

Last updated: 12 January 2026

## OXYBELUS

*Oxybelus* Latreille, 1796:129, no included species. Type species: *Crabro uniglumis* of Fabricius, 1775 [= *Vespa uniglumis* Linnaeus, 1758], designated by Latreille, 1802b:343 (first included species).

*Notoglossa* Dahlbom, 1845:514. Type species: *Notoglossa sagittata* Dahlbom, 1845 [= *Oxybelus lamellatus* Olivier, 1811], by monotypy.

*Alepidaspis* A. Costa, 1882b:35. Type species: *Alepidaspis diphyllus* A. Costa, 1882, by monotypy.

*Anoxybelus* Kohl, 1924:274. Type species: *Oxybelus maidli* Kohl, 1924, by monotypy.

*Gonioxybelus* Minkiewicz, 1934:251. Not available: type species not designated (Article 13.3).

*Orthoxybelus* Minkiewicz, 1934:251. Not available: type species not designated (Article 13.3).

*Gonioxybelus* Pate, 1937c:28. Validation of *Gonioxybelus* Minkiewicz, 1934. Type species: *Oxybelus nigripes* Olivier, 1811 [= *Apis trispinosa* Fabricius, 1787], by original designation.

*Orthoxybelus* Pate, 1937c:28. Validation of *Orthoxybelus* Minkiewicz, 1934. Type species: *Vespa uniglumis* Linnaeus, 1758, by original designation.

*Euoxybelus* Noskiewicz and Chudoba, 1950:300. Not available: type species not designated (Article 13.3).

*Latroxybelus* Noskiewicz and Chudoba, 1950:300. Type species: *Oxybelus latro* Olivier, 1811, by monotypy.

Keys: Maidl, 1930:660 (North and Central Europe); de Beaumont, 1942b:419 (Switzerland); Verhoeff, 1948:158 (western Palearctic); Faester, 1949:1 (western Palearctic); Noskiewicz and Chudoba, 1950:315 (Silesia Region of Poland); Guiglia, 1953a:55 (Italy); Blüthgen, 1954:143 (Central Europe); Guiglia, 1955:102 (Great Britain); Móczár, 1958e:281 (western Palearctic species); R. Bohart and Schlinger, 1957:103 (California); Mingo Pérez, 1966:57 (Iberian Peninsula); Tsuneki, 1982d:13 (Taiwan); Guichard, 1990b:277 (Arabia); R. Bohart, 1992:157 (Chile), 1993c:19 (*emarginatus* species group in South America), 1993d:65 (*Oxybelus uniglumis* and *O. scutellatus* species groups in South America), 1993e:159 (Central America and Caribbeans); Guichard, 1993b:529 (Europe); Manikandan, Dey, and Farooqi, 1999:5 (India); Schmid-Egger, 2011b:559 (*lamellatus* species group of Arabian Peninsula).

Recognition: de Beaumont, 1950f:414 (species of *lamellatus* group).

Nest guarding by male: Hook and Matthews, 1980.

Molina, 1999 reports a mirid prey (*Rhinacloa* sp.) in the nest of an undetermined *Oxybelus* near Lima, Peru. Nest: Barth, 1910:120.

D. Peckham, 1991 (vivipositing by female sarcophagid used as prey, subsequent destruction of the wasp's progeny by the sarcophagid larvae).

Review of biology: Kazenas, 2001b:179.

### 1. *abdominalis* C. Baker

*Oxybelus abdominalis* C. Baker, 1896b:158, ♂. Holotype or syntypes: ♂, USA: Colorado: Fort Collins (USNM). – Strickland, 1947:127 (Canada: Alberta: Medicine Hat, Vermilion); Burks in Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:158 (in checklist of North American *Oxybelus*, as *abdominale*), 1957:123 (in revision of Californian *Oxybelus*, as *abdominale*); Krombein, 1958f:200 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus calligaster* reported), 1961a:81 (visiting flowers of mat euphorbia, *Euphorbia albomarginata* Torr. and A. Gray, Euphorbiaceae, as *abdominale*); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Krombein, 1979b:1653 (in catalog of North American Hymenoptera); Hanks and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain);

Frommer, 1988:94 (California: Riverside County: Deep Canyon); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 161 (in key to Central American and Caribbean *Oxybelus*); Amaranante, 2002:43 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Alberta, Manitoba, and Saskatchewan: no specific locality). – **As *Notoglossa abdominalis***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae); H. Smith, 1908b:405 (in revision of Nebraskan Sphecidae); Mickel, 1918b:363 (in catalog of Nebraskan Sphecidae).

*Notoglossa calligaster* Viereck, 1906a:214, ♀. Holotype: ♀, USA: Kansas: Morton County: no specific locality (KU). Synonymized with *Oxybelus abdominalis* by R. Bohart and Schlinger, 1956c:158. – **As *Oxybelus calligaster***: Burks in Muesebeck, Krombein, and Townes, 1951:1031 (new generic assignment, in catalog of North American Hymenoptera).

## 2. *acutissimus* Bischoff

*Oxybelus acutissimus* Bischoff, 1912:226, ♀. Holotype: ♀, Zaire: Awakubi on Aruwimi River west of Lake Albert, now Mwitanzige (ZMHU). – Arnold, 1927:82 (original description translated into English), 1930:14 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae).

## *ssp. propinquus* Arnold

*Oxybelus acutissimus* var. *propinquus* Arnold, 1927:83, ♀, ♂. Syntypes: Zimbabwe: Bulawayo, Khami, Sawmills; South Africa: Transvaal: Pietersburg, now Limpopo Province: Polokwane (SAM, TMP). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae), 1951:166 (Ethiopia: Haramaya). – **As *Oxybelus acutissimus propinquus***: R. Bohart and Menke, 1976:366 (new status, in checklist of world Sphecidae); Gess, 1981:20 (South Africa: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils); Rodgers and Homewood, 1982:233 (Tanzania: Usambara Mountains); Dollfuss, 2008a:464 (locality records from Benin, Kenya, Malawi, Mozambique, South Africa, Tanzania, Zambia, and Zimbabwe).

## 3. *adductus* Kazenas

*Oxybelus adductus* Kazenas, 1994f:906, ♀, ♂. Holotype: ♀, Kazakhstan: Ili River 17 km northwest of village Bakanas (ZIN). – Esenbekova and Kazenas, 2000:43 (southeastern Kazakhstan: near Kapchagay, near Taldy-Korgan); Kazenas, 2001b:36 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:89 (geographic distribution, collecting localities in Kazakhstan); Dollfuss, 2008a:464 (locality records from Kazakhstan).

## 4. *admissus* Kazenas

*Oxybelus admissus* Kazenas, 1990:61, ♀. Holotype: ♀, Kazakhstan: Bakanas area (ZIN). – Kazenas, 2001b:36 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:89 (geographic distribution, collecting localities in Kazakhstan), 2008a:103 (southeastern Kazakhstan: near Bakanas in Ili River valley).

## 5. *aestuosus* Bingham

*Oxybelus aestuosus* Bingham, 1897:318, ♂. Holotype: ♂, Burma: Tenasserim: no specific locality (BMNH). – Pate, 1938b:387 (in list of Oriental Oxybelini, as *aestuosum*); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Manikandan and Dey, 2001:263 (in checklist of Oriental *Oxybelus*).

## 6. *aethiopicus* Cameron

*Oxybelus aethiopicus* Cameron, 1906:328, sex not stated. Holotype or syntypes: South Africa: Eastern Cape Province: Pearston (BMNH?). – Arnold, 1927:107, 108 (in revision of southern African *Oxybelus*), 1930:15 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Gess, 1981:20 (South Africa: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils); S. Gess and F. Gess, 2003:103 (South Africa: visiting flowers of *Senecio* sp., Asteraceae); Dollfuss, 2008a:465 (locality records from South Africa).

**7. *aganis* R. Bohart**

*Oxybelus aganis* R. Bohart, 1993d:68, ♀, ♂. Holotype: ♀, Paraguay: San Pedro: Cororo-Upane (UCD). – R. Bohart, 1993d:67 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:43 (in catalog of Neotropical Crabronidae).

**8. *agilis* F. Smith**

*Oxybelus agilis* F. Smith, 1856:387, ♂. Holotype or syntypes: ♂, India: no specific locality (BMNH). – F. Smith, 1859a:18 (bibliographic reference to original publication), 1863a:136 (known from Sulawesi), 1871a:368 (in catalog of Oriental Aculeata); Cameron, 1890b:276 (in list of Oriental Sphecidae); Kohl, 1884b:110 (in list of known *Oxybelus*); Bingham, 1897:316 (in Wasp Fauna of British India); Dalla Torre, 1897:639 (in catalog of world Sphecidae); R. Turner, 1917e:190 (synonymy); Pate, 1938b:387 (in list of Oriental Oxybelini, as *agile*); nec Sonan, 1940b:21 (= *Oxybelus nipponicus formosus*); Iwata and Yoshikawa, 1961:399 (Thailand); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Tsuneki, 1977c:21 (Taiwan: Taitung; additional description), 1977j:292 (Taiwan, additional description); Manikandan, Dey, and Farooqi, 1999:13 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:263 (in checklist of Oriental *Oxybelus*); Dollfuss, 2008a:465 (Pakistan: Baluchistan: Awaran in Khudsar District).

*Oxybelus sabulosus* F. Smith, 1856:388, ♀. Holotype or syntypes: ♀, India: no specific locality (BMNH). Synonymized with *Oxybelus agilis* by R. Turner, 1917e:190. – F. Smith, 1871a:369 (in catalog of Oriental Aculeata); Kohl, 1884b:115 (in list of known *Oxybelus*); Cameron, 1890b:276 (in list of Oriental Sphecidae); Bingham, 1897:316 (in Wasp Fauna of British India); Dalla Torre, 1897:647 (in catalog of world Sphecidae); Manikandan and Dey, 2001:263 (in checklist of Oriental *Oxybelus*).

***ssp. taiwanus* Tsuneki**

*Oxybelus agilis taiwanus* Tsuneki, 1982d:11, ♀, ♂. Holotype: Taiwan: Takao (BMNH). – Tsuneki, 1982d:13 (in key to *Oxybelus* of Taiwan); Hua, 2006:281 (in list of Chinese insects, geographic distribution).

**9. *albofasciatus* Kazenas**

*Oxybelus albimaculatus* Kazenas, 1972b:178, ♂, junior primary homonym of *Oxybelus albimaculatus* Mickel, 1918. Holotype: ♂, Kazakhstan: Taldy-Kurgan Oblast': Panfilov, now Zharkent (ZIN). – R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae).

*Oxybelus albofasciatus* Kazenas, 2001b:36. Substitute name for *Oxybelus albimaculatus* Kazenas. – Kazenas, 2002a:89 (geographic distribution, collecting localities in Kazakhstan, as nomen novum)

**10. *albipes* F. Morawitz**

*Oxybelus albipes* F. Morawitz, 1894:345, ♀. Syntypes: ♀, Turkmenistan: Serax (ZIN). – Dalla Torre, 1897:638 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Kazenas, 2001b:36 (in checklist of Sphecidae of Kazakhstan and Central Asia).

**11. *albopictus* Radoszkowski**

*Oxybelus albopictus* Radoszkowski, 1877:73, ♀, ♂ (as *albo-pictus*, incorrect original hyphenation). Syntypes: Tajikistan: Varzaminor 70 km east of Samarkand and Hodzha-Chiburgan (ZMMU). – Kohl, 1884b:110 (in list of known *Oxybelus*); F. Morawitz, 1893b:417 (Turkmenistan or Uzbekistan: Zaravshan River valley: Darkh); Dalla Torre, 1897:638 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Kazenas, 2001b:36 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:89 (geographic distribution, collecting localities in Kazakhstan), 2004b:106 (Kazakhstan: western Tien Shan); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

**12. *alexanderi* Kazenas**

*Oxybelus alexanderi*, Kazenas, 2004a:209, ♀. Holotype: ♀, Kazakhstan: Almaty Oblast': 5-8 km east of village Bakanas in Ili River valley (ZMMU).

### 13. *alhumdalilleri* Guichard

*Oxybelus alhumdalilleri* Guichard, 1990b:280, ♂. Holotype: ♂, United Arab Emirates: Island of El Futasi at 24°27'N 54°23'E (BMNH). – Schmid-Egger, 2011b:559 (recorded from United Arab Emirates by Guichard, 1990b); Gadalalah, 2020b:41 (in list of aculeate wasps of Arabian Peninsula).

### 14. *americanus* Spinola

*Oxybelus americanus* Spinola, 1842:114, ♂. Lectotype: ♂, French Guiana: Cayenne (Torino), designated by R. Bohart, 1993a:189. – Kohl, 1884b:110 (in list of known *Oxybelus*); Dalla Torre, 1897:638 (in catalog of world Sphecidae); W. Fox, 1897b:386 (Brazil: Mato Grosso: Chapada do Guimaraes; also: Marurú); Burks *in* Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); R. Bohart, 1993a:189 (diagnostic characters), 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:43 (in catalog of Neotropical Crabronidae), 2005a:11 (correction to his 2002 catalog); Pagliano, 2014:77 (specimens in M. Spinola collection, Torino, including lectotype). – **As *Notoglossa americana***: Brimley, 1938:450 (new generic assignment, North Carolina: Aberdeen, Bogue, Bryson City, Fairmont, Raleigh).

### 15. *amoenus* Kazenas

*Oxybelus amoenus* Kazenas, 1994f:909, ♀. Holotype: ♀, Kazakhstan: Ili village on Ili River (ZIN). – Esenbekova and Kazenas, 2000:43 (southeastern Kazakhstan: 3 km northeast, 15 km southeast, and 8 km south of Borandysu, 10 km northwest of Chundzha, 2 km north of Kokpek Valley); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:89 (geographic distribution, collecting localities in Kazakhstan), 2013b:496 (southeastern Kazakhstan: 3 km northeast, 15 km southeast, and 8 km south of Borandysu, 30 km east of Chilik on Ili River).

### 16. *analis* Cresson

*Oxybelus analis* Cresson, 1865a:149, ♀, ♂. Lectotype: ♀, Cuba: no specific locality (ANSP), designated by Cresson, 1916:102. – Packard, 1867:435 (in revision of North American *Oxybelus*); Kohl, 1884b:110 (in list of known *Oxybelus*); Dalla Torre, 1897:638 (in catalog of world Sphecidae); Ashmead, 1900:305 (in checklist of Caribbean Hymenoptera); R. Bohart and Schlinger, 1956c:158 (in checklist of North American *Oxybelus*, as *anale*); Alayo Dalmau, 1968b:19 (in revision of Cuban Sphecidae), 1973:194 (in catalog of Cuban Hymenoptera), 1976:33 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Simon Thomas, 1984:97 (Caribbean Islands: Island of Saint Martin); Sánchez and Genaro, 1992b:150 (Cuba: La Habana: Güines); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Genaro, 1993:769 (nesting habits); Cambra and Santos, 2000:53 (Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean); Amarante, 2002:43 (in catalog of Neotropical Crabronidae); Fernández, Saríol, Vega, Ricardo, González, and Portuondo, 2002:46 (Cuba: Provincia Granma); Portuondo and Fernández, 2004:135 (Cuba: Sierra Maestra and Nipe-Sagua-Baracoa mountains); Genaro, 2006:54 (in checklist of Cuban Sphecidae and Crabronidae; also: Isla de Juventud, Bahamas, first record from Island of Eleuthera, first record from Hispaniola, Saint-Martin, Bermuda, Nicaragua); Perez-Gelabert, 2008:240 (in list of arthropods of island of Hispaniola).

### *ssp. bimini* Krombein

*Oxybelus analis bimini* Krombein, 1953c:18, ♀, ♂. Holotype: ♂, Bahama Islands: Island of North Bimini (AMNH). – R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Elliott, 1992:45 (in list of wasps of Bahama Islands: occurring on Island of Bimini); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution); Amarante, 2002:43 (in catalog of Neotropical Crabronidae).

**17. andinus Brèthes**

*Oxybelus andinus* Brèthes, 1913:143, ♀. Holotype or syntypes: ♀, Argentina: Salta: no specific locality (MACN). – R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Genise, 1990:26 (type material in MACN); R. Bohart, 1993a:189 (study of type, diagnostic characters), 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America), 1993e:160 (in list of Central American and Caribbean *Oxybelus*), 161 (in key to Central American and Caribbean *Oxybelus*); Hanson and Menke, 1995:640 (known from Costa Rica); Amarante, 2002:43 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru).

**18. angustus de Saussure**

*Oxybelus angustus* de Saussure, 1892:563, ♂. Holotype or syntypes: ♂, South Africa: no specific locality (MHNG). – Dalla Torre, 1897:638 (in catalog of world Sphecidae); Arnold, 1927:102 (in revision of southern African *Oxybelus*, description of ♀, South Africa), 1930:15 (in checklist of Afrotropical Sphecidae), 1935a:502 (South Africa: Kalahari); de Beaumont, 1967b:512 (South Africa: Cape Province); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:103 (Namibia: visiting flowers of *Deverra denudata* (Viv.) Pfisterer and Podl., Apiaceae, as *angusta*); Dollfuss, 2008a:465 (locality records from Namibia and South Africa).

**19. antropovi Kazenas**

*Oxybelus antropovi* Kazenas, 2004a:207, ♀, ♂. Holotype: ♂, Kazakhstan: South Kazakhstan: 8 km southwest of Chardara (ZMMU). Paratypes: Turkmenistan. – Dollfuss, 2008a:465 (locality records from Mongolia, Turkmenistan, and Uzbekistan).

**20. arabicus Guichard**

*Oxybelus arabicus* Guichard, 1990b:283, ♀, ♂. Holotype: ♀, Saudi Arabia: El Riyadh (BMNH). Paratypes: Oman, United Arab Emirates, Yemen, Jordan, Israel. – Guichard, 1991a:340 (Jordan); Gadallah and Assery, 2004a:225 (in catalog of Sphecidae of Saudi Arabia); Dollfuss, 2008a:465 (locality records from Jordan); Schmid-Egger, 2011b:559 (United Arab Emirates: several localities), 560 (color photograph of female); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:352 (in new catalog of Sphecidae of Saudi Arabia); Schmid-Egger, 2014:586 (United Arab Emirates); Atbaei, Fallahzadeh, and Ljubomirov, 2015:18 (first record from Iran: Fars Province); Jahanigh, Rakhshani, Mokhtari, and Ramroodi, 2017:52 (Iran: known from Fars Province); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:30 (Iran: Hormozgan: Sar Kahnan at 27°24'N 57°07'E); Gadallah, 2020b:42 (in list of aculeate wasps of Arabian Peninsula).

**21. argentatus Curtis**

*Oxybelus argentatus* Curtis, 1833:pl. 480, sex not stated. Holotype or syntypes: Great Britain: no specific locality (BMNH). – Shuckard, 1837a:111 (in revision of British Aculeata); F. Smith, 1851c:23 (Great Britain: Biddeford, Devon, Liverpool), 1853:63 (in checklist of British Hymenoptera), 1856:383 (as synonym of *Oxybelus mucronatus*); Kohl, 1884b:110 (in list of known *Oxybelus*); nec Aurivillius, 1904:299 (= *Oxybelus argentatus aculeatus*); Morice, 1917:238 (taxonomic history, comparison with *Oxybelus mucronatus* of authors = *Oxybelus quatuordecimnotatus*); R. Perkins, 1924:227 (Great Britain: Devon), 1925:153 (Great Britain: Somersetshire: Berrow and Burnham); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Stelfox, 1927:304 (records from Ireland are erroneous); Hamm and Richards, 1930:117 (summary of nesting habits), 126 (list of prey); Bouwman, 1932:390 (in revision of Sphecidae of Netherlands); Stelfox, 1934b:278 (Great Britain: Devon: Braunton Burrows); Crèvecoeur and Maréchal, 1936:257 (in catalog of Belgian Hymenoptera); Richards, 1937b:105 (in checklist of British aculeates); Hallett, 1939:16 (Great Britain: Glamorgan: common on sandhills); J. Perkins, 1942:199 (Sweden: southern Skåne); Spooner, 1943:75 (Great Britain: King's Lynn); Verhoeff, 1948:173 (in revision of Western European *Oxybelus*); Chambers, 1949:227 (Great Britain: Bedfordshire); Fæster, 1949:17, 32, 35 (in revision of Western European *Oxybelus*); Guiglia, 1953a:79 (in revision of Italian *Oxybelus*); Blüthgen, 1954:145, 150 (in key to Central European *Oxybelus*), 154

(summary of locality records from Germany); Grandi, 1954:188 (nesting habits), 193 (description of mature larva); Tjeder, 1954:69 (Sweden: eastern Skåne: Löderup); Guiglia, 1955:103 (in revision of Great Britain *Oxybelus*); Helén, 1955a:129 (Finland: Hirvas, Lappvik, Penisaari); Boreham, 1956b:248 (nesting habits); Evans, 1957b:113 (discussion of larva's description by Grandi, 1954); de Beaumont, 1958c:213 (Swiss National Park); Móczár, 1958b:209 (Hungary: collecting localities, as *argentatus argentatus*), 1958c:282, 288 (in key to western Palearctic *Oxybelus*, as *argentatus argentatus*), 292 (Hungary: Paks); Olberg, 1959:30 (photograph of specimens visiting flowers of *Cirsium arvense* (L.) Scop., Asteraceae, *Jasione montana* L., Campanulaceae, and *Potentilla argentata* L., Rosaceae), 382-383 and 385 (photographs of nest digging and prey carrying); Wolf, 1959b:35 (Germany: Nassau); Noskiewicz and Puławski, 1960:162,165 (in key to Polish Sphecidae); Grandi, 1961:255 (nesting habits), 533 (description of larva); Valkeila, 1962b:68 (southwestern Finland, as *Oxybelus argentatus argentatus*); Erlandsson, 1963:66 (Denmark: Island of Bornholm); de Beaumont, 1964c:160 (in Sphecidae Fauna of Switzerland); Fæster, 1965:193 (Denmark: Hansted Nature Reserve); Stritt, 1968:111 (Germany: Baden-Württemberg); Schmidt, 1969:166 (Germany: Rhein-Main area: Mainz-Mombach, Mainzer Sand, as *Oxybelus argentatus argentatus*); Tumšs, 1970:83 (first record from Latvia); Schmidt, 1971b:52 (Germany: Rheinland-Pfalz: Mainzer Sand; as *Oxybelus argentatus argentatus*); Balthasar, 1972:151 (in Sphecidae Fauna of Czechoslovakia); Kofler, 1972:116 (Austria: eastern Tirol); Lomholdt, 1972:123 (Denmark: Island of Læsø); Simon Thomas, 1972:187 (France: Gironde, Lot-et-Garonne); Haeseler, 1973:55 (Germany: Schleswig-Holstein: Segrahner Berg 12 km southeast of Mölln); Lomholdt, 1975b:32 (Denmark: Island of Anholt, as *Oxybelus argentatus argentatus*); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Haeseler, 1976b:73 (Germany: Friesian Islands: Island of Amrum); Lomholdt, 1976:277, 279 (in Sphecidae Fauna of Fennoscandia and Denmark); Simon Thomas, 1976:6 (France: Lot-et-Garonne: Forêt de Campet); Guichard, 1977:253 (Great Britain: Surrey); Hoop, 1977:73 (Germany: Schleswig-Holstein: Sankt Peter-Ording); Kolesnikov, 1977:321 (Russia: Bryansk Oblast'); Schmidt, 1977/78:59 (Germany: Rheinland-Pfalz: Gonsenheimer Wald, Mainzer Sand; as *Oxybelus argentatus argentatus*); Haeseler, 1978c:195 (Germany: Friesian Islands: Island of Borkum); Marion, 1978:91 (France: Nièvre Department); Pulawski, 1978:275, 277 (in key to Sphecidae of European part of USSR); Leclercq, Gaspar, and Verstraeten, 1979:map 1422 (Belgium); Richards, 1979:399 (British Channel Islands), 1980:60 (in key to Sphecidae of British Isles); Haeseler, 1981:51 (Germany: Friesian Island: Island of Amrum); Petit, 1981:12 (locality records from Belgium and Netherlands); Donath, 1982:215 (Germany: Cottbus Bezirk); Skibińska, 1982:124 (Poland: Warszawa area); Dollfuss, 1983b:12 (in catalog of Sphecidae of Austria); Józán, 1983:102 (Hungary; as *Oxybelus argentatus argentatus*); Lefeber, 1983a:85 (Netherlands: Waddendistrict: northern coast sand dunes, Western Friesian Islands); Haack, Tschardtke, and Vidal, 1984:130 (Germany: Hamburg area); Janzon and Svensson, 1984:183 (Sweden: Island of Öland); Haeseler, 1985c:571 (Germany: Friesian Islands; as *Oxybelus argentatus argentatus*); Józán, 1985b:58 (Hungary: Darány: Barcsi borókás; as *Oxybelus argentatus argentatus*), 79 (floral records), 84 (ecological and zoogeographic characteristics); Nemkov, 1986:100 (Russia: Siberia: Irkutsk Oblast'); Steiner, 1986:105 (references to publications on nesting habits); Riemann, 1987b:42 (Germany: Niedersachsen: Nature Reserve Dünengebiet near Neumühlen); Schmidt and Westrich, 1987:375 (Germany: Mainz area; as *Oxybelus argentatus argentatus*); Chevin, 1988:15 (France: La Manche Department); Dollfuss, 1988:25 (Austria: Niederösterreich: Oberweiden); H. Kollar, 1988:23 (nesting at foot of loess cliffs); Kowalczyk, 1988b:66 (Poland: environs of Łódź); Wolf, 1988b:141 (Germany: Rheinland-Westfalen); Archer, 1989b:232 (Great Britain: Suffolk); Jacobs, 1989:15 (Germany: Mecklenburg-Vorpommern); Pádr *in* Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Jacobs and Oehlke, 1990:174 (new records from Democratic Germany); Pagliano, 1990:78 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:541 (Austria: Kärnten); Chinin, 1991:111 (Russia: Samara Oblast'); Day, 1991:xvii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:131 (in key to Sphecidae of North and Central Europe); Kowalczyk, 1991a:91, 94 (Poland: Łódź); Kuhlmann et al., 1991:91 (Germany: Senne Region); Pagliano, 1991b:329, 331 (in key to Italian Crabroninae); H.-J. Schulz, 1991:31 (Germany: Oberlausitz: 5 km southwest of Wittichenau); Archer, 1992c:218 (Great Britain: Wales); Budrys, 1992:33 (in list of Sphecidae of Lithuania); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Józán, 1992b:174

(Hungary: Boronka-melléki Protected Area); Archer, 1993:46 (Great Britain: Channel Islands); Bitsch and Leclercq, 1993:246 (in revision of western European Crabroninae); Guichard, 1993b:530 and 532 (in key to European *Oxybelus*); Kuhlmann, 1993:77 (Germany: known from Westfalen); Leclercq, 1993c:45 (references to recent publications); Felton and Schneider, 1994:290 (Luxemburg); Kowalczyk, 1994:76 (Poland: Łagiewniki forest in Łódź); Theunert, 1994c:45 (Germany: summary of records from Niedersachsen and Bremen); Gusenleitner, 1995:161 (Austria: Steiermark); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:422 (in key to Sphecidae of Russian Far East); Scharrer, 1995:27 (Germany: Bayern: Aschaffenburg, Kahl); Schmid-Egger, Risch, and Niehuis, 1995:199 (summary of records from Germany: Rheinland-Pfalz Province); Arens, 1996:441 (Germany: Bayern: Bayreuth area); Fowles, 1996:35 (Great Britain: in checklist of aculeates of Wales); Pawlikowski and Kruszyński, 1996:87 (Poland: Toruń Basin); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); von der Dunk and Amon, 1996:41 (Germany: Bayern: Altdorf sand dunes east of Nürnberg); Witt, 1996:106 (Germany: Brandenburg); Celary, 1997:58 (in checklist of Animals of Poland); Dörfel, 1997:71 (nesting habits described for general public); Else and Field *in* R. Edwards, 1997:72 (Great Britain and Ireland: distribution, flight period, prey, nesting habits, flowers visited, map of distribution by Archer and Roberts); Schmidt and Schmid-Egger, 1997:21 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:28 (Germany: in list of Sphecidae of Brandenburg), 35 (endangered); Flügel, 1998:60 (Germany: Brandenburg: Unteres Odertal National Park); Haeseler and Ritzau, 1998:51 (Germany: Bremen: Steller Heide); Morgan, 1998:19 (Great Britain: Wales: Carmarthenshire County); N. Schneider and Wahis, 1998:22 (Luxemburg: sandstone quarries); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka, as *arbenatus*); van der Smissen, 1998:64 (Germany: Schleswig-Holstein: Bröthen, Segrahner Berg); K. Weber, 1998:145 (Germany: Bayern: Bamberg area); Archer, 1999a:9 (Great Britain: Lancashire), 1999c:106 (prey: *Thereva nobilitata* Fabricius, Therevidae); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); W. Klein, 1999:17 (in corrected key to *Oxybelus* of Benelux); Kuhlmann, Wolf, and Woydak, 1999:569 (Germany: threatened with extinction in Nordrhein-Westfalen); Mandery, 1999:105 (Germany: Bayern: Coburg area); Neumayer, Schwarz, and Bregant, 1999:225 (Austria: in checklist of Sphecidae of Kärnten); Pauly, 1999:109 (in catalog of Belgian aculeates); Saure, 1999:33 (Germany: Berlin-Köpenick); M. Schwarz, 1999:86 (Austria: Oberösterreich: city of Linz area); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:259 (in Sphecidae Fauna of Germany); Dressler, 2000:33 (Germany: Hessen: Darmstadt area); Jacobs, 2000:8, 17 (Germany: Mecklenburg-Vorpommern: vulnerable); Mokrousov, 2000b:31 (Russia: Nizhniy Novgorod Oblast'); Zettel, 2000:29 (Austria: Drösing); Józán, 2001:279 (Hungary: Somogy County); Ohl et al., 2001:140 (distribution in Germany by provinces); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); van der Smissen, 2001:62 (Germany: Schleswig-Holstein: strongly endangered); Archer, 2002d:11 (Great Britain: Worcestershire: Hartlebury Common 17 km north of Worcester); Kowalczyk, Szczepko, and Świątek, 2002:154 (Poland: Kampinos National Park near Warszawa); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Söderman and Vikberg, 2002:52 (in list of Aculeata of Finland); Drewes, 2003:140 (Germany: miscellaneous locality records); Kowalczyk and Kurzac, 2003:209 (Poland: Łódź: Botanical Garden); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:68 (Germany: in catalog of wasps and bees of Bayern); Tischendorf and Treiber, 2003:121, 125 (Germany: Hessen: 15 km southwest of Frankfurt am Main: nesting under high power lines); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:194, 197 (Germany: Bayern: probably endangered); Archer, 2004:47 (Great Britain: Worcestershire: Devils Spittleful Nature Reserve), 2004g:9 (Great Britain: Cumbria: North Walney National Nature Reserve); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:263 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Peeters, van Achterberg, et al., 2004:404 (in Wasp and Ant Fauna of Netherlands); Shkuratov, 2004a:81 (Russia: Rostov Oblast': Tsimlyansk); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle

et al., 2004:372 (Germany: Sachsen-Anhalt: in red list of Sphecidae *sensu lato*); Szczepko and Kowalczyk, 2004:126 (Poland: Kampinos National Park near Warszawa); Wiśniowski, 2004:46 and 61 (in checklist of Polish Sphecidae); Archer, 2005c:56 (Great Britain: Suffolk County); Burger, 2005:34 (Germany: Thüringen); Haeseler, 2005:629 (Germany: Niedersachsen: Steller Heide near Bremen); Jacob and Remacle, 2005:62 (Belgium: Luxembourg Province: quarry Haut des Loges in Vance); Kofler, 2005:174 (Austria: Tirol: Lienz District: Ainet, Thal Aue in Assling Common, Lavant, Burgfrieden in Leisach Common, Huben Kienburg in Matrei Common); Kowalczyk and Kurzac, 2005:106 (Poland: Botanical Garden in Łódź); Kraatz, 2005:103 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Mandery, 2005:174 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Pagliano and Negrisol, 2005:206 (in Sphecid Fauna of Italy); Pijfers, 2005:50 (Netherlands: Twente: Noordelijke Manderheide); Reder, 2005:951 (Germany: Rheinland-Pfalz: Eisenberg, Worms); Riemann and Hohmann, 2005:562 (Germany: Niedersachsen: city of Bremen and adjacent area); Robinson, 2005:37 (Great Britain: Cumbria County); Saure, 2005:17 (Germany: Berlin); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Venne and Bleidorn, 2005:43 (Germany: Nordrhein-Westfalen: Moosheide Nature Reserve); Ziska and Saure, 2005:81 (Germany: Berlin: Biesenhorster Sand); Bock, 2006:41 (Germany: Bayern: Kelheim District: Abensberg sands); Gorobchishin, 2006:113 (Ukraine: Kyiv Oblast': village Svityl'ne); Liebig, 2006:39 (Germany: Sachsen: Muskauer Heide); N. Schneider, 2006:143 (Luxemburg: anthropogenic habitats); Archer, 2007a:151 (Great Britain: Norfolk: Thetford Warren Lodge); Baños-Picón, Gayubo, Asís, and González, 2007:256, 259 (Spain: Zamora: Cabañas de Aliste); Burguet, 2007:unnumbered p. 25 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Chevin, Livory, Lair, Sagot, and Baldock, 2007:41 (France: Département de la Manche); Hallin, 2007b:25 (Sweden: Blekinge County); Herrmann, 2007a:52 (Germany: Niedersachsen: Ostfriesland); Jacobs, 2007:114, 118 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:24 (Germany: northwestern Sachsen); Kowalczyk and Nadolski, 2007:284 (Poland: Łódź: railway areas); Saure, 2007:82 (Germany: in checklist of Aculeata of Land Brandenburg); Vago, 2007:175 (France: départements du Nord and Pas-de-Calais); Venne, Bleidorn, and Lauterbach, 2007:302 (Germany: Nordrhein-Westfalen: Bielefeld); Archer, 2008a:144 (Great Britain: Cumbria: North Walney Nature Reserve and Sandscale Haws); Danilov, 2008:349 (Russia: Altayskiy Krai: Barnaul area); Dollfuss, 2008a:465 (Bulgaria: Bachkovo in Rhodopi Mountains); Haeseler, 2008:308 (Germany: Friesian Islands); Larnhof, 2008:46 (Austria: Niederösterreich: Nature Reserve "in den Sandbergen" near Drösing); Nemkov, 2008b:20 (in catalog of Crabronidae of Asiatic Russia); Tannert and von der Dunk, 2008:181 (Germany: Bayern: west of Ernhofen and Weissenbrunn); Theunert, 2008:60 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Debuiser and Vago, 2009:6 (in list of Sphecidae *sensu lato* of northern France); U. Frommer, 2009a:28 (Germany: in checklist of Sphecidae of Hessen); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid: Reserva Natural Riberas de Castronuño–Vega del Duero); Nemkov, 2009b:90 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Ødegaard, Sverdrup-Thygeson, Hansen, Hanssen, and Öberg, 2009:28 (known from Norway), 43, 71 (Norway: locality records); Esser, Fuhrmann, and Venne, 2010:37 (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, 2010:28 (Germany: Bayern: Sulz- and Ottmaringer Tal); Howe, Knight, and Clee, 2010:100 (Great Britain: occurring on coastal sand dunes); Mokrousov, 2010a:62 (Russia: Nizhniy Novgorod Oblast': no specific localities); Rudoiskatel', 2010:159 (Russia: southern Ural Mountains); Saure, 2010a:88 (Germany: Berlin-Reinickendorf: Baumberge); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: rare); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:102 (western Slovakia: recorded from Borská nížina); van der Smitten, 2010a:345 (Germany: Schleswig-Holstein: Bröthen, Segrahner Berg); Archer, 2011b:54 (Great Britain: North Norfolk sand dunes); Baghirov, 2011b:149 (Russia: Altay Republic: Chike-Taman); Burger, 2011a:287 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Saure, 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf,

Frommer, Flügel et al., 2011:74 (Germany: Hessen: endangered); Wiesbauer and Zettel, 2011:269 (Austria: Niederösterreich: March = Morava lowland); Burguet *in* Durand and Burguet, 2012:3 (France: Puy-de-Dôme: sands Giraults-Faures in Orléat commune); Nemkov, 2012c:440 (in catalog of Crabronidae of Russian Far East); Shlyakhtenok, 2012a:171 (Belorussia: collected in private plots); Pankov, 2013:230 (Russia: Ivanovo Oblast'); A. Scholz and Liebig, 2013:22 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:179 (in annotated catalog of aculeate wasps of Belorussia); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2013:206 (nesting behavior in comparison with that of *Oxybelus trispinosus*), 216 (behavioral features reviewed); Wiśniowski and Piotrowski, 2013:22 (Poland: Poleski National Park); Bitsch, 2014:404 (paper by Andrietti et al., 2013 noted); Flügel, 2014:254 (Brandenburg: Hangelsberger Heide); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Archer, 2015:202 (Great Britain: English coastal sand dunes); Bleidorn, Gerth, Hopfe, et al., 2016:10 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Else, Bolton, and Broad, 2016:32 (in checklist of Aculeata of Great Britain and Ireland: England, Wales); Reemer and Peeters, 2016:10 (Netherlands: Hulshorsterzand); Ruchin and Antropov, 2016:402 (Russia: Mordovian State Nature Reserve); Saure, 2016c:205 (Germany: center of Berlin: Großer Tiergarten Park); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Antropov, 2017b:242 (in catalog of Crabroninae of Russia); Ruchin and Antropov, 2019a:13234 (Russia: Mordovia State Nature Reserve); Weiser, 2019:10 (Germany: Baden-Württemberg: Schwetzingen Hardt: colonization of deforested area); Akulov, Proshchalykin, and Mokrousov, 2020:49 (Russia: central Krasnoyarsk Krai); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:341 (in revision of Sphecidae *sensu lato* of Europe), 342 (in key to subspecies of *Oxybelus argentatus*); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Olszewski, Wiśniowski, and Ljubomirov, 2021:96 (in commented list of Sphecidae *sensu lato* of Poland); Olszewski, Sparks, Twerd, and Wiśniowski, 2024:5 (central Poland: common in river valleys: no specific localities, not endangered); Pytel-Huta and Franchuk, 2024:81 (Ukraine: Rivno Nature Reserve).

