserve), Hertzog, 1954:101 (France: Bouches-du-Rhône: Camargue); Tjeder, 1954:67 (Sweden: eastern Skåne: Löderup); Ceballos, 1956:375 (in catalog of Hymenoptera of Spain); Zirngiebl, 1957:183 (Germany: Rheinland-Pfalz: Birkenheide); Olberg, 1959:267 (photograph of individual digging nocturnal rest site and cleaning right antenna).

*Tachytes strigosus* Mocsáry, 1879:126, ♀. Syntypes: ♀, Hungary: Budapest (TMB). Synonymized with *Tachysphex acrobates* by Kohl, 1885a:390. – Haris, 2016:16 (in list of species described by S. Mocsáry from Carpathian Basin).

*Tachytes erythrogaster* A. Costa, 1882a:197, sex not stated (as *erythrogastra*, incorrect original termination). Holotype or syntypes: Italy: Sardegna: Cagliari (Napoli). Synonymized with *Tachytes fulvitaris* by A. Costa, 1884b:246 and 1885a:17. – A. Costa, 1883:57 (Italy: Sardegna: Cagliari), 90 (redescription), 1885:17 (as synonym of *Tachytes fulvitaris*). – **As *Tachysphex erythrogaster***: Kohl, 1885a:394 (new generic assignment, original description copied); Dalla Torre, 1897:679 (in catalog of world Hymenoptera); de Beaumont, 1936c:7 (type material missing from A. Costa collection, Napoli)999. – **As *Tachysphex fulvitaris erythrogaster***: Pulawski, 1971:95 (new status; revision); Erlandsson, 1974:71 (Italy); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Bonelli, 1988:86 (prey and nest); Pagliano, 1990:103 (in catalog of Italian Sphecidae); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna: Sardinia); Pagliano and Negrisolo, 2005:377 (in Sphecid Fauna of Italy). – **As *Tachysphex fulvitaris forme erythrogaster***: K. Schmidt and Bitsch *in* Bitsch et al., 2001:251 (new status, in Sphecid Fauna of Western Europe).

*Tachytes erythrogaster* A. Costa, 1884a:334, sex not stated (as *erythrogastra*, incorrect original termination). Objective synonym of *Tachytes erythrogaster* A. Costa, 1882a.

*Tachytes dubius* Radoszkowski, 1886a:31, ♂. Syntypes: Russia: Orenburg; Turkmenistan: Ashkhabad; and Caucasus: no specific locality (Kraków). Synonymized with *Tachysphex acrobates* by de Beaumont, 1936a:204, 1936b:617, and 1936c:6. – Radoszkowski, 1892:590 (reference to Radoszkowski, 1886). – **As *Tachysphex dubius***: Dalla Torre, 1897:679 (new generic assignment, in catalog of world Hymenoptera); Antiga and Bofill, 1904:11 (in catalog of Catalonian Hymenoptera); Grandi, 1930: 341 (Italy: Toscana: Maremma); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain).

As *Tachysphex caucasicus* (Radoszkowski, 1886): Kohl, 1888a:143 (♂ only; ♀ = *Tachysphex stachi*).

*Tachysphex bipunctatus* F. Morawitz, 1891:207, ♀. Holotype: ♀, western Kazakhstan: Ryn-Peski (ZIN). Synonymized with *Tachysphex fulvitaris* by Pulawski, 1971:90. – Dalla Torre, 1897:678 (in catalog of world Hymenoptera).

**161.fuscispina Pulawski**

*Tachysphex fuscispina* Pulawski, 1971:286, ♀. Holotype: ♀, Turkmenistan: Ashgabat (ZIN). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:112 (in key to Sphecidae of Kazakhstan and Central Asia), 2001:28 (in checklist of Sphecidae of Kazakhstan and Central Asia); Gadallah, 2020b:51 (in list of aculeate wasps of Arabian Peninsula).

**162.gagates Arnold**

*Tachysphex gagates* Arnold, 1940:119, ♀. Holotype: ♀, Zimbabwe: Kami (SAM). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a:302 (in revision of African *Tachysphex*).

**163.galapagensis Rohwer**

*Tachysphex galapagensis* Rohwer, 1924:173, ♀, ♂. Holotype: ♀, Galapagos Islands: Albemarle Island (USNM). – F. Williams, 1926:355 (reference to original description); Linsley and Usinger, 1966:177 (in checklist of insects of Galapagos Islands); Pulawski, 1974a:46 (in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 1988a:147 (in cladistic analysis of *Tachysphex terminatus* species group); Amarante, 2002:35 (in catalog of Neotropical Crabronidae), 2005a:10 (correction to his 2002 catalog).

**164.galeatus Pulawski**

*Tachysphex galeatus* Pulawski, 1977a:223, ♀, ♂. Holotype: ♀, Australia: Queensland: 15 mi. west of Bowen (ANIC); Cardale, 1985:240 (in catalog of Australian Sphecidae).

**165.gastrotrichus Pulawski**

*Tachysphex gastrotrichus* Pulawski, 2007a:304, ♀, ♂. Holotype: ♂, Namibia: Swakopmund District: 10 km east of Swakopmund at Swakop River (CAS).

**166.gegen Tsuneki**

*Tachysphex gegen* Tsuneki, 1971m:31, ♂. Holotype: ♂, China: Inner Mongolia: Apaka (originally K. Tsuneki coll., now Hyogo Mus.). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Hashimoto and Nakanishi, 1997:29 (holotype transferred to Hyogo Mus.); Hua, 2006:282 (in list of Chinese insects, geographic distribution).

**167.geniculatus (Spinola)**

*Lyrops geniculata* Spinola, 1839:480, ♀. Holotype: ♀, Egypt: no specific locality (Torino). – de Beaumont, 1952e:48 (study of holotype). – Casolari and Casolari Moreno, 1980:113 (specimen in M. Spinola collection, Torino); Pagliano, 2011a:111 (specimen in coll. Spinola, Torino, was labeled as holotype by de Beaumont). – **As *Larrada geniculata***: F. Smith, 1856:281 (new generic assignment, in catalog of Hymenoptera in British Museum). – **As *Tachysphex geniculatus***: Kohl, 1885a:395 (tentative new generic assignment, original description copied); Dalla Torre, 1897:680 (in catalog of world Hymenoptera); de Beaumont, 1952c:190 (Algeria: Hoggar); Pulawski, 1964:88 (Egypt: Abu Rawash, Abydos, Ghiza, Luxor, Maadi, Saqqara, Tell-el-Amarna, Wadi Digla, redescription), 1971:346 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Guichard, 1991a:339 (Jordan); Pulawski, 2007a:306 (in revision of African *Tachysphex*); Roche, 2007a:81 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Gadallah, 2020b:51 (in list of aculeate wasps of Arabian Peninsula).

As *Tachysphex* No. 8: de Beaumont, 1940b:168, synonymized with *Tachysphex geniculatus* by Pulawski, 1971:346.

**168. *georgii* Arnold**

*Tachysphex georgii* Arnold, 1940:122, ♀ (as *Georgii*, incorrect original capitalization). Holotype: ♀, South Africa: Western Cape Province: George (TMP). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a:309 (in revision of African *Tachysphex*).

**169. *gessianus* Pulawski**

*Tachysphex gessianus* Pulawski, 2007a:312, ♀, ♂. Holotype: ♀, South Africa: Eastern Cape Province: Hilton Farm 18 km west-northwest of Grahamstown (AMG). – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

**170. *gibbus* Kohl**

NOTE. In the male of *T. gibbus*, the forefemoral emargination is shiny, minutely punctate, whereas in *T. obscuripennis* it is dull, uniformly microsculptured.

*Tachysphex lativalvis* Thomson var. *gibbus* Kohl, 1885a:383, ♀ (as *gibba*, incorrect original termination). Syntypes: France: no specific locality, Spain: Barcelona (NHMW). – Kohl, 1885a:350 (in key to Palearctic *Tachysphex*); Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Ferton, 1901a:100 (blattid prey); Adlerz, 1904:137 (known prey: immature blattids *Ectobia livida*); Schmiedeknecht, 1907:231 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera, as var. *gibbus*); Mercet, 1910b:165 (listed from Spain, as *lativalvis* var. *gibba*); Dusmet, 1915:87 (Spain: Aragón); Berland, 1925d:121 (in Sphecid Fauna of France, as var. *gibba*); Schmiedeknecht, 1930:693 (in keys to Hymenoptera of North and Central Europe, as var. *gibba*); Grandi, 1934:129 (Italy); Grandi, 1935a:110 (Italy: Emilia-Romagna: Cervia, as *lativalvis gibbus*); Bernard, 1935:65 (France: Var: Fréjus area); Móczár, 1938:64 (Hungary; as var. *gibba*); Paul, 1941:46 (Germany: Brandenburg: Geesow); Giner Marí, 1943a:141 (in Sphecid Fauna of Spain, as *lativalvis* var. *gibba*); Guiglia, 1944b:28 (Italy; as var. *gibba*); Deleurance, 1946b:63 (prey: *Ectobius lividus*, nest vertical), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges, as var. *gibba*); de Andrade, 1949:16 (Portugal; as *lativalvis gibba*); de Beaumont, 1953b:15 (diagnostic characters; as *lativalvis* ssp. *gibba*), 1954e:91 (Italy); Grandi, 1954:239 (Italy); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain, as *gibba*); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales, as *gibba*); Grandi, 1957:389 (Italy); Compte Sart, 1959:133 (Spain: Majorca; as var. *gibba*); Diniz, 1959:29 (Portugal: Cascais, Mata de Leiria, as var. *gibba*); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Diniz, 1964a:5 (Portugal: Azenhas do Mar, Carcavelos, Cascais, Rezende, Sines, Troia); Königsmann, 1971:106 (Spain: Girona: Palamós; as var. *gibbus*). – **As *Tachysphex obscuripennis gibbus***: Pulawski, 1971:228 (new status, in revision of Palearctic *Tachysphex*); Simon Thomas, 1972:181 (France: Landes: Onesse; Lot-et-Garonne: Durance; as *lativalvis gibba*; specimen from Onesse is actually *Tachysphex panzeri*); Erlandsson, 1974:73 (Spain); Simon Thomas and Veenendaal, 1974b:4 (France; as *lativalvis gibba*), 1976:5 (France: Lot-et-Garonne: Forêt de Campet; as *lativalvis gibba*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pagliano, 1980:127 (Italy: Campania); Schmidt and Westrich, 1983:123 (first record from Greece); Gayubo, 1984c:365 (Portugal: El Algarve Province), 1986c:33 (Spain: Zamora Province); Gayubo and Sanza, 1986:47 (Spain: Burgos, Segovia); Gayubo and Mingo, 1988:80 (Spain); Pagliano, 1990:105 (in catalog of Italian Sphecidae); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); K. Schmidt and Bitsch *in* Bitsch et al., 2001:263 (in Sphecid Fauna of Western Europe); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Pagliano and Negrisoló, 2005:368 (in Sphecid Fauna of Italy); Shorenko, 2005a:164 (Ukraine: Crimea); Magdalou, 2006b:109 (France: Pyrénées-Orientales: Mas-Larrieu Nature Reserve near Argelès-sur-Mer), 2006c:7 (France: Pyrénées-Orientales: Réserve Naturelle du Mas-Larrieu); Tomarchio and Turrisi, 2006:956 (Italy: first record from Sicilia: Mount Etna); Shorenko, 2007b:257 (Ukraine: Crimea: Feodosiya, Kerch, Shchelkino village in Leninskiy District); Pagliano, 2009:184 (Italy: recorded from Sicilia by Tomarchio

and Turrisi, 2006); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Baldock, 2014:356 (Spain: Island of Mallorca), 2015:70 (Spain: Mallorca: Colonia Sant Jordi), 71 (Spain: Ibiza, near airport); Cross, Baldock, and Wood, 2021:44 (in catalog of Sphecidae *sensu lato* of Portugal). – As *Tachysphex gibbus*: Mokrousov and Popov, 2016:579 (full species status based on sympatric occurrence with *T. obscuripennis*; Russia: Krasnodarskiy Krai); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:21 (in revision of Sphecidae *sensu lato* of Europe).

As *Tachysphex* sp.: Ferton, 1894:216, footnote (a black species, preying on *Ectobia livida* Fabricius), corrected to *Tachysphex obscuripennis gibbus* by Pulawski, 1971:229.

*Tachysphex philippi* S. Saunders, 1910:524, ♀. Holotype: ♀, Algeria: Philippeville (OXUM). Synonymized with *Tachysphex lativalvis gibbus* by de Beaumont, 1947c:670. – Morice, 1911:102 (Algeria: Philippeville); von Schulthess, 1926b:215 (Morocco: Marrakech).

As *Tachysphex lativalvis*: Morice, 1911:102 (Algeria), corrected to *Tachysphex obscuripennis gibbus* by Pulawski, 1971:228.

### 171. *glaber* Kohl

*Tachysphex glaber* Kohl, 1906a:217, ♀. Syntypes: ♀, Yemen: Abd el Kuri Island (NHMW). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Dollfuss, 1989:13 (type material in NHMW); Pulawski, 2007a:314 (in revision of African *Tachysphex*); Gadallah, 2020b:51 (in list of aculeate wasps of Arabian Peninsula).

### 172. *glabrior* F. Williams

*Tachysphex glabrior* F. Williams, 1914a:170, ♀, ♂. Holotype: ♀, USA: Kansas: Phillips County: no specific locality (Kansas Univ.). – Mickel, 1918b:423 (in catalog of Nebraskan Sphecidae); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); LaBerge, 1956:527 (holotype in Snow Entomological Museum); Arnaud, 1970:32 (in list of species described by F.X. Williams); R. Bohart and Menke, 1976:275 (as new synonym of *Tachysphex mundus* by R. Bohart); Krombein, 1979b:1628 (in catalog of North American Hymenoptera); Pulawski, 1988a:112 (in revision of Nearctic *Tachysphex*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Amarante, 2002:35 (in catalog of Neotropical Crabronidae, as *glabrior*), 2005a:10 (correction to his 2002 catalog); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### 173. *gracilicornis* Mercet

*Tachysphex gracilicornis* Mercet, 1909b:194, ♀, ♂. Syntypes: Morocco: Melilla (MNCN). – Nadig, 1933:78 (Morocco: Goundafa; diagnostic characters); de Beaumont, 1940b:165 (in revision of *Tachysphex* of Egypt); Honoré, 1942:56 (Egypt); de Beaumont, 1947a:165 (Egypt, Algeria, Morocco; in new revision of *Tachysphex* of Egypt), 1955a:178 (Morocco), 1956a:196 (Libya), 1960b:237 (Libya); Pulawski, 1971:305 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Roche and Zalat, 1994:115 (Egypt: Sinai Peninsula); Pulawski, 2007a:315 (in revision of African *Tachysphex*); Roche, 2007a:79 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Ben Khedher, Yildirim, and Braham, 2020b:314 (Tunisia: new locality records from Beja, Kairouan, Kasserine, Mahdia, Sidi Bouzid, and Tozeur provinces).

*Tachysphex eduardi* Morice in E. Saunders, 1910:527, ♀, ♂ (as *Eduardi*, incorrect original capitalization). Syntypes: Algeria: Biskra (OXUM). Synonymized with *Tachysphex gracilicornis* by de Beaumont, 1947a:165. – Morice, 1911:103 (Algeria: Biskra, Bône); von Schulthess, 1926:215 (Tunisia: Gafsa, as *Edwardi*).

*Tachysphex gracilicornis baal* Pulawski, 1971:307, ♀, ♂. Holotype: ♀, Israel: Beersheba (originally H. Bytinski-Salz coll., now Tel Aviv Univ.). Synonymized with *Tachysphex gracilicornis* by Pulawski, 2007a:315. – de Beaumont, Bytinski-Salz, and Pulawski, 1973:10 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).

#### 174. *gracilitarsis* Morice

*Tachysphex gracilitarsis* Morice in E. Saunders, 1910:572, ♀. Lectotype: ♀, Algeria: Biskra (OXUM), designated by Pulawski, 1971:335. – Morice, 1911:103 (Algeria: Biskra); von Schulthess, 1926b:214 (Tunisia: Kairouan, Sfax; Libya: Dernah); Guiglia, 1934b:304 (Libya: bibliography and summary of locality records); Giner Marí, 1945b:362 (Morocco: Western Sahara: Al Aiun, determination tentative); de Beaumont, 1947c:663 (as *Tachysphex pygidialis* ssp. *gracilitarsis*; redescription); Pulawski, 1971:334 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Gayubo, 1982a:102 (northern Spain: Sierra de Béjar), 1984b:96 (Spain: previously recorded from Salamanca Province); Gayubo and Mingo, 1988:79 (Spain); K. Schmidt and Bitsch in Bitsch et al., 2001:251 (in Sphecid Fauna of Western Europe); Baños-Picon, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Pulawski, 2007a:318 (in revision of African *Tachysphex*); Ben Khedher, Yildirim, and Braham, 2020b:314 (in Tunisia known from Kairouan and Sfax); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:219 (in revision of Sphecidae *sensu lato* of Europe).

#### 175. *graecus* Kohl

*Tachysphex graecus* Kohl, 1883a:174, ♀, ♂ (as *graeca*, incorrect original termination). Lectotype: ♀, Greece: Island of Corfu: no specific locality (NHMW), designated by Pulawski, 1971:219. – Kohl, 1885a:349 and 356 (in key to Palearctic *Tachysphex*), 362 (in revision of Palearctic *Tachysphex*); Dalla Torre, 1897:680 (in catalog of world Hymenoptera); Morice, 1921:824 (Iraq: Amara); von Schulthess, 1926b:215 (Tunisia: Kairouan, determination tentative); de Beaumont, 1947c:665 (belongs to a separate species group), 1965a:48 (Greece); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nessebar); Pulawski, 1971:216 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:273 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); de Beaumont, Bytinski-Salz, and Pulawski, 1973:9 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Dollfuss, 1989:13 (lectotype in NHMW); K. Schmidt and Bitsch in Bitsch et al., 2001:253 (in Sphecid Fauna of Western Europe); Gayubo, Özbek, and Yildirim, 2003:89 (Turkey: İzmir: Selçuk); Straka, 2005b:269 (Turkey: Antalya: Göynük 25 km southwest of Antalya; Eskişehir: Sakariilica 30 km north of Eskişehir; Içel: Büyükeçeli); Yildirim and Ljubomirov, 2005:1796 (Turkey: Erzincan); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Ljubomirov and Yildirim, 2008:207 (in catalog of Crabronidae of Turkey); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:34 (Turkey: Kars and Tunceli provinces); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:18 (Azerbaijan: Nakhichevan Autonomous Republic); Ben Khedher, Yildirim, and Braham, 2020b:314 (in Tunisia recorded from Kairouan); Kaplan and Yildirim, 2021:63 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:219 (in revision of Sphecidae *sensu lato* of Europe).

of Europe); Can, 2022:223 (supernumerary submarginal cell); Can and Saboori, 2023:81 (Turkey: parasitized by larvae of mite *Leptus tridentatus* Saboori, Hakimitabar and Khademi (Trombidiformes: Erythraeidae)); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

### 176. *grandissimus* Gussakovskij

*Tachysphex grandissimus* Gussakovskij, 1933b:282, ♀, ♂ (♂ = *Tachysphex sordidus*). Lectotype: ♀, Iran: Bampur-Kaskin (ZIN), designated by Pulawski, 1971:422. – de Beaumont, 1940b:169 (in revision of *Tachysphex* of Egypt); Honoré, 1942:56 (Egypt: Cairo area, Dakhla oasis, Sinai Peninsula: Romani); de Beaumont, 1947a:177 (in new revision of *Tachysphex* of Egypt), 1950d:18 (Egypt: Siwa oasis); Gussakovskij, 1952:238 (Tajikistan, Turkmenistan; description of ♂); Balthasar, 1954b:269 (Palestine: Wadi el Kelt near Jericho); de Beaumont, 1955a:181 (Morocco), 1960b:238 (Libya); Myartseva, 1971b:180 (occurring only in sand deserts of southern Palearctic Region); Pulawski, 1971:420 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:13 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:114, 126 (in key to Sphecidae of Kazakhstan and Central Asia); Roche, 1981:2 (in checklist of Sphecidae of United Arab Emirates); Al-Houty, 1989:164 (Kuwait: Abdelli, Sulabiya); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Krombein and Pulawski, 1994:98 (in revision of Sri Lankan *Tachysphex*); Roche and Zalut, 1994:115 (Egypt: Sinai Peninsula); Al-Houty, 1997:161 (Kuwait: no specific locality); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia); Pulawski, 2007a:319 (in revision of African *Tachysphex*); Roche, 2007a:85 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province); Straka and Schmid-Egger, 2017:437 (United Arab Emirates: Jebel Hafit near Al Ain at 24.056°N 55.754°E); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:268 (Iran: Fars: Kherameh: Dodej); Ben Khedher, Yildirim, and Braham, 2020b:315 (in Tunisia known from Kebili and Tozeur); Gadallah, 2020b:51 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:76 (in catalog of *Tachysphex* of Iran); Gadallah and Abu El-Ghiet, 2024:87 (Saudi Arabia: Jazan Province: Abu Arish).

As *Tachysphex argyrius* (♂ only): Gussakovskij, 1933b:280 (Iran), corrected to *Tachysphex grandissimus* by Gussakovskij, 1952:237.

### 177. *gryllivorus* Pulawski

*Tachysphex gryllivorus* Pulawski in Krombein and Pulawski, 1994:34, ♀, ♂. Holotype: ♀, Sri Lanka: Anuradhapura District: Padaviya (USNM). – Krombein and Pulawski, 1994:10 (nesting habits).

### 178. *gujaraticus* Nurse

*Tachysphex gujaraticus* Nurse, 1909:516, ♀, ♂. Lectotype: ♀, India: Gujarat: Deesa (BMNH), designated by Pulawski, 1975a:310. – Ramakrishna Aiyar, 1916:552 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Krombein and Pulawski, 1994:20 (in revision of Sri Lankan *Tachysphex*); Roche and Zalut, 1994:115 (Egypt: Sinai Peninsula); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia); Nazarova, 2005:93 (alfalfa fields in southwestern Tajikistan, as *gujartiacus*); Pulawski, 2007a:323 (in revision of African *Tachysphex*); Roche, 2007a:74 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Straka and Schmid-Egger, 2017:437 (United Arab Emirates: north of Ajman), 438 (color photograph); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:629 (Iran: Hormozgan: Band e Molla at 27°25'N 57°09'E); Ben Khedher, Yildirim, and Braham, 2020b:315 (Tunisia:

Tozeur: Nefta oasis); Gadallah, 2020b:51 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:70 (in catalog of *Tachysphex* of Iran); Mawadda and Girish Kumar, 2023:112 (in checklist of Crabroninae of Northern India).

As *Tachysphex* No. 18 (part, other specimens = *Tachysphex erythrophorus*): de Beaumont, 1940b:178 (Egypt), corrected to *Tachysphex laniger* by Pulawski, 1971:129.

*Tachysphex laniger* Pulawski, 1964:105, ♀, ♂. Holotype: ♀, Egypt: Abu Rawash northwest of Cairo (originally W.J. Pulawski coll., now CAS). Synonymized with *Tachysphex gujaraticus* by Pulawski, 1975a:310. – Pulawski, 1971:129 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:8 (Israel); Kazenas, 1978b:123, 129 (in key to Sphecidae of Kazakhstan and Central Asia); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia).

### 179. *gussakovskii* Pulawski

*Tachysphex gussakovskii* Pulawski, 1971:106, ♀, ♂. Holotype: ♀, Kazakhstan: Baigakum (ZIN). Paratypes: Turkmenistan. – Myartseva, 1972a:79 (Turkmenistan; as *gussakovskiji*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:123, 129 (in key to Sphecidae of Kazakhstan and Central Asia); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Calliptamus barbarus cephalotes* F.W.); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:31 (southeastern Kazakhstan: 35 km south of Chilik, 10 km northwest of Chundzha, near landing place Dubun' on Ili River, 50 km east of village Kokshenghil'); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:68 (geographic distribution, collecting localities in Kazakhstan, as *gussakovskiji*), 2013b:495 (southeastern Kazakhstan: 35 km south of Chilik, 10 km northwest of Chundzha, near landing place Dubun' on Ili River, 50 km east of Kokshenghil', mouth of river Temerlik, as *gussakovskiji*); Mokrousov, Shlyakhtenok, and Grebennikov, 2016:25 (first record from Russia: Astrakhan' Oblast': Volzhski village at 46.965°N 47.53°E, Dosang, at 46.911°N 47.926°E, and near Lapas village at 46.976°N 47.846°E); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Mokrousov, 2017d:59 (South-East of European Russia: no specific locality); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:220 (in revision of Sphecidae *sensu lato* of Europe); Mokrousov and Proshchalykin, 2021a:321 (Russia: Tyva Republic); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution, as *gussakovskiji*).

As *Tachysphex speciosissimus*: Mokrousov, Shlyakhtenok, and Grebennikov, 2016:26 (first record from Russia: Astrakhan' Oblast': Volzhski village at 46.965°N 47.53°E) and Antropov, 2017b:240 (in catalog of Crabroninae of Russia), corrected to *Tachysphex gussakovskii* by Mokrousov and Proshchalykin, 2021a:321

### 180. *hadronyx* Pulawski

*Tachysphex hadronyx* Pulawski, 2007a:326, ♀, ♂. Holotype: ♀, Namibia: Swakopmund District: 63 km northeast of Swakopmund at 22°24'S 15°02'E (CAS). – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

### 181. *haematopus* Pulawski

*Tachysphex haematopus* Pulawski *in* Krombein and Pulawski, 1994:37, ♀, ♂. Holotype: ♀, Sri Lanka: Mannar District: 0.8 km northeast of Kokmotte Bungalow in Wilpattu National Park (USNM).

### 182. *harpax* Arnold

*Tachysphex harpax* Arnold, 1923a:161, ♀. Holotype: ♀, Zimbabwe: Sawmills or South Africa: Northwest Province: Platriver (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a:329 (in revision of African *Tachysphex*); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 2007); K. Schmidt, Straka, and

Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:221 (in revision of Sphecidae *sensu lato* of Europe; Cyprus: Lara beach 20 km north-northwest of Pafos).

*Tachysphex unguiculatus* Arnold, 1924:63, ♀, ♂. Lectotype: ♀, South Africa: Eastern Cape Province: Wil-lowmore (TMP), designated by Pulawski, 2007a:329. Synonymized with *Tachysphex harpax* by Pulawski, 2007a:329. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae).

*Tachysphex verhoeffi*, Pulawski, 1971:220, ♀, ♂. Holotype: ♀, Israel: Bat Yam (RMNH). Paratypes: Syria. Synonymized with *Tachysphex harpax* by Pulawski, 2007a:329. – de Beaumont, Bytinski-Salz, and Pulawski, 1973:9 (Israel); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae).

### 183. *helveticus* Kohl

*Tachysphex helveticus* Kohl, 1885a:374, ♀. Syntypes: France: no specific locality, and Switzerland: Valais: Sierre (NHMW). – Kohl, 1885a:351 (in key to Palearctic *Tachysphex*), 1888b:729 (Austria: Tirol, now Italy: Alto Adige), 1893:32 (Austria: Niederösterreich); Dalla Torre, 1897:680 (in catalog of world Hymenoptera); de Cobelli, 1903:111 (Italy: Province of Trentino: Alle Sarche); W. Schulz, 1904b:102 ("Akbes"); Schmiedeknecht, 1907:231 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Šusterka, 1909:34 (Czech Republic: vicinity of Praha); O. Meyer, 1919:154 (Germany: Posen Province, now Poland: Poznań Region); M. Müller, 1921:168 (Germany: Berlin area; Sachsen: Neumark); Hedicke, 1922:271 (Germany: Brandenburg: Gross Machnower Weinberg); Berland, 1925d:119 (in Sphecid Fauna of France); Schmiedeknecht, 1930:693 (in keys to Hymenoptera of North and Central Europe); de Beaumont, 1936a:207 (in revision of French *Tachysphex*); Goebel, 1937:42 (Poland: Poznań District: Poznań-Dębina); Zavadil, 1937a:73 (eastern Slovakia); Zavadil, Šusterka, and Baťa, 1937:201 (in catalog of Sphecidae of Czechoslovakia); Giordani Soika, 1939b:73 (first record from Italy: Lido di Venezia: Alberoni); Paul, 1941:46 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Baťa, 1944b:91 (Czech Republic: Veselí); Guiglia, 1944b:26 (Italy; redescription); nec de Beaumont, 1947a:200 (= *Tachysphex helveticus aegyptiacus*); Zavadil in Zavadil and Šnoflák, 1948:149, 151 (in key to Sphecidae of Czechoslovakia); Noskiewicz and Chudoba, 1949:422 (Poland: Górny Śląsk: Bytom area); Sanders, 1949:98 (first record from Netherlands: Kessel and Spar); Sanders, 1950:47 (Netherlands: Oudenrijn, diagnostic characters); Benno, 1951b:15 (in checklist of Aculeates of Netherlands); Leininger, 1951:118 (Germany: Baden-Württemberg: Graben, Rastatt, Sandhausen); Baťa, 1952:167 (Czech Republic); Fahlander, 1953:64 (Sweden: Boh, Tjärno, Sydkoster); de Beaumont, 1954a:60 (Italy); Grandi, 1954:239 (Italy); Kjellander, 1954b:247 (Sweden); Puławski, 1954:106 (Poland: Błędów); Hellén, 1955a:122 (Finland: Jomala, Saltvik, comparison with *Tachysphex nitidus*); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vogrin, 1955:37 (Yugoslavia); Hellén, 1956:45 (recorded from Finland); Bajári, 1957a:50, 54 (in key to Hungarian Sphecidae), 1957b:135 (first record from Hungary); Zirngiebl, 1957:183 (Germany: Rheinland-Pfalz: Birkenheide, Dürkheimer Bruch); Balthasar, 1958:337 (Slovakia: Čenkov); Benno, 1958b:12 (in review of Dutch Sphecidae); Puławski, 1958a:181 (Bulgaria: Varna); de Beaumont, 1959a:29 (Italy: Lazio: Acilia); Olberg, 1959:256-266 (photographs of nest digging, prey carrying, and nest closure); Valkeila, 1959a:182 (Finland: Bromarf); Wolf, 1959b:24 (Germany: Nassau); Noskiewicz and Puławski, 1960:124, 125 (in key to Polish Sphecidae); Valkeila, 1962b:66 (southwestern Finland); de Beaumont, 1964c:77 (in Sphecid Fauna of Switzerland); de Diniz, 1964a:6 (Portugal: Lisboa); de Beaumont, 1965a:50 (Greece); Benno, 1967:36 (in checklist of Sphecidae of Netherlands); J. Heinrich, 1967:75 (Germany: Bayern: Unterfranken District); Niedl and Deneš, 1967:81 (Czech Republic: Třeboň area); Scobiola-Palade, 1967b:42 (Romania); Benedek, 1968:73 (Hungary, visiting flowers of *Pastinaca sativa* L.); Pulawski, 1967a:408 (Turkey); Scobiola-Palade, 1968b:142 (Romania: Island of Letea in delta of Danube); Benedek, 1969a:84 (Hungary; marshy meadow); Schmidt, 1969:164 (Germany: Rhein-Main area: Darmstadt, Harreshausen near Dieburg);

Gauss and Perraudin, 1970:360 (Germany: Baden-Württemberg: Graben, Rastatt, Sandhausen); Haeseler, 1970:74 (Germany: Niedersachsen: Pevestorf, Schleswig-Holstein: Lauenburg); Leclercq, 1970c:map 33 (distribution in Belgium); Oehlke, 1970:712 (Democratic Germany); Tumšs, 1970:83 (first record from Latvia); Dathe, 1971:234 (Germany: Berlin Zoological Garden; phenology), 238 (Germany: Berlin); Pulawski, 1971:172 (in revision of Palearctic *Tachysphex*); Schmidt, 1971b:36 (Germany: Rheinland-Pfalz: Gonsenheimer Wald); Balthasar, 1972:271 (in Sphecidae Fauna of Czechoslovakia); Bonelli, 1972:6 (nesting habits); Kazenas, 1972b:162 (Kazakhstan); Krombein, 1972b:384 (Greece: Crete; prey: *Calliptamus italicus* (Linnaeus)); Hoop, 1973:48 (Germany: Schleswig-Holstein: Segrabner Berg); Erlandsson, 1974:72 (Italy); Kazenas, 1974b:110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Eck, 1976:90 (Democratic Germany); Lomholdt, 1976:251 (in Sphecidae Fauna of Fennoscandia and Denmark); Haeseler, 1977a:25 (Germany: Niedersachsen: Badener Berg 18 km southeast of Bremen); Kolenikov, 1977:318 (Russia: Bryansk Oblast'); Schmidt, 1977/78:55 (Germany: Rheinland-Pfalz: Mombacher Sand); Guichard, 1978:271 (Greece); Kazenas, 1978b:122, 132 (in key to Sphecidae of Kazakhstan and Central Asia); Marion, 1978:88 (France: Nièvre Department); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Schmidt, 1977/78:55 (Germany); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 70 (Netherlands: distribution map); Petit, 1980:43 (Belgium: Aayen); Schmidt, 1981:183 (Germany: Baden-Württemberg); Donath, 1982:213 (Germany: Cottbus Bezirk); Dollfuss, 1983a:77 (endangered in Burgenland, Austria), 80 (endangered in Steiermark, Austria), 1983b:10 (in catalog of Sphecidae of Austria); Riemann, 1983:85 (Germany: Bremen-Daverden area); Haack, Tschardtke, and Vidal, 1984:133 (Germany: Hamburg area); Gayubo, 1985c:168 (Spain: Cantabria: Santoña); Józán, 1985b:57 (Hungary south of Lake Balaton), 83 (ecological and zoogeographic characteristics); Riemann, 1985:21 (Germany: Niedersachsen); Westrich and Schmidt, 1985b:112 (Germany: endangered in Baden-Württemberg); Józán, 1986:370 (Hungary: Kiskunság National Park); Nemkov, 1986:97 (Russia: Siberia: Irkutsk Oblast'); Piek and Spanjer, 1986:190 (in list of Sphecidae with known prey); Vikberg, 1986:76 (Finland); Riemann, 1987b:44 (Germany: Niedersachsen: Nature Reserve Dünengebiet near Neumühlen); Schmidt and Westrich, 1987:364 (Germany: Mainz area); Dollfuss, 1988:24 (Austria: Niederösterreich: Oberweiden); Gayubo and Mingo, 1988:79 (Spain); Karsai, 1988:100 (Hungary: Kiskunság National Park); Kowalczyk, 1988b:65 (Poland: environs of Łódź); Dollfuss, 1989:12 (lectotype in NHMW); Pádr *in* Šedivy, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Barbier, Rasmont, and Wahis, 1990:32 (Belgium: Hainaut); Jacobs and Oehlke, 1990:164 (new locality records from Democratic Germany); Pagliano, 1990:104 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:539 (Austria: Kärnten); Day, 1991:xix (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:106 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:402 (Italy: Piemonte: Settimo); Jacobs, 1991:46, 47 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Kowalczyk, 1991a:90, 99, 102 (Poland: Łódź); H.-J. Schulz, 1991:30 (Germany: Oberlausitz: 5 km southwest of Wittichenau); van der Smissen, 1991:97 (northwestern Germany); Guichard, 1991a:340 (Jordan); Budrys, 1992:31 (in list of Sphecidae of Lithuania); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Gayubo, Borsato, and Osella, 1992:282 (Turkey); Józán, 1992b:173 (Hungary: Boronka-melléki Protected Area); Kuhlmann, 1993:76 (Germany: recorded from Westfalen by Teschner, 1955); Luig, 1993:44 (Estonia); van der Smissen, 1993:130 (northwestern Germany); Dollfuss, 1994:102 (endangered in Austria); Theunert, 1994c:51 (Germany: summary of records from Niedersachsen and Bremen); Gorobchishin, 1995:17 (Ukraine: Kanév Nature Reserve); Jansen and Kaluza, 1995:8 (Germany: endangered in Sachsen); Józán, 1995:104 (Hungary: projected Duna-Dráva National Park); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:410, 412 (in key to Sphecidae of Russian Far East); Scharrer, 1995:24 (Germany: Bayern: Kahl); Schmid-Egger, Risch, and

Niehuis, 1995:211 (Germany: summary of records from Rheinland-Pfalz Province); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Jakubzik, 1996:253 (Germany: Köln); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast', as *helveticus helveticus*); Saure, 1996:503 (Germany: Berlin-Pankow: sewage irrigation field); Schmid-Egger, Schmidt, and Doczkal, 1996:378 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Witt, 1996:106 (Germany: Brandenburg), 111 (locality records); Celary, 1997:58 (in checklist of Animals of Poland); Hinrichsen and Saure, 1997:31 (recognition characters); Schmidt and Schmid-Egger, 1997:29 (in checklist of German Sphecidae); Shlyakhtenok, Blinov, and Belyavskaya, 1997:152 (Belorussia: Pripyatskiy National Park); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg), 35 (endangered); Dollfuss, Gusenleitner, and Bregant, 1998:515 (Austria: summary of collecting records from Burgenland); Flügel, 1998:60 (Germany: Brandenburg: Unteres Odertal National Park); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Haeseler and Ritzau, 1998:51 (Germany: Bremen: Harriersand Island in Weser River and Steller Heide); Józán, 1998:311 (Hungary: Duna-Dráva National Park); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); van der Smissen, 1998:69 (Germany: Niedersachsen, Schleswig-Holstein); K. Weber, 1998:149 (Germany: Bayern: Bamberg area); Anan'eva and Kochetkov, 1999:7 (Russia: Ryazan Oblast': no specific locality); Majzlan, Rychlík, and Deván, 1999:146 (Slovakia: Čenkovská Step Nature Reserve); Pauly, 1999:109 (in catalog of Belgian aculeates); Saure, 1999:33 (Germany: Berlin-Köpenick); Wickl, 1999a:108 (Germany: Bayern: Oberpfalz area); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:228 (in Sphecidae Fauna of Germany); Dressler, 2000:34 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:31 (southeastern Kazakhstan: 7-8 km south of Alma Ata); Jacobs, 2000:12, 17 (Germany: Land Mecklenburg-Vorpommern: vulnerable); Józán, 2000:107 (Hungary: Bakony Mountains), 2001:279 (Hungary: Somogy County); Mokrousov, 2000b:30 (Russia: Nizhniy Novgorod Oblast'); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 157 (review of known biology); Ljubomirov, 2001b:49 (Bulgaria: Mount Vitoshka near Sofia); Ohl et al., 2001:142 (distribution in Germany by provinces); K. Schmidt and Bitsch in Bitsch et al., 2001:253 (in Sphecidae Fauna of Western Europe); Szczepko and Kowalczyk, 2001:188 (Poland: Kampinos National Park near Warszawa); Tischendorf, 2001:30 (Germany: Hessen: Kühkopf-Knoblochsaue Nature Reserve); van der Smissen, 2001:63 (Germany: Schleswig-Holstein: endangered); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:68 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:153 (Poland: Kampinos National Park near Warszawa); Shkuratov, 2002b:141 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Söderman and Vikberg, 2002:51 (in list of Aculeata of Finland); Venne and Bleidorn, 2002:10 (Germany: Nordrhein-Westfalen: Moosheide Nature Reserve); Drewes, 2003:142 (Germany: Bayern: Erlangen); Haeseler, 2003:340, 346 (Germany: Niedersachsen: Harriersand Island near Bremen); Józán, 2003:227 (Hungary: Látványi Puszta Nature Conservation Area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:70 (Germany: in catalog of wasps and bees of Bayern); von der Heide and Metscher, 2003:103 (Germany: Niedersachsen: Emsland area); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: strongly endangered); Dathe and Blank, 2004:181 (Germany: Nordrhein-Westfalen, addition to Ohl et al., 2001); Esser, Jakubzik, and Sonnenburg, 2004:18 (Germany: Nordrhein-Westfalen); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:264 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Gorobchishin, 2004:34 (Ukraine: Zaporiz'ka Oblast': Obitichna Kosa Nature Reserve); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Kazenas, 2004b:103 (Kazakhstan: western Tien Shan); Klein and Lefeber in Peeters, van Achterberg, et al., 2004:423 (in Wasp and Ant Fauna of

Netherlands); Majzlan and Deván, 2004:33 (Slovakia: Malacky-Široké); Shkuratov, 2004a:77 (Russia: Rostov Oblast'), 2004b:166 (Russia: Rostov Oblast': Gosudarstvennyi Muzey-Zapovednik M.A. Sholokhova); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:357 (in catalog of Polish Crabronidae); Stolle et al., 2004:373 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Szczepko and Kowalczyk, 2004:126 (Poland: Kampinos National Park near Warszawa); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:44 and 60 (in checklist of Polish Sphecidae); Haeseler, 2005:629 (Germany: Niedersachsen: Steller Heide near Bremen); Pagliano and Negrisoló, 2005:377 (in Sphecid Fauna of Italy); Riemann and Hohmann, 2005:565 (Germany: Niedersachsen: city of Bremen and adjacent area); Saure, 2005:19 (Germany: Berlin); Straka, 2005a:399 (critically endangered in Czech Republic), 2005b:255 (Turkey: Kayseri: Sultanhani); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Ziska and Saure, 2005:82 (Germany: Berlin: Biesenhorster Sand); Gorobchishin, 2006:109 (Ukraine: Kyiv; Cherkasy Oblast': Kanev Nature Reserve, Keleberda near Kanev); Liebig, 2006:40 (Germany: Sachsen: Muskauer Heide); Liška, 2006:89 (Slovakia: Váh river valley near Trenčín); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Burguet, 2007:unnumbered p. 22 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Hallin, 2007b:25 (Sweden: Blekinge County); Jacobs, 2007:96, 101 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:26 (Germany: northwestern Sachsen); Saure, 2007:83 (Germany: in checklist of Aculeata of Land Brandenburg Ebermann and Hall); Vago, 2007:175 (France: département d'Aisne); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov, 2008:349 (Russia: Altayskiy Kray: Barnaul area); Ljubomirov and Yildirim, 2008:208 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:19 (in catalog of Crabronidae of Asiatic Russia); Tannert and von der Dunk, 2008:181 (Germany: Bayern: west of Ernhofen and Weissenbrunn); Theunert, 2008:83 (Germany: map of distribution in Niedersachsen and Bremen); Debuysse and Vago, 2009:4 (in list of Sphecidae *sensu lato* of northern France); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Kowalczyk, Kurzac, and Nadolski, 2009:63 (Poland: between Warta and Widawka rivers); Mokrousov, 2009:286 (Russia: Republic Mari El); Nemkov, 2009b:78 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Pagliano, 2009:184 (Italy: Sardegna: lake Baratz); Szczepko and Wiśniowski, 2009:71 (Poland: Spała Landscape Park); Burguet in Durand and Burguet, 2010:51 (France Département d'Ardèche: Ardèche Gorges); Ermilov and Mokrousov: 2010:90 (phoretic mite *Imparipes breganti* Ebermann and Hall in Middle Volga Region of Russia); Esser, Fuhrmann, and Venne, 2010:38 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:29 (Germany: Bayern: Sulz- and Ottmaringer Tal); Mokrousov, 2010a:62 (Russia: Nizhniy Novgorod and Vladimir Oblast's, Chuvash Republic, Mari El Republic: no specific localities); Rudoiskatel', 2010:152 (Russia: southern Ural Mountains); Saure, 2010a:88 (Germany: Berlin-Reinickendorf: Baumberge), 2010b:175 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:19 (in red list of Aculeata of Germany: rare); Shorenko and Kononov, 2010:22 (Ukraine: Khar'kov Oblast': village Mokhnach); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:90 (Western Slovakia: Borská Nížina), 102 (Western Slovakia: recorded from Borská Nížina); van der Smissen, 2010a:353 (Germany: Schleswig-Holstein: locality records), 2010b:387 (France: Vaucluse: Bédoin), 2010c:398 (Sweden: Öland: Byrums Sandvik, Gårdby); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:75 (Russia: Chuvash Republic); Saure, 2011a:7 (Germany: Berlin: former airport Tempelhof), 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg); Theunert, 2011a:21 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al.,

2011:77 (Germany: Hessen: endangered); Wiesbauer and Zettel, 2011:269 (Austria: Niederösterreich: March = Morava lowland); Ziska and Saure, 2011:109 (Germany: Berlin: Tegeler Fließ valley); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:4 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Nemkov, 2012c:438 (in catalog of Crabronidae of Russian Far East); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Akulov and Proshchalykin, 2013:114 (Russia: Siberia: Krasnoyarsk Krai: Minusinsk and 12 km east of Minusinsk); Gros, 2013:324 (nesting habits); Mokrousov, Ruchin, and Egorov, 2013:201 (Russia: Mordovian Republic: Mordovian State Nature Reserve); Pankov, 2013:230 (Russia: Ivanovo Oblast'); Saure, 2013:22 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:26 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:165 (in annotated catalog of aculeate wasps of Belorussia); Wiśniowski and Szczepko, 2013:51 (Poland: Kampinos National Park near Warszawa); Baldock, 2014:356 (Spain: Island of Mallorca); Bitsch, 2014:402 (France: Loir-et-Cher: Blois; Vaucluse: Cadenet); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Kazenas, 2014a:134 (Kazakhstan: Karatau Mountain Range); Yildirim, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Baldock, 2015:70 (Spain: Mallorca: Cala Mesquida, Ca'n Picafort, Colonia Sant Jordi); P. Rosa and Pagliano, 2015:105 (Italy: Lombardia and Piemonte: Parco del Ticino); Bleidorn, Gerth, Hopfe, et al., 2016:11 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Mokrousov and Popov, 2016:580 (Russia: Abkhazia, Krasnodarskiy Krai); Stolle and Saure, 2016:925 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:34 (Turkey: Kars: Sarikamış: Karakurt); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Maharramov, Aliyev, and Mammadov, 2018:454 (Azerbaijan: Kusary: Avaran); Carminati, Mora, and Cretin, 2019:18 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:18 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:110 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13232 (Russia: Mordovia State Nature Reserve); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:70 (first record from Iran: Fars: Larestan at 27°39'54"N 54°16'39"E); Saure, 2020:277 (Germany: Sachsen-Anhalt: sand dunes); Cross, Baldock, and Wood, 2021:42 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:63 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:100 (in commented list of Sphecidae *sensu lato* of Poland); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:221 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution); Pytel-Huta and Franchuk, 2024:82 (Ukraine: Rivno Nature Reserve).

### **ssp. *aegyptiacus* Morice**

*Tachysphex aegyptiacus* Morice, 1897:306, ♀, ♂. Lectotype: ♂, Egypt: Cairo area: Choubra (OXUM), designated by Pulawski, 2007a:335. – Storey, 1916:110 (Egypt: Maadi); Honoré, 1942:55 (Egypt: Cairo area). – **As *Tachysphex helveticus* var. *aegyptiacus***: de Beaumont, 1940b:176 (new status). – **As *Tachysphex helveticus aegyptiacus***: de Beaumont, 1947a:200 (new status, in new revision of *Tachysphex* of Egypt); Pulawski, 1971:177 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a: 335 (in revision of African *Tachysphex*); Roche, 2007a:74 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

**ssp. *quadrifasciatus* Pulawski**

*Tachysphex helveticus quadrifasciatus* Pulawski, 1971:176, ♀, ♂. Holotype: ♀, Cyprus: Zakaki (originally W.J. Pulawski collection, now CAS). Paratypes: Jordan, Tajikistan. – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:122 (in key to Sphecidae of Kazakhstan and Central Asia).

**184. *hermia* Arnold**

*Tachysphex hermia* Arnold, 1924:53, ♀, ♂ (as *Hermia*, incorrect original capitalization). Lectotype: ♀, Zimbabwe: Bulawayo (SAM), designated by Pulawski, 2007a:338. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a:338 (in revision of African *Tachysphex*).

**185. *hippolyta* Arnold**

*Tachysphex hippolyta* Arnold, 1924:59, ♀ (as *Hippolyta*, incorrect original capitalization). Holotype: ♀, Zimbabwe: Sawmills (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); nec de Beaumont, 1967b:509 (= *Tachysphex argentifrons*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a:340 (in revision of African *Tachysphex*).

*Tachysphex viarius* Arnold, 1947:149, ♂. Holotype: Zimbabwe: Vumba Mountains (SAM). Synonymized with *Tachysphex hippolyta* by Pulawski, 2007a:340. – R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae).

**186. *hopi* Pulawski**

*Tachysphex hopi* Pulawski, 1988a:47, ♀, ♂. Holotype: ♀, USA: Arizona: Apache County: Canyon de Chelly (CAS). – Ratzlaff, 2016:26 (Canada: first record from British Columbia: Southern Interior.), 36 (British Columbia: Oliver); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Saskatchewan, first record from Manitoba: no specific locality).

**187. *horus* de Beaumont**

*Tachysphex horus* de Beaumont, 1940b:168, ♀, ♂ (♂ = *Tachysphex luxuriosus*). Holotype: ♀, Egypt: Heliopolis (Ministry of Agriculture of Egypt). – Honoré. 1942:56 (Egypt: Abu Rowash, Gebel Asfar, Fayum = Kom Osheim) de Beaumont, 1947a:171 (in new revision of *Tachysphex* of Egypt, ♂ = *Tachysphex luxuriosus*), nec 1956a:197 (= *Tachysphex luxuriosus*); Pulawski, 1964:91 (Egypt: Abu Rawash, Ghiza, Maadi, Saqqara; redescription); de Beaumont, Bytinski-Salz, and Pulawski, 1973:11 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Roche and Zalat, 1994:115 (Egypt: Sinai Peninsula); Pulawski, 2007a:343 (in revision of African *Tachysphex*); Roche, 2007a:82 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Ben Khedher, Yildirim, and Braham, 2020b:315 (in Tunisia known from TataouineTozeur); Gadallah, 2020b:51 (in list of aculeate wasps of Arabian Peninsula).

**188. *hostilis* Kohl**

*Tachysphex hostilis* Kohl, 1901c:779, ♀. Holotype: ♀, Turkmenistan: Bolshyie Balkhany (NHMW). – Pulawski, 1971:113 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:123, 129 (in key to Sphecidae of Kazakhstan and Central Asia); Dollfuss, 1989:13 (type material in NHMW); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:69 (geographic distribution, collecting localities in Kazakhstan), 2004d:30 (Kazakhstan: Mangyshlak Peninsula: no specific locality), 2008a:101 (south-

eastern Kazakhstan: Ili River valley: 35 km north of Chilik); Mokrousov and Zryanin, 2015:42 (Uzbekistan: Surkhandarya Oblast'); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

### 189. *huchiti* Pulawski

*Tachysphex huchiti* Pulawski, 1988a:126, ♀, ♂. Holotype: ♂, Mexico: Baja California Sur: Los Bariles (CAS). – Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, first record from Saskatchewan: no specific locality).

### 190. *humilis* Straka

*Tachysphex humilis* Straka, 2005b:255, ♀, ♂. Holotype: ♂, Jordan: Petra (OÖLM). – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria); Yıldırım, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:32 (may be a synonym of *Tachysphex consocius*); Kaplan and Yıldırım, 2021:63 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:222 (in revision of Sphecidae sensu lato of Europe); Kaplan and Yıldırım, 2023:1687 (in checklist of Sphecidae sensu lato of Turkey).

### 191. *hungaricus* Straka

*Tachysphex hungaricus* Straka, 2016:67, ♀. Holotype: ♀, Hungary: Örkény 50 km southeast of Budapest (NMPC). – K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:222 (in revision of Sphecidae sensu lato of Europe).

### 192. *hurdi* R. Bohart

*Tachysphex hurdi* R. Bohart, 1962a:33, ♀, ♂. Holotype: ♂, USA: California: Ventura County: Hungry Valley 5 mi south of Gorman (CAS). – Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Krombein, 1979b:1628 (in catalog of North American Hymenoptera); Pulawski, 1988a:108 (in revision of Nearctic *Tachysphex*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### 193. *hypoleius* (F. Smith)

*Tachytes hypoleius* F. Smith, 1856:302, ♀. Holotype or syntypes: ♀: Australia: Western Australia: Swan River (BMNH). – Froggatt, 1892:218 (in catalog of Australian Hymenoptera); Dalla Torre, 1897:690 (in catalog of world Hymenoptera). – **As *Tachysphex hypoleius***: R. Turner, 1908:492 (new generic assignment, redescription), 1916b:254 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 1977a:235 (in revision of Australian *Tachysphex*); Cardale, 1985:240 (in catalog of Australian Sphecidae).

### 194. *iaphetes* Pulawski

*Tachysphex iaphetes* Pulawski, 2007a:345, ♀. Holotype: ♀, Kenya: Rift Valley Province: Archer's Post (CAS).

### 195. *ibi* Pulawski

*Tachysphex ibi* Pulawski, 2007a:347, ♀, ♂. Holotype: ♀, South Africa: Eastern Cape Province: Belmont Valley 10 km east of Grahamstown (AMG). – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

**196. *idiotrichus* Pulawski**

*Tachysphex idiotrichus* Pulawski, 1982b:31, ♀, ♂. Holotype: ♀, USA: Arizona: Cochise County: Southwest Research Station 5 mi west of Portal (UCD). – Pulawski, 1988a:85 (in revision of Nearctic *Tachysphex*); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Escobar-Gómez, Horta-Vega, Venegas-Barraera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

**197. *idzekii* Tsuneki**

*Tachysphex idzekii* Tsuneki, 1971m:22, ♀. Holotype: ♀, China: Inner Mongolia: Apaka (originally K. Tsuneki coll., now USNM). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Nuhn and Menke, 1994:25 (holotype transferred to USNM); Hua, 2006:282 (in list of Chinese insects, geographic distribution).

**198. *imbellis* R. Turner**

*Tachysphex imbellis* R. Turner, 1908:485, ♀. Holotype: ♀, Australia: Queensland: Mackay (BMNH). – R. Turner, 1916b:254 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 1977a:249 (in revision of Australian *Tachysphex*); Cardale, 1985:240 (in catalog of Australian Sphecidae).

*Tachysphex adelaidae* R. Turner, 1910b:425, ♀. Holotype: ♀, Australia: South Australia: Adelaide (BMNH). Synonymized with *Tachysphex imbellis* by Pulawski, 1977a:249. – R. Turner, 1916b:254 (in key to Australian *Tachysphex*).

**199. *incanus* de Beaumont**

*Tachysphex incanus* de Beaumont, 1940:173, ♀, ♂. Lectotype: ♀, Mauritania: Mederdra (MNHN), designated by Pulawski, 2007a:349 (type locality erroneously placed in southern Algeria in original description, corrected to Mauritania by de Beaumont, 1947a:192). – de Beaumont, 1947a:192 (Mauritania, possibly also Libya; in new revision of *Tachysphex* of Egypt); Pulawski, 1971:372 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a:349 (in revision of African *Tachysphex*); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:268 (Iran: Fars: Kherameh: Dodej); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:75 (in catalog of *Tachysphex* of Iran).

**200. *incertus* (Radoszkowski)**

*Tachytes panzeri* varietas *geniculata* A. Costa, 1867b:87, sex not stated, junior secondary homonym of *Tachysphex geniculatus* (Spinola, 1839). Holotype or syntypes: Italy: Napoli area, Sicilia, or Sardegna (Napoli). Synonymized with *Tachysphex pygidialis* by de Beaumont, 1936c:7.

*Tachytes panzeri* varietas *geniculata* A. Costa, 1867c:31. Objective synonym of *Tachytes panzeri* varietas *geniculata* A. Costa, 1867b.

*Tachytes incertus* Radoszkowski, 1877:28, ♀, ♂ (as *incerta*, incorrect original termination). Lectotype: ♀, Uzbekistan: Kyzil-Kum (ZMMU), designated by Pulawski, 1971:321. – Nec Radoszkowski, 1886a:33 and 1892:590 (= *Tachysphex dignus*). – As *Tachysphex incertus*: Kohl, 1885a:395 (tentative new generic assignment, original description copied); F. Morawitz, 1893b:410 (Tajikistan: Veshab in Zeravshan River valley); Kohl in Dalla Torre, 1897:680 (new generic assignment, in catalog of world Hymenoptera); nec de Beaumont, 1936b:615 (= *Tachysphex dignus*); Gussakovskij, 1952:241 (Tajikistan); Pulawski, 1958a:178 (Bulgaria: Kurilo, mouth of Ropotamo River, Sandanski, Varna); Myartseva, 1963b:58 (Turkmenistan: lower Murgab River), 1965:77 (Turkmenistan: Akibay; Murgab district); Pulawski, 1967a:397 (Turkey); Romanova, 1969:134 (Russia: North Caucasus: Gheorghievsk, as *insertus*);

de Beaumont, 1970a:401 (Afghanistan); Puławski, 1971:318 (in revision of Palearctic *Tachysphex*); Kazenas, 1972b:162 (Kazakhstan); Myartseva, 1972a:79 (Turkmenistan); Scobiola-Palade, 1972:150 (Romania: delta of Danube: Caraorman); de Beaumont, Bytinski-Salz, and Pulawski, 1973:11 (Israel); Erlandsson, 1974:72 (France, Greece, Italy, Spain, Yugoslavia); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp. and *Statice gmelini* Willd., Plumbaginaceae, in Kazakhstan), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, and *Nitraria schoberi* L., Zygophyllaceae, in Kazakhstan), 111 (feeding on flowers of *Lepidium crassifolium* W. et K., Brassicaceae, in Kazakhstan), 112 (feeding on flowers of *Salsola laricifolia* Turcz., Chenopodiaceae, and *Gallium* sp., Rubiaceae, in Kazakhstan); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Guichard, 1978:271 (Greece); Kazenas, 1978b:113, 125 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:215, 219 (in key to Sphecidae of European part of USSR); Guichard, 1980:227 (Oman); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:117 (Russia: Siberia: Altayskiy Kray: basin of Aley River); Pagliano, 1980:128 (Italy: Liguria); Gayubo, 1982a:103 (northern Spain: Sierra de Béjar), 1982f:252 (Spain: Cádiz Province), 1983a:123 (prey: nymph of Gomphocerinae acridid); Schmidt and Westrich, 1983:123 (Greece); Gayubo, 1984b:84 (Spain: Salamanca Province), 1984c:364 (Portugal: El Algarve Province), 1985c:168 (Spain: Toledo: Corchuela); Gayubo and Tormos, 1984:15 (Spain: Valencia Province); Józán, 1985b:57 (Hungary south of Lake Balaton), 83 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Gayubo, 1986c:33 (Spain: Zamora Province); Gayubo and Heras, 1986:41 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:45 (Spain: Burgos Province); Gayubo and Tormos, 1986a:17 (Spain: Castellón: Castellón de la Plana); Islamov, 1986:526 (Uzbekistan: Tashkent Oblast'); Józán, 1986:370 (Hungary: Kiskunság National Park); Gayubo, 1987a:112 (Spain: Ciudad Real Province); Tormos and Jiménez, 1987a:125 (Spain: Valencia Province), 1987b:316 (Spain: Valencia Province: Dehesa de El Saler); Asís and Jiménez, 1988:271 (Spain: Castellón Province); Gayubo and Mingo, 1988:79 (Spain); Gayubo, Asís, and Tormos, 1990a:18 (Spain); Pagliano, 1990:104 (in catalog of Italian Sphecidae); Dollfuss, 1991:106 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:402 (Italy: Toscana, Lazio); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Guichard, 1991a:339 (Jordan); Gayubo, Borsato, and Osella, 1992:282 (Greece); Negrisolo and Pagliano, 1993:94 (Italy: Sardegna; as *incertus incertus*); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Gayubo and Borsato, 1994:207 (Italy: Lombardia); Tormos, Asís, and Gayubo, 1994:188, 205 (Spain: Albacete Province); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Nazarova and Shomirsaidov, 1997:23 (Tajikistan: fruit tree orchards in Vakhsh River valley); Schmidt and Schmid-Egger, 1997:29 (Schneid's, 1941, record from Germany cannot be confirmed); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Pagliano and Scaramozzino, 1999:162 (Italy: Piemonte: Borgomale); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:106 (Greece); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Basset, 2001:85 (France: Département de Gironde); Esenbekova and Kazenas, 2000:31 (southeastern Kazakhstan: fifteen localities); Ivanov and Ljubomirov, 2001:211 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 157 (review of known biology); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ljubomirov, 2001b:49 (Bulgaria: Mount Vitosha near Sofia); Ohl et al., 2001:142 (recorded from Germany but not occurring there); K. Schmidt and Bitsch *in* Bitsch et al., 2001:254 (in Sphecid Fauna of Western Europe); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:69 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:141 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at

46°27'N 42°41'E); Drewes, 2003:142 (Croatia: Šibenik); Gayubo, Özbek, and Yıldırım, 2003:89 (Turkey: many localities); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:70 (Germany: occurrence in Bayern not confirmed); Schmid-Egger, 2003:758 (Italy: Sicilia: Ferla 30 km west of Siracusa); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Kazenas, 2004b:103 (Kazakhstan: western Tien Shan), 2004d:30 (Kazakhstan: Mangyshlak Peninsula); Nazarova, 2004:106 (Tajikistan: Badakhshan Region: Rushan District in Shakh dara River valley, villages Visav and Sipun ch in Bartang River valley); Shkuratov, 2004a:77 (Ukraine: Lugansk; Russia: Rostov Oblast'), 2004b:166 (Russia: Rostov Oblast': Gosudarstvennyi Muzey-Zapovednik M.A. Sholokhova); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Ebrahimi, 2005:124 (in key to selected Iranian Sphecidae); Jacobs, 2005a:451 (Bulgaria: Melnik); Nazarova, 2005:93 (alfalfa fields in southwestern Tajikistan); Pagliano and Negrisol, 2005:371 (in Sphecidae Fauna of Italy); Shorenko, 2005a:163 (Ukraine: Crimea), 2005b:98 (Ukraine: Crimea: Karadagh Nature Reserve); Straka, 2005b:271 (Turkey: many localities); Gorobchishin, 2006:110 (Ukraine: Kyiv; Cherkasy Oblast': Kanev Nature Reserve); Liška, 2006:89 (Slovakia: Váh river valley near Trenčín); Ljubomirov, 2006:543 (Bulgaria: Rhodope Mountains: Satovcha Village, as *incertus incertus*); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Jacobs, 2007:94, 98 (in key to Crabronidae of Germany, not yet found in Germany); Kazenas, 2007a:90 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Pulawski, 2007a:352 (in revision of African *Tachysphex*); Roche, 2007a:79 (in checklist of Egyptian Crabronidae); G. Turrisi and R. Turrisi, 2007:120 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity, as *incertus incertus*); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia, known from Slovakia only); Yıldırım and Ljubomirov, 2007:119 (Turkey: Erzurum: Oltu); Danilov, 2008:349 (Russia: Altayskiy Kray: Barnaul area); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Kazenas, 2008b:112 (Kazakhstan: foothills of Zailiskiy Alatau: occurring among others on loess cliffs), 2008c:255 (Kazakhstan: village Koktum south of Lake Alakol'); T. Li, Q. Li, and Cai, 2008:142 (first record from China); Ljubomirov and Yıldırım, 2008:208 (in catalog of Crabronidae of Turkey); Baños-Picon, Asís, Gayubo, and Tormos, 2009:311 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park, as *incerta*); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Józán, 2009:166 (Croatia: Senj, Susanj); Pagliano, 2009:184 (Italy: Molise: Guardialfiera, as *incertus incertus*); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Rudoi skatel', 2010:152 (Russia: southern Ural Mountains); Shorenko and Konovalov, 2010:23 (Ukraine); Tüzün and Yüksel, 2010:4470 (Turkey: Niğde Province); van der Smissen, 2010b:387 (France: Ardèche: Saint-Maurice-d'Ibie, Vogüé; Vaucluse: Bédoin, Le Beaucet-Venasque); Baghirov, 2011b:148 (Russia: recorded from Altayskiy Kray by Kazenas, Mityaev, Matesova, Kulenova, and Zhdanko, 1979); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Kazenas, 2012b:169 (Kazakhstan: Korgalzhin State Nature Reserve); Bayındır, Gürbüz, Ljubomirov, and Pohl, 2013:146 (Turkey: Isparta: Kasnak Oak Forest Nature Reserve); Japoshvili and Ljubomirov, 2012:96 (Turkey: Isparta: Gölcük Nature Park 8 km southwest of city of Isparta); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Yıldırım, 2012:80 (Turkey: Erzurum province: several localities); Kazenas, 2013a:65, 66 (color photographs of adult wasps, short information on geographic distribution and nesting habits), 2013b:495 (southeastern Kazakhstan: almost everywhere in

foothills and low mountgains, rivers Ili and Sharyn valleys); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park); Bitsch, 2014:402 (France: Landes: Moliets-plage); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Ebrahimi, 2014:40 (Iran: Ardebil, Golestān, and Sistān-Baluchestān provinces); Józsan, 2014:133 (Croatia: Meka Draga: Kruševo); Kazenas, 2014a:134 (Kazakhstan: Karatau Mountain Range); Samin and Bagriacik, 2016:496 (Iran: West Azarbaijan Province: Mahabad and Ourmieh); Yıldırım, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:25 (Iran: Fars Province); Rezaei and Fallahzadeh, 2015:9 (Iran: Fars: Dalin at 30°03'N 52°07'E and Kaftarak at 29°34'N 52°41'E); Shorenko, 2015:328 (in list of Sphecidae *sensu lato* of Crimea); Mokrousov and Popov, 2016:580 (Russia: Krasnodarskiy Kray, as *insertus*); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:34 (Turkey: Antalya, Erzurum, Kars and Tunceli provinces); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Shorenko, 2017:78 (in Crimea collected in July and August); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:629 (Iran: Hormozgan: three localities); Maharramov, Aliyev, and Mammadov, 2018:455 (Azerbaijan: four localities); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Ben Khedher, Yıldırım, Braham, and Chaaban, 2019:191 (known from Tunisia: Tozeur Province); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:18 (Azerbaijan: Nakhichevan Autonomous Republic); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:268 (Iran: Fars: six localities); Shorenko, 2019:211 (among the most common sphecid species in Crimea); Ben Khedher, Yıldırım, and Braham, 2020b:315 (Tunisia: new locality record from Béja province); Gadallah, 2020b:52 (in list of aculeate wasps of Arabian Peninsula); Gros, 2020:401 (nesting habits); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:73 (in catalog of *Tachysphex* of Iran); Shorenko, 2020:52 (Crimea: Karadag Nature Reserve); Kaplan and Yıldırım, 2021:63 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:223 (in revision of Sphecidae *sensu lato* of Europe); Can, 2022a:222 (supernumerary vein in forewing) Can and Saboori, 2023:81 (Turkey: parasitized by larvae of mite *Leptus tridentatus* Saboori, Hakimitabar and Khademi (Trombidiformes: Erythraeidae)); Kaplan and Yıldırım, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution); Pytel-Huta and Franchuk, 2024:82 (Ukraine: Rivno Nature Reserve); Bertsch, Brunßen, Guericke, Hoffmann, Kratschmer, Maßell, Mehlhorn, Unglaub, Wörner, Wiesbauer, Zettel, Schmitt, and Niehuis, 2025:6 (first record from Austria: Burgenland: 2 km northeast of Apetlon at 47.7684°N 16.8515°E).

*Tachysphex pygidialis* Kohl, 1883a:176, ♀, ♂. Lectotype: ♀, France: Marseille (NHMW), designated by Pulawski, 1971:321. Synonymized with *Tachysphex incertus* by F. Morawitz, 1893b:410 and Gussakovskij, 1952:240. – Kohl, 1885a:351 and 356 (in key to Palearctic *Tachysphex*), 360 (in revision of Palearctic *Tachysphex*); Gasperini, 1887:15 (Dalmatia: Brusije and Ragusa, now Croatia: Brusje on Hvar Island and Dubrovnik); Kohl and Handlirsch, 1889:278 (Turkmenistan: Pul-i-Hatun); F. Morawitz, 1891a:207 (Russia: Astrakhan); Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Mocsáry, 1897:77 (Kingdom of Hungary, some localities are in today's Croatia and Romania); Bingham, 1898a:104 (Yemen: Aden); Dominique, 1901a:506 (France: Loire-Inférieure, now Loire-Atlantique: Le Cellier, Sainte-Marie-de-Pornic); Ferton, 1901b:680 (found in Marseille area, France, but not in Corsica); Antiga and Bofill, 1904:10 (in catalog of Catalanian Hymenoptera); E. Saunders, 1904c:635 (Spain); W. Schulz, 1904b:102 (Bosnia and Herzegovina: Hvar Island, as Lesina); Schmiedeknecht, 1907:232, 234 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Mercet, 1910b:165 (listed from Spain, as *pigidialis*); Graeffe, 1911:45 (Italy: Trieste area); Morice, 1911:102 (Algeria); Dusmet, 1915:87 (Spain: Aragón); Maidl, 1922:70 (Croatia); Ferton, 1923:333 (known from continental France but not found in Corsica); Berland, 1925d:119 (in Sphecid

- Fauna of France); von Schulthess, 1926b:215 (Tunisia); Schmiedeknecht, 1930:693, 695 (in keys to Hymenoptera of North and Central Europe); Nadig, 1933:79 (Morocco: Goundafa, Ifrane); Bernard, 1935:65 (France: Var: Fréjus area); Grandi, 1935a:110 (Italy); de Beaumont, 1936a:193 (in revision of French *Tachysphex*), 1936c:7 (specimens in A. Costa collection), 1940b:164 (in revision of *Tachysphex* of Egypt), corrected to *Tachysphex incertus nattereri* by Pulawski, 1971:323; Guiglia, 1940a:290 (Libya: Gadames); Honoré, 1940:56 (Egypt); Guiglia, 1941c:166 (Italy: Calabria: Grande Sila); Schneid, 1941:1045 (Germany: Bayern: Bamberg area, record not confirmed by subsequent workers); Guiglia, 1942b:234 (Libya; as *pygidialis*); Honoré, 1942:56 (Egypt: common), corrected to *Tachysphex incertus nattereri* by Pulawski, 1971:323; Giner Marí, 1943a:140 (in Sphecidae Fauna of Spain); Guiglia, 1944b:27 (Italy); Deleurance, 1946b:63 (habits as in *Tachysphex panzeri*), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); de Beaumont, 1947a:163 (in new revision of *Tachysphex* of Egypt), corrected to *Tachysphex incertus nattereri* by Pulawski, 1971:323, 1947b:391 (Cyprus), 1947c:663 (geographic variation); Zavadil in Zavadil and Šnoflák, 1948:150, 152 (in key to Sphecidae of Czechoslovakia); Ceballos, 1949:102 (Spain); de Andrade, 1949:15 (Portugal); nec de Beaumont, 1950d:18 (= *Tachysphex sericans gracilis*); de Beaumont, 1950f:405 (Algeria: Sidi Ferruch); Pittioni, 1950:25 (Cyprus); Scobiola-Palade, 1951:274 (first record from Romania: Budești, Făurei in Galați Region); Balthasar, 1952:66 (Slovakia); de Beaumont, 1952c:189 (Algeria: Hoggar); Balthasar, 1954b:269 (Palestine: Jerusalem; also Slovakia); de Beaumont, 1954a:55 (Italy), 1954e:90 (Italy); Grandi, 1954:240 (Italy); de Beaumont, 1955a:178 (Morocco); Vogrin, 1955:37 (Yugoslavia); Bytinski-Salz, 1956:226 (Turkey: Karapınar, Kasalpa, Seki); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain); Bajári, 1957a:51, 55 (in key to Hungarian Sphecidae); de Beaumont, 1957b:137 (northern Iran); Grandi, 1957:390 (Italy); Nouvel and Ribaut, 1958:14 (France: Pyrénées-Orientales: Banyuls-sur-Mer); de Beaumont, 1959a:27 (Italy); Diniz, 1959:29 (Portugal: Estoril, Lisboa); Suárez, 1959:57 (Spain: Almería Province); de Beaumont, 1960a:16 (Greece: Island of Rhodes), 1960c:171 (Afghanistan), 1961b:275 (Afghanistan); Atanassov, 1962:124 (Bulgaria: Petrich area); de Beaumont, 1962b:25 (Spain); Scobiola, 1963:825 (Romania: Letea); Ceballos, 1964:91 (in supplement to catalog of Spanish Sphecidae); Diniz, 1964a:5 (Portugal: Aljustrel, Coimbra, Estoril, Évora, Lisboa, Rezende); de Beaumont, 1965a:47 (Greece); Myartseva, 1965:78 (Turkmenistan: Akibay); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nessebar); Scobiola-Palade, 1967a:162 (Romania: Constanța District: Comarova), 1967b:42 (Romania), 1968b:142 (Romania: Island of Letea in delta of Danube), 1968c:385 (Romania: Budești); Königsmann, 1971:107 (Spain: Gerona: Palamós); Atanassov, 1972a:191 (Bulgaria: Stara Planina Mountains), 1972b:32, 50 (Bulgaria: Stara Planina Mountains); Balthasar, 1972:268 (in Sphecidae Fauna of Czechoslovakia); Georghiou, 1977:192 (Cyprus); Józán, 1981:304 (Hungary: Hortobágy National Park); Dollfuss, 1989:13 (lectotype in NHMW); Pádr in Šedivý, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Haris, 2016:15 (in list of species described by F. Kohl from Carpathian Basin).
- As *Tachytes panzeri*: Radoszkowski, 1886a:33 (male genitalia) and 1891:590 (reference to Radoszkowski, 1886a), corrected to *Tachysphex incertus* by Pulawski, 1971:318.
- Tachysphex rufiventralis* Ferton, 1905:68, ♀. Holotype: ♀, France: Corse: Bonifacio (MNHN). Synonymized with *Tachysphex incertus* by Pulawski, 2007a:352– Ferton, 1909:407 (France: Corse: Bonifacio); de Beaumont, 1936a:194 (in revision of French *Tachysphex*). – **As *Tachysphex pygidialis* var. *rufiventralis***: Guiglia, 1938b:9 (new status, Italy: Sardegna). – **As *Tachysphex pygidialis rufiventralis***: de Beaumont, 1947c:663 (new status, redescription), 1953b:14 (status of name). – **As *Tachysphex incertus rufiventralis***: Pulawski, 1971:322 (new subspecific generic assignment, in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pagliano, 1990:104 (in catalog of Italian Sphecidae); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); K. Schmidt and Bitsch in Bitsch et al., 2001:255 (in Sphecidae Fauna of Western Europe); Pagliano and Negrisolo, 2005:371 (in Sphecidae Fauna of Italy).

As *Tachysphex pygidialis* ssp. *algira*: de Beaumont, 1947c:664, corrected to *Tachysphex incertus kallipygus* by Pulawski, 1971:323.

*Tachysphex incertus kallipygus* Pulawski, 1971:323, ♀, ♂. Holotype: ♀, Algeria: Arba (Lausanne). Synonymized with *Tachysphex incertus* by Pulawski, 2007a:352, – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).

As *Lyrops panzeri*: Pagliano, 2008:549 (one specimen in M. Spinola collection, Torino).

### **201.inconspicuus (W. F. Kirby)**

*Tachytes inconspicuus* W. F. Kirby, 1890:540, ♀, ♂. Lectotype: ♀, Brazil: Island of Fernando de Noronha (BMNH), designated by Pulawski, 1974a:74. – As *Tachysphex inconspicuus*: Pulawski, 1974a:74 (new generic assignment; in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 1988a:193 (in revision of North American *Tachysphex*); Callan, 1991a:8 (Trinidad), 1993:42 (nest, prey; parasite: *Timulla eriphyla* Mickel); Amarante, 1993:19 (north-eastern Brazil); Cambra, 1993:16 (Peru: Pakitza, 11°57'S, 71°17'W); Cambra and Santos, 2000:56 (Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Starr and Hook, 2003:19 (in catalog of Aculeata of Trinidad, West Indies); Buys, 2006c:1277 (description of larva), 2007b:327 (nesting habits); Kurczewski, Coville, and Schal, 2010:1 (nesting and prey); Rasmussen and Asenjo, 2009:10 (in checklist of Crabronidae of Peru); Silvestre, Demétrio, Trad, de Oliveira Lima, Auko, and de Souza, 2014:69 (Brazil: Mato Grosso do Sul: dry forests in Bodoquena Mountain Range and Brazilian Chaco); Trad and Silvestre, 2017:5 (Brazil: Mato Grosso do Sul); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

*Tachysphex blatticidus* F. Williams, 1941:197, ♀, ♂. Holotype: ♀, Trinidad and Tobago: Trinidad: St. Augustine (BMNH). Synonymized with *Tachysphex inconspicuus* by Pulawski, 1974a:74. – Callan, 1942:18 (Trinidad: St. Augustine, parasite *Timulla eriphyla* Mickel, a mutillid, prey: *Chorisoneura* sp., a blattid), 1950:205 (preys on cockroaches), 1954:24 (Venezuela: Paria Peninsula: Cristóbal Colón; prey: adult *Chorisoneura* sp., a blattid); Arnaud, 1970:32 (in list of species described by F.X. Williams).