As *Oxybelus mucronatus*: F. Smith, 1857a:35 (Great Britain); Schenck, 1857:111 (Germany: in revision of fossorial wasps of Nassau Region), 1860:146 (Germany: Nassau Region), present correction based on synonymy with *argentatus* [as *argenteus*] given by author; F. Smith, 1871b:16 (in catalog of British Aculeata), present correction based on synonymy with *argentatus* given by author; E. Saunders, 1880:300 (in revision of British Aculeata), 1896:123 (in revision of British Aculeata); Gardner, 1901:379 (Great Britain: Cheshire: sandhills opposite Liverpool, now built over, and Wallasey; *Oxybelus argentatus* given as synonym); E. Saunders, 1902b:143 (Great Britain: Channel Islands: Island of Jersey; France: Bretagne: Saint Briac) and 1907b:67 (Great Britain: West Suffolk and Eastbourne), corrected to *Oxybelus argentatus* by R. Perkins, 1919a:9; Dittrich, 1911b:20 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region), present correction; Hallett, 1914:99 and 1916:221 (Great Britain: Glamorgan: Porthcawl), 1915:55 (Great Britain: Oxwich Bay); Dubois, 1922:191, 192, 193 (in key to Belgian Sphecidae), present correction based on author's synonymy; A. Wagner, 1938a:118 (northwestern Germany), present correction based on the author's synonymy; Paul, 1941:38 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area), present correction based on the author's synonymy; Balthasar, 1972:149 (in Sphecidae Fauna of Czechoslovakia).

? *Vespa decimmaculata* Donovan, 1806:43, sex not stated (as *decim-maculata*, incorrect original hyphenation). Holotype: England: Kent: no specific locality (depository?). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae, as tentative synonym of *Oxybelus argentatus*).

*Oxybelus ferox* Shuckard, 1837a:108, ♂. Holotype or syntypes: ♂, Britain: London area (depository unknown). Synonymized with *Oxybelus argentatus* (as *Oxybelus mucronatus*) by F. Smith, 1856:383. – F. Smith, 1851c:22 (Great Britain: London district), 1853:63 (in checklist of British Hymenoptera); Morice, 1917:271 (synonymy with *Oxybelus argentatus* confirmed); D. Baker, 1998:172 (type origin and depository).

*Oxybelus nigricornis* Shuckard, 1837a:112, ♀, ♂. Syntypes: Britain: no specific locality (BMNH). Synonymized with *Oxybelus argentatus* by Morice, 1917:272. – von Siebold, 1839:49 (Germany: Danzig, now Poland: Gdańsk);

Dahlbom, 1844:267 (original description copied) and 1845:512 (in key to *Oxybelus*), determination corrected to *Oxybelus fasciatus* by Thomson, 1870:179; von Kiesenwetter, 1849:90 (Germany: Kingdom of Saxony: Leipzig and Oberlausitz area); F. Smith, 1851c:23 (Great Britain: unknown locality), 1853:63 (in checklist of British Hymenoptera), 1856:385 (in catalog of Hymenoptera in British Museum), 1858c:166 (in review of British Aculeata, redescription); Brischke, 1862:104 (Germany: Prussen Province, now Poland: Pomorze Region), 1864:209 (*Oxybelus nigricornis* is a synonym of *bellicosus*); Kirchner, 1867:223 (in catalog of European Hymenoptera); F. Smith, 1871b:17 (in catalog of British Aculeata); Kohl, 1884b:114 (in list of known *Oxybelus*); Dalla Torre, 1897:645 (in catalog of world Sphecidae); de Gaulle, 1908:121 (in catalog of French Hymenoptera); D. Baker (type origin and depository).

### **ssp. *aculeatus* Thomson**

As *Oxybelus mucronatus*: Dahlbom, 1842a:13 (in review of Scandinavian aculeates), 1844:177 (in revision of Sphecidae and Pompilidae), and 1845:512 (in key to *Oxybelus*), corrected to *Oxybelus aculeatus* by Thomson, 1870:177; Westerland, 1893:28 (Russia: Karelian Republic: northern shore of Lake Ladoga, *Oxybelus aculeatus* given as a synonym).

*Oxybelus aculeatus* Thomson, 1870:177, ♀, ♂. Syntypes: Sweden: Skåne: no specific locality (Lund). – Thomson, 1874:289 (in revision of Hymenoptera of Scandinavia); F. Morawitz, 1893a:115 (Russia: Karelian Isthmus); Borries, 1897:76 (nesting habits unknown). – As *Oxybelus argentatus* var. *aculeatus*: Dalla Torre, 1897:645 (new status, in catalog of world Sphecidae). – As *Oxybelus argentatus aculeatus*: P. Verhoeff, 1948:177 (new status, in revision of Western European *Oxybelus*); Fahlander, 1957:63 (Sweden); Móczár, 1958c:283, 288 (in key to western Palearctic *Oxybelus*); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Lomholdt, 1976:279 (in Sphecid Fauna of Fennoscandia and Denmark); Pulawski, 1978:275, 277 (in key to Sphecidae of European part of USSR); Lomholdt, 1987:93 (Denmark: western Jutland: Skallingen Peninsula); Kuznetzova, 1990:25 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Kochetkov, Bol'shakova, Butenko, and Priklonskiy, 2008:263 (Russia: Rязан' Oblast': Oka Nature Reserve); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:342 (in key to subspecies of *Oxybelus argentatus*).

*Oxybelus quatuordecimnotatus* Dahlbom, 1845:513, ♂ (as *14-notatus*, incorrect original spelling), junior primary homonym of *Oxybelus quatuordecimnotatus* Jurine, 1807 (Dahlbom misspelled the latter name as *quatuordecimguttatus*). Syntypes: France: no specific locality (Lund). Synonymized with *Oxybelus argentatus aculeatus* by ...

*Oxybelus dahlbomi* Schulz, 1906:211 (as *Dahlbomi*, incorrect original capitalization). Substitute name for *Oxybelus quatuordecimnotatus* of Dahlbom, 1845.

As *Oxybelus argentatus*: Aurivillius, 1904:299 (in revision of Swedish Sphecidae), present correction.

### **ssp. *bouwmani* P. Verhoeff**

*Oxybelus argentatus bouwmani* P. Verhoeff, 1948:175, ♀, ♂. Holotype: ♀, Netherlands: Hilversum (RMNH). – Blüthgen, 1954:145, 150 (in key to Central European *Oxybelus*); Benno, 1958b:18 (in review of Dutch Sphecidae); Móczár, 1958c:283, 288 (in key to western Palearctic *Oxybelus*); Wolf, 1958:16 (Germany: Hessen: Darmstadt), 1959b:36 (Germany: Nassau); Valkeila, 1962b:68 (southwestern Finland); Hoop, 1963b:7 (Germany: Schleswig-Holstein: Lehmrade); Benno, 1967:38 (in checklist of Sphecidae of Netherlands); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Lomholdt, 1976:279 (in Sphecid Fauna of Fennoscandia and Denmark); Simon Thomas and Wiering, 1976:109 (Netherlands: IJsselmeer Polders); Lefeber, 1976:152 (Belgium: Zonhoven, prey: *Thereva nobilis* (Gmelin), Therevidae); Petit, 1980:43 (Belgium: Aayen), 1981:12 (locality records from Belgium and Netherlands, variation); Lefeber, 1983a:85 (Netherlands: Waddendistrict: northern coast sand dunes); Vikberg, 1986:76 (Finland); Pauly, 1999:109 (in catalog of Belgian aculeates, as *bowmanni*); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:342 (in key to subspecies of *Oxybelus argentatus*).

### **ssp. *debeaumonti* P. Verhoeff**

*Oxybelus argentatus debeaumonti* P. Verhoeff, 1948:178, ♀, ♂. Holotype: ♀, Switzerland: Valais: Martigny (Lausanne). – Grandi, 1954:244 (Italy); Zirngiebl, 1957:178 (Germany: Rheinland-Pfalz: Leistadt); Móczár, 1958b:209 (Hungary: collecting localities), 1958c:283 (in key to western Palearctic *Oxybelus*); Kofler, 1972:116 (Austria: eastern Tirol); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Pulawski, 1978:275, 277 (in key to Sphecidae of European part of USSR); Petit, 1981:13 (first record from Belgium: Vance, comparison with *Oxybelus argentatus bouwmansi*); Dollfuss, 1983b:13 (in catalog of Sphecidae of Austria); Pagliano, 1990:78 (in catalog of Italian Sphecidae); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Pauly, 1999:109 (in catalog of Belgian aculeates); Straka, 2005a:401 (endangered in Czech Republic); Vepřek, 2006:510 (Czech Republic: Kokořínsko area); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Bohemia and Moravia), 226 (all specimens recorded from Bohemia by Zavadil, Šusterka, and Bat'a, 1937:170, belong to this subspecies; additional locality records from Bohemia and Moravia); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Blažej, Macek, and Trýzna, 2016:123 (Czech Republic: České Švýcarsko = Bohemian Switzerland National Park); Kejval, Blažej, and Erhart, 2020:104 (western Czech Republic); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:342 (in key to subspecies of *Oxybelus argentatus*).

*Oxybelus argentatus gerstaeckeri* P. Verhoeff, 1948:179, ♀, ♂. Holotype: ♀, southern France: no specific locality (MNHN, coll. Pérez). Synonymized with *Oxybelus argentatus debeaumonti* by Bitsch and Leclercq, 1993:248. – Leininger, 1951:116 (Germany: Baden-Württemberg: Karlsruhe, Sandhausen, Schwetzingen); de Beaumont, 1952b:90 (Marquet's, 1896 specimens), 1954e:98 (Italy); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); Blüthgen, 1954:150 (in key to Central European *Oxybelus*); Zirngiebl, 1957:177 (Germany: Rheinland-Pfalz: Pfalz region); de Beaumont, 1958c:213 (Swiss National Park); Móczár, 1958b:209 (Hungary: collecting localities), 1958c:283, 289 (in key to western Palearctic *Oxybelus*); Wolf, 1959b:36 (Germany: Nassau), 1960:98 (Sweden); Hoop, 1961:64 (Germany: Schleswig-Holstein: Wahlstedt); Mingo Pérez, 1966:80 (in revision of *Oxybelus* of Iberian Peninsula); J. Heinrich, 1967:83 (Germany: Bayern: Unterfranken District); Benedek, 1968:78 (Hungary, visiting flowers of Umbelliferae); Schmidt, 1969:167 (Germany: Rhein-Main area: Darmstadt); Oehlke, 1970:792 (Democratic Germany); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Lomholdt, 1976:279 (in Sphecid Fauna of Fennoscandia and Denmark); Schmidt, 1981:173 (Germany: Baden-Württemberg); Gayubo, 1982b:8 (northern Spain: Sierra de Béjar), 1984b:96 (Spain: previously recorded from Salamanca Province); Plachter, 1985:60 (Germany: Bayern: lower Brombach valley); Brechtel, 1986:73 (Germany: Südpfalz); Gayubo and Heras, 1986:48 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:57 (Spain: Burgos); Józán, 1986:371 (Hungary: Kiskunság National Park); Karsai, 1988:100 (Hungary: Kiskunság National Park); Gayubo, Asís, and Tormos, 1990b:74 (Spain: Salamanca Province); Wickl and Wickl, 1994:194 (Germany: Bayern: Oberpfalz); Blösch, 1996:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Woydak, 1996:46 (Germany: Westfalen: summary of distribution and nesting habits); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); Blösch, 2005:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Bitsch and Leclercq, 2009:228 (in supplement to vol. I of Faune de France, 1993: recent records from Bavaria, Italy, and Spain recorded).

As *Oxybelus mucronatus*: Marquet, 1896:16 (France), corrected to *Oxybelus argentatus gerstaeckeri* by de Beaumont, 1952b:90; Schirmer, 1912:165 (Germany: Berlin area) and Balthasar, 1941b:112 (Czech Republic: eastern Moravia), present correction based on geographic distribution.

### **spp. mongolicus Tsuneki**

*Oxybelus argentatus mongolicus* Tsuneki, 1972a:159, ♀, ♂. Holotype: ♀, Mongolia: Tsoybalsan Aymag: Hamardaava (TMB). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Dollfuss, 2008a:465 (locality records from Mongolia).

**ssp. treforti Sajó**

*Oxybelus treforti* Sajó, 1884:87, ♀ (as *Treforti*, incorrect original capitalization). Lectotype: ♀, Hungary: Örszentmiklós (TMB), designated by Móczár, 1958c:296. – Kohl, 1884b:104 (description of ♂), 115 (in list of known *Oxybelus*); Dalla Torre, 1897:649 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Hungary: Kis-Szentmiklós near Budapest); Šnoflák in Zavadil and Šnoflák, 1948:32, 38 (in key to Czechoslovakian Sphecidae); Haris, 2016:20 (in list of species described by K. Sajó from Carpathian Basin). – As *Oxybelus mucronatus* var. *treforti*: Maidl in Schmiedeknecht, 1930:661, 664 (new status, in keys to Hymenoptera of North and Central Europe); Zavadil, 1932:95 (Czechoslovakia), 1939:121 (Czech Republic: Morava: Mutěnice); Balthasar, 1941a:105 (Czech Republic: Bzenecko area); Cavro, 1950:41 (France: Département du Nord). – As *Oxybelus argentatus treforti*: P. Verhoeff, 1948:179 (new status, in revision of Western European *Oxybelus*); Móczár, 1958b:209 (Hungary: collecting localities), 1958c:283, 288 (in key to western Palearctic *Oxybelus*), 292 (in revision of *Oxybelus* of Hungary); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Pulawski, 1978:275, 277 (in key to Sphecidae of European part of USSR); Józán, 1983:102 (Hungary), 1985a:181 (Hungary), 1985b:58 (Hungary: Barcsi borókás), 84 (ecological and zoogeographic characteristics), 1986:371 (Hungary: Kiskunság National Park); Dollfuss, 1989:11 (type material in NHMW); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Straka, 2005a:401 (endangered in Czech Republic); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Moravia and Slovakia), 227 (locality records from Moravia and Slovakia); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:342 (in key to subspecies of *Oxybelus argentatus*)

**22. argenteopilosus Cameron**

*Oxybelus argenteopilosus* Cameron, 1891a:158, ♀. Holotype or syntypes: ♀, Mexico: Guerrero: Venta de Zopilote (BMNH). – Dalla Torre, 1897:638 (in catalog of world Sphecidae); R. Bohart and Schlinger, 1956c:158 (in checklist of North American *Oxybelus*, as *argenteopilosum*), 1957:123 (in revision of Californian *Oxybelus*, as *argenteopilosum*); Krombein, 1958f:200 (in supplement to catalog of North American Hymenoptera: from Colorado and Oregon to Mexico); Horning and Barr, 1970:106 (USA: Idaho: Craters of the Moon National Monument); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Krombein, 1979b:1653 (in catalog of North American Hymenoptera); Frommer, 1988:94 (California: Riverside County: Deep Canyon); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Hanson and Menke, 1995:640 (known from Costa Rica, as *argentiopilosus*); Amarante, 2002:43 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 46 (Mexico: Tamaulipas); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:383 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo). – As *Belomicrus argenteospilus* [lapsus]: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae).

**23. argentinus Brèthes**

*Oxybelus argentinus* Brèthes, 1913:140, ♀, ♂. Lectotype: ♀, Argentina: Salta: no specific locality (MACN), designated by R. Bohart, 1993a:189. – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Radović, 1985:65 (sting apparatus analyzed); Genise, 1990:26 (type material in MACN); R. Bohart, 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:43 (in catalog of Neotropical Crabronidae).

**24. argypheus R. Bohart and Schlinger**

*Oxybelus argypheus* R. Bohart and Schlinger, 1956a:38, ♀ (as *argypheum*, incorrect original termination). Holotype: ♀, USA: California: San Diego County: Borrego Springs (CAS). – R. Bohart and Schlinger, 1956c:158 (in checklist of North American *Oxybelus*, as *argypheum*), 1957:119 (in revision of Californian *Oxybelus*, as *argypheum*); Krombein,

1958f:200 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Krombein, 1979b:1653 (in catalog of North American Hymenoptera); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae).

### 25. *arnoldi* Benoit

*Oxybelus arnoldi* Benoit, 1951:132, ♀ (as *Arnoldi*, incorrect original capitalization). Holotype: ♀, Zaire: Tshuapa: Eala (MRAC). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae).

### 26. *aurantiacus* Mocsáry

*Oxybelus aurantiacus* Mocsáry, 1883:48, ♀. Holotype or syntypes: ♀, Hungary: Budapest (TMB, lost). Neotype: sex not stated, Hungary: Fajsz (TMB), designated by Móczár, 1958c:297. – Kohl, 1884b:111 (in list of known *Oxybelus*); Radoszkowski, 1886a:37 (Turkmenistan, as *aurantiaca*), 1893a:72 (Turkmenistan); Dalla Torre, 1897:638 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Hungary: Kis-Szentmiklós); Maidl in Schmiedeknecht, 1930:661, 664 (in keys to Hymenoptera of North and Central Europe); Zavadil, 1937a:72 (eastern Slovakia); Zavadil, Šusterka, and Bat'a, 1937:173 (in catalog of Sphecidae of Czechoslovakia); Balthasar, 1948:141 (Slovakia: Kovačov); Šnoflák in Zavadil and Šnoflák, 1948:33, 36 (in key to Czechoslovakian Sphecidae); de Beaumont, 1950f:421 (southern Algeria); Zavadil, 1951:86 (Slovakia: Kovačov, Somotor); Guiglia, 1953a:140 (in revision of Italian *Oxybelus*, occurring in Hungary, southern Russia, southern France, Morocco, Algeria); Vogrin, 1955:44 (Yugoslavia); de Beaumont, 1957a:157 (Morocco); Móczár, 1958b:212 (Hungary: collecting localities), 1958c:296, 290 (in key to western Palearctic *Oxybelus*), 297 (in revision of *Oxybelus* of Hungary, description of ♂); Puławski, 1958a:189 (Bulgaria: Aitos; redescription of ♀); de Beaumont, 1960a:24 (Greece: Island of Rhodes); Puławski, 1964:146 (Egypt: Abydos, Abu Rawash, Ghiza, Kom Osheim); de Beaumont, 1965a:63 (Greece); Mingo Pérez, 1966:96 (in revision of *Oxybelus* of Iberian Peninsula; first records from Spain and Portugal); de Beaumont, 1967a:364 (Turkey); Benedek, 1969a:85 (Hungary: marshy meadow); Balthasar, 1972:164 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:178 (Kazakhstan); de Beaumont, Bytinski-Salz and Puławski, 1973:25 (Israel); Kazenas, 1974b:110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Puławski, 1978:275, 277 (in key to Sphecidae of European part of USSR); Gayubo, 1982b:8 (Spain: Ávila: Medinilla; Cáceres: Cabezuela del Valle; Salamanca: Peromingo); Józán, 1983:102 (Hungary); Gayubo, 1984b:96 (Spain: previously recorded from Salamanca Province); Józán, 1985b:58 (Hungary: Barcsi borókás), 79 (floral records), 84 (ecological and zoogeographic characteristics); Gayubo, 1986d:114 (Spain: Zamora Province); Gayubo and Heras, 1986:49 (Spain: Segovia Province); Gayubo and Sanza, 1986:57 (Spain: Burgos); Islamov, 1986:532 (Uzbekistan: Tashkent Oblast'); Józán, 1986:371 (Hungary: Kiskunság National Park); Karsai, 1988:100 (Hungary: Kiskunság National Park); Dollfuss, 1989:11 (type material in NHMW); Pádr in Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Guichard, 1990b:283 (Saudi Arabia, Yemen); Dollfuss, 1991:131 (in key to Sphecidae of North and Central Europe); Kazenas, 1992c:27 (Turkmenistan: Repetek Nature Reserve); Bitsch and Leclercq, 1993:249 (in revision of western European Crabroninae); Guichard, 1993b:530 (in key to European *Oxybelus*); Leclercq, 1993c:45 (Greece: Rhodes: Kremasti); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Wu and Zhou, 1996a:106 (in revision in Economic Insect Fauna of China); Nazarova and Shomirsaidov, 1997:24 (Tajikistan: fruit tree orchards in Vakhsh River valley); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Esenbekova and Kazenas, 2000:43 (southeastern Kazakhstan: near Bakanas, 3 km northeast of Borandysu, 10 km northwest of Chundzha, 5 km southwest of village Kazakhstan); Gayubo, González, and Torres, 2000:186 (Spain: Salamanca Province); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:89 (geographic distribution, collecting localities in Kazakhstan), 2004b:106 (Kazakhstan: western Tien Shan); Gadallah and Assery, 2004a:226 (in catalog of Sphecidae of Saudi Arabia); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Nazarova, 2004:107

(Tajikistan: Badakhshan Region: Dasht, Rushan, and Visav); Shkuratov, 2004a:81 (Russia: Rostov Oblast': village Rogozhkino, Tsimlyansk); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan); Hua, 2006:281 (in list of Chinese insects, geographic distribution); Roche, 2007a:102 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Slovakia); Ljubomirov and Yildirim, 2008:248 (in catalog of Crabronidae of Turkey); Dollfuss, 2008a:465 (locality records from Bulgaria, Greece, Hungary, Jordan, Kazakhstan, Kyrgyzstan, Mongolia, Morocco, Pakistan, Slovakia, Spain, Syria, Tadzhikistan, Turkmenistan, and Turkey); Gayubo, González, Tormos, and Asís, 2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas–Sierra de Francia); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Baghirov, 2010:678 (Russia: Altai Territories: village Savvushka), 2011b:149 (Russia: Altayskiy Kray: Savvushka); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Murai and Amr, 2011:119 (recorded from Syria by Dollfuss, 2008a); Sakenin, Samin, Bagriacik, and Rastegar, 2011:3 (Iran: Khuzestan: Ahwaz); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:352 (in new catalog of Sphecidae of Saudi Arabia); Kazenas, 2013b:496 (southeastern Kazakhstan: many localities in Ili River valley and adjacent desert); X. Li, L. Ma, and Q. Li, 2013:585 (China: Nei Mongol: Helan Mountains); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); Samin and Bagriacik, 2015:71 (Iran: Golestan: Gorgan at 36°50'N 54°30'E); Haris, 2016:16 (in list of species described by S. Mocsáry from Carpathian Basin); Antropov, 2017b:242 (in catalog of Crabroninae of Russia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:52 (Iran: known from Golestan and Khuzestan provinces); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:31 (Iran: Hormozgan: Sar Kahn at 27°24'N 57°07'E); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:14 (Azerbaijan: Nakhichevan Autonomous Republic); Gadallah, 2020b:42 (in list of aculeate wasps of Arabian Peninsula); Cross, Baldock, and Wood, 2021:52 (in catalog of Sphecidae *sensu lato* of Portugal); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:343 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

*Oxybelus rufitarsis* F. Morawitz, 1894:347, ♀. Syntypes: ♀, Turkmenistan: Serax (ZIN). Synonymized with *Oxybelus aurantiacus* by Pulawski, 1965c:576. – Dalla Torre, 1897:647 (in catalog of world Sphecidae).

### 27. *aurifrons* F. Smith

*Oxybelus aurifrons* F. Smith, 1856:389, ♀. Holotype or syntypes: ♀, Brazil: no specific locality (BMNH). – Kohl, 1884b:111 (in list of known *Oxybelus*); Strand, 1910a:157 (Paraguay); Dalla Torre, 1897:638 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); R. Bohart, 1993a:190 (study of type, diagnostic characters), 1993d:67 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru).

### 28. *ayuttayanus* Tsuneki

*Oxybelus ayuttayanus* Tsuneki, 1974b:655, ♀, ♂. Holotype: ♂, Thailand: Ayuttaya (T. Tano coll., Fukui). – R. Bohart and Menke, 1976:629 (in checklist of world Sphecidae).

### 29. *aztecus* Cameron

*Oxybelus aztecus* Cameron, 1891a:157, sex not stated. Holotype or syntypes: Mexico: Veracruz: no specific locality (BMNH). – Dalla Torre, 1897:638 (in catalog of world Sphecidae); R. Bohart and Schlinger, 1956c:158 (in checklist of North American *Oxybelus*, as *aztecum*); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); D. Peckham, 1985:866 (nesting habits); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution); Spofford, Kurczewski, and Downes, 1989:259 (reference to publication on nest parasite

*Senotainia trilineata* (Wulp), a miltogrammine fly); Hanson and Menke, 1995:640 (known from Costa Rica); Amaranter, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed). – **As *Notoglossa azteca***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae).

### 30. *bareii* Radoszkowski

*Oxybelus bareii* Radoszkowski, 1893c:243, ♀, ♂ (as *Bareii*, incorrect original capitalization). Syntypes: Turkmenistan: Ashkhabad, Serax (Kraków). – Dalla Torre, 1897:638 (in catalog of world Sphecidae, as *bargii*); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Dollfuss, 2008a:466 (Turkmenistan: 15 km north of Ashkhabad and Sandzikatzi area).

### 31. *bechuanae* Arnold

*Oxybelus bechuanae* Arnold, 1936:33, ♂. Holotype: ♂, Botswana: Kuruman (TMP). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Dollfuss, 2008a:466 (Namibia: Rundu, South Africa: Northern Cape Province: Van Zylsrus).

### 32. *bicornutus* Arnold

*Oxybelus bicornutus* Arnold, 1929c:412, ♀. Holotype: ♀, Namibia: Mafa (SAM). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae), 1935a:502 (South Africa: Kalahari); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Dollfuss, 2008a:467 (Namibia: 100 km northeast of Grootfontein, 100 km southwest of Rundu).

### 33. *bipunctatus* Olivier

*Oxybelus bipunctatus* Olivier, 1812b:597, [♀]. Holotype or syntypes: ♀, France: Paris area (lost). – Vander Linden, 1829:40 (bibliographic references, Belgium: Bruxelles, France: Paris); Lepeletier de Saint Fargeau, 1845:220 (in revision of world Hymenoptera; Paris area); Wesmael, 1852:626 (Belgium); F. Smith, 1856:384 (in catalog of Hymenoptera in British Museum); Schenck, 1857:112 (Germany: in revision of fossorial wasps of Nassau Region); F. Smith, 1858c:167 (in review of British Aculeata, redescription); Taschenberg, 1858:119 (in key to Sphecidae of Germany); Funk, 1859:58 (Germany: Bayern: Bamberg); Schenck, 1860:146 (Germany: Nassau Region), 1861:142 (Germany: Hessen: Weilburg); Brischke, 1862:105 (Germany: Preussen Province, now Poland: Pomorze Region); Giraud, 1863a:15 (France: Hautes-Alpes: Vallouise near Briançon); Taschenberg, 1866:162 (in revision of Hymenoptera of Germany); Gerstaecker, 1867a:77 (in revision of *Oxybelus*); Kirchner, 1867:223 (in catalog of European Hymenoptera); Schenck, 1867a:352 (Germany: Nassau Region); Chevriér, 1868:410 (in revision of Swiss *Oxybelus*); Wierzejski, 1868:117 (Ukraine: Podole Region); von Aichinger, 1870:315 (Austria: Tirol); F. Smith, 1871b:17 (in catalog of British Aculeata); P. Ivanov, 1872:151 (Ukraine: Khar'kov Oblast': Kupyansk area); Dours, 1874:153 (in catalog of Hymenoptera of France); Wierzejski, 1874:261 (Poland: Żegiestów; Ukraine: L'viv and Podole Region: Sinków); Taschenberg, 1875:380 (Germany: Halle); Radoszkowski, 1877:74 (Uzbekistan: Zaravshan valley; Kazakhstan: Kyzil-Kum); Kohl, 1880:144 (Austria: Tirol, and Italy: Trentino–Alto Adige), 221 (prey: Diptera *Homalomyia incisurata* Z.H., Fannidae, and *Onesia cognata* Meigen, Calliphoridae); Yaroshevskiy, 1881:121 (Ukraine: Khar'kiv Oblast': Kupyansk); Kohl, 1883e:662 (Switzerland); Sickmann, 1883:80 (Germany: Niedersachsen: Wellingholthausen); Kohl, 1884b:111 (in list of known *Oxybelus*); Radoszkowski, 1886a:37 (Turkmenistan); Brischke, 1888b:100 (Germany: Preussen Province, now Poland: Pomorze Region), 1889:204 (Germany: Steegen east of Danzig, now Poland: Stegna east of Gdańsk); Kohl, 1893a:33 (Austria: Niederösterreich); F. Morawitz, 1893a:115 (Russia: Karelian Isthmus); Sickmann, 1893:91 (Germany: Niedersachsen: Iburg); Westerlund, 1893:28 (Russia: Karelian Republic: northern shore of Lake Ladoga); Krieger, 1894:11 (Germany: Kingdom of Saxony); Marquet, 1896:30 (in revision of *Oxybelus* of France); Meunier, 1896:270 (Belgium: Bruxelles area); Acloque, 1897:92 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:639 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Kingdom of Hungary, some localities are in today's Slovakia); Ferton, 1901a:112 (prey); Chyzer, 1902:34 (Hungary); de Cobelli,