### **202.indicus Pulawski**

*Tachysphex indicus* Pulawski in Krombein and Pulawski, 1994:74, ♀, ♂. Holotype: ♀, India: Tamil Nadu: Coimbatore (CAS). Paratypes: Sri Lanka. – Krombein and Pulawski, 1994:12 (nesting habits).

### **203.inextricabilis Pulawski**

As *Tachysphex luxuriosus* (♂ only), corrected to *Tachysphex inextricabilis* by Pulawski, 1971:353; de Beaumont, 1940b:167 (in revision of *Tachysphex* of Egypt), 1947a:353 (in new revision of *Tachysphex* of Egypt); Pulawski, 1964:93 (Egypt).

As *Tachysphex seth* (♀ only): Pulawski, 1964:92, corrected to *Tachysphex inextricabilis* by Pulawski, 1971:353.

*Tachysphex inextricabilis* Pulawski, 1971:353, ♀, ♂. Holotype: ♂, Egypt: Kom Oshim on Cairo – Fayum road (originally W.J. Pulawski coll., now CAS). – de Beaumont, Bytinski-Salz, and Pulawski, 1973:11 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a:356 (in revision of African *Tachysphex*); Roche, 2007a:82 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:354 (in new catalog of Sphecidae of Saudi Arabia); Gadallah, 2020b:52 (in list of aculeate wasps of Arabian Peninsula).

**204. *instructus* Nurse**

*Tachysphex striolatus* Cameron, 1908b:305, ♀, junior primary homonym of *Tachysphex striolatus* Cameron, 1903. Lectotype: ♀, India: Gujarat: Deesa (BMNH), designated by Pulawski in Krombein and Pulawski, 1994:80.

*Tachysphex instructus* Nurse, 1909:514. Substitute name for *Tachysphex striolatus* Cameron, 1908. – Ramakrishna Aiyar, 1916:552 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Krombein and Pulawski, 1994:80 (in revision of Sri Lankan *Tachysphex*); Mawadda and Girish Kumar, 2023:112 (in checklist of Crabroninae of Northern India).

**205. *insulsus* Arnold**

*Tachysphex insulsus* Arnold, 1945:104, ♀, ♂. Syntypes: Madagascar: Antanimora, Bekily (MNHN). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae), 2007a:358 (in revision of African *Tachysphex*); Madl, 2014a:982 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

*Tachysphex crassicornis* Arnold, 1945:105, ♀, ♂. Lectotype: ♀, Madagascar: Bekily (MNHN), designated by Pulawski, 2007a:358. Synonymized with *Tachysphex insulsus* by Pulawski, 2007a:358. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Leclercq, 1990b:117 (Madagascar: Bekily); Pulawski, 2003b:797 (in checklist of Malagasy Sphecidae).

**206. *iridipennis* (F. Smith)**

*Tachytes iridipennis* F. Smith, 1873:57, ♀. Holotype: ♀, Brazil: Amazonas: Ega, now Tefé (BMNH). – Dalla Torre, 1897:691 (in catalog of world Hymenoptera). – **As *Tachysphex iridipennis***: Pulawski, 1974a:80 (new generic assignment; in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 1988a:196 (in revision of Nearctic *Tachysphex*); Callan, 1991a:8 (Trinidad); Amarante, 1993:19 (northeastern Brazil); Callan, 1993:43 (prey); Cambra and Santos, 2000:56 (Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Starr and Hook, 2003:19 (in catalog of Aculeata of Trinidad, West Indies); Rasmussen and Asenjo, 2009:10 (in checklist of Crabronidae of Peru); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

**207. *irregularis* Pulawski**

*Tachysphex irregularis* Pulawski, 1982b:31, ♀, ♂. Holotype: ♀, USA: California: Lassen County: Hallelujah Junction (UCD). – Pulawski, 1988a:55 (in revision of Nearctic *Tachysphex*).

**208. *isis* de Beaumont**

*Tachysphex isis* de Beaumont, 1940b:171, ♀, ♂. Holotype: ♀, Egypt: Wadi Rishrash (originally A. Alfieri coll., Cairo, now Entomological Society of Egypt?). – Honoré, 1942:56 (Egypt: Wadi Rishrash); de Beaumont 1947a:179 (in new revision of *Tachysphex* of Egypt); Pulawski, 1971:395 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a:362 (in revision of African *Tachysphex*); Roche, 2007a:84 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:355 (in new catalog of Sphecidae of Saudi Arabia); Gadallah, 2020b:52 (in list of aculeate wasps of Arabian Peninsula).

**209. *jokischianus* (Panzer)**

*Larra jokischiana* Panzer, 1807-1809, Heft 106:15, [♀] (as *Jokischiana*, incorrect original capitalization).

Holotype by monotypy: ♀, Germany: no specific locality (originally Iokisch coll., now ZSBS). Synonymized with *Tachysphex pectinipes* of Kohl by Kohl, 1885:388. – Peets, 1909-1911:68 (*Larra jokischiana* of Panzer = *Tachysphex pectinipes*); Casolari and Casolari Moreno, 1980:113 (specimens in M. Spinola collection, as *jokischianus*); Pagliano, 2011a:111 (specimens in coll. Spinola, Torino, are *Tachysphex pompiliformis*);. – **As *Tachytes jokischiana***: Herrich-Schaeffer, 1840:296 (new generic assignment; Germany: Bayern: Regensburg area). – **As *Tachysphex jokischianus***: Straka, 2016:83 (new generic assignment; in revision of *Tachysphex pompiliformis* species group, as valid species, description of ♂); Kejval, Blažej, and Erhart, 2020:106 (western Czech Republic); Saure, 2020:277 (Germany: Sachsen-Anhalt: sand dunes); Herb and Schmid-Egger, 2021:9 (Germany: Bayern: Kaufbeuren area, *pompiliformis* aggregation, probably *jokischianus*); Olszewski, Wiśniowski, and Ljubomirov, 2021:101 (in commented list of Sphecidae *sensu lato* of Poland); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:223 (in revision of Sphecidae *sensu lato* of Europe); Saure and Marten, 2021:136 (Germany: Sachsen-Anhalt: Nationalpark Harz).

**210. *jujuyensis* Brèthes**

*Tachysphex jujuyensis* Brèthes, 1913:146, ♀. Holotype: ♀, Argentina: Jujuy (MACN). – Pulawski, 1974a:54 (in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Genise, 1990:27 (type material in MACN); Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

**211. *julliani* Kohl**

*Tachysphex julliani* Kohl, 1883a:177, ♀, ♂ (as *Julliani*, incorrect original capitalization). Lectotype: sex not stated, France: Marseille (NHMW), designated by Dollfuss, 1979:13. – Kohl, 1885a:352 and 355 (in key to Palearctic *Tachysphex*), 384 (in revision of Palearctic *Tachysphex*); Dalla Torre, 1897:680 (in catalog of world Hymenoptera); Ferton, 1897:111 (prey), 1901a:100 (nesting habits), 1901b:680 (found in Marseille area, France, but not in Corsica); Adlerz, 1904:137 (known prey: mantids); Antiga and Bofill, 1904:11 (in catalog of Catalanian Hymenoptera); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Mercet, 1910b:165 (listed from Spain); Morice, 1911:102 (Algeria: Biskra); Ferton, 1912a:402 (review of structural and behavioral characters); Berland, 1923a:174 (preying on mantid *Ameles decolor* (Charpentier)), 1923b:288 (France: locality records); Ferton, 1923:127 (preying on young mantids), 333 (known from continental France but not found in Corsica); Berland, 1924:90 (France: Var: Callian), 1925d:120 (in Sphecidae Fauna of France), 1928b:178 (France: Alpes-Maritimes: Cagnes); Grandi, 1934:341 (Italy: Toscana: Maremma); Berland, 1932a:23 (France: Var Department; utilizing old charcoal preparation sites for nesting); Bernard, 1933:62 (France: Drôme: Dieulefit); Giner Marí, 1934:133 (Spain); Bernard, 1935:65 (France: Var: Fréjus area); de Beaumont, 1936a:199 (in revision of French *Tachysphex*), 1940b:172 (Egypt; revision; specimens may actually be *Tachysphex argentatus*); Honoré, 1942:55 (Egypt: Wadi Hof and Wadi Handal, may actually be *Tachysphex argentatus*); Giner Marí, 1943a:141 (in Sphecidae Fauna of Spain); de Beaumont, 1947a:188 (in new revision of *Tachysphex* of Egypt; specimens may actually be *Tachysphex argentatus*), 1947b:391 (Cyprus); de Andrade, 1949:16 (Portugal); Pittioni, 1950:25 (Cyprus); de Beaumont, 1954a:56 (Italy), 1954e:91 (Italy), 1955a:182 (Moroccan forms); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:197 (Libya); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); de Beaumont, 1959a:27 (Italy); Diniz, 1959:29 (Portugal: Évora, Paço de Rei, Vale de Gaio); Suárez, 1959:57 (Spain: Almería Province); de Beaumont, 1960a:18 (Greece: Island of Rhodes), 1960b:238 (Libya), 1961c:50 (Greece: Island of Crete), 1962b:25 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish

Sphecidae); Diniz, 1964a:5 (Portugal: eight localities); nec Pulawski, 1964:95 (= *Tachysphex argentatus*); de Beaumont, 1965a:48 (Greece); Pulawski, 1967:398 (Turkey); Königsmann, 1971:106 (Spain: Gerona: Palamós); Pulawski, 1971:360 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:273 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); Kazenas, 1972b:162 (Kazakhstan); Myartseva, 1972a:79 (Turkmenistan); de Beaumont, Bytinski-Salz, and Pulawski, 1973:12 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Georghiou, 1977:192 (Cyprus); Kazenas, 1978b:117, 128 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:216, 220 (in key to Sphecidae of European part of USSR); Guichard, 1980:227 (Oman); Pagliano, 1980:128 (Italy: Lazio); Gayubo, 1982a:103 (northern Spain: Sierra de Béjar), 1982f:253 (Spain: Cádiz Province: Algodonales, Puerto de Santa María, San Roque), 1984b:85 (Spain: Salamanca Province), 1984c:365 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:15 (Spain: Valencia Province); Gayubo, 1986b:38 (Spain: Andalucía Autonomous Community), 1986c:33 (Spain: Zamora Province); Gayubo and Heras, 1986:41 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:46 (Spain: Burgos, Segovia); Gayubo and Tormos, 1986a:12 (Spain: Castellón: Castellón de la Plana); Islamov, 1986:526 (Uzbekistan: Tashkent Oblast'); Piek and Spanjer, 1986:190 (in list of Sphecidae with known prey); Steiner, 1986:103 (references to papers on nesting habits); Gayubo, 1987a:113 (Spain: Ciudad Real Province); Asís and Jiménez, 1988:272 (Spain: Castellón Province); Gayubo and Mingo, 1988:80 (Spain); Dollfuss, 1989:13 (lectotype in NHMW); Pagliano, 1990:104 (in catalog of Italian Sphecidae); Dollfuss, 1991:106 (in key to Sphecidae of North and Central Europe); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Tormos, Asís, and Gayubo, 1994:188, 205 (Spain: Albacete Province); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Kuhlmann, 1996:220 (Portugal: Serra de Estrela); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Gayubo, García, Torres, and González, 1999:89 (Spain: Soria Province); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); Esenbekova and Kazenas, 2000:31 (southeastern Kazakhstan: seven localities); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 158 (review of known biology); K. Schmidt and Bitsch *in* Bitsch et al., 2001:255 (in Sphecid Fauna of Western Europe); Kazenas, 2002a:69 (geographic distribution, collecting localities in Kazakhstan); Schmid-Egger, 2003:758 (Italy: Sicilia: Bronte); Kazenas, 2004b:103 (Kazakhstan: western Tien Shan), 2004d:31 (Kazakhstan: northern Caspian region); Pagliano and Negrisolo, 2005:370 (in Sphecid Fauna of Italy); Shoreenko, 2005a:164 (Ukraine: Crimea); Straka, 2005b:273 (Turkey: four localities); Yildirim and Ljubomirov, 2005:1796 (Turkey: Kahramanmaraş: Tömek: Malatya: Kale); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Tomarchio and Turrisi, 2006:956 (Italy: Sicilia: Mount Etna); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:462 (Spain: Tarragona: El Perello, prey: Dictyoptera Mantidae: immature *Ameles* sp.); Pulawski, 2007a:364 (in revision of African *Tachysphex*); Roche, 2007a:84 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); G. Turrisi and R. Turrisi, 2007:120 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:209 (in catalog of Crabronidae of Turkey); Baños-Picon, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Pagliano, 2009:184 (Italy: Piemonte: Bonvicino; recorded from Sicilia by Tomarchio and Turrisi, 2006); Shoreenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Burguet *in* Durand and Burguet, 2010:52 (France Département

d'Ardèche: Ardèche Gorges); Gros, 2010:141 (nesting behavior); Shorenko and Konovalov, 2010:23 (Ukraine: Crimea, Karadag Nature Reserve, village Shchebetovka near Feodosiya); Tüzün and Yüksel, 2010:4471 (Turkey: Niğde Province); van der Smissen, 2010b:387 (France: Ardèche: Saint-Thomé, Saint-Thomé – Valvignères; Gard: Collias); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:355 (in new catalog of Sphecidae of Saudi Arabia); Kazenas, 2013b:495 (southeastern Kazakhstan: 30 km east of Chilik, 45 km southwest of Chundzha, urochishche Kurtogay in Sharyn River valley); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park); Bitsch, 2014:403 (first record from Sicily by Schmid-Egger, 2003 and biological observations by Gros, 2010 reported; France: Vaucluse: Ménerbes, Rustel); Kazenas, 2014a:134 (Kazakhstan: Karatau Mountain Range); Yıldırım, Ljubomirov, and Lelej, 2014:11 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:25 (Iran: Fars Province); Rezaei and Fallahzadeh, 2015:9 (Iran: Fars: Dasht e Arzhan at 29°38'N 51°58'E); Shorenko, 2015:328 (in list of Sphecidae *sensu lato* of Crimea); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:35 (Turkey: Ankara and Konya provinces); Antropov, 2017b:238 (in catalog of Crabroninae of Russia); Shorenko, 2017:78 (in Crimea collected in June and August), 2018:128 (Crimea, including localities, habitats, and number of specimens); Ben Khedher, Yıldırım, and Braham, 2020b:316 (Tunisia: new locality record from Tozeur province); Gadallah, 2020b:52 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:76 (in catalog of *Tachysphex* of Iran); Shorenko, 2020:52 (Crimea: Karadag Nature Reserve); Cross, Baldock, and Wood, 2021:43 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yıldırım, 2021:63 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:224 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

*Tachysphex semenovi* Gussakovskij, 1933b:281, ♀. Lectotype: ♀, Iran: Kerman: Khunikaka (ZIN), designated by Pulawski, 1971:364. Synonymized with *Tachysphex julliani* by Pulawski, 1971:360.

As *Tachysphex julliani* Kohl No. 1: de Beaumont, 1955a:182 (Morocco) and 1956a:197 (Libya), synonymized with *Tachysphex julliani africanus* by Pulawski, 1971:365.

*Tachysphex julliani africanus* Pulawski, 1971:365, ♀, ♂. Holotype: ♂, Morocco: Ijoukak (Lausanne). Synonymized with *Tachysphex julliani* by Pulawski, 2007a:365. – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).

As *Lyrops leucozona* (a manuscript name): Pagliano, 2008:546 (specimen in M. Spinola collection, Torino).

### **212.kalaharicus Arnold**

*Tachysphex sericeus* race *kalaharicus* Arnold, 1924:72, ♀. Holotype: ♀, Botswana: Palapye Road (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae). – As *Tachysphex sericeus kalaharicus*: R. Bohart and Menke, 1976:276 (new status, in checklist of world Sphecidae). – As *Tachysphex kalaharicus*: Pulawski, 2007a:369 (full species status, in revision of African *Tachysphex*).

*Tachysphex scabrosus* Arnold, 1929c:386, ♂. Holotype: ♂, Zimbabwe: Shiloh (SAM). Synonymized with *Tachysphex kalaharicus* by Pulawski, 2007a:369. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae).

### **213.karasi Straka**

*Tachysphex karasi* Straka, 2005b:258, ♀, ♂. Holotype: ♂, Turkey: Sivas: Tuzlagozu (OÖLM). Paratypes: Bulgaria. – Bayındır, Gürbüz, Ljubomirov, and Pohl, 2013:146 (Turkey: Isparta: Kasnak Oak Forest Nature Reserve); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic

provinces), 19 (is an endemic of Turkey); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:32 (may be a synonym of *Tachysphex consocius*); Kaplan and Yildirim, 2021:63 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:225 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

#### 214.karoo Pulawski

*Tachysphex karoo* Pulawski, 2007a:374, ♀, ♂. Holotype: ♂, South Africa: Western Cape Province: 5 km west of Robertson (CAS).

#### 215.kaszabi Tsuneki

*Tachysphex kaszabi* Tsuneki, 1972e:387, ♂. Holotype: ♂, Mongolia: Zavhan Aymag: Somon Nömrög (TMB). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).

#### 216.khoikhoi Pulawski

*Tachysphex khoikhoi* Pulawski, 2007a:375, ♀, ♂. Holotype: ♀, South Africa: Northern Cape Province: Geogap (= Hester Malan) Nature Reserve near Kraaiwater at 29°37'S 18°00'E (AMG).

#### 217.kodairai Tsuneki

*Tachysphex kodairai* Tsuneki, 1971m:27, ♂. Holotype: ♂, China: Inner Mongolia: Apaka (originally K. Tsuneki coll., now USNM). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Hua, 2006:282 (in list of Chinese insects, geographic distribution).

#### 218.krombeini Kurczewski

*Tachysphex* sp. No. 3: Krombein and Evans, 1954:233, 1955:231. Corrected to *Tachysphex krombeini* by Kurczewski, 1971:111.

*Tachysphex krombeini* Kurczewski, 1971:111, ♀, ♂. Holotype: ♂, USA: Florida: Desoto County: Arcadia (USNM). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Krombein, 1979b:1628 (in catalog of North American Hymenoptera); Kurczewski, 1987b:717 (nesting habits); Pulawski, 1988a:70 (in revision of Nearctic *Tachysphex*).

#### 219.krombeiniellus Pulawski

*Tachysphex krombeiniellus* Pulawski, 1982b:41, ♀, ♂. Holotype: ♀, USA: Florida: Levy County: no specific locality (USNM). – Noonan, 1984:7 (two paratypes in Milwaukee Public Museum); Pulawski, 1988a:181 (in revision of Nearctic *Tachysphex*).

#### 220.lacertosus Arnold

*Tachysphex lacertosus* Arnold, 1944:25, ♀. Holotype: ♀, Zimbabwe: Kami (SAM). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:109 (Namibia: visiting flowers of *Eriocephalus luederitzianus* O. Hoffm., Asteraceae); Pulawski, 2007a:378 (in revision of African *Tachysphex*).

*Tachysphex arenarius* Arnold, 1947:149, ♂. Holotype: ♂, Zimbabwe: Bembesi (SAM). Synonymized with *Tachysphex lacertosus* by Pulawski, 2007a:378. – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae).

#### 221.laevifrons (F. Smith)

*Larrada laevifrons* F. Smith, 1856:291, ♀. Holotype or syntypes: ♀, USA: Florida: Duval County: St. John's Bluff, now in Jacksonville (BMNH). – Cresson, 1862:237 (in catalog of North American Hymenoptera). – As *Larra laevifrons*: Patton, 1880b:389 (new generic assignment, in checklist of North American Larini); Kohl, 1885a:245 (in checklist of world *Larra*); Cresson, 1887:277 (in catalog of North American Hymenoptera); Provancher, 1887:266 (in key to *Larra* of Canada), 267 (description of ♂); W. Fox,

1894a:482 (unidentified species, original description copied); Dalla Torre, 1897:669 (in catalog of world Hymenoptera, as *levifrons*). – **As *Tachysphex laevifrons***: Ashmead, 1899d:250 (tentative new generic assignment, in checklist of North American Sphecidae); nec Harrington, 1902:221 (= *Tachysphex acutus*); G. Bohart, 1951:951 (in catalog of North American Hymenoptera); Krombein, 1958f:188 (in supplement to catalog of North American Hymenoptera); Kurczewski, 1966b:439 (males search long time for females, they usually land on prostrate vegetation, dried leaves, pieces of bark), 445 (males are not territorial); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Kurczewski, 1971:114 (in key to Floridan *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Krombein, 1979b:1628 (in catalog of North American Hymenoptera); Kurczewski, 1987b:717 (nesting habits); Pulawski, 1988a:56 (in revision of Nearctic *Tachysphex*); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Kurczewski, 2000c:114 (locality records from North and South Carolina), 117 (nest and prey).

*Tachysphex leensis* Rohwer, 1911b:578, ♀. Holotype: ♀, USA: Texas: Lee County: no specific locality (USNM). Synonymized with *Tachysphex laevifrons* by Pulawski in Krombein, 1979b:1628. – G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).

*Tachysphex consimiloides* F. Williams, 1914a:164, ♀. Holotype: ♀, USA: Kansas: Barton County: no specific locality (Kansas Univ.). Synonymized with *Tachysphex leensis* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:951. – LaBerge, 1956:527 (holotype in Snow Entomological Museum); Arnaud, 1970:32 (in list of species described by F.X. Williams).

### **222. *lagunaensis* Tsuneki**

*Tachysphex lagunaensis* Tsuneki, 1983a:58, ♀, ♂ (*brullii* species group). Holotype: ♂, Philippines: Luzon, Laguna Province: Pagsanjan (originally K. Tsuneki coll., now Hyogo Mus., USNM according to Tano, 2020:26). – Tsuneki, 1983a:68, 69 (in key to *Tachysphex* of Philippines and Japan); Krombein and Pulawski, 1994:83 (in revision of Sri Lankan *Tachysphex*; Laos, Thailand; type lost); Nuhn and Menke, 1994:27 (holotype not transferred to USNM, possibly returned to T. Tano, the collector); Menke, 1995:14 (type still in K. Tsuneki collection); Tano, 1995:45 (holotype in K. Tsuneki collection, as *lagunensis*); Hashimoto and Nakanishi, 1997:29 (holotype transferred to Hyogo Mus.); Haneda, 2011:45 (Philippines: Palawan: Inagawan Beach); Tano, 2020:26 (holotype in USNM).

### **223. *lamellatus* Pulawski**

*Tachysphex lamellatus* Pulawski, 1982b:32, ♀, ♂. Holotype: ♂, Mexico: Sonora: Alamos (CAS). – Pulawski, 1988a:130 (in revision of Nearctic *Tachysphex*); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### **224. *laticauda* Gussakovskij**

*Tachysphex laticauda* Gussakovskij, 1933b:281, ♀. Lectotype: ♀, Iran: Kerman: Galinchah-Dakodo (ZIN), designated by Pulawski, 1971:432. – Gussakovskij, 1952:236 (Tajikistan, Turkmenistan; description of ♂); de Beaumont, Bytinski-Salz, and Pulawski, 1973:13 (Israel); de Beaumont, 1970c:15 (Iran: Baluchistan); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:114, 127 (in key to Sphecidae of Kazakhstan and Central Asia); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 158 (review of known biology), 2002a:70 (geographic distribution, collecting localities in Kazakhstan); Pulawski, 2007a:93 (relationships to *Tachysphex albocinctus*); Maharramov, Aliyev, and Mammadov, 2018:456 (Azerbaijan: Baku: Amirjan, and Baku: Mardakan); Mokrousov, Proshchalykin, Aliyev, and

Maharramov, 2019:18 (Azerbaijan: Nakhichevan Autonomous Republic); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:77 (in catalog of *Tachysphex* of Iran); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

### 225. *latifrons* Kohl

*Tachysphex latifrons* Kohl, 1884a.:373, ♀. Syntypes: ♀, Turkey: Brussa, now Bursa (NHMW). – Kohl, 1885a.:353 (in key to Palearctic *Tachysphex*), 381 (in revision of Palearctic *Tachysphex*); Dalla Torre, 1897:680 (in catalog of world Hymenoptera); de Beaumont, 1947c.:667 (redescription), 668 (in key to Mediterranean species of *bicolor* group), 1957b.:137 (northern Iran), 1965a.:48 (Greece); Pulawski, 1965a.:401 (Turkey); Kazenas, 1971:161 (in Kazakhstan found only in southeastern mountains); Pulawski, 1971:213 (in revision of Palearctic *Tachysphex*); Kazenas, 1972b.:162 (Kazakhstan); de Beaumont, Bytinski-Salz, and Pulawski, 1973:9 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b.:118, 133 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:216, 220 (in key to Sphecidae of European part of USSR); Dollfuss, 1991:106 (in key to Sphecidae of North and Central Europe); Gorobchishin, 1994:21 (first record from Ukraine); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia); K. Schmidt and Bitsch *in* Bitsch et al., 2001:256 (in Sphecid Fauna of Western Europe); Kazenas, 2002a.:70 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2004a.:77 (Russia: Rostov Oblast'); Straka, 2005b.:269 (Turkey: Adiyaman: Nemrut dag near Karadut; Antalya: 10 km north of Akseki); Yildirim and Ljubomirov, 2005:1796 (Turkey: Kars: Sarikamis); T. Li, Q. Li, and Cai, 2008:142 (first record from China); Ljubomirov and Yildirim, 2008:209 (in catalog of Crabronidae of Turkey); Baghirov, 2010:678 (Russia: Altai Territories: villages Kosh-Agach and Savvushka); Shorenko and Konovalov, 2010:23 (Ukraine: Crimea: Feodosiya; Lugansk Oblast': village D'yakovo); Baghirov, 2011b.:148 (Russia: Altayskiy Kray: Savvushka; Altay Republic: Kosh-Agach); Japoshvili and Ljubomirov, 2012:96 (Turkey: Isparta: Gölcük Nature Park 8 km southwest of city of Isparta); Pankov, 2013:230 (Russia: Ivanovo Oblast'); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Shorenko, 2015:38 (in list of Sphecidae *sensu lato* of Crimea); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:35 (Turkey: Erzurum and Tunceli provinces); Antropov, 2017b.:239 (in catalog of Crabroninae of Russia); Shorenko, 2017:78 (in Crimea collected in July); Maharramov, Aliyev, and Mammadov, 2018:455 (Azerbaijan: Gandja, Salyan: Bendovan); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:72 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:63 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:225 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:421 (Uzbekistan: distribution).

*Tachysphex cyrenaicus* de Beaumont, 1947a.:195, ♀. Holotype: ♀, Libya: Cyrenaica: no specific locality (NHMW). Synonymized with *Tachysphex latifrons* by Pulawski, 1971:213 and 216. – de Beaumont, 1947c.:668 (in key to Mediterranean species of *bicolor* group), 1956a.:198 (Libya; description of ♂); Dollfuss, 1989:13 (holotype in NHMW).

### 226. *limatus* Arnold

*Tachysphex limatus* Arnold, 1924:53, ♀. Holotype: ♀, South Africa: Eastern Cape Province: Willowmore (TMP). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:109 (Namibia: visiting flowers of undetermined Aizoaceae); Pulawski, 2007a.:380 (in revision of African *Tachysphex*).

**227. *lindbergi* de Beaumont**

*Tachysphex lindbergi* de Beaumont, 1956d:3, ♀. Holotype: ♀, Cabo Verde Islands: Santo Antão: Chã de Morte (Zool. Mus. Helsinki). – Pulawski, 1971:166 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Erlandsson, 1978a:205 (Madeira); Simon Thomas and Wiering, 1993:404 (description of ♂); Smit, 2000:175 (Madeira); Pulawski, 2007a: 382 (in revision of African *Tachysphex*).

*Tachysphex* sp.: Groh, 1982:260 (Cape Verde Islands), corrected to *Tachysphex lindbergi* by Simon Thomas and Wiering, 1993:405.

**228. *linsleyi* R. Bohart**

*Tachysphex linsleyi* R. Bohart, 1962a:35, ♀, ♂. Holotype: ♂, USA: Nevada: Churchill County: 1 mi west of Eastgate (CAS). – Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Krombein, 1979:1931 (in supplement to catalog of North American Hymenoptera); Pulawski, 1988a:153 (in revision of Nearctic *Tachysphex*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Kurczewski, 2009:8 (review of known behavioral information), 81-86 (discussion of nesting behavior); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: first record from Canada: Alberta: no specific locality).

**229. *liriformis* Pulawski**

*Tachysphex liriformis* Pulawski, 1967a:395, ♀, ♂. Holotype: ♂, Tajikistan: Kondara 35 km north of Dushanbe (ZIN). – Pulawski, 1971:309 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:10 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:112, 125 (in key to Sphecidae of Kazakhstan and Central Asia); Dollfuss, 1989:13 (paratype in NHMW; as *tizifonnis*); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia); Straka, 2005b:271 (Turkey: Eskişehir: Sakarilica 30 km north of Eskişehir; Kayseri: 140 km south of Kayseri); Ljubomirov and Yildirim, 2008:210 (in catalog of Crabronidae of Turkey); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:18 (Azerbaijan: Nakhichevan Autonomous Republic); Kaplan and Yildirim, 2021:64 (in catalog of Crabronidae of Turkey), 2023:1687 (in checklist of Sphecidae sensu lato of Turkey).

**230. *loktionovi* Mokrousov and Proshchalykin**

*Tachysphex loktionovi* Mokrousov and Proshchalykin, 2021a:321, ♀, ♂. Holotype: ♀, Russia: Tyva Republic: Tore-Khol' Lake, 27 km south-southwest of Erzin village at 50.022°N 95.041°E (ZIN).

**231. *longipalpis* de Beaumont**

*Tachysphex longipalpis* de Beaumont, 1940b:166, ♀, ♂. Holotype: ♀, Egypt: Ghiza (originally A. Alfieri collection, now USNM). – Honoré, 1942:56 (Egypt: Shubrah, Ghizeh); de Beaumont, 1947a:160 (in new revision of *Tachysphex* of Egypt); Pulawski, 1964:83 (Egypt: Ghiza), 1971:299 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:112, 125 (in key to Sphecidae of Kazakhstan and Central Asia); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia); Pulawski, 2007a:385 (in revision of African *Tachysphex*); Roche, 2007a:79 (in checklist of Egyptian Crabronidae, as *longipalpis longipalpis*), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *longipalpis longipalpis*); Gadallah, 2020b:52 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:74 (in catalog of *Tachysphex* of Iran).

**232. *longipes* Pulawski**

*Tachysphex longipes* Pulawski, 2007a:388, ♀, ♂. Holotype: ♀, Namibia: Karibib District: 55 km southwest of Usakos (CAS). – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

**233. *lucillus* Pulawski**

*Tachysphex lucillus* Pulawski, 1971:281, ♀, ♂. Holotype: ♂, Turkmenistan: Repetek (ZIN). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:113, 125 (in key to Sphecidae of Kazakhstan and Central Asia), 1992c:26 (Turkmenistan: Repetek Nature Reserve); Esenbekova and Kazenas, 2000:31 (southeastern Kazakhstan: 60 km east of Chilik); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:70 (geographic distribution, collecting localities in Kazakhstan), 2008a:101 (southeastern Kazakhstan: Ili River valley: 35 km north of and 60 km east of Chilik); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:629 (Iran: Hormozgan: Band e Molla at 27°25'N 57°09'E); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:74 (in catalog of *Tachysphex* of Iran).

**234. *luctuosus* Arnold**

*Tachysphex Schönlandi* var. *luctuosus* Arnold, 1924:69, ♂. Holotype: ♂, South Africa: Eastern Cape Province: Willowmore (TMP). – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex schoenlandi luctuosus***: R. Bohart and Menke, 1976:276 (new status, in checklist of world Sphecidae). – **As *Tachysphex luctuosus***: Pulawski, 2007a:390 (full species status, in revision of African *Tachysphex*).

**235. *luxuriosus* Morice**

*Tachysphex luxuriosus* Morice, 1897:307, ♀. Holotype: ♀, Egypt: Koubbah near Cairo (OXUM). – de Beaumont, 1940b:167 (Egypt; revision; nec ♂ = *Tachysphex inextricabilis*); Honoré, 1942:56 (Egypt: Cairo area, Fayum = Kom Oshim, Helwan); de Beaumont, 1947a:169 (in new revision of *Tachysphex* of Egypt; ♂ = *Tachysphex inextricabilis*), 1956a:197 (Libya), 1960b:238 (Libya); Pulawski, 1964:94 (Egypt; re-description; nec ♂ = *Tachysphex inextricabilis*); Osborn and Krombein, 1969:16 (nw Sudan: Gebel 'Uweinat: Wadi Ain el Brins); Pulawski, 1971:351 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:11 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Roche and Zalut, 1994:115 (Egypt: Sinai Peninsula); Pulawski, 2007a:393 (in revision of African *Tachysphex*); Roche, 2007a:82 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

As *Tachysphex horus* (♂ only): de Beaumont, 1940b:168 (in revision of *Tachysphex* of Egypt), 1947a:171 (in new revision of *Tachysphex* of Egypt), and 1956a:197 (Libya), corrected to *Tachysphex luxuriosus* by Pulawski, 1971:351.

*Tachysphex seth* Pulawski, 1964, ♀, ♂ (♀ = *Tachysphex inextricabilis*). Holotype: ♂: Egypt: Fayum Province: Kom Osheim (originally W. Pulawski coll, now CAS). Synonymized with *Tachysphex luxuriosus* by Pulawski, 1971:351.

**236. *mackayensis* R. Turner**

*Tachytes australis* de Saussure, 1867:68, ♂, junior primary homonym of *Tachytes australis* de Saussure, 1854. Lectotype: ♂, Australia: New South Wales: Sydney (NHMW), designated by Pulawski, 1977a:297. – de Saussure, 1869:57 (Australia: Cape York); Froggatt, 1892:218 (in catalog of Australian Hymenoptera); R. Turner, 1910a:348 (in key to Australian *Tachytes*, interpretation questionable). – **As *Tachysphex australis***: R. Bohart and Menke, 1976:272 (new generic assignment, in checklist of world Sphecidae); R. Turner, 1916c:306 (new generic assignment); Dollfuss, 1989:13 (lectotype in NHMW).

*Tachysphex mackayensis* R. Turner, 1908:487, ♀. Holotype: ♀, Australia: Queensland: Mackay (BMNH). Synonymized with *Tachytes australis* de Saussure, 1867, by Pulawski, 1977a:297. – R. Turner, 1916b:255 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Evans, Matthews and Pulawski, 1976:442 (prey: juvenile *Ellipsidion*, a blattellid); Pulawski, 1977a:297 (in revision of Australian *Tachysphex*); Cardale, 1985:240 (in catalog of Australian Sphecidae); McCorquodale and Thomson, 1989:94 (Evans et al., 1976 cited); K. Walker, Naumann, Austin, Taylor, and Cardale, 1992:48 (in catalog of insects of Tasmania); Pagliano, 2003a:508 (Australia: Northern Territory: Batchelor).

### 237. *maculipennis* Pulawski

*Tachysphex maculipennis* Pulawski, 1977a:324, ♀, ♂. Holotype: ♀, Australia: Western Australia: 13 mi. northeast of Geraldton (ANIC); Cardale, 1985:240 (in catalog of Australian Sphecidae); Naumann, 1998:186 (Australia: northwestern Queensland: Musselbrook area, approximately 18°40'S 138°23'E).

### 238. *magnaemontis* Hensen

*Tachysphex magnaemontis* Hensen in Hensen and Ooijen, 1987:13, ♀. Holotype: ♀, Turkey: Bursa: Mount Uludag 30 km south of Bursa (coll. R.V. Hensen). – Straka, 2005b:260 (reference to Hensen, 1987); Ljubomirov and Yildirim, 2008:211 (in catalog of Crabronidae of Turkey); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces), 19 (is an endemic of Turkey); Kaplan and Yildirim, 2021:64 (in catalog of Crabronidae of Turkey), 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

### 239. *malkovskii* Pulawski

*Tachysphex malkovskii* Pulawski, 1971:72, ♀, ♂. Holotype: Kazakhstan: Mangyshlak Peninsula: Kamysta 90 km east of Tauchik (ZIN). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:120, 135 (in key to Sphecidae of Kazakhstan and Central Asia), 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:70 (geographic distribution, collecting localities in Kazakhstan), 2004d:31 (Kazakhstan: Mangyshlak Peninsula).

### 240. *marshalli* R. Turner

*Tachysphex marshalli* R. Turner, 1917f:293, ♀, ♂. Syntypes: Zimbabwe: Salisbury, now Harare (BMNH). – Arnold, 1923a:149 (original description copied), 1930:2 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:395 (in revision of African *Tachysphex*).

*Schistosphex breijeri* Arnold, 1922:137, ♀. Holotype: ♀, South Africa: Kraaifontein [probably Kraalfontein in former Transvaal, locality of unknown location] (TMP). Synonymized with *Tachysphex marshalli* by Pulawski, 2007a:395. – Arnold, 1930:2 (in checklist of Afrotropical Sphecidae, as *Breyeri*). – **As *Tachysphex breijeri***: Menke in R. Bohart and Menke, 1976:271 (illustration of pygidial plate), 272 (new generic assignment, in checklist of world Sphecidae).

*Tachysphex marshalli* var. *terrificus* Arnold, 1935a:497, ♀. Holotype: ♀, Botswana: Kaotwe (TMP). Synonymized with *Tachysphex marshalli* by Pulawski, 2007a:395– **As *Tachysphex marshalli terrificus***: R. Bohart and Menke, 1976:274 (new status, in checklist of world Sphecidae).

### 241. *mashona* Arnold

*Tachysphex Oberon* var. *mashona* Arnold, 1929c:387, ♀. Holotype: Zimbabwe: Penkrige (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex oberon mashona***: R. Bohart and Menke, 1976:275 (new status, in checklist of world Sphecidae). – **As *Tachysphex mashona***: Pulawski, 2007a:399 (full species status, in revision of African *Tachysphex*).

*Tachysphex Oberon* var. *halophilus* Arnold, 1940:120, ♀. Holotype: ♀, South Africa: Transvaal: Saltpan near Pretoria, now Tswaing (TMP). Synonymized with *Tachysphex mashona* by Pulawski, 2007a:399. – As *Tachysphex oberon halophilus*: R. Bohart and Menke, 1976:275 (new status, in checklist of world Sphecidae).

#### 242. *mauretanus* Pulawski

*Tachysphex mauretanus* Pulawski, 1971:366, ♀, ♂. Holotype: ♂, Morocco: Marrakech (Lausanne). – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a:402 (in revision of African *Tachysphex*); Ben Khedher, Yildirim, and Braham, 2020b:315 (first record from Tunisia: Mahdia: Sidi Alouane: Lemsanaa).

As *Tachysphex julliani* Kohl No. 2: de Beaumont, 1955a:182 (Morocco), synonymized with *Tachysphex mauretanus* by Pulawski, 1971:366.

#### 243. *maurus* Rohwer

*Tachysphex maurus* Rohwer, 1911b:575, ♀, ♂. Lectotype: ♂, USA: Texas: Lee County: Fedor (USNM), designated by Pulawski, 1988a:177. – G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Krombein, 1979b:1632 (in catalog of North American Hymenoptera); Pulawski, 1988a:177 (in revision of Nearctic *Tachysphex*); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

#### 244. *maximus* Pulawski

*Tachysphex maximus* Pulawski, 1977a:287, ♀, ♂. Holotype: ♀, Australia: New South Wales: 40 mi. north of Broken Hill (ANIC). – Cardale, 1985:241 (in catalog of Australian Sphecidae).

#### 245. *maya* Pulawski

*Tachysphex maya* Pulawski, 1988a:186, ♀, ♂. Holotype: ♂, Mexico: Chiapas: Villa Flores (UCD). – Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

#### 246. *mediterraneus* Kohl

*Tachysphex mediterraneus* Kohl, 1883a:173, ♀ (as *mediterranea*, incorrect original termination). Lectotype: ♀, Italy: Sicilia: Valsavoja, now Lentini Diramazione (NHMW), designated by Dollfuss, 1989:13. – Kohl, 1885a:350 (in key to Palearctic *Tachysphex*), 371 (in revision of Palearctic *Tachysphex*), 1893a:32 (Austria: Niederösterreich: Bisamberg, record not confirmed by subsequent authors); Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Ferton, 1901a:99 (Corsica, nest and prey); Adlerz, 1904:137 (known prey: *Oecanthus pellucens* (Scopoli), a gryllid); Antiga and Bofill, 1904:11 (in catalog of Catalanian Hymenoptera); Ferton, 1908:558 (Corsica, nest and prey); Mercet, 1910b:165 (listed from Spain); Morice, 1911:101 (Algeria: Philippeville, now Skikda); Ferton, 1912a:388 and 398 (Algeria: La Calle; nest and prey); Adlerz, 1916:110 (nesting habits); Ferton, 1923:86 (preying on *Oecanthus pellucens* (Scopoli), like *Isodontia splendidula*), 128 (nest, prey: *Oecanthus pellucens* (Scopoli), nest temporary closure, prey paralyzing, orientation flights), 171 (nesting habits), 315 (nest and prey identical in Algeria and Corsica), 320 (preys exclusively on *Oecanthus pellucens* (Scopoli)); Berland, 1925d:118 (in Sphecid Fauna of France); Grandi, 1930:316 (nesting habits, description of ♂) and 341 (Italy: Toscana: Maremma); E. Nielsen, 1933:293 (summary of nesting habits); Grandi, 1934:61 (nest entrance closed when the female goes hunting, prey: *Oecanthus pellucens* (Scopoli)), 129 (Italy), 1935:110 (Italy: Emilia-Romagna: Cervia); de Beaumont, 1936a:210 (in revision of French *Tachysphex*, description of ♂); Grandi, 1937:333 (Italy); Giner Marí, 1943:137 (in Sphecid Fauna of Spain); de Beaumont, 1947b:393 (Cyprus); de Andrade, 1949:15 (Portugal: Vale de Gaio); Pitoni, 1950:25 (Cyprus); de Beaumont,

1953a:175 (Mauritania), 1954a:58 (Italy), 1954e:91 (Italy); Grandi, 1954:239 (Italy); de Beaumont, 1955a:183 (Morocco); Bytinski-Salz, 1956:226 (Turkey: Kasaba); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Bajári, 1957a:50, 54 (in key to Hungarian Sphecidae), 1957b:135 (first record from Hungary: Szigetszentmiklós and Simontornyá); Nouvel and Ribaut, 1958:13 (France); Pulawski, 1958a:181 (Bulgaria: Aitos, mouth of Ropotamo River, Sandanski); Diniz, 1959:29 (Portugal: Vale de Gaio); de Beaumont, 1960a:18 (Greece: Island of Rhodes); Grandi, 1961:199 (nesting habits); de Beaumont, 1962b:26 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Diniz, 1964a:5 (Portugal: Carcavelos, Évora, Portimão, Troia, Vale de Gaio); Pulawski, 1964:95 (Egypt: Ghiza; diagnostic character); de Beaumont, 1965a:48 (Greece); Roberti, Frilli, and Pizzaghi, 1965:110 (Italy: Emilia-Romagna: Bobbio in Piacenza Province); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nessebar); Pulawski, 1967a:401 (Turkey); Königsmann, 1971:106 (Spain: Gerona: Palamós); Pulawski, 1971:255 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:272 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); de Beaumont, Bytinski-Salz, and Pulawski, 1973:9 (Israel); Erlandsson, 1974:72 (Italy, Yugoslavia); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Georghiou, 1977:192 (Cyprus); Kazenas, 1978b:118, 127 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:216, 220 (in key to Sphecidae of European part of USSR); Pagliano, 1980:128 (Italy: Abruzzo); Gayubo, 1982a:103 (northern Spain: Sierra de Béjar), 1982f:253 (Spain: Cádiz Province: Arcos de la Frontera, Puerto de Santa María, San Roque, Zahora); Dollfuss, 1983b:10 (in catalog of Sphecidae of Austria); Gayubo, 1984b:85 (Spain: Salamanca Province); Józán, 1985b:57 (recorded from Simontornya by Bajári, 1957), 83 (ecological and zoogeographic characteristics); Gayubo, 1986c:33 (Spain: Zamora Province); Gayubo and Sanza, 1986:46 (Spain: Burgos, Segovia); Gayubo and Tormos, 1986a:17 (Spain: Castellón: Castellón de la Plana); Piek and Spanjer, 1986:190 (in list of Sphecidae with known prey); Steiner, 1986:103 (references to papers on nesting habits); Gayubo, 1987a:113 (Spain: Ciudad Real Province); Asís and Jiménez, 1988:272 (Spain: Castellón Province); Dollfuss, 1988:12 (Austria: questionable record of Kohl, 1893); Gayubo and Mingo, 1988:80 (Spain); Dollfuss, 1989:13 (lectotype in NHMW); Pagliano, 1990:104 (in catalog of Italian Sphecidae); Dollfuss, 1991:106 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:402 (Italy: Liguria, Lazio); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Platycleis* sp., a tettigoniid); Negrisoló, 1991:318 (Italy: Venezia Province); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Gayubo and Borsato, 1994:208 (Italy: Toscana); Krombein and Pulawski, 1994:11 (summary of nesting habits), 41 (in revision of Sri Lankan *Tachysphex*); Tormos, Asís, and Gayubo, 1994:188, 205 (Spain: Albacete Province); Negrisoló, 1995a:23 (Italy: Veneto); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); Esenbekova and Kazenas, 2000:31 (southeastern Kazakhstan: 20 km west of Alma Ata, 5 km west of lake Biylikul', 3 km west of Kamenka on Aksay River, Sortogay on Charyn River, 3 km south of Talgar); Gayubo, González, and Torres, 2000:184 (Spain: Salamanca Province); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 158 (review of known biology); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); K. Schmidt and Bitsch *in* Bitsch et al., 2001:256 (in Sphecid Fauna of Western Europe); Shkuratov, 2001:17 (prey: *Oecanthus pellucens* (Scopoli)); Kazenas, 2002a:70 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:141 (Russia: Rostov Oblast': Rostovski Nature Reserve at 46°27'N 42°41'E); Drewes, 2003:142 (Spain: no specific locality); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del

Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Pagliano, 2003b:131 (Italy: Island of Pantelleria); Gayubo et al. 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Gorobchishin, 2004:34 (Ukraine: Zaporiz'ka Oblast': Obitichna Kosa Nature Reserve); Kazenas, 2004b:103 (Kazakhstan: western Tien Shan); Shkuratov, 2004a:77 (Russia: Rostov Oblast'; nest starting from vertical situations, prey: *Oecanthus pellucens* (Scopoli)), 2004b:166 (Russia: Rostov Oblast': Gosudarstvennyi Muzey-Zapovednik M.A. Sholokhova); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Pagliano and Negrisoló, 2005:374 (in Sphecid Fauna of Italy); Straka, 2005b:270 (Turkey: Adana: 45 km north of Adana, 48 km south of Adana; Bursa: Kurşunlu; Kayseri: 7 km northwest of Develi); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Pulawski, 2007a:404 (in revision of African *Tachysphex*); Roche, 2007a:78 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Shorenko, 2007b:258 (Ukraine: Crimea: Kerch); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:211 (in catalog of Crabronidae of Turkey); Baños-Picon, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Burguet *in* Durand and Burguet, 2010:52 (France Département d'Ardèche: Ardèche Gorges); Shorenko and Konovalov, 2010:23 (Ukraine); van der Smissen, 2010b:387 (France: Vaucluse: Bédoin); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Prisiy, 2012:47 (Russia: Belgorod Oblast'); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Kazenas, 2013a:67, 68 (color photographs of adult wasps, short information on geographic distribution and nesting habits), 2013b:495 (southeastern Kazakhstan: 10 km west of Chundzha); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park); Bitsch, 2014:403 (record from France by Burguet, 2010 and biological observations by Gros, 2014 reported); Gros, 2014:73 (nesting habits); Kazenas, 2014a:134 (Kazakhstan: Karatau Mountain Range); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); P. Rosa and Pagliano, 2015:105 (Italy: Lombardia and Piemonte: Parco del Ticino); Shorenko, 2015:328 (in list of Sphecidae *sensu lato* of Crimea); Mokrousov and Popov, 2016:580 (Russia: Abkhazia, Krasnodarskiy Krai); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:35 (Turkey: Kars: Sankamış: Karakurt); Antropov, 2017b:239 (in catalog of Crabroninae of Russia); Shorenko, 2017:78 (in Crimea collected in July); Maharramov, Aliyev, and Mammadov, 2018:455 (Azerbaijan: Ganja: Zazaly); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Ben Khedher, Yildirim, and Braham, 2020b:315 (in Tunisia known from Jendouba); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:73 (in catalog of *Tachysphex* of Iran); Cross, Baldock, and Wood, 2021:43 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:64 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:226 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

*Tachysphex collaris* Kohl, 1898b:100, ♀. Syntypes: ♀, Waboniland [= Kenya: Coast Province]: no specific locality (NHMW). Synonymized with *Tachysphex mediterraneus* by Pulawski in Krombein and Pulawski, 1994:41. – Arnold, 1923a:175 (recorded from Afrotropical Region but unknown to the author), 177 (original description translated into English), 1930:4 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex mediterraneus collaris***: Pulawski, 1971:257 (new status); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Dollfuss, 1989:13 (type material in NHMW).

*Tachysphex lanatus* Arnold, 1947:151, ♀, ♂. Synonymized with *Tachysphex mediterraneus* by Pulawski in Krombein and Pulawski, 1994:41. Lectotype: Zambia: Abercorn, now Mbala (SAM), designated by Pulawski, 2007a:405. – R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).

### 247. *melanius* Pulawski

*Tachysphex argentifrons* Arnold, 1924:58, ♀ only.

*Tachysphex melanius* Pulawski, 2007a:409, ♀, ♂. Holotype: ♀, South Africa: Eastern Cape Province: Algoa Bay (TMP). – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

### 248. *melas* Kohl

*Tachysphex melas* Kohl, 1898b:100, ♀. Lectotype: ♀, Mongolia: Irkut (NHMW), designated by Pulawski, 1971:78. – Pulawski, 1971:76 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:119, 135 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:218 (in key to Sphecidae of European part of USSR); Nemkov, 1986:97 (Russia: Siberia: Irkutsk Oblast': Angarsk); Dollfuss, 1989:13 (lectotype in NHMW); Guichard, 1991a:339 (Jordan); Nemkov in Nemkov, Kazenas, Budrys, et Antropov, 1995:410, 412 (in key to Sphecidae of Russian Far East); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:32 (southeastern Kazakhstan: 20 km west of Chundzha); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:70 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:141 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E), 2004b:166 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova); Kazenas, 2004d:31 (Kazakhstan: Mangyshlak Peninsula); Shkuratov, 2004a:77 (Russia: Rostov Oblast'); Straka, 2005b:260 (first record from Turkey: Adiyaman: Nemrut dag near Karadut); Nemkov, 2008b:19 (in catalog of Crabronidae of Asiatic Russia), 2009b:79 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Baghirova, 2011b:148 (Russia: Altay Republic: Kosh-Agach); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Mokrousov and Zryanin, 2015:42 (Uzbekistan: Kashkadarya Oblast'); Antropov, 2017b:239 (in catalog of Crabronidae of Russia); Maharramov, Aliye, and Mammadov, 2018:454 (first record from Azerbaijan: Turianchay State Reserve); Akulov, Proshchalykin, and Mokrousov, 2020:49 (Russia: central Krasnoyarsk Krai); Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:226 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

### *ssp. eatoni* E. Saunders

*Tachysphex eatoni* E. Saunders, 1910:525, ♀. Holotype: ♀, Algeria: Biskra (BMNH). – Morice, 1911:102 (Algeria: Biskra). – **As *Tachysphex melas eatoni***: Pulawski, 1971:79 (new status, in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Roche, 2007a:75 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

**249. melas Pulawski (preoccupied)**

*Tachysphex melas* Pulawski, 2007a:409, ♀, ♂. Junior primary homonym of *Tachysphex melas* Kohl, 1898:100. Holotype: ♀, South Africa: Eastern Cape Province: Algoa Bay (TMP).

**250. mendozanus Brèthes**

*Tachysphex mendozanus* Brèthes, 1913:148, ♀, ♂. Syntypes: Argentina: Mendoza: Chacras de Coria (MACN). – Pulawski, 1974a:96 (in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Genise, 1990:27 (type material in MACN); Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

**251. menkei Pulawski**

*Tachysphex menkei* Pulawski, 1982b:41, ♀, ♂. Holotype: ♀, USA: California: San Diego County: Borrego Valley (UCD). – Pulawski, 1988a:184 (in revision of Nearctic *Tachysphex*); Alcock, 2011:65 (hilltopping behavior by males in Usery Mountain, Arizona); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

**252. merina Pulawski**

*Tachysphex merina* Pulawski, 2007a:687, ♀. Holotype: ♀, Madagascar: Antananarivo Province: Ambatolampy at 19°21'S 47°27'E (MNHN). – Madl, 2014a:983 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

**253. mesembrius Pulawski**

*Tachysphex mesembrius* Pulawski, 2007a:412, ♀, ♂. Holotype: ♀, South Africa: Eastern Cape Province: Venterstad Region (SAM).

**254. micans (Radoszkowski)**

*Tachytes micans* Radoszkowski, 1877:29, ♀, ♂. Syntypes: Kazakhstan: Kyzil-Kum Desert: n specific locality (ZMMU). – Radoszkowski, 1886a:34 (male genitalia). – **As *Tachysphex micans***: Kohl, 1885a:396 (tentative new generic assignment, original description copied), 1888a:143 (new generic assignment, redescription); Radoszkowski, 1892:590 (reference to Radoszkowski, 1886); Dalla Torre, 1897:681 (in catalog of world Hymenoptera); de Beaumont, 1936b:610 (redescription; specimens in O. Radoszkowski collection, Kraków), 1940b:164 (in revision of African *Tachysphex*); Honoré, 1942:55 (Egypt: Abou Rawash, Cairo-Suez road, Katta, Sinai); de Beaumont, 1947a:159 (in new revision of *Tachysphex* of Egypt), 1955a:176 (Morocco), 1956a:196 (Libya); Grandi, 1957:389 (Libya: Tripolitania: Wadi Kaam); Myartseva, 1963b:58 (Turkmenistan: lower Murgab River); Pulawski, 1964:83 (Egypt: Abu Rawash, Dahshur), 1971:282 (in revision of Palearctic *Tachysphex*); Myartseva, 1972a:79 (Turkmenistan); Tsuneki, 1972e:383 (Mongolia); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Kazenas, 1978b:112, 124 (in key to Sphecidae of Kazakhstan and Central Asia); Guichard, 1980:227 (Oman); Roche, 1981:2 (in checklist of Sphecidae of United Arab Emirates); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Roche and Zalat, 1994:115 (Egypt: Sinai Peninsula); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Sphingonotus decorus* (Germ.) and *Leptopternis gracilis* (Ev.), Acrididae); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:32 (southeastern Kazakhstan: 35–45 km, 60 km, and 80 km east of Chilik, near landing place Dubun'); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 158 (review of known biology), 2002a:71 (geographic distribution, collecting localities in Kazakhstan); Pulawski, 2007a:414 (in revision of African *Tachysphex*); Roche, 2007a:79 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Kazenas, 2013b:495 (southeastern Kazakhstan: 35 km north and 35–80 km east of Chilik, near landing place Dubun'); S. Gess and Roosenschoon, 2016:104 (Dubai Desert Conservation Reserve, visiting flowers of *Prosopis cineraria* (L.) Druce, Fabaceae); Mokrousov, Shlyakhtenok, and Grebennikov, 2016:26

(first record from Russia: Astrakhan' Oblast': Volzhski village at 46.965°N 47.53°E and Kalmykia: Davsna sands 20 km east of Khulhuta at 46.292°N 46.672°E); Antropov, 2017b:239 (in catalog of Crabroninae of Russia); Mokrousov, 2017d:59 (South-East of European Russia: no specific locality); Straka and Schmid-Egger, 2017:437 (United Arab Emirates), 439 (color photograph); Gadallah, 2020b:52 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:74 (in catalog of *Tachysphex* of Iran); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:227 (in revision of Sphecidae *sensu lato* of Europe); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

As *Tachysphex vestitus*: Maidl, 1924:236 (Sudan), corrected to *Tachysphex micans* by Pulawski, 1971:283.

### 255. *miniatulus* Arnold

*Tachysphex Panzeri* var. *miniatulus* Arnold, 1924:70, ♀. Lectotype: ♀, Zimbabwe: Sawmills (SAM), designated by Pulawski, 2007a:418. – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae). – As *Tachysphex miniatulus*: Arnold, 1947:147 (new status, description of ♂); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pulawski, 2007a:418 (in revision of African *Tachysphex*).

### 256. *mirandus* Pulawski

*Tachysphex mirandus* Pulawski, 1982b:32, ♀, ♂. Holotype: ♀, California: San Bernardino County: Palm Springs (USNM). – Pulawski, 1988a:102 (in revision of Nearctic *Tachysphex*); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### 257. *miwok* Pulawski

*Tachysphex miwok* Pulawski, 1988a:67, ♀, ♂. Holotype: ♂, USA: California: San Francisco County: San Francisco (CAS). – Kurczewski, Kurczewski, and Abela, 2015:238 (nesting habits); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### 258. *mkomazi* Pulawski

*Tachysphex mkomazi* Pulawski, 2007a:420, ♀, ♂. Holotype: ♀, Tanzania: Tanga Region: 2 km northeast of Mkomazi at 4°37.8'S 38°05.5'E (CAS).

### 259. *mocsaryi* Kohl

*Tachysphex mocsaryi* Kohl, 1884a:367, ♀ (as *Mocsáryi*, incorrect original capitalization and diacritic mark). Syntypes: ♀, Hungary: no specific locality (NHMW). – Kohl, 1885a:351 (in key to Palearctic *Tachysphex*), 359 (in revision of Palearctic *Tachysphex*); Kohl and Handlirsch, 1889:278 (Turkmenistan); Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Mocsáry, 1897:77 (Hungary); Schmiedeknecht, 1907:232 (in keys to Hymenoptera of Central Europe), 1930:693 (in keys to Hymenoptera of North and Central Europe); Gussakovskij, 1935:427 (Tajikistan: Gushary); de Beaumont, 1947c:664 (description of ♂), 1961b:275 (Afghanistan); Zavadil *in* Zavadil and Šnoflák, 1948:150 (in key to Sphecidae of Czechoslovakia, not yet found in Czechoslovakia); Bajári, 1957a:52, 55 (in key to Hungarian Sphecidae); de Beaumont, 1962b:25 (Spain), 39 (comments); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Scobiola Palade, 1966b:392 (Romania: Tulcea District: C.A. Rosetti, Periprava; as *mócsaryi*); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nessebar); Pulawski, 1967a:394 (Turkey); Scobiola-Palade, 1967a:161 (Romania: Constanța District: Canaraua Fetei), 1968b:142 (Romania: Island of Letea in delta of Danube); Pulawski, 1971:312 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:269 (in Sphecid Fauna of Czechoslovakia: may be expected in the country); Myartseva, 1972a:79 (Turkmenistan); Scobiola-Palade, 1972:150 (Romania: delta of Danube: Caraorman; as *mocsaryi*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:11 (Israel); Scobiola-Palade, 1974:145 (Romania: Sărăturile sandbank in Danube delta); R. Bohart and Menke,

1976:275 (in checklist of world Sphecidae); Kazenas, 1978b:113, 126 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:214, 219 (in key to Sphecidae of European part of USSR); Józán, 1983:99 (Hungary), 1985b:57 (Hungary south of Lake Balaton), 83 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Islamov, 1986:527 (Uzbekistan: Tashkent Oblast'); Józán, 1986:370 (Hungary: Kiskunság National Park); Gayubo and Mingo, 1988:80 (Spain); Dollfuss, 1989:13 (lectotype in NHMW); Pádr *in* Šedivy, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Dollfuss, 1991:106 (in key to Sphecidae of North and Central Europe); Józán, 1992b:173 (Hungary: Boronka-melléki Protected Area); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Józán, 1995:104 (Hungary: projected Duna-Dráva National Park); Esenbekova and Kazenas, 2000:32 (southeastern Kazakhstan: 3 km northeast and 15 km southeast of Borandysu, 3 km south of Talgar); Ivanov and Ljubomirov, 2001:211 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia); K. Schmidt and Bitsch *in* Bitsch et al., 2001:258 (in Sphecid Fauna of Western Europe); Kazenas, 2002a:71 (geographic distribution, collecting localities in Kazakhstan), 2004b:103 (Kazakhstan: western Tien Shan), 2004d:31 (Kazakhstan: northern Caspian region); Ebrahimi, 2005:124 (in key to selected Iranian Sphecidae); Straka, 2005b:271 (Turkey: Adiyaman: Nemrut dag); Yildirim and Ljubomirov, 2005:1796 (Turkey: Balikesir: Ayvalik); Pulawski, 2007a:422 (in revision of African *Tachysphex*); Shorenko, 2007b:258 (Ukraine: Crimea: Feodosiya, Kerch); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia), 222 (does not occur in the area); Kazenas, 2008c:255 (Kazakhstan: village Koktum south of Lake Alakol'); Ljubomirov and Yildirim, 2008:212 (in catalog of Crabronidae of Turkey); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Rudoiskatel', 2010:152 (Russia: southern Ural Mountains); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Yildirim, 2012:80 (Turkey: Iğdır: Aralık); Kazenas, 2013b:495 (southeastern Kazakhstan: 30 km east of Chilik); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Ebrahimi, 2014:41 (Iran: Ghom and Khorāsān-e Razavi provinces); Kazenas, 2014a:134 (Kazakhstan: Karatau Mountain Range); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Shorenko, 2015:328 (in list of Sphecidae *sensu lato* of Crimea); Haris, 2016:15 (in list of species described by F. Kohl from Carpathian Basin); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:35 (Turkey: Erzurum: Oltu: Sarisaz); Antropov, 2017b:239 (in catalog of Crabroninae of Russia); Shorenko, 2017:78 (in Crimea collected in July); Maharramov, Aliyev, and Mammadov, 2018:455 (first record from Azerbaijan: Sharur: Akhura, and Shakhbuz: Kechili); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:269 (Iran: Fars: Dehno); Ben Khedher, Yildirim, and Braham, 2020b:316 (recorded from Tunisia by de Beaumont, 1947c without specific locality); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:74 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:228 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

*Tachysphex algirus* Kohl, 1892:215, ♀ (as *algira*, incorrect original termination). Holotype or syntypes: ♀, Algeria: Oran (NHMW). Synonymized with *Tachysphex mocsaryi* by Pulawski, 2007a:422. – Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Mercet, 1910b:165 (listed from Spain); nec de Beaumont, 1947c:664 (as *pygidialis* ssp. *algira* = *Tachysphex incertus kallipygus*); Ceballos, 1956:375 (in catalog of Hymenoptera of Spain). – **As *Tachysphex mocsaryi algirus***: Pulawski, 1971:315 (new

status, in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae).

*Tachysphex mocsaryi maroccanus* de Beaumont, 1947c:665, ♀, ♂ (as *maroccana*, incorrect original termination). Holotype: sex not stated, Morocco: Mogador area (BMNH). Synonymized with *Tachysphex mocsaryi algeris* by Pulawski, 1971:315. – de Beaumont, 1950f:405 (Algeria), 1955a:178 (Morocco).

### 260. *moczari* Tsuneki

*Tachysphex moczari* Tsuneki, 1972e:388, ♂. Holotype: ♂, Mongolia: Central Aymag: Tosgoni-ovoo north of Ulan Baator (TMB). – R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:412 (in key to Sphecidae of Russian Far East); T. Li, Q. Li, and Cai, 2008:142 (description of ♀, first record from China); Nemkov, 2008b:19 (in catalog of Crabronidae of Asiatic Russia), 2009b:79 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Antropov, 2017b:239 (in catalog of Crabroninae of Russia).

### 261. *modestus* Arnold

*Tachysphex modestus* Arnold, 1924:61, ♀, ♂. Lectotype: Zimbabwe: Bulawayo (SAM), designated by Pulawski, 2007a:426. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Gess, 1981:17 (South Africa; nesting in modified preexisting cavity), 54 (nesting in preexisting cavities is probably facultative); S. Gess and F. Gess, 2003:110 (South Africa: visiting flowers of *Maytenus linearis* (L. f.) Marais, Celastraceae, *Bergia gliomerata* L. f., Elatinaceae, and *Acacia karroo* Hayne, Fabaceae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:426 (in revision of African *Tachysphex*).

*Tachysphex punctiventris* Arnold, 1924:65, ♂. Holotype: ♀, Zimbabwe: Bulawayo or Filabusi (SAM). Synonymized with *Tachysphex modestus* by Pulawski, 2007a:426. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae), 1947:150 (description of ♀); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae).

*Tachysphex dicksoni* Arnold, 1962:849, ♀. Holotype: ♀, South Africa: Cape Province: Cape Town: Lions Head (SAM). Synonymized with *Tachysphex modestus* by Pulawski, 2007a:426. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae).

### 262. *mongolicus* Kohl

*Tachysphex mongolicus* Kohl, 1898b:99, ♀. Holotype: ♀, northern Mongolia: no specific locality (NHMW). – Pulawski, 1967a:403 (Turkey), 1971:84 (as new synonym of *Tachysphex nasalis*); Mokrousov and Proshchalykin, 2021a:324 (valid species, redescription, description of ♂, Russia: Tyva Republic).

*Tachysphex abditus* Kohl, 1898b:101, ♀. Holotype: ♀, northern Mongolia: no specific locality. Synonymized with *Tachysphex nasalis* by Pulawski, 1971:84, and with *Tachytes mongolicus* by Mokrousov and Proshchalykin, 2021a:324.

### 263. *montanus* (Cresson)

*Larrada montana* Cresson, 1865b:465, ♀. Lectotype: ♀, USA: Colorado: no specific locality (ANSP), designated by Cresson, 1916:96. – Cresson, 1876:208 (Colorado: Plains). – **As *Larra montana***: Patton, 1880b:389 (new generic assignment, in checklist of North American Larrini); Kohl, 1885a:246 (in checklist of world *Larra*); Cresson, 1887:277 (in catalog of North American Hymenoptera); Ashmead, 1890:33 (in checklist of Hymenoptera of Colorado). – **As *Tachysphex montanus***: W. Fox, 1894a:523 (new generic assignment, in revision of North American Larrinae); Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Horning and Barr, 1970:103

(USA: Idaho: Craters of the Moon National Monument); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Krombein, 1979b:1628 (in catalog of North American Hymenoptera); Pulawski, 1988a:25 (in revision of Nearctic *Tachysphex*); Ratzlaff, 2016:26 (Canada: British Columbia: from W. Fox, 1894a, Krombein, 1979 and Pulawski, 1988); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, first record from Saskatchewan: no specific locality).

*Tachysphex inusitatus* W. Fox, 1894a:524, ♂. Holotype: ♂, USA: Colorado: no specific locality (ANSP). Synonymized with *Tachysphex montanus* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:951. – Dalla Torre, 1897:680 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Cresson, 1928:45 (holotype in ANSP).

*Tachysphex compactus* W. Fox, 1894a:528, ♂. Holotype: ♂, Canada: British Columbia: Vancouver (ANSP). Synonymized with *Tachysphex montanus* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:951. – Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); nec Harrington, 1902:221 (= *Tachysphex pompiliformis*); Cresson, 1928:44 (holotype in ANSP). – **As *Hoplisis compactus* [sic]**: Ashmead, 1899:328 (new generic assignment, in checklist of North American Crabronidae).

*Tachysphex triquetrus* W. Fox, 1894a:528, ♀. Holotype: ♀, USA: Nevada: no specific locality (ANSP). Synonymized with *Tachysphex montanus* by Pulawski in Krombein, 1979b:1628. – Dalla Torre, 1897:686 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae, as *triquitrus*); Cresson, 1928:46 (holotype in ANSP); G. Bohart in Muesebeck, Krombein, and Townes, 1951:953 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae).

#### 264. *montivagus* Arnold

*Tachysphex georgii* race *montivagus* Arnold, 1944:26, ♀. Holotype: ♀, Lesotho: Mamathes (SAM). – **As *Tachysphex georgii montivagus***: R. Bohart and Menke, 1976:274 (new status, in checklist of world Sphecidae). – **As *Tachysphex montivagus***: Pulawski, 2007a:430 (full species status, in revision of African *Tachysphex*).

#### 265. *morawitzi* Pulawski

*Tachysphex morawitzi* Pulawski, 1971:86, ♀, ♂. Holotype: ♂, Tajikistan: Khrebet Petra Velikogo (ZIN). Paratypes: Tajikistan: Pamir and Kazakhstan: Tien Shan Mountains. – Kazenas, 1971:161 (in Kazakhstan found only in southeastern mountains, an endemic of Tien Shan Range), 1972b:162 (Kazakhstan); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Kazenas, 1978b:119, 134 (in key to Sphecidae of Kazakhstan and Central Asia); Islamov, 1986:527 (Uzbekistan: Tashkent Oblast'); Esenbekova and Kazenas, 2000:32 (southeastern Kazakhstan: 2 km S, 20 km W, and 15-20 km southwest of Alma Ata, 4-5 km south of Talgar); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:71 (geographic distribution, collecting localities in Kazakhstan); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Kazenas, 2004b:104 (Kazakhstan: western Tien Shan); Yildirim and Ljubomirov, 2005:1796 (first record from Turkey: Bayburt, Erzincan, and Erzurum provinces); Ljubomirov and Yildirim, 2008:212 (in catalog of Crabronidae of Turkey); Yildirim, 2012:80 (Turkey: Erzurum: Oltu: Sarisaz); Kazenas, 2013a:69 (color photograph of female, short information on geographic distribution and nesting habits), 2014a:135 (Kazakhstan: Karatau Mountain Range); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:35 (Turkey: Erzurum and Tunceli provinces); Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey), 2023:1687 (in checklist of Sphecidae sensu lato of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

**266. morosus (F. Smith)**

*Tachytes morosus* F. Smith, 1858b:18, ♀. Holotype or syntypes: Indonesia: Sulawesi: no specific locality (BMNH). – F. Smith, 1863b:135 (known from Sulawesi), 1871a:366 (in catalog of Oriental Aculeata); Maindron, 1879:179 (nesting habits); Dalla Torre, 1897:691 (in catalog of world Hymenoptera); Rudow, 1912:46 (description of nest). – **As *Tachysphex morosus***: R. Bohart and Menke, 1976:275 (new generic assignment, in checklist of world Sphecidae); Krombein and Pulawski, 1994:9 (nesting habits), 24 (in revision of Sri Lankan *Tachysphex*); Hua, 2006:282 (in list of Chinese insects, geographic distribution); Haneda, 2011:45 (Philippines: Palawan); Mokrousov and Gromenko, 2015:126 (Uzbekistan: near Uchkyzyl at 37°20'59"N 67°15'20"E); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution); Barthélémy and Guénard, 2025:17 (China: Hong Kong).

*Tachysphex tinctipennis* Cameron, 1904f:301, ♀. Holotype: ♀, India: Assam: Khasia Hills (OXUM). Synonymized with *Tachysphex morosus* by Pulawski in Krombein and Pulawski, 1994:24. – Ramakrishna Aiyar, 1916:551 (in catalog of Indian aculeates described after Bingham, 1897); Pulawski, 1975a:311 (interpretation of the species); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Tsuneki, 1977j:269 (Taiwan: Taihorinsho, Takao; as *Tachysphex nigricolor tinctipennis*, new status), 1983a:64 (Philippines; redescription; as full species), 68 (in key to *Tachysphex* of Philippines and Japan).

*Tachysphex lihyuetanus* Tsuneki, 1971h:15, ♂. Holotype: ♂, Taiwan: Nantou Prefecture: Lihyuetan (originally K. Tsuneki coll., now USNM). Synonymized with *Tachysphex tinctipennis* by Tsuneki, 1983a:64. – Tsuneki, 1971h:11 (in key to *Tachysphex* of Taiwan); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Porter, Stange, and Wang, 1999:9 (in checklist of Sphecidae of Taiwan).

**As *Tachysphex bengalensis***: Bingham, 1897:193 (in revision of Indian and Pakistani aculeates; India, Burma), corrected to *Tachysphex* sp. near *brevitarsis* by R. Turner, 1917e:198; F. Williams, 1928a:92 (Philippines, revision), corrected to *Tachysphex tinctipennis* by Pulawski, 1975a:311, and authors who followed F. Williams's interpretation: Krombein, 1949b:382 (in key to Micronesian Sphecidae), 393 (Mariana and Caroline Islands); Iwata and Yoshikawa, 1961:399 (Thailand); Tsuneki, 1963c:7 (Thailand; redescription); Iwata, 1964:369 (nesting habits in Thailand), 1965:107 (number of oocytes); Baltazar, 1966:329 (in catalog of Hymenoptera of Philippines); Tsuneki, 1967b:12 (in key to Larrinae of Taiwan), 49 (Taiwan; *japonicus* regarded as junior synonym), 1976b:54 (Philippines; as *bengalensis bengalensis*); Haneda, 1971b:30 (Taiwan); Paik, 1985:199 (in list of Sphecidae of Korea); Ohl and Linde, 2003:150 (number of ovarioles); Li and He, 2004:1100 (in hymenopterous fauna of Zhejiang Province, China); Terayama, 2020:17 (Micronesia: Palau).

**As *Tachysphex bituberculatus***: Weber, 1948:203 (introduced to Hawaii), corrected to *Tachysphex bengalensis* by Krombein, 1949b:393; Yoshimoto, 1960:331 (Hawaiian Islands: Oahu).

**ssp. titidzimaensis Tsuneki**

*Tachysphex tinctipennis titidzimaensis* Tsuneki, 1984a:4, ♀, ♂. Holotype: ♂, Ogasawara (= Bonin) Islands: Chichidzima: Mount Chuoh (originally K. Tsuneki coll., now Hyogo Mus.). – Tano, 1994a:5 (holotype in K. Tsuneki collection); Hashimoto and Nakanishi, 1997:19 (holotype transferred to Hyogo Mus.); Takahashi and Shimizu, 2001:13 (Japan: Ogasawara Islands: Chichi-Jima); Takahashi, 2010:19 (Japan: in list of Hymenoptera of Ogasawara = Bonin islands). – **As *Tachysphex morosus titidzimaensis***: Krombein and Pulawski, 1992:24 (new subspecific generic assignment); Takahashi, Shimizu, and Nambu, 2009:3 (Japan: Ogasawara Islands: Chichi-Jima).

**267. multifasciatus Pulawski**

*Tachysphex multifasciatus* Pulawski in Evans, Matthews and Pulawski, 1976:443, ♀, ♂. Holotype: ♂, Australia: Queensland: Mount Isa (ANIC). – Pulawski, 1977a:318 (in revision of Australian *Tachysphex*); Cardale, 1985:241 (in catalog of Australian Sphecidae).

**268. mundus W. Fox**

*Tachysphex exsectus* W. Fox, 1894a:526, ♀, ♂. Lectotype: ♀, USA: Montana: no specific locality (ANSP), designated by Cresson, 1928:44. Synonymized with *Tachysphex mundus* by Pulawski in Krombein, 1979b:1632. – Dalla Torre, 1897:679 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae, as *excatus*); G. Bohart in Muesebeck et al, 1951:951 (in catalog of North American Hymenoptera); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Hilchie, 1982:106 (prey of *Philanthus albopilosus*). – **As *Tachysphex mundus exsectus***: Elliott and Kurczewski, 1985:296 (prey).

*Tachysphex mundus* W. Fox, 1894a:531, ♀, ♂. Lectotype: ♀, USA: Illinois: no specific locality (ANSP), designated by Cresson, 1928:45. – Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); H. Smith, 1908:380 (in revision of Nebraskan Sphecidae); Stevens, 1917:422 (North Dakota: Bismarck); Mickel, 1918:424 (in catalog of Nebraskan Sphecidae); Robertson, 1928:121, 128, 135 (floral records); G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Krombein, 1979b:1632 (in catalog of North American Hymenoptera); Kurczewski, 1979:641 (nesting habits); Steiner, 1986:103 (references to papers on nesting habits); Pulawski, 1988a:169 (in revision of Nearctic *Tachysphex*); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Amarante, 2005a:10 (correction to his 2002 catalog); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Ratzlaff, 2016:26 (Canada: first record from British Columbia: Southern Interior), 36 (British Columbia: Osoyoos) Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Saskatchewan: no specific locality).

*Tachysphex johnsoni* Rohwer, 1911b:573, ♀. Holotype: ♀, USA: Colorado: Washington County: Cope (USNM). Synonymized with *Tachysphex aequalis* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:950, and with *Tachysphex mundus* by Pulawski in Krombein, 1979b:1632. – G. Bohart, 1951:950 (as synonym of *Tachysphex aequalis*).