1903:114 (Italy: Province of Trentino: Valdiriva); Antiga and Bofill, 1904:27 (Spain: Cataluña Province); W. Schulz, 1904b:101 (Finland: Terijoki, now Russia: Zelenogorsk); Kubes, 1905:84 (Czech Republic: Kolín); Schmiedeknecht, 1907:203, 205 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Dittrich, 1911b:20 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:45 (Italy: Trieste area); Morice, 1911:132 (Algeria: Biskra); Schirmer, 1912:165 (Germany: Berlin area); Alfken, 1914:276 (northwestern Germany); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); O. Meyer, 1919:149 (Germany: Posen Province, now Poland: Poznań Region); A. Wagner, 1920:38 (Germany: Lower Elbe region); Dubois, 1922:191, 192, 193 (in key to Belgian Sphecidae); Forsius, 1921:119 (Finland); Hedicke, 1922:270 (Germany: Brandenburg: Gross Machnower Weinberg); Maidl, 1922:73 (Albania, Croatia); Leininger, 1924:121 (Germany: Baden-Württemberg: Friedrichstal, Karlsruhe); Berland, 1925d:208 (in Sphecidae Fauna of France); Coulon, 1925:122 (France: Elbeuf, Oise); Forsius, 1925:119 (Finland); Lauterborn, 1925:355 (Germany: Baden-Württemberg: Limbergs near Sasbach); Shestakov, 1925:36 (Russia: Yaroslavl' area); K. Strohm, 1925:211 (Germany: Baden-Württemberg: Ihringen); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Chevalier, 1926a:10 (nesting habits); Friese, 1926:144 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); K. Strohm, 1926:74 (reference to Lauterborn, 1925); Grandi, 1927:208 (nest construction and structure, prey); F. Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley); Benoist, 1928:411 (France: Basses-Alpes: Saint-Pons); Berland, 1928b:182 (add Grandi, 1926 to bibliography in Berland, 1925d); Grandi, 1928d:314 (prey); Crèvecoeur, 1929:361 (prey carrying, temporary nest closure, cocoon); Maréchal, 1930:7 (cocoon structure; description of mature larva and pupa); Maidl *in* Schmiedeknecht, 1930:663, 665 (in keys to Hymenoptera of North and Central Europe); Crèvecoeur, 1931:187 (nesting habits, mating, nest parasites); Grandi, 1931:53 (additional prey: *Calythea albicincta* Fallén, Anthomyiidae, and *Hydrotaea armipes* Fallén, Muscidae), 58 (Italy: Toscana: Vallata delle Pozze near Le Mandriole, as *2-punctatus*); Pulkkinen, 1931:158 (in revision of Sphecidae of Finland); Bondroit, 1932:42 (Belgium: abundant in Bruxelles area); Bouwman, 1932:391 (in revision of Sphecidae of Netherlands); Gussakovskij, 1932:28 (Russia: Primorskiy Kray); Balles, 1934:17 (Germany: Baden-Württemberg: Mannheim-Rheinau); Giner Marí, 1934:136 (Spain); Forsius *in* Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); Crèvecoeur and Maréchal, 1936:257 (in catalog of Belgian Hymenoptera); Drogoszewski, 1936:129 (Poland: Łowicz); Goebel, 1937:39 (Poland: Poznań District: Poznań-Dębina); Zavadil, Šusterka, and Baťa, 1937:172 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938c:81 (Hungary: Kőszeg Hills); A. Wagner, 1938a:118 (northwestern Germany); Maréchal, 1939:341 (Belgium: Loën); Móczár, 1939:5 (Hungary: Jászberény); Struve, 1940:823 (Germany: Island of Borkum); Hoop, 1941b:70 (Germany: Schleswig-Holstein: Süderhastedt); Paul, 1941:39 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1034 (Germany: Bayern: Bamberg area); de Beaumont, 1942b:425 (in revision of Swiss *Oxybelus*); Balthasar, 1943:41 (Czech Republic: Moravia: Zlin area); Giner Marí, 1943a:263 (in Sphecidae Fauna of Spain); Pate, 1943c:16 (USA: New York: Long Island and Thompson County); Baťa, 1944b:91 (Czech Republic: Veselí); Guiglia, 1944b:40 (Italy); Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Pate, 1946a:165 (USA: District of Columbia, prey, as *bipunctatum*), 1946g:91 (USA: Maine: Bridgton); van Lith, 1947:103 (Netherlands); Balthasar, 1948:140 (Slovakia: Parkan); Krombein, 1948:67 (prey, as *bipunctatum*); Šnoflák *in* Zavadil and Šnoflák, 1948:35, 39 (in key to Czechoslovakian Sphecidae); Tsuneki, 1948d:52 (nesting habits); P. Verhoeff, 1948:191 (in revision of Western European *Oxybelus*); Fæster, 1949:18, 37 (in revision of Western European *Oxybelus*); Wahis, 1949:201 (prey: *Myospila mediatubunda* F., Muscidae and *Pollenia rudis* F., Polleniidae); Aerts, 1950a:51 (Germany: Nordrhein-Westfalen: Rheidter Wertchens near Köln; prey impaled on sting); Cavro, 1950:41 (France: Département du Nord); Noskiewicz and Chudoba, 1950:308 (Poland: in revision of *Oxybelus* of Śląsk Region); Szulczewski, 1950:102 (Poland: Wielkopolski National Park 15 km south of Poznań); Abrahamsen, 1951:116 (recorded from Denmark after J.C. Nielsen, 1907); Caruel, 1951:100 (France: Marne Department); Burks *in* Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera); de Beaumont, 1951h:35 (Switzerland: Neuchâtel area); Leininger, 1951:116 (Germany: Baden-Württemberg); Scobiola, 1951:274 (first record from Romania);

several localities); Tsuneki, 1951b:63 (nesting habits); Bat'a, 1952:167 (Czech Republic); de Beaumont, 1952b:91 (Marquet's, 1896 specimens); Guiglia, 1953a:100 (in revision of Italian *Oxybelus*); Móczár, 1953:311 (Hungary); Nouvel and Ribaut, 1953:184 (France: Haute-Garonne: Saint-Béat); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); Blüthgen, 1954:144, 149 (in key to Central European *Oxybelus*), 153 (common in sandy habitats); Grandi, 1954:187 (exclusive prey: *Calythea albocincta* Fallén, a muscid), 244 (Italy); Puławski, 1954:106 (Poland: Błędów); Aerts, 1955:60 (Germany: Rheinland); Steiner, 1955:146 (France: Dordogne); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vergne, 1955:6 (France: Auvergne); Vogrin, 1955:44 (Yugoslavia); R. Bohart and Schlinger, 1956c:158 (in checklist of North American *Oxybelus*, as *bipunctatum*); Ceballos, 1956:396 (in catalog of Sphecidae of Spain); Hertzog, 1956:183 (carrying prey impaled on stinger); Krombein, 1956a:43 (prey); de Beaumont, 1957b:139 (northern Iran); R. Bohart and Schlinger, 1957:109 (in key to North American *Oxybelus*, as *bipunctatum*); Evans, 1957b:111 (description of larva); Zirngiebl, 1957:178 (Germany: Rheinland-Pfalz: Birkenheide, Leistadt); Benno, 1958b:18 (in review of Dutch Sphecidae); Krombein, 1958f:200 (in supplement to catalog of North American Hymenoptera: prey: *Hyalomyodes triangulifera* (Loew) and *Leucostoma aterimum* (Villers), both Tachinidae); Móczár, 1958b:210 (Hungary: collecting localities), 1958c:286, 288 (in key to western Palearctic *Oxybelus*); Nouvel and Ribaut, 1958:17 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Olberg, 1959:386-389 (photographs of nest digging and prey carrying: prey impaled on stinger); Wolf, 1959b:35 (Germany: Nassau); Hamann, 1960:197 (Austria: Oberösterreich: Mönchgraben at 48°13'N 14°21'E); Noskiewicz and Puławski, 1960:162, 165 (in key to Polish Sphecidae); Grandi, 1961:263 (nesting habits); Valkeila, 1962b:68 (southwestern Finland); Wengris, 1962:207 (Lithuania: Vilnius area); Evans, 1963c:102 (prey impaled on sting during transport); Hoop, 1963a:73 (Germany: Schleswig-Holstein: Reher Kratt), 1963b:6 (Germany: Schleswig-Holstein: Reher Kratt, Süderhastedt); Krombein, 1963f:279 (Maryland: Plummers Island near Washington, D.C., as *bipunctatum*); Kurczewski and Kurczewski, 1963:149 (Pennsylvania: Presque Isle State Park, as *bipunctatum*); Babiy, 1964:119 (Austria: Land Salzburg); de Beaumont, 1964c:161 (in Sphecid Fauna of Switzerland); Hüsing and Jäger, 1964:192 (Germany: Sachsen-Anhalt: Nietleben near Halle), 196 (description of nest); B. Klug, 1965:144 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Mingo Pérez, 1966:75 (in revision of *Oxybelus* of Iberian Peninsula); Balthasar, M. Hrubant, and E. Hrubant, 1967:170 (Bulgaria: Slanchev Bryag near Nesebar); Benno, 1967:38 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:365 (Turkey); Gauss, 1967:560 (Germany: Baden-Württemberg); J. Heinrich, 1967:83 (Germany: Bayern: Unterfranken District); Niedl and Deneš, 1967:76 (Czech Republic: Třeboň area); Benedek, 1968:79 (Hungary, floral records); Kurczewski and Harris, 1968:81-82 (New York: Groton, relative abundance); Scobiola-Palade, 1968c:386 (Romania: București, Budești); Benedek, 1969a:85 (Hungary: marshy meadow); Dathe, 1969:438 (Germany: Berlin Zoological Garden); Lefeber, 1969c:234 (Netherlands: Sint-Pietersberg = Montagne Saint Pierre); Tsuneki, 1969a:11 (nesting habits); Zangheri, 1969:1708 (Italy: in catalog of flora and fauna of Romagna Region); Benedek, 1970:105 (Hungary: Tapolca); Gauss and Perraudin, 1970:360 (Germany: Baden-Württemberg: Bodensee area); Oehlke, 1970:792 (Democratic Germany); Tumšs, 1970:83 (first record from Latvia); Dathe, 1971:234 (Germany: Berlin Zoological Garden; phenology); Petit, 1971:22 (Luxemburg: Lellingen); Schmidt, 1971b:53 (Germany: Rheinland-Pfalz: Gonsenheimer Wald, Mainzer Sand); Stritt, 1971a:105 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:154 (in Sphecid Fauna of Czechoslovakia); Niedl and Deneš, 1972:151 (Czech Republic: Třeboň area); Kazenas, 1972b:176 (Kazakhstan); Kofler, 1972:116 (Austria: eastern Tirol); de Beaumont, Bytinski-Salz and Pulawski, 1973:25 (Israel); Hoop, 1973:47 (Germany: Schleswig-Holstein: Segrahner Berg); Lomholdt, 1973a:108 (Denmark: Funen: Svanninge Bakker); D. Peckham, Kurczewski, and D. Peckham, 1973:647 (nesting habits); Erlandsson, 1974:87 (Italy); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp., Tamaricaceae, in Kazakhstan), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan); Levi, Sysoletina, and Shernin, 1974:270 (Russia: Kirov Oblast': Dubrovka, Kirov, Kyrmyzh, Talitsa); Simon Thomas, 1974:58 (Netherlands: Limburg: Tienray); Evans, 1975a:263 (rapid colonizer of new habitats); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Haeseler, 1976b:73 (Germany: Friesian Islands: Island of

Amrum); Simon Thomas and Wiering, 1976:109 (Netherlands: IJsselmeer Polders); Wolf, 1976:30 (Germany: Nordrhein-Westfalen: Victoria Mine near Littfeld); Lomholdt, 1976:283 (in Sphecidae Fauna of Fennoscandia and Denmark); Kolesnikov, 1977:321 (Russia: Bryansk Oblast); Schmidt, 1977:99 (Germany: Baden-Württemberg: Enzklösterle in Schwarzwald); Petit, 1978:87 (Belgium, Genk, Opgrimbie, as Opbrimbie); Pulawski, 1978:275, 277 (in key to Sphecidae of European part of USSR); Schwammberger, 1978:421 (Germany: Württemberg); Benedek, 1979:236 (Hungary: Bakony Hills); Krombein, 1979b:1653 (in catalog of North American Hymenoptera); Leclercq, Gaspar, and Verstraeten, 1979:map 1423 (Belgium); Radović and Krunić, 1979:unpaginated foldout (nesting in sand, foreleg structure); Schwammberger, 1979:118 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Dathe, 1980:209 (Russia: northern Caucasus: Teberda); Kazenas, 1980e:92 (Russia: Far East); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:118 (Russia: Siberia: Altayskiy Kray: basin of Aley River); Pagliano, 1980:118 (Italy: Piemonte); Westrich, 1980:635 (Germany: Baden-Württemberg: Tübingen area); Haeseler, 1981:51 (Germany: Friesian Island: Island of Amrum); Schmidt, 1981:174 (Germany: Baden-Württemberg); Woydak, 1981:42 (Germany: Westfalen: Hamm); Burk, 1982:92 (preys predominantly on fly males, congregating around its nest, in search of females); Donath, 1982:215 (Germany: Cottbus Bezirk); Fimmamore, 1982:122 (in Sphecidae Fauna of Southern Quebec); Gayubo, 1982b:9 (Spain: Salamanca: Montemayor del Río, Peromingo, Valdefuentes de Sangusín, 1882e:103 (Spain: Cádiz Province); Haeseler, 1982a:20 (Germany: Niedersachsen: urban habitats in Oldenburg); Skibińska, 1982:124 (Poland: Warszawa area); Tsuneki, 1982b:10 (Korea), 16 (known from Korea); Dollfuss, 1983b:13 (in catalog of Sphecidae of Austria); Gayubo, 1983a:123 (prey: Tachinidae flies); Józán, 1983:102 (Hungary); Lefeber, 1983a:85 (Netherlands: Waddendistrict: northern coast sand dunes, West Friesian Islands); Riemann, 1983:86 (Germany: Bremen-Daverden area); Schmidt and Westrich, 1983:123 (first record from Greece); Chevin and Silvestre de Sacy, 1984:7 (France: Yvelines Department); Gayubo, 1984b:90 (Spain: Salamanca Province), 1984c:374 (Portugal: El Algarve Province); Haack, Tschamtker, and Vidal, 1984:130 (Germany: Hamburg area); Schmidt and Westrich, 1984:241 (Germany: Rheinland-Pfalz: Bad Münster); Veenendaal, 1984:19 (Netherlands: Amsterdam); Gayubo, 1985c:169 (Spain: Valladolid: Traspinedo); Haeseler, 1985c:571 (Germany: Friesian Islands); Józán, 1985b:58 (Hungary south of Lake Balaton), 79 (floral records), 84 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Nemkov, 1985:65 (nesting habits); Paik, 1985:200 (in list of Sphecidae of Korea); Plachter, 1985:60 (Germany: Bayern: lower Brombach valley); Radović, 1985:65 (sting apparatus analyzed); Brechtel, 1986:73 (Germany: Südpfalz); Gayubo, 1986f:1000 (prey: anthomyiid and tachinid flies); Gayubo and Heras, 1986:49 (Spain: Segovia and Valladolid Provinces); Gayubo and Sanza, 1986:57 (Spain: Burgos, Soria); Gayubo and Tormos, 1986a:15 (Spain: Castellón de la Plana); Józán, 1986:371 (Hungary: Kiskunság National Park); Nemkov, 1986:100 (Russia: Siberia: Irkutsk Oblast'); Skibińska, 1986b:151, 154 (Poland: suburbs of Warszawa); Steiner, 1986:105 (references to publications on nesting habits); Vikberg, 1986:76 (Finland); Asís and Jiménez, 1987:26 (Spain: Castellón Province); Holtappels, 1987:26 (Germany: Nordrhein Westfalen: Effelder Waldsee); Riemann, 1987b:42 (Germany: Niedersachsen: Nature Reserves Dünengebiet near Neumühlen and Voßberge); Scobiola-Palade, 1987:64 (Romania: Dobrogea); Schmidt and Westrich, 1987:375 (Germany: Mainz area); Dollfuss, 1988:14, 25 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Karsai, 1988:100 (Hungary: Kiskunság National Park); Kowalczyk, 1988b:66 (Poland: environs of Łódź); Wolf, 1988b:141 (Germany: Rheinland-Westfalen); Jacobs, 1989:15 (Germany: Mecklenburg-Vorpommern); Pádr *in* Šedivy, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Spofford, Kurczewski, and Downes, 1989:257, 259, 260, 261 (nest parasites: *Metopia luggeri* Townsend, *Phrosinella aurifacies* Downes, *Senotainia trilineata* (Wulp), *Senotainia vigilans* Allen, miltogrammine flies, and undetermined species of Miltogrammini, reference to publication on nest parasite *Phrosinella fulvicornis* (Coquillett), a miltogrammine fly); Weiffenbach, 1989:108 (Germany: Hessen: Gießen area); Barbier, Rasmont, and Wahis, 1990:32 (Belgium: Hainaut); Gayubo, Asís, and Tormos, 1990b:74 (Spain: Teruel and Toledo provinces); Jacobs and Oehlke, 1990:175 (new records from Democratic Germany); Kurczewski and Acciavatti, 1990:61 (New York: Cayuga County); Pádr, 1990:89 (Czech Republic: Praha area); Pagliano, 1990:78 (in

catalog of Italian Sphecidae); Rohe, 1990:1045 (Germany: Rheinland-Pfalz: Lenneberg forest); Schwammberger and Priesner, 1990:541 (Austria: Kärnten); Spofford and Kurczewski, 1990:746, 748, 749, 751 (nest parasites: *Metopia luggeri* (Townsend), *Phrosinella aurifacies* Downes, *Senotainia trilineata* (Van der Wulp), *Senotainia vigilans* Allen, and unknown species of Miltogrammini, Sarcophagidae); von der Heide and Witt, 1990:64 (Germany: Niedersachsen); Dollfuss, 1991:131 (in key to Sphecidae of North and Central Europe); Jacobs, 1991:46 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Jakubzik, 1991:75 (Germany: Köln); Kowalczyk, 1991a:91, 100, 102 (Poland: Łódź), 1991b:121 (Poland: Augustów Forest); Kuhlmann et al., 1991:91 (Germany: Senne Region); Pagliano, 1991b:329, 332 (in key to Italian Crabroninae); H.-J. Schulz, 1991:31 (Germany: Oberlausitz: 5 km southwest of Wittichenau); Budrys, 1992:32 (in list of Sphecidae of Lithuania); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Józán, 1992b:174 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); N. Schneider, 1992:178 (Luxemburg); Spofford and Kurczewski, 1992:998 (species of miltogrammine nest parasites listed), 1002 (counter-cleptoparasitic habits: diversionary flight), 1005 (post-larvipositional counter-cleptoparasitic habits: clean burrow, inordinate amount of post-provisioning time in burrow); Nemkov, 1992b:245 (Russia: Far East: 40 km south-southwest of Svobodnyi near Khingan Nature Reserve); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Bitsch and Leclercq, 1993:249 (in revision of western European Crabroninae); Guichard, 1993b:530 and 532 (in key to European *Oxybelus*, color variation); Kuhlmann, 1993:77 (Germany: known from Westfalen); Leclercq, 1993c:45 (collecting localities from Spain, Czechoslovakia, Switzerland, and Yugoslavia); Sorg and Wolf, 1993:60 (Germany: Rheinland-Westfalen: Nature Reserve Die Spey); Blagoveshchenskaya, 1994:90 (Russia: Ul'yanovsk Oblast'); Kowalczyk, 1994:76 (Poland: Łagiewniki forest in Łódź); Schmid-Egger, 1994a:688 (Germany: Rheinland-Pfalz: Höllenberg near Grünstadt); Theunert, 1994c:45 (Germany: summary of records from Niedersachsen and Bremen); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Krasnobayev et al., 1995:139 (Russia: Zhiguli Hills northwest of Samara); Negrisolo, 1995a:22 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:423 (in key to Sphecidae of Russian Far East); Riemann, 1995:52 (Germany: Bremen); Scharrer, 1995:27 (Germany: Bayern: Aschaffenburg, Karlstadt); Schmid-Egger, 1995:62 (Germany: northwestern Baden-Württemberg); Schmid-Egger, Risch, and Niehuis, 1995:199 (Germany: summary of records from Rheinland-Pfalz); Verves and Gorobchishin, 1995:54 (nest parasite: *Senotainia conica* (Fallén), Sarcophagidae); Wasserling and Tschardtke, 1995:324 (experiments with homing); 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); Jakubzik and Cölln, 1996b:400 (Germany: Rheinland-Pfalz); Kurczewski, 1996:83 (variation in nesting habits); Pawlikowski and Kruszyński, 1996:87 (Poland: Toruń Basin); Saure, 1996:503 (Germany: Berlin-Pankow: sewage irrigation field); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: not endangered); Tischendorf, 1996:47 (Germany: Hessen: near Bensheim); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); von der Dunk and Amon, 1996:41 (Germany: Bayern: Altdorf sand dunes east of Nürnberg); Witt, 1996:106 (Germany: Brandenburg); Woydak, 1996:46 (Germany: Westfalen: summary of distribution and nesting habits); Celary, 1997:58 (in checklist of Animals of Poland); Gauss, 1997:27 (egg of miltogrammatid flies deposited on adult specimens); Schmidt and Schmid-Egger, 1997:21 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:28 (Germany: in list of Sphecidae of Brandenburg); Dollfuss, Gusenleitner, and Bregant, 1998:520 (Austria: summary of collecting records from Burgenland); Flügel, 1998:60 (Germany: Brandenburg: Unteres Odertal National Park); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings), 1998b:54 (Ukraine: Sumy Oblast': Vakalivshchina); Haeseler and Ritzau, 1998:51 (Germany: Bremen: Island of Harriersand in Weser River and Steller Heide); Jakubzik, Schlüter, and Cölln, 1998:1182, 1184 (Germany: Rheinland-Pfalz); Józán, 1998:311 (Hungary: Duna-Dráva National Park); Kurczewski, 1998a:1 (dispersal and range expansion in northeastern North America), 1998d:250 (pine barrens in upstate New

York); Kurczewski and Wochadlo, 1998:7 (cell depth inversely related to soil moisture); 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); N. Schneider and Wahis, 1998:22 (Luxemburg: sandstone quarries); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); Shkuratov, 1998:98 (Russia: Rostov Oblast'); van der Smissen, 1998:64 (Germany: Mecklenburg-Vorpommern, Niedersachsen, Schleswig-Holstein); K. Weber, 1998:145 (Germany: Bayern: Bamberg area); Erhardt, 1999:75 (Germany: Niedersachsen: Ammerland area); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); W. Klein, 1999:16 (in corrected key to *Oxybelus* of Benelux); Neumayer, Schwarz, and Bregant, 1999:225 (Austria: in checklist of Sphecidae of Kärnten); Pauly, 1999:109 (in catalog of Belgian aculeates); Podgorbunskikh and Rudoiskatel', 1999:142 (Russia: Chelyabinsk Oblast': Il'men Nature Reserve); Riemann, 1999:835 (Germany: Niedersachsen: sand pits near Bremen); M. Schwarz, 1999:86 (Austria: Oberösterreich: city of Linz area); Sörensen, Mauss, and Schindler, 1999:504 (Germany: Schleswig-Holstein); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:264 (in Sphecid Fauna of Germany); Cölln and Jakubzik, 2000:226 (Germany: Rheinland-Pfalz: Gönnersdorf); Dressler, 2000:33 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:43 (southeastern Kazakhstan: near Alma Ata, 5-6 km west and 6-10 km south of Alma Ata); Gayubo, González, and Torres, 2000:186 (Spain: Salamanca Province); Jacobs, 2000:8 (Germany: Mecklenburg-Vorpommern: not endangered); Józán, 2000:109 (Hungary: Bakony Mountains); Mokrousov, 2000b:30 (Russia: Nizhniy Novgorod Oblast'); Neumeyer, 2000:99 (Switzerland: Basel); Pijfers, 2000:5 (Netherlands: Twente Region); Schmid-Egger, 2000b:276 (Germany: Baden-Württemberg: shores of Rhine River); Shkuratov, 2000:60 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 180 (review of biology); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ohl et al., 2001:140 (distribution in Germany by provinces); Reemer and van der Meer, 2001:16 (Netherlands: along Almelo-Nordhorn canal); Szczepko and Kowalczyk, 2001:188 (Poland: Kampinos National Park near Warszawa); van der Smissen, 2001:62 (Germany: Schleswig-Holstein: not endangered); Zettel, Gross, and Mazzucco, 2001:73 (Austria: Wien); Bieri, 2002:77 (Liechtenstein); Herrmann and Zinnert, 2002:26 (Germany: Baden-Württemberg: Bettenberg near Konstanz); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:90 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:154 (Poland: Kampinos National Park near Warszawa); Kurczewski, 2002:419 (seasonal variation in nesting habits); Mokrousov, 2002:148 (Russia: Nizhniy Novgorod Oblast': Kerzhenskiy Nature Reserve); 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, 2002:52 (in list of Aculeata of Finland); Wiśniowski, 2002:70 (Poland: Ojców National Park); Cölln, Esser, and Jakubzik, 2003:62 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Esser and Jakubzik, 2003:291 (Germany: Nordrhein-Westfalen: Niederrheinisches Tiefland); Gorobchishin, 2003:48 (Ukraine: Kiev: botanical garden); Haeseler, 2003:340 (Germany: Niedersachsen: Island of Harriersand near Bremen); Józán, 2003:227 (Hungary: Látányi Puszta Nature Conservation Area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:68 (Germany: in catalog of wasps and bees of Bayern); Reemer, 2003:62 (Netherlands: Gelderland: Zaltbommel area); Schmid-Egger, 2003:755 (Italy: Sicilia: Armerina, Madonie); 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, 2003:155 (Poland: Ojców National Park); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:263 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Kazenas, 2004b:106 (Kazakhstan: western Tien Shan); Peeters, van Achterberg, et al., 2004:405 (in Wasp and Ant Fauna of Netherlands); Raemakers, van den Eijnde, and Kleukers, 2004:292 (Netherlands: Tungelerwalle near Weert); Shkuratov, 2004a:81 (Ukraine: Donetsk Oblast': village Mostovoy), 2004b:168 (Russia: Rostov Oblast': Gosudarstvennyi

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Schneider, 2006:138 (Luxemburg: anthropogenic habitats); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006a:86 (Germany: Nordrhein-Westfalen: Dortmund); Vepřek, 2006:511 (Czech Republic: Kokořínsko area); Burguet, 2007:unnumbered p. 25 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Chevin, Livory, Lair, Sagot, and Baldock, 2007:42 (France: Département de la Manche); Cungs, Jakubzik, and Cölln, 2007:140 (Luxemburg: Haardt Nature Reserve); Guldmond, Pijfers, and den Belder, 2007:203 (Netherlands: Gelderland: dairy farm in de Graafschap); Herrmann, 2007a:52 (Germany: Niedersachsen: Ostfriesland); Jacobs, 2007:115, 118 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:25 (Germany: northwestern Sachsen); Józán, 2007:180 (Hungary: Zselic hills); Kowalczyk and Nadolski, 2007:284 (Poland: Łódź: railway areas); Nemkov, 2007c:997 (in Appendix to Key to identification of Sphecidae of Far East of Russia); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Smit and Megens, 2007:17 (Netherlands: Noort Brabant: vicinity of Leende); Vago, 2007:175 (France: départements du Nord and Pas-de-Calais); Venne, Bleidorn, and Lauterbach, 2007:302 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia); Winkler, 2007:30 (Germany: Niedersachsen: eastern Friesland); Danilov, 2008:349 (Russia: Altayskiy Krai: Barnaul area); Dollfuss, 2008a:465 (locality records from Bulgaria, Finland, France, Hungary, Italy, Kazakhstan, Mongolia, Serbia, Syria, Turkey, Turkmenistan, and Ukraine); Haeseler, 2008:308 (Germany: Friesian Islands); Haneda, 2008:3 (in key to Japanese Crabroninae); Kochetkov, Bol'shakova, Butenko, and Prikloński, 2008:264 (Russia: Ryazan' Oblast': Oka Nature Reserve); Larnhof, 2008:46 (Austria: Niederösterreich: Nature Reserve "in den Sandbergen" near Drösing); Ljubomirov and Yildirim, 2008:248 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:20 (in catalog of Crabronidae of Asiatic Russia); Protsenko and Drozdovskaya, 2008:127 (Ukraine: Sumy Oblast': Mogritsa village); Rudnick, 2008:37 (Germany: Mecklenburg: Hohen Viecheln); Tannert and von der Dunk, 2008:181 (Germany: Bayern: west of Ernhofen and Weissenbrunn); Theunert, 2008:61 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps);

Belkheir, 2009:18 (France: Pyrénées-Orientales: commune d'Eyne); Bitsch and Leclercq, 2009:228 (in supplement to vol. I of Faune de France, 1993: France: first records from Aisne: Courtement-Varennes and Rocourt-Saint-Martin; Hautes-Alpes: Gap on Durance River and Réotier; Haut-Rhin: Geiswasser); Debuysse and Vago, 2009:6 (in list of Sphecidae *sensu lato* of northern France); Donie, 2009:9 (Germany: Niedersachsen: Oldenburg); U. Frommer, 2009a:28 (Germany: in checklist of Sphecidae of Hessen); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid: Reserva Natural Riberas de Castronuño–Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Hessling, 2009:104 (Germany: Niedersachsen: Hunte River valley south of Oldenburg); Mokrousov, 2009:288 (Russia: Republic Mari El); Nemkov, 2009b:90 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Pagliano, 2009:180 (Italy: Liguria: Borghetto d'Arroschia); Straka, Dvořák, and Bogusch, 2009:262 (Czech Republic: Meandry Smědé Nature Reserve); van Diemen, 2009:49 (Netherlands: airbase Gilze-Rijen); Esser, Fuhrmann, and Venne, 2010:37 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:28 (Germany: Bayern: Sulz- and Ottmaringer Tal); Jakubzik, Kinkler, and Cölln, 2010:155 (Germany: Rheinland-Pfalz: Leverkusener Steinbüchel); Mokrousov, 2010a:62 (Russia: Kirov, Nizhniy Novgorod, and Vladimir oblast's, Chuvash Republic, Mari El Republic, Tatarstan: no specific localities); Rudoiskatel', 2010:159 (Russia: central Ural Mountains); Saure, 2010a:88 (Germany: Berlin-Reinickendorf: Baumberge), 2010b:175 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: relatively common); Schmidt, 2010:137 (Germany: Bayern: collected along Main-Donau canal); 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); Tüzün and Yüksel, 2010:4471 (Turkey: Niğde Province); van der Smissen, 2010a:345 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records), 2010b:385 (France: Vaucluse: Bédoin); Wurdack and Gack, 2010:153 (Germany: Baden-Württemberg: Kaiserstuhl); Baghirov, 2011b:149 (Russia: Altay Republic: Onguday); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:76 (Russia: Chuvash Republic); Murai and Amr, 2011:119 (recorded from Syria by Dollfuss, 2008a); Rudoiskatel', 2011d:244 (Russia: central Ural Mountains); Saure, 2011a:6 (Germany: Berlin: former airport Tempelhof), 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg), 2011d:200 (Germany: Sachsen-Anhalt: conservation area "Heide südlich Burg"); Schmid-Egger, 2011c:556 (Austria: Tirol: Tiroler Lech Nature Park); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:151 (Germany: Hessen: not endangered); Tripotin, 2011:23 (France: Seine-Maritime: artificial sand site near Sandouville); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:3 (France: Puy-de-Dôme: sands Giraults-Faures in Orléat commune); Cölln, Jakubzik, and Kinkler, 2012:25 (Germany: Nordrhein-Westfalen: Leverkusen); Nemkov, 2012c:440 (in catalog of Crabronidae of Russian Far East); Saure, 2012b:229 (Germany: Berlin-Spandau: Spandauer Forst); Shlyakhtenok, 2012a:171 (Belorussia: collected in private plots); Strumia, Pagliano, and Gayubo, 2012:56 (Italy: Toscana: Riserva di San Rossore); Tripotin, 2012:23 (France: Seine-Maritime: estuary of Seine river); Dyuzhaeva, 2013:117 (Russia: Samara Oblast': Zhiguli Nature Reserve); Flügel, 2013a:120 (Germany: Brandenburg: Pimpinellenberg near Oderberg); Mokrousov, Ruchin, and Egorov, 2013:202 (Russia: Republic of Mordovia: Mordovian State Nature Reserve); Pankov, 2013:230 (Russia: Ivanovo Oblast'); Saure, 2013:20 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:22 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:179 (in annotated catalog of aculeate wasps of Belorussia); Wiśniowski and Piotrowski, 2013:22 (Poland: Poleski National Park); Wiśniowski and Szczepko, 2013:41 (Poland: Kampinos National Park near Warszawa); Zettel, Zimmermann, and Wiesbauer, 2013:13 (Austria: Wien: Donaupark); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Flügel, 2014:255 (Brandenburg: Hangelsberger Heide); J.-K. Kim, 2014:437 (in catalog of Sphecidae *sensu lato* of Korean Peninsula), 451 (recorded from Korea but not occurring there); Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan);

Pagliano, 2014:81 (specimens in M. Spinola collection, Torino, are *Oxybelus bipunctatus* and *Oxybelus trispinosus*); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); Peeters, Klein, van Kemenade, and Spijkers, 2015:59 (Netherlands: Noord-Brabant: Kaaistoep Nature Reserve); P. Rosa and Pagliano, 2015:103 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:14 (Germany: Berlin-Lichterfelde); Simon, Lorthiois, and Macé, 2015:54 (France: alluvial terraces in Eure Department: Courcelles-sur-Seine); Blažej, Macek, and Trýzna, 2016:123 (Czech Republic: České Švýcarsko = Bohemian Switzerland National Park); Bleidorn, Gerth, Hopfe, et al., 2016:10 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Cölln and Jakubzik, 2016:18 (Germany: Rheinland-Pfalz: Vulkaneifel District); Reemer and Peeters, 2016:10 (Netherlands: Hulshorsterzand); Saure, 2016c:205 (Germany: center of Berlin: Großer Tiergarten Park); U. Sörensen, 2016:427 (Germany: Schleswig-Holstein: der Ochsenweg south of Leck); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Wiśniowski, 2016:129 (Poland: Ojców National Park); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:41 (Turkey: Kars: Sarıkamış: Karakurt, as *Oxybelus bipunctatus bipunctatus*); Antropov, 2017b:242 (in catalog of Crabroninae of Russia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:52 (Iran: known from Qazvin Province); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Vallée d'Eyne); Říha, 2017:175 (Czech Republic: Brno); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:6 (Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Carminati, Mora, and Cretin, 2019:19 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:14 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:105 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13234 (Russia: Mordovia State Nature Reserve); Akulov, Proshchalykin, and Mokrousov, 2020:49 (Russia: central Krasnoyarsk Krai); Kejval, Blažej, and Erhart, 2020:104 (western Czech Republic); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Cross, Baldock, and Wood, 2021:52 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:72 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:343 (in revision of Sphecidae *sensu lato* of Europe); Olszewski, Wiśniowski, and Ljubomirov, 2021:96 (in commented list of Sphecidae *sensu lato* of Poland); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam), 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); Jakubzik and Cölln, 2022:11 (Germany: Rheinland-Pfalz: Moselle River valley between Drohn and Kattenes); U. Frommer and Bahmer, 2023:194 (Germany: Hessen: Giessen University Botanical Garden and city gardens); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution); Olszewski, Sparks, Twerd, and Wiśniowski, 2024:5 (central Poland: common in river valleys: no specific localities); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: New Brunswick. Now Scotia, Ontario, Quebec, first record from Manitoba: no specific locality); Frommer and Klenke, 2025:164 (Germany: Hessen: Lahntal near Weilburg).

*Oxybelus nigroaeneus* Shuckard, 1837a:113, ♂. Syntypes: Britain: no specific locality (BMNH). Synonymized with *Oxybelus haemorrhoidalis* by Dahlbom, 1845:512, and with *Oxybelus bipunctatus* by Wesmael, 1852:626. – von Siebold, 1839:49 (Germany: Danzig, now Poland: Gdańsk); Dahlbom, 1844:266 (original description copied); F. Smith, 1851c:23 (Great Britain: unknown locality), 1853:63 (in checklist of British Hymenoptera); Dours, 1874:153 (in catalog of Hymenoptera of France); Morice, 1917:273 (identity with *Oxybelus bipunctatus* confirmed); D. Baker, 1998:172 (type origin and depository).

*Oxybelus laevigatus* Schilling, 1848:105, sex not stated. Holotype or syntypes: sex unknown, Germany: Schlesien: Fuchsberge bei Schwoitsch, now Poland: Swojec, a suburb of Wrocław (lost). Synonymized with *Oxybelus bipunctatus* by ... – Erichson, 1848:137 (original description recorded).

**ssp. *thermophilus* de Beaumont**

*Oxybelus bipunctatus thermophilus* de Beaumont, 1950f:421, ♀, ♂. Holotype: ♀, Algeria: Laghouat (BMNH). – de Beaumont, 1957a:157 (Morocco); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Dollfuss, 2008a:468 (locality records from Jordan and Morocco).

**34. *braunsi* Arnold**

*Oxybelus braunsi* Arnold, 1927:87, ♀ (as *Braunsi*, incorrect original capitalization). Holotype: ♀, South Africa: Sunday River (TMP). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae).

**35. *brethesi* R. Bohart**

*Oxybelus interruptus* Brèthes, 1913:145, ♀, junior primary homonym of *Oxybelus interruptus* Cresson, 1865. Holotype or syntypes: Argentina: La Pampa: no specific locality (MACN). – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Genise, 1990:26 (type material in MACN).

*Oxybelus brethesi* R. Bohart, 1993a:190. Substitute name for *Oxybelus interruptus* Brèthes, 1913. – R. Bohart, 1993d:67 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America). – Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:468 (Argentina: Entre Ríos: Pronunciamento).

**36. *californicus* R. Bohart and Schlinger**

*Oxybelus californicus* R. Bohart and Schlinger, 1956b:147, ♀, ♂ (as *californicum*, incorrect original termination). Holotype: ♂, USA: California: Yolo County: Davis (CAS). Paratypes: western USA. – R. Bohart and Schlinger, 1956c:159 (in checklist of North American *Oxybelus*, as *californicum*), 1957:121 (in revision of Californian *Oxybelus*, as *californicum*); Krombein, 1958f:200 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Krombein, 1979b:1654 (in catalog of North American Hymenoptera); Rust, Menke, and Miller, 1985:47 (California: Channel Islands); Frommer, 1988:94 (California: Riverside County: Deep Canyon); Spofford, Kurczewski, and Downes, 1989:259 (reference to publication on nest parasite *Senotainia trilineata* (Wulp), a miltogrammine fly); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Dollfuss, 2008a:465 (Washington: Benton County: Prosser area, as *californius*).

**37. *callani* Pate**

*Oxybelus callani* Pate, 1943g:281, ♀, ♂. Holotype: ♀, Trinidad: Talparo (originally V.*SENSU LATO* Pate collection, now Cornell Univ.). Paratype: Brazil. – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Callan, 1991a:12 (Trinidad); R. Bohart, 1993a:190 (study of type, diagnostic characters); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Starr and Hook, 2003:19 (in catalog of Aculeata of Trinidad, West Indies).