**269. musciventris Pulawski**

*Tachysphex musciventris* Pulawski, 1982:33, ♀, ♂. Holotype: ♀, USA: California: San Diego County: Borrego (UCD). – S. Frommer, 1988:96 (California: Riverside County: Deep Canyon); Pulawski, 1988a:88 (in revision of Nearctic *Tachysphex*); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Kurczewski, Kurczewski, and Abela, 2015:243 (California: San Luis Obispo County: Montana de Oro State Park); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

**270. mycerinus de Beaumont**

*Tachysphex mycerinus* de Beaumont, 1940b:166, ♀, ♂. Holotype: ♀, Egypt: Cairo (Ministry of Agriculture of Egypt). – Honoré, 1942:297 (Egypt: Cairo, Massarah); de Beaumont, 1947a:166 (in new revision of *Tachysphex* of Egypt), 1955a:176 (Morocco); Pulawski, 1964:88 (Egypt: Dahshur, Ghiza, Maadi, Kom Osheim), 1971:297 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Roche, 1981:2 (in checklist of Sphecidae of United Arab Emirates); Pulawski, 2007a:432 (in revision of African *Tachysphex*); Roche, 2007a:80 (in checklist of Egyptian Crabronidae),

2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:355 (in new catalog of Sphecidae of Saudi Arabia); Straka and Schmid-Egger, 2017:437 (United Arab Emirates), 439 (color photograph); Ben Khedher, Yildirim, and Braham, 2020b:316 (Tunisia: new locality record from Kairouan Province); Gadallah, 2020b:52 (in list of aculeate wasps of Arabian Peninsula).

### 271. *mzingeli* Pulawski

*Tachysphex mzingeli* Pulawski, 2007a:435, ♀, ♂. Holotype: ♂, Zimbabwe, Bulawayo airport at 20°00'S 28°38'E (CAS). Paratypes: Botswana, Namibia, South Africa, Tanzania.

### 272. *namaqua* Pulawski

*Tachysphex namaqua* Pulawski, 2007a:437, ♀, ♂. Holotype: ♀, South Africa: Western Cape Province: Knersvlakte (SAM).

### 273. *naranhun* Tsuneki

*Tachysphex naranhun* Tsuneki, 1971m:29, ♂. Holotype: ♂, China: Nei Mongol: Apaka (originally K. Tsuneki coll., now USNM). – R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Nuhn and Menke, 1994:26 (holotype transferred to USNM).

### 274. *nasalis* F. Morawitz

*Tachysphex nasalis* F. Morawitz, 1893c:412, ♂. Holotype: ♂, Tajikistan: Yagnob River valley: Shakh-sara (ZIN). – Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Pulawski, 1971:84 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Kazenas, 1978b:119, 133 (in key to Sphecidae of Kazakhstan and Central Asia); Esenbekova and Kazenas, 2000:32 (southeastern Kazakhstan: no specific locality); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:71 (geographic distribution, collecting localities in Kazakhstan), 2008a:101 (southeastern Kazakhstan: near Sarkand in foothills of Dzhungarian Alatau); Ljubomirov and Yildirim, 2008:212 (in catalog of Crabronidae of Turkey); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey), 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

### 275. *nattereri* Kohl

*Tachysphex nattereri* Kohl, 1888a:144, ♀, ♂ (as *Nattereri*, incorrect original capitalization; ♂ = *Tachysphex palopterus*). Lectotype: ♀, "Sudan": no specific locality, but Egypt according to locality label, as reported by Moidl, 1933b:126, designated by Pulawski, 2007a:352. Synonymized with *Tachysphex incertus* by Pulawski, 2007a:352, but resurrected to full species status by Straka and Schmid-Egger, 2017:437. – Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Arnold, 1923a:175 (recorded from Africa but unknown to the author); Moidl, 1933b:126 (Morocco); Dollfuss, 1989:13 (lectotype in NHMW); Straka and Schmid-Egger, 2017:437 (United Arab Emirates), 441 (color photograph); Gadallah, 2020b:52 (in list of aculeate wasps of Arabian Peninsula). – As *Tachysphex pygidialis nattereri*: de Beaumont, 1947c:663 (new status, in revision of Egyptian *Tachysphex*); Pulawski, 1964:84 (Egypt: Abu Rawash, Dahshur, Ghiza, Kom Osheim, Luxor, Maadi). – As *Tachysphex incertus nattereri*: Pulawski, 1971:323 (new subspecific generic assignment, in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Roche, 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

### 276. *nefarius* Pulawski

*Tachysphex nefarius* Pulawski, 1977a:327, ♀. Holotype: ♀, Australia: Queensland: Biggenden (ANIC). – Cardale, 1985:241 (in catalog of Australian Sphecidae).

**277. nigerrimus (F. Smith)**

*Tachytes nigerrimus* F. Smith, 1856:302, ♀ (referring to White and Butler MS name *Larra nigerrima*). Holotype or syntypes: ♀, New Zealand: no specific locality (BMNH). – White and Butler, 1874:27 and plate 7 (here as *Astata nigerrima*); Hutton, 1881:102 (in catalog of New Zealand Hymenoptera); W.F. Kirby, 1881a:40 (in checklist of Hymenoptera of New Zealand), 1884b:69 (in checklist of Hymenoptera of New Zealand); Dalla Torre, 1897:692 (in catalog of world Hymenoptera); Hutton, 1904:98 (in list of New Zealand fauna); W. Schulz, 1906:212 (correction to Dalla Torre: F. Smith is the author of the name); Miller, 1955:35 (preys on cockroaches); Gourlay, 1964:49 (prey: *Cutilia truncata* Brunner von Wattenwyl, a cockroach). – **As *Tachysphex nigerrimus***: R. Turner, 1908:491 (new generic assignment); Gourlay, 1930:7 (preys upon *Cutilia truncata* Brunner von Wattenwyl, a blattid, now in *Calolampra*); Hudson, 1950:57 (preying on cockroaches); Valentine, 1967:1146 (...; as *nigerimms*); D. Miller, 1971:26 (...); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Ferro et al., 1977:20, 24 (common name in New Zealand: black cockroach hunter); Pulawski, 1977a:308 (New Zealand; in revision of Australian *Tachysphex*); Callan, 1979:34 (New Zealand; review of available information; prey: *Celatoblatta peninsularis* Johns, a cockroach); Miller, 1984:26 (...); Valentine and Walker, 1991:40 (in catalog of New Zealand Hymenoptera); Harris, 1994:28 (in Fauna of New Zealand, nest and prey).

*Tachytes sericops* F. Smith, 1856:302, "♀" = ♂. Holotype or syntypes: ♂, New Zealand: Auckland (BMNH). Synonymized with *Tachysphex nigerrimus* by Pulawski, 1975a:311. – Hutton, 1881:103 (in catalog of New Zealand Hymenoptera); W.F. Kirby, 1881a:40 (in checklist of Hymenoptera of New Zealand), 1884b:69 (in checklist of Hymenoptera of New Zealand); Cameron, 1898a:46 (New Zealand: Greymouth), 1901e:220 (known from New Zealand); Hutton, 1904:98 (in list of New Zealand fauna). – **As *Tachysphex sericops***: Kohl, 1885:401 (new generic assignment, in checklist of world *Tachytes*); Dalla Torre, 1897:694 (in catalog of world Hymenoptera).

*Tachytes depressus* de Saussure, 1867:69, ♀. Holotype or syntypes: ♀, New Zealand: no specific locality (NHMW). Synonymized with *Tachysphex nigerrimus* by Pulawski, 1975a:311. – Hutton, 1881:103 (in catalog of New Zealand Hymenoptera); W.F. Kirby, 1881a:40 (in checklist of Hymenoptera of New Zealand), 1884b:69 (in checklist of Hymenoptera of New Zealand); Cameron, 1898a:46 (New Zealand: Greymouth); Hutton, 1904:98 (in list of New Zealand fauna); Dollfuss, 1989:13 (holotype in NHMW). – **As *Tachysphex depressus***: Kohl, 1885:401 (new generic assignment, in checklist of world *Tachytes*); Dalla Torre, 1897:679 (in catalog of world Hymenoptera); Kirkaldy, 1910:131 (*depressus* is a species of *Tachysphex*).

*Tachytes helmsi* Cameron, 1888b:182, ♀ (as *Helmsi*, incorrect original capitalization). Holotype or syntypes: ♀, New Zealand: Greymouth (depository?). Synonymized with *Tachysphex nigerrimus* by Pulawski, 1975a:311. – Cameron, 1898:46 (New Zealand: Greymouth); Hutton, 1904:98 (in list of New Zealand fauna). – **As *Tachysphex helmsi***: Dalla Torre, 1897:680 (new generic assignment, in catalog of world Hymenoptera); Kirkaldy, 1910:131 (*helmsi* is a species of *Tachysphex*).

**278. nigricolor (Dalla Torre)**

*Larrada nigricans* F. Smith, 1873:192, sex not stated, junior primary homonym of *Larrada nigricans* Walker, 1871. Lectotype: ♀, Japan: Nagasaki (BMNH), designated by Pulawski, 1975a:310. – **As *Larra nigricans***: Kohl, 1885a:246 (new generic assignment, in checklist of world *Larra*), 260 (original description copied).

*Larra nigricolor* Dalla Torre, 1897:670. Substitute name for *Larrada nigricans* F. Smith, 1873. – **As *Tachysphex nigricolor***: Pulawski, 1975a:310 (new generic assignment, discussion of species identity); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Tsuneki, 1977c:22 (Taiwan); Kazenas, 1980e:89 (Russia: Primorskiy Krai; first record from Soviet Union; as *nigridor*); Tsuneki, 1982b:15 (known from Korea), 1982f:46 (Okinawa), 1982g:60 (known from the Ryukyu archipelago), 1983a:64-67 (comparison with *Tachysphex tinctipennis*, list of references), 68 (in key to *Tachysphex* of

Philippines and Japan), 1984a:4 (Ogasawara = Bonin Islands); Paik, 1985:199 (in list of Sphecidae of Korea); Nemkov, 1992b:245 (Russia: Far East: Khingan Nature Reserve); Takahashi 1993:3 (Japan: Hachijo-Jima Island); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:410 (in key to Sphecidae of Russian Far East); Porter, Stange, and Wang, 1999:9 (in checklist of Sphecidae of Taiwan); Yamane, Ikudome, and Terayama, 1999:517 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Takahashi and Shimizu, 2001:13 (Japan: Ogasawara Islands: Haha-Jima); Haneda, 2003:4 (Japan: Nagasaki Prefecture: Tsushima, as *nigricolor nigricolor*); Haneda and Tano, 2003:11 (Japan: Nagasaki Prefecture: Tsushima, as *nigricolor nigricolor*); Kurokawa, 2003:61 (Japan: city of Fukui: Egamichou, as *nigricolor nigricolor*); Tano, Kurokawa, Murota, and Nozaka, 2003:31 (Japan: Nagasaki Prefecture: Tsushima, as *nigricolor nigricolor*); Ohl and Linde, 2003:151 (number of ovarioles); Haneda, Nosaka, Tano, Kurokawa, and Murota, 2004:32 (Japan: Gifu Prefecture, as *nigricolor nigricolor*); Suda, 2004:40 (Japan: Yamanashi Prefecture, as *nigricolor nigricolor*); Haneda, Inoue, Nozaka, Tano, Kurokawa, H. Murota, and T. Murota, 2005:64 (Japan: Fukui Prefecture: Mount Monju, as *nigricolor nigricolor*); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2005:47 (Japan: Gifu Prefecture, as *nigricolor nigricolor*); Negoro, Haneda, and Tano, 2005:46 (Japan: Toyama Prefecture, as *nigricolor nigricolor*); Haneda, Nozaka, Tano, Kurokawa and Murota, 2006a:22 (Japan: Toyama Prefecture, as *nigricolor nigricolor*), 2006b:47 (Japan: Nagasaki Prefecture: Tsushima, as *nigricolor nigricolor*); Hua, 2006:282 (in list of Chinese insects, geographic distribution); Haneda, Nozaka, Tano, Kurokawa, H.Murota, and T. Murota, 2007:53 (Japan: Kagoshima Prefecture: Amami Oshima Islands); Nemkov, 2007b:70 (Russia: Kuril Islands: Island of Kunashir); Ohkusa, 2007:34 (Japan: central Honshu: Aichi Prefecture, as *nigricolor nigricolor*); Nemkov, 2008b:19 (in catalog of Crabronidae of Asiatic Russia); S. Tanaka, 2008:38 (Japan: Yamaguchi Prefecture, as *nigricolor nigricolor*); Nemkov, 2009b:79 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:237 (Russia: Primorskiy Kray: Lazovsky Nature Reserve); Takahashi, 2010:19 (Japan: in list of Hymenoptera of Ogasawara = Bonin islands); N. Yamamoto, 2011:12 (Japan: Kyūshū: mainland Nagasaki Prefecture, as *nigricolor nigricolor*); Nemkov, 2012c:438 (in catalog of Crabronidae of Russian Far East); J.-K. Kim, 2014:434 (in catalog of Sphecidae *sensu lato* of Korean Peninsula); Ohkusa, 2014a:31 (Japan: city of Toyota: Sizen-Kansatsu-no-Mori, as *nigricolor nigricolor*); Murao, 2015:40 (Japan: Kyushu: coast of northwestern Fukuoka Prefecture, as *nigricolor nigricolor*); Antropov, 2017b:239 (in catalog of Crabroninae of Russia).

*Tachysphex japonicus* Iwata, 1933c:47, ♀, ♂. Holotype: ♀, Japan: Honshu: Ikeda, Settsu (Entomol. Lab. Kyoto Imper. Univ.). Synonymized with *Tachysphex nigricolor* by Pulawski, 1975a:311. – Sibuya, 1933:51 (nesting habits); Tsuneki, 1948d:52 (nesting habits); Yasumatsu, 1950, Iconogr. Ins. Japonic.:1476 (Japan); Iwata, 1955:28 (egg size, number of oocytes); Miyamoto, 1959:33 (visiting flowers of *Gallium verum* L., Rubiaceae), 34 (visiting flowers of *Torilis anthriscus* Gmel., Apiaceae); Tsuneki, 1962a:4 (Japan: Ryukyu Islands: Island of Amami-Oshima); Tsuneki and Shimoyama, 1963:48 (Japan: Towada Prefecture); Tano, 1964:38 (Japan: Kyushu: Yakushima Island); Tsuneki, 1964l:63 (in key to Larrinae of Japan and Korea), 1966g:14 (Okinawa), 1967b:49 (*Tachysphex japonicus* is a synonym of *Tachysphex bengalensis*); Haneda, 1968a:43 (Japan); Itami, 1968a:15 (Japan: Yamagata Prefecture: foot of Mount Iide); Pulawski, 1971:162 (in revision of Palearctic *Tachysphex*). – **As *Tachysphex bengalensis japonicus***: Tsuneki, 1967b:52 (new status, redescription), 53 (new generic assignment); Haneda, 1968b:55 (Japan: Nagano Prefecture: Ina District); Nambu, 1968b:21 (Japan: Saitama Prefecture); Itami, 1969:48 (Japan: Niigata Prefecture); Tsuneki, 1969b:4 (nesting habits), 1969k:64 (Japan: Mount Hyonosen), 1971h:10 (in key to *Tachysphex* of Taiwan), 12 (Taiwan; geographic variation), 1971m:29 (China: Peking); Yamada, 1971:35 (Japan: Aichi Prefecture); Haneda, 1972a:4 (Taiwan); Nambu, 1972e:89 (Japan: Saitama Prefecture); Murota, 1973a:102 (Ryukyu Islands: Amami Oshima Islands), 1973b:118 (Taiwan); Nambu, 1973a:150 (Japan: Saitama Prefecture); Suda, 1973:121 (Japan:

Yamanashi Prefecture); Tsuneki, 1973a:7 (distribution in Ryukyu Islands;); Nambu, 1975b:62 (Japan: Saitama Prefecture); Steiner, 1986:102 (references to papers on nesting habits).

As *Tachysphex bengalensis*: Yasumatsu, 1940b:97 (Botel Tobago), corrected to *Tachysphex nigricolor* by Tsuneki, 1983a:67; Tsuneki, 1967b:12, 17 (in key to Larrinae of Taiwan), 49 (Taiwan), corrected to *Tachysphex japonicus* by Pulawski, 1971:162.

### **ssp. lanhsuensis Tsuneki**

*Tachysphex nigricolor lanhsuensis* Tsuneki, 1977c:6, ♀. Holotype: ♀: Taiwan: Island of Botel Tobago, now Lan-hsu: Hungtou (originally K. Tsuneki coll., now Hyogo Mus.). – Hashimoto and Nakanishi, 1997:19 (holotype transferred to Hyogo Mus.); Hua, 2006:282 (in list of Chinese insects, geographic distribution).

### **ssp. yaeyamanus Tsuneki**

*Tachysphex bengalensis yaeyamanus* Tsuneki, 1971h:20, ♀, ♂. Holotype: ♂, Ryukyu Islands: Ishigaki Island: Mount Banna (originally K. Tsuneki coll., now USNM). – Tano, 1972:24 (Japan: Ryukyu Islands, as *bengarensis yaeyamanus*); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae), 628 (the subspecies should be transferred to *Tachysphex tinctipennis*); Nuhn and Menke, 1994:26 (holotype transferred to USNM). – As *Tachysphex nigricolor yaeyamanus*: Tsuneki, 1982e:28 (new subspecific generic assignment, Ryukyu Islands: Iriomote Island), 1982f:47 (Ryukyu Islands: Ishigaki Island), 1982g:60 (known from the Ryukyu archipelago).

### **279. nigripennis (Spinola)**

*Tachytes nigripennis* Spinola, 1808:260, ♀. Holotype or syntypes: ♀, Italy: "prope Genuam" (lost: de Beaumont, 1952e:44). Neotype: Czech Republic: Bzenec-Přivoz (ZSBS), designated by Straka, 2016:89. Synonymized with *Tachysphex pompiliformis* by Pulawski, 1971:62. – Vander Linden, 1829:22 (bibliographic references, Italy: Genova); Dahlbom, 1843:126 (in revision of Sphecidae and Pompilidae), 1845:470 (in key to world *Tachytes*); F. Smith, 1856:296 (in catalog of Hymenoptera in British Museum); Ruthe and Stein, 1857:313 (Germany: Berlin area); Schenck, 1857:194 (in revision of fossorial wasps of Germany); A. Costa, 1858:19 (Italy: Campania: Monti Partenii in Benevento Region); Taschenberg, 1858:84 (in key to Sphecidae of Germany); Brischke, 1862:100 (Germany: Preussen Province, now Poland: Pomorze Region); A. Costa, 1863:65 (Italy: Calabria Ulteriore: Brancalione); Taschenberg, 1866:201 (in revision of Hymenoptera of Germany); nec A. Costa, 1867b:85 and 1867c:29 (= *Tachysphex coriaceus*); Kirchner, 1867:216 (in catalog of European Hymenoptera); Schenck, 1867a:356 (known from Germany); Dours, 1874:139 (in catalog of Hymenoptera of France); Brischke, 1888b:97 (Germany: Preussen Province, now Poland: Pomorze Region); Dalla Torre, 1897:692 (in catalog of world Hymenoptera); von Heyden, 1905:81 (Germany: Hessen: Frankfurt); de Beaumont, 1952e:44 (not found in M. Spinola collection, Torino). – As *Tachysphex nigripennis*: Kohl, 1883e:671 (new generic assignment, Switzerland), 1885a:353 and 355 (in key to Palearctic *Tachysphex*), 389 (in revision of Palearctic *Tachysphex*); Gasperini, 1887:16 (recorded from Dalmatia, now Croatia, by Kohl, 1885a); Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Fertton, 1901a:100 (prey), 1901b:680 (found in Marseille area, France, but not in Corsica); Antiga and Bofill, 1904:11 (in catalog of Catalonian Hymenoptera); Kubes, 1905:85 (Czech Republic: Kolín); W. Schulz, 1905b:45 (Algeria: no specific locality); Schmiedeknecht, 1907:233, 234 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Mercet, 1910b:165 (listed from Spain); Dittrich, 1911b:24 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); W. Schulz, 1911a:68 (Schenck's material of 1857:194 not found in Zool. Mus. Marburg Univ.); Birula, 1912:543 (Ukraine: Zhytomyr Oblast': Radomyshl'); Schirmer, 1912:167 (Germany: Berlin area); Torka, 1913:35 (Germany: Provinz Posen, now Poland: Poznań Region); O. Meyer, 1919:154 (Germany: Posen Province, now Poland: Poznań Region); A. Wagner, 1920:39 (Germany: Lower Elbe region, not found but can be expected); Hedicke,

1922:271 (Germany: Brandenburg: Gross Machnower Weinberg); Ferton, 1923:333 (known from continental France but not found in Corsica); Berland, 1925d:122 (in Sphecidae Fauna of France); Bischoff, 1925:301 (Latvia: Wezkukkul); Schmiedeknecht, 1930:694, 695 (in keys to Hymenoptera of North and Central Europe); Guiglia, 1932d:475 (Libya: Gialo); Balles, 1934:20 (Germany: Baden-Württemberg: Achern, Fautenbach, Gamshurst, Oberachern, Ortenberg); Giner Marí, 1934:133 (Spain); Grandi, 1934:129 (Italy: Toscana: Taviano); Guiglia, 1934b:304 (Libya: bibliography and summary of locality records); Bernard, 1935:65 (France: Var: Fréjus area); de Beaumont, 1936a:203 (in revision of French *Tachysphex*); Goebel, 1937:42 (Poland: Poznań District: Poznań-Dębina, Strzeszyn); Zavadil, Šusterka, and Bat'a, 1937:203 (in catalog of Sphecidae of Czechoslovakia); Koornneeff, 1939:130 (Netherlands: Rhenen, misspelled *nigricornis*, comparison with *Tachysphex pectinipes*.); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Paul, 1941:46 (Germany: Pommern: Stettin, now Poland: Województwo Zachodniopomorskie: Szczecin, and Mecklenburg-Vorpommern: Island of Hiddensee); Schneid, 1941:1045 (Germany: Bayern: Bamberg area); Balthasar, 1943:42 (Czech Republic: Moravia: Zlin area); Giner Marí, 1943a:142 (in Sphecidae Fauna of Spain); Šnoflák, 1944a:144 (Czech Republic: serpentine steppe near Mohelno); Zavadil in Zavadil and Šnoflák, 1948:151, 153 (in key to Sphecidae of Czechoslovakia); Ceballos, 1949:102 (Spain); de Andrade, 1949:15 (Portugal); Cavro, 1950:35 (France: Département du Nord); Benno, 1951b:15 (in checklist of Aculeates of Netherlands); Scobiola-Palade, 1951:274 (first record from Romania: Dumbrăveni and Sighișoara in Sibiu Region); Móczár, 1953:310 (Hungary); de Beaumont, 1954a:62 (Italy); Grandi, 1954:239 (Italy); Aerts, 1955:63 (Germany: Rheinland); Vogrin, 1955:37 (Yugoslavia); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); Bajári, 1957a:53, 55 (in key to Hungarian Sphecidae), 1957b:134 (first record from Hungary); Grandi, 1957:389 (Italy); Benno, 1958b:12 (in review of Dutch Sphecidae); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Diniz, 1959:29 (Portugal: nine localities); Wolf, 1959b:24 (Germany: Nassau); Diniz, 1964a:6 (Portugal: eleven localities); Tsuneki, 1964l:63 (in key to Larrini of Korea); Benno, 1967:36 (in checklist of Sphecidae of Netherlands); Gauss, 1967:554 (Germany: Baden-Württemberg); J. Heinrich, 1967:75 (Germany: Bayern: Kahl); Benedek, 1968:73 (Hungary, visiting flowers of *Angelica silvestris* L.), 1969a:83 (Hungary; marshy meadow); Suárez, 1969:31 (Spain: Almería Province; determination tentative); Zangheri, 1969:1704 (Italy: in catalog of flora and fauna of Romagna Region); Königsmann, 1971:107 (Spain: Gerona: Palamós); Schmidt, 1971b:35 (Germany: Rheinland-Pfalz: Gonsenheimer Wald); Balthasar, 1972:264 (in Sphecidae Fauna of Czechoslovakia); K. Schmidt, 1977/78:55 (is a variety of *Tachysphex pompiliformis*); Pádr in Šedivý, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Straka, 2016:89 (in revision of *Tachysphex pompiliformis* species group, as valid species); Kejval, Blažej, and Erhart, 2020:106 (western Czech Republic); Cross, Baldock, and Wood, 2021:45 (in catalog of Sphecidae *sensu lato* of Portugal, as *Tachysphex pompiliformis* form *nigripennis*); Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:101 (in commented list of Sphecidae *sensu lato* of Poland); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:228 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

### 280. *niloticus* Pulawski

*Tachysphex niloticus* Pulawski, 1964:90, ♀, ♂. Holotype: ♂, Egypt: Abu Rawash northwest of Cairo (originally W. Pulawski coll., now CAS). – Pulawski, 1971:348 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pulawski, 2007a:439 (in revision of African *Tachysphex*); Roche, 2007a:82 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

**281. nitidior de Beaumont**

*Tachysphex nitidus* variété C de Beaumont, 1936a:207 (in revision of French *Tachysphex*), 1936c:8 (specimen in coll. A. Costa, Napoli), corrected to *Tachysphex nitidior* by de Beaumont, 1953b:15.

*Tachysphex nitidior* de Beaumont, 1940:175, ♀, ♂. Syntypes: Egypt: Wadi Hoff near Cairo (originally A. Mochi coll., Cairo, now?), Ezbet el Nakhl (originally A. Alfieri coll., now?). – Honoré, 1943:55 (Egypt: Wadi Hoff); de Beaumont, 1947a:199 (in new revision of *Tachysphex* of Egypt), 1950d:20 (Egypt: Siwa oasis), 1953b:15 (*Tachysphex nitidus* forme C is synonym of *nitidior*), 1954a:59 (Italy), 1954e:91 (Italy); Grandi, 1954:239 (Italy); de Beaumont, 1955a:184 (Morocco); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Pulawski, 1958a:181 (Bulgaria: Aitos); de Beaumont, 1959a:28 (Italy); Suárez, 1959:58 (Spain: Almería Province); de Beaumont, 1960a:18 (Greece: Island of Rhodes), 1960b:239 (Libya), 1961c:50 (Greece: Island of Crete), 1962b:26 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:77 (in Sphecidae Fauna of Switzerland); Diniz, 1964a:6 (Portugal: Cascais, Évora, Lisboa, Rezende); de Beaumont, 1965a:50 (Greece); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nessebar); Heinrich, 1967:75 (Germany: Bayern: Kahl, Karlstadt, and Miltenberg; as *nitidor*); Pulawski, 1967a:405 (Turkey), 1971:167 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:276 (in Sphecidae Fauna of Czechoslovakia: can be expected in the country); Tsuneki, 1972e:393 (Mongolia); de Beaumont, Bytinski-Salz, and Pulawski, 1973:8 (Israel); Erlandsson, 1974:72 (Italy, Malta); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Kazenas, 1978b:122, 131 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Pagliano, 1980:127 (Italy: Piemonte); Gayubo, 1982a:103 (northern Spain: Sierra de Béjar), 1984b:85 (Spain: Salamanca Province), 1984c:365 (Portugal: El Algarve Province), 1986c:33 (Spain: Zamora Province); Gayubo and Sanza, 1986:46 (Spain: Burgos Province); Islamov, 1986:526 (Uzbekistan: Tashkent Oblast'); Gayubo, 1987a:113 (Spain: Ciudad Real Province); Gayubo and Mingo, 1988:80 (Spain); Gayubo, Asís, and Tormos, 1990a:18 (Spain); Pagliano, 1990:104 (in catalog of Italian Sphecidae); Dollfuss, 1991:106 (in key to Sphecidae of North and Central Europe); Schembri, 1991:180 (Malta); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Gayubo and Borsato, 1994:208 (Italy: Veneto); Tormos, Asís, and Gayubo, 1994:188, 205 (Spain: Albacete Province); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Schmidt and Schmid-Egger, 1997:29 (the only German record by J. Heinrich, 1967, and Pulawski, 1971, is questionable); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); K. Weber, 1998:151 (the only record from Germany is a misidentification of *obscuripennis*); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); Ljubomirov, 1999b:50 (Bulgaria: Mount Vitosha near Sofia); Blösch, 2000:229 (in Sphecidae Fauna of Germany); Esenbekova and Kazenas, 2000:32 (southeastern Kazakhstan: 10 km northwest and 45 km southwest of Chundzha, 5 km southwest of village Kazakhstan, 7-8 km south of Talgar); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Ivanov and Ljubomirov, 2001:212 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Kazenas, 2001:29 (in checklist of Sphecidae of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ohl et al., 2001:142 (recorded from Germany but not occurring there); K. Schmidt and Bitsch *in* Bitsch et al., 2001:259 (in Sphecidae Fauna of Western Europe); Kazenas, 2002a:72 (geographic distribution, collecting localities in Kazakhstan); Gayubo, Özbek, and Yıldırım, 2003:89 (Turkey: Erzurum: University campus; Kars: Sarıkamış; Tokat: Tokat); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:70 (Germany: occurrence in Bayern not con-

firmed); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Kazenas, 2004b:104 (Kazakhstan: western Tien Shan); Shkuratov, 2004a:77 (Ukraine: Lugansk; Russia: Rostov Oblast'), 2004b:166 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Jacobs, 2005a:451 (Bulgaria: Banya near Hissarya); Pagliano and Negrisolo, 2005:378 (in Sphecid Fauna of Italy); Straka, 2005b:260 (Turkey: Bitlis: Bitlis; Gaziantep: Gaziantep; Kayzeri: Develi); Yildirim and Ljubomirov, 2005:1797 (Turkey: Erzurum: Olur, Şenkaya, Tortum); Gorobchishin, 2006:109 (Ukraine: Kyiv: Park Druzhby Narodov); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Baños-Picón, Gayubo, Asís, and González, 2007a:256, 258 (Spain: Zamora: Cabañas de Aliste); Jacobs, 2007:96, 101 (in key to Crabronidae of Germany, not yet found in Germany); Kazenas, 2007a:91 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Pulawski, 2007a:441 (in revision of African *Tachysphex*); Roche, 2007a:75 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); G. Turrisi and R. Turrisi, 2007:120 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Yildirim and Ljubomirov, 2007:120 (Turkey: Erzurum: Oltu); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:213 (in catalog of Crabronidae of Turkey); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Józán, 2009:166 (Croatia: Krk, Sveti Nikola); Burguet *in* Durand and Burguet, 2010:52 (France Département d'Ardèche: Ardèche Gorges); Shorenko and Konovalov, 2010:23 (Ukraine: Crimea: Feodosiya); van der Smissen, 2010b:387 (France: Ardèche: Plateau de Coiron, Saint-Maurice-d'Ibie, Saint-Thomé, Valvignères); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Pagliano, 2011b:21 (Italy: Island of Lampedusa); Protsenko and Drozdovskaya, 2011:90 (Ukraine: Mikolaiv Oblast': Bugskiy Guard National Park); Schmid-Egger, 2011a:39 (France: Parc National du Mercantour: Fontan; and Italy: Parco delle Alpi Marittime: San Lorenzo); Bayındır, Gürbüz, Ljubomirov, and Pohl, 2013:146 (Turkey: Isparta: Kasnak Oak Forest Nature Reserve); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Kazenas, 2012b:169 (Kazakhstan: Korgalzhin State Nature Reserve); Prisiy, 2012:48 (Russia: Belgorod Oblast'); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Kazenas, 2013b:495 (45 km southwest and 10 km northwest of Chundzha); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park and Serras de Aire e Candeeiros Natural Park); Kazenas, 2014a:135 (Kazakhstan: Karatau Mountain Range); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:25 (Iran: Fars Province); Baldock, 2015:68 (Spain: Mallorca: Ca'n Picafort); Rezaei and Fallahzadeh, 2015:9 (Iran: Fars: Dasht e Arzhan at 29°38'N 51°58'E); Shorenko, 2015:328 (in list of Sphecidae *sensu lato* of Crimea); Mokrousov and Popov, 2016:580 (Russia: Krasnodarskiy Krai); Schmid-Egger, Dandria, and Xuereb, 2016:80 (in checklist of Crabronidae of Maltese Islands); Antropov, 2017b:239 (in catalog of Crabroninae of Russia); Shorenko, 2017:78 (in Crimea collected in July and August); Straka and Schmid-Egger, 2017:440 (United Arab Emirates), 441 (color photograph); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:629 (Iran: Hormozgan: Band e Molla at 27°25'N 57°09'E and Sar Kahnan at 27°24'N 57°07'E); Maharramov, Aliyev, and Mammadov, 2018:454 (Azerbaijan: Mingechevir); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Mokrousov, Proshchalykin,

Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:269 (Iran: Fars: three localities); Ben Khedher, Yildirim, and Braham, 2020b:317 (in Tunisia known from Bizerte, Gabès, and Jendouba); Gadallah, 2020b:52 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:70 (in catalog of *Tachysphex* of Iran); Turrisi, Altadonna, Lo Cascio, Nobile, and Selis, 2020:730 (Italy: Aeolian Archipelago: island of Vulcano); Cross, Baldock, and Wood, 2021:43 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:229 (in revision of Sphecidae *sensu lato* of Europe); Abu el-Ghiet, Gadallah, Gasib, Al-Fifi, and Edmardash, 2023:172 (Saudi Arabia: Farasan Island); Can and Saboori, 2023:81 (Turkey: parasitized by larvae of mite *Leptus rosellae* Haitlinger (Trombidiformes: Erythraeidae)); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Gadallah and Abu El-Ghiet, 2024:87 (Saudi Arabia: Jazan Province: Farasan); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution); Pytel-Huta and Franchuk, 2024:83 (Ukraine: Rivno Nature Reserve).

### 282. *nitidissimus* de Beaumont

As *Tachysphex* No. 11: de Beaumont, 1940b:176, corrected to *Tachysphex nitidissimus* by Pulawski, 1971:154.

As *Tachysphex* No. 14: de Beaumont, 1940b:177, corrected to *Tachysphex nitidissimus* by Pulawski, 1971:154.

*Tachysphex nitidissimus* de Beaumont, 1952c:192, ♀, ♂. Holotype: ♂, Algeria: Hoggar: Idjef Mèlène near Hirhafok (Lausanne). – de Beaumont, 1958b:62 (Algeria: Tassili des Ajjer); Pulawski, 1964:95 (Egypt: Maadi, Sinai Peninsula: Oasis Feiran); de Beaumont, 1965a:49 (Greece; diagnostic characters); Pulawski, 1967a:405 (Turkey), 1971:154 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:8 (Israel); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Kazenas, 1978b:121, 131 (in key to Sphecidae of Kazakhstan and Central Asia); Guichard, 1980:228 (Oman), 1991a:339 (Jordan); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Roche and Zalut, 1994:115 (Egypt: Sinai Peninsula); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:33 (southeastern Kazakhstan: 3 km northeast of Borandysu, 10 km northwest of Chundzha, near landing place Dubun' on Ili River); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia); K. Schmidt and Bitsch *in* Bitsch et al., 2001:259 (in Sphecid Fauna of Western Europe); Kazenas, 2002a:72 (geographic distribution, collecting localities in Kazakhstan); Gayubo, Özbek, and Yildirim, 2003:89 (Turkey: Erzurum: Tortum); Kazenas, 2004b:104 (Kazakhstan: western Tien Shan); Straka, 2005b:260 (Turkey: many localities); Yildirim and Ljubomirov, 2005:1797 (Turkey: Erzincan); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Pulawski, 2007a:446 (in revision of African *Tachysphex*); Roche, 2007a:75 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Ljubomirov and Yildirim, 2008:213 (in catalog of Crabronidae of Turkey); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Yildirim, 2012:80 (Turkey: Oltu); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharabawy, 2013:355 (in new catalog of Sphecidae of Saudi Arabia); Kazenas, 2013b:495 (southeastern Kazakhstan: 10 km northwest of Chundzha, 30 km east of Chilik, near landing place Dubun' on Ili River), 2014a:135 (Kazakhstan: Karatau Mountain Range); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:36 (Turkey: Erzurum: Oltu: Başaklı Mountain); Straka and Schmid-Egger, 2017:437 (United Arab Emirates), 442 (color photograph); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:30 (Iran: Hormozgan: Sar Kahnan at 27°24'N 57°07'E); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Gadallah,

2020b:52 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:71 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:230 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

*Tachysphex consocius mookonis* Tsuneki, 1972e:392, ♀. Holotype: ♀, Mongolia: Hovd Aymag: 45 km north-northeast of Somon Bulgan (TMB). Synonymized with *Tachysphex nitidissimus* by Pulawski *in* Krombein and Pulawski, 1994:28. – R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae).

### 283. *nitidus* (Spinola)

*Astata nitida* Spinola, 1805:17, sex not stated. Lectotype: ♀, Italy: Liguria: no specific locality (Torino), designated by de Beaumont, 1952e:43. – Spinola, 1806:18 (in revision of insects of Liguria, Italy). – **As *Tachytes nitidus***: Spinola, 1808:76 (new generic assignment); Vander Linden, 1829:26 (bibliographic references, Italy: Liguria, interpretation of species); Aurivillius, 1904:266 (in revision of Swedish Sphecidae); Jansson, 1922:24 (Sweden: Öland Island); Friese, 1926:162 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Roller, 1936:315 (Austria: loess cliffs at Bisamberg near Vienna). – **As *Larrada nitida***: F. Smith, 1856:275 (new generic assignment, in catalog of Hymenoptera in British Museum); Taschenberg, 1870:2 (Portugal); Dours, 1874:140 (in catalog of Hymenoptera of France); Girard, 1879:954 (example of *Larrada*). – **As *Larra nitida***: Casolari and Casolari Moreno, 1980:112 (new generic assignment, specimens in M. Spinola collection, Torino). – **As *Tachysphex nitidus***: Kohl, 1885a:350 (new generic assignment, in key to Palearctic *Tachysphex*), 372 (new generic assignment, in revision of Palearctic *Tachysphex*); Gasperini, 1887:15 (Dalmatia: Spalato, now Croatia: Split); Kohl and Handlirsch, 1889:278 (Turkmenistan: Tahta-Bazar); Alfken, 1893:120 (Germany: Friesian Islands: Juist Island); Kohl, 1893a:32 (Austria: Niederösterreich); F. Morawitz, 1893a:111 (Russia: Karelian Isthmus), 1893b:410 (Tajikistan: Turush-Darya Pass); Krieger, 1894:11 (Germany: Kingdom of Saxony); Schletterer, 1894:31 (Istria Peninsula, now part of Croatia, Slovenia, and Italy); Borries, 1897:67 (citation of Kohl, 1885:373); Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Mocsáry, 1897:77 (Kingdom of Hungary, some localities are in today's Croatia); Dominique, 1901a:506 (France: Loire-Inférieure, now Loire-Atlantique: Sainte-Marie-de-Pornic); de Cobelli, 1903:111 (Italy: Province of Trentino; Rovereto: Trento Levico); E. Saunders, 1904c:603 (Spain: Mayorca); W. Schulz, 1904b:102 (Austria); Kubes, 1905:85 (Czech Republic: Kolín); Mantero, 1905:73 (Italy: Toscana: Isola del Giglio); Mortimer, 1905:261 (Great Britain: Wales: Aberdovey); Ván-gel, 1905:166 (Hungary); Móczár and Henter, 1907:205 (Hungary: Tiszaalpár); Schmiedeknecht, 1907:231, 233 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Mercet, 1910b:165 (listed from Spain); Dittrich, 1911b:24 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Mantero, 1911:74 (Italy: Sardegna: Isola dell'Asinara); Schirmer, 1912:167 (Germany: Berlin area); Kohl, 1913b:15 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Alfken, 1914:281 (northwestern Germany); Dusmet, 1915:87 (Spain: Aragón); Storey, 1916:110 (Egypt: Faraskur, Maadi); O. Meyer, 1919:154 (Germany: Posen Province, now Poland: Poznań Region); Łoziński, 1920:121 (Poland: Kraków); Strand, 1920:14 (Germany: Mecklenburg-Vorpommern: Rostock); A. Wagner, 1920:39 (Germany: Lower Elbe region); Maidl, 1922:70 (Croatia); Alfken, 1924:425 (Germany: Memmert Island); Chevalier, 1924c:73 (nesting habits); Berland, 1925d:117 (in Sphecid Fauna of France); Bischoff, 1925:301 (Latvia: Wezkukkul; Poland: Garbacz near Białowieża); Coulon, 1925:121 (France: Evreux; Spain); Schütze, 1925:113 (Germany: Lausitz Region: Lömischau); K. Strohm, 1925:211 (Germany: Baden-Württemberg: Kaiserstuhl), 1926:74 (reference to Lauterborn, 1925); Bouwman, 1926:280 (in list of Sphecidae of Netherlands); Carpentier, Crèvecoeur,

and Maréchal, 1926:353 (Belgium: Loën); Hémon, 1926:199 (France: Finistère: Fouesnant); von Schulthess, 1926b:214 (Tunisia); Grandi, 1927:204 (nesting habits); Benoist, 1928:409 (France: Basses-Alpes: Barcelonnette); Berland, 1928b:177 (add Adlerz, 1916 to bibliography in Berland, 1925d); Bouwman, 1928b:26 (in revision of Sphecidae of Netherlands); van der Vecht, 1928:93 (Netherlands: Meijendel sand dunes); A. Müller, 1930:181 (Jaila in former Dubrudsha or Bessarabia, may be in Ukraine, Moldova, or Rumania); Schriedeknecht, 1930:693, 695 (in keys to Hymenoptera of North and Central Europe); Dusmet y Alonso, 1931:7 (Portugal: Évora); Grandi, 1931:57 (Italy: Toscana: Vallata delle Pozze near Le Mandriole); Pulkkinen, 1931:77 (in revision of Sphecidae of Finland); Bondroit, 1932:37 (Belgium: Solbosch); Bernard, 1933:62 (France: Drôme: Dieulefit); Masi, 1933:196 (Italy: Toscana: Isola di Capraia, as *nitidulus*); E. Nielsen, 1933:294 (summary of nesting habits); Giner Marí, 1934:133 (Spain); Guiglia, 1934b:304 (Libya: bibliography and summary of locality records); nec Gussakovskij, 1934a:10 (= *Tachysphex angustatus*); Jansson, 1934:290 (Sweden); Nadig, 1934:32 (France: Corse: Ajaccio, Bastia, Cap Corse); Bernard, 1935:64 (France: Var: Fréjus area); Forsius in Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); Gussakovskij, 1935:427 (Tajikistan: Kulab); Marchand and Dulac, 1935:61 (France: Saône-et-Loire: Saint Laurent d'Andenay); Richards, 1935a:163 (*Tachysphex unicolor* of British authors is synonymized with *nitidus* by continental authors); Vergne, 1935:118 (France: Auvergne: Ambert, Les Martres-d'Artières, Lezoux); Drogozewski, 1936:130 (Poland: Łowicz); Dulac, 1937:13 (France: Saône-et-Loire: Saint-Laurent d'Andenay); Richards, 1937b:104 (in checklist of British aculeates); Struve, 1937:150 (Germany: Island of Borkum); Zavadil, Šustera, and Bat'a, 1937:201 (in catalog of Sphecidae of Czechoslovakia); nec Gussakovskij, 1938:7 (= *Tachysphex tarsinus*); Móczár, 1938c:80 (Hungary: Kőszeg Hills); Molitor, 1938:445 (color recognition); Guichard, 1938:72 (Great Britain: Norfolk coast); A. Wagner, 1938a:122 (northwestern Germany); Móczár, 1939:4 (Hungary: Jászberény); de Graham, 1941:99 (Great Britain: Lincolnshire); Paul, 1941:46 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1044 (Germany: Bayern: Bamberg area); Alfken, 1942:231 (Germany: Niedersachsen: Lüneburger Heide); Audcent, 1942:25 (parasite: *Sphecapata conica* Fallén); Honoré, 1943:55 (Egypt: Lower Egypt, Fayum, actually Kom Osheim); Yasumatsu, 1942c:112 (China: Nei Mongol: Apaka at 44°N 114.96°E); Boyd, 1943:162 (Great Britain: eastern Dorset); Móczár, 1943a:58 (Hungary: Nagykovács, as *nitidulus*); Spooner, 1943:70 (Great Britain: Ilington near Dorchester); Bat'a, 1944b:91 (Czech Republic: Veselí); Šnoflák, 1944a:144 (Czech Republic: serpentine steppe near Mohelno); Móczár, 1947b:90 (Hungary: Siebenbürgen: Gyimesbükk, now Romania: Transylvania: Ghimeș-Făget); Balthasar, 1948:142 (Slovakia: Kovačov, Parkan); Zavadil in Zavadil and Šnoflák, 1948:149, 151 (in key to Sphecidae of Czechoslovakia); Chambers, 1949:223 (Great Britain: Bedfordshire); Cavro, 1950:35 (France: Département du Nord); Szulczewski, 1950:108 (Poland: Wielkopolski National Park 15 km south of Poznań); Benno, 1951b:15 (in checklist of Aculeates of Netherlands); Caruel, 1951:100 (France: Marne Department); Cleu, 1953:50 (France: Ardèche River basin); Nouvel and Ribaut, 1953:179 (France: Haute-Garonne: Saint-Béat); Hertzog, 1954:101 (France: Bouches-du-Rhône: Camargue); Macko and Noskiewicz, 1954:180 (Poland: Dolny Śląsk: Stolec at 50°35'N 16°53'E); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vogrin, 1955:37 (Yugoslavia); Bytinski-Salz, 1956:226 (Turkey: Ulu Dag); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); Bajári, 1957a:51 (in key to Hungarian Sphecidae); Zirngiebl, 1957:183 (Germany: Rheinland-Pfalz: Birkenheide, Landau, Leistadt); Benno, 1958b:11 (in review of Dutch Sphecidae); Nouvel and Ribaut, 1958:13 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Olberg, 1959:254-255 (photographs of prey carrying and nest closure); Noskiewicz and Puławski, 1960:124, 125 (in key to Polish Sphecidae); Erlandsson, 1963:66 (Denmark: Bornholm Island); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Fæster, 1965:192 (Denmark: Hansted Nature Reserve); Evans, 1968c:119 (discussion of larval descriptions by Grandi); Hoop,

1961:66 (Germany: Schleswig-Holstein: Reher Kratt); Valkeila, 1962b:66 (southwestern Finland); Hoop, 1963a:73 (Germany: Schleswig-Holstein: Reher Kratt); Myartseva, 1963b:58 (Turkmenistan: lower Murgab River); Babiy, 1964:114 (Austria: not found in Land Salzburg); de Beaumont, 1964c:76 (in Sphecid Fauna of Switzerland); Diniz, 1964a:6 (Portugal: fifteen localities); Valkeila, Brander, and Käpylä, 1964:75 (Finland: Southern Finland: Forssa); Bonelli, 1966c:218 (Italy: Trentino–Alto Adige: Piazzöl); Benno, 1967:36 (in checklist of Sphecidae of Netherlands); Gauss, 1967:554 (Germany: Baden-Württemberg); Hoop, 1967a:39 (Germany: Schleswig-Holstein: Lehmrade, Sarnekow); Benedek, 1969b:421 (Hungary: Csopak, collected in vicinity of aphid *Hyalopteritena pruni* (Geoffroy)); Bonelli, 1969b:168 (nesting habits); Lefeber, 1969c:233 (Netherlands: Sint Pietersberg = Montagne Saint Pierre); Romanova, 1969:134 (Russia: North Caucasus); Babiy, 1970:19 (Austria: Land Salzburg); Gauss and Perraudin, 1970:360 (Germany: Baden-Württemberg: Bodensee area); Hoop, 1970:60 (Germany: Schleswig-Holstein: Heidkate, Krusendorf, Pelzerhaken, Weißenhaus, Wendtorfer sluice); Leclercq, 1970c:map 32 (distribution in Belgium); Oehlke, 1970:713 (Democratic Germany); Valetta, 1971:46 (Malta); Balthasar, 1972:270 (in Sphecid Fauna of Czechoslovakia); Haeseler, 1972:155, 200 (Germany: Schleswig-Holstein; anthropogenic habitats); Simon Thomas, 1974:57 (Netherlands: Limburg: Tienray); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Eck, 1976:91 (Democratic Germany); Haeseler, 1976b:72 (Germany: Friesian Islands: Amrum Island); Lomholdt, 1976:250 (in Sphecid Fauna of Fennoscandia and Denmark); Simon Thomas and Wiering, 1976:109 (Netherlands: IJsselmeer Polders); Schmidt, 1977/78:55 (Germany: Rheinland-Pfalz: Mombacher Sand); Guichard, 1978:271 (Greece); Haeseler, 1978c:195 (Germany: Friesian Islands: Borkum Island); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Schwammbberger, 1978:417 (Germany: Württemberg); Lefeber, 1979:11 (in checklist of Sphecidae of Netherlands), 71 (Netherlands: distribution map); Schwammbberger, 1979:115 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Guichard, 1980:227 (Oman); Pagliano, 1980:128 (Italy: Lazio); Petit, 1980:43 (Luxemburg: Grevenmacher); Dollfuss and Ressler, 1981:322 (Austria: Niederösterreich: Scheibbs District); Haeseler, 1981:52 (Germany: Friesian Island: Amrum Island); Schmidt, 1981:183 (Germany: Baden-Württemberg); Axelsson, 1982:79 (Sweden); Silvestre de Sacy, 1982:4 (France: Côte-du-Nord: Paimpol area); Skibińska, 1982:123 (Poland: Warszawa area); Dollfuss, 1983b:10 (in catalog of Sphecidae of Austria); Józán, 1983:99 (Hungary); Lefeber, 1983a:84 (Netherlands: Waddendistrict: northern coast sand dunes); Riemann, 1983:85 (Germany: Bremen-Daverden area); Haack, Tschardtke, and Vidal, 1984:133 (Germany: Hamburg area); Janzon and Svensson, 1984:183 (Sweden: Öland Island); Veenendaal, 1984:19 (Netherlands: Amsterdam); Haeseler, 1985c:571 (Germany: Friesian Islands); Józán, 1985a:181 (Hungary), 1985b:57 (Hungary south of Lake Balaton), 78 (floral records), 83 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Westrich and Schmidt, 1985b:112 (Germany: endangered in Baden-Württemberg); Józán, 1986:370 (Hungary: Kiskunság National Park); Steiner, 1986:103 (references to papers on nesting habits); Vikberg, 1986:76 (Finland); Lomholdt, 1987:93 (Denmark: western Jutland: Skallingen Peninsula); Riemann, 1987b:44 (Germany: Niedersachsen: Nature Reserves Dünengebiet near Neumühlen and Voßberge); Schmidt and Westrich, 1987:364 (Germany: Mainz area); Chevin, 1988:15 (France: La Manche Department); Dollfuss, 1988:12, 24 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Haeseler, 1988:211 (Germany: Friesian Islands); Karsai, 1988:100 (Hungary: Kiskunság National Park); Nilsson, 1988:98 (Sweden); Kowalczyk, 1988b:65 (Poland: environs of Łódź); Riemann, 1988:223 (Germany: Bremen area); Wolf, 1988b:141 (Germany: Rheinland-Westfalen); Al-Houty, 1989:164 (Kuwait: Abdelli, Umm Al-Rumam, Jal Al-Zor); Jacobs, 1989:12 (Germany: Mecklenburg-Vorpommern); Józán, 1989:101 (Hungary: Tihany Nature Reserve); Pádr *in* Šedivý, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Scobiola-Palade, 1989:87 (Romania: delta of Danube); Skibińska, 1989b:291 (Poland: moist meadow in Warszawa area); Jacobs and Oehlke, 1990:127 (in key to *Tachysphex nitidus* and *unicolor*); Jacobs and

Oehlke, 1990:164 (new locality records from Democratic Germany); Kowalczyk, 1990:291 (Poland: Góry Świętokrzyskie); Pádr, 1990:74 (Czech Republic: Praha area); Pagliano, 1990:104 (in catalog of Italian Sphecidae); von der Heide and Witt, 1990:64 (Germany: Niedersachsen); Day, 1991:xix (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:106 (in key to Sphecidae of North and Central Europe); Jacobs, 1991:46 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Józán, 1991:603 (Hungary: Bátorliget Nature Reserve); Kowalczyk, 1991a:99, 102 (Poland: Łódź); Kuhlmann et al., 1991:92 (Germany: Senne Region); Negrisolo, 1991:318 (Italy: Gorizia and Trieste Provinces); Budrys, 1992:31 (in list of Sphecidae of Lithuania); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Józán, 1992a:229 (Hungary: Béda-Karapancsa Protected Area), 1992b:173 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Kuhlmann, 1993:76 (Germany: known from Westfalen); Luig, 1993:44 (Estonia); Józán, 1993:413 (Hungary: Bükk National Park); Negrisolo and Pagliano, 1993:94 (Italy: Sardegna); Wiśniowski, 1993a:97 (Poland: in checklist of Sphecidae of Białowieża Primeval Forest); Blagoveshchenskaya, 1994:87 (Russia: Ul'yanovsk Oblast'); Roche and Zalat, 1994:115 (Egypt: Sinai Peninsula); Theunert, 1994c:51 (Germany: summary of records from Niedersachsen and Bremen); Gorobchishin, 1995:17 (Ukraine: Kanev Nature Reserve); Józán, 1995:104 (Hungary: projected Duna-Dráva National Park); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Scharrer, 1995:24 (Germany: Bayern: Kahl); Schmid-Egger, Risch, and Niehuis, 1995:211 (Germany: summary of records from Rheinland-Pfalz Province); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Jakubzik, 1996:253 (Germany: Köln); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Schmid-Egger, Schmidt, and Doczkal, 1996:378 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Witt, 1996:106 (Germany: Brandenburg), 111 (locality records); Woydak, 1996:38 (Germany: Westfalen: summary of distribution and nesting habits); Al-Houty, 1997:161 (Kuwait: no specific locality); Celary, 1997:58 (in checklist of Animals of Poland); Hinrichsen and Saure, 1997:32 (recognition characters); Petit, 1997:351 (Belgium: Liège Province: Lanaye: colonization of new habitat); Schmidt and Schmid-Egger, 1997:30 (in checklist of German Sphecidae); Shlyakhtenok, Blinov, and Belyavskaya, 1997:152 (Belorussia: Pripyatskiy National Park); Stuke, 1997:86 (Germany: Niedersachsen: Lüneburger Heide Nature Reserve); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg), 35 (endangered); Dollfuss, Gusenleitner, and Bregant, 1998:515 (Austria: summary of locality records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km west-southwest of Hamburg); Flügel, 1998:61 (Germany: Brandenburg: Unteres Odertal National Park); Józán, 1998:311 (Hungary: Duna-Dráva National Park); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); Morgan, 1998:18 (Great Britain: Wales: Carmarthenshire County); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Petit, 1998b:260 (Belgium: Liège Province: Bassenge, Lanaye); van der Smissen, 1998:69 (Germany: Mecklenburg-Vorpommern, Niedersachsen, Schleswig-Holstein); K. Weber, 1998:149 (Germany: Bayern: Bamberg area); Archer, 1999a:9 (Great Britain: Lancashire); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); Kuhlmann, Wolf, and Woydak, 1999:569 (Germany: strongly endangered in Nordrhein-Westfalen Stat); Pauly, 1999:109 (in catalog of Belgian aculeates); Wickl, 1999a:108 (Germany: Bayern: Oberpfalz area); Blösch, 2000:229 (in Sphecidae Fauna of Germany); Dressler, 2000:34 (Germany: Hessen: Darmstadt area); Jacobs, 2000:12 (Germany: Land Mecklenburg-Vorpommern: not endangered); Józán, 2000:107 (Hungary: Bakony Mountains); Mokrousov, 2000b:30 (Russia: Nizhniy Novgorod Oblast'); Vicidomini, 2000b:28 (Italy: previously recorded from Campania); Archer, 2001d:109 (Great Britain: Lincolnshire: Kirkby Moor 7.5 km south of Horncastle); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia); Ohl et al., 2001:142 (distribution in Germany by provinces); K. Schmidt and Bitsch *in* Bitsch et al., 2001:261 (in Sphecidae Fauna of Western Europe);

Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); Szczepko and Kowalczyk, 2001:188 (Poland: Kampinos National Park near Warszawa); van der Smissen, 2001:63 (Germany: Schleswig-Holstein: not endangered); Zettel, Gross, and Mazzucco, 2001:72 (Austria: Wien); Archer, 2002b:111 (Great Britain: Watsonian Yorkshire: distribution map); Archer and Edwards, 2002:102 (Great Britain: West Sussex: Ambersham and Iping commons); Bieri, 2002:79 (Liechtenstein, as *nitidulus*); Józan, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:72 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:153 (Poland: Kampinos National Park near Warszawa); Mokrousov, 2002:148 (Russia: Nizhniy Novgorod Oblast': Kerzhenskiy Nature Reserve); Shkuratov, 2002b:141 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Söderman and Vikberg, 2002:51 (in list of Aculeata of Finland); Vischer, 2002:289 (Germany: Sachsen-Anhalt: vineyards in Saale-Unstrut area); Bergsten, Ekerholm, Hellquist, Hilszczanski, Nilsson, Pettersson, and Werner, 2003:71 (Sweden: Västerbotten: Romelsön island); Esser and Jakubzik, 2003:291 (Germany: Nordrhein-Westfalen: Niederrheinisches Tiefland); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Gorobchishin, 2003:48 (Ukraine: Kiev: botanical garden); Haeseler, 2003:340 (Germany: Niedersachsen: Harriersand Island near Bremen); Józan, 2003:227 (Hungary: Látrányi Pusztá Nature Conservation Area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:70 (Germany: in catalog of wasps and bees of Bayern); von der Heide and Metscher, 2003:103 (Germany: Niedersachsen: Emsland area); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: endangered); Abenius, 2004:40 (Sweden: Norrbottens: Luleå area); Archer, 2004h:44 (Great Britain: Watsonian West Norfolk: Roydon Common); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:264 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Klein and Lefebvre *in* Peeters, van Achterberg, et al., 2004:424 (in Wasp and Ant Fauna of Netherlands); Nazarova, 2004:106 (Tajikistan: Badakhshan Region: villages Langar and Sebzor in Shakh dara River valley); Raemakers, van den Eijnde, and Kleukers, 2004:292 (Netherlands: Tungelerwalle near Weert); Shkuratov, 2004a:77 (Russia: Rostov Oblast'); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:357 (in catalog of Polish Crabronidae); Stolle et al., 2004:373 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Szczepko and Kowalczyk, 2004:126 (Poland: Kampinos National Park near Warszawa); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:44 and 60 (in checklist of Polish Sphecidae); G. Allen, 2005b:14 (Great Britain: Surrey County: Bisley Ranges); Bergsten, Ekerholm, Gabrielsson, Hellquist, Petersson, Werner, Ström, Chauvet, and Dalecky, 2005:16 (Sweden: Västerbotten: Bjuröklubbs Nature Reserve); Burger, 2005:35 (Germany: Thüringen); Haeseler, 2005:629 (Germany: Niedersachsen: Steller Heide near Bremen); Hallin, 2005:16 (Sweden: Örebro County: Hällefors); Kowalczyk and Kurzac, 2005:106 (Poland: Botanical Garden in Łódź); Kraatz, 2005:103 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Pagliano and Negrisolò, 2005:379 (in Sphecid Fauna of Italy); Reder, 2005:954 (Germany: Rheinland-Pfalz: Eisenberg, Monsheim); Riemann and Hohmann, 2005:566 (Germany: Niedersachsen: city of Bremen and adjacent area); Robinson, 2005:34 (Great Britain: Cumbria County); Saure, 2005:19 (Germany: Berlin); Shorenko, 2005a:164 (Ukraine: Crimea); Straka, 2005a:399 (critically endangered in Czech Republic); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Venne and Bleidorn, 2005:44 (Germany: Nordrhein-Westfalen: Moosheide Nature Reserve); Gorobchishin, 2006:108 (Ukraine: Cherkasy Oblast': Kanev Nature Reserve); Liebig, 2006:40 (Germany: Sachsen: Muskauer Heide); Liška, 2006:89 (Slovakia: Váh river valley near Trenčín); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Archer, 2007a:151 (Great Britain: Norfolk: Thetford Warren Lodge), 2007d:152 (Great Britain: Watsonian Yorkshire); Dvořák, Straka, Smetana, Halada, Vepřek, and Karas, 2007:169 (Czech Republic: Vyšenské Kopce National Nature Reserve); Herrmann, 2007a:53 (Germany: Niedersachsen: Ostfriesland); Józan, 2007:179 (Hungary: Zselic hills); Jacobs,

2007:97, 100 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:26 (Germany: northwestern Sachsen); Kowalczyk and Nadolski, 2007:284 (Łódź: railway areas); Pulawski, 2007a:449 (in revision of African *Tachysphex*); Saure, 2007:83 (in checklist of Aculeata of Land Brandenburg, Germany); Vago, 2007:175 (France: département de Pas-de-Calais); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Bohemia and Moravia), 222 (Bohemia: Srní near Česká Lipa, Moravia: Bzenec); Archer, 2008a:144 (Great Britain: Cumbria: North Walney Nature Reserve and Sandscale Haws); Danilov and Tshernyshev, 2008:43 (Russia: Novosibirsk Oblast': Karasuk area); Haeseler, 2008:309 (Germany: Friesian Islands); Ljubomirov, 2008:256 (Canary Islands: locality records from La Palma); Ljubomirov and Yildirim, 2008:214 (in catalog of Crabronidae of Turkey); Theunert, 2008:84 (Germany: map of distribution in Niedersachsen and Bremen); Debuyser and Vago, 2009:4 (in list of Sphecidae *sensu lato* of northern France); U. Frommer, 2009a:29 (Germany: in checklist of Sphecidae of Hessen); Kowalczyk, Kurzac, and Nadolski, 2009:63 (Poland: between Warta and Widawka rivers); Livory, Chevin, Lair, Sagot, and Baldock, 2009:27 (France: Département de la Manche); Ødegaard, Sverdrup-Thygeson, Hansen, Hanssen, and Öberg, 2009:72 (Norway: locality records); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Szczepko and Wiśniowski, 2009:71 (Poland: Spała Landscape Park); Ermilov and Mokrousov, 2010:90 (phoretic mites in Middle Volga Region of Russia: undetermined Acaridae); Esser, Fuhrmann, and Venne, 2010:38 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:29 (Germany: Bayern: Sulz- and Ottmaringer Tal); Howe, Knight, and Clee, 2010:100 (United Kingdom: occurring on coastal sand dunes); Mokrousov, 2010a:62 (Russia: Ivanovo, Kirov, Nizhny Novgorod, and Vladimir Oblast's: no specific localities); Saure, 2010a:88 (Germany: Berlin-Reinickendorf: Baumberge); Schmid-Egger, 2010a:19 (in red list of Aculeata of Germany: rare), 2010c:73 (Germany: not endangered); Shorenko and Konovalov, 2010:23 (Ukraine: Khar'kov Oblast': village Skripai; Lugansk Oblast': village D'yakovo); Tüzün and Yüksel, 2010:4471 (Turkey: Niğde Province); van der Smissen, 2010a:353 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records); Baghirov, 2011b:148 (Russia: recorded from Altayskiy Kray by Danilov, 2008); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Saure, 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg); Theunert, 2011a:21 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:65 (Germany: Hessen: strongly endangered); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); Standfuss and Standfuss, 2012:427 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Yildirim, 2012:80 (Turkey: Erzurum: Oltu); Lohez and Vago, 2013:21 (France: Pas-de-Calais: Mont Saint-Frieux); Pankov, 2013:230 (Russia: Ivanovo Oblast'); Saure, 2013:22 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:26 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:166 (in annotated catalog of aculeate wasps of Belorussia); Wiśniowski and Szczepko, 2013:51 (Poland: Kampinos National Park near Warszawa); Baldock, 2014:356 (Spain: Island of Mallorca); Bitsch, 2014:403 (record from France by Vago, 2007 noted); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Archer, 2015:202 (Great Britain: English coastal sand dunes); P. Rosa and Pagliano, 2015:105 (Italy: Lombardia and Piemonte: Parco del Ticino); Shorenko, 2015:328 (in list of Sphecidae *sensu lato* of Crimea); Voigt, 2015:69, 70 (Germany: Schleswig-Holstein: Sorgwohld area); Else, Bolton, and Broad, 2016:29 (in checklist of Aculeata of Great Britain and Ireland: England, Wales, Isle of Man); Mokrousov and Popov, 2016:580 (Russia: Krasnodarskiy Kray); Reemer and Peeters, 2016:10 (Netherlands: Hulshorsterzand); Schmid-Egger, Dandria, and Xuereb, 2016:80 (in checklist of Crabronidae of Maltese Islands); U. Sörensen, 2016:427 (Germany: Schleswig-Holstein: der Ochsenweg south of Leck); Stolle and Saure, 2016:925 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Wiśniowski, 2016:130 (Poland: Ojców National Park); Yildirim, Ljubomirov, Özbek, and Yüksel,

2016:36 (Turkey: Tunceli: Pülümür: Sağlamtaş); Antropov, 2017b:239 (in catalog of Crabroninae of Russia); Gülmez and Can, 2017:82 (Turkey: Erzincan Province); Shorenko, 2017:78 (in Crimea collected in August); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:7 (Poland: Janikowo: nesting in postindustrial soda ash dumping sites); Franken and Berg, 2018:67 (Netherlands: North Holland: sand dunes); Maharramov, Aliyev, and Mammadov, 2018:454 (first record from Azerbaijan: Sharrur); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Olszewski and Kowalczyk, 2019:111 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:269 (first record from Iran: Fars: Kherameh: Dodej); Ben Khedher, Yildirim, and Braham, 2020b:317 (in Tunisia known from several localities); Gadallah, 2020b:53 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:71 (in catalog of *Tachysphex* of Iran); Saure, 2020:277 (Germany: Sachsen-Anhalt: sand dunes); Shorenko, 2020:52 (Crimea: Karadag Nature Reserve); Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:101 (in commented list of Sphecidae *sensu lato* of Poland); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:230 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution); Frommer and Klenke, 2025:165 (Germany: Hessen: Lahntal near Weilburg); Kochetkov and Korsun, 2025:10 (Russia: Zabaikalskiy Kray: Dauriski Nature Reserve).

*Tachytes ibericus* de Saussure, 1867:68, ♀. Holotype or syntypes: ♀, Gibraltar (NHMW). Synonymized with *Tachysphex nitidus* by Kohl, 1885:372. – Kazenas, 1978b:121, 122, 132 (in key to Sphecidae of Kazakhstan and Central Asia). – **As *Tachysphex nitidus ibericus***: Pulawski, 1972:817 (new status); de Beaumont, Bytinski-Salz, and Pulawski, 1973:8 (Israel); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Báez and Ortega, 1978:192 (Canary Islands); Wolf, 1980:73 (Canary Islands); Hohmann, La Roche, Ortega, and Barquín, 1993:234 (detailed locality records from Canary Islands); K. Schmidt and Bitsch *in* Bitsch et al., 2001:262 (in Sphecidae Fauna of Western Europe); Roche, 2007a:75 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Cross, Baldock, and Wood, 2021:43 (in catalog of Sphecidae *sensu lato* of Portugal).

Nec *Tachysphex nitidus* of following authors (= *Tachysphex unicolor*): Sickmann, 1893:84; Antiga and Bofill, 1904:10; Morice, 1911:102; Birula, 1912:543; Dubois, 1921:208, 209; Lauterborn, 1925:355; Carpentier, Crèvecoeur and Maréchal, 1926:353; Grandi, 1928a:21, 1928d:300; Giordani Soika, 1932a:22; Guiglia, 1932d:474; Bischoff, 1933:4; Nadig, 1933:79; Giner Marí, 1934:133; Grandi, 1935a:110; Crèvecoeur and Maréchal, 1936:252; de Beaumont, 1936a:205 and 206 (*Tachysphex nitidus* variété A), 1936c:8, 1940b:175; Goebel, 1937:42; Guiglia, 1941c:166; Leclercq, 1941b:12; Guiglia, 1942:60; Giner Marí, 1943a:136; Giordani Soika, 1944:9; Guiglia, 1944b:25; de Beaumont, 1947a:197; Guiglia, 1948c:201; de Andrade, 1949:14; de Beaumont, 1950f:404, 1951h:33, 1953b:15; Móczár, 1953:310; Bischoff and Stadler, 1954:126; de Beaumont, 1954a:58, 1954e:91; Grandi, 1954:239; Aerts, 1955:63; de Beaumont, 1955a:183; Steiner, 1955:138; Bytinski-Salz, 1956:226; de Beaumont, 1956a:199; Grandi, 1957:389; Pulawski, 1958a:181; Compte Sart, 1959:133; de Beaumont, 1959a:28; Suárez, 1959:57; Wolf, 1959b:24; de Beaumont, 1960b:239, 1962b:26; Erlandsson, 1963:66; Richards, 1964:25; Fæster, 1965:192; B. Klug, 1965:132; de Beaumont, 1966:212; Scobiola-Palade, 1966b:392; J. Heinrich, 1967:75; Niedl and Deneš, 1967:81; Pulawski, 1967a:405; Scobiola-Palade, 1967b:42; de Beaumont, 1968a:262; Scobiola-Palade, 1968b:142, 1968c:384; Benedek, 1969a:84 (Hungary; marshy meadow); Dathe, 1969:439; de Beaumont, 1970a:401; Leclercq, 1970; Grandi, 1971:202, 503; Königsmann, 1971:107; Pulawski, 1971:139; Schmidt, 1971b:36; Tsuneki, 1971m:31; Wolf, 1971:374; Scobiola-Palade, 1972:150; Tsuneki, 1972e:392; Simon Thomas, 1972:182; de Beaumont, Bytinski-Salz, and Pulawski, 1973:8; Wolf, 1973:41; Erlandsson, 1974:72; Scobiola-Palade, 1974:145; Simon Thomas,

1976:5; Kolesnikov, 1977:318; Báez and Ortega, 1978:192; Kazenas, 1978b:121, 132; Marion, 1978:88; Schembri, 1991:180.

As *Larra unicolor*: Dahlbom, 1832:55, corrected to *Tachysphex ibericus borealis*, now *Tachysphex nitius*, by Pulawski, 1971:148; Peets, 1909-1911:68 (*Larra unicolor* of Panzer = *Tachysphex nitidus*); Casolari and Casolari Moreno, 1980:112 (specimens in M. Spinola collection, Torino), present correction.

As *Tachytes unicolor* (corrected to *Tachysphex ibericus borealis*, now *Tachysphex nitius*, by Pulawski, 1971:148 if not stated otherwise): Shuckard, 1837a:90 (in revision of British Aculeata); F. Smith, 1849b:2550 (preying on grasshoppers); Wissmann, 1849:12 (Germany: Kingdom of Hannover: Hedemünden and Münden); Wesmael, 1952:84 (Belgium, correction to Dahlbom's description); F. Smith, 1856:297 (in catalog of Hymenoptera in British Museum), 1857a:34 (Great Britain); Schenck, 1861:143 (Germany: Hessen: Weiburg); Brischke, 1862:100 (Germany: Preussen Province, now Poland: Pomorze Region); Taschenberg, 1866:201 (in revision of Hymenoptera of Germany), 1870:12 (Germany: Halle); Thomson, 1870:242 (in revision of Swedish wasps), 1874:220 (in revision of Hymenoptera of Scandinavia), present correction based on geographic distribution; E. Saunders, 1880:250 (in revision of British Aculeata); Sickmann, 1883:86 (Germany: Niedersachsen: Wellingholthausen), present correction based on geographic distribution; E. Saunders, 1896:80 (in revision of British Aculeata); Nevinson, 1900:62 (Great Britain: Wales: Criccieth, Towyn), present correction based on geographic distribution; Carr, 1901:15 (Great Britain: Lincolnshire: Skegness); Thornley, 1901b:63 (Great Britain: Lincolnshire: Skegness); R. Bradley, 1902:267 (Great Britain: North Wales); E. Saunders, 1902b:143 (Great Britain: Island of Jersey), 1907a:67 (Great Britain: Porthcawl); Morley, 1909:304 (Great Britain: Isle of Wight); Hallett, 1912:94 (Great Britain: Glamorgan County), present correction based on geographic distribution. – **As *Tachysphex unicolor***: Morice, 1900c:210 (new generic assignment, Great Britain: Surrey: Cobham); E. Saunders, 1903b:17 (Great Britain: North Wales); Adlerz, 1904:44 (nesting habits); Luff, 1907:39 (Great Britain: Island of Guernsey); Hallett, 1915:55 (Great Britain: Horton, Henfig, and Oxwich Bay); Bouwman, 1916:205 (nesting habits); Hallett, 1916:221 (Great Britain: South Wales: Porthcawl), present correction based on geographic distribution; R. Perkins, 1925:154 (Great Britain: Somersetshire: Burnham), present correction based on geographic distribution; Spooner, 1934:278 (Great Britain: Devon: Braunton Burrows), present correction based on geographic distribution; Hallett, 1939:17 (Great Britain: Wales: no specific locality), present correction based on geographic distribution; Richards, 1979:397 (British Channel Islands); Casolari and Casolari Moreno, 1980:112 (specimens in M. Spinola collection, Torino), present correction.

As *Tachysphex filicornis*: Heldmann, 1953:112 (Germany: Hessen: Eberstädter Düne near Darmstadt), corrected to *Tachysphex nitidus* by Schmidt, 1969:164.

*Tachysphex ibericus borealis* Pulawski, 1971:148, ♀, ♂. Holotype: ♀, Netherlands: Norwijk a. Z. (RMNH). Synonymized with *Tachysphex nitidus* by Pulawski, 1972:817. – Lomholdt, 1972:122 (Denmark: Læsø Island); Oehlke, 1972:136 (Germany: Hiddensee Island); Oehlke and Wudowenz, 1974:421 (paratypes in DEI); Lomholdt, 1975b:31 (Denmark: Anholt Island).

As *Tachysphex* sp. aff. *nitidus*: de Beaumont, 1968a:263 (Canary Islands: Fuertaventura), corrected to *Tachysphex ibericus* by Pulawski, 1971:147.

#### **284. *noar* Pulawski**

*Tachysphex noar* Pulawski in Krombein and Pulawski, 1994:68, ♀, ♂. Holotype: ♀, Sri Lanka: Mannar District: 0.8 km northeast of Kokmotte in Wilpattu National Park (USNM).

#### **285. *nobilis* Straka**

*Tachysphex nobilis* Straka, 2016:92, ♀, ♂. Holotype: ♀, Hungary: near Örkeny (ZSBS). – Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:101

(in commented list of Sphecidae *sensu lato* of Poland); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:231 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

### 286. *nonakai* Tsuneki

*Tachysphex nonakai* Tsuneki, 1971m:23, ♀. Holotype: ♀, China: Inner Mongolia: Apaka (originally K. Tsuneki coll., now USNM). – R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Hua, 2006:283 (in list of Chinese insects, geographic distribution).

### 287. *notogoniaeformis* Nadig

*Tachysphex notogoniaeformis* Nadig, 1933:80, ♂. Holotype: ♂, Morocco: Tizi n'Tichka (originally coll. Nadig, now Zurich). – de Beaumont, 1947c:662 (redescription), 1950f:405 (Algeria), 1955a:178 (description of ♀, Morocco); Pulawski, 1971:307 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pulawski, 2007a:452 (in revision of African *Tachysphex*); Ben Khedher, Yildirim, and Braham, 2020b:317 (in Tunisia known from Gafsa).

### 288. *novarae* (de Saussure)

*Tachytes novarae* de Saussure, 1867:69, ♀. Holotype or syntypes: ♀ India: Nicobar Islands: Nonkonis (NHMW). – Cameron, 1889c:135 (generic assignment uncertain). – **As *Tachysphex novarae***: Kohl, 1885:405 (new generic assignment); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Tsuneki, 1976b:54 (Philippines; redescription); Pulawski, 1977a:300 (in revision of Australian *Tachysphex*); Tsuneki, 1982a:34 (Bismarck Archipelago), 1983a:56 (Philippines; redescription), 68, 69 (in key to *Tachysphex* of Philippines and Japan), 1983c:41 (New Guinea: Kwaransan, Berlin-Hafen, now Aitape); Cardale, 1985:241 (in catalog of Australian Sphecidae); Dollfuss, 1989:13 (holotype in NHMW; as *novarri*); Naumann, 1993:186 (Australia: Queensland: Heathlands area in Cape York); Haneda, 2011:45 (Philippines: Palawan: Puerto Princesa).

As *Tachysphex* sp.?: F. Williams, 1936:128 (Guadalcanal), corrected to *Tachysphex novarae* by Pulawski, 1977a:300.