**38. *canaliculatus* Radoszkowski**

*Oxybelus canaliculatus* Radoszkowski, 1877:73, ♀, ♂. Syntypes: ♂, Uzbekistan: Zaravshan valley; Kazakhstan: Mount Karak near Bayrakum, Syr-Darya steppe (ZMMU). – Kohl, 1884b:111 (in list of known *Oxybelus*); Radoszkowski, 1893a:72 (Turkmenistan); Dalla Torre, 1897:639 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:90 (geographic distribution, collecting localities in Kazakhstan); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

**ssp. *seraksensis* Radoszkowski**

*Oxybelus canaliculatus* var. *seraksensis* Radoszkowski, 1893c:244, ♀, ♂. Syntypes: Turkmenistan: Askhabad, Serax (Kraków). – Dalla Torre, 1897:639 (in catalog of world Sphecidae). – As *Oxybelus seraxensis* [sic]: Giner Marí,

1943a:262 (in Sphecidae Fauna of Spain); Ceballos, 1956:397 (in catalog of Sphecidae of Spain). – **As *Oxybelus canaliculatus seraksensis***: R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia).

### 39. *canalis* R. Bohart and Schlinger

*Oxybelus canalis* R. Bohart and Schlinger, 1956b:149, ♀, ♂. Holotype: ♂, USA: California: Riverside County: Riverside (CAS). – R. Bohart and Schlinger, 1956c:159 (in checklist of North American *Oxybelus*), 1957:127 (in revision of Californian *Oxybelus*); Krombein, 1958f:201 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Krombein, 1979b:1654 (in catalog of North American Hymenoptera); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae).

### 40. *canescens* Cameron

*Oxybelus canescens* Cameron, 1890b:278, ♀. Holotype or syntypes: ♀, India: West Bengal: Barrackpore (OXUM). – Cameron, 1890b:276 (India: Barrackpore); Bingham, 1897:320 (in Wasp Fauna of British India); Dalla Torre, 1897:639 (in catalog of world Sphecidae); Rothney, 1903:106 (India: West Bengal: Barrackpore); Paiva, 1907:15 (India: West Bengal: Siliguri); Pate, 1938b:389 (in list of Oriental Oxybelini); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Manikandan, Dey, and Farooqi, 1999:14 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:263 (in checklist of Oriental *Oxybelus*).

### 41. *carinatus* Gussakovskij

*Oxybelus carinatus* Gussakovskij, 1933b:287, ♂. Syntypes: Iran: Kerman: Serbaz, Mergas: Shurab (ZIN). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:52 (Iran: known from Sistan-o Baluchestan Province).

### 42. *catamarcensis* (Schrottky)

*Notoglossa catamarcensis* Schrottky, 1909b:251, ♀. Holotype or syntypes: ♀, Argentina: Catamarca: no specific locality (lost: R. Bohart, 1993a:190). Neotype: ♀, Argentina: Catamarca: Santa Maria (IML), designated by R. Bohart, 1993a:190. – Jörgensen, 1912:294 (Argentina: Mendoza Province); Schrottky, 1913a:234 (Argentina: Catamarca). – **As *Oxybelus catamarcensis***: R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); R. Bohart, 1993a:190 (diagnostic characters); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:468 (French Guiana: Cayenne); Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru).

*Oxybelus decipiens* Brèthes, 1913:142, ♂. Holotype or syntypes: Argentina: Entre Ríos: Paraná (MACN). Synonymized with *Oxybelus camatarcensis* by R. Bohart, 1993a:190. – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Genise, 1990:26 (type material in MACN).

*Oxybelus pamparum* Brèthes, 1913:143, ♀. Holotype or syntypes: ♀, Argentina: probably La Pampa: no specific locality (MACN). Synonymized with *Oxybelus camatarcensis* by R. Bohart, 1993a:190. – Jörgensen, 1912:294 (Argentina: Mendoza Province); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Genise, 1990:26 (type material in MACN).

### 43. *caucasicus* Radoszkowski

*Oxybelus caucasicus* Radoszkowski, 1893c:244, ♀. Holotype or syntypes: ♀, Georgia: Lagodekhi (Kraków). – Dalla Torre, 1897:639 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae).

### 44. *chilensis* Reed

*Oxybelus chilensis* Reed, 1894:651, sex not stated. Lectotype: ♂, Chile: no specific locality (NHMW), designated by R. Bohart, 1992:158. – Dalla Torre, 1897:639 (in catalog of world Sphecidae); Brèthes, 1910b:145 (Chile); Jaffuel

and Piri6n, 1926:376 (Chile: valle de Marga Marga); Gazulla and Ruiz Pereira, 1929:300 (Chile: Hacienda de "Las Mercedes"); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Sielfeld, 1980b:74 (in checklist of Chilean Sphecidae); Dollfuss, 1989:11 (type material in NHMW); R. Bohart, 1992:158 (in revision of Chilean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:468 (locality records from Chile); Chiappa, 2012:8 (Chile: Regi6n de Valpara6s: no specific locality).

*Oxybelus comatus* Reed, 1894:651, sex not stated. Holotype or syntypes: Chile: no specific locality (depository unknown). Synonymized with *Oxybelus chilensis* by R. Bohart, 1992:158. – Dalla Torre, 1897:639 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Sielfeld, 1980b:74 (in checklist of Chilean Sphecidae).

#### 45. *cinemucro* R. Bohart

*Oxybelus cinemucro* R. Bohart, 1993c:20, ♀, ♂. Holotype: ♀, Argentina: Salta: Cafayate (UCD). – Menezes de Jesus, Onody, dos Santos Ramos, de Oliveira Andrade, Doria dos Santos, and Ferreira Brand6o, 2019:3 (paratype in Mus. Zool. Univ. S6o Paulo).

#### 46. *citrinulus* Gussakovskij

*Oxybelus citrinulus* Gussakovskij, 1952:254, ♀. Syntypes: ♀, Tajikistan: Djilikul (ZIN). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Dollfuss, 2008a:468 (Turkmenistan: Sandikatzi).

#### 47. *citrinus* Radoszkowski

*Oxybelus citrinus* Radoszkowski, 1893a:72, ♀. Holotype or syntypes: ♀, Turkmenistan: Serax (Krak6w). – Dalla Torre, 1897:639 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Dollfuss, 2008a:468 (Turkey: Gevas/Van G6l6); Kaplan and Yildirim, 2021:72 (in catalog of Crabronidae of Turkey), 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey).

#### 48. *clandestinus* Kohl

*Oxybelus clandestinus* Kohl, 1905b:358, ♀, ♂. Lectotype: ♀, Chile: Concepci6n (NHMW), designated by R. Bohart, 1992:160. – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Sielfeld, 1980b:74 (in checklist of Chilean Sphecidae); Dollfuss, 1989:11 (type material in NHMW); R. Bohart, 1992:160 (in revision of Chilean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:468 (locality records from Chile).

#### 49. *cocacolae* P. Verhoeff

*Oxybelus cocacolae* P. Verhoeff, 1968:169, ♀, ♂. Holotype: Morocco: Agadir (RMNH). – de Beaumont, 1968a:277 (Canary Islands: islands of Lanzarote and Fuertaventura; as *cocacolai*); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); B6ez and Ortega, 1978:192 (Canary Islands); Hohmann, La Roche, Ortega, and Barqu6n, 1993:248 (detailed locality records from Canary Islands); Leclercq, 1993c:46 (in catalog of western Palearctic Crabronini and Oxybelini); Dollfuss, 2008a:469 (Morocco: 10 km north of Mhamid).

#### 50. *cochise* Pate

*Oxybelus cochise* Pate, 1943f:93, ♀, ♂. Holotype: ♂, USA: New Mexico: Steins (depository?). – Burks *in* Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:159 (in checklist of North American *Oxybelus*), 1957:115 (in revision of Californian *Oxybelus*); Krombein, 1958f:201 (in supplement to catalog of North American Hymenoptera: Baja California); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Krombein, 1979b:1654 (in catalog of North American Hymenoptera); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution); Amarante,

2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae).

### 51. *cocopa* Pate

*Oxybelus cocopa* Pate, 1943h:121, ♂. Holotype: ♂, USA: California: Imperial County: Thompson Ranch (USNM). – Burks in Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:159 (in checklist of North American *Oxybelus*), 1957:127 (in revision of Californian *Oxybelus*); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Krombein, 1979b:1654 (in catalog of North American Hymenoptera).

### 52. *coffea* Gadallah and Edmardash

*Oxybelus coffea* Gadallah and Edmardash in Gadallah, Edmardash, Abu El-Ghiet, Al-Fifi, 2024:561, ♂. Holotype: ♂, Saudi Arabia: Jazan Province: Fifa Mountain: Almukhafih Farm at 17°16'07"N 43°07'32.3"E (Efflatoun Bey collection, Entomology Department, Cairo University, Egypt). – Gadallah and Abu El-Ghiet, 2024:87 (Saudi Arabia: Jazan Province: Fayfa)

### 53. *collaris* Kohl

*Oxybelus collaris* Kohl, 1884b:107, ♀. Holotype or syntypes: ♀, "Arabia felix: Tor", probably Thor in Sinai Peninsula (NHMW). – Kohl, 1884b:111 (in list of known *Oxybelus*), 1898a:354 (description of ♂, Egypt: Adelen-Insel opposite Dahshur, not Darfur in Sudan); Dalla Torre, 1897:639 (in catalog of world Sphecidae); Honoré, 1942:50 (in catalog of Egyptian Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Roche, 1981:4 (in checklist of Sphecidae of United Arab Emirates); Al-Houty, 1989:160 (Kuwait: Abdelli, Burjan, Sobiya); Dollfuss, 1989:11 (type material in NHMW); Guichard, 1990b:282 (Jordan, Saudi Arabia, United Arab Emirates), 1991a:340 (Jordan); Leclercq, 1993c:46 (in catalog of western Palearctic Crabronini and Oxybelini); Al-Houty, 1997:161 (Kuwait: no specific locality); Gadallah and Assery, 2004a:226 (in catalog of Sphecidae of Saudi Arabia); Roche, 2007a:103 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Dollfuss, 2008a:469 (Morocco: 10 km north of Mhamid, 10 km north of Erfoud); Schmid-Egger, 2011b:559 (recorded from United Arab Emirates by Guichard, 1990b); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:352 (in new catalog of Sphecidae of Saudi Arabia); Gadallah, 2020b:42 (in list of aculeate wasps of Arabian Peninsula).

### 54. *coloratus* R. Bohart

*Oxybelus coloratus* R. Bohart, 1993e:163, ♀, ♂. Holotype: ♀, Mexico: Veracruz: Veracruz (UCD). – R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*), 161 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae).

### 55. *concinus* Stephens

*Oxybelus concinns* Stephens, 1829a:364, by indication, Article 12.2.1 (reference to Panzer, 1804:ci). Substitute name for *Oxybelus mucronatus* of Panzer, 1804:ci. – Stephens, 1829b:33 (in checklist of British insects); Kirchner, 1867:223 (in catalog of European Hymenoptera).

### 56. *confusus* Alayo Dalmau

*Oxybelus confusus* Alayo Dalmau, 1968b:20, ♂. Syntypes: ♂, Cuba: Oriente: east of Santiago de Cuba: Siboney, Juraguá, etc. (IZAC). – Alayo Dalmau, 1973:194 (in catalog of Cuban Hymenoptera), 1976:33 (in checklist of Cuban Sphecidae); not listed by Bohart and Menke, 1976; R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution); Reyes and Hernández, 1995:3 (holotype in Inst. Ecol. Sist., La Havana, Cuba); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Hidalgo-Gato González, Reyes Sánchez, Mestre Novoa, Fernández García, Rodríguez-León Merino, Rodríguez Velázquez, Genaro Artola, and Fontenla Rizo, 2002:30 (holotype deposited at IZAC); Portunodo and Fernández, 2004:135 (Cuba: Sierra Maestra); Genaro, 2006:54 (in checklist of Cuban Sphecidae and Crabronidae).

**57. *conophilus* Benoit**

*Oxybelus conophilus* Benoit, 1951:132, ♂. Holotype: ♂, Zaire: Tshuapa: Bokote (MRAC). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae).

**58. *coniferus* Arnold**

*Oxybelus coniferus* Arnold, 1951:165, ♀, ♂. Syntypes: Ethiopia: Addis Ababa, Wondo (BMNH). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae).

**59. *continuus* Dahlbom**

*Oxybelus continuus* Dahlbom, 1845:513, ♂. Holotype or syntypes: ♂, Egypt: no specific locality (Lund). – Thomson, 1870:179 (as synonym of *Oxybelus dubius*); Kohl, 1884b:111 (in list of known *Oxybelus*); Dalla Torre, 1897:639 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Leclercq, 1993c:46 (unrecognizable species); Roche, 2007a:103 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

**60. *cordatus* Spinola**

*Oxybelus cordatus* Spinola, 1851a:364, ♀, ♂. Lectotype: ♀, Chile: Coquimbo (Torino), designated by R. Bohart, 1992:160. – F. Smith, 1856:390 (in catalog of Hymenoptera in British Museum); Kohl, 1884b:111 (in list of known *Oxybelus*); Reed, 1894:650 (in revision of Chilean Sphecidae); Dalla Torre, 1897:639 (in catalog of world Sphecidae); Brèthes, 1918d:162 (Chile: Río Blanco, affluent of Aconcagua); Jaffuel and Piri6n, 1926:376 (Chile: valle de Marga Marga); Gazulla and Ruiz Pereira, 1929:300 (Chile: Hacienda de "Las Mercedes"); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Sielfeld, 1980b:74 (in checklist of Chilean Sphecidae); R. Bohart, 1992:160 (in revision of Chilean *Oxybelus*), 1993c:21 (diagnostic characters); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:469 (locality records from Chile); Chiappa, 2012:8 (Chile: Regi6n de Valpara6so: no specific locality); Pagliano, 2014:78 (specimens in M. Spinola collection, Torino, including lectotype).

**61. *cordiformis* Gussakovskij**

*Oxybelus cordiformis* Gussakovskij, 1952:255, ♀, ♂. Syntypes: Tajikistan: Djilikul and Kabadian area (ZIN). – Myartseva, 1972a:94 (Turkmenistan); Kazenas, 1974b:110 (feeding on flowers of *Nitraria schoberi* L., Zygophyllaceae, in Kazakhstan); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Esenbekova and Kazenas, 2000:43 (southeastern Kazakhstan: 3 km northeast of Borandysu, 2 km northwest of Zhabagly); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2004b:106 (Kazakhstan: western Tien Shan); Dollfuss, 2008a:469 (locality records from Kazakhstan, Turkmenistan, and Uzbekistan); Kazenas, 2013b:496 (southeastern Kazakhstan: 3 km northeast of Borandysu), 2014a:136 (Kazakhstan: Karatau Mountain Range).

**62. *cornutus* Ch. Robertson**

*Oxybelus cornutus* Ch. Robertson, 1889:80, ♂. Lectotype: ♂, USA: Montana: no specific locality (ANSP), designated by Cresson, 1928:53. – C. Baker, 1896:59 (Colorado: Fort Collins); Cockerell and Baker, 1896:23 (New Mexico); Dalla Torre, 1897:639 (in catalog of world Sphecidae); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); J. Smith, 1900:513 (in list of insects of New Jersey); Snow, 1906:136 (Arizona: Oak Creek 20 mi. southwest of Flagstaff); H. Smith, 1908b:407 (in revision of Nebraskan Sphecidae); J. Smith, 1910:682 (in new list of insects of New Jersey); Mickel, 1918b:367 (in catalog of Nebraskan Sphecidae); Burks in Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:159 (in checklist of North American *Oxybelus*, as *cornutum*), 1957:115 (in revision of Californian *Oxybelus*, as *cornutum*); Krombein, 1958f:201 (in supplement to catalog of North American Hymenoptera: Montana south to Guadalajara, Mexico; synonymy with *Oxybelus quadricolor* and *O. polygoni* reported); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Krombein, 1979b:1654 (in catalog of North American Hymenoptera), 1985b:639 (not a

member of subgenus *Anoxybelus*); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles).

*Oxybelus quadricolor* Cockerell and Baker, 1896:21, ♀. Holotype: ♀, USA: New Mexico: Santa Fe (USNM). Synonymized with *Oxybelus cornutus* by Krombein, 1955b:70. – Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Rohwer, 1909:117 (description of ♀); Burks *in* Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera).

*Oxybelus polygoni* Rohwer, 1909a:116, ♀. Holotype or syntypes: ♀, USA: Colorado: Boulder County: Boulder (USNM). Synonymized with *Oxybelus cornutus* by Krombein, 1955b:70. – Burks *in* Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera).

### 63. *crandalli* R. Bohart and Schlinger

*Oxybelus crandalli* R. Bohart and Schlinger, 1956b:154, ♀. Holotype: ♀, USA: Arizona: Tucson (CAS). – R. Bohart and Schlinger, 1956c:159 (in checklist of North American *Oxybelus*), 1957:108 (in key to North American *Oxybelus*); Krombein, 1958f:201 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae; Arizona, Arkansas); Krombein, 1979b:1654 (in catalog of North American Hymenoptera); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae).

### 64. *cressonii* Ch. Robertson

*Oxybelus cressonii* Ch. Robertson, 1889:83, ♀ (as *Cressonii*, incorrect original capitalization). Holotype: ♀, USA: Illinois: no specific locality (ANSP). – Dalla Torre, 1897:639 (in catalog of world Sphecidae); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Cresson, 1928:53 (holotype in ANSP); Krombein, 1948a:67 (Virginia, prey); Burks *in* Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:159 (in checklist of North American *Oxybelus*), 1957:109 (in key to North American *Oxybelus*); Krombein, 1958f:201 (in supplement to catalog of North American Hymenoptera: central USA, Utah, Texas, east to Virginia, north to Michigan), 1963f:279 (Maryland: Plummers Island near Washington, D.C.); Kurczewski and Kurczewski, 1963:149 (Pennsylvania: Presque Isle State Park); Kurczewski, 1972a:398 (nesting habits); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Krombein, 1979b:1654 (in catalog of North American Hymenoptera); Burk, 1982:92 (preys predominantly on fly males congregating around its nest in search of females); Ahlstrom, 1995:110 (in checklist of insects of North Carolina); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario), 30 (distribution within Ontario), 55 (first record from Canada: Ontario: list of localities); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Ontario: no specific locality). – As *Notoglossa cressonii*: Mickel, 1918b:364 (in catalog of Nebraskan Sphecidae).

### 65. *cristatus* de Saussure

*Oxybelus cristatus* de Saussure, 1892:559, ♀, ♂. Syntypes: Madagascar: Bezanozano Province: Anosibé (MHNG). – Dalla Torre, 1897:640 (in catalog of world Sphecidae); Arnold, 1945:187 (Madagascar; redescription); Leclercq, 1960a:100 (Madagascar), 1961d:118 (Madagascar); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Leclercq, 1990b:120 (Madagascar); Pulawski, 2003b:797 (in checklist of Malagasy Sphecidae); Madl, 2014a:958 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

### 66. *curviscutis* Arnold

*Oxybelus curviscutis* Arnold, 1927:107 and 108, ♀, ♂. Syntypes: Zimbabwe: Sawmills, Bulawayo; Tanzania: no specific locality (SAM, TMP). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae); Scott *in* Arnold, 1933a:370 (Ethiopia: Harar District); Arnold, 1951:166 (Ghana, Mali, Senegal); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Al-Houty, 1989:160 (Kuwait: Al-Wafra); Hancock, Chahwanda, and Mhlanga, 1995:39 (syntypes in Bulawayo Museum); Al-Houty, 1997:161 (Kuwait: no specific locality); Dollfuss, 2008a:469 (locality records from Kenya, Mozambique, Namibia, South Africa, Zambia, and Zimbabwe); Gadallah, 2020b:42 (in list of aculeate wasps of Arabian Peninsula).

#### 67. *cyaneus* R. Bohart

*Oxybelus cyaneus* R. Bohart, 1993d:69, ♀. Holotype: ♀, Colombia: Amazonas: La Chorrera (BMNH). – Amarante, 2002:44 (in catalog of Neotropical Crabronidae).

#### 68. *decoris* R. Bohart

*Oxybelus decoris* R. Bohart, 1993d:69, ♀, ♂. Holotype: ♀, Brazil: Roraima Territory: Surumú (UCD). – R. Bohart, 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:44 (in catalog of Neotropical Crabronidae).

#### 69. *decorosus* (Mickel)

*Notoglossa decorosa* Mickel, 1916a:430, ♀. Holotype: ♀, USA: Nebraska: Omaha (UNL). – Mickel, 1918b:364 (in catalog of Nebraskan Sphecidae); Muma, 1952:21 (holotype in UNL). – **As *Oxybelus decorosus***: Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (new generic assignment, in catalog of North American Hymenoptera, as *decorosa*); R. Bohart and Schlinger, 1956c:159 (in checklist of North American *Oxybelus*, as *decorosum*), 1957:111 (in key to North American *Oxybelus*, as *decorosum*); Krombein, 1958a:52 (USA: West Virginia: Lost River State Park, as *decorosum*), 1958f:201 (in supplement to catalog of North American Hymenoptera: USA east of 100°W, Vermont and Minnesota, south to Florida); Kurczewski and Kurczewski, 1963:149 (Pennsylvania: Presque Isle State Park, as *decorosum*); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Krombein, 1979b:1654 (in catalog of North American Hymenoptera); Kurczewski, 1996:84 (nest and prey); Peckham and Hook, 1980:560 (nesting habits); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario), 30 (distribution within Ontario), 56 (first record from Canada: Ontario: Forest in Lambton County, Nairn Centre, Windsor); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Ontario, first record from Manitoba: no specific locality).

#### 70. *diphyllus* (A. Costa)

*Alepidaspis diphyllus* A. Costa, 1882b:23 and 35, ♀. Holotype ♀, Italy: Sardegna: Cagliari (Napoli). – de Beaumont, 1953i:12 (unnecessary and invalid designation of lectotype, based on a ♀ from Cabras, mentioned by A. Costa in 1884). – **As *Notoglossa diphylla***: A. Costa, 1883:92 (new generic assignment, redescription), 1884b:33 (Italy: Sardegna: Cabras). – **As *Oxybelus diphyllus***: Kohl, 1884b:111 (new generic assignment, in list of known *Oxybelus*); Dalla Torre, 1897:640 (in catalog of world Sphecidae); Guiglia, 1938b:10 (Sardegna), 12 (redescription); de Beaumont, 1950f:413 (diagnostic characters), 1952c:199 (Algeria: Hoggar), 1953i:12 (type incorrectly interpreted); Guiglia, 1953a:64 (in revision of Italian *Oxybelus*); de Beaumont, 1956a:212 (Tibesti), 1957a:154 (Morocco), 1958b:67 (Algeria: Tassili des Ajjer); Móczár, 1958c:282 (in key to western Palearctic *Oxybelus*); Mingo Pérez, 1966:67 (in revision of *Oxybelus* of Iberian Peninsula; Spain: Granada: Albuñol); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Guichard, 1990b:281 (Oman); Pagliano, 1980:120 (Italy: Sardegna), 1990:78 (in catalog of Italian Sphecidae), 1991b:328, 331 (in key to Italian Crabroninae); Bitsch and Leclercq, 1993:251 (in revision of western European Crabroninae); Guichard, 1993b:530 and 532 (in key to European *Oxybelus*); Leclercq, 1993c:46 (*pharao* is a subspecies or morphe); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Pagliano and Negrisolo, 2005:208 (in Sphecid Fauna of Italy); Dollfuss, 2008a:470 (locality records from Algeria,

Morocco, Tunisia, and Zambia); Schmid-Egger, 2011b:559 (in key to *lamellatus* species group of Arabian Peninsula); Gadallah, 2020b:42 (in list of aculeate wasps of Arabian Peninsula); Gadallah, Abu el-Ghiet, and Edmardash, 2021:1711 (first record from Saudi Arabia: Jazan Province); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:344 (in revision of Sphecidae *sensu lato* of Europe); Gadallah and Abu El-Ghiet, 2024:87 (Saudi Arabia: Jazan Province: Damad).

*Notoglossa diphylla* A. Costa, 1884a:334, ♀. Objective synonym of *Alepidaspis diphyllus* A. Costa, 1882.

### **ssp. pharao Kohl**

*Oxybelus pharao* Kohl, 1884b:105, ♀. Syntypes: ♀, Egypt: Cairo (NHMW). – Kohl, 1884b:114 (in list of known *Oxybelus*); Dalla Torre, 1897:646 (in catalog of world Sphecidae); Kohl, 1898a:357 (additional description); von Schulthess, 1926b:219 (Libya: Dernah); Guiglia, 1934b:306 (Libya: bibliography and summary of locality records); Nadig, 1934:31 (Italy: Sardegna: Cagliari); Honoré, 1942:51 (in catalog of Egyptian Sphecidae); Móczár, 1958c:282 (in key to western Palearctic *Oxybelus*). – **As *Oxybelus diphyllus pharao***: de Beaumont, 1950f:413 (new status); Guiglia, 1953a:66 (*Oxybelus pharao* is a subspecies of *O. diphyllus*); de Beaumont, 1957a:155 (redescription); Pulawski, 1964:147 (Egypt: Abydos, Cairo); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Dollfuss, 1989:11 (type material in NHMW); Roche, 2007a:102 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae).

### **71. *dissectus* Dahlbom**

*Oxybelus dissectus* Dahlbom, 1845:514, ♀. Lectotype: ♀, Germany: Posen, now Poland: Poznań (Lund), designated by Fæster, 1949:23. – Taschenberg, 1858:120 (in key to Sphecidae of Germany: Posen, now Poland: Poznań); Schenck, 1861:158 (redescription; Germany: Danzig and Posen, now Poland: Gdańsk and Poznań); Brischke, 1862:105 (Germany: Preussen Province, now Poland: Pomorze Region); A. Costa, 1863:66 (Italy: Calabria Ulteriore: extreme Calabria, determination tentative); Taschenberg, 1866:162 (in revision of Hymenoptera of Germany); Jaenicke, 1867:147 (Germany: Hessen: Frankfurt area); Kirchner, 1867:223 (in catalog of European Hymenoptera); Schenck, 1867a:350 (known from Germany); Jaenicke, 1868:8 (Germany: Hessen: Kelsterbach); Kohl, 1883e:663 (Switzerland), 1884b:111 (in list of known *Oxybelus*); Brischke, 1888b:100 (Germany: Preussen Province, now Poland: Pomorze Region); Dalla Torre, 1897:640 (in catalog of world Sphecidae); P. Verhoeff, 1948:197 (in revision of Western European *Oxybelus*); de Andrade, 1949:22 (Portugal); Fæster, 1949:23, 40 (in revision of Western European *Oxybelus*); de Beaumont, 1951h:35 (Switzerland: Neuchâtel area); Guiglia, 1953a:119 (in revision of Italian *Oxybelus*); Blüthgen, 1954:145, 152 (in key to Central European *Oxybelus*), 154 (summary of locality records from Germany); de Beaumont, 1954e:98 (Italy); Grandi, 1954:244 (Italy); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); de Beaumont, 1957b:139 (northern Iran); Móczár, 1958c:286, 289 (in key to western Palearctic *Oxybelus*, as *Oxybelus dissectus dissectus*); Nouvel and Ribaut, 1958:17 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Diniz, 1959:32 (Portugal: Lisboa); Wolf, 1959b:35 (known from Germany, but not from Nassau); de Beaumont, 1960b:250 (Libya); Noskiewicz and Puławski, 1960:162, 164 (in key to Polish Sphecidae); de Beaumont, 1964c:161 (in Sphecid Fauna of Switzerland), 1965a:61 (Greece); Isensee, Lesemann, and Röseler, 1965:612 (Spain: Gerona: no specific locality); Mingo Pérez, 1966:95 (in revision of *Oxybelus* of Iberian Peninsula); de Beaumont, 1967a:365 (Turkey); Scobiola-Palade, 1968c:386 (Romania: Daia, Segarcea, Turnu Măgurele); de Beaumont, 1969:94 (Turkey); Oehlke, 1970:793 (Democratic Germany); Balthasar, 1972:158 (in Sphecid Fauna of Czechoslovakia: not yet found in country); Kazenas, 1972b:176 (Kazakhstan); Erlandsson, 1974:87 (Italy, Malta, Spain); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Puławski, 1978:276, 277 (in key to Sphecidae of European part of USSR); Pagliano, 1980:120 (Italy: Puglia); Skibińska, 1982:124 (Poland: Warszawa area); Dollfuss, 1983b:13 (in catalog of Sphecidae of Austria); Gayubo, 1984c:374 (Portugal: El Algarve Province), 1986a:60 (Spain: Ciudad Real Province); Skibińska, 1986b:151, 154 (Poland: suburbs of Warszawa), 160 (gardens); Al-Houty, 1989:160 (Kuwait: Abdelli, Al-Wafra); Jacobs, 1989:15 (Oehlke's, 1970 record from Mecklenburg is incorrect); Jacobs and Oehlke, 1990:122 and 175 (not collected in Democratic Germany after 1960); Pagliano, 1990:78 (in

catalog of Italian Sphecidae); Dollfuss, 1991:131 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:404 (Italy); Negrisolo, 1991:319 (Italy: Venezia Province); Pagliano, 1991b:331, 332 (in key to Italian Crabroninae); Schembri, 1991:183 (citation of Erlandsson, 1974); Budrys, 1992:32 (in list of Sphecidae of Lithuania); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Bitsch and Leclercq, 1993:251 (in revision of western European Crabroninae); Guichard, 1993b:531 and 533 (in key to European *Oxybelus*, color variation); Leclercq, 1993c:46 (references to recent publications, records from Italy and Yugoslavia); Torregrosa, Gayubo, Tormos, and Asís, 1993:19 (Spain: Alicante Province); Gayubo and Borsato, 1994:210 (Italy: Toscana); Negrisolo, 1995a:18 (visiting flowers of *Echinophora spinosa* L., Apiaceae), 22 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Celary, 1997:58 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:21 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:28 (Germany: in list of Sphecidae of Brandenburg), 33 (extinct); Dollfuss, Gusenleitner, and Bregant, 1998:520 (Austria: summary of collecting records from Burgenland); Blösch, 2000:264 (in Sphecid Fauna of Germany); Mokrousov, 2000b:31 (Russia: Nizhniy Novgorod Oblast'); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Ohl et al., 2001:140 (distribution in Germany by provinces); Kazenas, 2002a:90 (geographic distribution, collecting localities in Kazakhstan); Drewes, 2003:140 (France: Haute-Savoie: mouth of Dranse); Kazenas, 2004b:106 (Kazakhstan: western Tien Shan), 2004d:32 (Kazakhstan: Ryn-Peski); Shkuratov, 2004a:81 (Russia: Volgograd Oblast': Frolovo); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:372 (Germany: Sachsen-Anhalt: last collected before 1954); Wiśniowski, 2004:46 and 61 (in checklist of Polish Sphecidae); Gayubo and Özbek, 2005:24 (Turkey: Erzurum: Palandöken; Kars: Kađýzman, Sarýkamýb); Jacobs, 2005a:448 (first record from Bulgaria: Melnik); Pagliano and Negrisolo, 2005:211 (in Sphecid Fauna of Italy); Saure, 2005:17 (Germany: Berlin); Jacobs, 2007:117, 119 (in key to Crabronidae of Germany); Roche, 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Dollfuss, 2008a:470 (locality records from Bulgaria, Croatia, France, Greece, Italy, Kazakhstan, Kyrgyzstan, Mongolia, Morocco, Spain, Syria, Tadjikistan, Turkey, Turkmenistan, and Uzbekistan); Pagliano, 2009:180 (Italy: Liguria: Albenga); Bitsch and Leclercq, 2009:228 (in supplement to vol. I of Faune de France, 1993: recent record from Bulgaria reported; France: first records from Puy-de-Dôme: Neschers; Haute-Savoie: Thonon-les-Bains); Mokrousov, 2010a:62 (Russia: Nizhniy Novgorod Oblast': no specific localities); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: extinct, last collected in 1954); van der Smissen, 2010b:385 (France: Vaucluse: Bédoin); Murai and Amr, 2011:119 (recorded from Syria by Dollfuss, 2008a); Tischendorf, Frommer, Flügel et al., 2011:183 (Germany: no certain records from Hessen); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Kazenas, 2012b:169 (Kazakhstan: Korgalzhin State Nature Reserve); Standfuss and Standfuss, 2012:427 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Strumia, Pagliano, and Gayubo, 2012:56 (Italy: Toscana: Riserva di San Rossore); Kazenas, 2013b:496 (southeastern Kazakhstan: Sharyn River valley); Baldock, 2014:357 (Spain: Island of Mallorca); Bitsch, 2014:404 (recent records from Bulgaria and France reported); Kazenas, 2014a:136 (Kazakhstan: Karatau Mountain Range); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces, as *Oxybelus dissectus dissectus*); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); P. Rosa and Pagliano, 2015:103 (Italy: Lombardia and Piemonte: Parco del Ticino); Schmid-Egger, Dandria, and Xuereb, 2016:80 (in checklist of Crabronidae of Maltese Islands); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Antropov, 2017b:242 (in catalog of Crabroninae of Russia, as *Oxybelus dissectus dissectus*); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:52 (Iran: known from Fars, Mazandaran, Qazvin, and Tehran provinces); Olszewski, Twerd, and Kowalczyk, 2017:194 (Poland: Toruń at 52°57'46"N 18°34'12"E); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:14 (Azerbaijan: Nakhichevan Autonomous Republic); Gadallah, 2020b:42 (in list of aculeate wasps of Arabian Peninsula); Cross, Baldock, and Wood, 2021:52 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:72 (in catalog of Crabronidae of Turkey, as *dissectus dissectus*); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Olszewski, Wiśniowski, and

Ljubomirov, 2021:96 (in commented list of Sphecidae *sensu lato* of Poland); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey, as *dissectus dissectus*).

*Oxybelus monachus* Gerstaecker, 1867a:84, ♀. Syntypes: Germany: Berlin-Pankow (ZMHU). Synonymized with *Oxybelus dissectus* by Blüthgen, 1949:88. – Chevrier, 1868:412 (summary of diagnostic characters); Kohl, 1884b:114 (in list of known *Oxybelus*); Dalla Torre, 1897:644 (in catalog of world Sphecidae); Schmiedeknecht, 1907:204 (in key to Hymenoptera of Central Europe); Graeffe, 1911:44 (Italy: Trieste area); Kohl, 1912a:63 (Austria: Südtirol: Alle Sarche, now Italy: Trentino-Alto Adige: Sarche di Calavino); Schirmer, 1912:165 (recorded from Berlin area, Germany, by Gerstaecker, 1867); A. Wagner, 1920:38 (Germany: Lower Elbe region, not found but can be expected); R. Meyer, 1921:48 (Poland: Bydgoszcz, as Bromberg, recognition characters, description of ♂); Maidl, 1922:74 (Croatia); Noskiewicz, 1922a:8 (Poland: Lwów area, now Ukraine: L'viv area); Szulczewski, 1922:98 (Poland: Bydgoszcz area); Noskiewicz, 1924a:114 (Poland: vicinity of Kraków); Grandi, 1930:341 (Italy: Toscana: Maremma); Maidl *in* Schmiedeknecht, 1930:663, 666 (in keys to Hymenoptera of North and Central Europe); Bischoff, 1933:4 (Morocco); Nadig, 1933:77 (Morocco: Goundafa); Drogoszewski, 1936:129 (Poland: Łowicz); Zavadil, Šusterka, and Bat'a, 1937:173 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938c:81 (Hungary: Kőszeg Hills); A. Wagner, 1938b:24 (northwestern Germany: Niendorf on Baltic coast), 1939b:74 (an eastern species in northwestern Germany); Zavadil, 1939:121 (Slovakia: Parkan); de Beaumont, 1942b:426 (in revision of Swiss *Oxybelus*); Giner Marí, 1945b:360 (Morocco); Šnoflák *in* Zavadil and Šnoflák, 1948:35, 40 (in key to Czechoslovakian Sphecidae, not yet found in Czechoslovakia); Noskiewicz and Chudoba, 1949:420 (Poland: Dolny Śląsk: Wrocław area), 1950:313 (Poland: in revision of *Oxybelus* of Śląsk Region); Scobiola, 1951:274 (first record from Romania: Daia in București Region, Securacea and Turnu Măgurele in Teleorman Region); Puławski, 1954:106 (Poland: Błędów); Vogrin, 1955:45 (Yugoslavia).

#### **ssp. *eburneofasciatus* Dahlbom**

*Oxybelus eburneofasciatus* Dahlbom, 1845:514, ♀ (as *eburneo-fasciatus*, incorrect original hyphenation, authorship attributed to Dufour). Holotype or syntypes: ♀, southern France: no specific locality, but France: Saint-Sever according to Fæster, 1949:25 (Lund). – Eversmann, 1849:416 (Russia: Ural foothills); Kirchner, 1867:223 (in catalog of European Hymenoptera); Marquet, 1881:184 (southern France); Kohl, 1884b:111 (in list of known *Oxybelus*); Marquet, 1896:21 (in revision of *Oxybelus* of France); Dalla Torre, 1897:640 (in catalog of world Sphecidae); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Berland, 1925d:208 (in Sphecid Fauna of France); Fæster, 1949:23, 25, 41 (in revision of Western European *Oxybelus*). – As *Oxybelus dissectus eburneofasciatus*: de Beaumont, 1952b:90 (new status; Marquet's, 1896 specimens); Guiglia, 1953a:123 (in revision of Italian *Oxybelus*, occurring in France and Spain); Grandi, 1954:244 (Italy); Móczár, 1958c:287, 289 (in key to western Palearctic *Oxybelus*); Ceballos, 1959:232 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:161 (in Sphecid Fauna of Switzerland), 1965a:62 (Greece); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Pagliano, 1990:78 (in catalog of Italian Sphecidae); Bitsch and Leclercq, 1993:252 (in revision of western European Crabroninae); Rudoiskatel', 2010:160 (Russia: central and southern Ural Mountains); Antropov, 2017b:242 (in catalog of Crabroninae of Russia); Fresno, 2018:231 (Spain: Barcelona: Gavá; Cantabria: Santoña; Guipúzcoa: Irún; Madrid: Montarco); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:345 (in key to subspecies of *Oxybelus dissectus*).

*Oxybelus dufouri* Marquet, 1896:22, ♀ (as *Dufouri*, incorrect original capitalization). Holotype: ♀, France: Landes: no specific locality (Lausanne). Synonymized with *Oxybelus dissectus eburneofasciatus* by de Beaumont, 1952b:90.

#### **ssp. *elegans* Mocsáry**

*Oxybelus elegans* Mocsáry, 1879:138, ♀, ♂. Syntypes: Hungary: Budapest and Grebenác, Grebenác is in today's Romania (TMB). – Sajó, 1882:5 (Hungary); Kohl, 1884b:111 (in list of known *Oxybelus*); Dalla Torre, 1897:640 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Kingdom of Hungary, Grebenác is in today's Romania); Antiga and Bofill, 1904:27 (Spain: Cataluña Province); von Schulthess, 1926b:219 (Tunisia); Maidl *in* Schmiedeknecht,

1930:663, 664, 665 (in keys to Hymenoptera of North and Central Europe); Zavadil, 1937a:72 (eastern Slovakia); Zavadil, Šustera, and Bat'a, 1937:172 (in catalog of Sphecidae of Czechoslovakia); Giner Mari, 1943a:263 (in Sphecidae Fauna of Spain); Balthasar, 1948:141 (Slovakia: Kovačov); Šnoflák *in* Zavadil and Šnoflák, 1948:35, 38 (in key to Czechoslovakian Sphecidae); Ceballos, 1949:101 (Spain); Zavadil, 1951:86 (Slovakia: Kovačov, Somotor); Vogrin, 1955:45 (Yugoslavia); Ceballos, 1956:396 (in catalog of Sphecidae of Spain); Balthasar, 1972:146 (in Sphecidae Fauna of Czechoslovakia); Haris, 2016:16 (in list of species described by S. Mocsáry from Carpathian Basin). – **As *Oxybelus dissectus elegans***: Móczár, 1958b:211 (new status, Hungary: collecting localities), 1958c:286, 289 (in key to western Palearctic *Oxybelus*), 296 (new status, in revision of *Oxybelus* of Hungary); Benedek, 1968:79 (Hungary, floral records), 1969a:85 (Hungary: marshy meadow); Tsuneki, 1972a:160 (Mongolia); de Beaumont, Bytinski-Salz and Pulawski, 1973:25 (Israel; ssp. *elegans* or var.); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Tsuneki, 1984e:59 (Russia: Sarepta, now Krasnoarmeysk); Józán, 1986:371 (Hungary: Kiskunság National Park); Karsai, 1988:100 (Hungary: Kiskunság National Park); Pádr *in* Šedivy, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Bitsch and Leclercq, 1993:252 (in revision of western European Crabroninae); Yıldırım and Ljubomirov, 2005:1798 (Turkey: Konya: Cumra); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Slovakia); Ljubomirov and Yıldırım, 2008:248 (in catalog of Crabronidae of Turkey); Tüzün and Yüksel, 2010:4472 (Turkey: Niğde Province); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Rezaei and Fallahzadeh, 2015:6 (Iran: Fars: Dalin at 30°03'N 52°07'E and Kaftarak at 29°34'N 52°41'E); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:41 (Turkey: Ankara, Antalya, Artvin, Bitlis, Erzurum, Kars, Konya, and Tunceli provinces); Antropov, 2017b:242 (in catalog of Crabroninae of Russia); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:265 (Iran: Fars: Estahban: Mobarak Abad); Kaplan and Yıldırım, 2021:72 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:345 (in key to subspecies of *Oxybelus dissectus*); Kaplan and Yıldırım, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey).

### **ssp. *morosus* Chevrier**

*Oxybelus morosus* Chevrier, 1868:390, ♀. Syntypes: Switzerland: Vaud: Nyon area (MHNG). Synonymized with *Oxybelus monachus* by de Beaumont, 1942b:426. – Kohl, 1883e:662 (Switzerland), 1884b:114 (in list of known *Oxybelus*); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Dalla Torre, 1897:644 (in catalog of world Sphecidae); Schmiedeknecht, 1907:203 (in key to Hymenoptera of Central Europe); Zilahi Kiss, 1915:80 (Hungary: Simontornya); Vogrin, 1955:45 (Yugoslavia). – **As *Oxybelus dissectus morosus***: Bitsch and Leclercq, 1993:251 (new status); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:344 (in key to subspecies of *Oxybelus dissectus*).

### **ssp. *tingitanus* de Beaumont**

*Oxybelus dissectus tingitanus* de Beaumont, 1950f:420, ♀, ♂. Holotype: ♀, Morocco: Mehdiya near Port Lyautey, now Kenitra (Lausanne). – de Beaumont, 1957a:155 (Morocco); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae).

### **72. *dissimilis* Arnold**

*Oxybelus dissimilis* Arnold, 1934:21, ♀, ♂. Syntypes: Zimbabwe: Chirinda Forest (SAM). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae).

### **73. *dusmeti* Mingo Pérez**

*Oxybelus dusmeti* Mingo Pérez, 1966:103, ♀, ♂. Syntypes: Spain: Avila: Navalperal, and Madrid: Madrid and Somosierra (MNCN). – Gayubo, 1982b:9 (Spain: Cáceres: Cabezueta del Valle; Salamanca: Montemayor del Río), 1984b:96 (Spain: previously recorded from Salamanca Province); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Bitsch and Leclercq, 1993:252 (in revision of western European Crabroninae); Guichard, 1993b:530 (in key

to European *Oxybelus*); Leclercq, 1993c:46 (in catalog of western Palearctic Crabronini and Oxybelini); Martin Albaladeo and Izquierdo Moya, 2006:120 (type in Museo Nacional de Ciencias Naturales); Dollfuss, 2008a:471 (locality records from Spain); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Bitsch and Leclercq, 2009:228 (in supplement to vol. I of Faune de France, 1993: opinions of Guichard, 1993b, and of Dollfuss, 2008, on the male reported); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Fresno, 2017:151 (Spain: Madrid: Valdaracete; Murcia: Foruna); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:345 (in revision of Sphecidae *sensu lato* of Europe).

#### 74. *eburneoguttatus* Arnold

*Oxybelus eburneoguttatus* Arnold, 1952:485, ♂. Holotype: ♂, Zimbabwe: Igusi (SAM). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae).

#### 75. *eburneus* Radoszkowski

*Oxybelus eburneus* Radoszkowski, 1877:72, ♀, ♂. Syntypes: Uzbekistan: Zaravschan valley; and Kazakhstan: Bayrakum and Mount Karak near Bayrakum (ZMMU). – Kohl, 1884b:111 (in list of known *Oxybelus*); Dalla Torre, 1897:640 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:90 (geographic distribution, collecting localities in Kazakhstan); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

*Oxybelus turkestanicus* Mocsáry, 1879:138. Unnecessary substitute name for *Oxybelus eburneus* Radoszkowski, treated as a junior homonym of *Oxybelus eburneus* Dours, 1874 (which is a nomen nudum and not available)

#### 76. *ecarinatus* Edmardash and Gadallah

*Oxybelus ecarinatus* Edmardash and Gadallah *in* Gadallah, Abu el-Ghiet, and Edmardash, 2021:1736, ♀. Holotype: ♀, Saudi Arabia: Jazan Province: Damad at 17°08'05.1"N 42°45'58.8"E (Efflatoun Bey collection, Entomology Department, Cairo University, Ghiza, Egypt). – Gadallah and Abu El-Ghiet, 2024:87 (Saudi Arabia: Jazan Province: Damad).

#### 77. *elongatus* Radoszkowski

*Oxybelus elongatus* Radoszkowski, 1877:70, ♂. Holotype: ♂, Uzbekistan: Zaravshan valley: no specific locality (ZMMU). – Kohl, 1884b:112 (in list of known *Oxybelus*); Dalla Torre, 1897:640 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

#### 78. *emarginatus* Say

*Oxybelus emarginatus* Say, 1837:375, ♂. Holotype or syntypes: ♂, USA: Indiana: no specific locality (lost). – F. Smith, 1856:390 (in catalog of Hymenoptera in British Museum); Le Conte, 1859b:757 (original description copied); Cresson, 1862:234 (in catalog of North American Hymenoptera); Packard, 1867:435 (in revision of North American *Oxybelus*); Cresson, 1873:226 (Texas); Kohl, 1884b:112 (in list of known *Oxybelus*); Cresson, 1887:286 (in catalog of North American Hymenoptera); Ch. Robertson, 1889:84 (in revision of North American *Oxybelus*); Ashmead, 1890:31 (in checklist of Hymenoptera of Colorado); C. Robertson, 1892:105 (visiting flowers of *Pycnanthemum lanceolatum* Ph., Lamiaceae), 1894:464 (visiting flowers of *Parthenium integrifolium* Linnaeus, Asteraceae); C. Baker, 1896b:159 (additional description); C. Robertson, 1896:73 (visiting flowers of *Polygonum hydrophiloides* Michx., Polygonaceae); Dalla Torre, 1897:640 (in catalog of world Sphecidae); Bridwell, 1899:209 (Kansas: Baldwin); Snow, 1906:136 (Arizona); Rohwer, 1916b:660 (in catalog of Hymenoptera of Connecticut); Pate, 1930b:40 (first record from New York State); Burks *in* Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera); Krombein, 1952a:96 (USA: Virginia: Westmoreland State Park); K. Cooper,

1953:34 (Massachusetts: Island of Penikese); Krombein, 1953a:296 (visiting foliage of *Quercus marilandica* Muenchh., Fagaceae), 338 (North Carolina), 1953b:123 (visiting foliage of *Quercus virginiana* Mill., Fagaceae), 125 (attracted to a grass), 134 (North Carolina: Kill Devil Hills); Krombein and Evans, 1954:235 (Florida), 1955:234 (Florida); R. Bohart and Schlinger, 1956c:159 (in checklist of North American *Oxybelus*, as *emarginatum*), 1957:121 (in revision of Californian *Oxybelus*); Krombein, 1958f:200 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus americanus* reported), 201, 202, 204 (synonymy with *Oxybelus dilutes*, *trifidus*, *americanus*, *pacificus*, and *minor* reported), 1963f:279 (Maryland: Plummers Island near Washington, D.C., as *emarginatum*); Krombein and Kurczewski, 1963:150 (nesting habits); Kurczewski and Kurczewski, 1963:149 (Pennsylvania: Presque Isle State Park, as *emarginatum*); Krombein, 1964b:120 (dolichopodid prey), 1964c:24 (nest, prey); Snoddy, 1968 (preying on Ceratopogonidae, Chloropidae, and Simuliidae); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator, as *emarginatum*); Evans, 1970:493 (Wyoming: Jackson Hole); Horning and Barr, 1970:106 (USA: Idaho: Craters of the Moon National Monument); D.J. Peckham, Kurczewski, and D.B. Peckham, 1973:655 (nesting habits); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); L. Davis, 1978:217 (North Carolina: Kill Devil Hills, data from Krombein, 1953a); Krombein, 1979b:1654 (in catalog of North American Hymenoptera, list of prey); Peckham and Hook, 1980:563 (nesting habits); Finnamore, 1982:123 (in Sphecid Fauna of Southern Quebec); Radović, 1985:65 (sting apparatus analyzed); Piek and Spanjer, 1986:186 (in list of Sphecidae with known prey, as *emarginatum*); Steiner, 1986:105 (references to publications on nesting habits); Frommer, 1988:94 (California: Riverside County: Deep Canyon; as *emarginatum*); Spofford, Kurczewski, and Downes, 1989:257, 259, 261 (nest parasites: *Phrosinella aurifacies* Downes and *Senotainia trilineata* (Wulp), miltogrammine fly, references to publications on nest parasite *Phrosinella fulvicornis* (Coquillett), a miltogrammine fly, and undetermined species of Miltogrammini); Spofford and Kurczewski, 1990:746, 748, 751 (nest parasites: *Phrosinella aurifacies* Downes, *Senotainia trilineata* (Van der Wulp), and unknown species of Miltogrammini, Sarcophagidae), 1992:998 (species of miltogrammine nest parasites listed); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Ahlstrom, 1995:110 (in checklist of insects of North Carolina); Kurczewski, 1996:84 (variation in nesting habits), 1998d:250 (pine barrens in upstate New York); Wcislo, 1998:181 (proportions of antennae in relations to parasitic/non-parasitic habits); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Ratzlaff, 2016:26 (Canada: British Columbia: from R. Bohart and Schlinger, 1957); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Alberta, Manitoba, Ontario, Quebec, and Saskatchewan: no specific locality). – **As *Notoglossa emarginata***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae, as *emarginatus*); J. Smith, 1900:513 (in list of insects of New Jersey, as *emarginatus*), 1910:682 (in new list of insects of New Jersey); Ch. Robertson, 1901:204 (redescription, Illinois); Harrington, 1902:218 (Canada: Ontario: Ottawa, as *emarginatus*); Viereck, 1903d:120 (Maryland: Chestertown); Snow, 1906:136 (Arizona: Oak Creek 20 mi. southwest of Flagstaff and Tucson); H. Smith, 1908b:406 (in revision of Nebraskan Sphecidae); Viereck, 1916:660 (in guide to the insects of Connecticut); Stevens, 1917:423 (North Dakota); Mickel, 1918b:363 (in catalog of Nebraskan Sphecidae); Britton, 1920:338 (in checklist of insects of Connecticut); Carter, 1925:131 (Canada: Alberta); Rohwer *in* Viereck, 1925:660 (in key to Sphecidae of Connecticut; Branford, Cheshire, East Hartford, New Haven, Poquonock, Sachem's Head, Scotland, and West Haven); Hendrickson, 1930:158 (Iowa); Brimley, 1938:450 (North Carolina: Bryson City, Judson, Raleigh).

*Oxybelus dilutus* C. Baker, 1896b:159, ♀. Holotype or syntypes: ♀, USA: Colorado: Fort Collins (USNM). Synonymized with *Oxybelus emarginatus* by R. Bohart and Schlinger, 1956c:160. – Burks *in* Muesebeck, Krombein, and Townes,

1951:1032 (in catalog of North American Hymenoptera). – **As *Notoglossa dilutus***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae).

*Oxybelus trifidus* Cockerell and Baker, 1896:23, ♂. Holotype: ♂, USA: New Mexico: Santa Fe (USNM). Synonymized with *Oxybelus emarginatus* by R. Bohart and Schlinger, 1956c:160. – Burks in Muesebeck, Krombein, and Townes, 1951:1034 (in catalog of North American Hymenoptera). – **As *Notoglossa trifidus***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae).

*Notoglossa americana* Ch. Robertson, 1901:204, ♀, ♂, junior secondary homonym of *Oxybelus americanus* Spinola, 1842. Syntypes: USA: no specific locality (ANSP). Synonymized with *Oxybelus emarginatus* by R. Bohart and Schlinger, 1956c:160. – Hartman, 1905:29 (preying on small dipterans); Hart, 1907:256 (Illinois). – **As *Oxybelus americanus***: Burks in Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera, as *americana*).

*Notoglossa minor* Mickel, 1916a:428, ♂. Holotype: ♂, USA: Nebraska: Omaha (UNL). Synonymized with *Oxybelus emarginatus* by R. Bohart and Schlinger, 1956c:160. – Mickel, 1918b:364 (in catalog of Nebraskan Sphecidae); Muma, 1952:21 (holotype in UNL). – **As *Oxybelus minor***: Burks in Muesebeck, Krombein, and Townes, 1951:1032 (new generic assignment, in catalog of North American Hymenoptera).

### 79. *exclamans* Viereck

*Oxybelus exclamans* Viereck, 1906:215, ♀. Holotype: ♀, USA: Kansas: Morton County: no specific locality (Kansas Univ.). – Burks in Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera); Krombein and Evans, 1954:235 (Florida); R. Bohart and Schlinger, 1956c:160 (in checklist of North American *Oxybelus*); LaBerge, 1956:527 (holotype in Snow Entomological Museum); R. Bohart and Schlinger, 1957:113 (in revision of Californian *Oxybelus*); Krombein, 1958f:200, 204 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus argentarius* reported), 201 (western USA north to South Dakota, east to Florida, south to Chihuahua, Mexico; synonymy with *Oxybelus townsendi*, *argentarius*, and *pectorosus* reported); Kurczewski, 1972a:400 (nesting habits: temporary closure); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera); Peckham and Hook, 1980:561 (nesting habits); Burk, 1982:92 (preys predominantly on fly males congregating around its nest in search of females); D. Peckham, 1985:869 (nesting habits); Piek and Spanjer, 1986:186 (in list of Sphecidae with known prey); Steiner, 1986:105 (references to publications on nesting habits); Spofford, Kurczewski, and Downes, 1989:256 (references to publications on nest parasites *Metopia argyrocephala* (Meigen) and *Senotainia* sp., miltogrammine flies); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed).

*Oxybelus townsendi* Rohwer and Cockerell, 1908:180, ♂. Holotype or syntypes: ♂, USA: New Mexico: Las Cruces (USNM). Synonymized with *Oxybelus exclamans* by R. Bohart and Schlinger, 1956c:160. – Burks in Muesebeck, Krombein, and Townes, 1951:1034 (in catalog of North American Hymenoptera).

*Oxybelus argentarius* Mickel, 1916a:431, ♀. Holotype: ♀, USA: Nebraska: Harrison (UNL). Synonymized with *Oxybelus exclamans* by R. Bohart and Schlinger, 1956c:160. – Mickel, 1918b:366 (in catalog of Nebraskan Sphecidae); Burks in Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera); Muma, 1952:21 (holotype in UNL), 27 (paratype in UNL).

*Oxybelus pectorosus* Mickel, 1918a:321, ♂. Holotype: ♂, USA: Nebraska: Mitchell (UNL). Synonymized with *Oxybelus exclamans* by R. Bohart and Schlinger, 1956c:160. – Mickel, 1918b:368 (in catalog of Nebraskan Sphecidae); Burks in Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); Muma, 1952:22 (holotype in UNL).

**80. *eximius* Sickmann**

*Oxybelus eximius* Sickmann, 1894:205, ♀, ♂. Syntypes: China: Hopei Province: Tientsin (Münster). – Dalla Torre, 1897:640 (in catalog of world Sphecidae); Yasumatsu, 1935d:39 (first record from Korea: Taiden); Tsuneki, 1982b:18 (known from Korea); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Paik, 1985:200 (in list of Sphecidae *sensu lato* of Korea); Hua, 2006:281 (in list of Chinese insects, geographic distribution); J.-K. Kim, 2014:437 (in catalog of Sphecidae *sensu lato* of Korean Peninsula).

**81. *fedtschenkoi* Radoszkowski**

*Oxybelus fedtschenkoi* Radoszkowski, 1877:69, ♀, ♂ (as *Fedtschenkoi*, incorrect original capitalization). Syntypes: Uzbekistan: Zeravshan valley; Kazakhstan: Karak, Kyzil-Kum (ZMMU). – Kohl, 1884b:112 (in list of known *Oxybelus*); F. Morawitz, 1893b:416 (Uzbekistan: Pyandjikent); Dalla Torre, 1897:640 (in catalog of world Sphecidae); Gussakovskij, 1935:434 (Tajikistan); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:90 (geographic distribution, collecting localities in Kazakhstan); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

**82. *fischeri* Spinola**

*Oxybelus fischeri* Spinola, 1839:484, ♀ (as *Fischeri*, incorrect original capitalization). Holotype or syntypes: ♀, Egypt: no specific locality (M. Spinola collection, Torino). – P. Verhoeff, 1948:204 (in revision of Western European *Oxybelus*); de Beaumont, 1950f:418 (southern Algeria), 1956a:213 (Libya), 1957a:155 (Morocco); Grandi, 1957:392 (Libya: Tripolitania: Bu el Gherab); de Beaumont, 1958b:69 (Algeria: Tassili des Ajjer); Móczár, 1958c:283, 290 (in key to western Palearctic *Oxybelus*); Pulawski, 1964:146 (Egypt: Abu Rawash, Cairo, Dahshur, Ghiza, Kom Osheim, Maadi, Saqqara, Wadi Digla); de Beaumont, 1968a:276 (Canary Islands: Fuertaventura; as *Oxybelus fischeri fischeri*); de Beaumont, Bytinski-Salz and Pulawski, 1973:25 (Israel); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Báez and Ortega, 1978:192 (Canary Islands); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Guichard, 1990b:283 (Saudi Arabia, Yemen); Hohmann, La Roche, Ortega, and Barquín, 1993:249 (detailed locality records from Canary Islands); Leclercq, 1993c:46 (*Oxybelus tegularis* is a subspecies or morphe from the Canaries); Roche and Zalut, 1994:116 (Egypt: Sinai Peninsula); Gadallah and Assery, 2004a:226 (in catalog of Sphecidae of Saudi Arabia); Roche, 2007a:103 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *Oxybelus fischeri fischeri*); Dollfuss, 2008a:471 (locality records from Algeria, Jordan, Morocco, Spain, Tunisia, and Turkey); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:352 (in new catalog of Sphecidae of Saudi Arabia); Bitsch, 2014:405 (recently recorded from Spain); Pagliano, 2014:81 (specimen in M. Spinola collection, Torino, is holotype); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Ben Khedher, Yildirim, Braham, and Chaaban, 2019:191 (known from Tunisia: Tozeur Province); Gadallah, 2020b:42 (in list of aculeate wasps of Arabian Peninsula); Kaplan and Yildirim, 2021:72 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:346 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey).

*Oxybelus africanus* Kohl, 1884b:106, ♀. Syntypes: ♀, Egypt: Cairo (NHMW, TMB). Synonymized with *Oxybelus fischeri* by P. Verhoeff, 1948:204 and de Beaumont, 1950f:418. – Kohl, 1884b:110 (in list of known *Oxybelus*); Dalla Torre, 1897:639 (in catalog of world Sphecidae); Kohl, 1898a:357 (description of ♂); Morice, 1911:132 (Algeria: Biskra); von Schulthess, 1926b:219 (Morocco, Tunisia, Libya); Guiglia, 1934b:306 (Libya: bibliography and sum-

mary of locality records); Nadig, 1934:31 (Italy: Sardegna: Cagliari); Honoré, 1942:50 (in catalog of Egyptian Sphecidae); Giner Marí, 1943a:262 (in Sphecidae Fauna of Spain); Radović, 1985:65 (sting apparatus analyzed); Dollfuss, 1989:11 (type material in NHMW).

**ssp. *tegularis* E. Saunders**

*Oxybelus tegularis* E. Saunders, 1903:210, ♀, ♂. Syntypes: Canary Islands: Island of Tenerife: Orotava (BMNH). – Saunders, 1904a:202 (Canary Islands: Island of Tenerife); Bischoff, 1937b:2 (Canary Islands). – **As *Oxybelus fischeri tegularis***: de Beaumont, 1954:6 (Canary Islands; new status), 1968a:276 (Canary Islands: Islands of Gran Canaria and Tenerife); Báez and Ortega, 1978:192 (Canary Islands); Erlandsson, 1978a:206 (Canary Islands; as *Oxybelus fischeri tegulus*); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Wolf, 1980:73 (Canary Islands); Hohmann, La Roche, Ortega, and Barquín, 1993:249 (detailed locality records from Canary Islands).

**83. *flagellifoveolaris* X. Li and Q. Li**

*Oxybelus flagellifoveolaris* X. Li and Q. Li, 2010:144, ♂. Holotype: ♂, China: Yunnan: Xishuangbanna Dai Autonomous Prefecture: Mengla County: Yao township (Yunnan Agricultural University).

**84. *flavicornis* Arnold**

*Oxybelus flavicornis* Arnold, 1927:97, ♀, ♂. Syntypes: Zimbabwe: Sawmills, Bulawayo, Sanyati River; Botswana: Palapye Road; South Africa: Cape Province: Willowmore (SAM). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Dollfuss, 2008a:472 (locality records from Kenya, Malawi, and Zimbabwe; variation).

**ssp. *nyassae* Arnold**

*Oxybelus flavicornis* race *nyassae* Arnold, 1927:98, ♂. Holotype: ♂, Tanzania: Langenburg on Lake Nyasa (ZMHU). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae, as *nyassae*). – **As *Oxybelus flavicornis nyassae***: R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Dollfuss, 2008a:473 (locality records from Benin, Kenya, Senegal, and Zimbabwe).

**85. *flavipes* Cameron**

*Oxybelus flavipes* Cameron, 1890b:276, ♀. Holotype or syntypes: ♀, India: Bengal: Barrackpore (OXUM). – Cameron, 1890b:276 (India: Barrackpore); Bingham, 1897:319 (original description copied); Dalla Torre, 1897:641 (in catalog of world Sphecidae); Rothney, 1903:106 (India: West Bengal: Barrackpore); Pate, 1938b:389 (in list of Oriental Oxybelini); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Manikandan and Dey, 2001:263 (in checklist of Oriental *Oxybelus*).

**86. *flavigaster* Kazenas**

*Oxybelus flavipes* Kazenas, 1972b:179, ♀, junior primary homonym of *Oxybelus flavipes* Cameron, 1890. Holotype: ♀, Kazakhstan: Alma-Ata Oblast': Ayak-Kalkan (ZIN). – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae).

*Oxybelus flavigaster* Kazenas, 2001b:37, 39. Substitute name for *Oxybelus flavipes* Kazenas. – Esenbekova and Kazenas, 2000:44 (southeastern Kazakhstan: no specific locality); Kazenas, 2002a:91 (geographic distribution, collecting localities in Kazakhstan, as nomen novum); Dollfuss, 2008a:473 (Turkmenistan: Repetek).

**87. *flaviventris* Arnold**

*Oxybelus flaviventris* Arnold, 1927:80, ♀, ♂. Syntypes: Zimbabwe: Bulawayo (SAM and coll. R. Stevenson, now?). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Dollfuss, 2008a:473 (Kenya: Voi, Zimbabwe: Masvingo).

**88. *fossor* Rohwer and Cockerell**

*Oxybelus fossor* Rohwer and Cockerell, 1908:179, ♀. Holotype or syntypes: ♀, USA: New Mexico: Mesilla Park (USNM). – Burks in Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera);

Krombein, 1955b:72 (synonymy reviewed); R. Bohart and Schlinger, 1956c:160 (in checklist of North American *Oxybelus*), 1957:129 (in revision of Californian *Oxybelus*); Krombein, 1958f:201, 204 (in supplement to catalog of North American Hymenoptera: USA west of 100°W north to Nebraska, also Baja California, synonymy with *Oxybelus umbrosus* and *puente* reported); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera); D. Peckham, 1985:867 (nesting habits); U. Frommer, 1988:94 (California: Riverside County: Deep Canyon); Spofford, Kurczewski, and Downes, 1989:258, 259 (references to publications on nest parasites *Senotainia nana* Coquillett and *Senotainia trilineata* (Wulp), miltogrammine flies); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed).

*Oxybelus umbrosus* Mickel, 1916a:432, ♂. Holotype: ♂, USA: Nebraska: Harrison (UNL). Synonymized with *Oxybelus fossor* by Pate, 1943g:125. – Mickel, 1918b:366 (in catalog of Nebraskan Sphecidae); Burks in Muesebeck, Krombein, and Townes, 1951:1034 (in catalog of North American Hymenoptera); Muma, 1952:22 (holotype in UNL), 27 (paratype in UNL).

*Oxybelus puente* Pate, 1943h:125, ♀, ♂. Holotype: ♂, USA: California: Riverside County: Riverside (ANSP). Synonymized with *Oxybelus fossor* by R. Bohart and Schlinger, 1956c:160. – Burks in Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); H. Allen, 1995:16 (holotype in ANSP).

### 89. *fraternus* R. Bohart

*Oxybelus fraternus* R. Bohart, 1993d:70, ♀, ♂. Holotype: ♀, Argentina: Catamarca: Andalgalá (UCD). – R. Bohart, 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:44 (in catalog of Neotropical Crabronidae).

### 90. *fraudulentus* Arnold

*Oxybelus decipiens* Arnold, 1929c:415, ♀, ♂, junior primary homonym of *Oxybelus decipiens* Brèthes, 1913. Syntypes: Namibia: Zesfontein, Koabenuuds (SAM). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae); S. Gess and F. Gess, 2003:103 (Namibia, South Africa: visiting flowers of *Psilocaulon salicornioides* (Pax) Schwant, Aizoaceae, *Deverra denudata* (Viv.) Pfisterer and Podl., Apiaceae, and *Zygophyllum simplex* L., Zygophyllaceae).

*Oxybelus fraudulentus* Arnold, 1940:138. Substitute name for *Oxybelus decipiens* Arnold, 1929. – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Dollfuss, 2008a:473 (locality records from Mozambique, Namibia, South Africa, and Zimbabwe).

### 91. *fritzi* R. Bohart

*Oxybelus modestus* Brèthes, 1913:142, ♀, ♂, junior primary homonym of *Oxybelus modestus* Kohl, 1892. Lectotype: ♂, Argentina: Mendoza: no specific locality (MACN), designated by R. Bohart, 1993a:190. – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Genise, 1990:26 (type material in MACN); Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru).

*Oxybelus fritzi* R. Bohart, 1993a:190 (diagnostic characters). Substitute name for *Oxybelus modestus* Brèthes, 1913. – R. Bohart, 1993c:21 (diagnostic characters); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:473 (Argentina: Buenos Aires: Sierra de la Ventana).

### 92. *frontis* R. Bohart

*Oxybelus frontis* R. Bohart, 1993d:70, ♀, ♂. Holotype: ♀, Argentina: Río Negro: Lamarque (originally M. Fritz coll., Salta, Argentina, now AMNH). – R. Bohart, 1993d:67 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Dollfuss, 2008a:473 (Argentina: Buenos Aires: Sierra de la Ventana).

**93. *fulvicaudis* Cameron**

*Oxybelus fulvicaudis* Cameron, 1908b:303, ♀. Holotype or syntypes: ♀, India: Gujarat: Deesa (BMNH). – Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); Pate, 1938b:389 (in list of Oriental Oxybelini); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Manikandan, Dey, and Farooqi, 1999:14 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:263 (in checklist of Oriental *Oxybelus*); Mawadda and Girish Kumar, 2023a:109 (in checklist of Crabroninae of Northern India).

**94. *fulvopilosus* Cameron**

*Oxybelus fulvopilosus* Cameron, 1890b:279, ♀. Holotype or syntypes: ♀, India: West Bengal: Barrackpore (OXUM). – Cameron, 1890b:276 (India: Barrackpore); Bingham, 1897:319 (in Wasp Fauna of British India); Dalla Torre, 1897:641 (in catalog of world Sphecidae); Rothney, 1903:106 (India: West Bengal: Barrackpore); Pate, 1938b:390 (in list of Oriental Oxybelini, as *fulvopilosum*); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Burks, 1983:33 (Sri Lanka); Pu, 1986:8 (China); Manikandan, Dey, and Farooqi, 1999:14 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:263 (in checklist of Oriental *Oxybelus*); Hua, 2006:281 (in list of Chinese insects, geographic distribution, as *fulvopilosa*).

**95. *funereus* Krombein**

*Oxybelus funereus* Krombein, 1982:34, ♀, ♂. Holotype: ♀, Sri Lanka: Galle District: Sinharaja Jungle (USNM). – Dollfuss, 2008a:473 (India: Kerala: Themala at 8°58.0'N 77°03.5'E, Laos: Bolikhamsai in Ban Nape Province).

**96. *furcifer* R. Turner**

*Oxybelus furcifer* R. Turner, 1917e:191, ♀, ♂. Syntypes: India: Bihar: Chapra and Pusa. – Pate, 1938b:390 (in list of Oriental Oxybelini; as *furciferum*); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Manikandan, Dey, and Farooqi, 1999:14 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Mawadda and Girish Kumar, 2023a:109 (in checklist of Crabroninae of Northern India).

**97. *furculatus* Manikandan, Dey, and Farooqi**

*Oxybelus furculatus* Manikandan, Dey, and Farooqi, 1998:120, ♂. Holotype: ♂, India: Delhi (Indian Agricultural Research Institute, New Delhi). – Manikandan, Dey, and Farooqi, 1999:12 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Dollfuss, 2008a:474 (India: Karnataka: 40 km southwest of Shimoga at 13°36.7'S 75°07.9'E, Uttaranchal: 13 km northwest of Nainital; Pakistan: Jammu and Kashmir: Azad); Mawadda and Girish Kumar, 2023a:109 (in checklist of Crabroninae of Northern India).

**98. *fuscus* Kazenas**

*Oxybelus fuscus* Kazenas, 2001a:89, ♀, ♂. Holotype: ♀, Kazakhstan: southeastern Kazakhstan: 30 km east of Chilik (ZIN).

**99. *fuscohirtus* Gussakovskij**

*Oxybelus fuscohirtus* Gussakovskij, 1930b:76, ♀, ♂. Syntypes: Tajikistan: Sary-kol Range in Pamir on Chinese border (ZIN). – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Dollfuss, 2008a:474 (locality records from Kyrgyzstan, Nepal, Tajikistan, and Uzbekistan).