### 289. *nubilipennis* de Beaumont

*Tachysphex nubilipennis* de Beaumont, 1950d:18, ♀, ♂. Lectotype: ♂, Egypt: Siwa oasis: El Arig (BMNH), designated by Pulawski, 2007a:93. Synonymized with *Tachysphex albocinctus* by Pulawski, 2007a:93, resurrected from synonymy by Straka and Schmid-Egger, 2017: 440 in spite of intermediate population described by Pulawski, 2007a:93. – de Beaumont, 1955a:181 (Morocco); Pulawski, 1971:434 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Straka and Schmid-Egger, 2017:440 (United Arab Emirates), 442 (color photograph); Gadallah, 2020b:53 (in list of aculeate wasps of Arabian Peninsula).

### 290. *oasicola* Pulawski

*Tachysphex oasicola* Pulawski, 1988a:113, ♀, ♂. Holotype: ♂, USA: New Mexico: Roosevelt County: Oasis State Park (CAS).

### 291. *oberon* Arnold

*Tachysphex oberon* Arnold, 1923a:161, ♀ (as *Oberon*, incorrect original capitalization). Holotype: ♀, Zimbabwe: Sawmills (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pulawski, 2007a:454 (in revision of African *Tachysphex*).

**292. *obscuripennis* (Schenck)**

*Tachytes obscuripennis* Schenck, 1857:190, ♂. Holotype: ♂, Germany: Mombach (Landesmuseum Wiesbaden). – Kirchner, 1867:216 (in catalog of European Hymenoptera); Schenck, 1867a:356 (Germany: Nassau Region); W. Schulz, 1911a:68 (type not found in Zool. Mus. Marburg Univ.); Schmidt, 1971a:62 (study of type); Andert, 2010:9 (holotype in Landesmuseum Wiesbaden). – **As *Tachysphex obscuripennis***: Kohl, 1885a:396 (tentative new generic assignment, original description copied); Leclercq, 1970c:map 33 (distribution in Belgium); Oehlke, 1970:713 (Democratic Germany); Pulawski, 1971:223 (in revision of Palearctic *Tachysphex*); Schmidt, 1971b:35 (Germany: Rheinland-Pfalz: Gonsenheimer Wald); Balthasar, 1972:266 (in Sphecidae Fauna of Czechoslovakia); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Leclercq, Gaspar, Lajoinie, and Thirion, 1976:178 (Belgium: Chaumont-Gistoux); Lomholdt, 1976:246 (in Sphecidae Fauna of Fennoscandia and Denmark); Kolesnikov, 1977:318 (Russia: Bryansk Oblast'); Pulawski, 1978:216, 220 (in key to Sphecidae of European part of USSR); Benedek, 1979:231 (Hungary: Bakony Hills: Hódos-ér); Lefeber, 1979:12 (in checklist of Sphecidae of Netherlands), 72 (Netherlands: distribution map); Richards, 1979:397 (British Channel Islands); Pagliano, 1980:127 (Italy: Piemonte); Richards, 1980:43, 44 (in key to Sphecidae of British Isles); Schmidt, 1981:184 (Germany: Baden-Württemberg); Gayubo, 1982a:105 (northern Spain: Sierra de Béjar), 1982f:253 (Spain: Cádiz Province: San Roque); Silvestre de Sacy, 1982:4 (France: Côte-du-Nord: Paimpol area); Dollfuss, 1983a:76 (endangered in Niederösterreich, Austria), 77 (endangered in Burgenland, Austria), 78 (endangered in Oberösterreich, Austria), 80 (endangered in Steiermark, Austria), 80 (endangered in Tirol, Austria), 1983b:10 (in catalog of Sphecidae of Austria); Józán, 1983:99 (Hungary); Lefeber, 1983a:84 (Netherlands: Waddendistrict: northern coast sand dunes); Riemann, 1983:84 (Germany: Bremen-Daverden area); Gayubo, 1984b:85 (Spain: Salamanca Province); Gayubo and Tormos, 1984:15 (Spain: Valencia Province); Haack, Tschamtker, and Vidal, 1984:133 (Germany: Hamburg area); Schmidt and Westrich, 1984:240 (Germany: Rheinland-Pfalz: Bad Münster); Chevin and Chevin, 1985:39 (France: Aude); Józán, 1985a:181 (Hungary), 1985b:57 (Hungary south of Lake Balaton), 78 (floral records), 83 (ecological and zoogeographic characteristics); Nilsson, 1985:43 (Sweden); Riemann, 1985:22 (Germany: Niedersachsen); Brechtel, 1986:60 (Germany: Südpfalz: Lauterwiesen, Sandbuckel); Gayubo and Sanza, 1986:47 (Spain: Segovia; as *obscuripennis obscuripennis*); Józán, 1986:370 (Hungary: Kiskunság National Park); Vikberg, 1986:76 (Finland); Riemann, 1987b:44 (Germany: Niedersachsen: Nature Reserves Dünengebiet near Neumühlen and Voßberge); Schmidt and Westrich, 1987:364 (Germany: Mainz area); Chevin, 1988:15 (France: La Manche Department); Dollfuss, 1988:12 (Austria: Bisamberg); Nilsson, 1988:98 (Sweden); Gayubo and Mingo, 1988:80 (Spain, as *obscuripennis obscuripennis*); Karsai, 1988:100 (Hungary: Kiskunság National Park); Riemann, 1988:223 (Germany: Bremen area); Jacobs, 1989:12 (Germany: Mecklenburg-Vorpommern); Pádr *in* Šedivý, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Pankevich, Belyavskaya, Molchanova, Shlyakhtenok, and Blinov, 1989:95 (Belorussia: Berezinskiy Nature Reserve); Jacobs and Oehlke, 1990:165 (new locality records from Democratic Germany); Pádr, 1990:74 (Czech Republic: Praha area); Pagliano, 1990:105 (in catalog of Italian Sphecidae); Schwammlinger and Priesner, 1990:539 (Austria: Kärnten); Day, 1991:xix (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:107 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:402 (Italy: Emilia, Sicilia); Jacobs, 1991:46 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Kowalczyk, 1991b:120 (Poland: Augustów Forest); H.-J. Schulz, 1991:30 (Germany: Oberlausitz: 5 km southwest of Wittichenau); Budrys, 1992:31 (in list of Sphecidae of Lithuania); Józán, 1992b:173 (Hungary: Boronka-melléki Protected Area); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Kuhlmann, 1993:76 (Germany: recorded from Westfalen by Teschner, 1955); Luig, 1993:44 (Estonia); Archer, 1994b:104 (British Channel Islands); Dollfuss, 1994:102 (endangered in Austria); Gayubo and Borsato, 1994:208 (Italy: Toscana); Kowalczyk, 1994:74 (Poland: Łagiewniki forest

in Łódź); Theunert, 1994c:51 (Germany: summary of records from Niedersachsen and Bremen); Tormos, Asís, and Gayubo, 1994:188, 205 (Spain: Albacete Province); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Jansen and Kaluza, 1995:8 (Germany: endangered in Sachsen); Józán, 1995:104 (Hungary: projected Duna-Dráva National Park); Negrisolo, 1995a:23 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Scharrer, 1995:24 (Germany: Bayern: Kahl, Lohr); Schmid-Egger, Risch, and Niehuis, 1995:211 (Germany: summary of records from Rheinland-Pfalz Province); Skibińska, 1995:423, 425 (Poland: pine forest in Białowieża Primeval Forest); Yeo and Corbet, 1995:38 (in field guide to British solitary wasps); Archer, 1996a:58 (Great Britain: Channel Islands); Arens, 1996:441 (Germany: Bayern: Bayreuth area); Blösch, 1996:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Jakubzik, 1996:253 (Germany: Köln); Saure, 1996:503 (Germany: Berlin-Pankow: sewage irrigation field); Schmid-Egger, Schmidt, and Doczkal, 1996:378 (Germany: Baden-Württemberg: may be endangered); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region, as *obcuripennis*); Witt, 1996:106 (Germany: Brandenburg), 111 (locality records); Woydak, 1996:38 and 104 (Germany: Westfalen: not found since 1893); Celary, 1997:58 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:30 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg); Dollfuss, Gusenleitner, and Bregant, 1998:515 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km west-southwest of Hamburg); Flügel, 1998:61 (Germany: Brandenburg: Unteres Odertal National Park); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Józán, 1998:311 (Hungary: Duna-Dráva National Park); N. Schneider and Wahis, 1998:23 (Luxemburg: sandstone quarries); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); van der Smissen, 1998:69 (Germany: Niedersachsen, Schleswig-Holstein); K. Weber, 1998:149 (Germany: Bayern: Bamberg area); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); Pagliano and Scaramozzino, 1999:162 (Italy: Piemonte: Borgomale); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); Pauly, 1999:109 (in catalog of Belgian aculeates); M. Schwarz, 1999:86 (Austria: Oberösterreich: city of Linz area); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:229 (in Sphecidae Fauna of Germany); Dressler, 2000:34 (Germany: Hessen: Darmstadt area); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:106 (Greece); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); González, Gayubo, and Tormos, 2000:19 (Andorra: Santa Coloma); Jacobs, 2000:12 (Germany: Land Mecklenburg-Vorpommern: not endangered); Józán, 2000:107 (Hungary: Bakony Mountains); Mokrousov, 2000b:30 (Russia: Nizhny Novgorod Oblast'); Schmid-Egger, 2000b:276 (Germany: Baden-Württemberg: shores of Rhine River); Vicidomini, 2000b:28 (Italy: previously recorded from Campania); Ivanov and Ljubomirov, 2001:212 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Józán, 2001:279 (Hungary: Somogy County); Ljubomirov, 2001b:49 (Bulgaria: Mount Vitosha near Sofia); Ohl et al., 2001:142 (distribution in Germany by provinces); K. Schmidt and Bitsch *in* Bitsch et al., 2001:262 (in Sphecidae Fauna of Western Europe); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); Szczepko and Kowalczyk, 2001:188 (Poland: Kampinos National Park near Warszawa); van der Smissen, 2001:64 (Germany: Schleswig-Holstein: not endangered); Zettel, Gross, and Mazzucco, 2001:72 (Austria: Wien); Herrmann and Zinnert, 2002:26 (Germany: Baden-Württemberg: Bettenberg near Konstanz); Kowalczyk, Szczepko, and Świątek, 2002:153 (Poland: Kampinos National Park near Warszawa); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Söderman and Vikberg, 2002:51 (in list of Aculeata of Finland); Gayubo, Özbek, and Yıldırım, 2003:89 (Turkey: Artvin: Yusufeli; Erzurum: Tortum); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Józán, 2003:227 (Hungary: Látványi Puszta Nature Conservation Area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and

Warnecke, 2003:70 (Germany: in catalog of wasps and bees of Bayern); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Schmid-Egger, 2003:758 (Italy: Sicilia: Milo); von der Dunk and Niedling, 2003:181 (Germany: Bayern: Zeckern north of Erlangen); von der Heide and Metscher, 2003:103 (Germany: Niedersachsen: Emsland area); Esser, Jakubzik, and Sonnenburg, 2004:18 (Germany: Nordrhein-Westfalen); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:264 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Gayubo et al., 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Klein and Lefebvre in Peeters, van Achterberg, et al., 2004:424 (in Wasp and Ant Fauna of Netherlands); Majzlan and Deván, 2004:30 (Slovakia: Sekule), 33 (Slovakia: Malacky-Široké); Raemakers, van den Eijnde, and Kleukers, 2004:292 (Netherlands: Tungelerwalle near Weert); Shkuratov, 2004a:77 (Russia: Rostov Oblast'); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:357 (in catalog of Polish Crabronidae); Stolle et al., 2004:373 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Szczepko and Kowalczyk, 2004:126 (Poland: Kampinos National Park near Warszawa); Wiśniowski, 2004:44 and 60 (in checklist of Polish Sphecidae); Blösch, 2005:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Burger, 2005:35 (Germany: Thüringen); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Hallin, 2005:16 (Sweden: Örebro County: Hällefors); Jacobs, 2005a:452 (Bulgaria: Krasново and Zvechen near Hissarya, Plovdiv); Kofler, 2005:172 (Austria: Tirol: Lienz District: Ainet, city of Lienz, Lorenzhof in St. Johann Common, Tassenbach in Strassen Common); Kowalczyk and Kurzac, 2005:106 (Poland: Botanical Garden in Łódź); Kraatz, 2005:103 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Pagliano and Negrisoló, 2005:363 (in Sphecidae Fauna of Italy); Pijfers, 2005:49 (Netherlands: Twente: Noordelijke Manderheide); Riemann and Hohmann, 2005:565 (Germany: Niedersachsen: city of Bremen and adjacent area); Saure, 2005:19 (Germany: Berlin); Straka, 2005a:404 (vulnerable in Czech Republic), 2005b:269 (Turkey: Erzincan: 15 km west of Refahiye; Sivas: 20 km east of Gürün); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Ziska and Saure, 2005:82 (Germany: Berlin: Biesendorfer Sand); Bock, 2006:41 (Germany: Bayern: Kelheim District: Abensberg sands); Gorobchishin, 2006:110 (Ukraine: Cherkasy Oblast': Kanev Nature Reserve; Sumy Oblast': Chuykivka); Liebig, 2006:40 (Germany: Sachsen: Muskauer Heide); Peeters, Krekels, and Megens, 2006:22 (Netherlands: Reichswald forest near Nijmegen); N. Schneider, 2006:143 (Luxemburg: anthropogenic habitats); Vepřek, 2006:511 (Czech Republic: Kokořínsko area); Ver-shinina, Mokin, Reshchikov, and Rudoiskatel', 2006:111 (Russia: Pskov Oblast': Selezhskiy National Park); Archer, 2007e:79 (Great Britain: extinct or vagrant); Baños-Picón, Gayubo, Asís, and González, 2007a:256, 258 (Spain: Zamora: Cabañas de Aliste); Burguet, 2007:unnumbered p. 21 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Hallin, 2007b:25 (Sweden: Blekinge County); Jacobs, 2007:95, 99 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:26 (Germany: northwestern Sachsen); Saure, 2007:83 (in checklist of Aculeata of Land Brandenburg, Germany); G. Turrisi and R. Turrisi, 2007:121 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Vago, 2007:175 (France: département de Pas-de-Calais); Vepřek and Straka, 2007:202 (in catalog of Sphecidae of Czech Republic and Slovakia); Vicidomini and Pignataro, 2007:2 (Italy: Salerno: Paestum); Dvořák, Bogusch, Malenovský, Bezděčka, Bezděčková, Holý, Liška, Macek, Roller, Říha, Smetana, Straka, and Šima, 2008:67 (Czech Republic: Hády Hill near Brno); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:215 (in catalog of Crabronidae of Turkey); Tannert and von der Dunk, 2008:181 (Germany: Bayern: west of Ernhofen and Weissenbrunn); Theunert, 2008:84 (Germany: map of distribution in Nieder-

sachsen and Bremen); Baños-Picon, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Belkheir, 2009:17 (France: Pyrénées-Orientales: commune d'Eyne); Debuysse and Vago, 2009:4 (in list of Sphecidae *sensu lato* of northern France); U. Frommer, 2009a:29 (Germany: in checklist of Sphecidae of Hessen); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Livory, Chevin, Lair, Sagot, and Baldock, 2009:27 (France: Département de la Manche); Mokrousov, 2009:286 (Russia: Republic Mari El); Ødegaard, Sverdrup-Thygeson, Hansen, Hanssen, and Öberg, 2009:72 (Norway: locality records); Szczepko and Wiśniowski, 2009:71 (Poland: Spała Landscape Park); van Diemen, 2009:49 (Netherlands: airbase Gilze-Rijen); Baghirov, 2010:678 (Russia: Altai Territories: villages Aktash, Chike-Taman, Kosh-Agach, and Savvushka); Burguet *in* Durand and Burguet, 2010:52 (France Département d'Ardèche: Ardèche Gorges); Ermilov and Mokrousov: 2010:90 (phoretic mite *Schwiebia crabronis* in Middle Volga Region of Russia); Esser, Fuhrmann, and Venne, 2010:38 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:29 (Germany: Bayern: Sulz- and Ottmaringer Tal); Howe, Knight, and Clee, 2010:99 (United Kingdom: occurring on coastal sand dunes); Johansson, 2010:121 (Sweden: Småland: upper Emå river valley); Mokrousov, 2010a:62 (Russia: Kirov, and Nizhniy Novgorod Oblast's, Chuvash Republic, Mari El Republic, Tatarstan: no specific localities), 2010c:108 (Russia: Chuvash Republic: State Nature Reserve “Prisurskiy” and National Park “Chavash varmane”); Saure, 2010a:88 (Germany: Berlin-Reinickendorf: Baumberge), 2010b:175 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:19 (in red list of Aculeata of Germany: relatively common); Shoreenko and Konovalov, 2010:23 (Ukraine); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:102 (Western Slovakia: recorded from Borská Nižina); Treiber, 2010:136 (France: départements du Bas-Rhin and du Haut-Rhin); van der Smissen, 2010a:353 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records), 2010b:387 (France: Ardèche, Gard, Vaucluse: locality records), 2010c:398 (Sweden: Öland: Byrums Sandvik, Gårdby, Rönnerum; Södermanland: Jordbro, Ören); Baghirov, 2011b:148 (Russia: Altayskiy Krai: Savvushka; Altay Republic: Aktash, Chike-Taman, Kosh-Agach); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Gogala, 2011:15 (Slovenia); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:75 (Russia: Chuvash Republic); Saure, 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg), 2011d:200 (Germany: Sachsen-Anhalt: conservation area “Heide südlich Burg”); Schmid-Egger, 2011a:39 (France: Parc National du Mercantour: Isola, Le Pra, Millefontes, Mollières, Saint Sauveur, Tende; and Italy: Parco delle Alpi Marittime: Lago Rovine, San Lorenzo, Malle Maira: Stropo); Theunert, 2011a:21 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:77 (Germany: Hessen: endangered); Ziska and Saure, 2011:109 (Germany: Berlin: Tegeler Fließ valley); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:4 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Franzén, Molander, Norén, and Nilsson, 2012:27 (Sweden: Skåne: Kullaberg Peninsula); Hellrigl, 2012:129 (Italy: Provincia Autonoma di Bolzano-Alto Adige, as Südtirol); Klimsa, 2012:69 (Germany: Bayern: Schwandorf District); Larivière, Chapelin-Viscardi, and Maillet-Mezeray, 2012:296 (France: Essonne: Maise, as *obscuripennis obscuripennis*); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); Shibayev and Polumordvinov, 2012:278 (Russia: Penza Oblast’); Shlyakhtenok, 2012b:92 (Belorussia: Beresina National Reserve: overgrowing dry meadow); Stru-

mia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Flügel, 2013a:120 (Germany: Brandenburg: Pimpinellenberg near Oderberg); Mokrousov, Ruchin, and Egorov, 2013:201 (Russia: Mordovian Republic: Mordovian State Nature Reserve); Pankov, 2013:230 (Russia: Ivanovo Oblast'); Saure, 2013:22 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:26 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:167 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park and Serras de Aire e Candeeiros Natural Park); Wiśniowski and Szczepko, 2013:51 (Poland: Kampinos National Park near Warszawa); Bitsch, 2014:403 (France: Aisne: Château-Thierry: Lozère: Le Rozier, Saint-Étienne-Vallée-Française); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Józan, 2014:133 (Croatia: Meka Draga: Kruševo); Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Lett, 2015:5 (France: Loir-et-Cher: Gièvre); P. Rosa and Pagliano, 2015:105 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:15 (Germany: Berlin-Lichterfelde); Simon, Lorthiois, and Macé, 2015:55 (France: alluvial terraces in Eure Department: Courcelles-sur-Seine and Seine-Maritime Department: Anneville-Ambourville); Else, Bolton, and Broad, 2016:29 (in checklist of Aculeata of Great Britain and Ireland: England); Mokrousov and Popov, 2016:581 (Russia: Abkhazia, Krasnodarskiy Krai); Reemer and Peeters, 2016:10 (Netherlands: Hulshorsterzand); Stolle and Saure, 2016:925 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:36 (Turkey: Erzurum and Kars provinces, as *obscuripennis obscuripennis*); Antropov, 2017b:239 (in catalog of Crabroninae of Russia); Burquet and Durand, 2017:9 (France: Puy-de-Dôme: basin of river Crouël); Magdalou, 2017: 20 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Julols, Mas Larieu, Vallée d'Eyne); Creutzburg, Winter, Baumbach, and Ssymank, 2018:216 (Germany: Thüringen: Wachsenburg Nature Reserve); Lett, 2018:203 (France: Loir-et-Cher: Gièvres at 47°16'39"N 1°41'52"E); Maharramov, Aliyev, and Mammadov, 2018:455 (first record from Azerbaijan: Kuzar: Laza); Carminati, Mora, and Cretin, 2019:18 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Ljubomirov, 2019:101 (Bulgaria: Vrachanska Planina); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:111 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13232 (Russia: Mordovia State Nature Reserve); Kejval, Blažej, and Erhart, 2020:106 (western Czech Republic); Saure, 2020:277 (Germany: Sachsen-Anhalt: sand dunes); Kaplan and Yıldırım, 2021:65 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:101 (in commented list of Sphecidae *sensu lato* of Poland); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:231 (in revision of Sphecidae *sensu lato* of Europe); Can, 2022a:222 (supernumerary vein in forewing), 223 (supernumerary submarginal cell); Can and Saboori, 2023:81 (Turkey: parasitized by larvae of mite *Lep-tus tridentatus* Saboori, Hakimitabar and Khademi (Trombidiformes: Erythraeidae)); Kaplan and Yıldırım, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Olszewski, Sparks, Twerd, and Wiśniowski, 2024:5 (central Poland: common in river valleys: no specific localities); Pytel-Huta and Franchuk, 2024:82 (Ukraine: Rivno Nature Reserve); Frommer and Klenke, 2025:165 (Germany: Hesse: Lahntal near Weilburg).

*Tachytes obscuripennis* Schenck, 1860:148. Nomen nudum

*Tachytes lativalvis* Thomson, 1870:242, ♀, ♂. Syntypes: central Sweden (Lund). Synonymized with *Tachysphex obscuripennis* by K. Schmidt, 1971a:62. – Thomson, 1874:219 (in revision of Hymenoptera of Scandinavia); E. Saunders, 1882:87 (Great Britain: Deal), 1883c:136 (Great Britain: Deal and Sandhills); Westerlund, 1893:25 (Russia: Karelian Republic: northern shore of Lake Ladoga); E. Saunders, 1896:81 (in revision of British Aculeata); Aurivillius, 1904:266 (in revision of Swedish Sphecidae); Jansson,

1922:24 (Sweden: Öland Island). – *As Tachysphex lativalvis*: Kohl, 1883e:670 (new generic assignment, Switzerland), 1885a:352 and 355 (in key to Palearctic *Tachysphex*), 382 (in revision of Palearctic *Tachysphex*), 1888b:728 (Austria: Tirol, now Italy: Alto Adige), 1893:32 (Austria: Niederösterreich); F. Morawitz, 1893a:111 (Russia: Karelian Isthmus); Sickmann, 1893:84 (Germany: Niedersachsen: Iburg); Krieger, 1894:11 (Germany: Kingdom of Saxony); Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Mocsáry, 1897:77 (Hungary: Budapest); Ferton, 1901b:680 (found in Marseille area, France, but not in Corsica); E. Saunders, 1902b:143 (Great Britain: Island of Jersey); Adlerz, 1904:50 (nesting habits); Antiga and Bofill, 1904:11 (in catalog of Catalan Hymenoptera); Mortimer, 1905:261 (Great Britain: Wales: Aberdovey); Adlerz, 1906:29 (Sweden; nesting habits); Schmiedeknecht, 1907:233 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Mercet, 1910b:165 (listed from Spain); Dittrich, 1911b:24 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:45 (Italy: Trieste area); nec Morice, 1911:102 (= *Tachysphex gibbus*); Kohl, 1912a:63 (Austria: Südtirol: Bad Ratzes, now Italy: Trentino–Alto Adige: Razzes); Schirmer, 1912:167 (Germany: Berlin area); Bouwman, 1914:392 (preying on cockroaches); Ferton, 1914:103 (earlier record of hemipterous prey was in error); Bouwman, 1916:202 (preying on cockroaches); Noskiewicz, 1918:138 (Galicia, now western Ukraine: Brzuchowice and Hołosko near Lwów); O. Meyer, 1919:154 (Germany: Posen Province, now Poland: Poznań Region); Dubois, 1920:88 (first record from Belgium: no specific locality); A. Wagner, 1920:39 (Germany: Lower Elbe region); Dubois, 1922:208, 209 (in key to Belgian Sphecidae); Ferton, 1923:333 (known from continental France but not found in Corsica); Leininger, 1924:121 (Germany: Baden-Württemberg: Friedrichstal, Waldkirch); Berland, 1925d:121 (in Sphecidae Fauna of France); Bischoff, 1925:301 (Latvia: Wezkukkul); Coulon, 1925:121 (Spain); Bouwman, 1926:280 (in list of Sphecidae of Netherlands); Hémon, 1926:199 (France: Finistère: Fouesnant); Benoist, 1928:410 (France: Alpes-Maritimes, Basses-Alpes); Berland, 1928b:178 (France: Charente-Inférieure: Royan; Finistère: Fouesnant; and Seine-Inférieure: Sotteville); Bouwman, 1928b:26 (in revision of Sphecidae of Netherlands); Grandi, 1928d:295 (prey), 296 (description of egg and larva); van der Vecht, 1928:93 (Netherlands: Meijndel sand dunes); Grandi, 1929:288 (Italy: Toscana: valle della Limentra); Schmiedeknecht, 1930:694, 695 (in keys to Hymenoptera of North and Central Europe); Dusmet y Alonso, 1931:7 (Portugal: Mitra); Grandi, 1931:57 (Italy: Toscana: Vallata delle Pozze near Le Mandriole); Pulkkinen, 1931:76 (in revision of Sphecidae of Finland); Maneval, 1932:95 (nesting habits); Maidl, 1933b:125 (Morocco: Agadir); E. Nielsen, 1933:294 (summary of nesting habits); Giner Marí, 1934:134 (Spain); Grandi, 1934:60 (labrum of mature larva illustrated); Jansson, 1934:290 (Sweden); Forsius in Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); Harttig, 1935:5 (Germany: Niedersachsen: Kirchseele); Crèvecoeur and Maréchal, 1936:252 (in catalog of Belgian Hymenoptera); de Beaumont, 1936a:200 (in revision of French *Tachysphex*), 1936c:8 (specimen in coll. A. Costa, Napoli); Pattri, 1936:113 (Germany: Hessen; Darmstadt area, on sandy habitats); Goebel, 1937:42 (Poland: Poznań District: Kobylpole, Strzeszyn); Richards, 1937b:104 (in checklist of British aculeates); Zavadil, Šusterka, and Bat'a, 1937:201 (in catalog of Sphecidae of Czechoslovakia); A. Wagner, 1938a:122 (northwestern Germany); Giordani Soika, 1939b:73 (Italy: Lido di Venezia); Guiglia, 1941c:166 (Italy: Calabria: Grande Sila); Paul, 1941:46 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1044 (Germany: Bayern: Bamberg area); J. Perkins, 1942:200 (Sweden: Skåne: Degaberga and Löderup); Giner Marí, 1943a:141 (in Sphecidae Fauna of Spain); Guiglia, 1944b:28 (Italy); Šnoflák, 1944a:144 (Czech Republic: serpentine steppe near Mohelno); Balthasar, 1945:115 (Czech Republic: southeastern Morava Region); de Beaumont, 1947c:670 (probable synonym of *Tachytes obscuripennis*); Zavadil in Zavadil and Šnoflák, 1948:149, 152 (in key to Sphecidae of Czechoslovakia); Cavro, 1950:35 (France: Département du Nord); Benno, 1951b:15 (in checklist of Aculeates of Netherlands); Caruel, 1951:100 (France: Marne Department, as *lativentris*); Cleu, 1953:50 (France:

Ardèche River basin); de Beaumont, 1953b:15 (variation); Nouvel and Ribaut, 1953:178 (France: Haute-Garonne: Saint-Béat); de Beaumont, 1954a:91 (Italy); Aerts, 1955:63 (Germany: Rheinland); de Beaumont, 1955a:183 (Morocco); Steiner, 1955:138 (France: Dordogne); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vergne, 1955:5 (France: Auvergne); Vogrin, 1955:37 (Yugoslavia); Ceballos, 1956:376 (in catalog of Hymenoptera of Spain); Stadler and Glässel, 1956:111 (Germany: Bayern: Romberg Nature Reserve); Morel, Nouvel, and Ribaut, 1956:338 (France: Département des Pyrénées-Orientales); Bajári, 1957a:52, 55 (in key to Hungarian Sphecidae); Grandi, 1957:389 (Italy); Benno, 1958b:12 (in review of Dutch Sphecidae); de Beaumont, 1958c:205 (Swiss National Park); de Beaumont, 1959a:28 (Italy); Diniz, 1959:29 (Portugal: Mitra); Wolf, 1959b:24 (Germany: Nassau); Hamann, 1960:198 (Austria: Oberösterreich: Mönchgraben at 48°13'N 14°21'E); Noskiewicz and Puławski, 1960:122, 124 (in key to Polish Sphecidae); Grandi, 1961:192 (nesting habits), 499 (description of larva); Valkeila, 1962b:66 (southwestern Finland); Hoop, 1963b:7 (Germany: Schleswig-Holstein:Lehmrade, Wahlstedt); de Beaumont, 1964c:76 (in Sphecid Fauna of Switzerland); Diniz, 1964a:5 (Portugal: Porto); Bonelli, 1966c:218 (Italy: Trentino–Alto Adige: Pestini near Cavalese, Razzes); Benno, 1967:36 (in checklist of Sphecidae of Netherlands); Gauss, 1967:554 (Germany: Baden-Württemberg); J. Heinrich, 1967:75 (Germany: Bayern: Unterfranken District); Hoop, 1967a:39 (Germany: Schleswig-Holstein: Salemer Moor, as *lativalvis*); Niedl and Deneš, 1967:81 (Czech Republic: Třeboň area); Benedek, 1968:73 (Hungary, visiting flowers of *Angelica silvestris* L., as *lativalis*); Bonelli, 1968b:50 (Italy: Trentino–Alto Adige: Piazzòl); Evans, 1968c:119 (discussion of larval descriptions by Grandi); Benedek, 1969a:83 (Hungary; marshy meadow); Romanova, 1969:134 (Russia: North Caucasus); Schmidt, 1969:163 (Germany: Rhein-Main area: Darmstadt); Tumšs, 1970:82 (Latvia); Kofler, 1972:107 (Austria: eastern Tirol); Simon Thomas, 1972:181 (France); Lefebver, 1973:153 (Netherlands: Budel; Belgium: Gruitrode); Simon Thomas, 1976:5 (France: Lot-et-Garonne: Forêt de Campet); Marion, 1978:88 (France: Nièvre Department); Steiner, 1986:103 (references to papers on nesting habits); Kowalczyk, 1991a:105 (Poland: Łódź); Delarze, 1992:68 (Switzerland: Valais: Les Folletères); Pawlikowski and Kruszyński, 1996:87 (Poland: Toruń Basin).

As *Tachytes panzeri*: von Aichinger, 1870:320 (Austria: Tirol), corrected to *Tachysphex lativalvis* by Kohl, 1888b:728.

### 293. *obscurus* Pulawski

*Tachysphex mocsaryi obscurus* Pulawski, 1971:315, ♂. Holotype: ♂, Canary Islands: Gran Canaria: San Augustin (H. Wolf collection, Plettenberg). – Báez and Ortega, 1978:192 (Canary Islands). – As *Tachysphex obscurus*: Pulawski, 1974b:299 (description of ♀; full species status); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Wolf, 1980:73 (Canary Islands); Hohmann, La Roche, Ortega, and Barquín, 1993:236 (detailed locality records from Canary Islands).

### 294. *occidentalis* Pulawski

*Tachysphex occidentalis* Pulawski, 1982b:34, ♀, ♂. Holotype: ♂, USA: California: Inyo County: 12 mi east of Lone Pine (UCD). – Elliott and Kurczewski, 1985:293 (prey); Pulawski, 1988a:91 (in revision of Nearctic *Tachysphex*); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### 295. *octodentatus* Arnold

*Tachysphex octodentatus* Arnold, 1924:62, ♀, ♂. Syntypes: Zimbabwe: Sawmills and Khami (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:458 (in revision of African *Tachysphex*).

*Tachysphex octodentatus* var. *inermis* Arnold, 1924:63, ♀. Lectotype: ♀, Zimbabwe: Bulawayo (SAM), designated by Pulawski, 2007a:458. Synonymized with *Tachysphex octodentatus* by Pulawski, 2007a:458. – **As *Tachysphex octodentatus inermis***: R. Bohart and Menke, 1976:275 (new status, in checklist of world Sphecidae).

*Tachysphex tridentatus* Arnold, 1924:55, ♀, ♂. Lectotype: ♂, Zimbabwe: Bulawayo (SAM), designated by Pulawski, 2007a:458. Synonymized with *Tachysphex octodentatus* by Pulawski, 2007a:458. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae).

### 296. *omoi* Guiglia

*Tachysphex omoi* Guiglia, 1943c:72, ♀. Holotype: ♀, Ethiopia: Gamo Gofa: Gondaraba = Condaraba at 4°58'N, 36°49'E (MSNG). – R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pulawski, 2007a:461 (in revision of African *Tachysphex*).

*Tachysphex omoi* Guiglia, 1950:252, ♀. Objective synonym of *Tachysphex omoi* Guiglia, 1943.

### 297. *onager* Pulawski

*Tachysphex onager* Pulawski, 2007a:463, ♀, ♂. Holotype: ♀, Tanzania: Morogoro Region: 62 road km southwest of Morogoro at 7°02.5'S 37°15.3'E (CAS). Paratypes: Malawi.

### 298. *opacus* F. Morawitz

*Tachysphex opacus* F. Morawitz, 1893b:410, ♂. Holotype: ♂, China: Sinkiang Uighur: Artuch 20 km north of Kashgar (ZIN). – Dalla Torre, 1897:682 (in catalog of world Hymenoptera); Pulawski, 1971:79 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Kazenas, 1978b:119, 134 (in key to Sphecidae of Kazakhstan and Central Asia); Esenbekova and Kazenas, 2000:33 (southeastern Kazakhstan: 45 km southwest of Chundzha); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:72 (geographic distribution, collecting localities in Kazakhstan); Straka, 2005b:261 (Turkey: Bitlis: Ahlat; Nevşehir: Ürgüp; Sivas: Gürün); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Straka, 2016:96 (in revision of *Tachysphex pompiliformis* species group); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:71 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey), 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

### 299. *opata* Pulawski

*Tachysphex opata* Pulawski, 1988a:106, ♀, ♂. Holotype: ♂, USA: Arizona: Cochise County: Portal (CAS). – Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

### 300. *orestes* Pulawski

*Tachysphex orestes* Pulawski, 1988a:31, ♀. Holotype: ♀, USA: California: Placer County: Carnelian Bay (CAS). – Ratzlaff, 2016:26 (Canada: British Columbia: from Pulawski, 1988); Buck and Bennett, 2025:214 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality).

### 301. *osiris* de Beaumont

*Tachysphex osiris* de Beaumont, 1940b:170, ♀, ♂. Lectotype: ♀, Sudan: Nabardi [= Bir Um-Nabardi, 160 km southeast of Wadi Halfa] (BMNH), designated by de Beaumont, 1947a:179. – Honoré, 1942:56 (Egypt: Aswan); de Beaumont, 1947a:178 (in new revision of *Tachysphex* of Egypt), 1950d:18 (Egypt: Siwa oasis), 1958b:61 (Algeria: Tassili des Ajjer); Pulawski, 1971:422 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Roche and Zalat, 1994:115

(Egypt: Sinai Peninsula); Pulawski, 2007a:465 (in revision of African *Tachysphex*); Roche, 2007a:86 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, 2020b:53 (in list of aculeate wasps of Arabian Peninsula).

### 302. *ovambo* Pulawski

*Tachysphex ovambo* Pulawski, 2007a:467, ♀, ♂. Holotype: ♀, Angola: 16 km northeast of Moçamedes, now Namibe (BMNH).

### 303. *oxychelus* Pulawski

*Tachysphex oxychelus* Pulawski in Krombein and Pulawski, 1994:38, ♀, ♂. Holotype: ♀, Sri Lanka: Mannar District: Kondachchi-Silavaturai (USNM).

### 304. *pacificus* R. Turner

*Tachysphex pacificus* R. Turner, 1908:491, ♀. Holotype: ♀, Australia: Victoria: Melbourne (BMNH). – R. Turner, 1916b:255 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pulawski, 1977a:245 (in revision of Australian *Tachysphex*); Cardale, 1985:241 (in catalog of Australian Sphecidae); K. Walker, Naumann, Austin, Taylor, and Cardale, 1992:48 (in catalog of insects of Tasmania).

### 305. *paiute* Pulawski

*Tachysphex paiute* Pulawski, 1988a:80, ♀, ♂. Holotype: ♀, USA: California: Inyo County: Antelope Springs (CAS). – Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: first record from Canada: Alberta: no specific locality).

### 306. *paloaterus* (Dahlbom)

*Tachytes paloaterus* Dahlbom, 1845:470, ♂ (as *paloatera*, incorrect original termination). Lectotype: ♂, Egypt: no specific locality (NRS), designated by Pulawski, 2007a:470. – Kohl, 1885:405 (in checklist of world *Tachytes*). – **As *Tachysphex paloaterus***: Kohl, 1885a:396 (new generic assignment, original description copied); Dalla Torre, 1897:682 (in catalog of world Hymenoptera); de Beaumont, 1940:165 (in revision of *Tachysphex* of Egypt); Honoré, 1942:56 (Egypt: Cairo area, Sollum); de Beaumont, 1947a:162 (in new revision of *Tachysphex* of Egypt), 1950f:405 (Algeria: Laghouat), 1955a:176 (Morocco; description of ♀); Pulawski, 1964:83 (Egypt: Dahshur, Ghiza, Kom Osheim, Maadi, Saqqara; characteristics of ♀), 1971:338 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:11 (Israel); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Guichard, 1980:227 (Oman); Pulawski, 2007a:470 (in revision of African *Tachysphex*); Roche, 2007a:80 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:355 (in new catalog of Sphecidae of Saudi Arabia); Straka and Schmid-Egger, 2017: 440 (United Arab Emirates), 443 (color photograph); Ben Khedher, Yildirim, and Braham, 2020b:318 (Tunisia: new locality records from Kasserine, Kebili, Mahdia, Sidi Bouzid, and Tozeur provinces); Gadallah, 2020b:53 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:74 (first record from Iran: Fars: Kzerun at 29°32'53"N 51°46'23"E).

As *Tachysphex nattereri*: Kohl, 1888a:144 (♂ only), corrected to *Tachysphex paloaterus* by Pulawski, 1971:323 and 338.

*Tachysphex* No. 1: de Beaumont, 1940:166, ♀, Egypt. Synonymized with *Tachysphex paloaterus* by de Beaumont, 1955a:176.

### 307. *panzeri* (Vander Linden)

*Tachytes panzeri* Vander Linden, 1829:22, ♀, ♂ (♀ = *Tachysphex pseudopanzeri*). Syntypes: Spain: no specific locality (lost). Neotype: ♂, Spain: Toledo (RMNH), designated by Pulawski, 1971:262. – Dahlbom,

1843:125 (in revision of Sphecidae and Pompilidae), 1845:470 (in key to world *Tachytes*); Eversmann, 1849:386 (Russia: Orenburg province), corrected to *Tachysphex panzeri sareptanus* by Pulawski, 1971:272; Wesmael, 1852:84 (Belgium: Ostende); F. Smith, 1856:296 (in catalog of Hymenoptera in British Museum); Kawall, 1857:24 (Kurland, now Latvia); Ruthe and Stein, 1857:313 (Germany: Berlin area); Schenck, 1857:190 (Germany: in revision of fossorial wasps of Nassau Region); Taschenberg, 1858:84 (in key to Sphecidae of Germany); Funk, 1859:59 (Germany: Bayern: Bamberg); Schenck, 1860:149 (Germany: Nassau Region); Brischke, 1862:99 (Germany: Preussen Province, now Poland: Pomorze Region); Taschenberg, 1866:201 (in revision of Hymenoptera of Germany); A. Costa, 1867b:86 and 1867c:30 (in revision of Italian Sphecidae); Kirchner, 1867:216 (in catalog of European Hymenoptera); Schenck, 1867a:356 (Germany: Nassau Region); Wierzejski, 1868:116 (Ukraine: Podole Region: Sinkov); Palma, 1869:38 (Italy: Sicilia settentrionale); nec von Aichinger, 1870:320 (= *Tachysphex obscuripennis*); Dours, 1874:139 (in catalog of Hymenoptera of France: Montpellier, Saint-Séver); Wierzejski, 1874:257 (Ukraine: Podole Region: Sinkov); Becker, 1880:153 (Russia: Sarepta, now Krasnoarmeysk south of Volgograd); Marquet, 1881:179 (southern France); A. Costa, 1882b:22 (Italy: Sardegna), corrected to *Tachysphex panzeri rufiventris* by Pulawski, 1971:270; Destefani, 1882:38 (Italy: Sicilia: Sciacca); A. Costa, 1883:57 (Italy: Sardegna), corrected to *Tachysphex panzeri rufiventris* by Pulawski, 1971:270; Friese, 1883:202 (Germany: Thüringen: Kahla); A. Costa, 1885a:17 (Kohl correctly synonymized *Tachytes rufiventris* with *T. panzeri*, Sardinian females have all red gaster), corrected to *Tachysphex panzeri rufiventris* by Pulawski, 1971:270; Fabre, 1886:227 (nesting in soil, preying on acridids, experiments with removing prey from nest entrance); Brischke, 1888a:54 (Germany: Hela Peninsula, now Poland: Hel Peninsula), 1888b:97 (Germany: Preussen Province, now Poland: Pomorze Region), 1889:204 (Germany: Steegen east of Danzig, now Poland: Stegna east of Gdańsk); F. Morawitz, 1891:207 (Kazakhstan: Ryn-Peski); Radoszkowski, 1892:590 (reference to Radoszkowski, 1886); Meunier, 1896:273 (Belgium: Bruxelles area); Cuní y Martorell, 1897:331 (Spain: Cataluña: villa de Calella); von Heyden, 1905:80 (Germany: Hessen: Frankfurt); Friese, 1926:162 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); G. Carpenter, 1930b:300 (nest closure). – **As *Lyrops panzeri***: Casolari and Casolari Moreno, 1980:113 (new generic assignment, specimens in M. Spinola collection, Torino, junior secondary homonym of *Lyrops panzeri* Dufour, 1841, now in *Tachytes*); Pagliano, 2008:549 (specimens in M. Spinola collection, Torino, are *Tachysphex panzeri*). – **As *Tachysphex panzeri***: Kohl, 1883a:177 (new generic assignment, comparison with *Tachysphex pygidialis*), 1883e:671 (Switzerland, record not confirmed by subsequent authors), 1884a:368 (redescription), 1885a:351 and 356 (in key to Palearctic *Tachysphex*), 356 (in revision of Palearctic *Tachysphex*); nec Radoszkowski, 1886a:33 and 1891:590 (= *Tachysphex incertus*); Gasperini, 1887:15 (recorded from Dalmatia, now Croatia, by Kohl, 1885a); F. Morawitz, 1891a:207 (western Kazakhstan: Ryn-Peski), corrected to *Tachysphex panzeri sareptanus* by Pulawski, 1971:272; A. Costa, 1893b:6 (Tunisia); Dalla Torre, 1897:682 (in catalog of world Hymenoptera); Ferton, 1897:106 (Corsican population have red gaster); Mocsáry, 1897:77 (Kingdom of Hungary, one locality is in today's Romania); Bingham, 1898a:104 (Yemen: Aden); Ferton, 1899:341 (prey capture), corrected to *Tachysphex panzeri rufiventris* by Pulawski, 1971:270; Adlerz, 1904:137 (known prey: adult acridids); Antiga and Bofill, 1904:10 (in catalog of Catalanian Hymenoptera); E. Saunders, 1904c:635 (Spain); Ferton, 1905:70, 94 (position of egg on prey), corrected to *Tachysphex panzeri rufiventris* by Pulawski, 1971:270; Kubes, 1905:85 (Czech Republic: Kolín); Mantero, 1905:73 (Italy: Toscana: Isola del Giglio); Vángel, 1905:166 (Hungary); Graeffe, 1906:455 (Tunisia: Tunis area); Móczár and Henter, 1907:205 (Hungary: Tiszaalpár); Schmiedeknecht, 1907:232, 234 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Mercet, 1910b:165 (listed from Spain); Zavattari, 1910:3 (Italy: Isola d'Elba: Portoferraio); Dittrich, 1911b:24 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:45 (Italy: Trieste area); Mantero, 1911:74 (Italy: Island of Asinara), corrected to

*Tachysphex panzeri rufiventris* by Pulawski, 1971:270; Morice, 1911:104 (Algeria); Zavattari, 1911:3 (Italy: Piemonte: Valle del Maira); Schirmer, 1912:167 (Germany: in Berlin area not collected since Ruthe and Stein, 1857); Bischoff, 1913b:119 (Botswana: Koca-Sekuma, certainly in error); Storey, 1916:110 (Egypt: Heliopolis, Khanka, Maadi, Mariut), corrected to *Tachysphex panzeri pulverosus* by Pulawski, 1971:275; O. Meyer, 1919:154 (Germany: Posen Province, now Poland: Poznań Region); Stöckhert, 1919:41 (Germany: Franken); A. Wagner, 1920:39 (Germany: Lower Elbe region, not found but can be expected); Gribodo, 1921:6 (Libya: Cyrenaica: Ghemines, determination uncertain); Dubois, 1922:208, 209 (in key to Belgian Sphecidae); Enslin, 1922c:246 (Germany: Bayern: Erlangen and Nürnberg); Hedicke, 1922:271 (Germany: Brandenburg: Gross Machnower Weinberg); Arnold, 1923a:167 (diagnosis); Ferton, 1923:86 (prey paralyzing), 291 (prey easily found when removed from nest entrance by author), corrected to *Tachysphex panzeri rufiventris* by Pulawski, 1971:270; Arnold, 1924:72 (variation); Berland, 1925d:119 (in Sphecida Fauna of France); Bischoff, 1925:301 (Latvia: Wezkukkul; Poland: Grajewo area); Coulon, 1925:121 (Spain; Morocco: Tanger); Strohm, 1925:211 (Germany: Baden-Württemberg: Hecklingen); Bouwman, 1926:280 (in list of Sphecidae of Netherlands); Hémon, 1926:199 (France: Finistère: Fouesnant); von Schulthess, 1926b:214 (Tunisia, Libya); Dusmet y Alonso, 1927:25 (Spain: Cataluña: Poblet and Tarragona); Grandi, 1927:199 (nesting habits); Benoist, 1928:410 (France: Basses-Alpes: Bayasse-Saint-Louis); Berland, 1928b:177 (add Grandi, 1926 to bibliography in Berland, 1925d; France: Finistère: Fouesnant); Bouwman, 1928b:27 (in revision of Sphecidae of Netherlands); Grandi, 1928a:22 (prey, prey carrying); van der Vecht, 1928:93 (Netherlands: Meijendel sand dunes); Schmiedeknecht, 1930:693, 695 (in keys to Hymenoptera of North and Central Europe); Guiglia, 1932d:474 (Libya: Gialo); Bernard, 1933:62 (France: Drôme: Dieulefit); Gussakovskij, 1933:284, correctly 384 (Iran: Kerman: Bampur – Kaskin), corrected to *Tachysphex panzeri pulverosus* by Pulawski, 1971:275; Nadig, 1933:78 (Morocco); Bernard, 1934b:250 (prey: *Docioctaurus genei* (Ocskay)); Giner Marí, 1934:133 (Spain); Grandi, 1934:61 (nest structure, prey: *Docioctaurus genei* (Ocskay)), 129 (Italy: Toscana: San Vincenzo); Guiglia, 1934b:303 (Libya: bibliography and summary of locality records); Maidl, 1934:64 (Greece: Aegean Islands: Milos); Nadig, 1934:32 (Italy: Sardegna: Cagliari); Bernard, 1935:64 (France: Var: Fréjus area; prey: *Docioctaurus genei* (Ocskay)); Gussakovskij, 1935:427 (Tajikistan: Kulab); Crèvecoeur and Maréchal, 1936:252 (in catalog of Belgian Hymenoptera); de Beaumont, 1936a:192 (in revision of French *Tachysphex*), 1936c:7 (specimens in coll. A. Costa, Napoli); Drogoszewski, 1936:130 (Poland: Łowicz); Goebel, 1937:42 (Poland: Poznań District: Kobylepole); Zavadil, Šustera, and Baťa, 1937:201 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938d:80 (Hungary: Pótharaszts puszta); Giordani Soika, 1939b:73 (Italy: Lido di Venezia); Móczár, 1939:4 (Hungary: Jászberény); de Beaumont, 1940b:163 (in revision of *Tachysphex* of Egypt), corrected to *Tachysphex panzeri pulverosus* by Pulawski, 1971:275; Guiglia, 1940a:289 (Libya: Gheddahia, Wadi el-Hadd), nec fig. 1 (= *Tachysphex cheops*); Paul, 1941:46 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1045 (Germany: Bayern: Bamberg area); Guiglia, 1942b:233 (Libya); Honoré, 1942:54 (Egypt: Lower Egypt), corrected to *Tachysphex panzeri pulverosus* by Pulawski, 1971:275; Giner Marí, 1943a:140 (in Sphecida Fauna of Spain); Guiglia, 1943c:76 (Ethiopia: Gamo Gofa: Sagan – Omo region, determination unreliable for geographic reasons), 1943d:92 (Albania: Scutari); Timon-David, 1943:29 (France: Bouches-du-Rhône: plage de Fos); Guiglia, 1944b:27 (Italy); Šnoflák, 1944a:144 (Czech Republic: serpentine steppe near Mohelno); Deleurance, 1946b:63 (list of prey), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Arnold, 1947:147 (redefinition of species); de Beaumont, 1947a:156 (in new revision of *Tachysphex* of Egypt), corrected to *Tachysphex panzeri pulverosus* by Pulawski, 1971:275; de Beaumont, 1947b:391 (Cyprus), corrected to *Tachysphex panzeri cyprius* by Pulawski, 1971:272; Guiglia, 1948c:201 (Italy: Sardegna: Cagliari), corrected to *Tachysphex panzeri rufiventris* by Pulawski, 1971:270; Zavadil in Zavadil and Šnoflák, 1948:150, 152 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:15 (Portugal);

Niesiołowski, 1950:225 (Poland: Lubasz 40 km north of Tarnów); Pittioni, 1950:24 (Cyprus), corrected to *Tachysphex panzeri cyprius* by Pulawski, 1971:272; de Andrade, 1949:15 (Portugal); Guiglia, 1950:254 (Ethiopia: Gamo Gofa: Gondaraba at 4°58'N 36°49'E, determination tentative); Pittioni, 1950:24 (Cyprus); Szulczewski, 1950:108 (Poland: Wielkopolski National Park 15 km south of Poznań); Benno, 1951b:15 (in checklist of Aculeates of Netherlands); Scobiola-Palade, 1951:274 (first record from Romania: several localities); de Beaumont, 1952c:189 (Algeria: Hoggar), corrected to *Tachysphex panzeri oraniensis* and to *Tachysphex panzeri pulverosus* by Pulawski, 1971:273; Móczár, 1953:310 (Hungary); Balthasar, 1954d:182 (Slovakia); de Beaumont, 1954a:55 (Italy), 1954e:90 (Italy); Grandi, 1954:240 (Italy); Hertzog, 1954:101 (France: Bouches-du-Rhône: Camargue); Atanassov, 1955:201 (Bulgaria: Belovo and Yundola in Rhodopi Mountains); de Beaumont, 1955a:173 (Morocco; geographic and individual variation), 176 (forme saharienne, synonymized with *Tachysphex panzeri pulverosus* by Pulawski, 1971:274); Vogrin, 1955:37 (Yugoslavia); Bytinski-Salz, 1956:226 (Turkey: Kalkan, Karapınar, Kemer); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:196 (Libya), corrected to *Tachysphex panzeri pulverosus* by Pulawski, 1971:275; Morel, Nouvel, and Ribaut, 1956:338 (France: Département des Pyrénées-Orientales); Bajári, 1957a:51, 55 (in key to Hungarian Sphecidae); de Beaumont, 1957b:136 (northern Iran); Grandi, 1957:389 (Italy); Benno, 1958b:12 (in review of Dutch Sphecidae); de Beaumont, 1958b:61 (Algeria: Tassili des Ajjer), corrected to *Tachysphex panzeri pulverosus* by Pulawski, 1971:275; Nouvel and Ribaut, 1958:14 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Pulawski, 1958a:178 (Bulgaria: Aitos, Burgas, mouth of Ropotamo River, Sandanski, Sozopol, Varna); Suárez, 1959:57 (Spain: Almería Province); Wolf, 1959b:24 (Germany: Nassau); de Beaumont, 1960a:14 (Greece: Island of Rhodes; diagnostic characters), 1960b:237 (Libya), corrected to *Tachysphex panzeri pulverosus* by Pulawski, 1971:275; Noskiewicz and Puławski, 1960:121, 124 (in key to Polish Sphecidae); de Beaumont, 1961c:49 (Greece: Island of Crete); Grandi, 1961:205 (nesting habits); de Beaumont, 1962b:25 (Spain); Scobiola, 1963:825 (Romania: Letea, Periprava in Danube delta); Babiý, 1964:114 (Austria: Land Salzburg); Ceballos, 1964:91 (in supplement to catalog of Spanish Sphecidae); Diniz, 1964a:4 (Portugal: twenty localities); de Beaumont, 1965a:47 (Greece); Roberti, Frilli, and Pizzaghi, 1965:110 (Italy: Emilia-Romagna: Bobbio in Piacenza Province); de Beaumont, 1966:212 (Egypt: Amrye near Alexandria); Benno, 1967:36 (in checklist of Sphecidae of Netherlands); Gauss, 1967:554 (Germany: Baden-Württemberg: Vorbergzone); J. Heinrich, 1967:75 (Germany: Bayern: Kahl); Pulawski, 1967a:393 (Turkey); Scobiola-Palade, 1968b:142 (Romania: Island of Letea in delta of Danube), 1968c:385 (Romania: București, Budești, Giurgiu); Schmidt, 1969:163 (Germany: Rhein-Main area: Weiterstädter Exerzierplatz near Darmstadt); Benedek, 1969a:83 (Hungary; marshy meadow); Leclercq, 1970:map 37 (distribution in Belgium: found on coast only); Oehlke, 1970:714 (Democratic Germany); Tumšs, 1970:82 (Latvia); Königsmann, 1971:107 (Spain: Gerona: Palamós); Pulawski, 1971:262 (in revision of Palearctic *Tachysphex*); Schmidt, 1971b:34 (Germany: recorded from Mombach by Schenck, 1857); Valetta, 1971:46 (Malta); Balthasar, 1972:267 (in Sphecidae Fauna of Czechoslovakia); Myartseva, 1972a:79 (Turkmenistan); Scobiola-Palade, 1972:150 (Romania: delta of Danube: Caraorman); Simon Thomas, 1972:182 (France); de Beaumont, Bytinski-Salz, and Pulawski, 1973:10 (Israel); Haeseler, 1973:54 (Germany: Niedersachsen: Pevestorf 72 km southeast of Lauenburg); Lefeber, 1973:153 (Netherlands: Vogelenzang); Erlandsson, 1974:73 (France, Italy); Simon Thomas and Veenendaal, 1974b:4 (France); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Lefeber, 1976:151 (Netherlands: Maasduintjes between Bergen and Wellse Hut); Simon Thomas, 1976:5 (France: Lot-et-Garonne: Forêt de Campet); Georghiou, 1977:192 (Cyprus); Kolesnikov, 1977:318 (Russia: Bryansk Oblast'); Guichard, 1978:271 (Greece); Kazenas, 1978b:113, 126 (in key to Sphecidae of Kazakhstan and Central Asia); Marion, 1978:88 (France: Nièvre Department); Pulawski, 1978:214, 219 (in key to Sphecidae of European part of USSR); Lefeber, 1979:12 (in checklist of Sphecidae of Netherlands), 73 (Netherlands: distribution map); Guichard, 1980:227 (Oman); Pagliano,

1980:127 (Italy: Abruzzo); Petit, 1980:43 (Belgium: Aayen); Schmidt, 1981:185 (Germany: Baden-Württemberg); Roche, 1981:2 (in checklist of Sphecidae of United Arab Emirates); Gayubo, 1982a:105 (northern Spain: Sierra de Béjar); Skibińska, 1981:358 (Poland: Warszawa-Białoleka); Gayubo, 1982f:253 (Spain: Cádiz Province); Skibińska, 1982:123 (Poland: Warszawa area); Dollfuss, 1983b:10 (in catalog of Sphecidae of Austria); Józán, 1983:99 (Hungary); Lefeber, 1983a:84 (Netherlands: Waddendistrict: northern coast sand dunes); Schmidt and Westrich, 1983:123 (Greece); Gayubo, 1984b:85 (Spain: Salamanca Province), 1984c:366 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:16 (Spain: Valencia Province); Gayubo, 1985c:168 (Spain: Valladolid: Valladolid); Józán, 1985b:57 (Hungary south of Lake Balaton), 83 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Westrich and Schmidt, 1985b:112 (Germany: extinct in Baden-Württemberg); Gayubo, 1986c:33 (Spain: Zamora Province); Gayubo and Heras, 1986:42 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:47 (Spain: Burgos and Soria provinces); Gayubo and Tormos, 1986a:17 (Spain: Castellón: Castellón de la Plana); Islamov, 1986:527 (Uzbekistan: Surkhandarya Oblast'); Józán, 1986:370 (Hungary: Kiskunság National Park); Skibińska, 1986b:154 (Poland: suburbs of Warszawa); Steiner, 1986:103 (references to papers on nesting habits); Dollfuss, 1987:21 (Austria); Gayubo, 1987a:113 (Spain: Ciudad Real Province); Tormos and Jiménez, 1987a:125 (Spain: Valencia Province), 1987b:316 (Spain: Valencia Province: Dehesa de El Saler); Schmidt and Westrich, 1987:364 (Germany: Mainz area); Asís and Jiménez, 1988:272 (Spain: Castellón Province); Gayubo and Mingo, 1988:81 (Spain); Karsai, 1988:100 (Hungary: Kiskunság National Park); Jacobs, 1989:12 (Germany: Mecklenburg-Vorpommern); Pádr *in* Šedivý, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Gayubo, Asís, and Tormos, 1990a:18 (Spain); Jacobs, 1990:10 (Germany: Rostock area); Jacobs and Oehlke, 1990:165 (new locality records from Democratic Germany); Pagliano, 1990:105 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:540 (Austria: Kärnten); Day, 1991:xix (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:107 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:403 (Italy); Kowalczyk, 1991b:120 (Poland: Augustów Forest); Negrisolo, 1991:319 (Italy: Venezia Province); Gayubo and Torres, 1991:Table I and p. 81 (Spain: Salamanca; effects of urban pressure); Guichard, 1991a:339 (Jordan); Jacobs, 1991:46, (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen), 47 (a psammobiont); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Calliptamus barbarus cephalotes* F.W.); Schembri, 1991:181 (citation of Valetta, 1971); Budrys, 1992:31 (in list of Sphecidae of Lithuania); Gayubo, Borsato, and Osella, 1992:282 (Algeria, France, Greece); Józán, 1992b:173 (Hungary: Boronka-melléki Protected Area); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Luchetti, 1993:106 (Italy: Sardegna: Maddalena archipelago); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Blagoveshchenskaya, 1994:87 (Russia: Ul'yanovsk Oblast'); Dollfuss, 1994:100 and 101 (endangered in Austria); Gayubo and Borsato, 1994:208 (Italy: Toscana, Sardegna); Krombein *in* Krombein and Pulawski, 1994:12 (nesting habits); Pulawski *in* Krombein and Pulawski, 1994:63 (in revision of Sri Lankan *Tachysphex*); Theunert, 1994c:51 (Germany: summary of records from Niedersachsen and Bremen); Tormos, Asís, and Gayubo, 1994:188, 206 (Spain: Albacete Province); Jansen and Kaluza, 1995:8 (Germany: endangered in Sachsen); Józán, 1995:104 (Hungary: projected Duna-Dráva National Park); Negrisolo, 1995a:19 (visiting flowers of *Echinophora spinosa* L.), 23 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:86 (Italy: Ferrara Province); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:24 (Germany: Bayern: Kahl); Schmid-Egger, Risch, and Niehuis, 1995:212 (Germany: summary of records from Rheinland-Pfalz Province); Kuhlmann, 1996:221 (Portugal: Serra de Estrela); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast', as *parzeri*); Schmid-Egger, Schmidt, and Doczkal, 1996:378 (Germany: Baden-Württemberg: last collected in 1938); Witt, 1996:106 (Germany: Brandenburg), 111 (locality records);

Celary, 1997:58 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:30 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg), 34 (endangered); Dollfuss, Gusenleitner, and Bregant, 1998:515 (Austria: summary of collecting records from Burgenland); Flügel, 1998:61 (Germany: Brandenburg: Unteres Odertal National Park); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Kulik, 1998:131 (Germany: Niedersachsen); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); van der Smitten, 1998:69 (Germany: Niedersachsen: Laasche); K. Weber, 1998:149 (Germany: Bayern: Bamberg area); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); Neumayer, Schwarz, and Bregant, 1999:225 (Austria: in checklist of Sphecidae of Land Kärnten); Pauly, 1999:109 (in catalog of Belgian aculeates); Blösch, 2000:230 (in Sphecid Fauna of Germany); Esenbekova and Kazenas, 2000:33 (southeastern Kazakhstan: twelve localities); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:106 (Greece); Jacobs, 2000:12, 17 (Germany: Land Mecklenburg-Vorpommern: endangered); Ljubomirov, 2000:10 (Bulgaria, specimens in N. Nedelkov collection); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 158 (review of known biology); Ohl et al., 2001:142 (distribution in Germany by provinces); K. Schmidt and Bitsch in Bitsch et al., 2001:264 (in Sphecid Fauna of Western Europe); Shkuratov, 2001:17 (prey: *Calliptamus italicus* L., *Chortippus albomarginatus* Deg., *Omocestus viridulus* L., Acrididae); Zettel, Gross, and Mazzucco, 2001:72 (Austria: Wien); Kazenas, 2002a:72 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:153 (Poland: Kampinos National Park near Warszawa); Shkuratov, 2002b:141 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); van der Meer, 2002:15 (Netherlands: costal dunes at Meijendel); Gayubo, Özbek, and Yıldırım, 2003:89 (Turkey: Ankara: Beytepe; Erzincan: Erzincan; Kars: Sarıkamış); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Józán, 2003:227 (Hungary: Látrányi Puszta Nature Conservation Area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:70 (Germany: in catalog of wasps and bees of Bayern); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Schmid-Egger, 2003:758 (Italy: Sicilia: Armerina, Vendicari); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: no longer endangered); Gayubo et al. 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Gorobchishin, 2004:34 (Ukraine: Zaporiz'ka Oblast': Obitichna Kosa Nature Reserve); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Kazenas, 2004b:104 (Kazakhstan: western Tien Shan), 2004d:31 (Kazakhstan: northern Caspian region); Klein and Lefebvre in Peeters, van Achterberg, et al., 2004:425 (in Wasp and Ant Fauna of Netherlands); Shkuratov, 2004a:77 (Russia: Rostov Oblast'; prey: acridids *Calliptamus italicus* L., *Chortippus albomarginatus* Deg., *Chrysochraon dispar* Germar, *Omocestus viridulus* L.), 2004b:166 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:357 (in catalog of Polish Crabronidae); Szczepko and Kowalczyk, 2004:126 (Poland: Kampinos National Park near Warszawa); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:44 and 60 (in checklist of Polish Sphecidae); Burger, 2005:35 (Germany: Thüringen); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Jacobs, 2005a:452 (Bulgaria: Melnik); Pagliano and Negrisoló, 2005:372 (in Sphecid Fauna of Italy); Saure, 2005:19 (Germany: Berlin); Shoreiko,

2005a:163 (Ukraine: Crimea), 2005b:98 (Ukraine: Crimea: Karadagh Nature Reserve); Straka, 2005a:396 (extinct in Czech Republic), 2005b:271 (Turkey: eight localities); Theunert, 2005a:19 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1797 (Turkey: Erzurum: Horasan); Bock, 2006:41 (Germany: Bayern: Kelheim District: Abensberg sands); Gorobchishin, 2006:109 (Ukraine: Kyiv Oblast': village Khotiv); Liebig, 2006:40 (Germany: Sachsen: Muskauer Heide); Ljubomirov, 2006:543 (Bulgaria and Greece: Rhodope Mountains: earlier records summarized); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:462 (Spain: Gerona: Calonge; Tarragona: Vandellos; prey: Orthoptera Acrididae: *Euchortippus chopardi* Descamps, *Calliptamus barbarus* (Costa); nest unicellular); Jacobs, 2007:94, 98 (in key to Crabronidae of Germany); Kazenas, 2007a:91 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Pulawski, 2007a:473 (in revision of African *Tachysphex*); Roche, 2007a:80 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Saure, 2007:83 (Germany: in checklist of Aculeata of Land Brandenburg); G. Turrisi and R. Turrisi, 2007:121 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity, as *panzer panzeri*); Vago, 2007:175 (France: département de Pas-de-Calais); Vepřek and Straka, 2007:203 (in catalog of Sphecidae of Czech Republic and Slovakia); Yildirim and Ljubomirov, 2007:120 (Turkey: Erzurum: Oltu); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); T. Li, Q. Li, and Cai, 2008:143 (first record from China); Ljubomirov and Yildirim, 2008:215 (in catalog of Crabronidae of Turkey); Theunert, 2008:85 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picon, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Debuysse and Vago, 2009:4 (in list of Sphecidae *sensu lato* of northern France); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Livory, Chevin, Lair, Sagot, and Baldock, 2009:28 (France: Département de la Manche: Annoville, Blainville, Les Moitiers d'Allonne); Pagliano, 2009:184 (Italy: Piemonte: San Benedetto Belbo; recorded from Trentino-Alto Adige by Kohl, 1880, as *panzeri panzeri*); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Szczepko and Wiśniowski, 2009:71 (Poland: Spała Landscape Park); Rudoiskatel', 2010:152 (Russia: southern Ural Mountains); Schmid-Egger, 2010a:19 (in red list of Aculeata of Germany: very rare); Shorenko and Konovalov, 2010:23 (Ukraine: Crimea: Evpatoriya; Lugansk Oblast'); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:90 (Western Slovakia: Borská Nižina); van der Smissen, 2010a:353 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records), 2010b:387 (France: Vaucluse: Bédoin); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Theunert, 2011a:21 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:48 (Germany: extinct in Hessen, last collected in 1956); Burguet *in* Durand and Burguet, 2012:4 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Yildirim, 2012:80 (Turkey: Erzincan and Erzurum provinces); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:355 (in new catalog of Sphecidae of Saudi Arabia); Kazenas, 2013a:70 (color photograph of male, short information on geographic distribution and nesting habits), 2013b:495 (southeastern Kazakhstan: many places in foothills and low mountains, also in river Ili and Sharyn valleys, and in adjacent deserts); A. Scholz and Liebig, 2013:26 (Germany: Sachsen: in list of Sphecidae

*sensu lato*); Shlyakhtenok, 2013:167 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park); Bitsch, 2014:403 (Isère: Arandon; Lozère: Saint-Étienne-Vallée Française, Saint Germain-de-Calberte; Bas-Rhin: Brumaty); Kazenas, 2014a:135 (Kazakhstan: Karatau Mountain Range); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Rezaei and Fallahzadeh, 2015:10 (Iran: Fars: Dalin at 30°03'N 52°07'E and Dasht e Arzhan at 29°38'N 51°58'E); P. Rosa and Pagliano, 2015:106 (Italy: Lombardia and Piemonte: Parco del Ticino); Shorenko, 2015:328 (in list of Sphecidae *sensu lato* of Crimea); Weber, 2015:64 (Germany: Bayern: Nature Reserve Börsting near Hallstadt); Bleidorn, Gerth, Hopfe, et al., 2016:11 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Mokrousov and Popov, 2016:581 (Russia: Krasnodarskiy Krai); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province); Samin and Bagriacik, 2016:497 (Iran: West Azarbaijan Province: Myandoab and Ourmieh); Schmid-Egger, Dandria, and Xuereb, 2016:80 (in checklist of Crabronidae of Maltese Islands); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:36 (Turkey: Kars and Tunceli provinces); Antropov, 2017b:239 (in catalog of Crabroninae of Russia); Shorenko, 2017:78 (in Crimea collected in June throughout August); Lett, 2018:203 (France: Loir-et-Cher: Gièvres at 47°16'39"N 1°41'52"E); Madl, 2018:941 (in catalog of Hymenoptera of Djibouti); Maharramov, Aliyev, and Mammadov, 2018:455 (Azerbaijan: Astara: Tangerud, and Lenkoran: Kergelen); Nicolas and Vago, 2018:13 (France: Pas-de-Calais: Mont Saint-Frieux); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Ben Khedher, Yildirim, Braham, and Chaaban, 2019:191 (known from Tunisia: Tozeur Province); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:111 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:270 (Iran: Fars: Kherameh: Dodej); Ben Khedher, Yildirim, and Braham, 2020b:318 (Tunisia: new locality records from Béja, Kairouan, Kasserine, Kebili, Mahdia, Sidi Bouzid, Siliana, Sousse, Tataouine, and Tozeur provinces); Gadallah, 2020b:53 (in list of aculeate wasps of Arabian Peninsula); Gros, 2020:400 (nesting habits); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:74 (in catalog of *Tachysphex* of Iran); Saure, 2020:277 (Germany: Sachsen-Anhalt: sand dunes); Shorenko, 2020:52 (Crimea: Karadag Nature Reserve); Cross, Baldock, and Wood, 2021:44 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:65 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:101 (in commented list of Sphecidae *sensu lato* of Poland); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:232 (in revision of Sphecidae *sensu lato* of Europe); Can, 2022a:222 (supernumerary vein in forewing); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Mawadda and Girish Kumar, 2023:112 (in checklist of Crabroninae of Northern India); Pytel-Huta and Franchuk, 2024:83 (Ukraine: Rivno Nature Reserve); Kochetkov and Korsun, 2025:11 (Russia: Zabaikalskiy Krai: Dauriski Nature Reserve).

*Lyrops rufiventris* Spinola, 1839:479, ♀. Holotype or syntypes: ♀, France: Corse: no specific locality (not in Torino, probably lost: see de Beaumont, 1952e:47; not listed by Casolari and Casolari Moreno, 1980, or by Pagliano, 1908). Synonymized with *Tachytes panzeri* by A. Costa, 1884b:246 and 1885a:17. – **As *Larrada rufiventris***: F. Smith, 1856:280 (new generic assignment, in catalog of Hymenoptera in British Museum). – **As *Tachytes rufiventris***: A. Costa, 1867b:87 and 1867c:31 (new generic assignment, in revision of Italian Sphecidae, 1882b:22 and 34 (Italy: Sardegna), 1883:57 (Italy: Sardegna); nec Magretti, 1884c:587 (= *Tachysphex argentatus*); Dalla Torre, 1897:693 (in catalog of world Hymenoptera); W. Schulz, 1906:212 (correction to Dalla Torre: described from Corsica, not Egypt). – **As *Tachysphex rufiventris***: Kohl, 1885:356 (new generic assignment, tentative new synonym of *Tachysphex panzeri*); Stadelmann, 1897:255 (new generic assignment). – **As *Tachysphex panzeri rufiventris***: Pulawski,

1971:270 (new status, in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pagliano, 1990:105 (in catalog of Italian Sphecidae); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Pagliano and Negrisolo, 2005:373 (in Sphecidae Fauna of Italy).

*Lyrops haemorrhoea* Spinola, 1843b:XXXVI, sex not stated, origin unknown, specimen(s) in Berlin Museum, as junior synonym of *Lyrops rufiventris*. Not available: first proposed as a junior synonym (Article 11.6).

*Tachytes oraniensis* Lepeletier de Saint Fargeau, 1845:253, ♀, ♂ (as *Oraniensis*, incorrect original capitalization). Syntypes: Algeria: Oran (MNHN). Synonymized with *Tachysphex panzeri* by Kohl, 1884a:368. – Lucas, 1849:249 (Algeria: Oran, original description copied with modifications); Dours, 1874:139 (in catalog of Hymenoptera of France: Montpellier); Radoszkowski, 1877:29 (Uzbekistan: Samarkand and Syr-Daria area), corrected to *Tachysphex panzeri pulverosus* by Pulawski, 1971:275; Acloque, 1897:93 (in Sphecidae Fauna of France and Algeria). – **As *Larrada oraniensis***: Walker, 1871:21 (new generic assignment, Djibouti: Tajura); Innes Bey, 1912:111 (specimens recorded by Walker, 1871, now destroyed by dermestids, were collected in Tajura). – **As *Tachytes panzeri* var. *oraniensis***: Pérez, 1907:496 (new status, Bahrain); Mantero, 1911:74 (Italy: Sardegna: Isola dell'Asinara). – **As *Tachysphex oraniensis***: Kohl, 1884a:368 (new generic assignment). – **As *Tachysphex panzeri* var. *oraniensis***: Kohl, 1885a:351 and 356 (in key to Palearctic *Tachysphex*); nec Medina, 1896:107 (= *Tachysphex pseudopanzeri*); Dalla Torre, 1897:683 (in catalog of world Hymenoptera); nec de Gaulle, 1908:121 (= *Tachysphex pseudopanzeri*); von Schulthess, 1909:441 (Libya: Ain Sarah, Benghazi, Dernah, Gherran, Tripoli); nec Mercet, 1910b:165 (= *Tachysphex pseudopanzeri*); Morice, 1911:104 (Algeria: Biskra); Maidl, 1913:560 (Egypt: El Wasta); Guiglia, 1932d:474 (Libya: Gialo); Maidl, 1933b:121 (Morocco); Nadig, 1933:78 (Morocco); Guiglia, 1940a:290 (Libya: Beni Ulid); Giner Marí, 1945b:362 (Morocco: Western Sahara: El Aiun); nec Ceballos, 1956:377 (= *Tachysphex pseudopanzeri*). – **As *Tachysphex panzeri* forme *oraniensis***: de Beaumont, 1955a:174 (new status, Morocco). – **As *Tachysphex panzeri oraniensis***: W. Schulz, 1905b:45 (new status, Algeria: Biskra); Mantero, 1911:74 (Italy: Isola dell'Asinara), corrected to *Tachysphex panzeri rufiventris* by Pulawski, 1971:271; Kruger, 1929a:21 and 1929b:56 (Libya: Cyrenaica: Giarabub, Tobruk); Guiglia, 1934b:303 (Libya: bibliography and summary of locality records); Nadig, 1934:32 (Italy: Sardegna: Cagliari, Iglesias), corrected to *Tachysphex panzeri rufiventris* by Pulawski, 1971:271; Guiglia, 1942b:234 (Libya); de Beaumont, 1966:212 (Egypt: Agami near Alexandria); Pulawski, 1971:273 (in revision of Palearctic *Tachysphex*); Tsuneki, 1972e:383 (Mongolia); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae).

*Tachytes aurifrons* Lucas, 1849:246, ♀. Syntypes: Algeria: La Calle (MNHN). Synonymized with *Tachysphex panzeri* by Kohl, 1884a:368 (tentatively) and by de Beaumont, 1947c:662 (definitely). – F. Smith, 1856:300 (in catalog of Hymenoptera in British Museum); Dalla Torre, 1897:687 (in catalog of world Hymenoptera); Marquet, 1875:203 (France: Hérault: Sète; Haute-Garonne: Toulouse); Magretti, 1906:15 (Eritrea).

*Tachytes discolor* Frivaldszky, 1877:351, ♂. Syntypes: Hungary: Budapest, also Grebenács in Temes Komitat, now in Timiș District in Romania (lost). Neotype: ♂, Hungary: Budapest-Rákos (TMB), designated by Pulawski *in* Krombein and Pulawski, 1994:63. Synonymized with *Tachysphex panzeri* by Kohl, 1883d:226. – Chyzer, 1902:33 (Hungary); Haris, 2016:14 (in list of species described by J. Frivaldszky from Carpathian Basin). – **As *Tachysphex panzeri* var. *discolor***: Dalla Torre, 1897:683 (new generic assignment, new status, in catalog of world Hymenoptera); Morice, 1911:104 (Algeria: Biskra); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nessebar).

*Tachytes pulverosus* Radoszkowski, 1886a:32, ♀, ♂. Lectotype: ♂, Uzbekistan: Samarkand (Kraków), designated by de Beaumont, 1936b:610 ("qui doit être considéré comme type"). Synonymized with *Tachysphex panzeri* by Pulawski *in* Krombein and Pulawski, 1994:63. – Radoszkowski, 1892:570 (reference to Radoszkowski, 1886). – **As *Tachysphex pulverosus***: Kohl *in* Dalla Torre, 1897:684 (new generic

- assignment, in catalog of world Hymenoptera); de Beaumont, 1936b:610 (revision of specimens in coll. O. Radoszkowski, Kraków). – As *Tachysphex panzeri pulverosus*: Pulawski, 1971:274 (new status, in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae).
- Tachytes ceylonicus* Cameron, 1900a:21, ♂ (as *ceylonica*, incorrect original termination). Holotype or syntypes: ♂, Sri Lanka: no specific locality (OXUM). Synonymized with *Tachysphex panzeri* by Pulawski, 1975a:312. – Ramakrishna Aiyar, 1916:551 (in catalog of Indian aculeates described after Bingham, 1897).
- Tachytes aurifrons* Cameron, 1900a:23, "♀", actually ♂, junior primary homonym of *Tachytes aurifrons* Lucas, 1849. Lectotype: ♂, Sri Lanka: Trincomalli (BMNH), designated by Pulawski, 1975a:312. Synonymized with *Tachysphex panzeri* by Pulawski, 1975a:312. – Ramakrishna Aiyar, 1916:551 (in catalog of Indian aculeates described after Bingham, 1897).
- Tachysphex ablatius* Nurse, 1909:516, ♀. Lectotype: ♀, India: Gujarat: Deesa (BMNH), designated by Pulawski, 1975a:312. Synonymized with *Tachysphex panzeri pulverosus* by Pulawski, 1975a:312. – Ramakrishna Aiyar, 1916:552 (in catalog of Indian aculeates described after Bingham, 1897).
- Tachysphex panzeri fortunatus* de Beaumont, 1968a:261, ♀, ♂. Holotype: ♀, Canary Islands: Gran Canaria: Maspalomas (BMNH). Synonymized with *Tachysphex panzeri* by Pulawski in Krombein and Pulawski, 1994:63. – Pulawski, 1971:270 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Báez and Ortega, 1978:192 (Canary Islands); Wolf, 1980:73 (Canary Islands); Gayubo, 1986f:999 (prey: acridid *Sphingonotus rubescens rubescens* (Walker)); Hohmann, La Roche, Ortega, and Barquín, 1993:237 (detailed locality records from Canary Islands).
- Tachysphex panzeri cyprius* Pulawski, 1971:272, ♀, ♂. Holotype: ♀, Cyprus: Limassol (W.J. Pulawski coll.). Synonymized with *Tachysphex panzeri* by Pulawski in Krombein and Pulawski, 1994:63. – R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae).
- Tachysphex panzeri sareptanus* Pulawski, 1971:272, ♀, ♂. Holotype: ♀, Russia: Sarepta, now Krasnoarmeysk (ZIN). Synonymized with *Tachysphex panzeri* by Pulawski in Krombein and Pulawski, 1994:63. – Kazenas, 1972b:162 (Kazakhstan), 1974b:109 (feeding on flowers of *Tamarix* sp., *Statice gmelini* Willd., Plumbaginaceae, and *Cynanchum sibiricum* Willd., Asclepiadaceae, in Kazakhstan), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan), 111 (feeding on flowers of *Lepidium crassifolium* W. et K., Brassicaceae, and *Gypsophila trichotoma* Wend., Caryophyllaceae, in Kazakhstan); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae).
- As *Tachysphex auriceps*: Giner Marí, 1945c:856 (India: Maharashtra: Varsoba near Bombay), corrected to *Tachysphex panzeri* by Pulawski in Krombein and Pulawski, 1994:63.
- As *Tachysphex lativalvis gibba*: Simon Thomas, 1972:181 (France: Landes: Onesse), corrected to *Tachysphex panzeri* by Simon Thomas and Veenendaal, 1974:4.
- As *Lyrops tricolor* partim: Pagliano, 2008:548 (specimens in M. Spinola collection, Torino, are *Tachysphex panzeri*).

### 308. *papago* Pulawski

*Tachysphex papago* Pulawski, 1982b:35, ♀, ♂. Holotype: ♀, USA: Arizona: Santa Cruz County: Nogales (BMNH). – Pulawski, 1988a:137 (in revision of North American *Tachysphex*).

### 309. *paucispina* Pulawski

*Tachysphex paucispina* Pulawski, 1977a:230, ♀. Holotype: ♀, Australia: Western Australia: Dongara (BMNH). – Cardale, 1985:241 (in catalog of Australian Sphecidae).

### 310. *paulus* Pulawski

*Tachysphex paulus* Pulawski, 2007a:480, ♀, ♂. Holotype: ♀, Namibia: Otjivarongo District: 18 km northeast of Kalkfeld at 20°45'S 16°16'E (CAS). – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

**311. *pauillus* W. Fox**

*Tachysphex pauillus* W. Fox, 1894a:530, ♀. Holotype: ♀, USA: California: no specific locality (ANSP). – Dalla Torre, 1897:683 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Cresson, 1928:45 (holotype in ANSP); G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Krombein, 1979b:1629 (in catalog of North American Hymenoptera); Rust, Menke, and Miller, 1985:46 (California: Channel Islands); Kurczewski and Evans, 1986:720 (correct name for *nigrrior* of Evans, 1970); Pulawski, 1988a:42 (in revision of Nearctic *Tachysphex*); Spofford, Kurczewski, and Downes, 1989:259, 260 (summary of previous records for nest parasites *Senotainia trilineata* (Wulp) and *Senotainia* sp., miltogrammine flies); Ratzlaff, 2016:26 (Canada: British Columbia: from Krombein, 1979 and Pulawski, 1988); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality).

*Tachysphex nigrrior* W. Fox, 1894a:530, ♀, ♂. Lectotype: ♀, USA: Washington: no specific locality (ANSP), designated by Cresson, 1928:45. Synonymized with *Tachysphex pauillus* by Pulawski in Krombein, 1979b:1629. – Dalla Torre, 1897:681 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Evans, 1970:489 (Wyoming: Jackson Hole, nesting habits), 497; R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae).

**312. *pechumani* Krombein**

*Tachysphex tarsatus* subsp. *pechumani* Krombein, 1938c:468, ♀. Holotype: ♀, USA: New Jersey: Ocean County: Manahawkin (USNM). – As *Tachysphex pechumani*: G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 (new status, in catalog of North American Hymenoptera); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Kurczewski, Elliott and Vasey, 1970:1594 (redescription of ♀, description of ♂); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Kurczewski and Elliott, 1978:765-780 (nesting habits); Krombein, 1979b:1629 (in catalog of North American Hymenoptera); Steiner, 1986:103 (references to papers on nesting habits); Pulawski, 1988a:50 (in revision of Nearctic *Tachysphex*); Spofford, Kurczewski, and Downes, 1989:258 (nest parasite *Senotainia rubriventris* Macquart, a miltogrammine fly); Spofford and Kurczewski, 1990:747 (nest parasite: *Senotainia rubriventris* Macquart, Sarcophagidae), 1992:997 (species of miltogrammine parasites listed); Kurczewski, 1998c:242 (current and past distribution, imperiled status, protection recommendations), 2000a:1 (postulated postpleistocene history and current distribution in southern Ontario), 2000b:41 (first record from Indiana: Porter County: Township of Pine); Skevington et al., 2001:128 (Canada: Ontario: Lambton County); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario), 74 (Ontario: additional localities); Moan and Tramer, 2008:67 (ecological observations); Kurczewski, 2008a:1 (geographic distribution and paleobiogeography), 2008b:33 (nesting habits); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Ontario: no specific locality).

**313. *pectinatus* Pulawski**

*Tachysphex pectinatus* Pulawski, 1974a:69, ♀, ♂. Holotype: ♀, Argentina: Chubut: 13 km north of Puerto Madryn (UCD). – R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

**314. *pekingensis* Tsuneki**

*Tachysphex pekingensis* Tsuneki, 1971m:24, ♀. Holotype: ♀, China: Peking, now Beijing (originally K. Tsuneki coll., now USNM). – R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Nuhn and Menke, 1994:26 (holotype transferred to USNM).

**315. *pentheri* Cameron**

*Tachysphex pentheri* Cameron, 1905f:212, ♂ (as *Pentheri*, incorrect original capitalization). Lectotype: ♂, South Africa: Eastern Cape Province: Grahamstown (AMG according to original description, now TMP), designated by Pulawski, 2007a:482. – Arnold, 1923a:176 (a variety of *panzeri*, but owing to the loss of the type the status of the species cannot be settled), 175 (recorded from Afrotropical Region but unknown to the author), 176 (original description copied), 1930:4 (in checklist of Afrotropical Sphecidae); Seyoum and Pulawski, 2001:324 (potential control agent of acridid pests in Ethiopia; numerous locality records from Harerge and Sidamo provinces); S. Gess and F. Gess, 2003:110 (Namibia, South Africa: visiting flowers of *Limeum argute-carinatum* Wawra and Peyr., Molluginaceae, *Selago corymbosa* L., Scrophulariaceae, and *Zygophyllum simplex* L., Zygophyllaceae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:482 (in revision of African *Tachysphex*); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:355 (in new catalog of Sphecidae of Saudi Arabia: first record from the country, but no specific locality); Gadallah, 2020b:53 (in list of aculeate wasps of Arabian Peninsula). – **As *Tachysphex panzeri pentheri***: R. Bohart and Menke, 1976:275 (new status, in checklist of world Sphecidae); Gess, 1981:20 (South Africa: Eastern Cape Province: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils).

*Tachysphex panzeri* var. *nanus* Arnold, 1924:71, ♀, ♂. Lectotype: ♂, South Africa: Eastern Cape Province: Willowmore (TMP). Synonymized with *Tachysphex pentheri* by Pulawski, 2007a:482. – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex panzeri nanus***: R. Bohart and Menke, 1976:275 (new status; in checklist of world Sphecidae).

As *Tachysphex panzeri* var. *caliban* (♀ only): Arnold, 1923a:169, corrected to *Tachysphex pentheri* by Pulawski, 2007a:482.

*Tachysphex Panzeri* var. *zavattarii* Guiglia, 1939:74, ♀ (as *Zavattarii*, incorrect original capitalization). Holotype: ♀, Ethiopia: Sidamo: Neghelli = Negele in Boran area (MSNG). Synonymized with *Tachysphex pentheri* by Pulawski, 2007a:458. – **As *Tachysphex panzeri zavattarii***: R. Bohart and Menke, 1976:275 (new status; in checklist of world Sphecidae).

**316. *perniger* Arnold**

*Tachysphex perniger* Arnold, 1947:166, ♀, ♂. Lectotype: ♀, Madagascar: Antsirabe (MNHN), designated by Pulawski, 2007a:491. – Leclercq, 1960a:98 (comparison with *Tachysphex micromegas*), 99 (Madagascar); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae), 2007:491 (in revision of African *Tachysphex*); Madl, 2014a:983 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

**317. *persa* Gussakovskij**

*Tachysphex persa* Gussakovskij, 1933b:285, ♀. Holotype: ♀, Iran: Kerman: Sardag: Chakh-i-Zaman (ZIN). – Pulawski, 1971:328 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:11 (Israel); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Kazenas, 1978b:113, 125 (in key to Sphecidae of Kazakhstan and Central Asia); Hensen and van Ooijen, 1987:14 (Turkey); Esenbekova and Kazenas, 2000:33 (southeastern Kazakhstan: Borandysu, 15 km southeast of Borandysu, 20 km west, 10 km northwest of and 15 km east of Chundzha, 3 km north of Kokpek Valley); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:73 (geographic distribution, collecting localities in Kazakhstan); Straka, 2005b:272 (Turkey: references to Pulawski, 1971 and Hensen and van Ooijen, 1987, as *persa persa*); Roche, 2007a:80 (in checklist of Egyptian Crabronidae, as *persa persa*), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *persa persa*); Ljubomirov and Yildirim, 2008:216 (in catalog of Crabronidae of Turkey); Kazenas, 2013b:495 (southeastern Kazakhstan: Borandysu 30 km east of Chilik, Kokpek ravine 15 km

southeast of Borandysu); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces, as *persa persa*); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province, as *persa persa*); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:37 (Turkey: Erzurum: Oltu: Çataksu); Gülmez and Can, 2017:82 (Turkey: Erzincan Province); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:30 (Iran: Hormozgan: Band e Molla at 27°25'N 57°09'E); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:270 (Iran: Fars Province); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:74 (in catalog of *Tachysphex* of Iran, as *Tachysphex persa persa*); Embergenov, Akhmedov, and Medetov, 2023:25 (Uzbekistan: southern Lake Aral region); Kaplan and Yıldırım, 2021:66 (in catalog of Crabronidae of Turkey), 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

### **ssp. *catharinae* Pulawski**

*Tachysphex catharinae* Pulawski, 1964:86, ♀, ♂. Holotype: ♂, Egypt: Sinai Peninsula: Saint Catherine Monastery (originally W.J. Pulawski coll., now CAS). – **As *Tachysphex persa catharinae***: Pulawski, 1971:331 (new status, in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:11 (Israel; as *persa* forme *catharinae*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Roche and Zalut, 1994:115 (Egypt: Sinai Peninsula); Roche, 2007a:81 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Straka and Schmid-Egger, 2017: 440 (United Arab Emirates), 443 (color photograph).

### **ssp. *confinis* Gussakovskij**

*Tachysphex confinis* Gussakovskij, 1952:241, ♀, ♂. Lectotype: ♂, Tajikistan: Ayvaj (ZIN), designated by Pulawski, 1971:334. – **As *Tachysphex persa confinis***: Pulawski, 1971:333 (new status, in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae).

As *Tachysphex maracandicus* (corrected to *Tachysphex persa confinis* by Pulawski, 1971:409): Radoszkowski, 1886a:32 (Turkmenistan, male genitalia), 1891:590 (reference to Radoszkowski, 1886a); de Beaumont, 1936b:612 (redescription).

### **ssp. *nigripes* Pulawski**

*Tachysphex nigripes* Pulawski, 1967a:397, ♀, ♂. Holotype: ♂, Kazakhstan: Kokchetau (ZIN). Paratypes: Tajikistan, Turkey. – **As *Tachysphex persa nigripes***: Pulawski, 1971:332 (new status, in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); K. Schmidt and Bitsch *in* Bitsch et al., 2001:265 (in Sphecid Fauna of Western Europe); Ljubomirov, 2001b:49 (Bulgaria: Mount Vitosha near Sofia); Straka, 2005b:272 (Turkey: Kayseri: 120 km south of Kayseri; Kütahya: 30 km north of Kuthya); Yıldırım and Ljubomirov, 2005:1797 (Turkey: Konya: Sille; Niğde: Ulukışla); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Ljubomirov and Yıldırım, 2008:216 (in catalog of Crabronidae of Turkey); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:36 (Turkey: Tunceli: Mazgirt: Kalaycı); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:75 (in catalog of *Tachysphex* of Iran); Kaplan and Yıldırım, 2021:66 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:233 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

### **318. *persistans* R. Turner**

*Tachysphex persistans* R. Turner, 1916b:256, ♀. Holotype: ♀, Australia: Western Australia: Yallingup (BMNH). – R. Turner, 1916b:254 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Pulawski, 1977a:283 (in revision of Australian *Tachysphex*); Cardale, 1985:241 (in catalog of Australian Sphecidae); McCorquodale and Thomson, 1989:94 (prey: adult Blattidae); K. Walker, Naumann, Austin, Taylor, and Cardale, 1992:48 (in catalog of insects of Tasmania).

### 319.*peruanus* Pulawski

*Tachysphex peruanus* Pulawski, 1986:95, ♀, ♂. Holotype: ♀, Peru: Lambayeneque Province: Lambayeneque (UCD). – Pulawski, 1988a:147 (in cladistic analysis); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru).

### 320.*picnic* van Ooijen

*Tachysphex picnic* van Ooijen in Hensen and van Ooijen, 1987:15, ♀. Holotype: Turkey: Bursa: Uludag 15 km south of Bursa (coll. P.D.J. van Ooijen). – Straka, 2005b:270 (Turkey: reference to Hensen and van Ooijen); Ljubomirov and Yildirim, 2008:217 (in catalog of Crabronidae of Turkey); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces), 19 (is an endemic of Turkey); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:36 (may be a synonym of *Tachysphex obscuripennis*); Arens, 2017a:213 (first record from Greece: Peloponnisos: Killini, Lykaion, Parnon, and Taygetos mountain ranges; comparison with *Tachysphex obscuripennis*); Kaplan and Yildirim, 2021:66 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:234 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

### 321.*pilosellus* Pulawski

*Tachysphex pilosellus* Pulawski, 1971:303, ♀, ♂. Holotype: ♂, Kazakhstan: Baygakum near Chiili (ZIN). Paratypes: Turkmenistan. – R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Kazenas, 1978b:112, 124 (in key to Sphecidae of Kazakhstan and Central Asia); Esenbekova and Kazenas, 2000:33 (southeastern Kazakhstan: near landing place Dubun' on Ili River); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:73 (geographic distribution, collecting localities in Kazakhstan), 2008a:101 (southeastern Kazakhstan: Ili River valley: 15 km east of Ayak-Kalkan, near Dubun', and Dzhusandala Desert), 2013b:495 (southeastern Kazakhstan: near landing place Dubun' on Ili River).

### 322.*pilosulus* R. Turner

*Tachysphex pilosulus* R. Turner, 1908:488, ♀, ♂. Lectotype: ♀, Australia: Queensland: Cape York (BMNH), designated by Pulawski, 1977a:320. – Montague, 1914:649 (Australia: Western Australia: Monte Bello Islands, identification tentative); R. Turner, 1916b:255 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Evans, Matthews and Pulawski, 1976:443 (nesting habits); Pulawski, 1977a:320 (in revision of Australian *Tachysphex*); Alcock, 1980b:259 (nest, prey); Cardale, 1985:241 (in catalog of Australian Sphecidae); K. Walker, Naumann, Austin, Taylor, and Cardale, 1992:48 (in catalog of insects of Tasmania); Naumann, 1993:186 (Australia: Queensland: Heathlands area in Cape York), 1998:186 (Australia: northwestern Queensland: Musselbrook area, approximately 18°40'S 138°23'E); Pagliano, 2003a:508 (Australia: Northern Territory and Queensland).

### 323.*pinal* Pulawski

*Tachysphex pinal* Pulawski, 1988a:81, ♀, ♂. Holotype: ♀, USA: of Arizona: Pinal County: Boyce Thompson Arboretum (CAS). – Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

**324.pisonoides (Reed)**

*Larrada pisonoides* Reed, 1894:632, ♀, ♂. Lectotype: ♂, Chile: Valparaiso (MCZ), designated by Pulawski, 1974a:61. – **As *Larra pisonoides***: Kohl in Dalla Torre, 1897:672 (new generic assignment, in catalog of world Hymenoptera). – **As *Tachytes pisonoides***: Chiappa, 2012:8 (erroneous new generic assignment; Chile: Región de Valparaíso: no specific locality). – **As *Tachysphex pisonoides***: Herbst, 1921c:114 (new generic assignment); Ruiz Pereira, 1924:102 (Chile: Cerro San Cristóbal); Jaffuel and Piri6n, 1926:376 (Chile: valle de Marga Marga); Janvier, 1928:95 (nesting habits, larvae of Hemiptera recorded as prey, almost certainly in error); Gazulla and Ruiz Pereira, 1929:300 (Chile: Hacienda de "Las Mercedes"); Pulawski, 1974a:61 (in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Sielfeld, 1980b:73 (in checklist of Chilean Sphecidae); Piek and Spanjer, 1986:190 (in list of Sphecidae with known prey); Steiner, 1986:103 (references to papers on nesting habits); Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

**325.pisonopsis Pulawski**

*Tachysphex pisonopsis* Pulawski, 1974a:59, ♀, ♂. Holotype: ♀, Chile: Valparaiso: Valparaiso (MCZ). – R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Sielfeld, 1980b:73 (in checklist of Chilean Sphecidae); Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

**326.platypus Pulawski**

*Tachysphex platypus* Pulawski, 1977a:253, ♀. Holotype: ♀, Australia: Western Australia: Marchagee (ANIC). – Cardale, 1985:242 (in catalog of Australian Sphecidae).

**327.platystethus Pulawski**

*Tachysphex platystethus* Pulawski, 2007a: 493, ♀, ♂. Holotype: ♀, Madagascar: Toliara (= Tuléar) Province: 12 km southeast of Toliara at 23°25'S 43°45'E (CAS). – Madl, 2014a:983 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

**328.pleuralis Pulawski**

*Tachysphex pleuralis* Pulawski, 1977a:279, ♂. Holotype: ♂, Australia: Northern Territory: McArthur River 48 km south-southeast of Borrooloola (ANIC). – Cardale, 1985:242 (in catalog of Australian Sphecidae).

**329.plicosus (A. Costa)**

*Tachytes plicosus* A. Costa 1867b:83 and 1867c:27, ♀ (as *plicosa*, incorrect original termination). Holotype: ♀, Italy, Calabria: vallata dell'Aspromonte (Napoli). – **As *Tachysphex plicosus***: Kohl, 1885a:396 (new generic assignment, original description copied); Dalla Torre, 1897:684 (in catalog of world Hymenoptera); de Beaumont, 1936a:211 (*plicosus* is the valid name for *gallicus*), 1936c:7 (study of A. Costa's specimens); Giordani Soika, 1939b:73 (Italy: Lido di Venezia); de Beaumont, 1940b:174 (in revision of *Tachysphex* of Egypt); Honoré, 1942:55 (Egypt: Ezbet Nakhlé, Marg); Guiglia, 1943b:71 (Albania: Kopluku); de Beaumont, 1947a:203 (in new revision of *Tachysphex* of Egypt), 1954a:58 (Italy); Grandi, 1954:240 (Italy); de Beaumont, 1959a:28 (Italy: Sicilia: Monte Etna); Pulawski, 1971:258 (in revision of Palearctic *Tachysphex*); Erlandsson, 1974:73 (France, Yugoslavia); Evans, 1974:719 (description of larva); Pulawski, 1974c:715 (Bulgaria, nest and prey); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 1978:216, 220 (in key to Sphecidae of European part of USSR); Pagliano, 1980:128 (Italy: Abruzzo); Rodgers and Homewood, 1982:234 (Tanzania: Usambara Mountains); Hensen and van Ooijen, 1987:16 (Turkey); Pagliano, 1990:105 (in catalog of Italian Sphecidae); Dollfuss, 1991:107 (in key to Sphecidae of North and Central Europe); Gayubo and Borsato, 1994:208 (Italy: Piemonte); Krombein and Pulawski, 1994:11 (nesting habits), 43 (in revision of Sri Lankan *Tachysphex*); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Vicidomini, 2000b:28 (Italy: previously recorded from Campania); K. Schmidt and Bitsch in Bitsch et al., 2001:266 (in Sphecidae)

Fauna of Western Europe); Gayubo, González, Tormos, and Asís, 2002:86 (distribution in Iberian Peninsula); Józán, 2002:53 (Hungary: Mecsek Mountains); Drewes, 2003:142 (Croatia: Moščenicka Draga); Pagliano and Negrisolo, 2005:374 (in Sphecidae Fauna of Italy); Straka, 2005b:270 (Turkey: reference to Pulawski, 1971, and Hensen and van Ooijen, 1987); Gayubo, González, de la Nuez, Asís, and Tormos, 2006:208 (Spain: Madrid: Tres Cantos; Salamanca: Saucelle; Sevilla: Cazalla de la Sierra); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:459 (recorded from Spain by Gayubo et al., 2002, 2006); Pulawski, 2007a:495 (in revision of African *Tachysphex*); Roche, 2007a:78 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); G. Turrisi and R. Turrisi, 2007:121 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia), 142 (detailed list of localities); Ljubomirov and Yildirim, 2008:217 (in catalog of Crabronidae of Turkey); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Józán, 2011:180 (in checklist of Sphecidae *sensu lato* of Hungary); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:30 (Iran: Hormozgan: Sar Kahnán at 27°24'N 57°07'E); Maharramov, Aliyev, and Mammadov, 2018:455 (Azerbaijan: Belokan: Katekh, and Zagatala: Perzivan); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:73 (in catalog of *Tachysphex* of Iran); Cross, Baldock, and Wood, 2021:44 (in catalog of Sphecidae *sensu lato* of Portugal); Fresno, 2021a:77 (Spain: Ciudad Real: Retuerta del Bullaque); Kaplan and Yildirim, 2021:66 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, ndK. Schmidt, and Straka, 2021:234 (in revision of Sphecidae *sensu lato* of Europe); Fresno, 2023:23 (Spain: León: Villarrodriego de Ordás and Málaga: Mijas Costa); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

*Tachytes plicosus* A. Costa 1867c: 27, ♀ (as *plicosa*, incorrect original termination). Objective synonym of *Tachytes plicosus* A. Costa, 1867a.

*Tachysphex gallicus* Kohl, 1883a:167, ♀ (as *gallica*, incorrect original termination). Syntypes: ♀, France: Marseille (NHMW). Synonymized with *Tachysphex plicosus* by de Beaumont, 1936a:211 and 1936c:7. – Kohl, 1885a:349 (in key to Palearctic *Tachysphex*), 377 (in revision of Palearctic *Tachysphex*); Dalla Torre, 1897:680 (in catalog of world Hymenoptera); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Berland, 1925b:119 (in Sphecidae Fauna of France); de Beaumont, 1936a:211 (in revision of French *Tachysphex*); Grandi, 1937:332 (Italy); Balthasar, 1972:274 (in Sphecidae Fauna of Czechoslovakia: can be expected in the country); Dollfuss, 1989:13 (type material in NHMW).

*Tachysphex striolatus* Cameron, 1903b:126, ♀ (as *striolata*, incorrect original termination). Holotype or syntypes: ♀, India: Barrackpore 20 km north of Calcutta (OXUM). Synonymized with *Tachysphex plicosus* by Pulawski, 1971:460. – Rothney, 1903:103 (India: West Bengal: Barrackpore); Ramakrishna Aiyar, 1916:551 (in catalog of Indian aculeates described after Bingham, 1897).

*Tachysphex egregius* Arnold, 1924:66, ♂. Holotype: ♂, Zimbabwe: Bulawayo (TMP). Synonymized with *Tachysphex plicosus* by Pulawski *in* Krombein and Pulawski, 1994:44. – Arnold, 19303 (in checklist of Afrotropical Sphecidae), 1929c:384 (description of ♀, South Africa: Cape Province: Lady Gray), 1951:155 (Ghana: Labadi; Mali: Tillembeya); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae).

### 330. *politus* Pulawski

*Tachysphex politus* Pulawski, 1977a:277, ♀. Holotype: ♀, Australia: New South Wales: 40 mi north of Broken Hill (ANIC). – Cardale, 1985:242 (in catalog of Australian Sphecidae).

**331. *pompiliformis* (Panzer)**

*Larra pompiliformis* Panzer, 1804, Heft 89:13, [♀]. Holotype: ♀, Germany: no specific locality (originally Baader coll, now ZSBS). – Panzer, 1806:129 (in review of his earlier work, perhaps a *Dimorpha*); Jurine, 1807:145 (in reclassification of Hymenoptera and Diptera); Spinola, 1808:173 (Italy: Genova area); F. Smith, 1851:19 (Great Britain: no specific locality), 1853:63 (in checklist of British Hymenoptera); Peets, 1909-1911:68 (*Larra pompiliformis* of Panzer = *Tachysphex pectinipes*). – **As *Tachytes pompiliformis***: Vander Linden, 1829:23 (new generic assignment, bibliographic references, Belgium: Bruxelles, Germany, Italy, variation); Shuckard, 1836:57 (preying on caterpillars, clearly in error), 1837a:89 (in revision of British Aculeata); von Siebold, 1839:48 (Germany: Danzig, now Poland: Gdańsk); Herrich-Schaeffer, 1840:297 (Germany: Bayern: Regensburg area); Dahlbom, 1843:130 (in revision of Sphecidae and Pompilidae), 1845:469 (in key to world *Tachytes*); Lepeletier de Saint Fargeau, 1845:252 (in revision of world Hymenoptera); F. Smith, 1849a:2373 (Great Britain: Devonshire), 1856:295 (in catalog of Hymenoptera in British Museum); Schenck, 1857:195 (in revision of fossorial wasps of Germany); F. Smith, 1858c:88 (in review of British Aculeata, redescription); Taschenberg, 1858:84 (in key to Sphecidae of Germany), 1866:201 (in revision of Hymenoptera of Germany); A. Costa, 1867b:85 and 1867c:28 (in revision of Italian Sphecidae); Kirchner, 1867:216 (in catalog of European Hymenoptera); Schenck, 1867a:356 (known from Germany); F. Smith, 1868a:96 (Great Britain: Mousehold Heath near Norwich), 1869d:77 (Great Britain: Norfolk: Cromer); Taschenberg, 1870:111 (Germany: Halle); F. Smith, 1871b:10 (in catalog of British Aculeata); Lichtenstein, 1873:CXXII (nesting in ground, prey: *Chortippus* spp., an acridid); H. Müller, 1873:466 (the name *Sphex pectinipes*, actually a pompilid, is incorrectly used for this species); Dours, 1874:139 (in catalog of Hymenoptera of France); Marquet, 1875:203 (France: Languedoc); Radoszkowski, 1876b:135 (Egypt, record not confirmed by subsequent authors), 1877:25 (Uzbekistan: Samarkand; Kazakhstan: Karak near Bairakum); Roebuck, 1878:47 (Great Britain: recorded from Yorkshire county: Yarm, by F. Smith, 1858); Girard, 1879:954 (morphology and habits); Gribodo, 1881a:74 (Italy: Calabria: Castello di Palizzi); W.F. Kirby, 1884a:408 (Cape Verde Islands: St. Vincent; may actually be *Tachysphex lindbergi*); Radoszkowski, 1892:590 (reference to Radoszkowski, 1886:fig. 30); Baldini, 1894:63 (Italy: Modena area); Acloque, 1897:93 (in Sphecid Fauna of France and Algeria); Cuní y Martorell, 1897:331 (Spain: Cataluña: villa de Calella). – **As *Lyrope pompiliformis***: Stephens, 1829:363 (new generic assignment, in catalog of British insects), 1829b:33 (in checklist of British insects); Casolari and Casolari Moreno, 1980:113 (specimens in M. Spinola collection, Torino); Pagliano, 2008:548, 549 (specimens in M. Spinola collection, Torino). – **As *Tachysphex pompiliformis***: Kohl, 1885:388 (new generic assignment, as synonym of *T. pectinipes* of Kohl); Dalla Torre, 1897:683 (in catalog of world Hymenoptera; *Larra pompiliformis* Panzer listed twice: incorrectly under *Astata boops* on p. 652, and correctly under *Tachysphex* on p. 683); Hémon, 1926:199 (France: Finistère: Fouesnant); Richards, 1935:163 (*Sphex pectinipes*, a pompilid, is incorrectly used for this species), 1937b:104 (in checklist of British aculeates); Guichard, 1938:72 (Great Britain: Norfolk coast), 1939a:42 (Great Britain: southern Cornwall: Polperro); de Graham, 1941:99 (Great Britain: Lincolnshire); J. Perkins, 1942:200 (Sweden: southern Skåne); Spooner, 1942:110 (Great Britain: Bedfordshire: Warren); Boyd, 1943:162 (Great Britain: eastern Dorset); Spooner, 1943:70 (Great Britain); de Beaumont, 1947a:203 (records from Egypt questionable; in new revision of *Tachysphex* of Egypt); Guichard and Yarrow, 1948:89 (Great Britain: London: Hampstead Heath); Leclercq, 1948:205 (*Tachysphex pompiliformis* is the correct name, not *pectinipes*); de Andrade, 1949:16 (Portugal: Serra da Cabreira); Chambers, 1949:223 (Great Britain: Bedfordshire); Cavro, 1950:35 (France: Département du Nord); Richards, 1950:79 (Great Britain: Wales: Pembrokeshire: Cwm-yr-Eglwys); Benno, 1951b:15 (in checklist of Aculeates of Netherlands); de Beaumont, 1951h:33 (Switzerland: Neuchâtel area); Richards, 1952:142 (Great Britain: Anglesea); Nouvel and Ribaut, 1953:178 (France: Haute-Garonne: Saint-Béat, Hautes-Pyrénées: Caunterets, Orédon); Bischoff and

Stadler, 1954:126 (Germany: Bayern: Romberg); de Beaumont, 1954a:61 (Italy), 1954e:91 (Italy); Grandi, 1954:179 (prey: *Chortippus* sp.), 240 (Italy); de Beaumont, 1955a:186 (Morocco); Steiner, 1955:138 (France: Dordogne); Aerts, 1955:63 (Germany: Rheinland); Leclercq, 1956i:132 (Luxembourg); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); Grandi, 1957:346 (prey: *Stenobothrus lineatus* Panzer), 389 (Italy), 390 (Italy: Abruzzi; ssp. ?); Yeo, 1957:19 (Great Britain: Middlesex, now in London); Benno, 1958b:12 (in review of Dutch Sphecidae); de Beaumont, 1958c:205 (Swiss National Park); Nouvel and Ribaut, 1958:14 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Pulawski, 1958a:180 (Bulgaria: Kniazhevo near Sofia, Kurilo); Ceballos, 1959:229 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1959a:28 (Italy); Diniz, 1959:29 (Portugal: Serra da Cabreira); Suárez, 1959:58 (Spain: Almería Province); Wolf, 1959b:24 (Germany: Nassau); Hamann, 1960:198 (Austria: Oberösterreich: Mönchgraben at 48°13'N 14°21'E); Noskiewicz and Puławski, 1960:123, 125 (in key to Polish Sphecidae); Grandi, 1961:207 (nesting habits), 505 (description of larva); Hoop, 1961:66 (Germany: Schleswig-Holstein); de Beaumont, 1962b:26 (Spain); Grandi, 1962:96 (Italy); Mal'kovskiy, 1962:342 (reducing populations of the grasshopper *Dociostaurus kraussi* Ingen in Mangyshlak Peninsula, Kazakhstan); Valkeila, 1962b:66 (southwestern Finland); Erlandsson, 1963:66 (Denmark: Bornholm Island); Felton, 1963:177 (Great Britain: Kent County); Hoop, 1963a:73 (Germany: Schleswig-Holstein: Reher Kratt); Ceballos, 1964:91 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:76 (in Sphecid Fauna of Switzerland); Diniz, 1964a:6 (Portugal: eleven localities); Evans, 1964b:289 (discussion of Grandi's, 1961, description of larva); Valkeila, Brander, and Käpylä, 1964:75 (Finland: Southern Finland: Forssa, Näyte, Tammela); Kazenas, 1964:108 (Kazakhstan: Mangyshlak, preying on *Dociostaurus kraussi* Ingen); de Beaumont, 1965a:49 (Greece); Bonelli, 1966b:20 (nesting habits), 1966c:218 (Italy: Trentino–Alto Adige: five localities); Benno, 1967:36 (in checklist of Sphecidae of Netherlands); Gauss, 1967:554 (Germany: Baden-Württemberg); J. Heinrich, 1967:75 (Germany: Bayern: Unterfranken District); Pulawski, 1967a:401 (Turkey); Scobiola-Palade, 1967b:42 (Romania); Yarrow, 1967:63 (Great Britain: Cornwall: Isles of Scilly); Bonelli, 1968b:50 (Italy: Trentino–Alto Adige: Castello di Fiemme, Cavalese); Leclercq, 1968b:39 (Great Britain: Kent); Parré, 1968:123 (Germany: Sachsen-Anhalt: Staßfurt); Scobiola-Palade, 1968b:142 (Romania: Island of Letea in delta of Danube), 1968c:385 (Romania: București, Budești, Giurgiu); Wolf, 1968:11 (Germany: Nordrhein-Westfalen: Siegen, inhabitant of forest edge); Bonelli, 1969d:50 (nesting habits); Romanova, 1969:134 (Russia: North Caucasus); Zangheri, 1969:1703 (Italy: in catalog of flora and fauna of Romagna Region); Babiý, 1970:19 (Austria: *pompiliformis* is the correct name for *pectinipes*); Gauss and Perraudin, 1970:360 (Germany: Baden-Württemberg: Bodensee area); Hoop, 1970:60 (Germany: Schleswig-Holstein: Wendtorfer sluice); Leclercq, 1970c:map 31 (distribution in Belgium); Lefeber and Petit, 1970:130 (Belgium: Plombières); Oehlke, 1970:714 (Democratic Germany); Tumšs, 1970:82 (Latvia); Dathe, 1971:234 (Germany: Berlin Zoological Garden; phenology); Königsmann, 1971:107 (Spain: Gerona: Palamós); Pulawski, 1971:62 (in revision of Palearctic *Tachysphex*); Schmidt, 1971b:35 (Germany: Rheinland-Pfalz: Gonsenheimer Wald, Mainzer Sand); Stritt, 1971a:104 (Germany: Baden-Württemberg: Karlsruhe); Tsuneki, 1971m:24 (China: Inner Mongolia: Apaka); Wolf, 1971:374 (Italy: Trentino–Alto Adige: Alpi Siusi); Haeseler, 1972:155, 170, 200 (Germany: Schleswig-Holstein; antropogenic habitats); Kofler, 1972:107 (Austria: eastern Tirol); Lomholdt, 1972:122 (Denmark: Island of Læsø); Myartseva, 1972a:79 (Turkmenistan); Oehlke, 1972:137 (Germany: Island of Hiddensee); Scobiola-Palade, 1972:150 (Romania: delta of Danube: Caraorman); Tsuneki, 1972e:383 (Mongolia); Simon Thomas, 1972:182 (France); Wolf, 1973:41 (Germany: Siegerländer Hüttensand); Erlandsson, 1974:73 (Italy, Spain); Burn, 1975:143 (Great Britain: Yorkshire: Doncaster district); Frilli and Pizzaghi, 1975:76 (Italy: Carpaneto in Piacenza Province); Lefeber, 1975b:120 (Netherlands: Schiepersberg); Lomholdt, 1975b:31 (Denmark: Anholt Island); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae; *Larra pompiliformis* Panzer listed twice: incorrectly under *Astata boops* on p. 212, and correctly under

*Tachysphex* on p. 276); Haeseler, 1976b:72 (Germany: Friesian Islands: Amrum Island); Leclercq, Gaspar, Lajoinie, and Thirion, 1976:178 (Belgium: Chaumont-Gistoux); Lomholdt, 1976:248 (in *Sphecida Fauna of Fennoscandia and Denmark*); Merisuo, 1976b:212 (female with abnormal midfemur); Simon Thomas, 1976:5 (France: Lot-et-Garonne: Forêt de Campet); Simon Thomas and Wiering, 1976:109 (Netherlands: IJsselmeer Polders); Guichard, 1977:252 (Great Britain: Surrey); Kolesnikov, 1977:318 (Russia: Bryansk Oblast'); Schmidt, 1977:96 (Germany: Baden-Württemberg: Enzklösterle in Schwarzwald); Guichard, 1978:271 (Greece); Marion, 1978:88 (France: Nièvre Department); Petit, 1978:86 (Belgium: Vance); Pulawski, 1978:217, 221 (in key to Sphecidae of European part of USSR); Schmidt, 1977/78:55 (Germany); Haeseler, 1978b:63 (Germany: Niedersachsen: a bog near Oldenburg), 1978c:195 (Germany: Friesian Islands: Borkum Island); Kazenas, 1978b:120, 135 (in key to Sphecidae of Kazakhstan and Central Asia); Schwammberger, 1978:417 (Germany: Württemberg); Benedek, 1979:231 (Hungary: Bakony Hills); Lefeber, 1979:12 (in checklist of Sphecidae of Netherlands), 74 (Netherlands: distribution map); Richards, 1979:397 (British Channel Islands); Schwammberger, 1979:115 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Dathe, 1980:208 (Russia: northern Caucasus: Teberda); Jacob-Remacle and Leclercq, 1980:193 (Belgium: gardens in Liège); Kazenas, 1980e:89 (Russia: Primorskiy Krai); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:117 (Russia: Siberia: Altayskiy Krai: basin of Aley River); Pagliano, 1980:127 (Italy: Piemonte); Petit, 1980:43 (Belgium: Saeftinge, Côte St.-Germain; Luxemburg: Boulaide, Helmsange, Hoscheid, Lipperscheid, Pintsch, Rospport, Rumelange); Richards, 1980:43, 44 (in key to Sphecidae of British Isles); Westrich, 1980:629 (Germany: Baden-Württemberg: Tübingen area); Dollfuss and Ressler, 1981:322 (Austria: Niederösterreich: Scheibbs District); Haeseler, 1981:52 (Germany: Friesian Islands: Amrum Island); Nelson, 1981:145 (Great Britain: Isle of Man); Schmidt, 1981:162, 164, 170, 185, 202 (Germany: Baden-Württemberg); Woydak, 1981:41 (Germany: Westfalen: Hamm); Axelsson, 1982:79 (Sweden); Gayubo, 1982a:106 (northern Spain: Sierra de Béjar), 1982f:253 (Spain: Cádiz Province: Zahora); Donath, 1982:213 (Germany: Cottbus Bezirk); Leclercq, 1982a:124 (Belgium: Liège); Silvestre de Sacy, 1982:4 (France: Côte-du-Nord: Paimpol area); Skibińska, 1982:120, 123 (Poland: Mazovian Voivodship: Wola Mrokowska); Tsuneki, 1982b:15 (North Korea: Hakugan); Dollfuss, 1983b:10 (in catalog of Sphecidae of Austria); Józán, 1983:99 (Hungary); Lefeber, 1983a:84 (Netherlands: Waddendistrict: northern coast sand dunes and Western Friesian Islands); Riemann, 1983:84 (Germany: Bremen-Daverden area); Schmidt and Westrich, 1983:123 (Greece); Steinmann, 1983:164 (Switzerland: Graubünden Canton, nesting next to wood buildings); Archer, 1984:25 (Great Britain: York); Gayubo, 1984b:86 (Spain: Salamanca Province), 1984c:366 (Portugal: El Algarve Province); Haack, Tscharncke, and Vidal, 1984:133 (Germany: Hamburg area); Janzon and Svensson, 1984:183 (Sweden: Öland Island); Lefeber, 1984:29 (Netherlands: Maastricht); Schmidt and Westrich, 1984:240 (Germany: Rheinland-Pfalz: Bad Münster); Veenendaal, 1984 (Netherlands: Amsterdam); Archer, 1985d:50 (Great Britain: Yorkshire: Pompopali near Leeds); Haeseler, 1985c:571 (Germany: Friesian Islands); Józán, 1985a:181 (Hungary), 1985b:57 (Hungary south of Lake Balaton), 78 (floral records), 83 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Paik, 1985:199 (in list of Sphecidae of Korea); Scobiola-Palade, 1985:96 (Romania: delta of Danube); Brechtel, 1986:60 (Germany: Südpfalz: Lauterwiesen); Gayubo, 1986c:33 (Spain: Zamora Province); Gayubo and Heras, 1986:43 (Spain: Segovia Province); Gayubo and Sanza, 1986:48 (Spain: Segovia); Gayubo and Tormos, 1986a:17 (Spain: Castellón: Castellón de la Plana); Islamov, 1986:526 (Uzbekistan: Tashkent Oblast'); Józán, 1986:370 (Hungary: Kiskunság National Park); Nemkov, 1986:97 (Russia: Siberia: Irkutsk Oblast'); Skibińska, 1986b:160 (Poland: Warszawa: gardens); Steiner, 1986:103 (references to papers on nesting habits); Hensen and van Ooijen, 1987:16 (Turkey); Vikberg, 1986:76 (Finland); Gayubo, 1987a:113 (Spain: Ciudad Real Province); Lomholdt, 1987:93 (Denmark: western Jutland: Skallingen

Peninsula); Packer, 1987:37 (Great Britain: Isle of Wight); Riemann, 1987a:340 (Germany: Niedersachsen: Bremen area), 1987b:45 (Germany: Niedersachsen: Nature Reserve Voßberge); Schmidt and Westrich, 1987:364 (Germany: Mainz area); Archer, 1988b:27 (Great Britain: Yorkshire: Strensall Common); Asís and Jiménez, 1988:272 (Spain: Castellón Province); Chevin, 1988:15 (France: La Manche Department); Dollfuss, 1988:12, 24 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Düweke, 1988:689 (Germany: Baden-Württemberg: Kaiserstuhl); Gayubo and Mingo, 1988:81 (Spain); Haeseler, 1988:211 (Germany: Friesian Islands); Karsai, 1988:100 (Hungary: Kiskunság National Park); Kowalczyk, 1988a:45 (Poland: Rogów), 1988b:65 (Poland: environs of Łódź); Kurczewski and O'Brien, 1988:173 (nesting habits); Pulawski, 1988a:20 (in revision of Nearctic *Tachysphex*); Riemann, 1988:223 (Germany: Bremen area); Wolf, 1988b:141 (Germany: Rheinland-Westfalen); Archer, 1989a:131, 133 (Great Britain: York: found before and after coniferization); Jacobs, 1989:12 (Germany: Mecklenburg-Vorpommern); Józán, 1989:101 (Hungary: Tihany Nature Reserve); Pankevich, Belyavskaya, Molchanova, Shlyakhtenok, and Blinov, 1989:95 (Belorussia: Berezinskiy Nature Reserve); Spofford, Kurczewski, and Downes, 1989:260, 261 (summary of records for nest parasites *Taxigramma heteroneura* (Meigen), a miltogrammine fly, and undetermined species of Miltogrammini); Weiffenbach, 1989:107 (Germany: Hessen: Gießen area); Barbier, Rasmont, and Wahis, 1990:32 (Belgium: Hainaut); Jacobs and Gayubo, Asís, and Tormos, 1990a:18 (Spain); Kuznetzova, 1990:20 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Nash, Boston, and Nelson, 1990:248 (Ireland: Down County); Oehlke, 1990:165 (new locality records from Democratic Germany); Pagliano, 1990:105 (in catalog of Italian Sphecidae); Rohe, 1990:1050 (Germany: Rheinland-Pfalz: Lenneberg forest); Schwammberger and Priesner, 1990:540 (Austria: Kärnten); von der Heide and Witt, 1990:64 (Germany: Niedersachsen); Dollfuss, 1991:107 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:403 (Italy); Jacobs, 1991:46 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Jakubzik, 1991:75 (Germany: Köln); Józán, 1991:603 (Hungary: Bátorliget Nature Reserve); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on three species of acridids); Kowalczyk, 1991a:90, 97, 99, 102, 105, 107 (Poland: Łódź), 1991b:120 (Poland: Augustów Forest); Kuhlmann et al., 1991:92 (Germany: Senne Region); Negrisolo, 1991:318 (Italy: Venezia Province); H.-J. Schulz, 1991:31 (Germany: Oberlausitz: 5 km southwest of Wittichenau); Budrys, 1992:31 (in list of Sphecidae of Lithuania); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Gayubo, Borsato, and Osella, 1992:282 (France, Greece); Józán, 1992a:229 (Hungary: Béda-Karapanca Protected Area), 1992b:173 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Nemkov, 1992b:245 (Russia: Far East: 40 km south-southwest of Svobodnyi near Khingan Nature Reserve); N. Schneider, 1992:179 (Luxemburg); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Wolf, 1992a:29 (a gynandromorph); Archer, 1993a:45 (Great Britain: Channel Islands), 1993d:129 (Great Britain: Lincolnshire: Risby Warren 3 km northeast of Scunthorpe); Gorobchishin, 1993:46 (Ukraine: Kanev Nature Reserve); Kuhlmann, 1993:76 (Germany: known from Westfalen); Luig, 1993:44 (Estonia); Simon Thomas and Wiering, 1993:405 (Kirby's 1884 record from Cabe Verde Islands is probably in error); Sorg and Wolf, 1993:60 (Germany: Rheinland-Westfalen: Nature Reserve Die Spey); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Wiśniowski, 1993a:97 (Poland: in checklist of Sphecidae of Białowieża Primeval Forest); Gayubo and Borsato, 1994:209 (Italy: Veneto); Kowalczyk, 1994:74 (Poland: Łągiewniki forest in Łódź); Theunert, 1994c:51 (Germany: summary of records from Niedersachsen and Bremen); Tormos, Asís, and Gayubo, 1994:188, 207 (Spain: Albacete Province); Schmid-Egger, 1994a:688 (Germany: Rheinland-Pfalz: Hölleberg near Grünstadt); Archer, 1995a:23 (Great Britain: Yorkshire: frequency); Archer and Burn, 1995:58 (Great Britain: Yorkshire: Crow Wood near Finningley); Gorobchishin, 1995:17 (Ukraine: Kanev Nature Reserve); Józán, 1995:104 (Hungary: projected Duna-Dráva National Park); Negrisolo, 1995a:23 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna);

Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:410, 412 (in key to Sphecidae of Russian Far East); Papp and Józán, 1995:146 (Hungary: Síkfőkút oak forest); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:24 (Germany: Bayern: Aschaffenburg, Kahl, Karlstadt, Lohr, Obernau); Schmid-Egger, 1995:65 (Germany: northwestern Baden-Württemberg); Schmid-Egger, Risch, and Niehuis, 1995:212 (Germany: summary of records from Rheinland-Pfalz); Shlyakhtenok, 1995:194 (Belorussia: Berezinsky Nature Reserve); Skibińska, 1995:423, 425 (Poland: pine forest in Białowieża Primeval Forest); Yeo and Corbet, 1995:38 (in field guide to British solitary wasps); Archer, 1996a:58 (Great Britain: Channel Islands); Arens, 1996:441 (Germany: Bayern: Bayreuth area); Blösch, 1996:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Doronin, 1996:18 (Latvia: Riga, nest parasitized by *Euchrum roseum* Rossi, a chrysidid); Flügel, 1996:524 (Germany: Freizeitpark Marienfelde south of Berlin); Fowles, 1996:35 (Great Britain: in checklist of aculeates of Wales); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Harvey and Plant, 1996:68 (Great Britain: summary of records from Essex); Jakubzik, 1996:253 (Germany: Köln); Jakubzik and Cölln, 1996b:401 (Germany: Rheinland-Pfalz); Kuhlmann, 1996:221 (Portugal: Serra de Estrela); Minoranskiy and Shkuratov, 1996:81 (Russia: Rostov Oblast'); Pawlikowski and Kruszyński, 1996:87 (Poland: Toruń Basin); Saure, 1996:503 (Germany: Berlin-Pankow: sewage irrigation field); Schmid-Egger, Schmidt, and Doczkal, 1996:378 (Germany: Baden-Württemberg: not endangered); Tischendorf, 1996:47 (Germany: Hessen: near Bensheim); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Witt, 1996:106 (Germany: Brandenburg), 111 (locality records); Woydak, 1996:39 (Germany: Westfalen: summary of distribution and nesting habits); Wu and Zhou, 1996a:89 (in revision in Economic Insect Fauna of China); Archer, 1997a:49 (Great Britain: Yorkshire: Cave Wold); Celary, 1997:58 (in checklist of Animals of Poland); Finnamore, 1997:888 (Canada: Yukon); Nazarova and Shomirsaidov, 1997:23 (Tajikistan: fruit tree orchards in Vakhsh River valley); Petit, 1997:351 (Belgium: Liège Province: Lanaye: colonization of new habitat); Riemann, 1997:50 (Germany: Achim 14 km southeast of Bremen); Schmidt and Schmid-Egger, 1997:30 (in checklist of German Sphecidae); Shlyakhtenok, Blinov, and Belyavskaya, 1997:152 (Belorussia: Pripyatskiy National Park); Stoyanov and Ljubomirov, 1997:26 (Bulgaria: Rila Mountains); Archer, 1998b:158 (Great Britain: Lincolnshire: Gibraltar Point National Nature Reserve); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg); Dollfuss, Gusenleitner, and Bregant, 1998:515 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km west-southwest of Hamburg); Flügel, 1998:61 (Germany: Brandenburg: Unteres Odertal National Park); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings), 1998b:54 (Ukraine: Sumy Oblast': Vakalivshchina); Haeseler and Ritzau, 1998:51 (Germany: Bremen: Harriersand Island in Weser River and Steller Heide); Jakubzik, Schlüter, and Cölln, 1998:1182, 1184 (Germany: Rheinland-Pfalz); Józán, 1998:311 (Hungary: Duna-Dráva National Park); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); Mauss and Schindler, 1998:136 (Germany: Schleswig-Holstein: Nordfriesland District); Morgan, 1998:17, 18 (Great Britain: Wales: Carmarthenshire County); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); N. Schneider and Wahis, 1998:23 (Luxemburg: sandstone quarries); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); van der Smissen, 1998:69 (Germany: Mecklenburg-Vorpommern, Niedersachsen, Schleswig-Holstein); K. Weber, 1998:149 (Germany: Bayern: Bamberg area); Anan'eva and Kochetkov, 1999:7 (Russia: Ryazan Oblast': no specific locality); Archer, 1999a:9 (Great Britain: Lancashire); Cölln and Jakubzik, 1999:29 (Germany: Rheinland-Pfalz: Keuper-Scharren southwest of Hungerburg); Cretin, 1999:8 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane); Erhardt, 1999:75 (Germany: Niedersachsen: Ammerland area); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); Gusenleitner, 1999:599 (Austria:

Vorarlberg: Vandans northwest of Schruns); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); Kuhlmann, Wolf, and Woydak, 1999:570 (endangered in Nordrhein-Westfalen State of Germany); Ljubomirov, 1999b:50 (Bulgaria: Mount Vitosha near Sofia); Mandery, 1999:106 (Germany: Bayern: Coburg area); Neumayer, Schwarz, and Bregant, 1999:225 (Austria: in checklist of Sphecidae of Land Kärnten); Pauly, 1999:109 (in catalog of Belgian aculeates); Petit, 1999:112 (Netherlands: Nieuw-Namen); Riemann, 1999:835 (Germany: Niedersachsen: sand pits near Bremen); Salzmann-Wandeler and Rezbanyai-Reser, 1999:101 (Switzerland: Tessin: Monte Generoso); M. Schwarz, 1999:86 (Austria: Oberösterreich: city of Linz area); Skibińska, 1999:96 (previously recorded from Białowieża Primeval Forest, Poland); Sörensen, Mauss, and Schindler, 1999:504 (Germany: Schleswig-Holstein); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Archer, 2000c:115 (Great Britain: Lincolnshire); Beavis, 2000:63 (Great Britain: Isles of Scilly); Blösch, 2000:234 (in Sphecidae Fauna of Germany); Dressler, 2000:34 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:33 (southeastern Kazakhstan: twelve localities); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); González, Gayubo, and Tormos, 2000:19 (Andorra: Santa Coloma); Grace, Yates, and Triplet, 2000:20 (Great Britain: East Sussex: Rye Bay area); Jacobs, 2000:12 (Germany: Land Mecklenburg-Vorpommern: not endangered); Józán, 2000:108 (Hungary: Bakony Mountains); Kuhlmann, 2000:64 (Germany: Hessen: Diemel River valley); Ljubomirov, 2000:10 (Bulgaria, specimens in N. Nedelkov collection); M. Mader and Chalwatzis, 2000:60 (Germany: Hessen: Oderwald Mountains); Mauss, Schröder, and Botta, 2000:76 (Germany: Bayern: Arber area in Bavarian Forest); Mokrousov, 2000b:30 (Russia: Nizhniy Novgorod Oblast'); Schmid-Egger, 2000b:276 (Germany: Baden-Württemberg: shores of Rhine River); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Vicidomini, 2000b:28 (Italy: previously recorded from Campania); Archer, 2001b:14 (Great Britain: Watsonian Yorkshire), 2001d:109 (Great Britain: Lincolnshire: Kirkby Moor 7.5 km south of Horncastle); Cungs and Jakubzik, 2001:122, 123 (Luxemburg); Deván, 2001:165 (Slovakia: Krasin Nature Reserve in Biele Karpaty Mountains); Dorow, 2001:136 (Germany: Hessen: Schönbusche Forest Reserve); Haeseler, 2001:266 (Germany: Niedersachsen: Brookdeich near Oldenburg); Ivanov and Ljubomirov, 2001:212 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 159 (review of known biology); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Kuhlmann, 2001:19 (Germany: Nordrhein-Westfalen: Nature Reserve Bleikuhlen near Blankenrode); Mazzucco, 2001:203 (Austria: Niederösterreich: Steinfeld); Ohl et al., 2001:142 (distribution in Germany by provinces); Reemer and van der Meer, 2001:16 (Netherlands: along Almelo-Nordhorn canal); K. Schmidt and Bitsch *in* Bitsch et al., 2001:267 (in Sphecidae Fauna of Western Europe); Schmid-Egger, 2001:17 (France: Alsace: Bollenbergs); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); Szczepko and Kowalczyk, 2001:188 (Poland: Kampinos National Park near Warszawa); van der Smissen, 2001:64 (Germany: Schleswig-Holstein: not endangered); Wolf, 2001c:580 (in list of hermaphrodite aculeates described by the author in *Linzer Biologische Beiträge*); Zettel, Gross, and Mazzucco, 2001:72 (Austria: Wien); Archer, 2002b:111 (Great Britain: Watsonian Yorkshire: distribution map), 2002d:11 (Great Britain: Worcestershire: Hartlebury Common 17 km north of Worcester), 2002e:41 (Great Britain: Watsonian Yorkshire); Archer and Edwards, 2002:102 (Great Britain: West Sussex: Ambersham and Iping commons); Beavis, 2002:106 (Great Britain: Kent: Tunbridge Wells area); Bieri, 2002:79 (Liechtenstein); Deván, 2002a:200 (Slovakia: Kobela Nature Reserve near Nové Mesto); Esser and Cölln, 2002:1137 (southwestern Germany: Eifel region); Herrmann and Zinnert, 2002:26 (Germany: Baden-Württemberg: Bettenberg near Konstanz); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:73 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:153 (Poland: Kampinos National Park near Warszawa); Litt, 2002:166 (Belgium); Reemer and van der Meer, 2002:Bijlage 5 (Netherlands: Gelderland: Zaltbommel

area); C. Schlüter, 2002:141 (Germany: Niedersachsen: anthropogenic habitats in Ammerland District); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Söderman and Vikberg, 2002:51 (in list of Aculeata of Finland); Wiśniowski, 2002:70 (Poland: Ojców National Park); Ziska, 2002:9 (Germany: Berlin-Köpenick: Krumme Lake); Archer, 2003a:58 (Great Britain: Watsonian Yorkshire); Cölln, Esser, and Jakubzik, 2003:63 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Drewes, 2003:142 (France, Hungary, Germany, Italy, Spain: miscellaneous locality records); Esser and Jakubzik, 2003:291 (Germany: Nordrhein-Westfalen: Niederrheinisches Tiefland); Flügel, 2003:9 (Germany: Hessen: Knüllwald); Gayubo, Özbek, and Yıldırım, 2003:90 (Turkey: many localities); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Gorobchishin, 2003:48 (Ukraine: Kiev: botanical garden); Haeseler, 2003:340 (Germany: Niedersachsen: Harriersand Island near Bremen); Józán, 2003:227 (Hungary: Látrányi Puszta Nature Conservation Area); Lukáš, 2003:73 (Slovakia: Bratislava: old fruit orchard); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:70 (Germany: in catalog of wasps and bees of Bayern); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Reemer, 2003:62 (Netherlands: Gelderland: Zaltbommel area); Schmid-Egger, 2003:758 (Italy: Sicilia: Citelli, Nebrodi); Tischendorf and Treiber, 2003:121 (Germany: Hessen: 15 km southwest of Frankfurt am Main: nesting under high power lines); von der Heide and Metscher, 2003:103 (Germany: Niedersachsen: Emsland area); Wiśniowski *in* Dylewska and Wiśniowski, 2003:151 (Poland: Ojców National Park); Archer, 2004a:47 (Great Britain: Worcestershire: Devils Spittleful Nature Reserve), 2004g:9 (Great Britain: Cumbria: North Walney National Nature Reserve); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario); Deván, 2004:148 (western Slovakia); Dorow, 2004a:127 (Germany: Hessen: Schönbuche Nature Reserve); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:264 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Gayubo et al. 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Hellrigl, 2004a:174 (Italy: Trentino-Alto Adige, as Südtirol: Vinschgau = Val Venosta: Schlanders); Jakubzik, Niehuis, and Cölln, 2004:458 (Germany: Rheinland-Pfalz: Roßstein in Rhein valley at 50°06'42"N 7°43'87"E); Kazenas, 2004b:104 (Kazakhstan: western Tien Shan), 2004d:31 (Kazakhstan: northern Caspian region); Klein and Lefebvre *in* Peeters, van Achterberg, et al., 2004:425 (in Wasp and Ant Fauna of Netherlands); Majzlan and Deván, 2004:31 (Slovakia: Sekule), 33 (Slovakia: Malacky-Široké); Raemakers, van den Eijnde, and Kleukers, 2004:292 (Netherlands: Tungelerwalle near Weert); Salzmann-Wandeler and Rezbanyai-Reser, 2004:27 (central Switzerland); Shkuratov, 2004a:77 (Ukraine: Lugansk; Russia: Rostov Oblast'), 2004b:167 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova); Straka, 2004:1109 (comparison with *Tachysphex austriacus*); Schneider and Carrières, 2004:98 (Luxemburg: Bon-Pays Region); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:357 (in catalog of Polish Crabronidae); Szczepko and Kowalczyk, 2004:126 (Poland: Kampinos National Park near Warszawa); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:44 and 60 (in checklist of Polish Sphecidae); Archer, 2005c:56 (Great Britain: Suffolk County); Beavis, 2005:194 (Great Britain: Islands of Scilly); Bergsten, Ekerholm, Gabrielsson, Hellquist, Petersson, Werner, Ström, Chauvet, and Dalecky, 2005:16 (Sweden: Västerbotten: Bjuröklubbs Nature Reserve); Blösch, 2005:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Burger, 2005:35 (Germany: Thüringen); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Dubitzky, Blank, and Schönitzer, 2005:276 (Germany: Bayern: area north of Dachau); Ebrahimi, 2005:123 (in key to selected Iranian Sphecidae); Fuhrmann, 2005:89 (Germany: Nordrhein-Westfalen: Grubengelände Littfeld Nature Reserve); Gregory and Wright, 2005:140 (Great Britain: Shotover Hill 5 km east of Oxford); Haeseler, 2005:629 (Germany: Niedersachsen: Steller Heide near Bremen); Hallin, 2005:16 (Sweden: Örebro County: Hällefors); Jacobs, 2005a:452 (Bulgaria); Jakubzik and Cölln, 2005:63 (Germany: Rheinland-Pfalz: Bausenberg near Niederzissen); Kofler,

2005:173 (Austria: Tirol: Lienz District: several localities); Kowalczyk and Kurzac, 2005:106 (Poland: Botanical Garden in Łódź); Kraatz, 2005:103 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Nazarova, 2005:93 (alfalfa fields in southwestern Tajikistan); Nemkov, 2005a:147 (Russia: Sakhalin Island); Pagliano and Negrisolò, 2005:379 (in Sphecidae Fauna of Italy); Pijfers, 2005:49 (Netherlands: Twente: Noordelijke Manderheide); Riemann and Hohmann, 2005:566 (Germany: Niedersachsen: city of Bremen and adjacent area); Robinson, 2005:34 (Great Britain: Cumbria County); Saure, 2005:19 (Germany: Berlin); Schmalz, 2005:58 (references to XIX<sup>th</sup> century authors); Shorenko, 2005a:164 (Ukraine: Crimea), 2005b:98 (Ukraine: Crimea: Karadagh Nature Reserve); Straka, 2005b:261 (Turkey: five localities); Theunert, 2005a:19 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Venne and Bleidorn, 2005:44 (Germany: Nordrhein-Westfalen: Moosheide Nature Reserve); Yildirim and Ljubomirov, 2005:1797 (Turkey); Ziska and Saure, 2005:82 (Germany: Berlin: Biesendorfer Sand); Archer, 2006a:20 (Great Britain: Lincolnshire: Rauceby Warren Nature Reserve), 2006c:217 (Great Britain: Staffordshire: Highgate Common), 2006d:76 (Great Britain: Watsonian Yorkshire: Pollington Quarry); Feitz, Gloden, Melchior, and Schneider, 2006:82 (Luxemburg: Baggerweieren area in Haff Réimech Nature Reserve); U. Frommer and Tischendorf, 2006:89 (Germany: Hessen: Schlüchterner Becken); Gadoum and Barbier, 2006:42 (France: départements of Val-d'Oise and Yvelines: Parc Naturel Régional du Vexin Français: Guernes); Gorobchishin, 2006:107 (Ukraine: many localities); Hua, 2006:283 (in list of Chinese insects, geographic distribution); Liebig, 2006:40 (Germany: Sachsen: Muskauer Heide); Liška, 2006:89 (Slovakia: Váh river valley near Trenčín); Magdalou, 2006a:7, 10 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane), 2006b:109 (France: Pyrénées-Orientales: Mas-Larrieu Nature Reserve near Argelès-sur-Mer), 2006c:7 (France: Pyrénées-Orientales: Réserve Naturelle du Mas-Larrieu); Peeters, Krekels, and Megens, 2006:22 (Netherlands: Reichswald forest near Nijmegen); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Vepřek, 2006:511 (Czech Republic: Kokořínsko area); Archer, 2007a:151 (Great Britain: Norfolk: Thetford Warren Lodge), 2007c:152 (Great Britain: South Devon coast); Baños-Picón, Gayubo, Asís, and González, 2007a:256, 258 (Spain: Zamora: Cabañas de Aliste); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:462 (France: Doubs, prey: Orthoptera Acrididae: *Gomphocerippus rufus* (Linnaeus)); Burguet, 2007:unnumbered p. 22 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Cungs, Jakubzik, and Cölln, 2007:140 (Luxemburg: Haardt Nature Reserve); Dorow, 2007:263 (Germany: Hessen: Niddahänge Forest Reserve); Dvořák, Straka, Smetana, Halada, Vepřek, and Karas, 2007:169 (Czech Republic: Vyšenské Kopce National Nature Reserve); Guldemond, Pijfers, and den Belder, 2007:203 (Netherlands: Gelderland: dairy farm in de Graafschap); Hallin, 2007b:25 (Sweden: Blekinge County); Herrmann, 2007a:53 (Germany: Niedersachsen: Ostfriesland), 2007b:96 (Germany: Baden-Württemberg: Fürstenberg in Konstanz); Jacobs, 2007:96, 100 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:26 (Germany: northwestern Sachsen); Józán, 2007:179 (Hungary: Zselic hills); Kazenas, 2007a:91 (Kazakhstan: Akmala Oblast: Kurgandzhin Nature Reserve and vicinity); Kowalczyk and Nadolski, 2007:284 (Łódź: railway areas); Roche, 2007a:76 (in checklist of Egyptian Crabronidae, data questionable), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Saure, 2007:83 (in checklist of Aculeata of Land Brandenburg, Germany); Shlyakhtenok, 2007a:300 (Belorussia: Berezinsky Nature Reserve), 2007b:364 (Ukraine: Chernobyl area); Vago, 2007:175 (France: départements d'Aisne and Pas-de-Calais); Venne, Bleidorn, and Lauterbach, 2007:303 (Germany: Nordrhein-Westfalen: Bielefeld); G. Turrisi and R. Turrisi, 2007:121 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Vepřek and Straka, 2007:203 (in catalog of Sphecidae of Czech Republic and Slovakia); Winkler, 2007:30 (Germany: Niedersachsen: eastern Friesland); Yildirim and Ljubomirov, 2007:120 (Turkey: Erzurum: Aşkale, Pirnakapan, and Pasinler); Archer, 2008a:144 (Great Britain: Cumbria: North Walney Nature Reserve, Sandscale Haws, and Lindisfarne Nature Reserve); Danilov, 2008:349 (Russia: Altayskiy Kray: Barnaul area); Dvořák,

Bogusch, Malenovský, Bezděčka, Bezděčková, Holý, Liška, Macek, Roller, Říha, Smetana, Straka, and Šima, 2008:67 (Czech Republic: Hády Hill near Brno); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Haeseler, 2008:309 (Germany: Friesian Islands); Kazenas, 2008b:112 (Kazakhstan: foothills of Zailiskiy Alatau: sometimes found on loess cliffs); Ljubomirov and Yildirim, 2008:217 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:19 (in catalog of Crabronidae of Asiatic Russia); Theunert, 2008:85 (Germany: map of distribution in Niedersachsen and Bremen); Archer, 2009a:24 (Great Britain: Yorkshire: Sheffield), 2009b:170 (Great Britain: Lindisfarne National Nature Reserve on Island of Lindisfarne); Baños-Picon, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Belkheir, 2009:17 (France: Pyrénées-Orientales: commune d'Eyne); Debuysse and Vago, 2009:4 (in list of Sphecidae *sensu lato* of northern France); Donie, 2009:10 (Germany: Niedersachsen: Oldenburg); U. Frommer, 2009a:29 (Germany: in checklist of Sphecidae of Hessen); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Kowalczyk, Kurzac, and Nadolski, 2009:63 (Poland: between Warta and Widawka rivers); Livory, Chevin, Lair, Sagot, and Baldock, 2009:28 (France: Département de la Manche); Mokrousov, 2009:287 (Russia: Republic Mari El); Nemkov, 2009b:79 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:237 (Russia: Primorskiy Kray: Lazovsky Nature Reserve); Ødegaard, Sverdrup-Thygeson, Hansen, Hanssen, and Öberg, 2009:72 (Norway: locality records); Pagliano, 2009:184 (Italy: Sardegna: lake Baratz; France: Corse: Cargese); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Straka, Dvořák, and Bogusch, 2009:265 (Czech Republic: Bílý Potok); Szczepko and Wiśniowski, 2009:71 (Poland: Spała Landscape Park); Archer, 2010a:52 (Great Britain: Watsonian Nottinghamshire: Spalford Warren), 2010b:99 (Great Britain: Watsonian Staffordshire: Cannock Chase Country Park); Burguet *in* Durand and Burguet, 2010:52 (France Département d'Ardèche: Ardèche Gorges); Esser, Fuhrmann, and Venne, 2010:38 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Falk, 2010:94 (Great Britain: heathland sites in West Midlands region); Hable, Krauss, von der Dunk, and Wickl, 2010:29 (Germany: Bayern: Sulz- and Ottmaringer Tal); Howe, Knight, and Clee, 2010:100 (Great Britain: occurring on coastal sand dunes); Johansson, 2010:121 (Sweden: Småland: upper Emå river valley); Mokrousov, 2010a:62 (Russia: Kirov, Nizhniy Novgorod, and Vladimir Oblast's, Chuvash Republic, Mari El Republic, Tatarstan: no specific localities), 2010c:108 (Russia: Chuvash Republic: State Nature Reserve "Prisurskiy"); Rudoiskatel', 2010:152 (Russia: central and southern Ural Mountains); Sakenin, Samin, and Bagriacik, 2010:16 (Iran: Kordestan: Marivan, Kamyaran); Saure, 2010a:88 (Germany: Berlin-Reinickendorf: Baumberge), 2010b:175 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:19 (in red list of Aculeata of Germany: relatively common); Schmidt, 2010:140 (Germany: Bayern: collected along Main-Donau canal); Shorenko and Kononov, 2010:23 (Ukraine: Khar'kov Oblast': villages Gaidary and Skripai); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:102 (Western Slovakia: recorded from Borská nížina); Treiber, 2010:136 (France: département du Bas-Rhin); Tüzün and Yüksel, 2010:4471 (Turkey: Niğde Province); van der Smissen, 2010a:353 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records), 2010b:387 (France: Ardèche, Drôme, Gard: locality records), 2010c:398 (Sweden: Öland: Byrums Sandvik, Gårdby; Södermanland: Jordbro); Wurdack and Gack, 2010:153 (Germany: Baden-Württemberg: Kaiserstuhl); Archer, 2011a:42 (Great Britain: Yorkshire: Strensall Common), 2011b:54 (Great Britain: North Norfolk sand dunes), 2011d:187 (Great Britain: Watsonian Yorkshire: Hatfield Moor and Thorne Moor); Baghirov, 2011b:148 (Russia: recorded from Altayskiy Kray by Kazenas, Mityaev, Matesova, Kulenova, and Zhdanko, 1979); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del

Duero Natural Park: effects of wildfire); Falk, 2011:69 (Great Britain: Sussex: South Downs); Gogala, 2011:15 (Slovenia); Józán, 2011:181 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:75 (Russia: Chuvash Republic); Protsenko and Drozdovskaya, 2011:90 (Ukraine: Mikolaiv Oblast': Bugskiy Guard National Park); Rudoiskatel', 2011d:241 (Russia: central Ural Mountains); Saure, 2011a:7 (Germany: Berlin: former airport Tempelhof), 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg), 2011d:200 (Germany: Sachsen-Anstalt: conservation area "Heide südlich Burg"; Schmid-Egger, 2011a:39 (France: Parc National du Mercantour and Italy: Parco delle Alpi Marittime ), 2011c:557 (Austria: Tirol: Tiroler Lech Nature Park); Shlyakhtenok, 2011:95 (Belorussia: city of Minsk); Theunert, 2011a:21 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:176 (Germany: Hessen: not endangered); Ziska and Saure, 2011:110 (Germany: Berlin: Tegeler Fließ valley); Archer, 2012a:130 (Great Britain: Watsonian Yorkshire: Allerthorpe Common); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:4 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Cölln, Jakubzik, and Kinkler, 2012:25 (Germany: Nordrhein-Westfalen: Leverkusen); Franzén, Molander, Norén, and Nilsson, 2012:27 (Sweden: Skåne: Kullaberg Peninsula); Gerth, Mayer, Hering, Wolf, Schaffer, and Bleidorn, 2012:9 (Germany: Sachsen: Bienitz in Leipzig); Hellrigl, 2012:129 (Italy: Provincia Autonoma di Bolzano-Alto Adige, as Südtirol); Japoshvili and Ljubomirov, 2012:96 (Turkey: Isparta: Gölcük Nature Park 8 km southwest of city of Isparta); Klimsa, 2012:69 (Germany: Bayern: Schwandorf District); Nemkov, 2012c:438 (in catalog of Crabronidae of Russian Far East); Prisniy, 2012:48 (Russia: Belgorod Oblast'); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); Shlyakhtenok, 2012a:172 (Belorussia: collected in private plots), 2012b:92 (Belorussia: Beresina National Reserve: overgrowing dry meadow); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Yildirim, 2012:80 (Turkey: Erzurum, Tortum, and Tunceli provinces); Bayındır, Gürbüz, Ljubomirov, and Pohl, 2013:146 (Turkey: Isparta: Kasnak Oak Forest Nature Reserve); Bitsch, Grouet, and Savina, 2013:292 (France: Pyrénées centrales: département d'Ariège: Ascou-Pailhères); Braun-Reichert, 2013:14 (Germany: Bayern: pastures between Regensburg and Nürnberg); Kazenas, 2013a:71 (color photograph of female, short information on geographic distribution and nesting habits), 2013b:495 (southeastern Kazakhstan: many places in Ili River valley, in foothills and low mountains); Mokrousov, Ruchin, and Egorov, 2013:201 (Russia: Republic of Mordovia: Mordovian State Nature Reserve); Saure, 2013:22 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:28 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:168 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park and Serras de Aire e Candeeiros Natural Park); Wiśniowski and Szczepek, 2013:52 (Poland: Kampinos National Park near Warszawa); Baldock, 2014:356 (Spain: Island of Mallorca); Bitsch, 2014:403 (France: Aisne: Grisolles, Rocourt-Saint-Martin; Charente-Maritime: 11 km south of Saintes; Indre-et-Loire: Tours); Ebrahimi, 2014:41 (Iran: Alborz, Ardebil, Āzarbāijān-e Sharghi, Khorāsān-e Razavi, and Tehrān provinces); U. Frommer, 2014:28 (Germany: Hessen: Lorch); Ghahari, Hayat, Lavigne, and Ostovan, 2014:1397 (prey of asilid fly *Machimus cyanopus* (Loew)), 1423 (prey of asilid fly *Stichopogon scaliger* Loew); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Jakovlev, Polevoi, and Humala, 2014:302 (Russia: Republic of Karelia: Zaonezhye Peninsula in Lake Onega); Józán, 2014:133 (Croatia: Gornji Jelenje, Meka Draga: Kruševo, Prezid pass, Susanj); Kazenas, 2014a:135 (Kazakhstan: Karatau Mountain Range); J.-K. Kim, 2014:434 (in catalog of Sphecidae *sensu lato* of Korean Peninsula); Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan); Ruchin and Antropov, 2014:35 (Russia: Republic of Mordovia); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Archer, 2015:202 (Great Britain: English coastal sand dunes); Atbaei, Fallahzadeh, and Ljubomirov, 2015:25 (Iran: Fars Province); Koçak and Kemal,

2015:153 (in checklist of Hymenoptera of Turkey); Lett, 2015:5 (France: Loir-et-Cher: Gièvre); Mokrousov and Egorov, 2015:425 (Russia: Republic of Mordovia: Nature State Reserve Priskuskiy); Paukkunen and Kozlov, 2015:63 (Russia: Murmansk Oblast'); P. Rosa and Pagliano, 2015:106 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:15 (Germany: Berlin-Lichterfelde); Simon, Lorthiois, and Macé, 2015:55 (France: alluvial terraces in Eure Department: Courcelles-sur-Seine); Shorenko, 2015:329 (in list of Sphecidae *sensu lato* of Crimea); Voigt, 2015:70 (Germany: Schleswig-Holstein: Sorgwohld area); Blažej, Macek, and Trýzna, 2016:128 (Czech Republic: České Švýcarsko = Bohemian Switzerland National Park); Bleidorn, Gerth, Hopfe, et al., 2016:11 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Cölln and Jakubzik, 2016:18 (Germany: Rheinland-Pfalz: Vulkaneifel District); Else, Bolton, and Broad, 2016:29 (in checklist of Aculeata of Great Britain and Ireland: England, Scotland, Wales, Ireland, Isle of Man); Le Divelec, Chapelin-Viscardi, and Larivière, 2016:109 (northern France: in agricultural landscapes); Mokrousov and Popov, 2016:581 (Russia: Abkhazia, Krasnodarskiy Krai); Ratzlaff, 2016:26 (Canada: British Columbia: from Krombein, 1979 and Pulawski, 1988); Reemer and Peeters, 2016:10 (Netherlands: Hulshorsterzand); A. Scholz, 2016:72 (Germany: Sachsen: Kleinraschützer Heide); U. Sörensen, 2016:427 (Germany: Schleswig-Holstein: der Ochsenweg south of Leck); Stolle and Saure, 2016:925 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Straka, 2016:97 (in revision of *Tachysphex pompiliformis* species group); Wiśniowski, 2016:130 (Poland: Ojców National Park); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:37 (Turkey: Bayburt, Erzincan, Erzurum, Giresun, Kars, and Tunceli provinces); Antropov, 2017b:239 (in catalog of Crabroninae of Russia); Burguet and Durand, 2017:9 (France: Puy-de-Dôme: basin of river Crouël); Durand and Burguet, 2017:2 (France: Puy-de-Dôme: Réserve Naturelle Nationale Chastreix-Sancy); Jansen, 2017:10 (Germany: Sachsen: Leipzig); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Forêt de la Massane, Julols, Mas Larrieu, Vallée d'Eyne); Říha, 2017:175 (Czech Republic: Brno); Shorenko, 2017:78 (in Crimea collected in July and August); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:6 (Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Creutzburg, Winter, Baumbach, and Ssymank, 2018:216 (Germany: Thüringen: Wachsenburg Nature Reserve); Franken and Berg, 2018:67 (Netherlands: North Holland: sand dunes); Lett, 2018:203 (France: Loir-et-Cher: Gièvres at 47°16'39"N 1°41'52"E); Ma, Zhang, Ch. Li, Ji, and Q. Li, 2018:487 (China: Shanxi: Lishan National Nature Reserve); Maharramov, Aliyev, and Mammadov, 2018:454 (first record from Azerbaijan: Belokany, Nakhichevan, Yardymly: Avash); Nicolas and Vago, 2018:13 (France: Pas-de-Calais: Mont Saint-Frieux); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Carminati, Mora, and Cretin, 2019:18 (France: in list of Sphecidae *sensu lato* of Franche-Comté, as *Tachysphex* groupe *pompiliformis*); Ljubomirov, 2019:101 (Bulgaria: Vratschanska Planina); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:111 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13233 (Russia: Mordovia State Nature Reserve); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:269 (Iran: Fars: three localities); Yalın and Tüzün, 2019:16 (Turkey: Adana Province: no specific locality); Kejval, Blažej, and Erhart, 2020:107 (western Czech Republic); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:71 (in catalog of *Tachysphex* of Iran); Shorenko, 2020:52 (Crimea: Karadag Nature Reserve); Cross, Baldock, and Wood, 2021:44 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:66 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:101 (in commented list of Sphecidae *sensu lato* of Poland); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:235 (in revision of Sphecidae *sensu lato* of Europe); Can, 2022a:222 (supernumerary vein in forewing); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Mawadda and Girish Kumar, 2023:112 (in checklist of Crabroninae of Northern India); Medetov, Embergenov, Kholmatov, Elmurodova,

Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution); Pytel-Huta and Franchuk, 2024:83 (Ukraine: Rivno Nature Reserve); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, Quebec, Saskatchewan, first record from Newfoundland Island: no specific locality); Frommer and Klenke, 2025:165 (Germany: Hessen: Lahntal near Weilburg).