**100. *genisei* R. Bohart**

*Oxybelus genisei* R. Bohart, 1993c:21, ♀, ♂. Holotype: ♀, Brazil: Santa Catarina: Nova Teutonia (UCD). – Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:474 (Bolivia: Río Seco, Santa Cruz); Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru); Menezes de Jesus, Onody, dos Santos Ramos, de Oliveira Andrade, Doria dos Santos, and Ferreira Brandão, 2019:3 (paratypes in Mus. Zool. Univ. São Paulo).

**101. *glasunowi* F. Morawitz**

*Oxybelus glasunowi* F. Morawitz, 1894:346, ♀ (as *Glasunowi*, incorrect original capitalization). Holotype or syntypes: ♀, Turkmenistan: Tedzhen (ZIN). – Dalla Torre, 1897:641 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia).

#### 102. *gobiensis* Tsuneki

*Oxybelus gobiensis* Tsuneki, 1972a:164, ♀, ♂. Holotype: ♂, Mongolia: East Gobi Aymag: 40 km northwest of Khara-Bireg (TMB). – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Dollfuss, 2008a:474 (locality records from Mongolia).

#### 103. *gracilissimus* Kazenas

*Oxybelus gracilissimus* Kazenas, 1990:60, ♀, ♂ (spelled *gracilissimus* on p. 59, but *gracilissimus* on p. 60). Holotype: ♀, Kazakhstan: 65 km west of Bakanas (ZIN). – Esenbekova and Kazenas, 2000:44 (southeastern Kazakhstan: no specific locality); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:91 (geographic distribution, collecting localities in Kazakhstan), 2008a:103 (southeastern Kazakhstan: Ili River valley: 65 km west of Bakanas, 15 km east of Ayak-Kalkan).

#### 104. *guichardi* de Beaumont

*Oxybelus guichardi* de Beaumont, 1950f:413. Holotype: ♀, Algeria: Tadjerouna (BMNH). – de Beaumont, 1953a:176 (Mauritania); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Guichard, 1990b:281 (Kuweit); Leclercq, 1993c:46 (Algeria); Roche, 2007a:103 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Dollfuss, 2008a:474 (Israel: 32 km southeast of Beersheba at 30°58'N, 34°58'E).

#### 105. *haemorrhoidalis* Olivier

*Oxybelus haemorrhoidalis* Olivier, 1812b:597, sex not stated. Holotype or syntypes: France: Paris area (lost). – Vander Linden, 1829:40 (bibliographic references, France: Paris area); Herrich-Schaeffer, 1840:295 (Germany: Bayern: Regensburg area); nec Dahlbom, 1844:272 and 1845:512 (= *Oxybelus trispinosus*); von Siebold, 1844:132 (Germany: Preussen: vicinity of Danzig, now Poland: Gdańsk); Schilling, 1848:105 (Germany: Breslau area, now Poland: Wrocław); Eversmann, 1849:416 (Russia: Ural foothills); von Kiesenwetter, 1849:90 (Germany: Kingdom of Saxony: Dresden); Kirschbaum, 1853:47 (Germany: Herzogtum Nassau: Mombach); F. Smith, 1856:386 (in catalog of Hymenoptera in British Museum); Ruthe and Stein, 1857:315 (Germany: Berlin area); Assmuss, 1859:616 (Russia: Moscow Governorate); A. Morawitz, 1864:459 (Russia: Sankt-Petersburg); Kirchner, 1867:223 (in catalog of European Hymenoptera); Kohl, 1884b:112 (in list of known *Oxybelus*); Radoszkowski, 1887b:97 (in list of Transcaspian Hymenoptera); Dalla Torre, 1897:641 (in catalog of world Sphecidae); von Heyden, 1906:82 (Germany: Hessen: Frankfurt); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino, as *haemorrhoidalis*); Leclercq, 1993c:46 (collecting localities from Europe, Morocco, and Algeria); Gayubo and Borsato, 1994:210 (Italy: Veneto, Lazio); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: endangered); Schmid and Schmid-Egger, 1997:21 (in checklist of German Sphecidae); Blösch, 1998:168 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); F. Burger, Saure, and Oehlke, 1998:28 (Germany: in list of Sphecidae of Brandenburg), 35 (endangered); Dollfuss, Gusenleitner, and Bregant, 1998:521 (Austria: summary of collecting records from Burgenland); K. Weber, 1998:145 (Germany: Bayern: Bamberg area); Blösch, 2000:264 (in Sphecid Fauna of Germany); Schmid-Egger, 2000b:276, 279 (Germany: Baden-Württemberg: shores of Rhine River); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Ohl et al., 2001:140 (distribution in Germany by provinces); van der Smissen, 2001:62 (Germany: Schleswig-Holstein: extinct); Drewes, 2003:140 (Germany: Bayern: Karlstadt am Main); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavalier); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:68 (Germany: in

catalog of wasps and bees of Bayern); Tischendorf and Treiber, 2003:121, 125 (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: strongly endangered); Esser, Jakubzik, and Sonnenburg, 2004:18 (Germany: Nordrhein-Westfalen); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:263 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Nicoli Aldini, 2004:255 (nesting habits, as *Oxybelus haemorrhoidalis haemorrhoidalis*); Peeters, van Achterberg, et al., 2004:405 (in Wasp and Ant Fauna of Netherlands); Stolle et al., 2004:372 (Germany: Sachsen-Anhalt: in red list of Sphecidae); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Gayubo and Özbek, 2005:24 (Turkey: seven localities); Jacobs, 2005a:448 (Bulgaria: Nesebar); Mandery, 2005:174 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Pagliano and Negrisolò, 2005:213 (in Sphecidae Fauna of Italy); Reder, 2005:951 (Germany: Rheinland-Pfalz: Eisenberg, Monsheim, Worms); Saure, 2005:17 (Germany: Berlin); Straka, 2005a:404 (vulnerable in Czech Republic, as *haemorrhoidalis haemorrhoidalis*); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1798 (Turkey: Erzurum and Konya provinces); Ziska and Saure, 2005:81 (Germany: Berlin: Biesendorfer Sand); Gadoum and Barbier, 2006:43 (France: départements of Val-d'Oise and Yvelines: Parc Naturel Régional du Vexin Français: Guernes); Liebig, 2006:39 (Germany: Sachsen: Muskauer Heide); Ljubomirov, 2006:541 (Bulgaria: Rhodope Mountains: Peshtera); ); Burguet, 2007:unnumbered p. 25 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Chevin, Livory, Lair, Sagot, and Baldock, 2007:42 (France: Département de la Manche); Jacobs, 2007:116, 119 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:25 (Germany: northwestern Sachsen); Nemkov, 2007c:997 (in Appendix to Key for identification of Sphecidae of Far East of Russia); Roche, 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Saure, 2007:82 (Germany: in checklist of Aculeata of Land Brandenburg); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov, 2008:350 (Russia: Altayskiy Kray: Barnaul area); Danilov and Tshernyshev, 2008:43 (Russia: Novosibirsk Oblast': Karasuk area); Dollfuss, 2008a:474 (locality records from Algeria, Azerbaidjan, Bulgaria, France, Greece, Hungary, Iran, Italy, Japan, Kazakhstan, Kyrgyzstan, Moldova, Mongolia, Morocco, Romania, Serbia, Spain, Syria, Tunisia, Turkey, Turkmenistan, Ukraine, and Uzbekistan); Gayubo, González, Tormos, and Asís, 2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas–Sierra de Francia); Ljubomirov and Yildirim, 2008:249 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:20 (in catalog of Crabronidae of Asiatic Russia); Protsenko and Drozdovskaya, 2008:127 (Ukraine: Sumy Oblast': Mogritsa village); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Bitsch and Leclercq, 2009:228 (in supplement to vol. I of Faune de France, 1993: behavioral observation by Nicoli Aldini reported; France: first record from Ain: Sermayer; Loiret: Ardon; Vaucluse: Carpentras et Orange); Guéorguiev and Ljubomirov, 2009:265 (Bulgaria: Maleshevska Planina); Nemkov, 2009b:90 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Budrys, 2010:138 (first record from Lithuania: Nemirseta); Esser, Fuhrmann, and Venne, 2010:37 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:28 (Germany: Bayern: Sulz- and Ottmaringer Tal); Mokrousov, 2010a:62 (Russia: Nizhniy Novgorod Oblast': no specific localities); Rudoiskatel', 2010:160 (Russia: recorded from Ural Mountains); Saure, 2010b:176 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: rare); Shorenko and Kononov, 2010:21 (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, 2010b:385 (France: Ardèche: Saint-Maurice-d'Ibie; Vaucluse: Bédoin); Baghirov, 2011b:149 (Russia: recorded from Altayskiy Kray by Danilov and Chernyshev, 2008); Blösch, 2011:96 (prey carrying); Murai and Amr, 2011:119 (recorded from Syria by Dollfuss, 2008a); Protsenko and Drozdovskaya, 2011:91 (Ukraine: Mikolaiv Oblast': Bugskiy Guard National Park); Saure, 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg), 2011d:200 (Germany: Sachsen-Anhalt: conservation area "Heide südlich Burg"); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:75 (Germany:

Hessen: endangered); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:3 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Nemkov, 2012c:440 (in catalog of Crabronidae of Russian Far East); Prisniy, 2012:48 (Russia: Belgorod Oblast'); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); Standfuss and Standfuss, 2012:427 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Strumia, Pagliano, and Gayubo, 2012:56 (Italy: Toscana: Riserva di San Rossore); Mokrousov, Ruchin, and Egorov, 2013:202 (Russia: Republic of Mordovia: Mordovian State Nature Reserve); Saure, 2013:20 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:22 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:180 (in annotated catalog of aculeate wasps of Belorussia); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Bitsch, 2014:405 (record from France by van der Smissen, 2010b reported); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); J.-K. Kim, 2014:437 (in catalog of Sphecidae *sensu lato* of Korean Peninsula); Pagliano, 2014:79 (specimens in M. Spinola collection, Torino, are *Oxybelus haemorrhoidalis* and *Oxybelus quatuordecimnotatus*); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:18 (Iran: Fars Province); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); P. Rosa and Pagliano, 2015:103 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:14 (Germany: Berlin-Lichterfelde); Bleidorn, Gerth, Hopfe, et al., 2016:10 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Mokrousov and Popov, 2016:583 (Russia: Krasnodarskiy Krai); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:41 (Turkey: Ağrı, Erzurum, and Kars provinces); Antropov, 2017b:242 (in catalog of Crabroninae of Russia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:53 (Iran: known from Fars, Mazandaran, Sistan-o Baluchestan, and Yazd provinces); Jacobs and Liebig, 2018:144 (Russia: Irkutsk Oblast': Sarma); Akulov, 2019:44 (Russia: first record from Krasnoyarskiy Krai: no specific locality); Carminati, Mora, and Cretin, 2019:19 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:14 (Azerbaijan: Nakhichevan Autonomous Republic); Ruchin and Antropov, 2019a:13234 (Russia: Mordovian State Nature Reserve), 2019b:162 (in Mordovian State Nature Reserve known from single specimen); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:265 (Iran: Fars: Kazeroon and Khonj); Akulov, Proshchalykin, and Mokrousov, 2020:49 (Russia: central Krasnoyarsk Krai); Ben Khedher, Yıldırım, and Braham, 2020a:105 (Tunisia: Kebili, Mahdia, Nabeul, and Sousse provinces); Cross, Baldock, and Wood, 2021:53 (in catalog of Sphecidae *sensu lato* of Portugal, as *haemorrhoidalis haemorrhoidalis*); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:346 (in revision of Sphecidae *sensu lato* of Europe), 347 (in key to subspecies of *Oxybelus haemorrhoidalis*, as *haemorrhoidalis haemorrhoidalis*); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Kaplan and Yıldırım, 2021:72 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:96 (in commented list of Sphecidae *sensu lato* of Poland); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); Kaplan and Yıldırım, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution); Pytel-Huta and Franchuk, 2024:81 (Ukraine: Rivno Nature Reserve); Kochetkov and Korsun, 2025:9 (Russia: Zabaikalskiy Krai: Dauriski Nature Reserve).

*Oxybelus victor* Lepeletier de Saint Fargeau, 1845:218, ♀. Holotype or syntypes: ♀, France: Paris area (lost?). Synonymized with *Oxybelus haemorrhoidalis* by Bitsch and Leclercq, 1993:253. – F. Smith, 1856:386 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:223 (in catalog of European Hymenoptera); Dours, 1874:153 (in catalog of Hymenoptera of France); Kohl, 1883e:662 (Switzerland), 1884b:116 (in list of known *Oxybelus*); Acloque, 1897:92 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:650 (in catalog of world Sphecidae); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Berland, 1925d:210 (in Sphecid Fauna of France); Coulon, 1925:122 (France); Grandi, 1926:313 (prey carrying, prey); Berland, 1928b:182 (add Grandi, 1926 to bibliography in Berland, 1925d); Grandi, 1928d:313 (prey); Grandi, 1929:289 (Italy: Toscana: valle della Limentra); Maidl *in*

Schmiedeknecht, 1930:662, 666 (in keys to Hymenoptera of North and Central Europe); Bouwman, 1932:393 (in revision of Sphecidae of Netherlands); Crèvecoeur and Maréchal, 1936:257 (in catalog of Belgian Hymenoptera); Zavadil, Šusterka, and Bat'a, 1937:171 (in catalog of Sphecidae of Czechoslovakia); Kuntze and Noskiewicz, 1938:406 (Poland: Podole region, now Ukraine, also known from more northern parts of Poland); Móczár, 1938c:81 (Hungary: Kőszeg Hills); Molitor, 1938:448 (color recognition); A. Wagner, 1938a:118 (northwestern Germany); Móczár, 1939:5 (Hungary: Jászberény); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Paul, 1941:38 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1033 (Germany: Bayern: Bamberg area); de Beaumont, 1942b:427 (in revision of Swiss *Oxybelus*); Balthasar, 1943:41 (Czech Republic: Moravia: Zlin area); Giner Marí, 1943a:258 (in Sphecid Fauna of Spain); Guiglia, 1944b:41 (Italy); van Lith, 1947:104 (Netherlands); Balthasar, 1948:141 (Slovakia: Kovačov, Parkan); Šnoflák in Zavadil and Šnoflák, 1948:35, 40 (in key to Czechoslovakian Sphecidae); P. Verhoeff, 1948:183 (in revision of Western European *Oxybelus*); de Andrade, 1949:21 (Portugal, as *Oxybelus victor victor*); Fæster, 1949:30, 43 (in revision of Western European *Oxybelus*); de Beaumont, 1950f:421 (Algeria); Noskiewicz and Chudoba, 1950:311 (Poland: in revision of *Oxybelus* of Śląsk Region); Leininger, 1951:116 (Germany: Baden-Württemberg); Scobiola, 1951:274 (first record from Romania: București, Mangalia in Constanța Region); de Beaumont, 1952b:91 (Marquet's, 1896 specimens); Guiglia, 1953a:88 (in revision of Italian *Oxybelus*, as *Oxybelus victor victor*); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); Blüthgen, 1954:147, 151 (in key to Central European *Oxybelus*), 153 (summary of locality records from Germany); de Beaumont, 1954e:98 (Italy); Vergne, 1955:6 (France: Auvergne); Vogrin, 1955:46 (Yugoslavia); Ceballos, 1956:398 (in catalog of Sphecidae of Spain); de Beaumont, 1956a:213 (Libya); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); de Beaumont, 1957a:156 (Morocco; geographic variation), 1957b:139 (northern Iran); Zirngiebl, 1957:178 (Germany: Rheinland-Pfalz: Birkenheide, Leistadt); Benno, 1958b:18 (in review of Dutch Sphecidae); Móczár, 1958b:209 (Hungary: collecting localities), 1958c:285, 290 (in key to western Palearctic *Oxybelus*); Diniz, 1959:32 (Portugal: Lisboa, São João do Estoril); Wolf, 1959b:35 (Germany: Nassau); Noskiewicz and Puławski, 1960:163, 165 (in key to Polish Sphecidae); Grandi, 1961:260 (nesting habits, as *Oxybelus victor victor*); de Beaumont, 1964c:162 (in Sphecid Fauna of Switzerland), 1965a:63 (Greece); Bonelli, 1966c:221 (Italy: Trentino–Alto Adige: Montagna); Mingo Pérez, 1966:85 (in revision of *Oxybelus* of Iberian Peninsula, as *Oxybelus victor victor*); Balthasar, M. Hrubant, and E. Hrubant, 1967:170 (Bulgaria: Slanchev Bryag near Nesebar); Benno, 1967:39 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:365 (Turkey); Gauss, 1967:560 (Germany: Baden-Württemberg); J. Heinrich, 1967:83 (Germany: Bayern: Unterfranken District); Scobiola-Palade, 1967a:162 (Romania: Constanța District: Mangalia), 1967b:50 (Romania); Benedek, 1968:79 (Hungary, floral records); Scobiola-Palade, 1968c:386 (Romania: București); Zangheri, 1969:1709 (Italy: in catalog of flora and fauna of Romagna Region); Benedek, 1969a:85 (Hungary: marshy meadow), 1970:105 (Hungary: Tapolca); de Beaumont, 1970a:405 (Afghanistan), 1970c:17 (Iran: Baluchistan); Oehlke, 1970:798 (Democratic Germany); Schmidt, 1971b:54 (Germany: Rheinland-Pfalz: Gonsenheimer Wald, Mainzer Sand); Tsuneki, 1971m:36 (China: Nei Mongol: Apaka); Balthasar, 1972:162 (in Sphecid Fauna of Czechoslovakia); Scobiola-Palade, 1972a:152 (Romania: delta of Danube: Caraorman); Simon Thomas, 1972:187 (France: Gironde, Landes, Lot-et-Garonne); Erlandsson, 1974:88 (Spain, Yugoslavia); Scobiola-Palade, 1974:147 (Romania: Sărăturile sandbank in Danube delta); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Simon Thomas, 1976:6 (France: Lot-et-Garonne: Forêt de Campet); Kolesnikov, 1977:321 (Russia: Bryansk Oblast); Guichard, 1978:272 (Greece); Marion, 1978:91 (France: Nièvre Department); Puławski, 1978:276, 277 (in key to Sphecidae of European part of USSR); Benedek, 1979:237 (Hungary: Bakony Hills); Leclercq, Gaspar, and Verstraeten, 1979:map 1430 (Belgium, as *Oxybelus victor victor*); Radović and Krunić, 1979:unpaginated foldout (nesting in sand, foreleg structure); Pagliano, 1980:120 (Italy: Piemonte); Schmidt, 1981:179 (Germany: Baden-Württemberg); Donath, 1982:215 (Germany: Cottbus Bezirk); Gayubo, 1982b:17 (northern Spain: Ávila, Cáceres, and Salamanca provinces), 1882e:103 (Spain: Cádiz Province); Tsuneki, 1982b:19 (known from Korea); Dollfuss, 1983b:13 (in catalog of Sphecidae of Austria); Schmidt and Westrich, 1983:124 (Greece); Gayubo, 1984b:92 (Spain:

Salamanca Province); Józán, 1985b:58 (Hungary south of Lake Balaton), 79 (floral records), 84 (ecological and zoogeographic characteristics); Paik, 1985:200 (in list of Sphecidae *sensu lato* of Korea); Radović, 1985:65 (sting apparatus analyzed); Scobiola-Palade, 1985:97 (Romania: delta of Danube); Brechtel, 1986:73 (Germany: Südpfalz Region); Gayubo, 1986d:115 (Spain: Zamora Province); Gayubo and Heras, 1986:53 (Spain: Segovia Province); Gayubo and Sanza, 1986:62 (Spain: Burgos, Soria); Józán, 1986:371 (Hungary: Kiskunság National Park); Steiner, 1986:106 (references to publications on nesting habits); Asís and Jiménez, 1987:27 (Spain: Castellón Province); Schmidt and Westrich, 1987:375 (Germany: Mainz area); Tormos and Jiménez, 1987a:125 (Spain: Valencia); Dollfuss, 1988:14, 26 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Karsai, 1988:100 (Hungary: Kiskunság National Park); Wolf, 1988b:141 (Germany: Rheinland-Westfalen); Józán, 1989:101 (Hungary: Tihany Nature Reserve); Pádr *in* Šedivy, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Scobiola-Palade, 1989:88 (Romania: delta of Danube); Skibińska, 1989b:291 (Poland: moist meadow in Warszawa area); Jacobs and Oehlke, 1990:123 (population regress in Democratic Germany after 1960), 178 (citation of Donath, 1982); Kuznetzova, 1990:25 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pádr, 1990:90 (Czech Republic: Praha area); Pagliano, 1990:80 (in catalog of Italian Sphecidae); Schwammlberger and Priesner, 1990:542 (Austria: Kärnten); Day, 1991:xvii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:133 (in key to Sphecidae *sensu lato* of North and Central Europe); Józán, 1991:603 (Hungary: Bátorliget Nature Reserve); Kowalczyk, 1991a:100 (Poland: Łódź); Pagliano, 1991b:329, 332 (in key to Italian Crabroninae); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Gayubo, Borsato, and Osella, 1992:285 (France, Greece); Józán, 1992a:229 (Hungary: Béda-Karapancsa Protected Area), 1992b:174 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); Nemkov, 1992b:245 (Russia: Far East: Blagoveshchensk); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Negrisolo and Pagliano, 1993:92 (Italy: Sardegna); Guichard, 1993b:531 and 533 (in key to European *Oxybelus*); Torregrosa, Gayubo, Tormos, and Asís, 1993:19 (Spain: Alicante Province); Dollfuss, 1994:103 (endangered in Austria); Theunert, 1994c:46 (Germany: summary of records from Niedersachsen and Bremen); Tormos, Asís, and Gayubo, 1994:189, 213 (Spain: Albacete Province); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Gusenleitner, 1995:161 (Austria: Steiermark); Jansen and Kaluza, 1995:8 (Germany: endangered in Sachsen); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:425 (in key to Sphecidae of Russian Far East); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:28 (Austria: Niederösterreich: Donau-Auen; Germany: Bayern: Aschaffenburg, Kahl; Croatia: Island of Krk); Schmid-Egger, Risch, and Niehuis, 1995:201 (summary of records from Germany: Rheinland-Pfalz Province); Verves and Gorobchishin, 1995:54 (preying on *Sarcophila latifrons* (Fallén), Sarcophagidae); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Minoranskiy and Shkuratov, 1996:82 (Russia: Rostov Oblast'); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Witt, 1996:106 (Germany: Brandenburg), 110 (locality records); Celary, 1997:59 (in checklist of Animals of Poland); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Józán, 1998:311 (Hungary: Duna-Dráva National Park); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); Neumayer, Schwarz, and Bregant, 1999:225 (Austria: in checklist of Sphecidae of Land Kärnten); Pauly, 1999:109 (in catalog of Belgian aculeates, as *Oxybelus victor victor*); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Dressler, 2000:33 (Germany: Hessen: Darmstadt area); Józán, 2000:109 (Hungary: Bakony Mountains), 2001:279 (Hungary: Somogy County); Zettel, Gross, and Mazzucco, 2001:74 (Austria: Wien); Józán, 2002:53 (Hungary: Mecsek Mountains); Shlyakhtenok and Skibinska, 2002:34 (Belorussia: no specific locality); Gorobchishin, 2003:48 (Ukraine: Kiev: botanical garden); Józán, 2003:227 (Hungary: Látrányi Puszta Nature Conservation Area); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Island of Malyi Tataru in Danube delta at 45.21°N 29.00°E); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Wiśniowski, 2004:46 and 61 (in checklist of Polish Sphecidae); Kofler, 2005:175 (Austria: Tirol: Lienz District: city of Lienz, Untergaimberg in Gaimberg Common); Riemann and Hohmann, 2005:562 (Germany: Niedersachsen: city of Bremen and adjacent area); Gorobchishin, 2006:120 (Ukraine: several localities); Józán,

- 2007:180 (Hungary: Zselic Hills); Shlyakhtenok, 2007a:299 (Belorussia: Berezinsky Nature Reserve); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia); Baños-Picón, Asís, Gayubo, and Tor-mos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Kowalczyk, Kurzac, and Soszyński, 2009:129 (Poland: Sulejów Landscape Park: Szarbsko); Rudoiskatel', 2010:159 (Russia: southern Ural Mountains); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Pankov, 2013:230 (Russia: Ivanovo Oblast'); Wiśniowski and Szczepko, 2013:43 (Poland: Kampinos National Park near Warszawa); Baldock, 2014:358 (Spain: Island of Mallorca); Józán, 2014:132 (Croatia: Meka Draga: Kruševo). – **As *Oxybelus haemorrhoidalis victor***: Bitsch and Leclercq, 1993:253 (new status, forme or subspecies); Shkuratov, 2004a:81 (Ukraine: Donetsk; Russia: Rostov and Volgograd Oblast's); Straka, 2005a:401 (endangered in Czech Republic); Budrys, 2010:138 (first record from Lithuania: Nemirseta, Rūdinkai); Wiesbauer and Zettel, 2011:269 (Austria: Niederösterreich: March = Morava lowland); Cross, Baldock, and Wood, 2021:53 (in catalog of Sphecidae *sensu lato* of Portugal); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:347 (in key to subspecies of *Oxybelus haemorrhoidalis*).
- Oxybelus dubius* Dahlbom, 1845:513, ♂. Holotype or syntypes: ♂, Europe: no specific locality, but Germany: Glogau, now Poland: Głogów, according to Fæster, 1949:30 (Lund). Synonymized with *Oxybelus victor* by Fæster, 1949:30. – Thomson, 1870:179 (in revision of Swedish Crabroninae).
- Oxybelus fasciatus* Dahlbom, 1845:513, ♀. Holotype or syntypes: ♀, Germany: Posen, now Poland: Poznań (Lund, now lost, see Faester, 1949:30). Synonymized with *Oxybelus victor* by ... – Kirschbaum, 1853:47 (Germany: Herzogtum Nassau: Mombach); Taschenberg, 1858:118 (in key to Sphecidae of Germany: Poland: Poznań; Germany: Mombach); von Frauenfeld, 1861:103 (Croatia: Dalmatia: no specific locality); Schenck, 1861:150 (redescription; Germany: Nassau Region: Wiesbaden, now in Hessen); Taschenberg, 1866:160 (in revision of Hymenoptera of Germany); Kirchner, 1867:223 (in catalog of European Hymenoptera); Schenck, 1867a:352 (Germany: Nassau Region); Thomson, 1870:179 (in revision of Swedish Crabroninae); Kohl, 1884b:112 (in list of known *Oxybelus*); Gasperini, 1887:14 (cited from Dalmatia by Frauenfeld, 1861); Borries, 1897:76 (nesting habits unknown); Dalla Torre, 1897:640 (in catalog of world Sphecidae); Dominique, 1901a:505 (France: Loire-Inférieure, now Loire-Atlantique: Sainte-Marie-de-Pornic); de Cobelli, 1903:114 (Italy: Province of Trentino: Malè, Rovereto); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:80 (specimen in M. Spinola collection, Torino, are *Oxybelus haemorrhoidalis*).
- Oxybelus simplex* Dahlbom, 1845:513, ♂. Holotype or syntypes: ♂, "Europ. merid.:" no specific locality, but France: Montpellier according to Fæster, 1949:30 (Lund). Synonymized with *Oxybelus dubius* by Thomson, 1870:179 and with *Oxybelus victor* by Fæster, 1949:30. – Kirchner, 1867:223 (in catalog of European Hymenoptera); Kohl, 1884b:115 (in list of known *Oxybelus*); Dalla Torre, 1897:648 (in catalog of world Sphecidae); von Heyden, 1905:82 (Germany: Hessen: Frankfurt).
- Oxybelus bicolor* Schilling, 1848:105, sex not stated. Holotype: sex unknown: Germany: Lissa near Glatz, now Poland: Bardo near Kłodzko (lost). Synonymized with ... by ..., synonymy confirmed by Bitsch and Leclercq, 1993:253 and Leclercq, 1993c:46. – Erichson, 1948:137 (original description copied); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae). – **As *Oxybelus haemorrhoidalis* var. *bicolor***: Dalla Torre, 1897:641 (in catalog of world Sphecidae).
- Oxybelus elegantulus* Gerstaecker, 1867a:59, ♀. Syntypes: ♀, Germany: Woltersdorf near Berlin (ZMHU). Synonymized with *Oxybelus victor* by Faester, 1949:30. – A. Costa, 1867c:147 (in revision of Italian Sphecidae); Chevrier, 1868:412 (summary of diagnostic characters); A. Costa, 1871b:76 (in revision of Italian Sphecidae); Kohl, 1883e:661 (Switzerland), 1884b:111 (in list of known *Oxybelus*), 1893:33 (Austria: Niederösterreich); Baldini, 1894:72 (Italy: Modena area); Krieger, 1894:11 (Germany: Kingdom of Saxony: Leipzig); Dalla Torre, 1897:640 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Kingdom of Hungary, some localities are in today's Croatia and Slovakia); Chyzer, 1902:34 (Hungary); W. Schulz, 1904b:101 (Czechoslovakia: Houška); Kubes, 1905:84 (Czech Republic: Kolín); Schmiedeknecht, 1907:202 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of

French Hymenoptera); Dittrich, 1911b:20 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Schirmer, 1912:164 (Germany: Berlin area); Alfken, 1914:275 (northwestern Germany); O. Meyer, 1919:149 (Germany: Posen Province, now Poland: Poznań Region); Stöckhert, 1919:38 (Germany: Franken); Dubois, 1920:87 (Belgium: Beverloo), 1922:190, 192, 193 (in key to Belgian Sphecidae); Fahringer and Friese, 1921:161 (Turkey: Erzurum: Dörtjol in Amanus Mountains = Gavur Dağları); Enslin, 1922c:246 (Germany: Bayern: Fürth, Neumerkt, and Nürnberg); Hedicke, 1922:270 (Germany: Brandenburg: Gross Machnower Weinberg); Noskiewicz, 1922b:231 (Poland: Podole Region: Sinków, now Ukraine); Leininger, 1924:121 (Germany: Baden-Württemberg: Friedrichstal, Karlsruhe); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Zanon, 1926:89 (Libya: Fueihat 15 km south of Benghazi); Guiglia, 1934b:306 (Libya: bibliography and summary of locality records); Szulczewski, 1950:102 (Poland: Wielkopolski National Park 15 km south of Poznań).

*Oxybelus incomptus* Gerstaecker, 1867a:76, ♂. Syntypes: ♂, Germany: Berlin area (ZMHU). Synonymized with *Oxybelus victor* by Blüthgen, 1949:87. – Chevrier, 1868:412 (summary of diagnostic characters); Kohl, 1884b:112 (in list of known *Oxybelus*); Dalla Torre, 1897:641 (in catalog of world Sphecidae); O. Schneider, 1898:102 (Germany: Island of Borkum); Schmiedeknecht, 1907:205 (in key to Hymenoptera of Central Europe); Schirmer, 1912:165 (Germany: Berlin area); Alfken, 1914:276 (northwestern Germany); O. Meyer, 1919:150 (Germany: Posen Province, now Poland: Poznań Region); Maidl in Schmiedeknecht, 1930:666 (in keys to Hymenoptera of North and Central Europe); Paul, 1941:38 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1034 (Germany: Bayern: Bamberg area, as *comptus*); Šnoflák in Zavadil and Šnoflák, 1948:41 (in key to Czechoslovakian Sphecidae); Noskiewicz and Chudoba, 1950:314 (Poland: in revision of *Oxybelus* of Śląsk Region).

*Oxybelus analis* Gerstaecker, 1867a:93, ♀, junior primary homonym of *Oxybelus analis* Cresson, 1865. Holotype: ♀, Austria: no specific locality (ZMHU). Synonymized with *Oxybelus melancholicus* by Kohl, 1884b:113 and Marquet, 1896:33, synonymy confirmed by Blüthgen, 1949:87. – Chevrier, 1868:413 (summary of diagnostic characters); Kohl, 1880:143 (Austria: Italy: Trentino–Alto Adige), 1883e:663 (Switzerland); Gasperini, 1889:68 (Dalmatia: Spalato, now Croatia: Split); Kohl, 1893a:34 (Austria: Niederösterreich); Krieger, 1894:12 (Germany: Kingdom of Saxony); Schletterer, 1894:34 (Istria Peninsula, now part of Croatia, Slovenia, and Italy); Marquet, 1896:33 (in revision of *Oxybelus* of France); Kubes, 1905:84 (Czech Republic: Kolín); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Maidl, 1922:73 (Croatia); Blüthgen, 1954:147 (in key to Central European *Oxybelus*, as *Oxybelus victor* var. *analis*).

*Oxybelus melancholicus* Chevrier, 1868:394, ♀, ♂. Syntypes: Switzerland: Lake Léman area: no specific locality (MHNG). Synonymized with *Oxybelus victor* by Blüthgen, 1949:87. – Kohl, 1883e:663 (Switzerland), 1884b:113 (in list of known *Oxybelus*); Dalla Torre, 1897:644 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Ferton, 1901a:110 (prey paralyzing and transportation, list of prey), 112 (additional prey record); E. Saunders, 1904c:639 (Spain); Mantero, 1905:71 (Italy: Toscana: Isola del Giglio); Schmiedeknecht, 1907:204 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Ferton, 1908:564 (prey); Morice, 1911:132 (Algeria: Alger, Biskra); O. Meyer, 1919:150 (Germany: Posen Province, now Poland: Poznań Region); Maidl, 1922:74 (Croatia); Ferton, 1923:172 (prey paralyzing, list of prey); Berland, 1924:89 (France: Var: Callian), 1925d:210 (in Sphecid Fauna of France); von Schulthess, 1926b:219 (Tunisia); Grandi, 1927:205 (prey, nest provisioning); Berland, 1928b:182 (add Grandi, 1927 to bibliography in Berland, 1925d); Grandi, 1928d:312 (prey), 1929:278 (list of prey), 281 (description of mature larva), 289 (Italy: Toscana: valle della Limentra); Maidl in Schmiedeknecht, 1930:662, 666 (in keys to Hymenoptera of North and Central Europe); Bouwman, 1932:391 (in revision of Sphecidae of Netherlands); Giordani Soika, 1932a:23 (Italy: Lido di Venezia); Gussakovskij, 1932:28 (Russia: Primorskiy Krai); Masi, 1933:196 (Italy: Toscana: Isola di Capraia); Giner Marí, 1934:136 (Spain); Grandi, 1934:128 (Italy: Toscana: Taviano, determination tentative); Bernard, 1935:67 (France: Var: Fréjus area); Grandi, 1935a:109 (Italy); Yasumatsu, 1935d:39 (first record from Japan and Korea); Zavadil, Šusterka, and Bat'a, 1937:171 (in catalog of Sphecidae of

Czechoslovakia); Guiglia, 1938b:10 (Italy: Sardegna); Móczár, 1939:5 (Hungary: Jászberény); de Beaumont, 1942b:429 (in revision of Swiss *Oxybelus*); Balthasar, 1943:41 (Czech Republic: Moravia: Zlin area); Giner Marí, 1943a:259 (in Sphecidae Fauna of Spain); Guiglia, 1944a:151 (Cyprus: Cherkos; ♀, redescription of syntypes, comparison with *Oxybelus mandibularis*), 1944b:41 (Italy); Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); van Lith, 1947:105 (Netherlands, determination tentative); Šnoflák in Zavadil and Šnoflák, 1948:35, 40 (in key to Czechoslovakian Sphecidae); Noskiewicz and Chudoba, 1949:420 (Poland: Dolny Śląsk: Sułów); Pittioni, 1950:29 (Cyprus); Caruel, 1952b:101 (France: Marne Department); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); Hertzog, 1954:102 (France: Bouches-du-Rhône: Camargue); Vogrin, 1955:45 (Yugoslavia); Hertzog, 1956:183 (carrying prey impaled on stinger); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); Evans, 1957b:113 (discussion of larva's description by Grandi, 1929:281); Compte Sart, 1959:138 (Spain: Mayorca); Scobiola-Palade, 1959:499 (Romania: Constanța Region: Techirghiol); Ceballos, 1964:95 (in supplement to catalog of Spanish Sphecidae); Balthasar, 1972:163 (in Sphecidae Fauna of Czechoslovakia); Georghiou, 1977:191 (Cyprus); Piek and Spanjer, 1986:186 (in list of Sphecidae with known prey); Steiner, 1986:105 (references to publications on nesting habits); Pádr in Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Pádr, 1990:89 (Czech Republic: Praha area). – **As *Oxybelus victor melancholicus***: Giner Marí, 1934:136 (Spain); de Andrade, 1949:22 (Portugal); Verhoeff, 1948:187 (in revision of Western European *Oxybelus*); Guiglia, 1953a:94 (in revision of Italian *Oxybelus*); Grandi, 1954:187 (nest and prey: *Musca domestica* Linnaeus, *Stomoxys calcitrans* (Linnaeus), both Muscidae), 245 (Italy); Grandi, 1957:337 (nest parasite: *Smicromyrme viduata* Pallas, Mutillidae), 392 (Italy); Grandi, 1959a:187 (*Metopia staegei* Rondani, Sarcophagidae, may be a prey, but also a nest parasite, this form of interrelationships is named alleloparasitism), 1961:260 (nesting habits), 531 (description of larva), 1962:99 (Italy); Mingo Pérez, 1966:87 (in revision of *Oxybelus* of Iberian Peninsula); Simon Thomas, 1972:187 (France: Gironde, Landes, Lot-et-Garonne); de Beaumont, Bytinski-Salz, and Pulawski, 1973:24 (Israel); Simon Thomas, 1976:6 (France: Lot-et-Garonne: Forêt de Campet). – **As *Oxybelus victor var. melancholica***: Ceballos, 1956:397 (in catalog of Sphecidae of Spain); Nouvel and Ribaut, 1958:17 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Diniz, 1959:32 (Portugal: Estoril, Lisboa, Quinta do Mato).