*Larrada parvula* Cresson, 1865b:465, ♂. Lectotype: ♂, USA: Colorado Territory: no specific locality (ANSP), designated by Cresson, 1916:96. Synonymized with *Tachysphex pompiliformis* by Pulawski, 1988a:20 – **As synonym of *Larra montana***: Patton, 1880:389 (new generic assignment, in checklist of North American Larrini); Kohl, 1885:246. – **As *Tachysphex parvulus***: W. Fox, 1894a:518 (new generic assignment, in revision of North American Larrinae); Dalla Torre, 1897:683 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Rohwer, 1908a:223 (Colorado: Florissant); G. Bohart, 1951:951 (in catalog of North American Hymenoptera); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Alcock, 1974a:329 (nesting habits); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Krombein, 1979:1929 (in catalog of North American Hymenoptera); Steiner, 1986:103 (references to papers on nesting habits).

*Larra quebecensis* Provancher, 1882:50, ♀, ♂ (as *Quebecensis*, incorrect original capitalization). Lectotype: ♀, Canada: Quebec: no specific locality (Laval Univ. Quebec), designated by Pulawski, 1988a:20. Synonymized with *Tachysphex pompiliformis* by Pulawski, 1988a:20. – Provancher, 1883b:633 (in revision of Canadian Hymenoptera); Cresson, 1887:277 (in catalog of North American Hymenoptera); Peckham and Peckham, 1905:263 (nest construction, preying on grasshoppers); Bridwell, 1899:209 (Kansas: Baldwin); G. Peckham and E. Peckham, 2005:263 (nesting habits); Gahan and Rohwer, 1917:433 (type not located). – **As *Tachysphex quebecensis***: W. Fox, 1894a:527 (new generic assignment, in revision of North American Larrinae); Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); J. Smith, 1900:518 (New Jersey: no specific locality); Harrington, 1902:221 (Canada: Ontario: Ottawa); J. Smith, 1910:683 (in new list of insects of New Jersey: no specific locality); F. Williams, 1914a:173 (in revision of Larrinae of Kansas); Rohwer, 1916b:687 (in catalog of Hymenoptera of Connecticut); Gahan and Rohwer, 1917:433 (type not located); Rohwer *in* Viereck, 1925:687; not yet found in the State (in key to Sphecidae of Connecticut); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Elliott and Kurczewski, 1973:80 (Alberta near Whitecourt); Steiner, 1973:24 (Canada: Northwest Territories: Fort Providence at 61°17'N, Frank Channel at 62°43'N); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Krombein, 1979b:1629 (in catalog of North American Hymenoptera); Finnamore, 1982:103 (in Sphecid Fauna of Southern Quebec); Steiner, 1986:103 (references to papers on nesting habits); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument).

*Larra quebecensis* Provancher, 1883:633, ♀, ♂ (as *Quebecensis*, incorrect original capitalization). Objective synonym of *Larra quebecensis* Provancher, 1882.

*Tachysphex decorus* W. Fox, 1894a:524, ♀. Holotype: ♀, USA: Dakota: no specific locality (ANSP). Synonymized with *Tachysphex pompiliformis* by Pulawski, 1988a:20. – Dalla Torre, 1897:679 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Cresson, 1928:44 (holotype in ANSP); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Krombein, 1979b:1628 (in catalog of North American Hymenoptera).

*Tachysphex tenuipunctus* W. Fox, 1894a:525, ♀. Lectotype: ♀, USA: Oregon: Mount Hood (ANSP), designated by Cresson, 1928:46. Synonymized with *Tachysphex pompiliformis* by Pulawski, 1988a:20. – Dalla Torre, 1897:686 (in catalog of world Hymenoptera); J. Smith, 1910:683 (in new list of insects of New Jersey: Clementon); Stevens, 1917:422 (North Dakota: Fargo); Mickel, 1918b:423 (in catalog of

- Nebraskan Sphecidae); Carter, 1925:133 (Canada: Alberta: Chin); Strickland, 1947:129 (Canada: Alberta: Lethbridge, Medicine Hat); G. Bohart in Muesebeck, Krombein, and Townes, 1951:953 (in catalog of North American Hymenoptera); Newton, 1956:615 (nesting habits); W. Ferguson, 1962:81 (nest parasite: *Sphaerophthalma (Photopsis) unicolor* (Cresson), a mutillid); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Krombein, 1979b:1630 (in catalog of North American Hymenoptera).
- Tachysphex consimilis* W. Fox, 1894a:526, ♀, ♂. Lectotype: ♀, USA: Montana: no specific locality (ANSP), designated by Cresson, 1928:44. Synonymized with *Tachysphex parvulus* by R. Bohart in R. Bohart and Menke, 1976:275. – Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); H. Smith, 1908:382 (in revision of Nebraskan Sphecidae); F. Williams, 1914a:164 (in revision of Larrinae of Kansas, as *consimilis* Cresson); Mickel, 1918b:423 (in catalog of Nebraskan Sphecidae); G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera).
- Tachysphex rufoniger* Bingham, 1897:195, ♀ (as *rufo-niger*, incorrect original hyphenation). Lectotype: ♀, Pakistan: North-West Provinces: no specific locality (BMNH), designated by Pulawski, 1975a:310. Synonymized with *Tachysphex pompiliformis* by Pulawski, 1975:310.
- Tachysphex projectus* Nurse, 1903a:517, ♀. Holotype: ♀, India: Kashmir: no specific locality (BMNH). Synonymized with *Tachysphex pompiliformis* by Pulawski, 1975a:310. – Ramakrishna Aiyar, 1916:551 (in catalog of Indian aculeates described after Bingham, 1897).
- Tachysphex argyrotrichus* Rohwer, 1911b:572, ♂. Holotype: ♂, USA: Colorado: Las Animas County: Trinidad (USNM). Synonymized with *Tachysphex parvulus* by R. Bohart in R. Bohart and Menke, 1976:275. – G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera).
- Tachysphex granulosis* Mickel, 1916a:413, ♀. Holotype: ♀, USA: Nebraska: Sioux County: Glen (UNL). Synonymized with *Tachysphex tenuipunctus* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:953. – Mickel, 1918b:422 (in catalog of Nebraskan Sphecidae); Carter, 1925:133 (Canada: Alberta); Strickland, 1947:129 (Canada: Alberta: Edmonton, Lethbridge); Muma, 1952:23 (type in UNL).
- Tachysphex erythraeus* Mickel, 1916a:415, ♀. Holotype: ♀, USA: Nebraska: Warbonnet Canyon (UNL). Synonymized with *Tachysphex pompiliformis* by Pulawski, 1988a:21. – Mickel, 1918b:424 (in catalog of Nebraskan Sphecidae); G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae); Muma, 1952:23 (type in UNL); Krombein, 1979b:1628 (in catalog of North American Hymenoptera).
- Tachysphex angularis* Mickel, 1916a:416, ♂. Holotype: ♂, USA: Nebraska: Sioux County: Sowbelly Canyon (UNL). Synonymized with *Tachysphex pompiliformis* by Pulawski, 1988a:20. – Mickel, 1918b:424 (in catalog of Nebraskan Sphecidae); G. Bohart in Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); Muma, 1952:23 (type in UNL), 28 (paratypes in UNL); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae); Krombein, 1979b:1627 (in catalog of North American Hymenoptera).
- As *Sphex pectinipes* Linnaeus, 1758 (which actually is a pompilid): As *Larra pectinipes*: Dahlbom, 1832:53 (new generic assignment, redescription). – As *Tachytes pectinipes*: Dahlbom, 1843:127 (in revision of Sphecidae and Pompilidae), 1845:470 (in key to world *Tachytes*); Eversmann, 1849:385 (Russia: southern Ural Mountains and Orenburg province); von Kiesenwetter, 1849:89 (Germany: Kingdom of Saxony); Wissmann, 1849:12 (Germany: Kingdom of Hannover: Hedemünden and Münden); Tischbein, 1850:8 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); Wesmael, 1852:85 (Belgium); Kirschbaum, 1853:44 (Germany: Herzogtum Nassau: Mainz-Mombach); Kirchner, 1854:311 (Czechoslovakia: Kaplitz in Budweiser District, now České Budějovice); Kawall, 1857:24 (Kurland,

now Latvia); Ruthe and Stein, 1857:313 (Germany: Berlin area); Schenck, 1857:191 (in revision of fossorial wasps of Nassau Region, Germany); Taschenberg, 1858:84 (in key to Sphecidae of Germany); Assmus, 1859:610 (Russia: Moscow Governorate); Funk, 1859:59 (Germany: Bayern: Bamberg); Schenck, 1860:149 (Germany: Nassau Region); Schenck, 1861:143 (Germany: Hessen: Weilburg); von Frauenfeld, 1861:103 (Croatia: Dalmatia: no specific locality); Brischke, 1862:100 (Germany: Preussen Province, now Poland: Pomorze Region); Giraud, 1863a:14 (Italy: Piemonte: Suse); Siła-Nowicki, 1864:55 (Poland: Tatry Mountains), 1865:55 (western Ukraine: Galicia region: no specific locality); Taschenberg, 1866:201 (in revision of Hymenoptera of Germany); Jaenicke, 1867:147 (Germany: Hessen: Frankfurt area); Kirchner, 1867:216 (in catalog of European Hymenoptera); Schenck, 1867a:356 (Germany: Nassau Region); Dietrich, 1868:364 (Switzerland: Zurich Canton); Jaenicke, 1868:9 (Germany: Hessen: Mombach); Wierzejski, 1868:116 (Ukraine: Podole Region: Janów, Kalinowce); von Aichinger, 1870:320 (Austria: Tirol); Thomson, 1870:241 (in revision of Swedish wasps); P. Ivanov, 1872:152 (Ukraine: Kharkov Oblast': Kupyansk area); Schlechtendal, 1872:37 (Germany: Sachsen: Zwickau); Dours, 1874:139 (in catalog of Hymenoptera of France); Mocsáry, 1874:120 (Siebenbürgen, now Romania: Transylvania: no specific locality); Thomson, 1874:218 (in revision of Hymenoptera of Scandinavia); Wierzejski, 1874:257 (Poland: Żegiestów; Ukraine: L'viv and Podole Region); Marquet, 1875:203 (France: Hérault: Béziers); Beuthin, 1876:231 (Germany: Hamburg area); Becker, 1880:153 (Russia: Sarepta, now Krasnoarmeysk south of Volgograd); Kohl, 1880:180 (Austria: Tirol, and Italy: Trentino–Alto Adige); E. Saunders, 1880:249 (in revision of British Aculeata); Siebke, 1880:64 (Norway); Yaroshevskiy, 1881:126 (Ukraine: Khar'kiv Oblast': Kupyansk); Friese, 1883:203 (Germany: Sachsen-Anhalt: Kösen, Weissenfels); Harwood, 1884:211 (England: Essex: Colchester area); von Heyden, 1884:116 (Germany: Frankfurt am Main); Brischke, 1888a:54 (Germany: Hela Peninsula, now Poland: Hel Peninsula), 1888b:97 (Germany: Preussen Province, now Poland: Pomorze Region), 1889:204 (Germany: Steegen east of Danzig, now Poland: Stegna east of Gdańsk); Assmuss, 1892:52 (Russia: earlier record from Moscow Governorate repeated); V. Perkins, 1892:201 (Great Britain: Gloucestershire: Wotton-under-Edge); Radoszkowski, 1893a:62 (Turkmenistan); Sickmann, 1893:83 (Germany: Niedersachsen: Iburg); Westerlund, 1893:26 (Russia: Karelian Republic: northern shore of Lake Ladoga); Freke, 1896:40 (Ireland); Meunier, 1896:273 (Belgium: Bruxelles area); E. Saunders, 1896:81 (in revision of British Aculeata); Meunier, 1897a:350 (Bulgaria: Sofia area); Strand, 1898b:93 (Norway); W. Evans, 1900:265 (Great Britain: Scotland: Cromdale, and near Perth); Nevinson, 1900:62 (Great Britain: Wales: Criccieth, Towyn); Carr, 1901:16 (Great Britain: Lincolnshire: Skegness); Ferton, 1901b:680 (found in Marseille area, France, but not in Corsica); Gardner, 1901:376 (Great Britain: Cheshire: Deamere and Oakmere); J. Nielsen, 1901a:268 (nesting habits); Rothney, 1901:150 (Great Britain: Cornwall: Tintagel); Thornley, 1901b:63 (Great Britain: Lincolnshire: Skegness); Bradley, 1902:267 (Great Britain: northern Wales); Chyzer, 1902:33 (Hungary); Nevinson, 1902:12 (Great Britain: Cornwall: Newquay); de Cobelli, 1903:111 (Italy: Province of Trentino); J. Nielsen, 1903:112 (nesting habits); Aurivillius, 1904:266 (in revision of Swedish Sphecidae); von Heyden, 1905:81 (Germany: Hessen: Frankfurt); de Galle, 1908:121 (in catalog of French Hymenoptera); Gardner, 1908:186 (preying on grasshoppers); Morley, 1909:304 (Great Britain: Isle of Wight); Orr, 1909a:25 (Ireland: Down County); Morice, 1911:103 (Algeria: Constantine); Friese, 1926:162 (in key to Sphecidae of Central Europe, short morphological and biological characteristics). – **As *Tachysphex pectinipes***: Kohl, 1883e:671 (new generic assignment, Switzerland), 1885a:353 and 355 (in key to Palearctic *Tachysphex*), 388 (in revision of Palearctic *Tachysphex*); Wüstnei, 1886:42 (Germany: Schleswig-Holstein: Madskov near Sonderburg); Gasperini, 1887:15 (recorded as *Tachytes pectinipes* from Dalmatia, now Croatia, by von Frauenfeld, 1861); F. Morawitz, 1891a:207 (Russia: Astrakhan' Governorate); Kohl, 1893a:31 (Austria: Niederösterreich); F. Morawitz, 1893a:111 (Russia: Karelian Isthmus); Krieger, 1894:10 (Germany: Kingdom of Saxony); Borries, 1897 (review of known nesting habits); Dalla Torre, 1897:683 (in catalaog

of world Sphecidae); Mocsáry, 1897:77 (Kingdom of Hungary, some localities are in today's Croatia and Romania); O. Schneider, 1898:102 (Germany: Borkum Island); E. Saunders, 1902b:143 (Great Britain: Jersey and Alderney Islands; France: Bretagne: Saint Briac); J. Nielsen, 1903:112 (nesting habits); Adlerz, 1904:50 (nesting habits); Antiga and Bofill, 1904:11 (in catalog of Catalonian Hymenoptera); E. Saunders, 1904b:249 (Great Britain: Scotland: Nairn); Kubes, 1905:85 (Czech Republic: Kolín); Mortimer, 1905:261 (Great Britain: Wales: Aberdovey); W. Schulz, 1906:46 (Greece: Crete); Luff, 1907:39 (Great Britain: Island of Guernsey); Móczár and Henter, 1907:205 (Hungary: Tiszaalpár, Dobsina; Romania: Caraş-Severin: Mehadia); Schmiedeknecht, 1907:233, 234 (in key to Hymenoptera of Central Europe); Ferton, 1910:157 (prey preference); Mercet, 1910b:165 (listed from Spain); Dittrich, 1911b:24 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:45 (Italy: Trieste area); Schirmer, 1912:167 (Germany: Berlin area); Lundblad, 1913:212 (Sweden); Alfken, 1914:281 (northwestern Germany); Birula, 1914:368 (Ukraine: Zhytomyr Oblast: Radomyshl'), 387 (Belorussia: Luskopol' near Vitebsk); Bouwman, 1914:391 (Netherlands); Szilády, 1914:88 (Hungary: Bólya, Igenpataka, Torda); Bouwman, 1916:203 (nesting habits); Hallett, 1916:221 (Great Britain: South Wales: Porthcawl); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); Hallett, 1919:262 (Great Britain: Island of Guernsey); O. Meyer, 1919:154 (Germany: Posen Province, now Poland: Poznań Region); Łoziński, 1920:121 (Poland: Kraków, Maków Podhalański); Noskiewicz, 1920a:155 (Poland: Tatry Mountains: Gubałówka); A. Wagner, 1920:39 (Germany: Lower Elbe region); Strand, 1921:33 (Germany: Bayern: Kulmbach); Dubois, 1922:208, 209 (in key to Belgian Sphecidae); Hedicke, 1922:271 (Germany: Brandenburg: Gross Machnower Weinberg); Ferton, 1923:323 (larves of *Stenobothrus* are preferred prey, and the setose *Acrotylus* is rarely captured), 333 (known from continental France but not found in Corsica); Alfken, 1924:425 (Germany: Memmert); Chevalier, 1924c:74 (nesting habits); R. Perkins, 1924:230 (Great Britain: Devon); Berland, 1925d:121 (in Sphecida Fauna of France); Bischoff, 1925:301 (Latvia: Wezkukkul; Poland: Białowieża); Coulon, 1925:121 (in Elbeuf Museum: no locality); R. Perkins, 1925:154 (Great Britain: Gloucestershire and Somershetshire); Schütze, 1925:113 (Germany: Lausitz Region); Strohm, 1925:211 (Germany: Baden-Württemberg: Kaiserstuhl); Bouwman, 1926:280 (in list of Sphecidae of Netherlands); Grandi, 1927:202 (nesting habits); Stelfox, 1927:308 (Ireland: list of localities); F. Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley); Benoist, 1928:410 (France: Alpes-Maritimes, Basses-Alpes, Hautes-Alpes); Berland, 1928b:178 (add Grandi, 1926 to bibliography in Berland, 1925d); Bouwman, 1928b:27 (in revision of Sphecidae of Netherlands); Grandi, 1928d:305 (prey), 307 (description of egg and larva); van der Vecht, 1928:93 (Netherlands: Meijndel sand dunes); Grandi, 1929:288 (Italy: Toscana: valle della Limentra); Butterfield and Fordham, 1930:369 (Great Britain: Yorkshire); Schmiedeknecht, 1930:694, 695 (in keys to Hymenoptera of North and Central Europe); Grandi, 1931:57 (Italy: Toscana: Vallata delle Pozze near Le Mandriole); Pulkkinen, 1931:76 (in revision of Sphecidae of Finland); Bondroit, 1932:37 (Belgium: Solbosch); Gussakovskij, 1932:14 (Russia: Kamchatka: Elisovo); Maneval, 1932:94 (nesting habits); Bernard, 1933:62 (France: Drôme: Dieulefit); Bondroit, 1934:60 (Belgium: Ostende); Drogoszewski, 1933:118 (Poland: Łowicz); Nadig, 1933:79 (Morocco: Asni); E. Nielsen, 1933:294 (summary of nesting habits); Stelfox, 1933:52 (Ireland: Waterford County: Bunmahon); Balles, 1934:20 (Germany: Baden-Württemberg: Oberachern); Giner Marí, 1934:133 (Spain); Jansson, 1934:290 (Sweden); Spooner, 1934b:278 (Great Britain: Devon: Branton Burrows); Bernard, 1935:65 (France: Var: Fréjus area); Forsius in Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); Grandi, 1935a:110 (Italy); Marchand and Dulac, 1935:61 (France: Saône-et-Loire: Saint Laurent d'Andenay); Minkiewicz, 1935:196 (Poland: Kazimierz on Wisła, 51°20'N 21°58'E); Richards, 1935a:163 (*Sphex pectinipes* of Linnaeus is actually a pompilid); Vergne, 1935:118 (France: Auvergne: common); Bernard, 1936a:35 (France: Hautes-Pyrénées: Pic de Néouvielle area); Crèvecoeur and Maréchal, 1936:252 (in catalog of Belgian Hymenoptera); de Beaumont, 1936a:202 (in revision of French *Tachysphex*), 1936c:8 (specimens in coll. A. Costa); Dulac,

1937:13 (France: Saône-et-Loire: Saint-Laurent d'Andenay); Goebel, 1937:42 (Poland: Poznań District: Głuszyna, Poznań-Dębina, Puszczkowo, Splawie, Strzeszyn); Zavadil, Šustera, and Bat'a, 1937:203 (in catalog of Sphecidae of Czechoslovakia); Hallett, 1938:74 (Great Britain: Herefordshire: Mathon, Ross-on-Wye); Hardouin, 1938:9 (nest and prey); Móczár, 1938a:161 (Hungary: Kassa, now Slovakia: Košice); A. Wagner, 1938a:122 (northwestern Germany); Aerts, 1939:134 (Germany: Nordrhein-Westfalen: loess cliff at Weilerswist near Köln); Giordani Soika, 1939b:73 (Italy: Lido di Venezia); Koornneeff, 1939:130 (Netherlands: Rhenen, comparison with *Tachysphex nigripennis*, misspelled *nigricornis*); Móczár, 1939:4 (Hungary: Jászberény); de Beaumont, 1940b:177 (not known from Egypt); Dvornar-Zapolskiy, 1940:304 (Russia: Kursk Oblast'); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Guiglia, 1941c:166 (Italy: Calabria: Grande Sila); Hoop, 1941b:70 (Germany: Schleswig-Holstein: Süderhastedt); Paul, 1941:46 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1045 (Germany: Bayern: Bamberg area); Honoré, 1942:55 (Egypt: Hawamdieh, Adelen Insel, in error); Giner Marí, 1943a:142 (in Sphecid Fauna of Spain); Móczár, 1943a:58 (Hungary: Nagykörös); Guiglia, 1944b:28 (Italy); Deleurance, 1946b:63 (habits as in *Tachysphex panzeri*), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Carl and de Beaumont, 1947:68 (Switzerland: Graubünden = Grisons Canton: Swiss National Park); Balthasar, 1948:142 (Slovakia: Kovačov, Parkan); Zavadil in Zavadil and Šnoflák, 1948:151, 153 (in key to Sphecidae of Czechoslovakia); Georgel, 1950:64 (France: Seine-et-Oise: Sucey-en-Brie); Szulczewski, 1950:108 (Poland: Wielkopolski National Park 15 km south of Poznań); Caruel, 1952a:62 (France: Marne Department); Móczár, 1953:310 (Hungary); Fahlander, 1954:252 (Sweden: Gästrikland Region); Tjeder, 1954:67 (Sweden: eastern Skåne: Löderup); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vogrin, 1955:37 (Yugoslavia); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain); Hertzog, 1956:182 (carrying prey dorsum up, keeping it with mandibles by antennae); Bajári, 1957a:54, 55 (in key to Hungarian Sphecidae); Zirngiebl, 1957:183 (Germany: Rheinland-Pfalz: Birkenheide, Landau, Leistadt); Olberg, 1959:267 (photograph of specimen resting on sand); Lehrer and Scutaru, 1963:287 (Romania: Moldova: Baia in Suceava District, Pașcani in Iași District); Evans, 1968c:119 (discussion of larval descriptions by Grandi); Babiý, 1964:114 (Austria: Land Salzburg); Fæster, 1965:192 (Denmark: Hansted Nature Reserve); Scobiola-Palade, 1966b:392 (Romania: Tulcea District: Periprava); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nessebar); Niede and Deneš, 1967:81 (Czech Republic: Třeboň area); Benedek, 1968:73 (Hungary, floral records); Nagy, 1968:378 (nest parasite in Romania: *Smicromyrme septentrionalis* Hoffer, a mutillid, now *Smicromyrme sicana* (De Stefani Perez, 1887)); Benedek, 1969a:84 (Hungary; marshy meadow); Dathe, 1969:439 (Germany: Berlin Zoological Garden); Benedek, 1970:98 (Hungary: Tapolca); Kazenas, 1971:161 (Kazakhstan: Zailiyskiy Alatau Range; widely distributed in Kazakhstan); Balthasar, 1972:263 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:163 (Kazakhstan); Józán, 1981:304 (Hungary: Hortobágy National Park), 1983:99 (Hungary); Pádr in Šedivý, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Scobiola-Palade, 1989:87 (Romania: delta of Danube); Pádr, 1990:74 (Czech Republic: Praha area); Blagoveshchenskaya, 1994:87 (Russia: Ul'yankovsk Oblast').

As *Lyrops bicolor*: Stephens, 1829a:363 (in catalog of British insects) and 1829b:33 (in checklist of British insects), nomen nudum. Corrected to *Larra pompiliformis* by F. Smith, 1899:99.

As *Lyrops tricolor*: Stephens, 1829:363 (in catalog of British insects) and 1829b:33 (in checklist of British insects), corrected to *Larra pompiliformis* by F. Smith, 1855:99.

As *Larra abdominalis*: Provancher, 1887:266 (in key to *Larra* of Canada), corrected to *Tachysphex pompiliformis* by Pulawski, 1988a:22.

As *Tachysphex compactus*: Harrington: 1902:221 (Canada: Ontario: Ottawa area), corrected to *Tachysphex pompiliformis* by Buck, 2004:75.

As *Tachysphex fulvitaris*: Lefebvre, 1971a:17 (Netherlands: Meynweg), corrected to *Tachysphex pompiliformis* by Lefebvre, 1973:153.

*Tachysphex* unidentified species: Steiner, 1981:333 (nesting habits), corrected to *Tachysphex pompiliformis* by Pulawski, 1988a:21.

As *Tachysphex verticalis*: Ratzlaff, 2016:26 (first record from Canada: British Columbia: Southern Interior Mountains), 36 (British Columbia: Castlegar), corrected to *Tachysphex pompiliformis* by Buck and Bennett, 2025:215.

### 332. *powelli* R. Bohart

*Tachysphex powelli* R. Bohart, 1962a:35, ♀, ♂. Holotype: ♂, USA: California: Alpine County: Winnemucca Lake (CAS). – Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Krombein, 1979b:1629 (in catalog of North American Hymenoptera); Pulawski, 1988a:38 (in revision of Nearctic *Tachysphex*).

### 333. *priesneri* de Beaumont

*Tachysphex priesneri* de Beaumont, 1940b:176, ♀, ♂. Holotype: ♀, Egypt: Kharga oasis (Ministry of Agriculture of Egypt). – Honoré, 1942:55 (Egypt: Kharga oasis, Wadi um Assad); de Beaumont, 1947a:208 (in new revision of *Tachysphex* of Egypt), 1956a:199 (Libya; variation); Pulawski, 1971:132 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 2007a:499 (in revision of African *Tachysphex*); Roche, 2007a:76 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

### 334. *prismaticus* Straka

*Tachysphex prismaticus* Straka, 2005b:262, ♀, ♂. Holotype: ♂, Kazakhstan: 20 km southeast of Aksay (OÖLM). Paratypes: Kyrgyzstan, Turkey. – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria); Straka, 2016:69 (in revision of *Tachysphex pompiliformis* species group); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Kaplan and Yildirim, 2021:66 (in catalog of Crabronidae of Turkey), 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

### 335. *prosopigastroides* Bischoff

*Tachysphex prosopigastroides* Bischoff, 1913c:65, ♀. Holotype: ♀, Zimbabwe: Bulawayo (ZMHU). – Arnold, 1923a:163 (Zimbabwe; in revision of southern African *Tachysphex*), 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:502 (in revision of African *Tachysphex*).

*Tachysphex subfuscatus* R. Turner, 1917b:323, ♀. Holotype: ♀, Malawi: Mlanje (BMNH). Synonymized with *Tachysphex prosopigastroides* by Pulawski, 2007a:502. – Arnold, 1923a:176 (original description copied), 1930:4 (in checklist of Afrotropical Sphecidae); Pulawski, 1975a:313 (diagnostic characters); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae).

*Tachysphex strigatus* R. Turner, 1917b:324, ♀. Lectotype: ♀, Zambia: between Fort Jameson (now Chipata) and Lundazi (BMNH), designated by Pulawski, 1975a:313. Synonymized with *Tachysphex subfuscatus* by Pulawski, 1975a:313. – Arnold, 1923a:174 (original description copied), 1930:4 (in checklist of Afrotropical Sphecidae).

*Tachysphex sipapomae* Arnold, 1923a:164, ♂. Lectotype: ♂, Zimbabwe: Sawmills (SAM), designated by Pulawski, 2007a:502. Synonymized with *Tachysphex prosopigastroides* by Arnold, 1924:70

### 336. *proteus* Pulawski

*Tachysphex proteus* Pulawski, 1977a:255, ♀. Holotype: ♀, Australia: Victoria: Wilkur (National Museum of Victoria, Melbourne). – Cardale, 1985:242 (in catalog of Australian Sphecidae).

**337. *psammobius* (Kohl)**

*Tachytes psammobius* Kohl, 1880:235, ♀, ♂ (as *psammobia*, incorrect original termination). Lectotype: ♀, Italy: Bolzano (as Bozen; NHMW), designated by Pulawski, 1971:189. – **As *Tachysphex psammobius***: Kohl, 1880:180 (new generic assignment, Italy: Trentino-Alto Adige), 1883e:671 (Switzerland, as *psammobia*), 1885a:353 and 355 (in key to Palearctic *Tachysphex*), 386 (in revision of Palearctic *Tachysphex*); Gasperini, 1889:69 (Dalmatia: Spalato, now Croatia: Split); Kohl, 1893a:32 (Austria: Niederösterreich); Krieger, 1894:11 (Germany: Kingdom of Saxony); Dalla Torre, 1897:684 (in catalog of world Hymenoptera); Ferton, 1901b:680 (found in Marseille area, France, but not in Corsica); Antiga and Bofill, 1904:11 (in catalog of Catalonian Hymenoptera); Schmiedeknecht, 1907:232, 233 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Šusterka, 1909:35 (Czech Republic: vicinity of Praha); Mercet, 1910b:165 (listed from Spain); Dittrich, 1911b:24 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Morice, 1911:105 (Algeria: Constantine); Birula, 1914:387 (Belorussia: Vitebsk, as *psammobia*); Zilahy Kiss, 1915:80 (Hungary: Bethlen, Nagyilonda); Noskiewicz, 1918:138 (Galicia, now western Ukraine: Hołosko near Lwów); Stöckhert, 1919:41 (Germany: Franken); O. Meyer, 1919:154 (Germany: Posen Province, now Poland: Poznań Region); Enslin, 1922c:247 (Germany: Bayern: Fürth); Ferton, 1923:333 (known from continental France but not found in Corsica); Berland, 1925d:122 (in Sphecidae Fauna of France); Bischoff, 1925:301 (Latvia: Wezkukkul); Blüthgen, 1925:166 (Germany: Saale River valley: Eulau); Schütze, 1925:113 (Germany: Lausitz Region); von Schulthess, 1926b:215 (Tunisia); Berland, 1928b:178 (France: Ardennes: Charleville); Bouwman, 1928b:27 (in revision of Sphecidae of Netherlands); Schmiedeknecht, 1930:694 (in keys to Hymenoptera of North and Central Europe); Crèvecoeur and Maréchal, 1932:70 (first record from Belgium: Boitsfort, Embourg, Loën); Giordani Soika, 1932a:22 (Italy: Lido di Venezia; determination tentative); Giner Marí, 1934:133 (Spain); Bernard, 1935:65 (France: Var: Fréjus area); Grandi, 1935a:110 (Italy); Maneval, 1935:75 (France: Haute-Loire: Puy); Crèvecoeur and Maréchal, 1936:252 (in catalog of Belgian Hymenoptera); de Beaumont, 1936a:204 (in revision of French *Tachysphex*), 1936c:8 (specimen in coll. A. Costa, Napoli); Goebel, 1937:42 (Poland: Poznań District: Strzeszyn); Zavadil, Šusterka, and Bat'a, 1937:202 (in catalog of Sphecidae of Czechoslovakia); Kuntze and Noskiewicz, 1938:407 (Poland: Podole region, now Ukraine, also known from more northern parts of Poland); Maréchal, 1939:341 (Belgium: Loën); Guiglia, 1941c:166 (Italy: Calabria: Grande Sila); Schneid, 1941:1045 (Germany: Bayern: Bamberg area); Blüthgen, 1942:10 (Germany: Sachsen: known from Saal Valley and Kyffhäuser); Giner Marí, 1943a:142 (in Sphecidae Fauna of Spain); Bat'a, 1944b:91 (Czech Republic: Veselí); Guiglia, 1944b:28 (Italy); Balthasar, 1945:115 (Czech Republic: southeastern Morava Region); Carl and de Beaumont, 1947:68 (Switzerland: Graubünden = Grisons Canton: Swiss National Park); de Beaumont, 1947b:393 (Cyprus); Zavadil *in* Zavadil and Šnoflák, 1948:150, 152 (in key to Sphecidae of Czechoslovakia); Ceballos, 1949:102 (Spain); Cavro, 1950:36 (France: Département du Nord); Pittioni, 1950:25 (Cyprus); Benno, 1951b:15 (in checklist of Aculeates of Netherlands); Bat'a, 1952:167 (Czech Republic); Aerts, 1955:63 (Germany: Rheinland); Nouvel and Ribaut, 1955:141 (France: Haute-Garonne: Melles); Steiner, 1955:139 (France: Dordogne); Vogrin, 1955:37 (Yugoslavia); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain); Bajári, 1957a:53, 54 (in key to Hungarian Sphecidae); Benno, 1958b:12 (in review of Dutch Sphecidae); de Beaumont, 1958c:205 (Swiss National Park); Nouvel and Ribaut, 1958:14 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Pulawski, 1958a:181 (Bulgaria: Kniazhevo near Sofia); Wolf, 1959b:24 (Germany: Nassau); Noskiewicz and Puławski, 1960:123, 125 (in key to Polish Sphecidae); de Beaumont, 1962b:26 (Spain); Ceballos, 1964:91 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:76 (in Sphecidae Fauna of Switzerland); Diniz, 1964a:6 (Portugal: Rezende); de Beaumont, 1965a:49 (Greece); Bonelli, 1966c:218 (Italy: Trentino–Alto Adige: Montagna); Lefeber, 1966:209 (Netherlands: Kannerberg, Meyendel);

Benno, 1967:36 (in checklist of Sphecidae of Netherlands); Gauss, 1967:554 (Germany: Baden-Württemberg); Balthasar, Hrubant, and Hrubant, 1967:171 (Bulgaria: Slanchev Bryag near Nessebar); J. Heinrich, 1967:75 (Germany: Bayern: Unterfranken District); Niedl and Deneš, 1967:81 (Czech Republic: Třeboň area); Pulawski, 1967a:404 (Turkey); Scobiola-Palade, 1967a:162 (Romania: Constanța District: Canarua Fetei); Lefeber, 1968a:5 (Netherlands: Kanne, specimen from Meijendel, reported in 1966i, is *Tachysphex pompiliformis*); Scobiola-Palade, 1968b:142 (Romania: Island of Letea in delta of Danube), 1968c:384 (Romania: Budești); Lefeber, 1969a:79 (Netherlands: Bemelen, Sint Pietersberg), 1969c:233 (Netherlands: Sint Pietersberg = Montagne Saint Pierre); Leclercq, 1970c:map 34 (distribution in Belgium); Oehlke, 1970:715 (Democratic Germany); Tumšs, 1970:83 (Latvia); Lefeber, 1971a:17 (Netherlands: t'Rooth); Pulawski, 1971:189 (in revision of Palearctic *Tachysphex*); Schmidt, 1971b:36 (Germany: Rheinland-Pfalz: Mainzer Sand); Balthasar, 1972:265 (in Sphecidae Fauna of Czechoslovakia); Simon Thomas, 1972:182 (France: Landes); de Beaumont, Bytinski-Salz, and Pulawski, 1973:9 (Israel); Lefeber, 1973:153 (Netherlands: Bemelerberg; Belgium: Eben, Plombières, Vroenhoven); Lefeber and Petit, 1974:163 (Belgium: Plombières); Scobiola-Palade, 1974:145 (Romania: Sărăturile sandbank in Danube delta); Lefeber, 1975b:120, 154 (Netherlands: Schiepersberg); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Eck, 1976:91 (Democratic Germany); Georghiou, 1977:192 (Cyprus); Kolesnikov, 1977:318 (Russia: Bryansk Oblast'); Kazenas, 1978b:120, 131 (in key to Sphecidae of Kazakhstan and Central Asia); Marion, 1978:88 (France: Nièvre Department); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Benedek, 1979:231 (Hungary: Bakony Hills); Lefeber, 1979:12 (in checklist of Sphecidae of Netherlands), 75 (Netherlands: distribution map); Richards, 1979:397 (British Channel Islands); Pagliano, 1980:128 (Italy: Toscana); Józán, 1981:304 (Hungary: Hortobágy National Park); Schmidt, 1981:186 (Germany: Baden-Württemberg); Gayubo, 1982a:106 (northern Spain: Sierra de Béjar); Schedl, 1982:102 (Austria: Tirol: Ötztaler Alps); Dollfuss, 1983a:76 (Austria: endangered in Niederösterreich), 77 (endangered in Burgenland, Austria), 78 (endangered in Oberösterreich, Austria), 1983b:11 (in catalog of Sphecidae of Austria); Józán, 1983:99 (Hungary); Chevin and Silvestre de Sacy, 1984:7 (France: Yvelines Department); Gayubo, 1984b:86 (Spain: Salamanca Province); Józán, 1985a:181 (Hungary), 1985b:57 (Hungary south of Lake Balaton), 78 (floral records), 83 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Westrich and Schmidt, 1985b:112 (Germany: endangered in Baden-Württemberg); Wolf, 1985a:6 (Germany: Frankfurt area); Brechtel, 1986:61 (Germany: Südpfalz: Lauterwiesen, Sandbuckel); Gayubo, 1986c:33 (Spain: Zamora Province); Józán, 1986:370 (Hungary: Kiskunság National Park); Nemkov, 1986:97 (Russia: Siberia: Irkutsk Oblast'); Gayubo, 1987a:113 (Spain: Ciudad Real Province); Kurczewski, 1987a:121 (nesting habits); Schmidt and Westrich, 1987:364 (Germany: Mainz area); Dollfuss, 1988:12, 24 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Gayubo and Mingo, 1988:81 (Spain); Karsai, 1988:100 (Hungary: Kiskunság National Park); Pulawski, 1988a:109 (in revision of Nearctic *Tachysphex*); Wolf, 1988b:141 (Germany: Rheinland-Westfalen); Dollfuss, 1989:13 (lectotype in NHMW); Jacobs, 1989:13 (Germany: Mecklenburg-Vorpommern); Józán, 1989:101 (Hungary: Tihany Nature Reserve); Pádr *in* Šedivy, 1989a:168 (in checklist of Czechoslovakian Sphecidae); Barbier, Rasmont, and Wahis, 1990:32 (Belgium: Hainaut); Gayubo, Asís, and Tormos, 1990a:18 (Spain); Jacobs and Oehlke, 1990:166 (new records from Democratic Germany); Kuznetzova, 1990:20 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pádr, 1990:74 (Czech Republic: Praha area); Pagliano, 1990:106 (in catalog of Italian Sphecidae); Day, 1991:xix (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:107 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:403 (Italy); Józán, 1991:603 (Hungary: Bátorliget Nature Reserve); van der Smissen, 1991:97 (northwestern Germany); Budrys, 1992:32 (in list of Sphecidae of Lithuania); Józán, 1992b:173 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Gorobchishin, 1993:46 (Ukraine: Kanev Nature

Reserve); Kuhlmann, 1993:76 (Germany: known from Westfalen); Luig, 1993:44 (Estonia); van der Smissen, 1993:130 (northwestern Germany); Dollfuss, 1994:102 (endangered in Austria); Theunert, 1994a:48 (Germany: Niedersachsen: Wense and Balgenberg near Neubrück), 1994c:51 (summary of records from Niedersachsen and Bremen, Germany); Tormos, Asís, and Gayubo, 1994:188, 207 (Spain: Albacete Province); Wickl and Wickl, 1994:193 (Germany: Bayern: Oberpfalz: Holzhaammer, Mantel); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Jansen and Kaluza, 1995:8 (Germany: endangered in Sachsen); Józán, 1995:104 (Hungary: projected Duna-Dráva National Park); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:410, 412 (in key to Sphecidae of Russian Far East); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:25 (Austria: Niederösterreich: Oberweiden; Germany: Bayern: Aschaffenburg, Obernau); Schmid-Egger, Risch, and Niehuis, 1995:212 (Germany: summary of records from Rheinland-Pfalz Province); Schmid, Schmid-Egger, and Doczkal, 1995:9 (a new species close to *Tachysphex psammobius* found in Germany: Rhine River area); Skibińska, 1995:423, 425 (Poland: pine forest in Białowieża Primeval Forest); Arens, 1996:441 (Germany: Bayern: Bayreuth area); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Jakubzik, 1996:253 (Germany: Köln); Jakubzik and Cölln, 1996b:401 (Germany: Rheinland-Pfalz); Saure, 1996:503 (Germany: Berlin-Pankow: sewage irrigation field); Schmid-Egger, Schmidt, and Doczkal, 1996:378 (Germany: Baden-Württemberg: endangered); Tischendorf, 1996:47 (Germany: Hessen: near Bensheim); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Witt, 1996:106 (Germany: Brandenburg), 111 (locality records); Celary, 1997:58 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:30 (in checklist of German Sphecidae); Shlyakhtenok, Bli-nov, and Belyavskaya, 1997:152 (Belorussia: Pripyatskiy National Park); Blösch, 1998:168 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg), 35 (endangered); Dollfuss, Gusenleitner, and Bregant, 1998:515 (Austria: summary of collecting records from Burgenland); Flügel, 1998:61 (Germany: Brandenburg: Unteres Odertal National Park); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Jakubzik, Schlüter, and Cölln, 1998:1182, 1184 (Germany: Rheinland-Pfalz); Józán, 1998:311 (Hungary: Duna-Dráva National Park); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); van der Smissen, 1998:70 (Germany: Niedersachsen: Brünkendorf, Schleswig-Holstein); K. Weber, 1998:149 (Germany: Bayern: Bamberg area); García, Torres, and González, 1999:90 (Spain: Soria Province); Gusenleitner, 1999:599 (Austria: Vorarlberg: Vandans northwest of Schruns); Ljubomirov, 1999b:51 (Bulgaria: Mount Vitosha near Sofia); Mandery, 1999:106 (Germany: Bayern: Coburg area); Pauly, 1999:109 (in catalog of Belgian aculeates); Saure, 1999:33 (Germany: Berlin-Köpenick); M. Schwarz, 1999:86 (Austria: Oberösterreich: city of Linz area); Wickl, 1999a:108 (Germany: Bayern: Oberpfalz area); Blösch, 2000:235 (in Sphecid Fauna of Germany); Dressler, 2000:34 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:34 (southeastern Kazakhstan: 23 km west of Alma Ata, near Lavar, near Masak); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:106 (Greece); Jacobs, 2000:12 (Germany: Land Mecklenburg-Vorpommern: not endangered); Józán, 2000:108 (Hungary: Bakony Mountains); Mokrousov, 2000b:30 (Russia: Nizhniy Novgorod Oblast'); Schmid-Egger, 2000b:276 (Germany: Baden-Württemberg: shores of Rhine River); Zettel, 2000:27 (Austria: Marchfeld); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Mazzucco, 2001:203 (Austria: Niederösterreich: Steinfeld); Ohl et al., 2001:142 (distribution in Germany by provinces); K. Schmidt and Bitsch *in* Bitsch et al., 2001:269 (in Sphecid Fauna of Western Europe); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); van der Smissen, 2001:64 (Germany:

Schleswig-Holstein: strongly endangered); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:74 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:153 (Poland: Kampinos National Park near Warszawa); Mokrousov, 2002:148 (Russia: Nizhniy Novgorod Oblast': Kerzhenskiy Nature Reserve); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); van der Smissen, 2002:212 (Germany: Schleswig-Holstein: Teschow 6 km northeast of Lubeck-Schlutup; probable parasite: *Chrysis illigeri* Wesmael); Ziska, 2002:9 (Germany: Berlin-Köpenick: Krumme Lake); Cölln, Esser, and Jakubzik, 2003:63 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Józán, 2003:227 (Hungary: Látványi Puszta Nature Conservation Area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:70 (Germany: in catalog of wasps and bees of Bayern); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Tischendorf and Treiber, 2003:121 (Germany: Hessen: 15 km southwest of Frankfurt am Main: nesting under high power lines); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: endangered); Deván, 2004:148 (western Slovakia); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:264 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Gayubo et al. 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Kazenas, 2004b:104 (Kazakhstan: western Tien Shan); Klein and Lefeber *in* Peeters, van Achterberg, et al., 2004:426 (in Wasp and Ant Fauna of Netherlands); Majzlan and Deván, 2004:31 (Slovakia: Sekule), 33 (Slovakia: Malacky-Široké); Shkuratov, 2004a:77 (Russia: Rostov Oblast'); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:357 (in catalog of Polish Crabronidae); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:44 and 60 (in checklist of Polish Sphecidae); Burger, 2005:36 (Germany: Thüringen); Cölln and Jakubzik, 2005:808 (Germany: in synthesis of records from northwestern Rheinland-Pfalz); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Jacobs, 2005a:452 (Bulgaria); Kofler, 2005:173 (Austria: Tirol: Lienz District: Forchach in Lavant Common); Kowalczyk and Kurzac, 2005:106 (Poland: Botanical Garden in Łódź); Pagliano and Negrisoló, 2005:380 (in Sphecid Fauna of Italy); Reder, 2005:954 (Germany: Rheinland-Pfalz: Eisenberg); Saure, 2005:19 (Germany: Berlin); Shorenko, 2005a:164 (Ukraine: Crimea), 2005b:98 (Ukraine: Crimea: Karadagh Nature Reserve); Straka, 2005b:264 (Turkey: Antalya: Taşkesigi 100 km east of Antalya; Erzurum: Tekederesi 15 km southwest of Erzurum); Theunert, 2005a:19 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Ziska and Saure, 2005:82 (Germany: Berlin: Biesenhorster Sand); Bock, 2006:41 (Germany: Bayern: Kelheim District: Abensberg sands); Gorobchishin, 2006:109 (Ukraine: Cherkasy Oblast': Kanev Nature Reserve; Kyiv Oblast': Glevakha, village Khotiv, Kyiv); Liebig, 2006:40 (Germany: Sachsen: Muskauer Heide); Ljubomirov, 2006:543 (Bulgaria: Rhodope Mountains: earlier records summarized, also Yurukovo Village); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:460 (France: first record from département de la Haute-Garonne: near Saint-Béat); Cungs, Jakubzik, and Cölln, 2007:140 (Luxemburg: Haardt Nature Reserve); Jacobs, 2007:95, 99 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:26 (Germany: northwestern Sachsen); Józán, 2007:179 (Hungary: Zselic hills); Kowalczyk and Nadolski, 2007:284 (Łódź: railway areas); Saure, 2007:83 (in checklist of Aculeata of Land Brandenburg, Germany); Vepřek and Straka, 2007:203 (in catalog of Sphecidae of Czech Republic and Slovakia); Yildirim and Ljubomirov, 2007:120 (Turkey: Bingöl and Kars provinces); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); T. Li, Q. Li, and Cai, 2008:144 (first record from China);

Ljubomirov and Yildirim, 2008:218 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:19 (in catalog of Crabronidae of Asiatic Russia); Theunert, 2008:86 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picon, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Belkheir, 2009:17 (France: Pyrénées-Orientales: commune d'Eyne); U. Frommer, 2009a:29 (Germany: in checklist of Sphecidae of Hessen), 41 (Hessen: locality records); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:264 (Bulgaria: Maleshevska Planina); Kowalczyk, Kurzac, and Nadolski, 2009:63 (Poland: between Warta and Widawka rivers); Nemkov, 2009b:80 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Burguet *in* Durand and Burguet, 2010:52 (France Département d'Ardèche: Ardèche Gorges); Esser, Fuhrmann, and Venne, 2010:38 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:29 (Germany: Bayern: Sulz- and Ottmaringer Tal); Mokrousov, 2010a:62 (Russia: Ivanovo and Nizhny Novgorod Oblast's, Chuvash Republic: no specific localities); Rudoiskatel', 2010:152 (Russia: central and southern Ural Mountains); Saure, 2010a:88 (Germany: Berlin-Reinickendorf: Baumberge); Schmid-Egger, 2010a:19 (in red list of Aculeata of Germany: rare); van der Smissen, 2010a:354 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records), 2010b:387 (France: Ardèche: Saint-Maurice d'Ibie, Saint-Thomé, Vogüé; Vaucluse: Bédoin); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Gogala, 2011:15 (Slovenia: Podčetrtek); Józán, 2011:181 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:75 (Russia: Chuvash Republic); Rudoiskatel', 2011b:68 (Russia: Republic of Bashkortostan), 2011d:241 (Russia: central Ural Mountains); Saure, 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg); Schmid-Egger, 2011a:39 (Italy: Parco delle Alpi Marittime: San Lorenzo); Theunert, 2011a:21 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:107 (Germany: Hessen: may be endangered); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Cölln, Jakubzik, and Kinkler, 2012:25 (Germany: Nordrhein-Westfalen: Leverkusen); Klimsa, 2012:69 (Germany: Bayern: Schwandorf District); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); Shlyakhtenok, 2012a:172 (Belorussia: collected in private plots), 2012b:92 (Belorussia: Beresina National Reserve: overgrowing dry meadow); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Yildirim, 2012:80 (Turkey: Erzurum: Oltu); Danilov and Odintseva, 2013:332 (Russia: Western Siberia: 65 km north-northeast of Tobol'sk at 58°45'N 68°74'E); Flügel, 2013a:120 (Germany: Brandenburg: Pimpinellenberg near Oderberg); Kazenas, 2013b:495 (southeastern Kazakhstan: near Masak); A. Scholz and Liebig, 2013:28 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:168 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park); Wiśniowski and Szczepko, 2013:53 (Poland: Kampinos National Park near Warszawa); Bitsch, 2014:403 (France: Aisne: Rocourt-Saint-Martin; Haute-Garonne: Blagnac; Loiret: Ardon); Józán, 2014:133 (Croatia: 2 km south of Križišće, Prezid Pass, Rudelić Draga); Kazenas, 2014a:135 (Kazakhstan: Karatau Mountain Range); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Rezaei and Fallahzadeh, 2015:10 (Iran: Fars: Dasht e Arzhan at 29°38'N 51°58'E); Saure, 2015:15 (Germany: Berlin-Lichterfelde); Shorenko, 2015:329 (in list of Sphecidae *sensu lato* of Crimea); Weber, 2015:64 (Germany: Bayern: Nature Reserve Börstig near Hallstadt); Bleidorn, Gerth, Hopfe, et al., 2016:11 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Cölln and Jakubzik, 2016:18 (Germany: Rheinland-Pfalz: Vulkaneifel District); Mokrousov and Popov,

2016:581 (Russia: Abkhazia, Krasnodarskiy Krai); Ratzlaff, 2016:26 (Canada: British Columbia: from Pulawski, 1988); A. Scholz, 2016:72 (Germany: Sachsen: Kleinraschützer Heide); Stolle and Saure, 2016:925 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:37 (Turkey: Kars: Sarikamış: Karakurt); Antropov, 2017b:239 (in catalog of Crabroninae of Russia); Durand and Burguet, 2017:2 (France: Puy-de-Dôme: Réserve Naturelle Nationale Chastreix-Sancy); Gülmez and Can, 2017:82 (Turkey: Erzincan Province); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Vallée d'Eyne); Twerd, Krzyżyński, Waldon-Rudziołek, and Olszewski, 2017:7 (Poland: Inowrocław: nesting in postindustrial soda ash dumping sites); Gros, 2018:21 (nesting habits); Lett, 2018:203 (France: Loir-et-Cher: Gièvres at 47°16'39"N 1°41'52"E); Maharramov, Aliyev, and Mammadov, 2018:454 (Azerbaijan: Kakhi); Shoreenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Carminati, Mora, and Cretin, 2019:18 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:111 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13233 (Russia: Mordovia State Nature Reserve); Akulov, Proshchalykin, and Mokrousov, 2020:50 (Russia: central Krasnoyarsk Krai); Ben Khedher, Yildirim, and Braham, 2020b:319 (in Tunisia known from Tunis); Kejval, Blažej, and Erhart, 2020:107 (western Czech Republic); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:71 (in catalog of *Tachysphex* of Iran); Saure, 2020:277 (Germany: Sachsen-Anhalt: sand dunes); Shoreenko, 2020:52 (Crimea: Karadag Nature Reserve); Cross, Baldock, and Wood, 2021:45 (in catalog of Sphecidae *sensu lato* of Portugal); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correas-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico); Olszewski, Wiśniowski, and Ljubomirov, 2021:101 (in commented list of Sphecidae *sensu lato* of Poland); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:236 (in revision of Sphecidae *sensu lato* of Europe); Can, 2022:223 (supernumerary submarginal cell); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution); Olszewski, Sparks, Twerd, and Wiśniowski, 2024:5 (central Poland: common in river valleys: no specific localities, not endangered); Buck and Bennett, 2025:214 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Manitoba, Saskatchewan: no specific locality); Frommer and Klenke, 2025:165 (Germany: Hessen: Lahntal near Weilburg).

*Tachysphex asperatus* W. Fox, 1894a:516, ♀. Holotype: ♀, USA: Nevada: no specific locality (ANSP). Synonymized with *Tachysphex sculptilis* by Pulawski *in* Krombein, 1979b:1629. – Dalla Torre, 1897:678 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Cresson, 1928:43 (holotype in ANSP); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:950 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae).

*Tachysphex sculptilis* W. Fox, 1894a:517, ♀. Holotype: ♀, USA: Colorado: no specific locality (ANSP). Synonymized with *Tachysphex psammobius* by Pulawski, 1988a:109. – Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Cresson, 1928:46 (holotype in ANSP); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Krombein, 1979b:1629 (in catalog of North American Hymenoptera).

*Tachysphex nigrescens* Rohwer, 1908a:220, ♀. Holotype: ♀, USA: Colorado: Teller County: Florissant (USNM). Synonymized with *Tachysphex sculptilis* by Pulawski *in* Krombein, 1979b:1629. – G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).

*Tachysphex sphecodoides* Rohwer, 1911b:578, ♀. Holotype: ♀, USA: Colorado: Otero County: Rocky Ford (USNM). Synonymized with *Tachysphex sculptilis* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:952.

### 338. *pseudofasciatus* Pulawski

*Tachysphex pseudofasciatus* Pulawski, 2007a:506, ♀, ♂. Holotype: ♀, Egypt: Al Qahirah (= Cairo): Gebel Asfar (USNM). – Ben Khedher, Yildirim, and Braham, 2020b:319 (in Tunisia known from Tozeur).

As *Tachysphex fasciatus* (corrected to *Tachysphex pseudofasciatus* by Pulawski, 2007a:506): de Beaumont, 1940b:178 (Egypt, Algeria: Biskra; in revision of *Tachysphex* of Egypt); Honoré, 1942:55 (Egypt: Gebel Asfar, Kerdaceh); de Beaumont, 1947a:207 (Egypt, Algeria; in new revision of *Tachysphex* of Egypt, ♀ only, ♂ = *Tachysphex speciosissimus*); Pulawski, 1971:118 (in revision of Palearctic *Tachysphex*).

### 339. *pseudopanzeri* de Beaumont

As *Tachysphex panzeri* var. *oraniensis* (corrected to *Tachysphex pseudopanzeri* by Pulawski, 1971:278): Medina, 1896:107 (Spain: Pozuelo de Calatrava); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Mercet, 1910b:165 (in list of Spanish *Tachysphex*); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain).

*Tachysphex panzeri* forme *pseudopanzeri* de Beaumont, 1955a:174, ♀, ♂. Holotype: ♂: Morocco: Port Lyautey, now Kenitra (Lausanne). – Ceballos, 1959:229 (in supplement to catalog of Spanish Sphecidae); Suárez, 1959:57 (Spain: Almería Province); de Beaumont, 1962b:25 (Spain); Ceballos, 1964:90 (in supplement to catalog of Spanish Sphecidae); Diniz, 1964a:4 (Portugal: Rezende, Troia). – As *Tachysphex pseudopanzeri*: Morel, Nouvel, and Ribaut, 1956:338 (full species status, France: Département des Pyrénées-Orientales); Pulawski, 1971:278 (in revision of Palearctic *Tachysphex*); Erlandsson, 1974:73 (Spain); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Gayubo, 1982a:107 (northern Spain: Sierra de Béjar), 1982f:253 (Spain: Cádiz Province), 1984b:86 (Spain: Salamanca Province), 1984c:366 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:16 (Spain: Valencia Province); Eiroa and Novoa, 1985:23 (Spain: Pontevedra: Barra beach near Cangas); Gayubo, 1985a:487 (prey: *Dociostaurus genei genei* (Ocskay)?), 1986c:33 (Spain: Zamora Province); Gayubo and Heras, 1986:43 (Spain: Segovia and Valladolid Provinces; floral records); Gayubo and Sanza, 1986:48 (Spain: Burgos and Soria provinces); Gayubo and Tormos, 1986a:17 (Spain: Castellón: Castellón de la Plana); Gayubo, 1987a:113 (Spain: Ciudad Real Province); Asís and Jiménez, 1988:272 (Spain: Castellón Province); Gayubo and Mingo, 1988:82 (Spain); Gayubo, Asís, and Tormos, 1990a:18 (Spain); Gayubo and Torres, 1991:Table I and p. 81 (Spain: Salamanca; effects of urban pressure); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Tormos, Asís, and Gayubo, 1994:188, 207 (Spain: Albacete Province); Kuhlmann, 1996:221 (Portugal: Serra de Estrela); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); García, Torres, and González, 1999:90 (Spain: Soria Province); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); K. Schmidt and Bitsch in Bitsch et al., 2001:271 (in Sphecid Fauna of Western Europe); Drewes, 2003:143 (Spain: Figueras, Tarragona); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Magdalou, 2006b:109 (France: Pyrénées-Orientales: Mas-Larrieu Nature Reserve near Argelès-sur-Mer), 2006c:7 (France: Pyrénées-Orientales: Réserve Naturelle du Mas-Larrieu); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Baños-Picon, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); van der Smissen, 2010b:387 (France: Vaucluse: Bédoin); Cruz-

Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Mas Larrieu); Cross, Baldock, and Wood, 2021:45 (in catalog of Sphecidae *sensu lato* of Portugal); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:237 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

### 340.*psilocerus* Kohl

*Tachysphex psilocerus* Kohl, 1884a:374, ♀. Holotype or syntypes: ♀, Mexico: Ciudad de México: Chapultepec (NHMW). – Cameron, 1889a:64 (reference to original description, in revision of Central American Aculeates); Dalla Torre, 1897:684 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Krombein, 1979b:1629 (in catalog of North American Hymenoptera); Pulawski, 1988a:139 (in revision of Nearctic *Tachysphex*); Dollfuss, 1989:13 (type material in NHMW); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

*Tachysphex helianthi* Rohwer, 1911b:570, ♀. Holotype: ♀, USA: Colorado: Boulder (USNM). Synonymized with *Tachysphex psilocerus* by Pulawski *in* Krombein, 1979b:1629. – G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae).

*Tachysphex nitelopteroides* F. Williams, 1958:207, ♀, ♂. Holotype: ♀, Mexico: Baja California Sur: La Paz (CAS). Synonymized with *Tachysphex psilocerus* by Pulawski *in* Krombein, 1979b:1629. – Arnaud, 1970:32 (in list of species described by F.X. Williams); R. Bohart and Menke, 1976:275 (in checklist of world Sphecidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae).

### 341.*pilonotus* Pulawski

*Tachysphex pilonotus* Pulawski, 2007a:508, ♀, ♂. Holotype: ♂, South Africa: Western Cape Province: Wellington: Roosehoek (RMNH). – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

### 342.*ptah* Pulawski

*Tachysphex ptah* Pulawski, 1964:84, ♀, ♂. Holotype: ♂, Egypt, Abou Rawash northwest of Cairo (originally W. Pulawski coll., now CAS). – Pulawski, 1971:287 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:10 (Israel); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 2007a:510 (in revision of African *Tachysphex*); Roche, 2007a:81 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Straka and Schmid-Egger, 2017: 440 (United Arab Emirates), 445 (color photograph); Gadallah, 2020b:53 (in list of aculeate wasps of Arabian Peninsula).

### 343.*pubescens* Pulawski

*Tachysphex pubescens* Pulawski, 1977a:248, ♀. Holotype: ♀, Australia: Victoria: Wyperfeld National Park 25 mi north of Rainbow (ANIC). – Cardale, 1985:242 (in catalog of Australian Sphecidae).

### 344.*pugnator* R. Turner

*Tachysphex pugnator* R. Turner, 1908:491, ♀. Holotype: ♀, Australia: South Australia: Adelaide (BMNH). – R. Turner, 1915b:556 (Tasmania), 1916b:255 (in key to Australian *Tachysphex*); Riek, 1970:943 (in Insect Fauna of Australia); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski,

1977a:238 (in revision of Australian *Tachysphex*); Cardale, 1985:242 (in catalog of Australian Sphecidae); McCorquodale and Thomson, 1989:94 (prey: nymph of *Laxta*, a blattid).

### 345. *pulcher* Pulawski

*Tachysphex pulcher* Pulawski, 1967a:394, ♀, ♂. Holotype: ♀, Turkmenistan: Akhcha-Kuyma near Nebit-Dag (ZIN). Paratypes: Kazakhstan, Tajikistan, Turkey. – Pulawski, 1971:280 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:10 (Israel); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Kazenas, 1978b:112, 124 (in key to Sphecidae of Kazakhstan and Central Asia); Roche, 1981:3 (in checklist of Sphecidae of United Arab Emirates); Hensen and van Ooijen, 1987:16 (Turkey); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve), 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:74 (geographic distribution, collecting localities in Kazakhstan); Straka, 2005b:272 (Turkey: Adiyaman: Nemru dag; Van: 10 km east of Erciş, 10 km north of Muradiye); Pulawski, 2007a:512 (in revision of African *Tachysphex*); Kazenas, 2008a:101 (Southeastern Kazakhstan: 15 km north of Aksuek, 65 km west of Bakanas); Ljubomirov and Yildirim, 2008:219 (in catalog of Crabronidae of Turkey); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharrawy, 2013:355 (in new catalog of Sphecidae of Saudi Arabia); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Mokrousov and Gromenko, 2015:126 (Uzbekistan: Sundukli Desert at 38°57'45"N 64°32'2"E); Samin and Bagriacik, 2016:497 (Iran: West Azarbaijan Province: Makoo); Maharramov, Aliyev, and Mammadov, 2018:456 (Azerbaijan: Baku, and Ordubad: Bilav); Gadallah, 2020b:53 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:75 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:66 (in catalog of Crabronidae of Turkey), 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

### 346. *punctatiformis* Arnold

*Tachysphex punctatiformis* Arnold, 1923a:151, ♀, ♂ (authorship attributed to Brauns). Lectotype: ♀, South Africa: Eastern Cape Province: Willowmore (SAM), designated by Pulawski, 2007a:514. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:110 (South Africa: visiting flowers of *Galenia sarcophylla* Fenzl., Aizoaceae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:514 (in revision of African *Tachysphex*).

### 347. *punctatus* (F. Smith)

*Larrada punctata* F. Smith, 1856:282, ♀, actually ♂. Holotype or syntypes: ♂, South Africa: Western Cape Province: Cape of Good Hope (BMNH). – **As *Larra punctata***: Kohl, 1885a:247 (new generic assignment, in checklist of world *Larra*); Dalla Torre, 1897:672 (in catalog of world Hymenoptera). – **As *Tachysphex punctata***: R. Turner, 1917b:323 (new generic assignment, diagnostic characters). – **As *Tachysphex punctatus***: R. Turner, 1917f:292 (new generic assignment, diagnostic characters, description of ♀); Arnold, 1923a:148 (in revision of southern African *Tachysphex*; South Africa: Eastern Cape Province: Willowmore), 1930:2 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:110 (South Africa: visiting flowers of *Zygophyllum simplex* L., Zygophyllaceae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:518 (in revision of African *Tachysphex*).

### 348. *puncticeps* Cameron

*Tachysphex puncticeps* Cameron, 1903b:127, ♀. Holotype or syntypes: ♀, India: West Bengal: Barrackpore 20 km north of Calcutta (OXUM). – Rothney, 1903:103 (India: West Bengal: Barrackpore); Ramakrishna Aiyar, 1916:551 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and

Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 1977a:215 (in revision of Australian *Tachysphex*); Tsuneki, 1983a:62 (in revision of Larinae of Philippines;), 67, 68 (in key to *Tachysphex* of Philippines and Japan); Cardale, 1985:242 (in catalog of Australian Sphecidae); K. Walker, Naumann, Austin, Taylor, and Cardale, 1992:48 (in catalog of insects of Tasmania); Krombein and Pulawski, 1994:77 (in revision of Sri Lankan *Tachysphex*); Naumann, 1998:186 (Australia: northwest Queensland: Musselbrook area, approximately 18°40'S 138°23'E); Porter, Stange, and Wang, 1999:9 (in checklist of Sphecidae of Taiwan); Pagliano, 2003a:508 (Australia: Victoria: Droitana); Pham, 2019a:211 (nesting habits in Vietnam); Pham and Antropov, 2021:320 (recorded from Vietnam by Krombein and Pulawski, 1994 and Pham, 2019a).

*Tachysphex varihirtus* Cameron, 1903b:128, ♂ (as *varihirta*, incorrect original termination). Holotype or syntypes: ♂, India: West Bengal: Barrackpore 20 km north of Calcutta (OXUM). Synonymized with *Tachysphex puncticeps* by Pulawski, 1975a:311. – Rothney, 1903:103 (India: West Bengal: Barrackpore); Ramakrishna Aiyar, 1916:551 (in catalog of Indian aculeates described after Bingham, 1897).

*Tachysphex rugidorsatus* R. Turner, 1915b:556, ♀. Lectotype: ♀, Australia: Tasmania: Eaglehawk Neck (BMNH), designated by Pulawski, 1975a:311. Synonymized with *Tachysphex puncticeps* by Pulawski, 1975a:311. – R. Turner, 1916b:254 (in key to Australian *Tachysphex*).

*Tachysphex mindorensis* F. Williams, 1928a:92, ♀, ♂. Holotype: ♂, Philippines: Mindoro Island: San Jose (Bishop Mus.). Synonymized with *Tachysphex puncticeps* by Pulawski, 1975a:311. – Baltazar, 1966:329 (in catalog of Hymenoptera of Philippines); Arnaud, 1970:32 (in list of species described by F.X. Williams); Tsuneki, 1971h:11 (in key to *Tachysphex* of Taiwan), 14 (Taiwan); Haneda, 1972a:4 (Taiwan); Tsuneki, 1976b:54 (Philippines; redescription), 1977c:6 (Island of Botel Tobago, now Lan-hsu), 1982e:28 (Taiwan).

### 349. *punctifrons* (W. Fox)

*Larra punctifrons* W. Fox, 1891e:194, ♀. Lectotype: ♀, USA: Montana: no specific locality (USNM), designated by Pulawski, 1988a:37. – **As *Tachysphex punctifrons***: W. Fox, 1894a:531 (new generic assignment, in revision of North American Larinae, description of ♂); Dalla Torre, 1897:684 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); J. Smith, 1900:518 (New Jersey: Camden County: no specific locality); H. Smith, 1908:380 (in revision of Nebraskan Sphecidae); J. Smith, 1910:683 (in new list of insects of New Jersey: Camden County: no specific locality); Mickel, 1918:423 (in catalog of Nebraskan Sphecidae); Carter, 1925:133 (Canada: Alberta: Lethbridge); Strickland, 1947:129 (Canada: Alberta); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); Krombein and Evans, 1954:232 (Florida: Arcadia); Kurczewski, 1971:114 (in key to Floridan species); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Krombein, 1979b:1629 (in catalog of North American Hymenoptera); Kurczewski, 1987a:118 (nesting habits); Pulawski, 1988a:37 (in revision of Nearctic *Tachysphex*); Kurczewski, 2000c:114 (locality records from North Carolina), 116 (nest and prey); Buck, Paiero, and Marshall, 2006:41 (Canada: Ontario: Lake Opinicon); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, Manitoba, Saskatchewan: no specific locality).

*Tachysphex fedorensis* Rohwer, 1911b:576, ♀, ♂. Lectotype: ♀, USA: Texas: Lee County: Fedor (USNM), designated by Pulawski, 1988a:37. Synonymized with *Tachysphex punctifrons* by G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:952.

### 350. *punctiger* Pulawski

*Tachysphex punctiger* Pulawski, 2007a:520, ♀, ♂. Holotype: ♂, Namibia: Swakopmund District: 63 km northeast of Swakopmund at 22°24'S 15°02'E (CAS). – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

**351.punctipes Pulawski**

*Tachysphex punctipes* Pulawski, 1967a:404, ♀. Holotype: ♀, Turkey: Artvin: 20 km Yusufeli-Tortum road (BMNH). – Pulawski, 1971:89 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Straka, 2005b:264 (description of ♂; Kazakhstan: Matay desert; Mongolia: Bayanzag 100 km southwest of Dalanzadgad; Turkey: Van: Erciş); Ljubomirov and Yildirim, 2008:219 (in catalog of Crabronidae of Turkey); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces), 19 (is an endemic of Turkey); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Kaplan and Yildirim, 2021:66 (in catalog of Crabronidae of Turkey), 2023:1687 (in checklist of Sphecidae *sensu lato* of Turkey).

**352.punctipleuris Straka**

*Tachysphex punctipleuris* Straka, 2016:102, ♀, ♂. Holotype: ♂, Italy: Lombardia: Grosio in Valtellina (ZSBS). – Ljubomirov, 2019:101 (Bulgaria: Vratschanska Planina); Kaplan and Yildirim, 2021:66 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:238 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey).

**353.pusulosus de Beaumont**

*Tachysphex pusulosus* de Beaumont, 1955a:184, ♀. Holotype: ♀, Libya: northern Tripolitania: Corradini (BMNH). – de Beaumont, 1956a:199 (Libya); Pulawski, 1971:136 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:8 (Israel); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Straka, 2005b:268 (Turkey: reference to Pulawski, 1971); Pulawski, 2007a: 522 (in revision of African *Tachysphex*); Ljubomirov and Yildirim, 2008:220 (in catalog of Crabronidae of Turkey); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Kaplan and Yildirim, 2021:67 (in catalog of Crabronidae of Turkey), 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey).

**354.quadricolor (Gerstaecker)**

*Lyrops quadricolor* Gerstaecker *in* Peters, 1858:510, ♀. Holotype: ♀, Mozambique: no specific locality (ZMHU). – **As *Tachytes quadricolor***: Dalla Torre, 1897:693 (new generic assignment, in catalog of world Hymenoptera). – **As *Tachysphex quadricolor***: Stadelmann, 1897:255 (new generic assignment, study of type); R. Turner, 1917d:43 (new generic assignment); Arnold, 1923a:175 (recorded from Afrotropical Region but unknown to the author, original description translated into English), 1930:4 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:524 (in revision of African *Tachysphex*).

*Lyrops quadricolor* Gerstaecker *in* Peters, 1862:477, ♀. Objective synonym of *Lyrops quadricolor* Gerstaecker, 1857.

*Tachysphex depilosellus* R. Turner, 1917b:322, ♀. Lectotype: ♀, Zambia: Pakasa, locality of unknown location (BMNH), designated by Pulawski, 2007a:524. Synonymized with *Tachysphex quadricolor* by Pulawski, 2007a:524. – Arnold, 1923a:173 (original description copied), 1930:4 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae).

*Tachysphex depilosellus* var. *fallax* Arnold, 1924:71, ♀, ♂. Lectotype: ♀, South Africa: Eastern Cape Province: Willowmore (SAM), designated by Pulawski, 2007a:524. Synonymized with *Tachysphex quadricolor* by Pulawski, 2007a:524. – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex depilosellus fallax***: R. Bohart and Menke, 1976:273 (new status, in checklist of world Sphecidae).

**355. *quasifugax* Straka and Schmid-Egger**

*Tachysphex quasifugax* Straka and Schmid-Egger, 2017:444, ♀, ♂. Holotype: ♂, United Arab Emirates: Wadi Bih at 25.80° N 56.07°E (OÖLM). – Straka and Schmid-Egger, 2017:446-449 (color photographs); Gadallah, 2020b:53 (in list of aculeate wasps of Arabian Peninsula).

**356. *quisqueyus* Pulawski**

*Tachysphex quisqueyus* Pulawski, 1988a:156, ♀, ♂. Holotype: ♂, Dominican Republic: Pedernales: Cabo Rojo (CAS). – Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Perez-Gelabert, 2008:240 (in list of arthropods of island of Hispaniola).

**357. *radiatus* Gussakovskij**

*Tachysphex radiatus* Gussakovskij, 1952:246, ♀. Syntypes: ♀, Tajikistan: Stalinabad, now Dushanbe (ZIN). – Pulawski, 1971:236 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Kazenas, 1978b:117 (in key to Sphecidae of Kazakhstan and Central Asia), 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:74 (geographic distribution, collecting localities in Kazakhstan), 2004b:104 (Kazakhstan: western Tien Shan).

**358. *radoszkowskyi* F. Morawitz**

*Tachysphex radoszkowskyi* F. Morawitz, 1893b:411, ♀ (as *Radoszkowskyi*, incorrect original capitalization). Lectotype: ♀, Tajikistan: Kol in Yagnob River valley (ZIN), designated by Pulawski, 1971:75. – Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Pulawski, 1971:74 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Kazenas, 1978b:120 (in key to Sphecidae of Kazakhstan and Central Asia), 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia); Yildirim and Ljubomirov, 2005:1797 (first record from Turkey: Erzurum: Oltu: Süt-kans); Ljubomirov and Yildirim, 2008:220 (in catalog of Crabronidae of Turkey); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Kaplan and Yildirim, 2021:67 (in catalog of Crabronidae of Turkey), 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey).

**359. *ramses* Pulawski**

*Tachysphex ramses* Pulawski, 1971:297, ♀, ♂. Holotype: ♀, Egypt: Manshiet Radwan near Ghiza (USNM). – R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 2007a:529 (in revision of African *Tachysphex*); Roche, 2007a:81 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

**360. *rapax* Pulawski**

*Tachysphex rapax* Pulawski, 2007a:531, ♀, ♂. Holotype: ♀, Kenya: Eastern Province: 94 km east of Thika at 1°06.6'S 37°42.1'E (CAS). Paratypes: Tanzania.

**361. *reedi* Menke**

*Tachysphex pisonoides* var. *erythropus* Herbst, 1921c:114, ♀, ♂, junior secondary homonym of *Tachysphex erythropus* (Spinola, 1839). Lectotype: ♂, Chile: Valparaiso: Marga Marga (MCZ), designated by Pulawski, 1974a:64. – Jaffuel and Piri6n, 1926:376 (Chile: valle de Marga Marga).

*Tachysphex reedi* Menke in Pulawski, 1974a:64. Substitute name for *Tachysphex erythropus* Herbst, 1921. – Pulawski, 1974a:64 (in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Sielfeld, 1980b:73 (in checklist of Chilean Sphecidae); Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

**362. *remotus* Pulawski**

*Tachysphex remotus* Pulawski, 1974a:92, ♀, ♂. Holotype: ♂, Colombia: Guajira: Riohacha (BMNH). – R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

**363. *rhacodes* Pulawski**

*Tachysphex rhacodes* Pulawski, 2007a:534, ♀, ♂. Holotype: ♀, Zambia: Eastern Province: Wildlife Camp at Luangwa River 7 km southwest of Mfue at 13°07'S 31°45'E (CAS). Paratypes: Ethiopia, Kenya, Namibia, Tanzania, Zimbabwe.

**364. *rhodesianus* Bischoff**

*Tachysphex panzeri rhodesianus* Bischoff, 1913c:64, ♂. Holotype: ♂, Zimbabwe: Bulawayo (ZMHU). – **As *Tachysphex panzeri* race *rhodesianus***: Arnold, 1923a:170 (new status, revision, description of ♀), 1930:4 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex rhodesianus***: Arnold, 1947:147 (full species status); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 2007a:537 (in revision of African *Tachysphex*).

**365. *rhynchocephalus* Pulawski**

*Tachysphex rhynchocephalus* Pulawski, 1977a:281, ♂. Holotype: ♂, Australia: South Australia: 30 mi south of Mount Davies (ANIC). – Cardale, 1985:243 (in catalog of Australian Sphecidae).

**366. *robustior* F. Williams**

*Tachysphex robustior* F. Williams, 1914a:164, ♂. Holotype ♂: USA: Kansas: Grant County: no specific locality (Kansas Univ.). – G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); LaBerge, 1956:527 (holotype in Snow Entomological Museum); Arnaud, 1970:33 (in list of species described by F.X. Williams); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski in Krombein, 1979b:1632 (as new synonym of *Tachysphex mundus*); Pulfickaowski, 1988a:176 (in revision of Nearctic *Tachysphex*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:6 (in analysis of geographic distribution in Mexico).

*Tachysphex crenuloides* F. Williams, 1914a:168, ♀. Holotype: ♀, USA: Kansas: Morton County: no specific locality (Kansas Univ.). Synonymized with *Tachysphex robustior* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 and with *Tachysphex mundus* by Pulawski in Krombein, 1979b:1632. – LaBerge, 1956:527 (holotype in Snow Entomological Museum); Arnaud, 1970:32 (in list of species described by F.X. Williams).

**367. *rotundus* Pulawski**

*Tachysphex rotundus* Pulawski, 2007a:540, ♀, ♂. Holotype: ♂, Namibia: Rehoboth District: 23 km north of Rehoboth (CAS). Paratypes: Angola, Botswana, South Africa, Zaire, Zimbabwe. – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

**368. *ruber* Pulawski**

*Tachysphex ruber* Pulawski, 2007a:543, ♀, ♂. Holotype: ♀, Namibia: Rehoboth District: 15 km north of Kalkrand (CAS). Paratypes: Botswana, South Africa. – F. Gusenleitner and Schwarz, 2013:312 (paratypes in Biologiezentrum, Linz, Austria).

**369. *rubicundus* Pulawski**

*Tachysphex rubicundus* Pulawski, 1971:342, ♀, ♂. Holotype: ♀, Turkmenistan: Uch-Adzhi (ZIN). Paratypes: Kazakhstan. – R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Kazenas, 1978b:113, 126 (in key to Sphecidae of Kazakhstan and Central Asia), 1992c:26 (Turkmenistan: Repetek Nature

Reserve), 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:74 (geographic distribution, collecting localities in Kazakhstan).

### 370. *ruficaudis* (Taschenberg)

*Tachytes ruficaudis* Taschenberg, 1870:12, ♀. Lectotype: ♀, Brazil: Nova Friburgo (Halle), designated by R. Bohart in Pulawski, 1974a:37. – Kohl, 1885:406 (in checklist of world *Tachytes*); Dalla Torre, 1895:693 (in catalog of world Hymenoptera); Schrottky, 1903b:178 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay), 1913:231 (listed). – As *Notogonia ruficaudis*: Strand, 1910a:159 (new generic assignment, Paraguay). – As *Tachysphex ruficaudis*: Jörgensen, 1912:291 (new generic assignment, Argentina: Mendoza Province); Pulawski, 1974a:37 (in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 1988a:149 (in revision of Nearctic *Tachysphex*); Callan, 1991a:8 (Trinidad); Cambra and Santos, 2000:56 (Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean); Amarante, 1993:19 (northeastern Brazil), 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Starr and Hook, 2003:19 (in catalog of Aculeata of Trinidad, West Indies); Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Silvestre, Demétrio, Trad, de Oliveira Lima, Auko, and de Souza, 2014:69 (Brazil: Mato Grosso do Sul: dry forests in Bodoquena Mountain Range and Brazilian Chaco); Vanoye-Eligio, Meléndez-Ramírez, Ayala, Navarro-Alberto, and Delfín-González, 2015:994 (Mexico: in list of Sphecidae *sensu lato* of Yucatán); Trad and Silvestre, 2017:5 (Brazil: Mato Grosso do Sul); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico); Klein, 2025:130 (Leeward Antilles: Bonaire Island).

*Tachytes pullulus* Strand, 1910a:169, "♀" = ♂. Lectotype: ♂, Paraguay: Asunción: Villa Morra (or Asunción?), designated by R. Bohart in Pulawski, 1974a:37 (ZMHU). Synonymized with *Tachysphex ruficaudis* by R. Bohart in Pulawski, 1974a:37 – Strand, 1927:255 (in list of species described by the author).

### 371. *rufitarsis* (Spinola)

*Larra rufitarsis* Spinola, 1851a:323, ♀. Lectotype: ♀, Chile: no specific locality (Torino), designated by Pulawski, 1974a:65. – As *Lyrops rufitarsis*: Casolari and Casolari Moreno, 1980:113 (new generic assignment, specimens in M. Spinola collection, Torino); Pagliano, 2008:549 (specimens in M. Spinola collection, Torino). – As *Tachytes rufitarsis*: F. Smith, 1856:304 (new generic assignment, in catalog of Hymenoptera in British Museum); Kohl, 1885:406 (in checklist of world *Tachytes*); Reed, 1894:631 (revision); Dalla Torre, 1897:693 (in catalog of world Hymenoptera); Chiappa, 2012:8 (Chile: Región de Valparaíso: no specific locality). – As *Tachysphex rufitarsis*: Kohl, 1905b:364 (new generic assignment, in description of *Tachysphex herbstii*); Kieffer and Herbst, 1909:122 (visiting galls of *Lecanium resinatum*); W. Schulz, 1911b:195 (study of type, redescription); nec Brèthes, 1913:149 (= *Tachysphex conceptus*); Herbst, 1921c:114 (synonymy); Ruiz Pereira, 1924:102 (Chile: Cerro San Cristóbal); Jaffuel and Piri6n, 1926:377 (Chile: valle de Marga Marga); Gazulla and Ruiz Pereira, 1929:300 (Chile: Hacienda de "Las Mercedes"); Janvier, 1928:92 (nesting habits); Pulawski, 1974a:65 (in revision of Neotropical *Tachysphex*); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Siefert, 1980b:73 (in checklist of Chilean Sphecidae); Piek and Spanjer, 1986:191 (in list of Sphecidae with known prey); Steiner, 1986:103 (references to papers on nesting habits); Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

? *Tachytes saussurei* var. *rufipes* Reed, 1894:632, ♂. Holotype: ♂, Chile: no specific locality (depository?). Tentatively synonymized with *Tachysphex rufitarsis* by Bohart and Menke, 1976:276.

*Larrada rufiventris* Reed, 1894:633, ♂, junior secondary homonym of *Tachysphex rufiventris* (Spinola, 1839). Holotype or syntypes: ♂, Chile: Valparaiso: El Salto (MCZ). Synonymized with *Tachytes rufitarsis* by Dalla Torre, 1897:693 (synonymy confirmed by Pulawski, 1974a:65) and with *Tachysphex pisonoides* var. *herbstii* by Herbst, 1921c:114.

### 372. *rufopictus* Arnold

*Tachysphex Braunsi* var. *rufopictus* Arnold, 1929c:385, ♂. Holotype: South Africa: Eastern Cape Province: Lady Gray (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex braunsi rufopictus***: R. Bohart and Menke, 1976:272 (new status, in checklist of world Sphecidae). – **As *Tachysphex rufopictus***: S. Gess and F. Gess, 2003:110 (full species status, South Africa: visiting flowers of *Senecio* sp., Asteraceae, and *Bergia glomerata* L. f., Elatinaceae, as *rufocinctus*); Pulawski, 2007a:544 (in revision of African *Tachysphex*).

*Tachysphex brachycerus* Arnold, 1940:121, ♀. Holotype: ♀, South Africa: Eastern Cape Province: Willowmore (TMP). Synonymized with *Tachysphex rufopictus* by Pulawski, 2007a:544. – R. Bohart and Menke, 1976:272 (in checklist of world Sphecidae).

### 373. *rugicauda* Pulawski

*Tachysphex rugicauda* Pulawski in Krombein and Pulawski, 1994:87, ♀. Holotype: ♀, India: Tamil Nadu: Moyar Camp in Nilgiri Hills (CAS).

### 374. *rugosipleuris* Pulawski

*Tachysphex rugosipleuris* Pulawski, 2007a:547, ♀, ♂. Holotype: ♂, Senegal: 10 km south of Bignona (CAS). Paratypes: Burkina Faso, Cameroon, Ivory Coast.

### 375. *sabulosus* Pulawski

*Tachysphex sabulosus* Pulawski, 2007a:549, ♀, ♂. Holotype: ♀, Zimbabwe: Bulawayo airport at 20°00'S 28°38'E (CAS). Paratype: South Africa.

### 376. *saevus* Arnold

*Tachysphex saevus* Arnold, 1924:52, ♀. Holotype: ♀, South Africa: Northern Province: Pietersburg (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 2007a:551 (in revision of African *Tachysphex*).

### 377. *sahelensis* Pulawski

*Tachysphex sahelensis* Pulawski, 2007a:553, ♂. Holotype: ♂, Senegal: 4 km southwest of Thiès (CAS). Paratypes: Mali.

### 378. *samburu* Pulawski

*Tachysphex samburu* Pulawski, 2007a:555, ♀, ♂. Holotype: ♀, Kenya: Eastern Province: near Ewaso Ng'iro River opposite Archer's Post at 0°38.1'N 37°40.4'E (CAS). Paratypes: Tanzania.

### 379. *saturnus* Arnold

*Tachysphex saturnus* Arnold, 1924:52, ♀. Holotype: ♀, South Africa: Eastern Cape Province: Algoa Bay (TMP). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 2007a: 557 (in revision of African *Tachysphex*); Madl, 2014a:983 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

*Tachysphex halictiformis* Arnold, 1945:100, ♀, ♂. Lectotype: ♂, Madagascar: Bekily (MNHN), designated by Pulawski, 2007a:557. Synonymized with *Tachysphex saturnus* by Pulawski, 2007a:557.– Leclercq, 1960a:98 (Madagascar), 1961d:111 (Madagascar); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Leclercq, 1990b:117 (Madagascar: Bekily, Fampanambo); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae).

**380. *saundersi* Mercet**

*Tachysphex saundersi* Mercet, 1909b:195, ♀, ♂. Syntypes: Spain: Madrid and Aranjuez (MNCN). – Mercet, 1910b:165 (listed from Spain); Giner Marí, 1943a:137 (in Sphecidae Fauna of Spain); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Gayubo, 1982a:107 (northern Spain: Sierra de Béjar), 1984b:96 (Spain: previously recorded from Salamanca Province); Baños-Picon, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:238 (in revision of Sphecidae *sensu lato* of Europe).

**381. *scaber* Pulawski**

*Tachysphex scaber* Pulawski, 2007a:562, ♀, ♂. Holotype: ♂, Zambia: Lusaka Province: 25 km east of Lusaka at 15°21'S 28°30'E (CAS). Paratypes: Botswana, Namibia, South Africa, Zimbabwe.

**382. *scaurus* Arnold**

*Tachysphex scaurus* Arnold, 1945:98, ♀, ♂. Syntypes: Madagascar: Bekily, Ihosy (MNHN). – Leclercq, 1961d:110 (Madagascar); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae), 2007a:564 (in revision of African *Tachysphex*); Madl, 2014a:984 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

**383. *schmiedeknechti* Kohl**

*Tachysphex schmiedeknechti* Kohl, 1883a:170, ♀ (as *Schmiedeknechti*, incorrect original capitalization). Lectotype: ♀, Greece: Attica: Aegina, now Aiyina (NHMW), designated by Pulawski, 2007a:568. – Kohl, 1885a:350 (in key to Palearctic *Tachysphex*), 375 (in revision of Palearctic *Tachysphex*); Dalla Torre, 1897:685 (in catalog of world Hymenoptera); de Beaumont, 1940b:171 (in revision of *Tachysphex* of Egypt); Honoré, 1942:56 (Egypt: desert edge, oases); de Beaumont, 1947a:185 (in new revision of *Tachysphex* of Egypt), 1950d:20 (Egypt: Siwa oasis), 1950f:404 (Algeria); Gussakovskij, 1952:240 (Kazakhstan, Turkmenistan, Tajikistan); de Beaumont, 1953a:175 (Mauritania), 1955a:181 (Morocco); Bytinski-Salz, 1956:226 (Turkey: Kemer); de Beaumont, 1956a:197 (Libya), 1958b:61 (Algeria: Tassili des Ajjer), 1960a:18 (Greece: Island of Rhodes), 1960b:238 (Libya), 1965a:48 (Greece); Myartseva, 1965:77 (Turkmenistan: Akibay); Pulawski, 1967a:398 (Turkey), 1971:389 (in revision of Palearctic *Tachysphex*); Balthasar, 1972:275 (in Sphecidae Fauna of Czechoslovakia: can be expected in the country); Myartseva, 1972a:79 (Turkmenistan), 1972b:112 (parasite: *Chrysis (Tetrachrysis) mesasiatica* Semenov, 1912 = *decora* Mocsáry, 1887); de Beaumont, Bytinski-Salz, and Pulawski, 1973:12 (Israel); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Myartseva, 1976:77 (nesting habits); Kazenas, 1978b:114, 126 (in key to Sphecidae of Kazakhstan and Central Asia); Guichard, 1980:227 (Oman); Roche, 1981:3 (in checklist of Sphecidae of United Arab Emirates); Gayubo and Mingo, 1988:82 (Spain: Córdoba: Sierra Morena); Dollfuss, 1989:13 (type material in NHMW); Guichard, 1991a:339 (Jordan); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Krombein and Pulawski, 1994:13 (summary of nesting habits), 93 (in revision of Sri Lankan *Tachysphex*); Roche and Zalut, 1994:115 (Egypt: Sinai Peninsula); Esenbekova and Kazenas, 2000:34 (southeastern Kazakhstan: near landing place Dubun' on Ili River); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 160 (review of known biology); K. Schmidt and Bitsch *in* Bitsch et al., 2001:271 (in Sphecidae Fauna of Western Europe); Kazenas, 2002a:75 (geographic distribution, collecting localities in Kazakhstan); Gadallah and Assery, 2004b:1396 (skeletal parts of sting apparatus); Straka, 2005b:273 (Turkey: Antalya: Beşkonak); Pulawski, 2007a:568 (in revision of African *Tachysphex*); Roche, 2007a:84 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Ljubomirov and Yildirim, 2008:220 (in catalog of Crabronidae of Turkey);

Murai and Amr, 2011:112 (Syria: Al Thawrah Nature Reserve at 35°51'N 28°38'E), 120 (recorded from Syria by Pulawski, 1971); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:356 (in new catalog of Sphecidae of Saudi Arabia); Kazenas, 2013b:495 (southeastern Kazakhstan: near landing place Dubun' on Ili River); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Mokrousov, 2015:537 (southeastern European Russia); Mokrousov, Shlyakhtenok, and Grebennikov, 2016:26 (Russia: Kalmykia: Davsna sands 20 km east of Khulhuta at 46.292°N 46.672°E); Antropov, 2017b:239 (in catalog of Crabroninae of Russia); Mokrousov, 2017d:59 (South-East of European Russia: no specific locality); Straka and Schmid-Eger, 2017:449 (United Arab Emirates), 450 (color photographs); Fresno, 2018:227 (Spain: Almería: Rioja); Ben Khedher, Yildirim, and Braham, 2020b:319 (in Tunisia known from Kebili and Tozeur); Kaplan and Yildirim, 2021:67 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:239 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey); Mawadda and Girish Kumar, 2023:112 (in checklist of Crabroninae of Northern India); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

*Tachysphex schmiedeknechti satanas* Pulawski, 1971:393, ♀, ♂. Holotype: ♀, Syria: Ramadan near Damascus (originally A. Mochi coll., now Torino). Synonymized with *Tachysphex schmiedeknechti* by Pulawski *in* Krombein and Pulawski, 1994:94. – R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae).

### 384. *schoenlandi* Cameron

*Tachysphex schoenlandi* Cameron, 1905f:211, ♂ (as *Schönlandi*, incorrect original capitalization and use of diacritic mark). Holotype or syntypes: South Africa: Eastern Cape Province: Grahamstown (AMG according to original description, currently TMP). – Arnold, 1923a:167 (certainly a variety of *panzeri*, but the type is lost and the status of the species cannot be settled), 169 (probably the senior synonym of *Tachysphex panzeri* var. *aethiopicus*), 175 (recorded from Afrotropical Region but unknown to the author, original description copied), 1924:68 (♀, South Africa: Cape Province: Algoa Bay, good species characterized by fimbriate male sterna), 1930:4 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Gess, 1981:20 (South Africa: Eastern Cape Province: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils, preying upon mandid nymphs); S. Gess and F. Gess, 2003:110 (Namibia: visiting flowers of *Psilocaulon glareosum* (Berger) Dinter and Schwant., Aizoaceae, and *Zygophyllum simplex* L., Zygophyllaceae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:572 (in revision of African *Tachysphex*).

### 385. *scopa* Pulawski

*Tachysphex scopa* Pulawski, 2007a:575, ♀, ♂. Holotype: ♂, Namibia: Karibib District: 65 km southwest of Usakos (CAS). Paratypes: Angola, western South Africa.

### 386. *scopaesus* Pulawski

*Tachysphex scopaesus* Pulawski, 1988a:137, ♀, ♂. Holotype: ♀, USA: Texas: Kleberg County: Kingsville (UCD). – Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: first records from Canada: Alberta, Saskatchewan: no specific locality).

### 387. *semirufus* (Cresson)

*Larrada semirufa* Cresson, 1865b:464, ♀. Lectotype: ♀, USA: Colorado Territory: no specific locality (ANSP), designated by Cresson, 1916:96. – Riley, 1878:317 (illustration of female, illustration of female carrying nymphal grasshopper prey), 318 (preying on larvae of *Melanoplus spretus* (Walsh)). – **As *Larra semirufa***: Patton, 1880b:389 (new generic assignment, in list of North American Larrini); Kohl, 1885a:247 (in checklist of world *Larra*); Cresson, 1887:277 (in catalog of North American Hymenoptera); Ashmead, 1890:33 (in checklist of Hymenoptera of Colorado), 1894:63 (according to Riley, 1878, preying on young *Melanoplus spretus*). – **As *Tachysphex semirufus***: W. Fox, 1894a:515 (new generic assignment, in revision of North American Larrinae); Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); H. Smith, 1908b:381 (in revision of Nebraskan Sphecidae); Rohwer, 1911b:580 (in key to *Tachysphex antennatus*, *hitei*, *semirufus*, *tarsatus* and *wheeleri*); Mickel, 1918b:422 (in catalog of Nebraskan Sphecidae); G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Krombein, 1979b:1629 (in catalog of North American Hymenoptera); Kurczewski and Evans, 1986:271 (nesting habits); Pulawski, 1988a:40 (in revision of Nearctic *Tachysphex*); Finnamore, 1997:888 (Canada: Yukon); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario); Ratzlaff, 2016:26 (Canada: British Columbia: from Krombein, 1979, Pulawski, 1988, and Buck, 2004); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Ontario, Saskatchewan, Yukon Territory, first records from Manitoba and Quebec: no specific locality).

*Tachysphex punctulatus* H. Smith, 1906:246, ♀, junior primary homonym of *Tachysphex punctulatus* Kohl, 1884 (now in *Larropsis*). Holotype: ♀, USA: Nebraska: Sioux County: no specific locality (UNL). Synonymized with *Tachysphex semirufus* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:952. – Muma, 1952:23 (type in UNL).

*Tachysphex puncticeps* H. Smith, 1908:381. Substitute name for *Tachysphex punctulatus* H. Smith, 1906, junior primary homonym of *Tachysphex puncticeps* Cameron, 1903. Synonymized with *Tachysphex semirufus* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:952. – Mickel, 1918b:424 (in catalog of Nebraskan Sphecidae).

*Tachysphex giffardi* Rohwer, 1917a:244, ♀. Holotype: ♀, USA: California: Placer County: Summit (USNM). Synonymized with *Tachysphex semirufus* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:952.

### **388. *sericans* Gussakovskij**

*Tachysphex sericans* Gussakovskij, 1952:241, ♀, ♂. Lectotype: ♀, Tajikistan: Ayvaj (ZIN), designated by Pulawski, 1971:326. – Pulawski, 1971:324 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Kazenas, 1978b:113, 125 (in key to Sphecidae of Kazakhstan and Central Asia); Roche, 1981:3 (in checklist of Sphecidae of United Arab Emirates); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia); Straka and Schmid-Egger, 2017:451 (United Arab Emirates, color photograph); Gadallah, 2020b:54 (in list of aculeate wasps of Arabian Peninsula); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:240 (in revision of Sphecidae sensu lato of Europe); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

### **ssp. *gracilis* Pulawski**

As *Tachysphex pygidialis*: de Beaumont, 1950d:18 (Egypt: Siwa oasis), corrected to *Tachysphex sericans gracilis* by Pulawski, 1971:326.

*Tachysphex sericans gracilis* Pulawski, 1971:326, ♀, ♂. Holotype: ♀, Algeria: Biskra (Lausanne). – R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Roche, 2007a:81 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Ben Khedher, Yildirim, and Braham, 2020b:319 (first record from Tunisia: Kebili: Errahmat).

### 389. *sericeus* (F. Smith)

*Larrada sericea* F. Smith, 1856:285, ♀. Holotype or syntypes: ♀, Gambia: no specific locality (BMNH). – Nec *Tachytes sericeus* (= *Tachysphex erythropus*): De-Stefani, 1886:171, 1895:226. – **As *Larra sericea***: Kohl, 1885a:247 (new generic assignment, in checklist of world *Larra*); Dalla Torre, 1987:674 (in catalog of world Hymenoptera). – **As *Tachysphex sericeus***: R. Turner, 1917e:197 (new generic assignment, synonymy); Arnold, 1923a:154 (Zimbabwe, South Africa; in revision of southern African Sphecidae), 1930:3 (in checklist of Afrotropical Sphecidae); Guiglia, 1943c (Ethiopia), 1950:249 (Ethiopia: Gamo Gofa: Elolo, Gondaraba at 4°58'N 36°49'E); Pulawski, 1975:313 (synonymy with *Tachysphex fluctuatus* confirmed); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Gess, 1981:20 (South Africa: Eastern Cape Province: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils); S. Gess and F. Gess, 2003:111 (South Africa: visiting flowers of *Deverra denudata* (Viv.) Pfeisterer and Podl., Apiaceae, and *Selago* sp., Scrophulariaceae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:579 (in revision of African *Tachysphex*); Ljubomirov and Yildirim, 2008:221 (in catalog of Crabronidae of Turkey); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Rezaei and Fallahzadeh, 2015:10 (Iran: Fars: Dasht e Arzhan at 29°38'N 51°58'E and Kaftarak at 29°34'N 52°41'E); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:77 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:67 (in catalog of Crabronidae of Turkey).

*Lyrops fluctuata* Gerstaecker in Peters, 1858:510, ♀ (authorship assigned to Klug). Holotype: ♀, Mozambique: Tette (ZMHU). Synonymized with *Tachysphex sericeus* by R. Turner, 1917e:197, synonymy confirmed by Pulawski, 1975a:313. – Kohl, 1883c:226 (incorrectly synonymized with *Tachysphex erythropus*); Casolari and Casolari Moreno, 1980:112 (specimens in M. Spinola collection, Torino); Pagliano, 2008:546 (specimens in M. Spinola collection, Torino). – **As *Tachytes fluctuata***: Magretti, 1884c:587 (new generic assignment, Eritrea: Kor Cheru; Sudan and/or Eritrea), 1898:51 (Somalia: Umberto I). – **As *Tachysphex fluctuatus***: nec Kohl, 1885a:250 (new generic assignment, = *Tachysphex erythropus*); nec F. Morawitz, 1894:342 (= *Tachysphex sordidus*); W. Fox, 1896e:554 (Somalia: Berbera); Dalla Torre, 1897:679 (in catalog of world Hymenoptera); Stadelmann, 1897:255 (study of type, new generic assignment); Bingham, 1898a:104 (Yemen: Aden); W. Schulz, 1905b:9 (West Africa: Muculla); Kohl, 1906a:218 (Yemen: Aden); Longstaff, 1911:195 (Sudan: Khartoum), 199 (Sudan: Kosti); nec Fertton, 1912a:399 (= *Tachysphex costae ferttoni*); nec Kruger, 1929a:21 and 1929b:56 (as *fluctuosus* = *Tachysphex erythropus*); nec Gussakovskij, 1933b:280 and 1935:426 (= *Tachysphex erythropus*); nec Cros, 1936:355 (= *Tachysphex costae ferttoni*); nec Rungs, 1936:25; nec Móczár, 1938d:80 (= *Tachysphex costae*); Arnold, 1945:97 (as good species), 1951:155 (Ethiopia, Ghana); nec Ceballos, 1956:376 (= *Tachysphex erythropus*); Pulawski, 1971:416 (relationships to *Tachysphex maidli*). – Nec following authors (= *Tachysphex erythropus*): Kohl, 1885:367; W. Fox, 1896:554; W. Schulz, 1904:102; von Schulthess, 1909:442; Mercet, 1910:165; Morice, 1911:101; Dusmet, 1915:87; von Schulthess, 1926:215; Guiglia, 1932b:474; Gussakovskij, 1933:280; Nadig, 1933:79; Guiglia in Zavattari, 1934:303; Gussakovskij, 1935:426 (Tajikistan); de Beaumont, 1936b:614, 1936c:8; Rungs, 1936:24; Guiglia, 1939a:187, 1940:292, 1942:234; Honoré, 1942:56; Giner Mari, 1943:139, 1947:25; Ceballos, 1956:376; Myartseva, 1963:58.

*Lyrops fluctuata* Gerstaecker, 1862:478, ♀. Objective synonym of *Lyrops fluctuata* Gerstaecker, 1858.

*Tachysphex selectus* Nurse, 1909:514, ♂. Holotype: ♂, India: Bombay (BMNH). Synonymized with *Tachysphex sericeus* by R. Turner, 1917e:198 and by Pulawski, 2007a:579. – Ramakrishna Aiyar, 1916:552 (in catalog of Indian aculeates described after Bingham, 1897); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Krombein and Pulawski, 1994:72 (as valid species, in revision of Sri Lankan *Tachysphex*); Straka, 2005b:274 (Turkey: Antalya: Gönük 25 km southwest of Antalya, Kemer 35 km southwest of Antalya; Balıkesir: Ar Kent near Ayvalık); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:239 (as valid species, in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey).

As *Tachysphex ferrugineipes* (Lepeletier de Saint Fargeau): Cameron, 1910:289 (Tanzania: Meru), corrected to *Tachysphex sericeus* by R. Turner, 1917e:198.

*Tachysphex actaeon* de Beaumont, 1960a:16, ♀, ♂. Holotype: ♂, Israel: Jerusalem (Lausanne). Synonymized with *Tachysphex selectus* by Pulawski, 1975a:313. – Pulawski, 1967a:398 (Turkey), 1971:412 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:13 (Israel).

### 390. *sexinus* Leclercq

*Tachysphex sexinus* Leclercq, 1961d:111, ♂. Holotype: ♂, Madagascar: Ranomafana (MHNB). – R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae), 2007a:585 (in revision of African *Tachysphex*); Madl, 2014a:984 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

### 391. *seyrigi* Arnold

*Tachysphex seyrigi* Arnold, 1945:99, ♀, ♂ (as *Seyrigi*, incorrect original capitalization). Lectotype: ♂, Madagascar: Bekily (MNHN). – Leclercq, 1960a:99 (Madagascar), 1961d:110 (Madagascar); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Leclercq, 1990b:118 (Madagascar: Bekily); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae), 2007a:587 (in revision of African *Tachysphex*); Madl, 2014a:984 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

### 392. *siitanus* Tsuneki

*Tachysphex siitanus* Tsuneki, 1971m:30, ♀. Holotype: ♀, China: Peking, now Beijing: Siitan (originally K. Tsuneki coll., now USNM). – R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Nuhn and Menke, 1994:26 (holotype transferred to USNM); Hua, 2006:283 (in list of Chinese insects, geographic distribution).

### 393. *silvestris* Pulawski

*Tachysphex silvestris* Pulawski, 2007a:589, ♀, ♂. Holotype: ♀, Ivory Coast: Abijan: Forêt de Banco (CAS). Paratypes: Cameroon, Gabon, Ghana, Kenya, Tanzania.

### 394. *similis* Rohwer

*Tachysphex similis* Rohwer, 1910a:51, ♀, ♂. Lectotype: ♀, USA: Texas: Lee County: Fedor (USNM), designated by Pulawski, 1988a:161. – J. Smith, 1910:683 (in new list of insects of New Jersey: Anglesea); Krombein, 1950a:267 (North Carolina: Dare County); Wray, 1950:38 (North Carolina: Nags Head, Kill Devil Hills); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); Krombein, 1951a:143 (Virginia: Dunn Loring; visiting tulip-tree honeydew), 1952a:93 (USA: Virginia: Westmoreland State Park), 330 (North Carolina), 1953b:122 (visiting foliage of *Quercus marilandica*), 132 (North Carolina: Kill Devil Hills); Krombein and Evans, 1954:232 (Florida), 1955:231 (Florida, grasshopper prey); Krombein, 1958f:188 (in supplement to catalog of North Ameri-

can Hymenoptera: prey, *Radinotatum* sp., now *Achurum*, an orthopteran), 1963f:273 (Maryland: Plummers Island near Washington, D.C.), 1964c:15 (nesting habits); Kurczewski, 1966c:436-453 (comparative male behavior); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Kurczewski, 1967b:279 (*Hedychridium fletcheri* is a probable parasite); Wray, 1967:123 (North Carolina: Nags Head); Kurczewski, 1971:114 (in key to Floridan *Tachysphex*); Elliot and Kurczewski, 1974:725 (character displacement); Evans, 1975a:263 (slow colonizer of new habitats); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); L. Davis, 1978:218 (North Carolina: Kill Devil Hills, data from Krombein, 1953a); Krombein, 1979b:1631 (in catalog of North American Hymenoptera); Finnamore, 1982:104 (in Sphecid Fauna of Southern Quebec); Elliott and Kurczewski, 1985:295 (prey); Steiner, 1986:103 (references to papers on nesting habits); Pulawski, 1988a:161 (in revision of Nearctic *Tachysphex*); Spofford, Kurczewski, and Downes, 1989:257 (summary of previous records for nest parasite *Phrosinella fulvicornis* (Coquillett), a miltogrammine fly), 259 (nest parasite *Senotainia trilineata* (Wulp), a miltogrammine fly); Elliott, 1992:45 (in list of wasps of Bahama Islands: occurring on islands of Bimini and San Salvador); Spofford, Kurczewski and Downes, 1990:747 (nest parasite: *Senotainia trilineata* (Van der Wulp), a sarcophagid fly, as *similus*); Spofford and Kurczewski, 1992:997 (species of miltogrammine parasites listed), 1002 (counter-cleptoparasitic behavior: freeze-stop and face-off); G. Scudder, 1994:76 (in checklist of rare and endangered invertebrates of British Columbia); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Elliott, 1996:24 (Bahamas, nesting habits); Kurczewski, 1998d:250 (pine barrens in upstate New York), 1998e:253 (possibly a synonym of *Tachysphex acutus*, but current usage recommended); Kurczewski, 2000c:115 (locality records from North and South Carolina), 118 (nest and prey); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario); Kurczewski, 2009:42 (review of known behavioral information, field observations), 81-86 (discussion of nesting behavior); Ratzlaff, 2016:26 (Canada: British Columbia: from Scudder, 1994); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Northwest Territories, Manitoba, New Brunswick, Ontario, Quebec, Saskatchewan: no specific locality).

*Tachysphex similans* Rohwer, 1910a:52, ♀. Holotype: ♀, USA: Texas: Lee County: Fedor (USNM). Synonymized with *Tachysphex similis* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:952.

As *Tachysphex terminatus*: Krombein, 1953c:13 (Bahamas: South Bimini), corrected to *Tachysphex similis* by Pulawski, 1988a:161.

### 395.*simplex* Pulawski

*Tachysphex longipalpis simplex* Pulawski, 1971:302, ♀, ♂. Holotype: ♂, Turkmenistan: Krasnovodsk (ZIN). Paratypes: Israel, Iran. – de Beaumont, Bytinski-Salz, and Pulawski, 1973:10 (Israel); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Pulawski, 2007a:387 (comparison with *Tachysphex longipalpis*). – As *Tachysphex simplex*: Straka and Schmid-Egger, 2017:451 (United Arab Emirates, raised to full species status); Gadallah, 2020b:54 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:75 (in catalog of *Tachysphex* of Iran).

### 396.*smissenae* Straka

*Tachysphex smissenae* Straka, 2016: 70, ♀, ♂. Holotype: ♂, France: Vaucluse: Bédoin 13 km northeast of Carpentras (NMPC). – Kaplan and Yildirim, 2021:67 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:240 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey).

**397. *socotrae* Pulawski**

*Tachysphex socotrae* Pulawski, 2007a:592, ♀, ♂. Holotype: ♀, Yemen: Isle of Socotra: Hadibo Plain (BMNH). – Gadallah, 2020b:54 (in list of aculeate wasps of Arabian Peninsula).

**398. *solaris* Pulawski**

*Tachysphex solaris* Pulawski, 1982b:35, ♀, ♂. Holotype: ♀, USA: California: San Diego County: Borrego Valley (UCD). – Pulawski, 1988a:93 (in revision of Nearctic *Tachysphex*); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico).

**399. *sonorensis* (Cameron)**

*Larra sonorensis* Cameron, 1889a:50, ♀. Holotype: ♀, Mexico: Northern Sonora: no specific locality (BMNH). – Dalla Torre, 1897:674 (in catalog of world Hymenoptera); Ashmead, 1899d:249 (in checklist of North American Sphecidae). – **As *Tachysphex sonorensis***: R. Bohart and Menke, 1976:276 (new generic assignment, in checklist of world Sphecidae); Krombein, 1979b:1629 (in catalog of North American Hymenoptera); Rust, Menke, and Miller, 1985:46 (California: Channel Islands), 53 (color forms); Parks, 1986:34 (California: Torrey Pine State Reserve); Pulawski, 1988a:133 (in revision of Nearctic *Tachysphex*); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, first record from Saskatchewan: no specific locality).

*Tachysphex dakotensis* Rohwer, 1923a:98, ♀. Holotype: ♀, USA: North Dakota: Bowman County: Gascoyne (USNM). Synonymized with *Tachysphex sonorensis* by Pulawski in Krombein, 1979b:1629. – G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:273 (in checklist of world Sphecidae).

*Tachysphex schlingeri* R. Bohart, 1962a:36, ♀, ♂. Holotype: ♂, USA: California: Sierra County: Sierraville (CAS). Synonymized with *Tachysphex sonorensis* by Pulawski in Krombein, 1979b:1629. – Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae).

**400. *sordidus* (Dahlbom)**

*Tachytes sordidus* Dahlbom, 1845:470, ♂ (as *sordida*, incorrect original termination). Lectotype: ♂, "Egypt", actually Greece: Island of Rhodes (Stockholm, Hedenborg coll.), designated by de Beaumont, 1947b:391. – **As *Tachysphex sordidus***: Kohl, 1885a:397 (tentative new generic assignment, original description copied); Dalla Torre, 1897:694 (in catalog of world Hymenoptera); de Beaumont, 1940b:170 (not found in Egypt); Honoré, 1942:56 (described from Egypt, in error); de Beaumont, 1947a:176 (in new revision of *Tachysphex* of Egypt, occurrence in Egypt doubtful), 1947b:391 (Cyprus); Pittioni, 1950:25 (Cyprus); de Beaumont, 1960a:16 (Greece: Island of Rhodes); Pulawski, 1971:417 (in revision of Palearctic *Tachysphex*); Kazenas, 1972b:163 (Kazakhstan); Myartseva, 1972a:79 (Turkmenistan); de Beaumont, Bytinski-Salz, and Pulawski, 1973:13 (Israel); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp. in Kazakhstan); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Georghiou, 1977:192 (Cyprus); Kazenas, 1978b:114, 126 (in key to Sphecidae of Kazakhstan and Central Asia); Islamov, 1986:527 (Uzbekistan: Surkhandarya Oblast); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); Nazarova and Shomirsaidov, 1997:23 (Tajikistan: fruit tree orchards in Vakhsh River valley); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:34 (southeastern Kazakhstan: Borandysu, 60 km east of Chilik, near Kapchagay); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:75 (geographic distribution,

collecting localities in Kazakhstan), 2004b:104 (Kazakhstan: western Tien Shan), 2004d:31 (Kazakhstan: northern Caspian region); Straka, 2005b:275 (Turkey: Antalya: Gönük 25 km southwest of Antalya; Nevşehir: Ürgüp); Pulawski, 2007a:594 (in revision of African *Tachysphex*); Roche, 2007a:140 (described mistakenly from Egypt, actually from the Island of Rhodes); Ljubomirov and Yildirim, 2008:222 (in catalog of Crabronidae of Turkey); Kazenas, 2013b:495 (southeastern Kazakhstan: Borandysu 30 km east of Chilik); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Maharramov, Aliyev, and Mammadov, 2018:456 (Azerbaijan: Baku: Buzovny, and Baku: Lokbatan); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:77 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:67 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:241 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

*Tachysphex lebedevi* Gussakovskij, 1952:238, ♀, ♂. Lectotype: Tajikistan: Koy-pyaz-tau (ZIN), designated by Pulawski, 1971:419. Synonymized with *Tachysphex sordidus* by Pulawski, 1971:417 and 419.

As *Tachysphex fluctuatus*: Morawitz, 1894:342 (Turkmenistan: Repetek), corrected to *Tachysphex sordidus* by Pulawski, 1971:417.

As *Tachysphex grandissimus* (♂ only): Gussakovskij, 1933b:382 (Iran), corrected to *Tachysphex sordidus* by Pulawski, 1971:417.

#### 401. *spatulifer* Pulawski

*Tachysphex spatulifer* Pulawski, 1982b:35, ♀, ♂. Holotype: ♀, USA: California: Monterey County: Arroyo Seco Camp (UCD). – Pulawski, 1988a:63 (in revision of Nearctic *Tachysphex*); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoy-Eligio, and Correrias-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico).

#### 402. *speciosissimus* Morice

*Tachysphex speciosissimus* Morice, 1897:308, ♀. Holotype: ♀, Egypt: Koubbeh near Cairo (OXUM). – de Beaumont, 1940b:177 (in revision of *Tachysphex* of Egypt); Honoré, 1942:55 (Egypt: Kafr Hakim, Wadi um Assad); de Beaumont, 1947a:206 (in new revision of *Tachysphex* of Egypt); Pulawski, 1971:109 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:7 (Israel); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Pulawski, 2007a:596 (in revision of African *Tachysphex*); Roche, 2007a:76 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Murai and Amr, 2011:120 (recorded from Syria by Pulawski, 1971); Mokrousov and Zryanin, 2015:42 (Uzbekistan: Surkhandarya Oblast); nec Mokrousov, Shlyakhtenok, and Grebennikov, 2016:26 and Antropov, 2017b:240 (= *Tachysphex gussakovskii*); Ben Khedher, Yildirim, and Braham, 2020b:319 (in Tunisia known from Gabès); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:71 (in catalog of *Tachysphex* of Iran); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:241 (in revision of Sphecidae *sensu lato* of Europe); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

*Tachysphex redivivus* Kohl, 1901c:781, ♀. Holotype: ♀, Egypt: Cairo (NHMW). Synonymized with *Tachysphex speciosissimus* by de Beaumont, 1940b:178. – Dollfuss, 1989:13 (type material in NHMW).

As *Tachysphex fasciatus* (♂ only): de Beaumont, 1940b:178 and 1947a:207 (corrected to *Tachysphex speciosissimus* by Pulawski, 1971:109 and 112).

**403. *spectrum* Pulawski**

*Tachysphex spectrum* Pulawski, 2007a:600, ♀, ♂. Holotype: ♀, Tanzania: Morogoro Region: 128 road km northwest of Morogoro at 6°08.2'S 36°54.3'E (CAS). Paratypes: Kenya. – F. Gusenleitner and Schwarz, 2013:313 (paratypes in Biologiezentrum, Linz, Austria).

**404. *spinulosus* Pulawski**

*Tachysphex spinulosus* Pulawski, 1974a:72, ♀, junior primary homonym of *Tachysphex spinosus* W. Fox, 1893. Holotype: ♀, Brazil: Mato Grosso: Xavantina (BMNH). – Amarante, 2002:35 (in catalog of Neotropical Crabronidae).

*Tachysphex spinulosus* Pulawski, 1975a:311. Substitute name for *Tachysphex spinosus* Pulawski, 1974. – R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Amarante, 2005:10 (*spinulosus* is the valid name for the species).

**405. *splendidulus* F. Morawitz**

*Tachysphex splendidulus* F. Morawitz, 1893b:411, ♀. Holotype: ♀, Tajikistan: Varzaminor 70 km east of Samarkand (ZIN). – Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Pulawski, 1971:75 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae); Kazenas, 1978b:120 (in key to Sphecidae of Kazakhstan and Central Asia), 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia).

**406. *spretus* Kohl**

*Tachysphex spretus* Kohl, 1901c:778, ♀. Holotype: ♀, Turkmenistan: Bolshyie Balkhany (NHMW). – Pulawski, 1971:120 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Kazenas, 1978b:118, 128 (in key to Sphecidae of Kazakhstan and Central Asia); Dollfuss, 1989:13 (lectotype in NHMW); Esenbekova and Kazenas, 2000:34 (southeastern Kazakhstan: 10 km northwest and 45 km southwest of Chundzha); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:75 (geographic distribution, collecting localities in Kazakhstan), 2008a:102 (southeastern Kazakhstan: Ili River valley: 14-18 km Ayak-Kalkan, 10 km northwest and 45 km southwest of Chundzha), 2013b:495 (southeastern Kazakhstan: 10 km northwest of and 45 km southwest of Chundzha); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

**407. *sri* Pulawski**

*Tachysphex sri* Pulawski in Krombein and Pulawski, 1994:22, ♀, ♂. Holotype: ♂, Sri Lanka: Anuradhapura District: Padaviya tank (USNM).

**408. *stachi* de Beaumont**

As *Tachysphex caucasicus* (Radoszkowski, 1886): Kohl, 1888a:143 (♀ only; ♂ = *Tachysphex fulvitaris*), corrected to *Tachysphex stachi* by de Beaumont, 1936b:618.

*Tachysphex stachi* de Beaumont, 1936b:618, ♀. Syntypes: ♀, Caucasus: no specific locality (Kraków). – Pulawski, 1971:99 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:7 (Israel); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Kazenas, 1978b:119, 134 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:218 (in key to Sphecidae of European part of USSR); Esenbekova and Kazenas, 2000:34 (southeastern Kazakhstan: 8 km south of Borandysu, Chinghil'su 30 km east of Chilik, 10 km northwest of Chundzha, 1-2 km north of Kokpet Valley, near Lavar); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:75 (geographic distribution, collecting localities in Kazakhstan), 2004d:31 (Kazakhstan: Mangyshlak Peninsula); Straka, 2005b:267 (Turkey: Adiyaman: Nemrut dag near Karadut); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Yıldırım, Ljubomirov,

Özbek, and Yüksel, 2016:37 (Turkey: Erzurum: Pazaryolu: Kumaşkaya); Antropov, 2017b:240 (in catalog of Crabroninae of Russia); Maharramov, Aliyev, and Mammadov, 2018:455 (first record from Azerbaijan: Belokany); Kaplan and Yildirim, 2021:67 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:242 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey).

#### 409. *stevensoni* Arnold

*Tachysphex stevensoni* Arnold, 1924:64, ♀, ♂ (as *Stevensoni*, incorrect original capitalization). Lectotype: ♀, Zimbabwe: Bulawayo (SAM), designated by Pulawski, 2007a:602. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 2007a:602 (in revision of African *Tachysphex*).

#### 410. *stimulator* R. Turner

*Tachysphex stimulator* R. Turner, 1916b:257, ♀, ♂. Lectotype: ♀, Australia: Western Australia: Yallingup (BMNH), designated by Pulawski, 1977a:227. – R. Turner, 1916b:254 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 1977a:227 (in revision of Australian *Tachysphex*); Cardale, 1985:243 (in catalog of Australian Sphecidae).

#### 411. *stysi* Straka

*Tachysphex stysi* Straka, 2008:692, ♀, ♂. Holotype: ♂, Kazakhstan: Chagir 40 km south of Arys' (OÖLM). Paratypes: Tajikistan, Turkmenistan.

#### 412. *suavis* Arnold

*Tachysphex suavis* Arnold, 1929c:385, ♀. Holotype: ♀, Zimbabwe: Bulawayo (SAM). – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae), 1945:97 (Madagascar); Leclercq, 1961d:109 (Madagascar); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Leclercq, 1990b:118 (Madagascar: Fort Dauphin); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae), 2007a:604 (in revision of African *Tachysphex*); Madl, 2014a:985 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

#### 413. *subandinus* Pulawski

*Tachysphex subandinus* Pulawski, 1974a:57, ♀, ♂. Holotype: ♂, Argentina: Tucumán: Las Cejas (MCZ). – R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Amarante, 1993:19 (northeastern Brazil), 2002:35 (in catalog of Neotropical Crabronidae).

#### 414. *subcoriaceus* Arnold

*Tachysphex subcoriaceus* Arnold, 1945:98, ♂. Holotype: ♂, Madagascar: Ranomafana (MNHN). – Leclercq, 1961d:109 (description of ♀; Madagascar); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Leclercq, 1990b:118 (Madagascar: Nosy-Komba); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae), 2007a:607 (in revision of African *Tachysphex*); Madl, 2014a:985 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

*Tachysphex subeditus* Leclercq, 1961d:109, ♀, ♂. Holotype: ♂, Madagascar: Toamasina: Foulpointe, now Mahavelona (MHNB). Synonymized with *Tachysphex subcoriaceus* by Pulawski, 2007a:607. – R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 2003b:798 (in checklist of Malagasy Sphecidae).

#### 415. *subdentatus* F. Morawitz

*Tachysphex subdentatus* F. Morawitz, 1893c:412, ♀. Lectotype: ♀, Tajikistan: Iskander-kul in Yagnob River valley 55 km northwest of Dushanbe (ZIN), designated by Pulawski, 1971:98. – Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Myartseva, 1963b:58 (Turkmenistan: lower Murgab River), 1965:78

(Turkmenistan: Akibay), 1966:48 (preying on orthopterans); Pulawski, 1967a:405 (Turkey, description of ♂), 1971:96 (in revision of Palearctic *Tachysphex*); Myartseva, 1971b:180 (ranges slightly outside Turanian Province), 1972a:80 (Turkmenistan); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Kazenas, 1978b:118, 133 (in key to Sphecidae of Kazakhstan and Central Asia); Pulawski, 1978:216, 220 (in key to Sphecidae of European part of USSR); Islamov, 1986:525 (Uzbekistan: Tashkent Oblast'); Hensen and van Ooijen, 1987:16 (Turkey); Gorobchishin, 1994:21 (first record from Ukraine); Nazarova and Shomirsaidov, 1997:23 (Tajikistan: fruit tree orchards in Vakhsh River valley); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia); K. Schmidt and Bitsch *in* Bitsch et al., 2001:272 (in Sphecid Fauna of Western Europe); Kazenas, 2002a:76 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:141 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Kazenas, 2004d:31 (Kazakhstan: northern Caspian region); Nazarova, 2004:107 (Tajikistan: Badakhshan Region: Rushan district: villages Visav and Dasht); Shkuratov, 2004a:77 (Russia: Rostov Oblast': Rostovskiy Nature Reserve); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan); Straka, 2005b:267 (Turkey: Agri: 20 km south of Agri); Yildirim and Ljubomirov, 2007:120 (Turkey: Malalya: Kale); Danilov, 2008:349 (Russia: Altayskiy Kray: Barnaul area); Ljubomirov and Yildirim, 2008:222 (in catalog of Crabronidae of Turkey); Baghirov, 2011b:148 (Russia: recorded from Altayskiy Kray by Danilov, 2008); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:37 (Turkey: Kars: Sarıkamış: Karakurt); Antropov, 2017b:240 (in catalog of Crabroninae of Russia); Maharramov, Aliyev, and Mammadov, 2018:455 (first record from Azerbaijan: Lerik: Gilidara); Eroğlu and Yüksel, 2019:5230 (recorded from Niğde Province of Turkey by Pulawski, 1967, but not rediscovered since then); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:72 (in catalog of *Tachysphex* of Iran); Kaplan and Yildirim, 2021:67 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:242 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

#### 416. *subfimbriatus* Arnold

*Tachysphex subfimbriatus* Arnold, 1924:69, ♀, ♂. Lectotype: ♀, South Africa: Eastern Cape Province: Willowmore (TMP), designated by Pulawski, 2007a:610. – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:111 (Namibia: visiting flowers of *Zygophyllum simplex* L., Zygophyllaceae); Pulawski, 2007a: 610 (in revision of African *Tachysphex*).

#### 417. *subopacus* R. Turner

*Tachysphex debilis* R. Turner, 1908:490, ♀, junior primary homonym of *Tachysphex debilis* Pérez, 1907 (a junior synonym of *Tachytes argyreus* (F. Smith)). Holotype: ♀, Australia: Queensland: Cairns (BMNH). *Tachysphex subopacus* R. Turner, 1910a:348. Substitute name for *Tachysphex debilis* R. Turner, 1908. – R. Turner, 1916b:255 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 1977a:296 (in revision of Australian *Tachysphex*); Cardale, 1985:243 (in catalog of Australian Sphecidae).

#### 418. *sulcatus* Pulawski

*Tachysphex sulcatus* Pulawski, 1988a:97, ♀, ♂. Holotype: ♀, USA: California: Los Angeles County: Angeles Crest Highway: Arroyo Seco (CAS). – Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico)

**419. *sulcidorsum* de Beaumont**

*Tachysphex sulcidorsum* de Beaumont, 1950f:406, ♀, ♂. Holotype: ♀, Algeria: Laghouat (BMNH). – de Beaumont, 1952c:195 (Algeria: Hoggar), 1955a:186 (Morocco); Pulawski, 1971:115 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 2007a:613 (in revision of African *Tachysphex*).

**420. *svetlanae* Pulawski**

*Tachysphex svetlanae* Pulawski, 1971:316, ♂. Holotype: ♂, Turkmenistan: Ashgabat (originally W.J. Pulawski coll., now CAS). – R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Kazenas, 1978b:125 (in key to Sphecidae of Kazakhstan and Central Asia); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:76 (geographic distribution); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution).

**421. *sycorax* Arnold**

*Tachysphex Panzeri* var. *sycorax* Arnold, 1923a:169, ♂ (as *Sycorax*, incorrect original capitalization). Holotype: ♂, Zimbabwe: Bulawayo (SAM). – Arnold, 1930:4 (in checklist of Afrotropical Sphecidae). – **As *Tachysphex panzeri sycorax***: R. Bohart and Menke, 1976:275 (new status, in checklist of world Sphecidae). – **As *Tachysphex sycorax***: Pulawski, 2007a:615 (full species status, in revision of African *Tachysphex*).

**422. *sympleuron* Pulawski**

*Tachysphex sympleuron* Pulawski in Krombein and Pulawski, 1994:60, ♀, ♂. Holotype: ♀, Sri Lanka: ♀, Mannar District: 0.8 km northeast of Kokmotte in Wilpattu National Park (USNM). – Krombein in Krombein and Pulawski, 1994:11 (nesting habits).

**423. *tahoe* Pulawski**

*Tachysphex tahoe* Pulawski, 1988a:86, ♀, ♂. Holotype: ♂, USA: California: Placer County: Carnelian Bay on Lake Tahoe (UCD). – Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico)

**424. *taita* Pulawski**

*Tachysphex taita* Pulawski, 2007a:617, ♀, ♂. Holotype: ♂, Kenya: Coast Province: 10 km north of Taita Discovery Centre (CAS). Paratypes: Namibia, Tanzania.

**425. *tanqua* Pulawski**

*Tachysphex tanqua* Pulawski, 2007a:620, ♀, ♂. Holotype: ♀, South Africa: Northern Cape Province: Pofadder (SAM). – F. Gusenleitner and Schwarz, 2013:313 (paratypes in Biologiezentrum, Linz, Austria).

**426. *tarsatus* (Say)**

*Larra tarsata* Say, 1823:78, sex not stated. Holotype or syntypes: USA: Arkansas: no specific locality (destroyed, see W. Fox, 1902:11). – F. Smith, 1856:281 (in catalog of Hymenoptera in British Museum); Le Conte, 1859a:166 (original description copied); Cresson, 1862:237 (in catalog of North American Hymenoptera); Riley, 1880:270 (preying on Rocky Mountain locust, *Melanoplus spretus* (Walsh)); Patton, 1880b:389 (in checklist of North American Larrini); Cresson, 1887:277 (in catalog of North American Hymenoptera); Ashmead, 1890:33 (in checklist of Hymenoptera of Colorado). – **As *Larrada tarsata***: Cresson, 1865:464 (new generic assignment, body color), 1876:208 (Colorado: Denver). – **As *Tachysphex tarsatus***: W. Fox, 1894a:512 (new generic assignment, in revision of North American Larrinae), 1894c:106 (Mexico: Baja California); Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); G. Peckham and E. Peckham, 1900:89 (nesting habits); J. Smith, 1900:518 (in new list of insects of New Jersey: Camden and Gloucester counties, Anglesea, Clementon); G. Peckham and E. Peckham, 1905:261 (nesting habits, as *tarsata*);

H. Smith, 1908:381 (in revision of Nebraskan Sphecidae); J. Smith, 1910:683 (New Jersey: Camden and Gloucester counties: Anglesea, Clementon); Rohwer, 1911b:580 (in key to *Tachysphex antennatus*, *hitei*, *semirufus*, *tarsatus* and *wheeleri*); F. Williams, 1914a:165 (in revision of Larrinae of Kansas), 203 (nesting habits); Rohwer, 1916b:687 (in catalog of Hymenoptera of Connecticut); Stevens, 1917:422 (North Dakota: Sheldon); Mickel, 1918b:422 (in catalog of Nebraskan Sphecidae); Rohwer in Viereck, 1925:687 (in key to Sphecidae of Connecticut; not yet found in the State); J.Ch. Bradley, 1928:1009 (in catalog of Hymenoptera of New York); Robertson, 1928:128 (visiting flowers of *Cicuta maculata* L.), 195 (visiting flowers of *Cassia chamaecrista* (L.), now *Chamaecrista fasciculata* (Michx) Green); G. Carpenter, 1930b:299 (nest closure); Brimley, 1938:443 (North Carolina: Raleigh); Strickland, 1947:129 (Canada: Alberta); Krombein, 1950a:267 (North Carolina: Dare County); G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); K. Cooper, 1953:33 (Massachusetts: Island of Penikese); Krombein, 330 (North Carolina); Kurczewski and Kurczewski, 1963:146 (Pennsylvania: Presque Isle State Park); Kurczewski, 1966b:436-453 (male behavior); Lavigne and Pfadt, 1966:31 (Wyoming; preying on grasshopper *Amphitornus coloradus* (Thomas)); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); Evans, 1970:490 (Wyoming: Jackson Hole, nesting habits); Horning and Barr, 1970:103 (USA: Idaho: Craters of the Moon National Monument); Alcock and Gamboa, 1975b:164 (nesting habits); Evans, 1975a:263 (slow colonizer of new habitats); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); L. Davis, 1978:218 (North Carolina: Kill Devil Hills, data from Krombein, 1953a); Krombein, 1979b:1630 (in catalog of North American Hymenoptera); Steiner, 1981:333 (stinging pattern), 1982a:2, 12-14 (defensive reaction of grasshopper prey); Finnamore, 1982:106 (in Sphecid Fauna of southern Quebec); Hilchie, 1982:106 (prey of *Philanthus albopilosus*), 107 (Alberta: Empress); Elliott and Kurczewski, 1985:293 (prey); Rust, Menke, and Miller, 1985:46 (California: Channel Islands), 53 (prey); Steiner, 1986:103 (references to papers on nesting habits); Pulawski, 1988a:57 (in revision of Nearctic *Tachysphex*); Spofford, Kurczewski, and Downes, 1989:256, 257, 261 (summary of previous records for nest parasites *Hilarella hilarella* (Zetterstedt), *Phrosinella fulvicornis* (Coquillett), *Taxigramma heteroneura* (Meigen), miltogrammine flies, and undetermined species of Miltogrammini), 257, 260 (nest parasites: *Metopia luggeri* Townsend, *Phrosinella aurifacies* Downes, *Senotainia trilineata* (Wulp), *Senotainia vigilans* Allen, and *Sphenometopa tergata* (Coquillett), miltogrammine flies); Kurczewski and Acciavatti, 1990:60 (New York: Cayuga County); Spofford and Kurczewski, 1990:745, 746, 747, 749, 750, 751 (nest parasites: *Hilarella hilarella* (Zetterstedt), *Metopia luggeri* (Townsend), *Phrosinella aurifacies* Downes, *Senotainia trilineata* (Van der Wulp), *Senotainia vigilans* Allen, *Sphenometopa tergata* (Coquillett), *Taxigramma heteroneura* (Meigen), and unknown species of Miltogrammini, Sarcophagidae); Kurczewski, 1991a:300 (nesting habits); Spofford and Kurczewski, 1992:997 (species of miltogrammine parasites listed), 1002 (counter-cleptoparasitic behavior: freeze-stop and face-off, diversionary flight), 1003 (chasing flight), 1004 (post-larvipositional counter-cleptoparasitic behavior: abandon burrow), 1005 (abandon prey, clean prey, inordinate amount of post-provisioning time in burrow); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Kurczewski, 1998d:250 (pine barrens in upstate New York), 1999:181 (nesting habits); Kurczewski, 2000c:115 (locality records from North and South Carolina), 117 (nest and prey); Skevington et al., 2001:128 (Canada: Ontario: Lambton County); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario); Kurczewski, Kurczewski, and Abela, 2015:235 (nesting habits); Ratzlaff, 2016:26 (Canada: British Columbia: from Pulawski, 1988 and Blades and Maier, 1992); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and

Greenland: Canada: Alberta, British Columbia, Manitoba, Saskatchewan, Ontario, Quebec: no specific locality).

*Tachysphex dubius* W. Fox, 1894a:515, ♂, junior secondary homonym of *Tachysphex dubius* (Radoszkowski, 1886). Lectotype: ♂, USA: New Jersey: Camden County: Camden (ANSP), designated by Cresson, 1928:44. Synonymized with *Tachysphex tarsatus* by R. Bohart in R. Bohart and Menke, 1976:277. – Ashmead, 1899d:250 (in checklist of North American Sphecidae); J. Smith, 1900:518 (New Jersey: Camden County: no specific locality); Viereck, 1903a:67 (New Mexico: Beulah); F. Williams, 1914a:163 (in revision of Larrinae of Kansas); Strickland, 1947:129 (Canada: Alberta: Medicine Hat).

*Tachysphex dubiosus* Dalla Torre, 1897:679. Substitute name for *Tachysphex dubius* W. Fox. – Viereck, 1902-1903:67 (New Mexico: Beulah); J. Smith, 1910:683 (in new list of insects of New Jersey: Camden County: Da Costa, N. Woodbury); G. Bohart in Muesebeck, Krombein, and Townes, 1951:951 (in catalog of North American Hymenoptera).

*Tachysphex hitei* Rohwer, 1908a:221, ♀. Holotype: ♀, USA: Colorado: Boulder County: Jim Creek (USNM). Synonymized with *Tachysphex tarsatus* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:952. – Rohwer, 1911b:580 (in key to *Tachysphex antennatus*, *hitei*, *semirufus*, *tarsatus* and *wheeleri*).

*Tachysphex sanguinosus* Mickel, 1916a:414, ♀. Holotype: ♀, USA: Nebraska: Douglas County: Omaha (UNL). Synonymized with *Tachysphex tarsatus* by Pulawski in Krombein, 1979b:1630. – Mickel, 1918b:422 (in catalog of Nebraskan Sphecidae); G. Bohart in Muesebeck, Krombein, and Townes, 1951:952 (in catalog of North American Hymenoptera); Muma, 1952:23 (type in UNL); R. Bohart and Menke, 1976:276 (in checklist of world Sphecidae).

*Tachysphex zimmeri* Mickel, 1916a:415, ♀. Holotype: ♀, USA: Nebraska: Sioux County: Monroe Canyon (UNL). Synonymized with *Tachysphex tarsatus* by G. Bohart in Muesebeck, Krombein, and Townes, 1951:952. – Mickel, 1918b:423 (in catalog of Nebraskan Sphecidae); Carter, 1925:133 (Canada: Alberta: Lethbridge); Strickland, 1947:129 (Canada: Alberta: Lethbridge); Muma, 1952:23 (type in UNL).

#### 427. *tarsinus* (Lepeletier de Saint Fargeau)

*Tachytes tarsinus* Lepeletier de Saint Fargeau, 1845:243, ♂ (as *tarsina*, incorrect original termination). Holotype or syntypes: ♂, France: probably Dauphinée: no specific locality (MNHN). – Fabre, 1856a:139 (France: Vaucluse: Avignon area); Dours, 1874:139 (in catalog of Hymenoptera of France); Radoszkowski, 1877:28 (Uzbekistan: Samarkand); Girard, 1879:955 (preying on acridids); Marquet, 1881:179 (southern France); Fabre, 1886:229 (nesting in soil, preying on acridids); De Stefani Perez, 1894:216 (Italy: Sicilia), 1895:226 (in catalog of Sicilian Hymenoptera); Acloque, 1897:93 (in Sphecidae Fauna of France and Algeria). – **As *Tachysphex tarsinus***: Kohl, 1885:398 (tentative new generic assignment, original description copied); Dalla Torre, 1897:686 (new generic assignment, in catalog of world Sphecidae); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Coulon, 1925:121 (Morocco: Tanger); de Beaumont, 1940b:175 (in revision of *Tachysphex* of Egypt); Honoré, 1942:55 (Egypt: Cairo area, Fayum (actually Kom Osheim), Mariut); de Beaumont, 1947a:198 (in new revision of *Tachysphex* of Egypt), 1950f:406 (Algeria), 1953b:15 (*Tachysphex nitidus* form B is a synonym of *tarsinus*), 1954a:58 (Italy), 1954e:91 (Italy); Grandi, 1954:240 (Italy); de Beaumont, 1955a:184 (Morocco); Steiner, 1955:138 (France: Dordogne); Ceballos, 1956:378 (in catalog of Hymenoptera of Spain); de Beaumont, 1956a:199 (Libya); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); Grandi, 1957:390 (Italy: Abruzzi); Nouvel and Ribaut, 1958:14 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Pulawski, 1958a:181 (Bulgaria: Aitos, Kniازه-hevo near Sofia, Sozopol, Varna); Grandi, 1959b:287 (Italy: Livorno: Quercianella); Suárez, 1959:57 (Spain: Almería Province); de Beaumont, 1962b:26 (Spain); Grandi, 1962:96 (Italy); de Beaumont, 1964c:76 (Switzerland); Ceballos, 1964:91 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:77 (in Sphecidae Fauna of Switzerland); Diniz, 1964a:6 (Portugal: seventeen localities); de Beaumont, 1965a:50 (Greece); Bonelli, 1966c:218 (Italy: Trentino–Alto Adige: Montagna); Balthasar, Hrubant, and Hrubant,

1967:171 (Bulgaria: Slanchev Bryag near Nessebar); J. Heinrich, 1967:75 (Germany: Bayern: Kahl and Miltenberg); Pulawski, 1967a:405 (Turkey); Stritt, 1968:110 (Germany: Baden-Württemberg); Schmidt, 1969:163 (Germany: Rhein-Main area: Mainzer Sand, Offenbach area); Gauss and Perraudin, 1970:360 (Germany: Baden-Württemberg: Achkarren in Kaiserstuhl); Oehlke, 1970:716 (Democratic Germany); Pulawski, 1971:158 (in revision of Palearctic *Tachysphex*); Schmidt, 1971b:36 (Germany: Rheinland-Pfalz: Mainzer Sand); Balthasar, 1972:276 (in Sphecidae Fauna of Czechoslovakia); Simon Thomas, 1972:182 (France: Gironde, Lot-et-Garonne); de Beaumont, Bytinski-Salz, and Pulawski, 1973:8 (Israel); Erlandsson, 1974:73 (France); Frilli and Pizzaghi, 1975:76 (Italy: Badagnano in Piacenza Province); Simon Thomas, 1976:5 (France: Lot-et-Garonne: Forêt de Campet); Kolesnikov, 1977:318 (Russia: Bryansk Oblast'); Guichard, 1978:271 (Greece); Kazenas, 1978b:122, 132 (in key to Sphecidae of Kazakhstan and Central Asia); Marion, 1978:88 (France: Nièvre Department); Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Eck, 1976:91 (Democratic Germany); Simon Thomas, 1976:5 (France: Lot-et-Garonne: Forêt de Campet); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Guichard, 1980:228 (Oman); Pagliano, 1980:127 (Italy: Piemonte); Preuss, 1980a:23 (Germany; endangered, nesting in dry soils); Schmidt, 1981:186 (Germany: Baden-Württemberg); Gayubo, 1982a:108 (northern Spain: Sierra de Béjar), 1982f:254 (Spain: Cádiz Province); Dollfuss, 1983a:76 (endangered in Niederösterreich, Austria), 80 (endangered in Steiermark, Austria), 1983b:11 (in catalog of Sphecidae of Austria); Gayubo, 1983a:123 (prey: nymph of *Euchortippus* sp., an acridid); Schmidt and Westrich, 1983:123 (Greece); Gayubo, 1984b:86 (Spain: Salamanca Province), 1984c:367 (Portugal: Algarve Province); Brechtel, 1986:61 (Germany: Südpfalz); Gayubo, 1986c:33 (Spain: Zamora Province); Gayubo and Heras, 1986:44 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:49 (Spain: Burgos Province); Gayubo, 1987a:113 (Spain: Ciudad Real Province); Schmidt and Westrich, 1987:364 (Germany: Mainz area); Dollfuss, 1988:12 (Austria: Bisamberg); Asís and Jiménez, 1988:272 (Spain: Castellón Province); Gayubo and Mingo, 1988:83 (Spain); Asís, Gayubo, and Tormos, 1989a:237 (description of larva); Jacobs, 1989:12 (Germany: Mecklenburg-Vorpommern); Gayubo, Asís, and Tormos, 1990a:18 (Spain); Jacobs and Oehlke, 1990:167 (new records from Democratic Germany); Pagliano, 1990:106 (in catalog of Italian Sphecidae); Day, 1991:xix (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:107 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:403 (Italy: Sicilia); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Jacobs, 1991:46, 48 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Negrisolo, 1991:318 (Italy: Gorizia and Trieste Provinces); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Józán, 1992b:173 (Hungary: Boronka-melléki Protected Area), 1992c:289 (first record from Hungary: Zselic Hills); Kuhlmann, 1993:76 (Germany: known from Westfalen); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Dollfuss, 1994:101 (endangered in Austria); Gayubo and Borsato, 1994:209 (Italy: Toscana, Veneto); Tormos, Asís, and Gayubo, 1994:188, 207 (Spain: Albacete Province); Jansen and Kaluza, 1995:8 (Germany: endangered in Sachsen); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:25 (Germany: Bayern: Miltenberg); Schmid-Egger, Risch, and Niehuis, 1995:212 (Germany: summary of records from Rheinland-Pfalz Province); Gusenleitner, 1996b:810 (Austria: Burgenland); Kuhlmann, 1996:221 (Portugal: Serra de Estrela); Schmid-Egger, Schmidt, and Doczkal, 1996:378 (Germany: Baden-Württemberg: endangered); Witt, 1996:106 (Germany: Brandenburg), 111 (locality records); Woydak, 1996:39 (Germany: Westfalen: summary of distribution and nesting habits), 104 (not collected after 1942); Celary, 1997:58 (in checklist of Animals of Poland); Hinrichsen and Saure, 1997:32 (recognition characters); Nazarova and Shomirsaidov, 1997:24 (Tajikistan: fruit tree orchards in Vakhsh River valley); Schmidt and Schmid-Egger, 1997:30 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg), 35 (endangered); Dollfuss, Gusenleitner, and Bregant, 1998:515 (Austria: sum-

mary of collecting records from Burgenland); Flügel, 1998:61 (Germany: Brandenburg: Unteres Odertal National Park); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Jakubzik, Schlüter, and Cölln, 1998:1182, 1184 (Germany: Rheinland-Pfalz); van der Smissen, 1998:70 (Germany: Niedersachsen: Brünkendorf, Laasche); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); Kuhlmann, Wolf, and Woydak, 1999:568 (extinct or presumably extinct in Nordrhein-Westfalen State of Germany); Saure, 1999:33 (Germany: Berlin-Köpenick), 36 (strongly endangered in Germany); Wickl, 1999a:108 (Germany: Bayern: Oberpfalz area); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:236 (in Sphecidae Fauna of Germany); Dressler, 2000:34 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:34 (southeastern Kazakhstan: 70-75 km east of Chilik); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:106 (Greece); Jacobs, 2000:12 (Germany: Land Mecklenburg-Vorpommern: endangered); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Vepřek, 2000:233 (reference to records from Czech Republic by Tyrner, 1981; Moravia: Bzenec); Zettel, 2000:27 (Austria: Hundsheimer Kogel); nec Vepřek, 2000 (= *Tachysphex grandii*); Cungs and Jakubzik, 2001:122, 123, 125 (first record from Luxemburg); Ivanov and Ljubomirov, 2001:212 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Jacobs, 2001:137 (Germany: endangered in Mecklenburg-Vorpommern); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 161 (review of known biology); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ohl et al., 2001:142 (distribution in Germany by provinces); K. Schmidt and Bitsch in Bitsch et al., 2001:273 (in Sphecidae Fauna of Western Europe); Tischendorf, 2001:30 (Germany: Hessen: Kühkopf-Knoblochsaue Nature Reserve); Kazenas, 2002a:76 (geographic distribution, collecting localities in Kazakhstan); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Cölln, Esser, and Jakubzik, 2003:63 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Drewes, 2003:143 (Germany: Baden-Württemberg: Kaiserstuhl; Italy: Trentino: Torbole; Spain: Tarragona); Feitz, Schneider, and Pauly, 2003:85 (Luxemburg: Remerschen); Gayubo, Özbek, and Yıldırım, 2003:90 (Turkey: Erzurum: Tortum, Palandöken); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:70 (Germany: in catalog of wasps and bees of Bayern); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Schmid-Egger, 2003:758 (Italy: Sicilia: Milo, Randazzo, Vendicari); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: strongly endangered); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:264 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Gayubo et al. 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Kazenas, 2004b:104 (Kazakhstan: western Tien Shan), 2004d:32 (Kazakhstan: Mangyshlak Peninsula); Shkuratov, 2004a:77 (Russia: Rostov Oblast'), 2004b:167 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:357 (in catalog of Polish Crabronidae); Stolle et al., 2004:373 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Wiśniowski, 2004:44 and 60 (in checklist of Polish Sphecidae); Cölln and Jakubzik, 2005:808 (Germany: in synthesis of records from northwestern Rheinland-Pfalz); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Jacobs, 2005a:452 (Bulgaria: Melnik); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan); Pagliano and Negrisoló, 2005:381 (in Sphecidae Fauna of Italy); Saure, 2005:19 (Germany: Berlin); Straka, 2005b:267 (Turkey: four localities); Theunert, 2005a:19 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Ziska and Saure, 2005:82 (Germany: Berlin: Biesenhorster Sand); Hua, 2006:283

(in list of Chinese insects, geographic distribution); Liebig, 2006:40 (Germany: Sachsen: Muskauer Heide); Ljubomirov, 2006:543 (Greece: Rhodope Mountains: earlier records summarized); Magdalou, 2006a:7, 10 (France: Pyrénées-Orientales: Réserve Naturelle de la Massane), 2006b:109 (France: Pyrénées-Orientales: Mas Larrieu Nature Reserve near Argelès-sur-Mer); 2006c:7 (France: Pyrénées-Orientales: Réserve Naturelle du Mas-Larrieu); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Baños-Picón, Gayubo, Asís, and González, 2007a:256, 258 (Spain: Zamora: Cabañas de Aliste); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:460 (recorded from Luxemburg by Cungs and Jakubzik, 2001 and Feitz et al., 2006); Burguet, 2007:unnumbered p. 22 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Cungs, Jakubzik, and Cölln, 2007:140 (Luxemburg: Haardt Nature Reserve); G. Turrisi and R. Turrisi, 2007:121 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Tischendorf, Frommer, Flügel et al., 2011:107 (Germany: Hessen: may be endangered); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:4 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Hellrigl, 2012:129 (Italy: Provincia Autonoma di Bolzano-Alto Adige, as Südtirol); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:356 (in new catalog of Sphecidae of Saudi Arabia); Gros, 2013:328 (nesting habits); Kazenas, 2013b:495 (southeastern Kazakhstan: 70 km east of Chilik); Olszewski, Wiśniowski, Pawlikowski, and Szpila, 2013:132 (Poland: Toruń); Saure, 2013:22 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:28 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:169 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park and Serras de Aire e Candeeiros Natural Park); Baldock, 2014:356 (Spain: Island of Mallorca); Bitsch, 2014:403 (France: Lozère: Saint-Étienne-Vallée-Française; Haut-Rhin: Munster); U. Frommer, 2014:28 (Germany: Hessen: Lorch); Józán, 2014:133 (Croatia: five localities); Kazenas, 2014a:135 (Kazakhstan: Karatau Mountain Range); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:26 (Iran: Fars Province); Baldock, 2015:70 (Spain: Mallorca: Alcudia, S'Albufera); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Lett, 2015:5 (France: Loir-et-Cher: Gièvre); P. Rosa and Pagliano, 2015:106 (Italy: Lombardia and Piemonte: Parco del Ticino); Samin, Bagriacik, and Monaem, 2015:197 (Iran: East Azarbaijan: Harris); Simon, Lorthiois, and Macé, 2015:55 (France: alluvial terraces in Eure Department: Courcelles-sur-Seine); Mokrousov and Popov, 2016:581 (Russia: Krasnodarskiy Krai); Stolle and Saure, 2016:925 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:37 (Turkey: Kars Province); Antropov, 2017b:240 (in catalog of Crabroninae of Russia); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Forêt de la Massane, Mas Larrieu); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:30 (Iran: Hormozgan: Sar Kahnan at 27°24'N 57°07'E); Lett, 2018:203 (France: Loir-et-Cher: Gièvres at 47°16'39"N 1°41'52"E); Maharramov, Aliyev, and Mammadov, 2018:455 (first record from Azerbaijan: Khachmaz: Uzunoba); Carminati, Mora, and Cretin, 2019:18 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:19 (Azerbaijan: Nakhichevan Autonomous Republic); Ben Khedher, Yıldırım, and Braham, 2020b:320 (in Tunisia known from Tozeur); Gadallah, 2020b:54 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:72 (in catalog of *Tachysphex* of Iran); Saure, 2020:277 (Germany: Sachsen-Anhalt: sand dunes); Cross, Baldock, and Wood, 2021:45 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yıldırım, 2021:67 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:101 (in commented list of Sphecidae *sensu lato* of Poland); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near

Potsdam); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution); Olzowski, Sparks, Twerd, and Wiśniowski, 2024:5 (central Poland: common in river valleys: no specific localities).