### 106. *harraricus* Arnold

*Oxybelus harraricus* Arnold, 1927:112, ♀, ♂. Syntypes: Ethiopia: Harar (BMNH). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae); Scott in Arnold, 1933a:369 (Ethiopia: Harar District); Giordani Soika, 1939c:103 (Eritrea: Adi Caie); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Madl, 2023:252 (in catalog of Crabronidae of Eritrea).

### 107. *hastatus* Fabricius

*Oxybelus hastatus* Fabricius, 1804:317, sex not stated. Holotype: ♂, Morocco: Mogador (ZMUC). – Olivier, 1812b:594 (redescription); Dahlbom, 1844:273 (in revision of Pompilidae and Sphecidae), 1845:514 (in key to *Oxybelus*); F. Smith, 1856:387 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:223 (in catalog of European Hymenoptera, as *hastatus* Dahlbom); Kohl, 1884b:112 (in list of known *Oxybelus*); Dalla Torre, 1897:641 (in catalog of world Sphecidae); Giner Marí, 1943a:260 (in Sphecidae Fauna of Spain); Ceballos, 1956:396 (in catalog of Sphecidae of Spain); de Beaumont, 1957a:154 (Morocco; diagnostic characters); Móczár, 1958c:282 (in key to western Palearctic *Oxybelus*); van der Vecht, 1961a:71 (study of holotype); Mingo Pérez, 1966:83 (in revision of *Oxybelus* of Iberian Peninsula); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Gayubo, 1982b:9 (Spain: Ávila, Cáceres, and Salamanca provinces), 1984b:90 (Spain: Salamanca Province); Gayubo, Asís, and Tormos, 1990b:74 (Spain: Cáceres Province); Bitsch and Leclercq, 1993:254 (in revision of western European Crabroninae); Guichard, 1993b:530 and 532 (in key to European *Oxybelus*); Leclercq, 1993c:46 (Algeria: Messad; Morocco: Agadir); Dollfuss, 2008a:476 (Morocco: 10 km east of Guelmim; Spain: Salamanca: Aldea del Obispo: Prada Cano); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and

Malaise traps); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid: Reserva Natural Riberas de Castroño – Vega del Duero); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:499 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire), 501 (exclusive species of burned areas); Cross, Baldock, and Wood, 2021:53 (in catalog of Sphecidae *sensu lato* of Portugal); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:34 (in revision of Sphecidae *sensu lato* of Europe).

*Oxybelus lancifer* Olivier, 1812b:594, sex not stated. Holotype or syntypes: Spain: no specific locality (lost). – Synonymized with *Oxybelus hastatus* by Dahlbom, 1844:273. – Vander Linden, 1829:36 (bibliographic references, Spain, may be a synonym of *Oxybelus hastatus*); F. Smith, 1856:3836 (in catalog of Hymenoptera in British Museum); de Beaumont, 1957a:154 (redescription); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:78 (specimens in M. Spinola collection, Torino, are *Oxybelus hastatus*).

#### 108. *hessei* Arnold

*Oxybelus hessei* Arnold, 1929c:413, ♀, ♂ (as *Hessei*, incorrect original capitalization). Syntypes: Namibia: Zesfontein, Kaross, Otavi, Otjikondo (SAM). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:103 (Namibia, South Africa: visiting flowers of *Deverra denudata* (Viv.) Pfisterer and Podl., Apiaceae, and *Gisekia africana* (Lour.) Kuntze and *Limeumargutecarinatum* Wawra and Peyr., Molluginaceae).

#### 109. *huae* R. Bohart

*Oxybelus huae* R. Bohart, 1993d:70, ♀, ♂. Holotype: ♀, Ecuador: Napo: Huahua Sumaco, 45 km on Hallin-Loreto Road (UCD). – R. Bohart, 1993d:67 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:44 (in catalog of Neotropical Crabronidae).

#### 110. *hurdi* R. Bohart and Schlinger

*Oxybelus hurdi* R. Bohart and Schlinger, 1956b:155, ♀, ♂. Holotype: ♂, Mexico: Nayarit: Ahuacatlán (CAS). – R. Bohart and Schlinger, 1956c:161 (in checklist of North American *Oxybelus*), 1957:107 (in key to North American *Oxybelus*); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae).

#### 111. *imperialis* Gerstaecker

*Oxybelus imperialis* Gerstaecker, 1867a:24, ♀. Holotype or syntypes: ♀, South Africa: no specific locality (ZMHU). – Kohl, 1884b:112 (in list of known *Oxybelus*); Dalla Torre, 1897:641 (in catalog of world Sphecidae); Arnold, 1927:79 (in revision of southern African *Oxybelus*), 1930:14 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Gess, 1981:20 (South Africa: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils); S. Gess, 1996:283 (floral records); S. Gess and F. Gess, 2003:103 (South Africa: visiting flowers of *Lasiospermum bipinnatum* (Thunb.) Druce, Asteraceae).

#### 112. *inornatus* (Ch. Robertson)

*Notoglossa inornata* Ch. Robertson, 1901:203, ♀, ♂. Syntypes: USA: Illinois: Carlinville (ANSP). – **As *Oxybelus inornatus***: Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (new generic assignment, in catalog of North American Hymenoptera, as *inornata*); R. Bohart and Schlinger, 1956c:161 (in checklist of North American *Oxybelus*), 1957:109 (in key to North American *Oxybelus*, as *inornatum*); Krombein, 1956a:43 (prey), 1958f:202 (in supplement to catalog of North American Hymenoptera: northeastern USA, Michigan to Massachusetts, south to North Carolina; prey: *Pholeomyia indecora* (Loew), Miliichidae); Kurczewski and Kurczewski, 1963:149 (Pennsylvania: Presque Isle State Park, as *inornatum*); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera); Ahlstrom, 1995:110 (in checklist of insects of North

Carolina); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario), 30 (distribution within Ontario), 56 (first record from Canada: Ontario: Forks o the Credit); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Ontario: no specific locality).

### 113. *insularis* Kohl

*Oxybelus insularis* Kohl, 1884b:109, ♀. Holotype: ♀, Sri Lanka: no specific locality (NHMW). – Kohl, 1884b:112 (in list of known *Oxybelus*); Cameron, 1890b:276 (in list of Oriental Sphecidae); Bingham, 1896a:447 (bibliographic reference), 1897:318 (original description translated into English); Dalla Torre, 1897:641 (in catalog of world Sphecidae); Pate, 1938b:390 (in list of Oriental Oxybelini); R. Bohart and Menke, 1976:3368 (in checklist of world Sphecidae); Krombein, 1983:36 (Sri Lanka, redescription); Dollfuss, 1989:11 (type material in NHMW); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

### 114. *irwini* R. Bohart

*Oxybelus irwini* R. Bohart, 1993e:164, ♀, ♂. Holotype: ♀, ♂. Holotype: ♀, El Salvador: Mount San Salvador (UCD). – R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Hanson and Menke, 1995:640 (known from Costa Rica, as *irwini*); Cambra and Santos, 2000:51 (first record from Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean; Provincia de Coclé: Antón); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:476 (Dominican Republic: Barahona); Menezes de Jesus, Onody, dos Santos Ramos, de Oliveira Andrade, Doria dos Santos, and Ferreira Brandão, 2019:3 (paratype in Mus. Zool. Univ. São Paulo).

### 115. *iwatai* Tsuneki

*Oxybelus nigriventris* Tsuneki, 1963c:43, ♀, junior primary homonym of *Oxybelus nigriventris* Turnier, 1901. Holotype: ♀, Thailand: Muangfang (Sasayama Univ.). – R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae).  
*Oxybelus iwatai* Tsuneki, 1976e:434. Substitute name for *Oxybelus nigriventris* Tsuneki, 1963 nec Turnier, 1901.

### 116. *jamaicae* R. Bohart

*Oxybelus jamaicae* R. Bohart, 1993e:164, ♀, ♂. Holotype: ♀, Jamaica: Saint Cateherine Parish: Hellshire Hills (Kansas Univ.). – R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*), 162 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae).

### 117. *kirgisicus* Radoszkowski

*Oxybelus kirgisicus* Radoszkowski, 1893c:244, ♀. Holotype or syntypes: ♀, "Steppes de Kirghises", now Kazakhstan: no specific locality (Kraków). – Dalla Torre, 1897:642 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia).

### 118. *kizilkumii* Radoszkowski

*Oxybelus kizilkumii* Radoszkowski, 1877:71, ♀, ♂ (as *Kizilkumii*, incorrect original capitalization). Syntypes: Kazakhstan: Kyzyl-Kum and Syr-Daria steppe: no specific locality (ZMMU). – Kohl, 1884b:113 (in list of known *Oxybelus*); Dalla Torre, 1897:642 (in catalog of world Sphecidae); Gussakovskij, 1933b:287 (Iran: Khorassan); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:53 (Iran: known from Khorasan Province); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

### 119. *koreanus* Tsuneki

*Oxybelus koreanus* Tsuneki, 1974a:383, ♀, ♂. Holotype: North Korea: South Pyongyan: Pyongyan (TMB). – R. Bohart and Menke, 1976:629 (in checklist of world Sphecidae); Tsuneki, 1982b:16 (known from Korea); Paik, 1985:200 (in list of Sphecidae *sensu lato* of Korea); J.-K. Kim, 2014:437 (in catalog of Sphecidae *sensu lato* of Korean Peninsula).  
*Oxybelus koreanus* Tsuneki, 1991:203, as new species. Nomen nudum.

**120. *krombeini* R. Bohart and Schlinger**

*Oxybelus krombeini* R. Bohart and Schlinger, 1956b:149, ♀, ♂. Holotype: ♂, USA: California: Tulare County: Woodlake (CAS). – R. Bohart and Schlinger, 1956c:161 (in checklist of North American *Oxybelus*), 1957:123 (in revision of Californian *Oxybelus*); Krombein, 1958f:202 (in supplement to catalog of North American Hymenoptera); Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera).

**121. *laetus* Say**

*Oxybelus laetus* Say, 1837:375, ♂. Holotype or syntypes: ♂, USA: Indiana: no specific locality (lost). – F. Smith, 1856:390 (in catalog of Hymenoptera in British Museum); Le Conte, 1859b:758 (original description copied); Cresson, 1862:234 (in catalog of North American Hymenoptera); Packard, 1867:435 (in revision of North American *Oxybelus*); Cresson, 1873:226 (Texas); Kohl, 1884b:113 (in list of known *Oxybelus*); Cresson, 1887:286 (in catalog of North American Hymenoptera); Ch. Robertson, 1889:82 (in revision of North American *Oxybelus*; Virginia, Illinois); Dalla Torre, 1897:642 (in catalog of world Sphecidae); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); J. Smith, 1900:513 (in list of insects of New Jersey); Snow, 1906:136 (Arizona: Oak Creek 20 mi. southwest of Flagstaff); J. Smith, 1910:682 (in new list of insects of New Jersey); Mickel, 1918b:367 (in catalog of Nebraskan Sphecidae); Brimley, 1938:450 (North Carolina: Raleigh); Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:161 (in checklist of North American *Oxybelus*, as *laetum*), 1957:109 (in key to North American *Oxybelus*, as *laetum*); Krombein, 1958f:202 (in supplement to catalog of North American Hymenoptera: USA east of 100°W, Texas to North Carolina, north to Michigan and Massachusetts); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera); Burk, 1982:92 (preys predominantly on fly males congregating around its nest in search of females); Finnamore, 1982:125 (in Sphecid Fauna of southern Quebec); Ahlstrom, 1995:110 (in checklist of insects of North Carolina); Kurczewski, 1996:85 (nest); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario), 30 (distribution within Ontario); 56 (first record from Canada: Ontario: Port Franks, Pinery Provincial Park); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Ontario: no specific locality).

**ssp. *fulvipes* Ch. Robertson**

*Oxybelus fulvipes* Ch. Robertson, 1889:82, ♂. Holotype: ♂, USA: Florida: Orlando (ANSP). – Dalla Torre, 1897:641 (in catalog of world Sphecidae); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Cresson, 1928:54 (holotype in ANSP); Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera); Krombein and Evans, 1954:235 (Florida: Orlando). – **As *Oxybelus laetus fulvipes***: R. Bohart and Schlinger, 1956c:161 (new status, listed); Krombein, 1958f:201, 202 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus floridanus* reported, *Oxybelus fulvipes* is a subspecies of *O. laetus*); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera); D. Peckham and Hook, 1980:557 (nesting habits).

*Oxybelus floridanus* Ch. Robertson, 1901:203, ♂. Holotype or syntypes: ♂, USA: Florida: Inverness (ANSP). Synonymized with *Oxybelus laetus fulvipes* by R. Bohart and Schlinger, 1956c:161. – Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera).

**122. *lamellatus* Olivier**

*Oxybelus lamellatus* Olivier, 1811:595, sex not stated. Syntypes: Egypt: no specific locality; and Iraq: Baghdad area (lost). – F. Smith, 1856:387 (in catalog of Hymenoptera in British Museum); Gerstaecker, 1867a:26 (bibliographic refere Madl, 2023:252 (in catalog of Crabronidae of Eritrean countries); Kohl, 1884b:113 (in list of known *Oxybelus*); Magretti, 1884a:250 (Sudan), 1884c:599 (Sudan: Sawakin; Eritrea: Keren); Kohl, 1894:341 (Cameroon: no specific locality); Magretti, 1895:167 (Somalia); nec Marquet, 1896 (= *Oxybelus lamellatus andalusiacus*); Dalla Torre,

1897:642 (in catalog of world Sphecidae); Magretti, 1898:52 (Somalia: Ganana, determination tentative); E. Saunders, 1904c:608 (Spain: Mayorca), 639 (Spain); Graeffe, 1906:455 (Tunisia: Carthago); von Schulthess, 1909:442 (Libya: Dernah); Morice, 1911:131 (Algeria); Maidl, 1913:561 (Egypt: Aswan; *Oxybelus arabs*, *diphyllus* and *frondiger* regarded as synonyms); Mantero, 1915:326 (Libya); R. Turner, 1917e:192 (India: Bihar: Pusa); Morice, 1921:824 (Iraq: Amara, Baghdad); Maidl, 1924:234 (Sudan: Tonga on White Nile); von Schulthess, 1926b:219 (Tunisia); Kruger, 1929a:22 and 1929b:57 (Libya: Cyrenaica: Giarabub); Guiglia, 1932:128 (Ethiopia: Harar, determination tentative), 1932b:100 (Libya: Fezzan: Auenat, Ghat), 1932d:480 (Libya: Augila, El Agheila, Gialo); Bischoff, 1933:4 (Morocco); Gussakovskij, 1933b:287 (Iran: Khorassan); Nadig, 1933:77 (Morocco); Scott in Arnold, 1933a:369 (Ethiopia: Harar District and Mount Fantali); Giner Marí, 1934:136 (Spain); Guiglia, 1934b:306 (Libya: bibliography and summary of locality records); Gussakovskij, 1935:434 (Tajikistan); Guiglia, 1936:7 (Libya: Gialo, Marada); Pate, 1938b:390 (in list of Oriental Oxybelini, as *lamellatum*); Guiglia, 1942b:235 (Libya); Honoré, 1942:50 (in catalog of Egyptian Sphecidae); Giner Marí, 1943a:256 (in Sphecid Fauna of Spain); de Beaumont, 1947b:399 (Cyprus); de Andrade, 1949:21 (Portugal); de Beaumont, 1950f:413 (southern Algeria; diagnostic characters); Pittioni, 1950:28 (Cyprus); de Beaumont, 1952c:199 (Algeria: Hoggar), 1953a:175 (Mauritania); Bytinski-Salz, 1956:227 (Turkey: Aydın, Finike, Istanbul, Karapınar); Ceballos, 1956:396 (in catalog of Sphecidae of Spain); de Beaumont, 1956a:212 (Libya), 1957a:154 (Morocco), 1957b:138 (northern Iran); Grandi, 1957:392 (Libya: Wadi Kaam); de Beaumont, 1958b:67 (Algeria: Tassili des Ajjer); Diniz, 1959:32 (Portugal: six localities); de Beaumont, 1960a:23 (Greece: Island of Rhodes), 1960b:250 (Libya), 1961b:275 (Afghanistan); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River); Pulawski, 1964:147 (Egypt: Abydos, Abu Rawash, Cairo, Ghiza, Kom Osheim, Maadi; Sinai: Oasis Feiran); Derwesh, 1965:71 (Iraq: no specific locality); Myartseva, 1965:96 (Turkmenistan: Akibay, Sakar-Chagin district, Pechekly 50 and 65 km north of Mary, Bayram-Ali); de Beaumont, 1966:212 (Egypt: Alexandria area: Agami, Amrye, south of Abd el Rahman); Myartseva, 1966:48 (preying on Diptera); de Beaumont, 1967a:364 (Turkey); Ford, 1969:228 (preying on tsetse fly, *Glossina tachinoides* Westwood, Glossinidae, in Nigeria); de Beaumont, 1970c:17 (Iran: Baluchistan); Kazenas, 1972b:176 (Kazakhstan); Myartseva, 1972a:94 (Turkmenistan); de Beaumont, Bytinski-Salz, and Pulawski, 1973:24 (Israel); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Georghiou, 1977:191 (Cyprus); Guichard, 1980:228 (Oman); Roche, 1981:4 (in checklist of Sphecidae of United Arab Emirates); Krombein, 1983:37 (Sri Lanka); Schmidt and Westrich, 1983:123 (first record from Greece); Islamov, 1986:532 (Uzbekistan: Tashkent Oblast'); Al-Houty, 1989:160 (Kuwait: widely distributed); Guichard, 1990b:281 (Arabian Peninsula); Pagliano, 1990:78 (in catalog of Italian Sphecidae), 1991b:328, 331 (in key to Italian Crabroninae); Kazenas, 1992c:27 (Turkmenistan: Repetek Nature Reserve); Guichard, 1993b:530 and 532 (in key to European *Oxybelus*); Leclercq, 1993c:47 (collecting localities from North Africa, Cyprus, Rhodes, Turkey); Roche and Zalat, 1994:116 (Egypt: Sinai Peninsula); Negrisolo in Minelli, Ruffo, and La Posta, 1995b:66 (in catalog of Italian fauna); Wu and Zhou, 1996a:108 (in revision in Economic Insect Fauna of China); Al-Houty, 1997:161 (Kuwait: no specific locality); Asís, Tormos, and Gayubo, 1997b:62 (description of larva); Nazarova and Shomirsaidov, 1997:24 (Tajikistan: fruit tree orchards in Vakhsh River valley); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); Manikandan, Dey, and Farooqi, 1999:12 (in key to Indian *Oxybelus*); Esenbekova and Kazenas, 2000:44 (southeastern Kazakhstan: no specific locality); Tormos, Asís, Gayubo, Portillo, and Torres, 2000:326 (nesting habits); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 181 (males attracted to humans), 2002a:91 (geographic distribution, collecting localities in Kazakhstan); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Gadallah and Assery, 2004a:216 (in key to Sphecidae of Jeddah Region, Saudi Arabia), 226 (in catalog of Sphecidae of Saudi Arabia), 2004b:1397 (skeletal parts of sting apparatus); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan); Hua, 2006:281 (in list of Chinese insects, geographic distribution); Roche, 2007a:102 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, as *Oxybelus lamellatus lamellatus*); Yildirim and Ljubomirov, 2007:120 (Turkey: İçel: Aydıncık); Dollfuss, 2008a:476 (locality records from Algeria, Egypt, Iran, Jordan, Kazakhstan, Morocco, Pakistan, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, and Uzbekistan); Ljubomirov and Yildirim, 2008:250 (in catalog of

- Crabronidae of Turkey); Bitsch and Leclercq, 2009:229 (in supplement to vol. I of Faune de France, 1993:229, diagnostic characters by Pulawski, 2006, and behavioral observations by Asís et al. reported); Murai and Amr, 2011:119 (recorded from Syria by Dollfuss, 2008a); Schmid-Egger, 2011b:559 (in key to *Oxybelus lamellatus* species group of Arabian Peninsula; United Arab Emirates: several localities), 561 (color photographs of female, and of female thorax and propodeum); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:352 (in new catalog of Sphecidae of Saudi Arabia); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Ebrahimi, 2014:39 (Iran: Sistān-Baluchestān: Khāsh: 90 km from Zahedan); Schmid-Egger, 2014:586 (United Arab Emirates); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:18 (Iran: Fars Province, as *Oxybelus lamellatus lamellatus*); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); S. Gess and Roosenschoon, 2016:104 (Dubai Desert Conservation Reserve, visiting flowers of *Acacia tortilis* (Forssk.) Hayne, Fabaceae); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province, as *Oxybelus lamellatus lamellatus*); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:41 (Turkey: Mersin: Aydıncık, as *Oxybelus lamellatus lamellatus*); Antropov, 2017b:242 (in catalog of Crabroninae of Russia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:53 (Iran: known from Fars, Khorasan, Qazvin, and Tehran provinces); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:31 (Iran: Hormozgan: Sar Kahnan at 27°24'N 57°07'E); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:265 (Iran: Fars: Khonj); Gadallah, 2020b:42 (in list of aculeate wasps of Arabian Peninsula); Kaplan and Yıldırım, 2021:72 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:348 (in revision of Sphecidae *sensu lato* of Europe; in key to subspecies of *Oxybelus lamellatus*, as *lamellatus lamellatus*); Embergenov, Akhmedov, and Medetov, 2023:25 (Uzbekistan: southern Lake Aral region); Kaplan and Yıldırım, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Madl, 2023:252 (in catalog of Crabronidae of Eritrea); Medetov, Embergenov, Kholmratov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).
- Oxybelus savignyi* Spinola, 1839:483, ♀, ♂ (as *Savignyi*, incorrect original capitalization). Syntypes: Egypt: no specific locality (Torino). Synonymized with *Oxybelus lamellatus* by ... – Spinola, 1843b:XXXVI (represented in Berlin Museum under the name *Oxybelus lamellatus*). – Radoszkowski, 1877:74 (Kyrgyzstan: Osh; Uzbekistan: Tashkent; as *Savignii*), 1887b:97 (in list of Transcaspian Hymenoptera); Gribodo, 1884a:388 (Eritrea: Assab); Kohl, 1884b:115 (in list of known *Oxybelus*); Dalla Torre, 1897:648 (in catalog of world Sphecidae); Kokujev, 1902:11, footnote (northeastern Iran: Kyariz); Gribodo, 1924b:47 (Libya: Tolmetta, as *savignyi* var.); Zanon, 1926:89 (Libya: Fueihat 15 km south of Benghazi ); Guiglia, 1934b:306 (Libya: bibliography and summary of locality records); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Pagliano, 2014:77 (specimens in M. Spinola collection, Torino, are *Oxybelus lamellatus*, including unpublished lectotype).
- Notoglossa sagittata* Dahlbom, 1845:514, ♀. Holotype or syntypes: ♀, Africa: no specific locality (Lund). Synonymized with *Oxybelus lamellatus* by ... – Dalla Torre, 1897:647 (in catalog of world Sphecidae); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).
- Oxybelus squamosus* F. Smith, 1875:38, ♀, ♂. Syntypes: Ethiopia: no specific locality (Halle). Synonymized with *Oxybelus lamellatus* by ... Syntypes: India: no specific locality (OXUM). – Kohl, 1884b:115 (in list of known *Oxybelus*, as *squammosus*); Cameron, 1890b:276 (India: Barrackpore); Bingham, 1897:315 (in Wasp Fauna of British India); Dalla Torre, 1897:648 (in catalog of world Sphecidae); Rothney, 1903:106 (India: West Bengal: Barrackpore); Maxwell-Lefroy, 1909:209 (preying on *Musca* sp. and *Stomoxys calcitrans* (L.), Muscidae); Fletcher, 1914:280 (nesting habits); van Vondel, 1995:30 (specimens from India in Natuurmuseum Rotterdam); Jonathan, Ray, and Kundu, 2000:202 (India: Meghalaya: East Garo Hills: Dainadubi and Darugiri; West Garo Hills: Tura); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

- Oxybelus rufipes* Taschenberg, 1880:781, ♀, ♂. Syntypes: Ethiopia: no specific locality (Halle). Synonymized with *Oxybelus lamellatus* by Pulawski, 2006:165. – Kohl, 1884b:114 (in list of known *Oxybelus*); Dalla Torre, 1897:647 (in catalog of world Sphecidae); Arnold, 1927:111 (original description translated into English), 1930:15 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Pulawski, 2006:165 (diagnostic characters).
- Oxybelus forticarinatus* Cameron, 1908b:304, ♀, ♂. Syntypes: India: Gujarat: Deesa (BMNH). Synonymized with *Oxybelus arabs* by Meade-Waldo in Meade-Waldo, Morley, and Turner, 1915:236, and with *Oxybelus lamellatus* by R. Turner, 1917e:192. – Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); Pate, 1938b:389 (in list of Oriental Oxybelini); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).
- Oxybelus ceylonicus* Cameron, 1897a:79, sex not stated. Holotype or syntypes: Sri Lanka: Trincomalee (OXUM). Synonymized with *Oxybelus lamellatus* by Krombein, 1983:37. – Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); Pate, 1938b:389 (in list of Oriental Oxybelini); Manikandan and Dey, 2001:263 (in checklist of Oriental *Oxybelus*).

### **ssp. *aequipunctatus* Pate**

- Oxybelus aequipunctatus* Pate, 1938b:382, ♂ (as *aequipunctatum*, incorrect original termination). Holotype: ♂, Philippines: Luzon: Mount Maquilung (USNM). – Pate, 1938b:387 (in list of Oriental Oxybelini); Baltazar, 1966:358 (in catalog of Hymenoptera of Philippines). – **As *Oxybelus lamellatus aequipunctatus***: R. Bohart and Menke, 1976:368 (new status, in checklist of world Sphecidae); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

### **ssp. *andalusiacus* Spinola**

- Oxybelus andalusiacus* Spinola, 1843a:136, ♂. Holotype: ♂, Spain: no specific locality (Torino). – Gerstaecker, 1867a:26 (as new synonym of *Oxybelus lamellatus*); Kirchner, 1867:223 (in catalog of European Hymenoptera); de Beaumont, 1950f:413 (redescription), 1952b:89 (Marquet's, 1896 specimens); Guiglia, 1953a:66 (in revision of Italian *Oxybelus*); de Beaumont, 1957a:154 (Morocco); Guiglia, 1957:146 (Italy: Isole Pelagie); Móczár, 1958c:282 (in key to western Palearctic *Oxybelus*, as *andalusiacus*); Suárez, 1959:60 (Spain: Almería Province); Ceballos, 1959:231 (in supplement to catalog of Spanish Sphecidae); Guiglia, 1960:361 (Italy: Isole Pelagie: Lampedusa); de Beaumont, 1962b:29 (Spain); Ceballos, 1964:95 (in supplement to catalog of Spanish Sphecidae); Mingo Pérez, 1966:67 (in revision of *Oxybelus* of Iberian Peninsula); Erlandsson, 1974:87 (Spain); R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Gayubo, 1982b:8 (northern Spain: Sierra de Béjar), 1982e:102 (Spain: Cádiz Province); Gayubo, 1984b:90 (Spain: Salamanca Province), 1984c:374 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:17 (Spain: Valencia); Gayubo, 1985c:169 (Spain: Toledo: Corchuela), 1986a:60 (Spain: Ciudad Real Province), 1986d:114 (Spain: Zamora Province), 1986e:993 (teratological specimen); Gayubo and Heras, 1986:48 (Spain: Segovia Province; floral records); Tormos and Jiménez, 1987b:316 (Spain: Valencia Province: Dehesa de El Saler); Gayubo, Asís, and Tormos, 1990b:74 (Spain: Badajoz and Cáceres Provinces); Guichard, 1990b:281 (as new synonym of *Oxybelus lamellatus*); Pagliano, 1990:78 (in catalog of Italian Sphecidae); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Pagliano, 1991b:328, 331 (in key to Italian Crabroninae); Torregrosa, Gayubo, Tormos, and Asís, 1993:19 (Spain: Alicante Province); Negrisoló in Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Pagliano and Scaramozzino, 1995:730 (Italy: Island of Lampedusa); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Pagliano and Negrisoló, 2005:207 (in Sphecid Fauna of Italy); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Pagliano, 2014:77 (specimen in M. Spinola collection, Torino, is holotype of *Oxybelus lamellatus andalusiacus*). – **As *Oxybelus lamellatus andalusiacus***: Bitsch and Leclercq, 1993:255 (new status; Sicily, Sardegna, Corsica, Balearic Islands, France: Hérault, Iberian Peninsula); Leclercq, 1993c:4t (locality records from Spain, Portugal, and Morocco); Bitsch and Leclercq, 2009:228 and 229 (in supplement to vol. I of Faune de France, 1993: recent records from Portugal, Sardinia, and Spain reported); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid:

Reserva Natural Riberas de Castronuño–Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Baldock, 2014:357 (Spain: Island of Mallorca, as *andalusiacus*); Ben Khedher, Yildirim, Braham, and Chaaban, 2019:192 (known from Tunisia: Tozeur Province); Ben Khedher, Yildirim, and Braham, 2020a:104 (Tunisia: numerous locality records); Gadallah, 2020b:43 (in list of aculeate wasps of Arabian Peninsula); Cross, Baldock, and Wood, 2021:53 (in catalog of Sphecidae *sensu lato* of Portugal); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:348 (in key to subspecies of *Oxybelus lamellatus*).

*Oxybelus arabs* Lepeletier de Saint Fargeau, 1845:212, ♀. Holotype or syntypes: ♀, Algeria: Oran (depository?). Synonymized with *Oxybelus andalusiacus* by .... – Lucas, 1849:261 (Algeria: La Calle, Oran; original description copied with modifications); F. Smith, 1856:387 (in catalog of Hymenoptera in British Museum); Lichtenstein, 1875a:XII (first record from France: Hérault: Cette, now Sète); Marquet, 1875:210 (France: Hérault: Cette, now Sète), 1881:185 (southern France); Kohl, 1884b:111 (in list of known *Oxybelus*); Acloque, 1897:91 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:638 (in catalog of world Sphecidae); Bingham, 1898a:109 (Yemen: Aden); Pérez, 1907:496 (Bahrain); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Berland, 1925d:206 (in Sphecid Fauna of France); Coulon, 1925:122 (Morocco: Tanger); Ceballos, 1959:231 (in supplement to catalog of Spanish Sphecidae); Guichard, 1990b:281 (as new synonym of *Oxybelus lamellatus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

*Notoglossa frondigera* A. Costa, 1883:58 and 92, ♂. Holotype: ♂, Italy: Sardegna: Oschiri (Napoli). Synonymized with *Oxybelus andalusiacus* by Guiglia, 1953a:66. – A. Costa, 1884b:33 (Italy: Sardegna: Oristano, Fordongianus, Scala di Giocca); Schmiedeknecht, 1896:149 (Algeria: Oran Province); de Beaumont, 1953i:12 (unnecessary designation of lectotype). – **As *Oxybelus frondiger***: Kohl, 1884b:112 (new generic assignment, in list of known *Oxybelus*); Dalla Torre, 1897:641 (in catalog of world Sphecidae); Guiglia, 1938b:10 (Italy: Sardegna, redescription), 1948c:203 (Italy: Sardegna: Cagliari); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*, as *frondigera*).

*Notoglossa frondigera* A. Costa, 1884a:334, ♂. Objective synonym of *Notoglossa frondigera* A. Costa, 1883a.

As *Oxybelus lamellatus*: Marquet, 1896:15 (France: Hérault: Sète), corrected to *Oxybelus andalusiacus* by de Beaumont, 1952b:89; Antiga and Bofill, 1904:27 (Spain: Cataluña Province), present correction based on geographic distribution.

### **ssp. *banksi* (Ashmead)**

*Notoglossa banksi* Ashmead, 1905:960, ♀, actually ♂. Holotype: ♂, Philippines: Manila (USNM). – Brown, 1906:686 (in catalog of Philippine Hymenoptera). – **As *Oxybelus banksi***: Pate, 1938b:379 (new generic assignment, redescription), 388 (in list of Oriental Oxybelini); Baltazar, 1966:358 (in catalog of Hymenoptera of Philippines, as *Oxybelus banksi banksi*). – **As *Oxybelus lamellatus banksi***: Tsuneki, 1976b:118 (new status, Philippines); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Haneda, 2011:47 (Philippines: Palawan: Aborland and Puerto Princesa).

### **ssp. *bicolorisquama* Strand**

*Oxybelus bicolorisquama* Strand, 1923:172, ♂. Lectotype: ♂, Taiwan: Tainan (DEI), designated by Oehlke and Wudowenz, 1974:421. – Strand, 1927:254 (in list of species described by author); Pate, 1938b:388 (in list of Oriental Oxybelini); Sonan, 1940b:20 (Taiwan). – **As *Oxybelus lamellatus bicolorisquama***: Tsuneki, 1968g:25 (new status, Taiwan), 1971a:28 (Taiwan: Pingtung Prefecture: Hengchun, Kentin); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Tsuneki, 1977j:291 (Taiwan: Kagi, Takao, characteristics of subspecies), 1982d:13 (Taiwan); Porter, Stange, and Wang, 1999:10 (in checklist of Sphecidae of Taiwan); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Barthélémy and Guénard, 2025:26 (China: Hong Kong).

*Oxybelus bicolorisquama* var. *kankauensis* Strand, 1923:173, ♂. Holotype: ♂, Taiwan: Kankau, now Hengchun (DEI). Synonymized with *Oxybelus bicolorisquama*. by Tsuneki, 1968g:26. – Strand, 1927:254 (in list of species described

by author); Pate, 1938b:389 (in list of Oriental Oxybelini, as *kankauense*); Oehlke and Wudowenz, 1974:423 (holotype in DEI).