*Tachysphex nitidus* Spinola, variété B de Beaumont, 1936a:206 (in revision of French *Tachysphex*), 1936c:8 (specimen in coll. A. Costa). Synonymized with *Tachysphex tarsinus* by de Beaumont, 1940b:175.

As *Tachysphex nitidus*: Gussakovskij, 1938:7 (China: Kiangsu Province), corrected to *Tachysphex tarsinus* by Pulawski, 1971:158.

#### 428. *tembe* Pulawski

*Tachysphex tembe* Pulawski, 2007a:624, ♀. Holotype: ♀, South Africa: Kwazulu-Natal: Tembe Elephant Park (OÖLM). – F. Gusenleitner and Schwarz, 2013:313 (holotype and paratypes in Biologiezentrum, Linz, Austria).

#### 429. *tenuicornis* Bischoff

*Tachysphex tenuicornis* Bischoff, 1913b:120, ♀, ♂. Lectotype: ♀, Namibia: Lüderitz District: Prinzen Bucht south of Lüderitz (ZMHU), designated by Pulawski, 2007a:626. – Arnold, 1923a:175 (recorded from Afrotropical Region but unknown to author), 176 (original description translated into English), 1930:4 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:111 (Namibia: visiting flowers of *Brownanthus kuntzei* (Schinz) Ihlenf. and Bittrich and *Psilocaulon salicornioides* (Pax) Schwantes, Aizoaceae); Pulawski, 2007a:626 (in revision of African *Tachysphex*).

#### 430. *tenuis* R. Turner

*Tachysphex tenuis* R. Turner, 1908:489, ♀. Holotype: ♀, Australia: Northern Territory: Port Darwin (BMNH). – R. Turner, 1916b:255 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 1977a:256 (in revision of Australian *Tachysphex*); Cardale, 1985:243 (in catalog of Australian Sphecidae); Pagliano, 2003a:509 (Australia).

#### 431. *tenuisculptus* Pulawski

*Tachysphex tenuisculptus* Pulawski, 1977a:315, ♀, ♂. Holotype: ♀, Australia: South Australia: Musgrave Park (ANIC). – Cardale, 1985:243 (in catalog of Australian Sphecidae).

#### 432. *terminatus* (F. Smith)

*Larrada terminata* F. Smith, 1856:291, ♂. Lectotype: ♂, USA: New York: Trenton Falls (OXUM), designated by Pulawski, 1988a:156. – Cresson, 1862:238 (in catalog of North American Hymenoptera), 1873:214 (Texas), 1876:208 (Utah: Spring Lake). – As *Larra terminata*: Patton, 1880b:389 (new generic assignment, in checklist of North American Larrini); Provancher, 1882:50 and 1883b:633 (in revision of Canadian Hymenoptera); Kohl, 1885a:248 (in checklist of world *Larra*); Cresson, 1887:277 (in catalog of North American Hymenoptera); Provancher 1887:267 (in key to *Larra* of Canada); Ashmead, 1894:63 (preying on *Chortophaga viridifasciata* (DeGeer)). – As *Tachysphex terminatus*: W. Fox, 1894a:520 (new generic assignment, in revision of North American Larrinae); Dalla Torre, 1897:686 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Cockerell, 1899a:144 (New Mexico); J. Smith, 1900:518 (New Jersey: Anglesea); Harrington, 1902:221 (Canada: Ontario: Ottawa); H. Smith, 1908:382 (in revision of Nebraskan Sphecidae); J. Smith, 1910:683 (in new list of insects of New Jersey: Anglesea, Belleplain, DaCosta, Iona); F. Williams, 1914a:172 (in revision of Larrinae of Kansas), 201 (nesting habits); Rohwer, 1916b:687 (in catalog of Hymenoptera of Connecticut), nec 1917a:244 (= *Tachysphex alpestris*); Mickel, 1918b:422 (in catalog of Nebraskan Sphecidae); Rau and Rau, 1918:144 (nesting habits); Washburn, 1918:223 (in list of Hymenoptera of Minnesota); Rohwer in Viereck, 1925:687 (in key to Sphecidae of Connecticut; not yet found in the State);

Rau, 1926:188 (Missouri: Wickes: sheltered clay bank; prey: *Chortophaga viridifasciata* (De Geer)); J.Ch. Bradley, 1928:1009 (in catalog of Hymenoptera of New York); Robertson, 1928:195 (visiting flowers of *Cicuta maculata* L.), 209 (visiting flowers of *Sium suave* Walt. = *cicutaeifolium* Schrank, Apiaceae); G. Carpenter, 1930b:300 (nest closure); Brimley, 1938:443 (North Carolina: Castle Hayne, Kinston, Raleigh, Wilmington); Rau, 1938b:543 (sleeping habits), 1946:10 (prey: *Arphia sulphurea* Fabricius, *Dichromorpha viridis* Scudder, *Melanoplus* sp., all acridids); Strickland, 1947:129 (Canada: Alberta: Drumheller, Medicine Hat); Krombein, 1950a:267 (North Carolina: Dare County); G. Bohart in Muesebeck, Krombein, and Townes, 1951:953 (catalog of North American Hymenoptera); Krombein, 1951a:143 (Virginia: Dunn Loring; visiting tulip-tree honeydew), 1952a:93 (USA: Virginia: Westmoreland State Park); K. Cooper, 1953:33 (Massachusetts: Island of Penikese); Krombein, 1953a:295 (visiting foliage of *Pinus serotina*), 296 (visiting foliage of *Quercus marilandica*), 298 (visiting flowers of Virginia creeper), 330 (North Carolina), 1953b:123 (visiting foliage of *Quercus virginiana*), 132 (North Carolina: Kill Devil Hills); nec Krombein, 1953c:13 (= *Tachysphex similis*); Strandtman, 1953:49 (nesting habits); Evans, 1958c:118 (description of larva); Krombein, 1958c:100 (North Carolina: Kill Devil Hills), 1958f:188 (in supplement to catalog of North American Hymenoptera: prey); Kurczewski and Kurczewski, 1963:146 (Pennsylvania: Presque Isle State Park); Kurczewski, 1966b:317 (preying on Tettigoniidae), 1966c:436-453 (comparative male behavior); Krombein, 1967c:393 (in supplement to catalog of North American Hymenoptera); Kurczewski, 1967b:279 (nesting females are not visibly disturbed by the presence of *Hedychridium fletcheri* a chrysidid); Kurczewski and Harris, 1968:81-82 (New York: Groton, relative abundance); Kurczewski and Snyder, 1968:28 (nesting habits); nec G. Bohart, Nye, and Hawthorn, 1970:48 (= *Tachysphex alpestris*); nec Evans, 1970:491 (= *Tachysphex alpestris*); nec Horning and Barr, 1970:103 (= *Tachysphex alpestris*); Elliott and Kurczewski, 1974:725 (character displacement); Miller and Kurczewski, 1973a:210 (nesting female activities increase with temperature); Steiner, 1973:24 (Canada: Northwest Territories: Frank Channel at 62°43'N); Pulawski, 1974a:41 (in revision of Neotropical *Tachysphex*); Elliott and Kurczewski, 1975:268 (seasonal variation); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); L. Davis, 1978:218 (North Carolina: Kill Devil Hills, data from Krombein, 1953a); Elliott and Kurczewski, 1978:103 (geographic variation); Krombein, 1979b:1631 (in catalog of North American Hymenoptera); Finnamore, 1982:107 (in Sphecidae Fauna of southern Quebec); Spofford and Kurczewski, 1984:663 (*Perilampus hyalinus* (Say) is a hyperparasite of *Senotainia trilineata* (Van der Wulp) and *S. vigilans* Allen, nest parasites of *Tachysphex terminatus*); Radović, 1985:64 (sting apparatus analyzed); Piek and Spanjer, 1986:191 (in list of Sphecidae with known prey); Spofford, Kurczewski and Peckham, 1986:350 (nest parasites in New York State: *Phrosinella aurifacies* Downes, *Senotainia vigilans* Allen, and *S. trilineata* (Van der Wulp), all miltogrammine flies); Steiner, 1986:103 (references to papers on nesting habits); Pulawski, 1988a:156 (in revision of Nearctic *Tachysphex*); Spofford, Kurczewski, and Downes, 1989:256, 257, 258, 260, 261 (nest parasites: *Hilarella hilarella* (Zetterstedt), *Phrosinella aurifacies*, *Senotainia rubriventris* Macquart, miltogrammine flies, and undetermined species of Miltogrammini, summary of previous records for nest parasites *Phrosinella fulvicornis* (Coquillett), *Senotainia vigilans* Allen, and *Sphenometopa tergata* (Coquillett), miltogrammine flies); Kurczewski and Acciavatti, 1990:60 (New York: Cayuga County); Spofford and Kurczewski, 1990:745, 746, 747, 749, 751 (nest parasites: *Hilarella hilarella* (Zetterstedt), *Phrosinella aurifacies* Downes, *Senotainia rubriventris* Macquart, *Senotainia trilineata* (Van der Wulp), *Senotainia vigilans* Allen, and unknown species of Miltogrammini, Sarcophagidae), 1992:997 (species of miltogrammine parasites listed), 1002 (counter-cleptoparasitic behavior: freeze-stop and face-off, diversionary flight), 1003 (chasing flight), 1004 (post-larvipositional counter-cleptoparasitic behavior: abandon burrow), 1005 (abandon prey, clean prey, inordinate amount of post-provisioning time in burrow); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Kurczewski, 1998d:250 (pine barrens in upstate New York), 2000c:115 (locality records from North and South Carolina), 118 (nest and

prey, males emerging from nests); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario); Matthews and Matthews, 2005:66 (Nebraska: Keith County; nesting habits, prey: *Agenotettix deorum* (Scudder), *Boopedon nubilum* (Say), *Melanoplous femurrubrum* (De Geer), *Melanoplus* sp., and *Sparagemon collare* (Scudder), all Acrididae); Kurczewski, 2009:9 (review of known behavioral information, field observations), 81-86 (discussion of nesting behavior); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correras-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:214 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, Manitoba, Nova Scotia, Prince Edward Island, Ontario, Quebec, first record from New Brunswick: no specific locality).

*Larra minor* Provancher, 1887:268, ♀, ♂. Lectotype: ♂, Canada: Ontario: Ottawa (Laval Univ. Quebec), designated by Gahan and Rohwer, 1917:433. Synonymized with *Tachysphex terminatus* by W. Fox, 1893b:520, and G. Bohart in Muesebeck, Krombein, and Townes, 1951:953 (as new synonym).

#### 433. *tessellatus* (Dahlbom)

*Tachytes tessellatus* Dahlbom, 1845:471, ♀, ♂ (as *tessellata*, incorrect original termination). Lectotype: ♂, Greece: Island of Rhodes (Stockholm), designated by de Beaumont, 1947c:662. – A. Costa, 1863:65 (Italy: Calabria Ulteriore: Brancaleone, obviously in error); Frivaldszky, 1877:351 (Hungary: Temes Komitat: Grebenáčz, now in Timiș District in Romania, obviously in error). – **As *Tachysphex panzeri* forme *tessellata***: de Beaumont, 1960a:15 (new status, diagnostic characters, Island of Rhodes). – **As *Tachysphex tessellatus***: Kohl, 1885a:398 (new generic assignment, original description copied); Dalla Torre, 1897:686 (in catalog of world Hymenoptera); de Beaumont, 1947:662 (as synonym of *Tachysphex panzeri*); Pulawski, 1967a:393 (Turkey), 1971:276 (in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Schmidt and Westrich, 1983:123 (Greece); K. Schmidt and Bitsch in Bitsch et al., 2001:274 (in Sphecid Fauna of Western Europe); Straka, 2005b:272 (Turkey: Siirt: 15 km south of Siirt); Yildirim and Ljubomirov, 2005:1797 (Turkey: Erzurum: Şenkaya; Malatya: Kale); Ljubomirov and Yildirim, 2008:223 (in catalog of Crabronidae of Turkey); Pagliano, 2009:184 (Italy: recorded from Calabria by Costa, 1863, but presence in Italy needs confirmation); Yildirim, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); Kaplan and Yildirim, 2021:67 (in catalog of Crabronidae of Turkey); K. Schmidt, Straka, and Bitsch in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:243 (in revision of Sphecidae sensu lato of Europe); Can, 2022a:222 (supernumerary vein in forewing); Can and Saboori, 2023:81 (Turkey: parasitized by larvae of mite *Leptus tridentatus* Saboori, Hakimitabar and Khademi (Trombidiformes: Erythraeidae)); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae sensu lato of Turkey).

#### 434. *testaceipes* Bingham

*Tachysphex testaceipes* Bingham, 1897:193, ♂. Lectotype: ♂, Burma: Tenasserim (BMNH), designated by Pulawski in Krombein and Pulawski, 1994:91. – Giner Marí, 1945c:856 (India: Maharashtra: Borivli near Bombay); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Krombein and Pulawski, 1994:91 (in revision of Sri Lankan *Tachysphex*, description of ♀; Laos, Thailand).

#### 435. *texanus* (Cresson)

*Larrada texana* Cresson, 1873:214, ♀, ♂. Lectotype: ♀, USA: Texas: Bosque County: no specific locality (ANSP), designated by Cresson, 1916:96. – **As *Larra texana***: Patton, 1880b:389 (new generic assignment, in checklist of North American Larrini); Kohl, 1885a:248 (in checklist of world *Larra*); Cresson, 1887:277 (in catalog of North American Hymenoptera). – **As *Tachytes texanus***: Patton, 1879d:368 (new generic assignment, junior secondary homonym of *Tachytes texanus* Cresson, 1873, description of ♂,

western central Kansas), 1880b:392 (in checklist of North American Larrini); Snow, 1881:97 (Kansas: Wallace County: no specific locality).— **As *Tachysphex texanus***: W. Fox, 1894a:513 (new generic assignment, in revision of North American Larrinae); Dalla Torre, 1897:686 (in catalog of world Hymenoptera); Ashmead, 1899d:250 (in checklist of North American Sphecidae); Hartman, 1905:29 (preying on flies, prey impaled on sting, observation probably referring to an *Oxybelus*); Hart, 1907:256 (Illinois); F. Williams, 1914a:166 (in revision of Larrinae of Kansas), 206 (prey carrying); Mickel, 1918b:422 (in catalog of Nebraskan Sphecidae); G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:953 (in catalog of North American Hymenoptera); Krombein, 1967c:394 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Krombein, 1979b:1630 (in catalog of North American Hymenoptera); Rust, Menke, and Miller, 1985:46 (California: Channel Islands), 53 (prey); Kurczewski, 1987a:122 (nesting habits); Frommer, 1988:96 (California: Riverside County: Deep Canyon); Pulawski, 1988a:121 (in revision of Nearctic *Tachysphex*); Ahlstrom, 1995:109 (in checklist of insects of North Carolina); Amarante, 2002:35 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:665 (in checklist of Mexican Sphecidae); Buck, 2004:25 (Canada: in checklist of Crabronidae of Ontario), 30 (distribution within Ontario); 46 (first record from Ontario: Arkell, Eramosa, Ottawa, Primrose); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico); Buck and Bennett, 2025:215 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, Ontario, first record from Saskatchewan: no specific locality).

*Tachysphex sepulcralis* F. Williams, 1914a:169, ♀, ♂. Holotype: ♀, USA: Kansas: Phillips County: no specific locality (KU). Synonymized with *Tachysphex texanus* by Pulawski *in* Krombein, 1979b:1630. — G. Bohart *in* Muesebeck et. al., 1951:952 (in catalog of North American Hymenoptera); Krombein, 1953a:295 (visiting foliage of *Pinus serotina*), 297 (visiting foliage of *Liquidambar styraciflua*), 330 (North Carolina); LaBerge, 1956:528 (holotype in Snow Entomological Museum, as *sepulchralis*); Krombein, 1958f:188 (in supplement to catalog of North American Hymenoptera, *sepulchralis* is correct spelling), 1967c:393 (in supplement to catalog of North American Hymenoptera); Arnaud, 1970:33 (in list of species described by F.X. Williams); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); L. Davis, 1978:217 (North Carolina: Kill Devil Hills, data from Krombein, 1953a).

*Tachysphex maneei* Banks, 1921:19, ♀. Holotype: ♀, USA: North Carolina: Southern Pines (MCZ). Synonymized with *Tachysphex sepulcralis* by G. Bohart *in* Muesebeck, Krombein, and Townes, 1951:952. — Brimley, 1938:443 (North Carolina: Havelock, Hoffman, Raleigh, Southern Pines, Wilmington).

#### **436. *theseus* Arnold**

*Tachysphex theseus* Arnold, 1951:156, ♀. Holotype: ♀, Ghana: Accra (BMNH). — R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 2007a:629 (in revision of African *Tachysphex*).

#### **437. *thysanomerus* Pulawski**

*Tachysphex thysanomerus* Pulawski, 2007a:631, ♀, ♂. Holotype: ♀, Namibia: Swakopmund District: 10 km north of Swakopmund at 22°35.S' 14°32'E (CAS). — F. Gusenleitner and Schwarz, 2013:313 (paratypes in Biologiezentrum, Linz, Austria).

#### **438. *tipai* Pulawski**

*Tachysphex tipai* Pulawski, 1988a:99, ♀, ♂. Holotype: ♀, USA: California: Riverside County: 18 mi. west of Blythe (CAS). — Horta-Vega, Vannoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:384 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico).

**439. titania Arnold**

*Tachysphex titania* Arnold, 1923a:163, ♀, ♂ (as *Titania*, incorrect original capitalization). Lectotype: ♀, Zimbabwe: Bulawayo (SAM), designated by Pulawski, 2007a:634. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:634 (in revision of African *Tachysphex*).

*Tachysphex titania* var. *willowmorensis* Arnold, 1924:55, ♀, ♂. Lectotype: ♂, South Africa: Eastern Cape Province: Willowmore (TMP), designated by Pulawski, 2007a:634. Synonymized with *Tachysphex titania* by Pulawski, 2007a:634. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae). – As *Tachysphex titania willowmorensis*: R. Bohart and Menke, 1976:277 (new status, in checklist of world Sphecidae).

**440. toltec Pulawski**

*Tachysphex toltec* Pulawski, 1988a:83, ♀, ♂. Holotype: ♂, Mexico: Mexico: Teotihuacán Pyramids (CAS). – Amarante, 2002:336 (in catalog of Neotropical Crabronidae).

**441. truncatifrons R. Turner**

*Tachysphex truncatifrons* R. Turner, 1908:484, ♀. Holotype: ♀, "Australia: Queensland": no specific locality (OXUM, Saunders coll., lost?). – R. Turner, 1916a:225 (locality label possibly erroneous), 1916b:254 (in key to Australian *Tachysphex*); Pulawski, 1977a:329 (probably not Australian); Cardale, 1985:243 (in catalog of Australian Sphecidae).

**442. tryssus Pulawski**

*Tachysphex tryssus* Pulawski, 2007a:638, ♀, ♂. Holotype: ♀, South Africa: Northern Province: Happy Rest Nature Reserve at 22°59'S 29°46'E (Plant Protection Research Institute, Pretoria, South Africa). Paratype: Zimbabwe.

**443. tsil Pulawski**

*Tachysphex tsil* Pulawski, 1988a:131 ♀, ♂. Holotype: ♂, USA: Arizona: Cochise County: Portal (CAS).

**444. ulonyovu Pulawski**

*Tachysphex ulonyovu* Pulawski, 2007a:639, ♀, ♂. Holotype: ♀, Zimbabwe: Victoria Falls at 17°56'S 25°50'E (CAS). Paratypes: South Africa. – F. Gusenleitner and Schwarz, 2013:313 (paratypes in Biologiezentrum, Linz, Austria).

**445. ulothrix Pulawski**

*Tachysphex ulothrix* Pulawski, 2007a:642, ♀, ♂. Holotype: ♀, Namibia: Karibib District: 65 km southwest of Usakos (CAS).

**446. undatus (F. Smith)**

*Tachytes undatus* F. Smith, 1856:304, ♀. Holotype or syntypes: ♀, Brazil: Amazonas: Villa Nova, now Parintins (BMNH). – Dalla Torre, 1897:695 (in catalog of world Hymenoptera). – As *Tachysphex undatus*: Pulawski, 1974a:26 (new generic assignment, in revision of Neotropical *Tachysphex*); Sielfeld, 1980b:73 (in checklist of Chilean Sphecidae); Amarante, 2002:36 (in catalog of Neotropical Crabronidae).

*Tachysphex herbstii* Kohl, 1905b:364, ♂ (as *Herbstii*, incorrect original capitalization). Lectotype: ♂, Chile: Concepción (NHMW), designated by Pulawski, 1974a:26. Synonymized with *Tachysphex undatus* by Pulawski, 1974a:26. – Dollfuss, 1989:13 (lectotype in NHMW). – As *Tachysphex pisonoides* var. *herbstii*: Herbst, 1921c:114 (new status); Jaffuel and Piri6n, 1926:377 (Chile: valle de Marga Marga).

**447. unicolor (Panzer)**

*Larra unicolor* Panzer, 1807-1809:pl.16, [♀]. Holotype or syntypes: ♀, Germany: no specific locality (originally Iokisch coll., now lost). Neotype: ♂, Germany: Bayern: F6rth area (ZSBS), designated by Pulawski, 1972:817. – Dahlbom, 1832:55 (redescription); Ghiliani, 1842:25 (listed from Italy: Sicilia); F. Smith,

1851c:19 (Great Britain: Isle of Wight, Berkshire: Sanhurst, Surrey: Weybridge), 1853:63 (in checklist of British Hymenoptera). – **As *Tachytes unicolor***: nec Dahlbom, 1832:55 (new generic assignment = *Tachysphex nitidus*); nec Shuckard, 1837a:90 (= *Tachysphex nitidus*); nec Brullé, 1839:91 (= *Tachysphex unicolor simonyi*); von Siebold, 1839:48 (Germany: Danzig, now Poland: Gdańsk); Dahlbom, 1843:129 (in revision of Sphecidae and Pompilidae), 1845:469 (in key to world *Tachytes*); Lepeletier de Saint Fargeau, 1845:240 (in revision of world Hymenoptera); Lucas, 1849:246 (Algeria: La Calle, Oran); nec F. Smith, 1849b:2550 (= *Tachysphex nitidus*); Tischbein, 1850:8 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); Kirschbaum, 1853:44 (Germany: Herzogtum Nassau: Mainz-Mombach); Ruthe and Stein, 1857:313 (Germany: Berlin area); Schenck, 1857:193 (Germany: in revision of fossorial wasps of Nassau Region); Giraud, 1858:446 (Austria: Wien area); F. Smith, 1858c:89 (in review of British Aculeata, redescription); Taschenberg, 1858:84 (in key to Sphecidae of Germany); Assmus, 1859:610 (Russia: Moscow Governorate); Funk, 1859:59 (Germany: Bayern: Bamberg); Schenck, 1860:149 (Germany: Nassau Region); von Frauenfeld, 1861:103 (Croatia: Dalmatia: no specific locality); A. Costa, 1863:65 (Italy: Calabria Ulteriore: valle di Popsis); Kirchner, 1867:216 (in catalog of European Hymenoptera); nec Taschenberg, 1866:201 (= *Tachysphex nitidus*); Palma, 1869:38 (Italy: Sicilia settentrionale); nec Taschenberg, 1870:12 (= *Tachysphex nitidus*); nec Brischke, 1862:100 (= *Tachysphex nitidus*); A. Costa, 1867b:83 and 1867c:27 (in revision of Italian Sphecidae); Schenck, 1867a:356 (Germany: Nassau Region); Wierzejski, 1868:116 (Ukraine: L'viv area); von Aichinger, 1870:320 (Austria: Tirol); nec Thomson, 1870:242 (= *Tachysphex nitidus*); F. Smith, 1871b:10 (in catalog of British Aculeata); P. Ivanov, 1872:152 (Ukraine: Kharkov Oblast': Kupyansk area); Dours, 1874:139 (in catalog of Hymenoptera of France); nec Thomson, 1874:220 (= *Tachysphex nitidus*); Wierzejski, 1874:257 (Ukraine: L'viv); Beuthin, 1876:231 (Germany: Hamburg area); nec Radoszkowski, 1877:27 and 1886a:29 (= *Liris* sp., see Fig. 26); Becker, 1880:153 (Russia: Sarepta, now Krasnoarmeysk south of Volgograd); Kohl, 1880:180 (Austria: Tirol, and Italy: Trentino–Alto Adige); nec E. Saunders, 1880:250 (= *Tachysphex nitidus*); Magretti, 1881:107 (Italy: Lombardia), 270 (in list of species discussed in this paper); Yaroshevskiy, 1881:125 (Ukraine: Khar'kiv Oblast': Kupyansk); A. Costa, 1882b:22 (Italy: Sardegna), 1883:57 (Italy: Sardegna); Friese, 1883:203 (Germany: Sachsen-Anhalt: Weissenfels; Thüringen: Schwarzta); nec Sickmann, 1883:86 (= *Tachysphex nitidus*); Brischke, 1888b:97 (Germany: Preussen Province, now Poland: Pomorze Region), 1889:204 (Germany: Steegen east of Danzig, now Poland: Stegna east of Gdańsk); Assmuss, 1892:52 (Russia: earlier record from Moscow Governorate repeated); Westerlund, 1893:25 (Russia: Karelian Republic: northern shore of Lake Ladoga); Baldini, 1894:62 (Italy: Modena area); De Stefani Perez, 1894:215 (Italy: Sicilia); Engel, 1894:53 (Germany: Steinbek near Hamburg); De Stefani Perez, 1895:226 (in catalog of Sicilian Hymenoptera); Acloque, 1897:93 (in Sphecid Fauna of France and Algeria); Lüderwaldt, 1897b:29 (Germany: Gollnow, now Poland: Pomorze Region: Goleniów); nec Nevinson, 1900:62 (= *Tachysphex nitidus*); nec Carr, 1901:15 (= *Tachysphex nitidus*); nec Thornley, 1901:63 (= *Tachysphex nitidus*); nec Bradley, 1902:267 (= *Tachysphex nitidus*); nec E. Saunders, 1902b:143, 1903b:17, and 1907a:67 (= *Tachysphex nitidus*); von Heyden, 1905:81 (Germany: Hessen: Frankfurt); nec Morley, 1909:304 (= *Tachysphex nitidus*); G. Carpenter, 1930b:300 (nest closure). – **As *Tachysphex unicolor***: Kohl, 1883e:670 (new generic assignment, Switzerland); nec Morice, 1900c:210 (= *Tachysphex nitidus*); nec E. Saunders, 1903b:17 (= *Tachysphex nitidus*); nec Adlerz, 1904:44 (= *Tachysphex nitidus*); Graeffe, 1911:45 (Italy: Trieste area); nec Hallett, 1912:94 and 1916:221 (= *Tachysphex nitidus*); nec R. Perkins, 1925:154 (= *Tachysphex nitidus*); Dathe, 1971:234, 238, (Germany: Berlin Zoological Garden, phenology); Pulawski, 1972:817 (valid name); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Leclercq, Gaspar, Lajoinie, and Thirion, 1976:178 (Belgium: Chaumont-Gistoux); Pulawski, 1978:218, 221 (in key to Sphecidae of European part of USSR); Guichard, 1977:252 (Great Britain: Surrey); Benedek,

1979:231 (Hungary: Bakony Hills); Jacob-Remacle and Leclercq, 1980:193 (Belgium: gardens in Liège); Pagliano, 1980:127 (Italy: Piemonte); Richards, 1980:43 (in key to Sphecidae of British Isles); Westrich, 1980:629 (Germany: Baden-Württemberg: Tübingen area); Nelson, 1981:145 (Great Britain: Isle of Man); Schmidt, 1981:187 (Germany: Baden-Württemberg); Gayubo, 1982a:110 (northern Spain: Sierra de Béjar), 1982f:254 (Spain: Cádiz Province); Leclercq, 1982a:124 (Belgium: Liège); Dollfuss, 1983b:11 (in catalog of Sphecidae of Austria); Schmidt and Westrich, 1983:123 (Greece); Veenendaal, 1983a:135 (first record from Netherlands); Gayubo, 1984b:87 (Spain: Salamanca Province), 1984c:367 (Portugal: El Algarve Province); Lefeber, 1984:29 (Netherlands: Maastricht); Gayubo and Tormos, 1984:16 (Spain: Valencia Province); Gayubo, 1985c:168 (Spain: Valladolid: Valladolid); Lefeber, 1985:87 (Netherlands: southern Limburg); Gayubo, 1986c:34 (Spain: Zamora Province); Gayubo and Sanza, 1986:49 (Spain: Burgos, Segovia); Gayubo and Tormos, 1986a:17 (Spain: Castellón: Castellón de la Plana); Archer, 1987:110 (Great Britain: Yorkshire); Gayubo, 1987a:114 (Spain: Ciudad Real Province); Asís and Jiménez, 1988:273 (Spain: Castellón Province); Dollfuss, 1988:24 (Austria: Niederösterreich: Oberweiden); Barbier, Rasmont, and Wahis, 1990:32 (Belgium: Hainaut); Gayubo, Asís, and Tormos, 1990a:18 (Spain); Jacobs and Oehlke, 1990:127 (in key to *Tachysphex nitidus* and *unicolor*), 167 (new records from Democratic Germany); Pagliano, 1990:106 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:540 (Austria: Kärnten); Dollfuss, 1991:107 (in key to Sphecidae of North and Central Europe); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Kazenas and Nasyrova, 1991:38 (Kazakhstan: preying on *Sphingonotus maculatus* Uv.); Schembri, 1991:180 (first record from Malta); Kazenas, 1992c:26 (Turkmenistan: Repetek Nature Reserve); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Hohmann, La Roche, Ortega, and Barquín, 1993:238 (detailed records from Canary Islands); Torregrosa, Gayubo, Tormos, and Asís, 1993:18 (Spain: Alicante Province); Archer, 1994b:104 (British Channel Islands); Dollfuss, 1994:103 (endangered in Austria); Gayubo and Borsato, 1994:209 (Italy: Veneto); Schmid-Egger, 1994a:688 (Germany: Rheinland-Pfalz: Höllenberg near Grünstadt); Tormos, Asís, and Gayubo, 1994:188, 208 (Spain: Albacete Province); Archer, 1995a:21 (Great Britain: Yorkshire: Blaxton); Archer and Burn, 1995:58 (Great Britain: Yorkshire: Crow Wood near Finningley); Gorobchishin, 1995:17 (Ukraine: Kanev Nature Reserve); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:9 (in catalog of Italian fauna); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Schmid-Egger, 1995:65 (Germany: northwestern Baden-Württemberg); Schmid-Egger, Risch, and Niehuis, 1995:213 (Germany: summary of records from Rheinland-Pfalz Province); Yeo and Corbet, 1995:34 (in field guide to British solitary wasps); Archer, 1996a:58 (Great Britain: Channel Islands); Arens, 1996:441 (Germany: Bayern: Bayreuth area); Blösch, 1996:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Fowles, 1996:35 (Great Britain: in checklist of aculeates of Wales); Jakubzik and Cölln, 1996b:401 (Germany: Rheinland-Pfalz); Kuhlmann, 1996:221 (Portugal: Serra de Estrela); Schmid-Egger, Schmidt, and Doczkal, 1996:378 (Germany: Baden-Württemberg: may be endangered); Tischendorf, 1996:47 (Germany: Hessen: near Bensheim); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Witt, 1996:106 (Germany: Brandenburg), 111 (locality records); Hinrichsen and Saure, 1997:32 (recognition characters); Schmidt and Schmid-Egger, 1997:30 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg); Dollfuss, Gusenleitner, and Bregant, 1998:515 (Austria: summary of collecting records from Burgenland); Flügel, 1998:61 (Germany: Brandenburg: Unteres Odertal National Park); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings), 1998b:54 (Ukraine: Sumy Oblast': Vakalivshchina); Jakubzik, Schlüter, and Cölln, 1998:1182, 1184 (Germany: Rheinland-Pfalz); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); van der Smissen, 1998:70 (Germany: Niedersachsen, Schleswig-Holstein: Siems); K. Weber, 1998:149 (Germany: Bayern: Bamberg area); Gayubo, García,

Torres, and González, 1999:90 (Spain: Soria Province); Löhr, 1999:62 (Germany: Hessen: Mücke-Merlau near Gemünden); Pauly, 1999:109 (in catalog of Belgian aculeates); Salzmann-Wandeler and Rezbanyai-Reser, 1999:101 (Switzerland: Tessin: Monte Generoso); M. Schwarz, 1999:86 (Austria: Oberösterreich: city of Linz area); Theunert, 1999:138 (Germany: Niedersachsen); Blösch, 2000:236 (in Sphecidae Fauna of Germany); Dressler, 2000:34 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:34 (southeastern Kazakhstan: five localities); Gayubo, González, and Torres, 2000:185 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:106 (Greece); Jacobs, 2000:12 (Germany: Land Mecklenburg-Vorpommern: not endangered); M. Mader and Chalwatzis, 2000:60 (Germany: Hessen: Oderwald Mountains); Schmid-Egger, 2000b:276 (Germany: Baden-Württemberg: shores of Rhine River); Shkuratov, 2000:58 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Vicidomini, 2000b:28 (Italy: previously recorded from Campania); Cungs and Jakubzik, 2001:122, 123 (Luxemburg); Kazenas, 2001:30 (in checklist of Sphecidae of Kazakhstan and Central Asia), 161 (review of known biology); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ljubomirov, 2001b:49 (Bulgaria: Mount Vitoshka near Sofia); Ohl et al., 2001:142 (distribution in Germany by provinces); K. Schmidt and Bitsch *in* Bitsch et al., 2001:274 (in Sphecidae Fauna of Western Europe); Tyrner, 2001:129 (first record from Czech Republic: several localities); van der Smissen, 2001:64 (Germany: Schleswig-Holstein: to be treated as endangered); Herrmann and Zinnert, 2002:26 (Germany: Baden-Württemberg: Bettenberg near Konstanz); Kazenas, 2002a:76 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:141 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Wiśniowski, 2002:70 (Poland: Ojców National Park); Cölln, Esser, and Jakubzik, 2003:63 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Drewes, 2003:143 (Germany: Bayern: Karlstadt am Main); Flügel, 2003:9 (Germany: Hessen: Knüllwald); Gayubo, Özbek, and Yıldırım, 2003:90 (Turkey: Erzurum: Güzelyayla, Tortum, Şenkaya); Generani, Pagliano, González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavalero); Kula and Tyrner, 2003a:150 (Czech Republic: Děčín Sandstone Uplands: forest district Snežník: birch stands in air-polluted area), 2003b:204 (Northern Czech Republic: spruce stands in air-pollution region); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:70 (Germany: in catalog of wasps and bees of Bayern); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); Schmid-Egger, 2003:758 (Italy: Sicilia: Milo, Nebrodi, Noto 30 km west of Siracusa, Randazzo); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:197 (Germany: Bayern: approaching endangered status); Wiśniowski *in* Dylewska and Wiśniowski, 2003:151 (Poland: Ojców National Park); Archer, 2004g:9 (Great Britain: Cumbria: North Walney National Nature Reserve); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:264 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Gayubo et al. 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Jakubzik, Niehuis, and Cölln, 2004:458 (Germany: Rheinland-Pfalz: Roßstein in Rhein valley at 50°06'42"N 7°43'87"E); Kazenas, 2004b:104 (Kazakhstan: western Tien Shan), 2004d:30 (Kazakhstan: Mangyshlak Peninsula); Klein and Lefebvre *in* Peeters, van Achterberg, et al., 2004:426 (in Wasp and Ant Fauna of Netherlands); Shkuratov, 2004a:77 (Russia: Rostov Oblast'), 2004b:167 (Russia: Rostov Oblast': Gosudarstvennyi Muzej-Zapovednik M.A. Sholokhova); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:357 (in catalog of Polish Crabronidae); Stolle et al., 2004:373 (Germany: Sachsen-Anhalt: in red list of Sphecidae); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands);

Wiśniowski, 2004:44 and 60 (in checklist of Polish Sphecidae); Blösch, 2005:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Burger, 2005:36 (Germany: Thüringen); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Ebrahimi, 2005:123 (in key to selected Iranian Sphecidae); Jacobs, 2005a:452 (Bulgaria: Shipka, Troyanska Planina south of Troyan); Pagliano and Negrisoló, 2005:381 (in Sphecidae Fauna of Italy); Pijfers, 2005:50 (Netherlands: Twente: Noordelijke Manderheide); Reder, 2005:954 (Germany: Rheinland-Pfalz: Eisenberg, Flörsheim-Dalsheim, Grünstadt, Monsheim); Saure, 2005:19 (Germany: Berlin); Straka, 2005b:267 (Turkey: many localities); Theunert, 2005a:19 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Ziska and Saure, 2005:82 (Germany: Berlin: Biesenhorster Sand); Feitz, Gloden, Melchior, and Schneider, 2006:82 (Luxemburg: Baggerweieren area in Haff Réimech Nature Reserve); Gorobchishin, 2006:108 (Ukraine: several localities); Liebig, 2006:40 (Germany: Sachsen: Muskauer Heide); Ljubomirov, 2006:543 (Bulgaria: Rhodope Mountains: Milevi Skali Hut, as *unicolor unicolor*); Schneider and Feitz, 2006:68 (a female with reduced hindocellar scars and shifted backward midocellus); N. Schneider, 2006:135 (Luxemburg: anthropogenic habitats); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006b:97 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Bitsch, Dollfuss, Bouček, Schmidt, Schmid-Egger, Gayubo, Antropov, and Barbier, 2007:460 (first recorded from Luxemburg by Cungs and Jakubik, 2001); Burguet, 2007:unnumbered p. 22 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Cungs, Jakubzik, and Cölln, 2007:141 (Luxemburg: Haardt Nature Reserve); Herrmann, 2007b:96 (Germany: Baden-Württemberg: Fürstenberg in Konstanz); Jacobs, 2007:97, 101 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:26 (Germany: northwestern Sachsen); Roche, 2007a:76 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Saure, 2007:83 (Germany: in checklist of Aculeata of Land Brandenburg); G. Turrisi and R. Turrisi, 2007:121 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Vago, 2007:175 (France: départements du Nord, Pas-de-Calais, and Somme); Vepřek and Straka, 2007:203 (in catalog of Sphecidae of Czech Republic and Slovakia), 223 (first record from Slovakia: Vaporské vrchy); Dvořák, Bogusch, Malenovský, Bezděčka, Bezděčková, Holý, Liška, Macek, Roller, Říha, Smetana, Straka, and Šima, 2008:67 (Czech Republic: Hády Hill near Brno); Gayubo, González, Tormos, and Asís, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Kazenas, 2008b:112 (Kazakhstan: foothills of Zailiskiy Alatau: found near loess cliffs), 2008c:255 (Kazakhstan: village Koktum south of Lake Alakol); T. Li, Q. Li, and Cai, 2008:144 (first record from China); Ljubomirov and Yildirim, 2008:224 (in catalog of Crabronidae of Turkey); Theunert, 2008:87 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picon, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Belkheir, 2009:17 (France: Pyrénées-Orientales: commune d'Eyne); Debuysse and Vago, 2009:4 (in list of Sphecidae *sensu lato* of northern France); Flügel, 2009b:63 (Germany: Hessen: Borken, in inactive open brown coal mine); U. Frommer, 2009a:29 (Germany: in checklist of Sphecidae of Hessen); Gayubo, González, Tormos, and Asís, 2009:363 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:623 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Józán, 2009:166 (Croatia); Livory, Chevin, Lair, Sagot, and Baldock, 2009:29 (France: Département de la Manche); Pagliano, 2009:184 (Italy: Abruzzo: Moscutto; recorded from Trentino-Alto Adige by Kohl, 1880); Burguet *in* Durand and Burguet, 2010:52 (France Département d'Ardèche: Ardèche Gorges); Esser, Fuhrmann, and Venne, 2010:38 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:29 (Germany: Bayern: Sulz- and Ottmaringer Tal); Mokrousov, 2010a:62 (Russia: Tatarstan: no specific localities), 2010b:100 (Russia: Tatarstan: no specific localities); Saure, 2010b:175 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:19 (in red list of Aculeata of Germany: relatively common); Smetana, Roller,

Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šíma, Tyrner, Vepřek, and Zeman, 2010:102 (Western Slovakia: recorded from Borská nížina); Treiber, 2010:136 (France: Département du Bas-Rhin); van der Smissen, 2010a:354 (Germany: Schleswig-Holstein: locality records), 2010b:387 (France: Ardèche, Vaucluse: locality records); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:498 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Gogala, 2011:16 (Slovenia); Józán, 2011:181 (in checklist of Sphecidae *sensu lato* of Hungary); Saure, 2011a:7 (Germany: Berlin: former airport Tempelhof), 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg), 2011d:200 (Germany: Sachsen-Anhalt: conservation area “Heide südlich Burg”); Schmid-Egger, 2011a:39 (Italy: Parco delle Alpi Marittime: San Lorenzo); Theunert, 2011a:21 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:177 (Germany: Hessen: not endangered); Ziska and Saure, 2011:110 (Germany: Berlin: Tegeler Fließ valley); Boillat, 2012:227 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:4 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Strumia, Pagliano, and Gayubo, 2012:57 (Italy: Toscana: Riserva di San Rossore); Flügel, 2013a:120 (Germany: Brandenburg: Pimpinellenberg near Oderberg), 2013c:303 (Germany: Hessen: Kassel); Gros, 2013:328 (nesting habits); Kazenas, 2013b:495 (southeastern Kazakhstan: many localities in foothills and low mountains, in Ili River valley); Saure, 2013:22 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:28 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:170 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:17 (Portugal: Douro International Natural Park and Serras de Aire e Candeeiros Natural Park); Wiśniowski and Szczepko, 2013:54 (Poland: Kampinos National Park near Warszawa); Baldock, 2014:356 (Spain: Island of Mallorca); Bitsch, 2014:403 (France: Aisne: Charly, Chateau-Thierry, Varennes; Isère: Arandon; Lozère: Saint-Étienne-Vallée-Française); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Ebrahimi, 2014:41 (Iran: Alborz, Ardebil, Māzandarān, and Sistān-Baluchestān provinces); U. Frommer, 2014:28 (Germany: Hessen: Lorch); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Józán, 2014:133 (Croatia: nine localities); Kazenas, 2014a:135 (Kazakhstan: Karatau Mountain Range); Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces); Zettel, Ockermüller, and Wiesbauer, 2014:167 (Austria: Niederösterreich, discussion of diagnostic characters); Koçak and Kemal, 2015:153 (in checklist of Hymenoptera of Turkey); P. Rosa and Pagliano, 2015:106 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:15 (Germany: Berlin-Lichterfelde); Simon, Lorthiois, and Macé, 2015:55 (France: alluvial terraces in Eure Department: Courcelles-sur-Seine); Bleidorn, Gerth, Hopfe, et al., 2016:11 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Cölln and Jakubzik, 2016:18 (Germany: Rheinland-Pfalz: Vulkaneifel District); Else, Bolton, and Broad, 2016:30 (in checklist of Aculeata of Great Britain and Ireland: England); Schmid-Egger, Dandria, and Xuereb, 2016:80 (in checklist of Crabronidae of Maltese Islands); A. Scholz, 2016:72 (Germany: Sachsen: Kleinraschützer Heide); Stolle and Saure, 2016:925 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Wiśniowski, 2016:130 (Poland: Ojców National Park); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:37 (Turkey: Kars: Sarıkamış: Karakurt, as *unicolor unicolor*); Antropov, 2017b:240 (in catalog of Crabroninae of Russia); Durand and Burguet, 2017:2 (France: Puy-de-Dôme: Réserve Naturelle Nationale Chastreix-Sancy); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Vallée d’Eyne); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:7 (Poland: Inowrocław: nesting in postindustrial soda ash dumping sites); Carminati, Mora, and Cretin, 2019:18 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:20 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:111

(northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Akulov, Proshchalykin, and Mokrousov, 2020:50 (Russia: central Krasnoyarsk Krai); Ben Khedher, Yildirim, and Braham, 2020b:320 (Tunisia: Mahdia: Sidi Alouane: Aouled Kloula); Kejval, Blažej, and Erhart, 2020:107 (western Czech Republic); Rezaei, Fallahzadeh, Saghaei, and Sadeghi, 2020:72 (in catalog of *Tachysphex* of Iran); Saure, 2020:277 (Germany: Sachsen-Anhalt: sand dunes); Cross, Baldock, and Wood, 2021:45 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:67 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:101 (in commented list of Sphecidae *sensu lato* of Poland); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); K. Schmidt, Straka, and Bitsch *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:244 (in revision of Sphecidae *sensu lato* of Europe); Budrys, Budrienė, Lazauskaitė, and Orlovskytė, 2023:110 (first record from Lithuania: two localities); Kaplan and Yildirim, 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:422 (Uzbekistan: distribution); Frommer and Klenke, 2025:165 (Germany: Hessen: Lahntal near Weilburg).

*Larra jurinii* Drapiez, 1819:54, ♀. Holotype or syntypes: ♀, southern France: no specific locality (lost). Synonymized with *Tachysphex nitidus* by Kohl, 1885a:372. – **As *Tachytes jurinei***: Vander Linden, 1829:26 (new generic assignment, bibliographic references, Italy: Bologna, southern France, redescription); Herrich-Schaeffer, 1840:296 (new generic assignment; Germany: Bayern: Regensburg area).

*Tachysphex nitidus* Spinola variété A de Beaumont, 1936a:206.

As *Tachysphex nitidus* (if not stated otherwise, records were cited by Pulawski, 1971:139 and collectively corrected to *Tachysphex unicolor* by Pulawski, 1972:817): Sickmann, 1893:84 (Germany: Niedersachsen: Iburg), present correction based on geographic distribution; Antiga and Bofill, 1904:10 (in catalog of Catalonian Hymenoptera), present correction; Morice, 1911:102 (Algeria); Birula, 1912:543 (Ukraine: Zhytomyr Oblast': Radomyshl'); Dubois, 1922:208, 209 (in key to Belgian Sphecidae), present correction; Hedicke, 1922:271 (Germany: Brandenburg: Gross Machnower Weinberg); Leininger, 1924:121 (Germany: Baden-Württemberg: Sandhausen bei Heidelberg), 1925:355 (Germany: Baden-Württemberg: Kaiserstuhl); Carpentier, Crèvecoeur and Maréchal, 1926:353 (Belgium); Grandi, 1928a:21 (nest and prey), present correction, 1928d:300 (nest and prey), 303 (description of larva), 1929:267 (number of prey per cell, position of egg, nest parasite: *Heteropterina multipunctata* Rondani, a dipteran); Grandi, 1929:288 (Italy: Toscana: valle della Limentra); Giordani Soika, 1932a:22 (Italy: Lido di Venezia); Guiglia, 1932d:474 (Libya: Gialo); Bischoff, 1933:5 (Morocco); Nadig, 1933:79 (Morocco); Giner Marí, 1934:133 (Spain); Grandi, 1935a:110 (Italy); Crèvecoeur and Maréchal, 1936:252 (in catalog of Belgian Hymenoptera); de Beaumont, 1936a:205 (in revision of French *Tachysphex*) and 206 (*Tachysphex nitidus* Spin., variété A), 1936c:8 (specimens in coll. A. Costa, Napoli); Goebel, 1937:42 (Poland: Poznań District: Poznań-Dębin, Puszczykowo); Hardouin, 1938:9 (nest and prey, revue of data by French authors); de Beaumont, 1940b:175 (in revision of *Tachysphex* of Egypt); Guiglia, 1941c:166 (Italy: Calabria: Grande Sila); Leclercq, 1941b:12 (Belgium: Liège area), present correction; Guiglia, 1942:60 (Greece: Island of Rhodes); Giner Marí, 1943a:136 (in Sphecidae Fauna of Spain), present correction; Giordani Soika, 1944:9 (Italy: Sicilia: Messina, Taormina); Guiglia, 1944b:25 (Italy); Deleurance, 1946b:63 (prey, nest), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); de Beaumont, 1947a:197 (in new revision of *Tachysphex* of Egypt); Guiglia, 1948c:201 (Italy: Sardegna: Villasalto); de Andrade, 1949:14 (Portugal); de Beaumont, 1950f:406 (Algeria, Morocco), 1951h:33 (Switzerland: Neuchâtel area), 1953b:15 (*Tachysphex nitidus* form A is synonym of *nitidus*); Móczár, 1953:310 (Hungary); Bischoff and Stadler, 1954:126 (Germany: Bayern: Romberg); de Beaumont, 1954a:58 (Italy), 1954e:91 (Italy); Grandi, 1954:239 (Italy); Aerts, 1955:63 (Germany: Rheinland); de Beaumont, 1955a:183 (Morocco); Steiner, 1955:138 (France: Dordogne); Bytynski-Salz, 1956:226 (Turkey), present correction; de Beaumont, 1956a:199 (Libya); Grandi, 1957:389 (Italy), present correction;

Pulawski, 1958a:181 (Bulgaria: Kniazhevo near Sofia); Compte Sart, 1959:133 (Spain: Mayorca); de Beaumont, 1959a:28 (Italy); Suárez, 1959:57 (Spain: Almería Province); Wolf, 1959b:24 (Germany: Nassau); de Beaumont, 1960b:239 (Libya), 1962b:26 (Spain); Richards, 1964:25 (heathlands in southern England); de Beaumont, 1965a:49 (Greece); B. Klug, 1965:132 (Germany: Baden-Württemberg: Freiburg im Breisgau area); de Beaumont, 1966:212 (Egypt: Abukir and Agami near Alexandria); Scobiola-Palade, 1966b:392 (Romania: Tulcea District: Periprava); Heinrich, 1967:75 (Germany: Niederfranken), present correction; Niedl and Denes, 1967:81 (Czech Republic: Třeboň area), present correction; Pulawski, 1967a:405 (Turkey); Scobiola-Palade, 1967b:42 (Romania); de Beaumont, 1968a:262 (Canary Islands: Fuertaventura, Lanzarote); Scobiola-Palade, 1968b:142 (Romania: Island of Letea in delta of Danube), 1968c:384 (Romania: Budești, Comana, Frătești, Giurgiu, Herăstrău); Benedek, 1969a:84 (Hungary; marshy meadow); Dathe, 1969:439 (Germany: Berlin Zoological Garden), present correction; de Beaumont, 1970a:401 (Afghanistan); Leclercq, 1970:map 32 (distribution in Belgium); Grandi, 1971:202 (nesting habits), 503 (description of larva); Königsmann, 1971:107 (Spain: Gerona: Palamós), present correction; Pulawski, 1971:139 (in revision of Palearctic *Tachysphex*); Schmidt, 1971b:36 (Germany: Rheinland-Pfalz: Mainzer Sand), present correction; Tsuneki, 1971m:31 (China: Peking: Tien-dang), present correction; Wolf, 1971:374 (Italy: Trentino–Alto Adige: Alpi Siusi), present correction; Scobiola-Palade, 1972:150 (Romania: delta of Danube: Caraorman), present correction; Simon Thomas, 1972:182 (France: Landes, Lot-et-Garonne), present correction; Tsuneki, 1972e:392 (Mongolia), present correction; de Beaumont, Bytinski-Salz, and Pulawski, 1973:8 (Israel), present correction; Wolf, 1973:41 (Germany: Siegerländer Hüttensand), present correction; Erlandsson, 1974:72 (Malta, Spain, Yugoslavia), present correction; Scobiola-Palade, 1974:145 (Romania: Sărăturile sandbank in Danube delta), present correction; Simon Thomas, 1976:5 (France: Lot-et-Garonne: Forêt de Campet), present correction; Kolesnikov, 1977:318 (Russia: Bryansk Oblast') present correction; Báez and Ortega, 1978:192 (Canary Islands) present correction; Kazenas, 1978b:121, 132 (in key to Sphecidae of Kazakhstan and Central Asia, present correction; Marion, 1978:88 (France: Nièvre Department), present correction; Richards, 1979:397 (British Channel Islands), present correction; Schembri, 1991:180 (citation of Erlandsson, 1974).

### **ssp. *simonyi* Kohl**

As *Tachysphex unicolor*: Brullé, 1839:91 (Canary Islands), corrected to *Tachysphex nitidus simonyi* by Pulawski, 1971:146.

*Tachysphex simonyi* Kohl, 1892:218, ♀ (as *Simonyi*, incorrect original capitalization). Lectotype: ♀, Canary Islands: Gran Canaria (NHMW), designated by Pulawski, 1971:147. – Dalla Torre, 1897:685 (in catalog of world Hymenoptera); Saunders, 1903c:209 (Canary Islands: Tenerife: Orotava), 1904a:201 (Canary Islands: Tenerife); de Beaumont, 1947c:669 (redescription), 1954b:3 (Canary Islands: Tenerife), 1968a:262 (Canary Islands: Gran Canaria, Tenerife, Gomera, Hierro); Simon Thomas, 1969a:120 (Canary Islands: Tenerife); Wolf, 1980:73 (Canary Islands). – As *Tachysphex nitidus simonyi*: Pulawski, 1971:146 (new status, in revision of Palearctic *Tachysphex*); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Báez and Ortega, 1978:192 (Canary Islands); Dollfuss, 1989:13 (lectotype in NHMW); Hohmann, La Roche, Ortega, and Barquín, 1993:239 (detailed locality records from Canary Islands); Ljubomirov, 2008:257 (known from La Palma, Canary Islands).

### **448. *usakos* Pulawski**

*Tachysphex usakos* Pulawski, 2007a:644, ♀, ♂. Holotype: ♀ (not ♂), Namibia: Karibib District: 50 km southwest of Usakos (CAS).

### **449. *utina* Pulawski**

*Tachysphex utina* Pulawski, 1988a:178, ♀, ♂. Holotype: ♂, USA: Florida: Putnam County: Welaka (USNM).

**450. vanharteni Straka and Schmid-Egger**

*Tachysphex vanharteni* Straka and Schmid-Egger, 2017:452, ♀, ♂. Holotype: ♂, Unites Arab Emirates: Jebel Jibir at 25.65°N 55.11°E (Ch. Schmid-Egger, personal collection, Berlin). – Straka and Schmid-Egger, 2017:453-455 (color photographs); Gadallah, 2020b:54 (in list of aculeate wasps of Arabian Peninsula).

**451. vanrhynsi Arnold**

*Tachysphex vanrhynsi* Arnold, 1940:120, ♂. Holotype: ♂, South Africa: Cape Province: Vanrhynsdorp (TMP). – R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:111 (South Africa: visiting flowers of *Galenia sarcophylla* Fenzl, Aizoaceae, and *Limeum africanum* L., Molluginaceae); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Pulawski, 2007a:646 (in revision of African *Tachysphex*).

**452. vardyi Pulawski**

*Tachysphex vardyi* Pulawski, 1977a:233, ♀, ♂. Holotype: ♀, Australia: Western Australia: south of Perth (BMNH). – Cardale, 1985:243 (in catalog of Australian Sphecidae).

**453. venator Arnold**

*Tachysphex venator* Arnold, 1960b:468, ♀. Holotype: ♀, Zambia: Abercorn, now Mbala (SAM). – R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 2007a:648 (in revision of African *Tachysphex*).

**454. verticalis Pulawski**

*Tachysphex verticalis* Pulawski, 1982:36, ♀, ♂. Holotype: ♀, California: Riverside County: 9 mi. west of Beaumont (UCD). – Pulawski, 1988a:104 (in revision of Nearctic *Tachysphex*); Amarante, 2002:36 (in catalog of Neotropical Crabronidae); nec Ratzlaff, 2016:26, 36 (= *Tachysphex pompiliformis*); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correas-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico).

**455. vestitus Kohl**

*Tachysphex vestitus* Kohl, 1892:217, ♂. Holotype or syntypes: ♂, Algeria: Biskra (NHMW). – Dalla Torre, 1897:686 (in catalog of world Hymenoptera); Morice, 1911:104 (Algeria: Biskra; description of ♀); Storey, 1916:110 (Egypt: Heliopolis, Maadi); nec Maidl, 1924:236 (= *Tachysphex micans*); de Beaumont, 1940b:173 (in revision of *Tachysphex* of Egypt); Honoré, 1942:55 (Egypt: Kerdaceh, Fayum = Kom Osheim, Wadi um Assad); de Beaumont, 1947a:191 (in new revision of *Tachysphex* of Egypt), 1950d:20 (Egypt: Siwa oasis), 1950f:405 (Algeria), 1955a:182 (Morocco), 1956a:198 (Libya), 1958b:61 (Algeria: Tassili des Ajjer), 1960b:239 (Libya); Pulawski, 1964:95 (Egypt: Abu Rawash, Dahshur, Kom Osheim, Saqqara; Sudan: Wadi Halfa), 1971:382 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:12 (Israel); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Dollfuss, 1989:13 (type material in NHMW); Roche and Zalut, 1994:115 (Egypt: Sinai Peninsula); Pulawski, 2007a:650 (in revision of African *Tachysphex*); Roche, 2007a:84 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Gadallah, 2020b:54 (in list of aculeate wasps of Arabian Peninsula).

**456. vitiensis F. Williams**

*Tachysphex vitiensis* F. Williams, 1928:166, ♀. Holotype: ♀, Fiji: Viti Levu Island: Suva Bay (Bishop Mus.). – F. Williams, 1947:318 (listed from Fiji), 334 (description of ♂); Fullaway, 1957:279 (in checklist of Hymenoptera of Fiji); Arnaud, 1970:33 (in list of species described by F.X. Williams); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 1977a:304 (in revision of Australian *Tachysphex*); Evenhuis, 2007:6 (in checklist of Hymenoptera of Fiji).

**457. vividus Pulawski**

*Tachysphex vividus* Pulawski, 1977a:274, ♀, ♂. Holotype: ♂, Australia: New South Wales: 25 mi. west of Nyngan (ANIC). – Cardale, 1985:243 (in catalog of Australian Sphecidae).

#### 458. *vulneratus* R. Turner

As *Tachytes fluctuata* (part): Magretti, 1884c:587 (Eritrea), corrected to *Tachysphex vulneratus* by Pulawski, 2007a:654.

*Tachysphex vulneratus* R. Turner, 1917b:325, ♀, ♂. Lectotype: ♀, eastern Zambia: Niamadzi River near Nawalia (BMNH), designated by Pulawski, 1975a:312. – Arnold, 1923a:155 (Zimbabwe; in revision of southern African *Tachysphex*), 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Krombein and Pulawski, 1994:88 (in revision of Sri Lankan *Tachysphex*); Pretorius, 2005:116 (use of geometric morphometrics to determine sexual dimorphism in wing venation); Straka, 2005b:274 (first record from Turkey: İçel: Büyükeçeli); Pulawski, 2007a:654 (in revision of African *Tachysphex*); Yıldırım, Ljubomirov, and Lelej, 2014:12 (distribution in Turkey by biogeographic provinces, as *vulneratus*); Kaplan and Yıldırım, 2021:67 (in catalog of Crabronidae of Turkey), 2023:1688 (in checklist of Sphecidae *sensu lato* of Turkey).

*Tachysphex karrooensis* Arnold, 1923a:158, ♀, ♂. Holotype: sex not stated, South Africa: Eastern Cape Province: Willowmore (SAM). Synonymized with *Tachysphex vulneratus* by Pulawski in Krombein and Pulawski, 1994:88. – Arnold, 1930:3 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:274 (in checklist of world Sphecidae); Gess, 1981:19 (South Africa: Eastern Cape Province: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils).

*Tachysphex foucauldi* de Beaumont, 1952c:190, ♂. Holotype: ♂, Algeria: Hoggar: Tinhamour (Lausanne). Synonymized with *Tachysphex vulneratus* by Pulawski in Krombein and Pulawski, 1994:88. – de Beaumont, 1956a:197 (Chad: Tibesti: Tao; description of ♀); Pulawski, 1971:379 (in revision of Palearctic *Tachysphex*). – As *Tachysphex vulneratus foucauldi*: Pulawski, 1975a:312 (new status); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae).

#### 459. *walkeri* R. Turner

*Tachysphex walkeri* R. Turner, 1908:487, ♀. Holotype: ♀, Australia: Queensland: Sand Islet on Long Reef (BMNH). – R. Turner, 1916b:254 (in key to Australian *Tachysphex*); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 1977a:260 (in revision of Australian *Tachysphex*); Alcock, 1980b:259 (prey: Blattellidae); Cardale, 1985:244 (in catalog of Australian Sphecidae); Naumann, 1993:186 (Australia: Queensland: Heathlands area in Cape York), 1998:186 (Australia: northwest Queensland: Musselbrook area, approximately 18°40'S 138°23'E); Pagliano, 2003a:509 (Australia: Northern Territory and Queensland).

#### 460. *waltoni* Arnold

*Tachysphex waltoni* Arnold, 1940:121, ♀ (as *Waltoni*, incorrect original capitalization). Holotype: ♀, South Africa: Cape Province: Albany District (TMP). – R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:111 (South Africa: visiting flowers of *Bergia glomerata* L. f., Elatinaceae); Pulawski, 2007a:658 (in revision of African *Tachysphex*).

#### 461. *williamsi* R. Bohart

*Tachysphex williamsi* R. Bohart, 1962a:38, ♀, ♂. Holotype: ♂, USA: California: San Francisco County: Lone Mountain, now site of University of San Francisco (CAS). – Krombein, 1967c:394 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Krombein, 1979b:1630 (in catalog of North American Hymenoptera); Elliott and Kurczewski, 1985:294 (prey); Pulawski, 1988a:62 (in revision of Nearctic *Tachysphex*); Matthews and Matthews, 2005:67 (Nebraska: Keith County; nesting habits, prey: second instar larva of *Melanoplus angustipennis* Dodge, Acrididae); Ratzlaff, 2016:26 (Canada: firsts record from British Columbia: Southern Interior),

36 (British Columbia: Penticton); Buck and Bennett, 2025:215 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, Saskatchewan, first record from British Columbia: no specific locality).

**462. *xanthoptesimus* Pulawski**

*Tachysphex xanthoptesimus* Pulawski in Krombein and Pulawski, 1994:50, ♀, ♂. Holotype: ♀, Sri Lanka: Monaragala District: 20.8 km east of Uda Walawe along Mau Aru (USNM). Paratypes: southern India.

**463. *yarrowi* de Beaumont**

*Tachysphex* No. 17: de Beaumont, 1940b:178 (Egypt), corrected to *Tachysphex yarrowi* by de Beaumont, 1960b:239.

*Tachysphex yarrowi* de Beaumont, 1960b:239, ♀. Holotype: ♀, Libya: Cyrenaica: Capuzzo (BMNH). – Pulawski, 1964:96 (Egypt: Abu Rawash, Ghiza; description of ♂), 1971:193 (in revision of Palearctic *Tachysphex*); de Beaumont, Bytinski-Salz, and Pulawski, 1973:9 (Israel); R. Bohart and Menke, 1976:277 (in checklist of world Sphecidae); Pulawski, 2007a:661 (in revision of African *Tachysphex*); Roche, 2007a:77 (in checklist of Egyptian Crabronidae), 2007b:5 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

**464. *yolo* Pulawski**

*Tachysphex yolo* Pulawski, 1982b:37, ♀, ♂. Holotype: ♂, USA: California: Yolo County: Davis (UCD). – Elliott and Kurczewski, 1985:294 (prey: *Melanoplus foedus* Scudder, Acrididae); Kurczewski, 1987a:119 (nesting habits); Pulawski, 1988a:117 (in revision of Nearctic *Tachysphex*); Amarante, 2002:36 (in catalog of Neotropical Crabronidae); Field, Ohl, and Kennedy, 2011:735 (in molecular cladistic analysis of Ammophilini); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico).

**465. *yuma* Pulawski**

*Tachysphex yuma* Pulawski, 1982b:39, ♀, ♂. Holotype: ♂, Mexico: Baja California Sur: La Paz (CAS). – S. Frommer, 1988:96 (California: Riverside County: Deep Canyon); Pulawski, 1988a:120 (in revision of Nearctic *Tachysphex*); Amarante, 2002:36 (in catalog of Neotropical Crabronidae); Escobar-Gómez, Horta-Vega, Venegas-Barrera, Coronado-Blanco, Vannoye-Eligio, and Correrias-Sandoval, 2021:7 (in analysis of geographic distribution in Mexico).

**466. *zambius* Pulawski**

*Tachysphex zambius* Pulawski, 2007a:663, ♂. Holotype: ♂, Zambia: Southern Province: 56 road km northeast of Choma at 16°37'S 27°20'E (CAS).

**467. *ziziphi* Pulawski**

*Tachysphex ziziphi* Pulawski, 2007a:665, ♀, ♂. Holotype: ♂, Namibia: Okahandja District: Waldau River 17 km west of Okahandja at 21°57'S 16°45'E (CAS). Paratypes: South Africa.

**sp.**

Ferton, 1894:216 (= *Tachysphex gibbus*); Harrington, 1902:222 (Canada: Ontario: Ottawa); E. Saunders, 1902b:143 (British Channel Islands; as n. sp.), 1904c:604 (Spain: Mayorca); von Schulthess, 1909:441 (Libya: Djebel Gosseba, sp. near *panzeri*); Morice, 1911:102 (Algeria: Biskra); Nurse, 1914:444 (India: Assam); Storey, 1916:110 (Egypt); Bischoff, 1930a:219 (Tajikistan: Pamir); Roth, 1930:83 (Algeria: Tassili des Ajjjer); Bondroit, 1932:37 (Belgium: Solbosch); Rau, 1933:184 (Panama: Barro Colorado Island; species with red gastral tip preying on acridids, all-black species preying on cockroaches); Roth, 1934b:190 (Algeria); Bischoff, 1935:259 (Kashmir); von Schulthess, 1935:305 (Australia: Northern Territory: Burnside); F. Williams, 1936b:128 (Solomon Islands, two species); Yasumatsu, 1942c:112 (China: Beijing; Nei Mongol: Apaka at 44°N 114.96°E); Giner Marí, 1945b:361 (Canary Islands: Gran

Canaria: El Carrizal), 362 (Western Sahara), 1947:25 (Western Sahara); Gibson-Hill, 1950:160 (Cocos Islands); Krombein, 1951a:143 (Virginia: Dunn Loring; visiting tulip-tree honeydew); Wolcott, 1951:841 (in review of insects of Puerto Rico); Krombein, 1953b:132 (= *Tachysphex crassiformis*); Balthasar, 1954b:269 (Palestine); Callan, 1954:24 (Venezuela: Paria Peninsula: Cristóbal Colón); Krombein and Evans, 1954:233 (Florida), 1955:231 (= *Tachysphex crassiformis*); Vesey-Fitzgerald 1956a:287 (sp. near *blatticida*: Trinidad, prey: *Cariblatta*); de Beaumont, 1957b:137 (northern Iran; *panzeri* species group and *pompiliformis* species group), 1958b:62 (Algeria: Tassili des Ajjer; five spp.); Pulawski, 1958a:181 (= *Tachysphex rugosus*); de Beaumont, 1960b:238 (three species of the *panzeri* group; Libya), 1961c:50 (Greece: Island of Crete; spp. near *nitidus*), 1961e:5 (Iraq); Krombein, 1961a:82 (visiting flowers of mat euphorbia, *Euphorbia albomarginata* Torr. and A. Gray); Diniz, 1964a:6 (Portugal: Rezende, Sines); Myartseva, 1965:78 (Turkmenistan: Akibay); Lavigne and Pfadt, 1966:31 (Wyoming; preying on grasshopper *Melanoplus occidentalis* (Thomas)); de Beaumont, 1968a:263 (as sp. aff. *nitidus* = *Tachysphex nitidus ibericus*); de Beaumont, 1960a:19 (Greece: Island of Rhodes), 1967b:510 (South Africa); Pulawski, 1967a:397 (Turkey; sp. near *catharinae*); de Beaumont, 1968a:263 (spp. similar to *Tachysphex nitidus*); Horning and Barr, 1970:103 (USA: Idaho: Craters of the Moon National Monument); Alayo Dalmau, 1973:177 (in catalog of Cuban Hymenoptera); Hurd and Linsley, 1975:116 (Arizona: Cochise County: Douglas; New Mexico: Hidalgo County: Lordsburg; on flowers of *Larrea tridentata* (De Candolle) Coville, Zygophyllaceae); Kumar, Lavigne, Lloyd, and Pfadt, 1976:52 (USA: Colorado: Pawnee National Grassland); C. Ward et al., 1977:156 (associated with mesquite (*Prosopis glandulosa* Torr.), Fabaceae); Gess, 1981:17 (sp. Near *Tachysphex modestus*; South Africa: Eastern Cape Province: Hilton Farm 18 km west-northwest of Grahamstown; in old or abandoned burrows of *Parachilus insignis*), 54 and 69 (facultative nesting in preexisting cavities); Roche, 1981:3 (in checklist of Sphecidae of United Arab Emirates); Hilchie, 1982:107 (Alberta: Empress); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Blow Sand Mountains); Sk. Yamane, 1983:86 (Indonesia: Krakatau Islands); G. Ferguson, 1984a:299 (prey of *Philanthus zebratus*); Parks, 1986:35 (California: Torrey Pine State Reserve; three species); Hensen and van Ooijen, 1987:12 (near *Tachysphex liriformis*; Turkey); Ch. Porter, 1987:45 (Chile: Tarapacá Region); F. Fernández, 1990:24 (Colombia: Meta: Parque Nacional Natural La Macarena); Hilburn et. al., 1990:175 (Bermuda); Amarante, 1993:19 (northeastern Brazil); Hohmann, La Roche, Ortega, and Barquín, 1993:234 (Canary Islands, aff. *Tachysphex gracilitarsis*), 235 (Canary Islands: aff. *Tachysphex nitidus*); Schmid-Egger, Risch, and Niehuis, 1995:212 (sp. aff. *Tachysphex psammobius*; Germany: Rheinland-Pfalz); S. Gess, 1996:266 (visiting flowers of *Limeum aethiopicum* Burm.), 275 (visiting flowers of *Conyza bonariensis* (L.) Cronq.); Schmid-Egger, Schmidt, and Doczkal, 1996:378 (sp. aff. *Tachysphex psammobius*; Germany: Baden-Württemberg: endangered); González, Gayubo, and Torres, 1998:72, 73 (Spain: Valladolid Province); Naumann, 1998:186 (Australia: northwest Queensland: Musselbrook area, approximately 18°40'S 138°23'E); González, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega, near *Tachysphex blattivorus*, near *Tachysphex nitidus*); Meagher and Mitchell, 1999:368 (collected in pheromone- and synthetic floral volatile-baited traps); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Esenbekova and Kazenas, 2000:29 (southeastern Kazakhstan, aff. *Tachysphex ctenophorus*); S. Gess and F. Gess, 2003:111 (South Africa: floral records for three species); Pitts, 2003:485 (nest parasite: *Dilophotopsis concolor crassa* (Viereck), a mutillid); Evenhuis, 2007:6 (in checklist of Hymenoptera of Fiji); Cungs, Jakubzik, and Cölln, 2007:140 (Luxemburg: Haardt Nature Reserve, near *obscuripennis*); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 46 (Mexico: Tamaulipas, seven species); Schmid-Egger, 2011a:39 (France: Parc National du Mercantour: Millefont); Tripotin, 2011:23 (France: Seine-Maritime: artificial sand site near Sandouville); Villemant, 2011:134 (Vanuatu: island of Espiritu Santo); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:356 (in new catalog of Sphecidae of Saudi Arabia, species near *Tachysphex panzeri*); Vieira, Oliveira, Brewster, and

Gayubo, 2013:17 (Portugal: Douro International Natural Park); Silvestre, Demétrio, Trad, de Oliveira Lima, Auko, and de Souza, 2014:69 (Brazil: Mato Grosso do Sul: dry forests in Bodoquena Mountain Range and Brazilian Chaco); Kemal and Koçak, 2016:33 (Turkey: Van: in list of Pterygota of Artos Mountain); Straka and Schmid-Egger, 2017:437 (United Arab Emirates, species near *Tachysphex mocsaryi* Kohl); Trad and Silvestre, 2017:5 (Brazil: Mato Grosso do Sul); Field, Gonzalez-Voyer, and Boulton, 2020:7 (evolution of parental care); Gadallah, 2020b:54, 55 (in list of aculeate wasps of Arabian Peninsula, nine species); Barthélémy and Guénard, 2025:17 (China: Hong Kong).

### **SPECIES DESCRIBED IN *TACHYSPHEX* AND TRANSFERRED TO OTHER GENERA**

*capitalis* E. Saunders, 1910 = *Parapiagetia*  
*falsus* F. Morawitz, 1893 = *Prosopigastra*  
*genicularis* F. Morawitz, 1890 = *Parapiagetia*  
*globiceps* F. Morawitz, 1889 = *Prosopigastra*  
*integer* Kohl, 1892 = *Parapiagetia*  
*intermedius* Viereck, 1906 = *Tachytes*  
*longiventris* Cameron, 1912 = *Liris*  
*melanarius* Kohl, 1888 = *Larropsis*  
*nudus* Nurse, 1903 = *Prosopigastra*  
*pollux* Nurse, 1903 = *Holotachysphex holognathus* (Morice, 1897)  
*punctulatus* Kohl, 1884 = *Larropsis*  
*rufogeniculatus* Cameron, 1912 = ? *Liris anticus* (F. Smith, 1856)  
*rufomaculatus* Cameron, 1889a = *Tachytes amazonus* F. Smith, 1856  
*semiappendiculatus* Cameron, 1912 = *Liris*  
*socius* Kohl, 1888 = *Larropsis*  
*substriatulus* R. Turner, 1917 = *Parapiagetia*  
*tarsalis* Dalla Torre, 1897 = *Tachytes tarsalis* Spinola, 1839

### **NOMINA NUDA IN *TACHYSPHEX***

*Tachysphex Antigae* Tourmier: Antiga and Bofill, 1904:11 (in catalog of Catalonian Hymenoptera); Mercet, 1910b:145 (listed); Ceballos, 1956:375 (in catalog of Hymenoptera of Spain).  
*Tachysphex laevidorsis* Pérez: Fertón, 1912, 1923. Synonymized with *Ancistromma punctulatum*, now *Larropsis punctulata*, by Pulawski in R. Bohart and Menke, 1976:260.  
*Tachysphex obscurus* Cresson: J. Smith, 1910:683 (in new list of insects of New Jersey: Gloucester County).  
*Tachysphex Reticulatus* Pérez: Antiga and Bofill, 1904:11 (in catalog of Catalonian Hymenoptera); Mercet, 1910b:165 (listed); Ceballos, 1956:377 (in catalog of Hymenoptera of Spain).

### **UNRECOGNIZABLE MISSPELLING**

*Tachysphex spinipes* Panzer: Móczár and Henter, 1907:205 (Romania: Caraş-Severin: Mehádia)