### **ssp. *divaricatus* Pate**

*Oxybelus banksi* forma *divaricatus* Pate, 1938b:382, ♂ (as *divaricatum*, incorrect original termination). Holotype: ♂, Philippines: Mindanao: Kolambungan (USNM). – Pate, 1938b:388 (listed). – **As *Oxybelus banksi divaricatus***: Baltazar, 1966:359 (new status, in catalog of Hymenoptera of Philippines); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

### **ssp. *thaiianus* Tsuneki**

*Oxybelus andalsiacus* [sic] *thaiianus* Tsuneki, 1961b:391, ♂. Holotype: ♂, Thailand: Doi Inthanon (Osaka Univ.). – **As *Oxybelus lamellatus thaiianus***: Tsuneki, 1974b:652 (Thailand).

### **123. *lanceolatus* Gerstaecker**

*Oxybelus lanceolatus* Gerstaecker, 1867a:26, ♀. Syntypes: ♀, Saudi Arabia (ZMHU). – Kohl, 1884b:113 (in list of known *Oxybelus*); Dalla Torre, 1897:642 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Gadallah and Assery, 2004a:226 (in catalog of Sphecidae of Saudi Arabia); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:352 (in new catalog of Sphecidae of Saudi Arabia); Gadallah, 2020b:43 (in list of aculeate wasps of Arabian Peninsula).

### **124. *latifrons* Kohl**

*Oxybelus latifrons* Kohl, 1892:209, ♀. Holotype or syntypes: ♀, Armenia or Azerbaijan: Arax River Valey: no specific locality (NHMW). – Dalla Torre, 1897:642 (in catalog of world Sphecidae); de Beaumont, 1967a:365 (Turkey); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Dollfuss, 1989:11 (type material in NHMW); Leclercq, 1993c:47 (in catalog of western Palearctic Crabronini and Oxybelini); Ljubomirov and Yildirim, 2008:250 (in catalog of Crabronidae of Turkey); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:3 (Azerbaijan: Nakhichevan Autonomous Republic: Babek: Sirab at 39°18'N 45°31'E, redescription of ♀, description of ♂); Kaplan and Yildirim, 2021:72 (in catalog of Crabronidae of Turkey), 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey).

### **125. *latilineatus* Cameron**

*Oxybelus latilineatus* Cameron, 1908b:302, ♀. Holotype or syntypes: ♀, India: either Gujarat: Deesa, or Maharashtra: Matheran (BMNH). – Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); Pate, 1938a:391 (in list of Oriental Oxybelini, as *latilineatum*); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Manikandan, Dey, and Farooqi, 1999:13 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

### **126. *latro* Olivier**

*Oxybelus latro* Olivier, 1812b:594, [♀]. Syntypes: southern France and Paris area, Italy (lost). – Vander Linden, 1829:37 (bibliographic references, France, Italy); Dahlbom, 1844:278 (bibliographic references, unknown to author), 1845:514 (in key to *Oxybelus*, unknown to author); Lepeletier de Saint Fargeau, 1845:211 (in revision of world Hymenoptera); Fabre, 1856a:139 (France: Vaucluse: Avignon area); F. Smith, 1856:385 (in catalog of Hymenoptera in British Museum); A. Costa, 1867c:150 (in revision of Italian Sphecidae); Gerstaecker, 1867a:80 (in revision of *Oxybelus*; Woltersdorf near Berlin); Kirchner, 1867:223 (in catalog of European Hymenoptera); Costa, 1871b:79 (in revision of Italian Sphecidae); Dours, 1874:152 (in catalog of Hymenoptera of France); Martinez y Saez, 1874:31 (first record from Spain: specimens from Madrid area donated to Léon Dufour); Radoszkowski, 1877:76 (Uzbekistan: Zaravshan valley; also: Uzunat); Becker, 1880:152 (Russia: Sarepta, now Krasnoarmeysk south of Volgograd); Sajó, 1882:5 (Hungary); Kohl, 1883e:663 (Switzerland), 1884b:113 (in list of known *Oxybelus*); Radoszkowski,

1892:592 (male genitalia); Kohl, 1893a:33 (Austria: Niederösterreich: Wien: Türkenschanze); F. Morawitz, 1893b:416 (Uzbekistan: Serbent), 1894:348 (Turkmenistan: Koshlagar); De Stefani Perez, 1895:228 (Italy: in catalog of Sicilian Hymenoptera); Marquet, 1896:19 (in revision of *Oxybelus* of France); Acloque, 1897:91 (in Sphecidae Fauna of France and Algeria); Dalla Torre, 1897:642 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Hungary); Chyzer, 1902:34 (Hungary); Ferton, 1901a:112 (prey); Antiga and Bofill, 1904:27 (Spain: Cataluña Province); W. Schulz, 1904b:101 (Kazakhstan: Semipalatinsk; Russia: Sarepta, now Krasnoarmeysk, and Kolyvansk in Altai Mountains); Vángel, 1905:167 (Hungary); Móczár and Henter, 1907:205 (Hungary: Tiszaalpár); Schmiedeknecht, 1907:202, 203 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Schirmer, 1912:165 (Germany: Berlin area); Alfken, 1914:276 (northwestern Germany); Torka, 1916:31 (Germany: Posen Province: south of Nakel, now Poland: Poznań Region: south of Nakło); O. Meyer, 1919:149 (Germany: Posen Province, now Poland: Poznań Region); Noskiewicz, 1918:138 (Galicia, now western Ukraine: Hołosko near L'viv); Dubois, 1920:87 (Belgium: Beverloo), 1922:190, 192, 193 (in key to Belgian Sphecidae); Hedicke, 1922:270 (Germany: Brandenburg: Gross Machnower Weinberg); Maidl, 1922:73 (Croatia); Berland, 1925d:207 (in Sphecidae Fauna of France); Coulon, 1925:122 (France: no specific locality); Friese, 1926:144 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); A. Müller, 1930:181 (Romania: Măcin; Ukraine: Tarutino); Maidl *in* Schmiedeknecht, 1930:661, 664 (in keys to Hymenoptera of North and Central Europe); Dusmet y Alonso, 1931:9 (Portugal: Cova de Piedade, Mitra); Zavadil, 1932:95 (Czechoslovakia); Nadig, 1933:77 (Morocco: Ifrane); K. Strohm, 1933:338 (Germany: Baden: Württemberg: Kaiserstuhl); Balles, 1934:17 (Germany: Baden-Württemberg: Mannheim-Rheinau); Giner Marí, 1934:136 (Spain); Grandi, 1934:128 (Italy: Lazio: Acilia); Zavadil, 1934:187 (Slovakia); Vergne, 1935:120 (France: Auvergne: Pont-du-Chateau); Crèvecoeur and Maréchal, 1936:257 (in catalog of Belgian Hymenoptera); Bernard, 1935:67 (France: Var: Fréjus area); Drogoszewski, 1936:129 (Poland: Łowicz); Goebel, 1937:39 (Poland: Poznań District: Poznań-Dębina, Splawie, Strzeszyn, Strzeszynek); Zavadil, Šustera, and Bat'a, 1937:170 (in catalog of Sphecidae of Czechoslovakia); Kuntze and Noskiewicz, 1938:406 (Poland: Podole region, now Ukraine, also known from more northern parts of Poland); Móczár, 1938c:81 (Hungary: Kőszeg Hills); A. Wagner, 1938a:119 (northwestern Germany); Móczár, 1939:5 (Hungary: Jászberény); Yasumatsu, 1940:31 (China: Nei Mongol: Kunshan-tagh Desert); Paul, 1941:39 (Germany: Pommern: Gollnow and Tempelburg, now Poland: Województwo Zachodniopomorskie: Goleniów and Czaplínek); Schneid, 1941:1033 (Germany: Bayern: Bamberg area); de Beaumont, 1942b:423 (in revision of Swiss *Oxybelus*); Yasumatsu, 1942c:114 (China: Nei Mongol: Apaka at 44°N 114.96°E); Balthasar, 1943:40 (Czech Republic: Moravia: Zlin area); Giner Marí, 1943a:256 (in Sphecidae Fauna of Spain); Guiglia, 1943b:73 (Albania: Koplíku); Timon-David, 1943:29 (France: Bouches-du-Rhône: plage de Fos); Guiglia, 1944b:40 (Italy); de Beaumont, 1947b:400 (Cyprus); Šnoflák *in* Zavadil and Šnoflák, 1948:32, 37 (in key to Czechoslovakian Sphecidae); P. Verhoeff, 1948:205 (in revision of Western European *Oxybelus*); de Andrade, 1949:21 (Portugal); Fæster, 1949:17, 31 (in revision of Western European *Oxybelus*); Noskiewicz and Chudoba, 1949:420 (Poland: Dolny Śląsk: Sułów), 1950:300 (Poland: in revision of *Oxybelus* of Śląsk Region); Pittioni, 1950:28 (Cyprus); Szulczewski, 1950:102 (Poland: Wielkopolski National Park 15 km south of Poznań); Leininger, 1951:116 (Germany: Baden-Württemberg: Rheinau, Sandhausen, Schwetzingen); de Beaumont, 1952b:90 (Marquet's, 1896 specimens); Guiglia, 1953a:70 (in revision of Italian *Oxybelus*); Blüthgen, 1954:145, 149 (in key to Central European *Oxybelus*), 153 (summary of locality records from Germany); de Beaumont, 1954e: 98 (Italy); Puławski, 1954:106 (Poland: Błędów); Atanassov, 1955:197 (Sofia area); Vogrin, 1955:45 (Yugoslavia); Ceballos, 1956:397 (in catalog of Sphecidae of Spain); de Beaumont, 1957b:138 (northern Iran); Zirngiebl, 1957:178 (Germany: Rheinland-Pfalz: Birkenheide); Balthasar, 1958:337 (Czechoslovakia); Móczár, 1958b:208 (Hungary: collecting localities), 1958c:284, 287 (in key to western Palearctic *Oxybelus*); Puławski, 1958a:190 (Bulgaria: Aitos, Sandanski, Sozopol, Varna); Diniz, 1959:32 (Portugal: eight localities); Suárez, 1959:60 (Spain: Almería Province); Wolf, 1959b:35 (Germany: Nassau); de Beaumont, 1960c:172 (Afghanistan); Noskiewicz and Puławski, 1960:160, 164 (in key to Polish Sphecidae); de Beaumont, 1962b:29 (Spain); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River); Ceballos, 1964:95 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:62

(Greece); Mingo Pérez, 1966:71 (in revision of *Oxybelus* of Iberian Peninsula); Myartseva, 1965:96 (Turkmenistan: Akibay and Bayram-Ali district); Balthasar, M. Hrubant, and E. Hrubant, 1967:170 (Bulgaria: Slanchev Bryag near Nesebar); de Beaumont, 1967a:364 (Turkey); Gauss, 1967:560 (Germany: Baden-Württemberg); Scobiola-Palade, 1967b:49 (Romania); Benedek, 1968:78 (Hungary, floral records); Scobiola-Palade, 1968b:143 (Romania: Island of Letea in delta of Danube), 1968c:386 (Romania: Brănești, Budești, Cernica); Benedek, 1969a:85 (Hungary: marshy meadow); de Beaumont, 1969:94 (Turkey); Schmidt, 1969:167 (Germany: Rhein-Main area: Weiterstädter Exerzierplatz near Darmstadt); Tsuneki, 1969a:20 (nesting habits); de Beaumont, 1970a:404 (Afghanistan); Oehlke, 1970:794 (Democratic Germany); Atanassov, 1972a:190 (Bulgaria: Stara Planina Mountains), 1972b:32, 48 (Bulgaria: Stara Planina Mountains); Balthasar, 1972:145 (in Sphecidae Fauna of Czechoslovakia); Kazenas, 1972b:177 (Kazakhstan); Tsuneki, 1972a:159 (Mongolia); Erlandsson, 1974:87 (Spain); Kazenas, 1974b:109 (feeding on flowers of *Cynanchum sibiricum* Willd., Asclepiadaceae, in Kazakhstan), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, *Nitraria schoberi* L., Zygophyllaceae, and *Daucus carota* L., Apiaceae, in Kazakhstan), 111 (feeding on flowers of *Achillea millefolium* L., Asteraceae, in Kazakhstan); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Georghiou, 1977:191 (Cyprus); Kolesnikov, 1977:321 (Russia: Bryansk Oblast'); Guichard, 1978:272 (Greece); Pulawski, 1978:275, 276 (in key to Sphecidae of European part of USSR); Leclercq, Gaspar, and Verstraeten, 1979:map 1424 (Belgium); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 1980:120 (Italy: Lazio); Schmidt, 1981:174 (Germany: Baden-Württemberg); Donath, 1982:215 (Germany: Cottbus Bezirk); Skibińska, 1982:124 (Poland: Warszawa area); Dollfuss, 1983a:76 (Austria: endangered in Niederösterreich), 77 (Austria: endangered in Burgenland), 1983b:13 (in catalog of Sphecidae of Austria); Gayubo and Tormos, 1984:18 (Spain: Valencia); Józán, 1985b:58 (Hungary south of Lake Balaton), 84 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:97 (Romania: delta of Danube); Westrich and Schmidt, 1985b:111 (Germany: extinct in Baden-Württemberg); Gayubo, 1986a:61 (Spain: Ciudad Real Province); Gayubo and Sanza, 1986:58 (Spain: Burgos); Gayubo and Tormos, 1986a:15 (Spain: Castellón de la Plana); Józán, 1986:371 (Hungary: Kiskunság National Park); Dollfuss, 1988:26 (Austria: Niederösterreich: Oberweiden); Karsai, 1988:100 (Hungary: Kiskunság National Park); Kowalczyk, 1988b:66 (Poland: environs of Łódź); Jacobs, 1989:15 (Oehlke's, 1970 record from Mecklenburg is incorrect); Pádr *in* Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Jacobs and Oehlke, 1990:122 and 175 (not collected in Democratic Germany after 1960); Pagliano, 1990:79 (in catalog of Italian Sphecidae); Day, 1991:xvii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:131 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:405 (Italy); Kowalczyk, 1991a:100, 102 (Poland: Łódź); Pagliano, 1991b:329, 331 (in key to Italian Crabroninae); H.-J. Schulz, 1991:31 (Germany: Oberlausitz: 5 km southwest of Wittichenau); Kazenas, 1992c:28 (Turkmenistan: Repetek Nature Reserve); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Bitsch and Leclercq, 1993:256 (in revision of western European Crabroninae); Guichard, 1993b:530 and 532 (in key to European *Oxybelus*); Leclercq, 1993c:47 (collecting localities from Hungary, Italy, Cyprus, and Turkey); Torregrosa, Gayubo, Tormos, and Asís, 1993:19 (Spain: Alicante Province); Dollfuss, 1994:98 (endangered in Austria); Theunert, 1994c:45 (Germany: summary of records from Niedersachsen and Bremen); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Negrisola *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Scharrer, 1995:27 (northern Adriatic area: no specific locality; Croatia: Island of Krk); Schmid-Egger, Risch, and Niehuis, 1995:199 (Germany: summary of records from Rheinland-Pfalz); H.J. Schulz, 1995:8 (Germany: Sachsen: Oberlausitz: Skaska); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Minoranskiy and Shkuratov, 1996:82 (Russia: Rostov Oblast'); Pawlikowski and Kruszyński, 1996:87 (Poland: Toruń Basin); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: last collected in 1947); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Witt, 1996:106 (Germany: Brandenburg), 110 (locality records); Celary, 1997:58 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:22 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:28 (Germany: in list of Sphecidae of Brandenburg), 34 (endangered); Dollfuss, Gusenleitner, and Bregant, 1998:521 (Austria: summary of collecting records from Burgenland); Gorobchishin, 1998a:49 (Ukraine: Kiev

and surroundings); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); K. Weber, 1998:145 (Germany: Bayern: Bamberg area); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); Pauly, 1999:109 (in catalog of Belgian aculeates); Blösch, 2000:268 (in Sphecidae Fauna of Germany); Esenbekova and Kazenas, 2000:44 (southeastern Kazakhstan: seven localities); Jacobs, 2000:8, 16 (Germany: Mecklenburg-Vorpommern: extinct); Józán, 2001:279 (Hungary: Somogy County); Ljubomirov, 2000:10 (Bulgaria: specimens in N. Nedelkov collection); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 181 (nesting habits); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ohl et al., 2001:140 (distribution in Germany by provinces); Zettel, Gross, and Mazzucco, 2001:74 (Austria: Wien: Türken-schanze, last collected in 1886); Kazenas, 2002a:91 (geographic distribution, collecting localities in Kazakhstan); Shkuratov, 2002b:142 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Shlyakhtenok and Skibińska, 2002:33 (Belorussia: no specific locality); Drewes, 2003:140 (Croatia: Baška on Island of Krk; Spain: Tarragona); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:68 (Germany: in catalog of wasps and bees of Bayern); Schmid-Egger, 2003:755 (Italy: Sicilia: Armerina); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:193, 195 (Germany: extinct in Bavaria, last collected in 1948); Kazenas, 2004b:106 (Kazakhstan: western Tien Shan); Shkuratov, 2004a:81 (Ukraine: Donetsk; Russia: Rostov and Volgograd Oblast's; prey: *Spallanzania hebes* Fallén, Tachinidae), 2004b:168 (Russia: Rostov Oblast': Gosudarstvennyi Muzej-Zapovednik M.A. Sholokhova); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:372 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Tezcan and Yildirim, 2004:245 (Turkey: Manisa: Muradiye); Wiśniowski, 2004:46 and 61 (in checklist of Polish Sphecidae); Burger, 2005:34 (Germany: Thüringen); Ebrahimi, 2005:133 (in key to selected Iranian Sphecidae); Gayubo and Özbek, 2005:25 (Turkey: many localities); Landeck, Wöhler, and Landgraf, 2005:18 (Germany: Lausitz Region; visiting flowers of *Reseda luteola* Linnaeus, Resedaceae); Pagliano and Negrisoló, 2005:209 (in Sphecidae Fauna of Italy); Riemann and Hohmann, 2005:562 (Germany: Niedersachsen: city of Bremen and adjacent area, last recorded by Alfken, 1915); Saure, 2005:17 (Germany: Berlin); Straka, 2005a:395 (extinct in Czech Republic); Yildirim and Ljubomirov, 2005:1798 (Turkey: Bitlis, Erzurum, and Kars provinces); Gorobchishin, 2006:117 (Ukraine: Cherkasy Oblast': Kaniv Nature Reserve; Kyiv Oblast': Kyiv); Liebig, 2006:39 (Germany: Sachsen: Muskauer Heide); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Jacobs, 2007:114, 117 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:25 (Germany: northwestern Sachsen); Kazenas, 2007a:91 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Shorenko, 2007b:258 (Ukraine: Crimea: Evpatoriya, Opukskiy Nature Reserve, Tobchikskoye Lake); G. Turrisi and R. Turrisi, 2007:117 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia); 227 (not occurring in Bohemia); Dollfuss, 2008a:478 (locality records from Bulgaria, Croatia, Greece, Hungary, Kazakhstan, Kyrgyzstan, Mongolia, Russia: Rostov, Tajikistan, Turkey, Turkmenistan, Ukraine, and Uzbekistan); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Bitsch and Leclercq, 2009:228 (in supplement to vol. I of Faune de France, 1993:229: recent records from Austria, Bulgaria, Croatia, Germany, Italy, and Spain reported); U. Frommer, 2009a:28 (Germany: in checklist of Sphecidae of Hessen), 37 (Germany: Hessen: Marburg, collected in 1953); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Budrys, 2010:138 (first record from Lithuania: 3 km south of Puvočiiai); Ghazi-Soltani, Ebrahimi, Iranipour, and Pour Abad, 2010:800 (Iran: East Azarbaijan: Bonab, Tabriz: Khalatpoushan); Rudoiskatel', 2010:159 (Russia: southern Ural Mountains); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: very rare); Shorenko and Kononov, 2010:21 (Ukraine); Tüzün and Yüksel, 2010:4471 (Turkey: Niğde Province); van der Smissen, 2010b:385 (France: Ardèche: Plateau de Coiron); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Tischendorf, Frommer, Flügel et al., 2011:45 (Germany: extinct in Hessen, last collected in 1947); Kazenas, 2012b:169 (Kazakhstan: Korgalzhin State Nature Reserve); Yildirim, 2012:80 (Turkey: Adana, Erzurum, and Iğdir provinces); Kazenas,

2013b:497 (southeastern Kazakstan: many localities on plains and in low mountains); A. Scholz and Liebig, 2013:24 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:180 (in annotated catalog of culeate wasps of Belorussia); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Bitsch, 2014:405 (record from France by van der Smissen, 2010b noted); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Ebrahimi, 2014:39 (Iran: Khorāsān-e Razavi: Mashad: Torogh and Meyshābur: Fathābād); Pagliano, 2014:77 (specimens in M. Spinola collection, Torino); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:18 (Iran: Fars Province); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); Rezaei and Fallahzadeh, 2015:6 (Iran: Fars: Dasht e Arzhan at 29°38'N 51°58'E and Kaftarak at 29°34'N 52°41'E); P. Rosa and Pagliano, 2015:103 (Italy: Lombardia and Piemonte: Parco del Ticino); Shorenko, 2015:325 (in list of Sphecidae *sensu lato* of Crimea); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:42 (Turkey: Erzurum, Iğdır, Kars, and Tunceli provinces); Antropov, 2017b:242 (in catalog of Crabroninae of Russia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:53 (Iran: known from Ardabil, East Azerbaijan, Fars, Khorasan-e Razavi, Mazandaran, Qazvin, and Tehran provinces); Shorenko, 2017:77 (in Crimea collected in June and August); Ma, Q. Li, Wang, Jiang, and Lu, 2018:827 (China: Shanxi: Qinling Mountains); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:14 (Azerbaijan: Nakhichevan Autonomous Republic); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:266 (Iran: Fars: Sarvestan: seven localities); Kejval, Blažej, and Erhart, 2020:104 (not occurring in western Czech Republic); Cross, Baldock, and Wood, 2021:53 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yıldırım, 2021:72 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:349 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution); Pytel-Huta and Franchuk, 2024:81 (Ukraine: Rivno Nature Reserve); Kochetkov and Korsun, 2025:9 (Russia: Zabaikalskiy Krai: Dauriski Nature Reserve).

*Oxybelus armiger* Olivier, 1812b:594, [♂]. Holotype or syntypes: ♂, France: Paris area (lost). Synonymized with *Oxybelus latro* by Gerstaecker, 1867a:80. – Vander Linden, 1829:38 (bibliographic references, almost certainly a synonym of *Oxybelus uniglumis*); Herrich-Schaeffer, 1840:295 (Germany: Bayern: Regensburg area); Lapeletier de Saint Fargeau, 1845:213 (in revision of world Hymenoptera, Paris area); F. Smith, 1856:385 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:222 (in catalog of European Hymenoptera); P. Ivanov, 1872:151 (Ukraine: Khar'kiv Oblast': Kupyansk area); Yaroshevskiy, 1881:121 (Ukraine: Khar'kiv Oblast': Kupyansk); Acloque, 1897:92 (in Sphecidae Fauna of France and Algeria); Antiga and Bofill, 1904:27 (Spain: Cataluña Province); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:78 (specimens in M. Spinola collection, Torino, are *Oxybelus latro* and *Oxybelus subspinosus*).

*Oxybelus affinis* Marquet, 1881:185, sex not stated. Holotype or syntypes: southern France: no specific locality (Lauzanne). Synonymized with *Oxybelus latro* by de Beaumont, 1952b:89. – Kohl, 1884b:110 (in list of known *Oxybelus*); Dalla Torre, 1897:638 (in catalog of world Sphecidae); de Gaulle, 1908:121 (in catalog of French Hymenoptera).

*Oxybelus opacus* Tournier, 1901:258, ♂. Holotype: Spain: Balenya (MHNG). Synonymized with *Oxybelus latro* by de Beaumont, 1942b:423. – Antiga and Bofill, 1904:28 (Spain: Cataluña Province); Ceballos, 1956:397 (in catalog of Sphecidae of Spain).

*Oxybelus latro* Olivier var. *rugulosus* Móczár, 1957:425, ♀. Holotype: ♀: Hungary: Balatonszépplak: Tóköpuszta (TMB). – Móczár, 1958c:284 (in key to western Palearctic *Oxybelus*); Haris, 2016:35 (in list of species described by L. Móczár from Carpathian Basin). – **As *Oxybelus latro rugulosus***: R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae).

**127. lepturus Arnold**

*Oxybelus lepturus* Arnold, 1927:107, 108, ♀, ♂. Syntypes: Zimbabwe: Bulawayo, Sanyati Valley, Druids Mine (SAM). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Dollfuss, 2008a:479 (locality records from Malawi, Namibia, Zambia, and Zimbabwe).

**128. lewisi Cameron**

*Oxybelus lewisi* Cameron, 1890b:282, ♀ (as *Lewisi*, incorrect original capitalization). Holotype or syntypes: "Sri Lanka: Nugata" (OXUM), but almost certainly Japan: Niigata (Tsuneki, 1966f:7). – Cameron, 1890:276 (listed); Bingham, 1896a:447 (references), 1897:320 (original description copied); Dalla Torre, 1897:642 (in catalog of world Sphecidae); Matsumura, 1908:132 (...); Yasumatsu, 1935d:38 (in revision of Japanese *Oxybelus*); Pate, 1938b:391 (in list of Oriental Oxybelini); Nambu, 1968b:29 (Japan: Saitama Prefecture); Tsuneki, 1968a:7 (Taiwan, redescription of ♀, description of ♂), 1968g:27 (Taiwan), 1969a:20 (nesting habits); Itami, 1971:28 (Japan: new locality records); Haneda, 1972a:6 (Taiwan); Nambu, 1975b:78 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Tsuneki, 1977c:21 (Taiwan: Taitung), 1982d:13 (in key to *Oxybelus* of Taiwan); Krombein, 1983:38 (records from Sri Lanka and India are erroneous); Manikandan, Dey, and Farooqi, 1999:13 (in key to Indian *Oxybelus*); Porter, Stange, and Wang, 1999:10 (in checklist of Sphecidae of Taiwan); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Negoro, Haneda, and Tano, 2005:46 (Japan: Toyama Prefecture); Hua, 2006:281 (in list of Chinese insects, geographic distribution); Haneda, 2008:3 (in key to Japanese Crabroninae); Muraio, 2015:40 (Japan: Kyushu: coast of northwestern Fukuoka Prefecture); Komeda, 2021b:64 (Japan: Honshu: Yamanashi Prefecture).

*Oxybelus sakuranus* Tsuneki, 1966f:7, ♀. Holotype: ♀, Japan: Saitama Prefecture: Sakurazawa (originally K. Tsuneki coll., now Hyogo Mus.). Synonymized with *Oxybelus lewisi* by Tsuneki, 1968a:7. – Hashimoto and Nakanishi, 1997:17 (holotype transferred to Hyogo Mus.); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

**129. limatus Arnold**

*Oxybelus limatus* Arnold, 1927:95, ♀, ♂. Syntypes: Zimbabwe: Sawmills (SAM). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Dollfuss, 2008a:479 (South Africa: Western Cape Province: Greyton).

**130. lineatus (Fabricius)**

*Nomada lineata* Fabricius, 1787:306, sex not stated. Holotype: ♀, Germany: Halae Saxonum, now Sachsen-Anhalt: Halle (ZMUC). – **As *Crabro lineatus***: Fabricius, 1793:300 (new generic assignment, redescription), 1796:51 (in Index to his Entomologia Systematica, 1793), Panzer, 1799, Heft 73:18 (in revision of German insects: Nürnberg, illustration of habitus); Peets, 1909-1911:67 (*Crabro lineatus* of Panzer = *Oxybelus lineatus*). – **As *Oxybelus lineatus***: Fabricius, 1804:317 (new generic assignment, redescription); Latreille, [1805]:307 (redescription); Panzer, 1806:191 (in critical review of his earlier work); Jurine, 1807:217 (in checklist of species of *Oxybelus*); Olivier, 1812b:594 (redescription); Vander Linden, 1829:36 (bibliographic references, France, Germany, Italy); Herrich-Schaeffer, 1840:295 (Germany: Bayern: Regensburg area); Dahlbom, 1844:267 (in revision of Sphecidae and Pompilidae), 1845:XXV (type material examined), 513 (in key to *Oxybelus*); Eversmann, 1849:415 (Russia: Kazan' province and Ural foothills); von Kiesenwetter, 1849:90 (Germany: Kingdom of Saxony: Hoflössnitz near Dresden); F. Smith, 1856:384 (in catalog of Hymenoptera in British Museum); Ruthe and Stein, 1857:315 (Germany: Berlin area); Schenck, 1857:130 (in revision of fossorial wasps of Germany); Taschenberg, 1858:118 (in key to Sphecidae of Germany); Funk, 1859:58 (Germany: Bayern: Bamberg); Taschenberg, 1866:160 (in revision of Hymenoptera of Germany); Gerstaecker, 1867a:55 (in revision of *Oxybelus*); Kirchner, 1867:223 (in catalog of European Hymenoptera); Schenck, 1867a:350 (known from Germany); Thomson, 1870:178 (in revision of Swedish Crabroninae); Dours, 1874:153 (in catalog of Hymenoptera of France); Taschenberg, 1875:380 (Germany: Leipzig); Marquet, 1881:184 (southern France); Yaroshevskiy, 1881:121 (Ukraine: Khar'kiv Oblast': Kupyansk); Kohl, 1884b:113 (in list of known *Oxybelus*),

1888b:726 (Austria: Tirol, now Italy: Alto Adige); Krieger, 1894:11 (Germany: Kingdom of Saxony: Dresden); Marquet, 1896:23 (in revision of *Oxybelus* of France); Dalla Torre, 1897:642 (in catalog of world Sphecidae); Lüdewaldt, 1897b:30 (Germany: Gollnow, now Poland: Pomorze Region: Goleniów, as *lineolatus*); Mocsáry, 1897:80 (Hungary: Budapest); N. Arnold, 1902:86 (Russia: Mohilev Province, now Belorussia); de Cobelli, 1903:114 (Italy: Trentino: Alle Sarche); Kubes, 1905:84 (Czech Republic: Kolín); Schmiedeknecht, 1907:202, 203 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Ditttrich, 1911b:20 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:44 (Italy: Trieste area); Birula, 1912:536 (Ukraine: Zhytomyr Oblast': Radomyshl'); Schirmer, 1912:164 (Germany: Berlin area); Birula, 1913:536 (Ukraine: Zhytomyr Oblast': Radomyshl'); Alfken, 1914:275 (northwestern Germany); O. Meyer, 1919:149 (Germany: Posen Province, now Poland: Poznań Region); Stöckhert, 1919:38 (Germany: Franken); Dubois, 1920:87 (Belgium: Beverloo); Kryger, 1920:138 (first record from Denmark); A. Wagner, 1920:38 (Germany: Lower Elbe region); Dubois, 1922:190, 191, 193 (in key to Belgian Sphecidae); Enslin, 1922c:246 (Germany: Bayern: Nürnberg); Noskiewicz, 1922a:8 (Poland: Lwów area, now Ukraine: Lviv area), 1924a:114 (Poland: vicinity of Kraków); Berland, 1925d:208 (in Sphecidae Fauna of France); Coulon, 1925:122 (France: Oise; Germany); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Friese, 1926:144 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Maidl *in* Schmiedeknecht, 1930:661, 664 (in keys to Hymenoptera of North and Central Europe); Bouwman, 1932:391 (in revision of Sphecidae of Netherlands); Giner Marí, 1934:136 (Spain); Crèvecoeur and Maréchal, 1936:257 (in catalog of Belgian Hymenoptera); Zavadil, Šusterka, and Bat'a, 1937:170 (in catalog of Sphecidae of Czechoslovakia); A. Wagner, 1938a:118 (northwestern Germany); Móczár, 1939:5 (Hungary: Jászberény); A. Wagner, 1939b:74 (an eastern species in northwestern Germany); Paul, 1941:38 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1032 (Germany: Bayern: Bamberg area); de Beaumont, 1942b:423 (Switzerland: Peney near Geneva and val Mesocco; redescription); Giner Marí, 1943a:257 (in Sphecidae Fauna of Spain); Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); van Lith, 1947:103 (Netherlands: Ermelo); Šnoflák *in* Zavadil and Šnoflák, 1948:32, 37 (in key to Czechoslovakian Sphecidae); P. Verhoeff, 1948:168 (in revision of Western European *Oxybelus*); Fæster, 1949:16, 33 (in revision of Western European *Oxybelus*); Noskiewicz and Chudoba, 1950:300 (Poland: in revision of *Oxybelus* of Śląsk Region); Abrahamsen, 1951:115 (recorded from Denmark after J.C. Nielsen, 1907); Leininger, 1951:116 (Germany: Baden-Württemberg: Rastatt); de Beaumont, 1952b:90 (Marquet's, 1896 specimens); Guiglia, 1953a:85 (in revision of Italian *Oxybelus*); Blüthgen, 1954:144, 148 (in key to Central European *Oxybelus*), 154 (summary of locality records from Germany); Grandi, 1954:244 (Italy); Ceballos, 1956:397 (in catalog of Sphecidae of Spain); Zirngiebl, 1957:178 (Germany: Rheinland-Pfalz: Leistadt area); Benno, 1958b:18 (in review of Dutch Sphecidae); Móczár, 1958b:209 (Hungary: collecting localities), 1958c:284, 287 (in key to western Palearctic *Oxybelus*); Wolf, 1959b:35 (Germany: Nassau); Noskiewicz and Puławski, 1960:161, 164 (in key to Polish Sphecidae); van der Vecht, 1961a:71 (study of holotype); de Beaumont, 1964c:160 (in Sphecidae Fauna of Switzerland); Hüsing and Jäger, 1964:192 (Germany: Sachsen-Anhalt: Nietleben near Halle), 196 (males emerge before females, nesting in sand, preying on flies); Mingo Pérez, 1966:84 (in revision of *Oxybelus* of Iberian Peninsula); Benno, 1967:38 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:364 (Turkey); Gauss, 1967:560 (Germany: Baden-Württemberg: nördliches Rheinvorland); J. Heinrich, 1967:83 (Germany: Bayern: Unterfranken District); Oehlke, 1970:794 (Democratic Germany); Tumšs, 1970:83 (first record from Latvia); Lomholdt, 1971:125 (Denmark: Femmøller, Glatved); Balthasar, 1972:152 (in Sphecidae Fauna of Czechoslovakia); Simon Thomas, 1972:187 (France: Lot-et-Garonne); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Lomholdt, 1976:276 (in Sphecidae Fauna of Fennoscandia and Denmark); Simon Thomas, 1976:6 (France: Lot-et-Garonne: Forêt de Campet); Kolesnikov, 1977:321 (Russia: Bryansk Oblast'); Pulawski, 1978:275, 276 (in key to Sphecidae of European part of USSR); Leclercq, Gaspar, and Verstraeten, 1979:map 1425 (Belgium); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Schmidt, 1981:175 (Germany: Baden-Württemberg); Skibińska, 1982:124 (Poland: Warszawa area); Dollfuss, 1983a:75 (Austria: endangered in Niederösterreich), 1983b:13 (in catalog of Sphecidae of Austria);

Józan, 1983:102 (Hungary), 1985b:58 (Hungary south of Lake Balaton), 69 (map of distribution in Hungary), 84 (ecological and zoogeographic characteristics); Westrich and Schmidt, 1985b:111 (Germany: endangered in Baden-Württemberg); Józan, 1986:371 (Hungary: Kiskunság National Park); Dollfuss, 1987:22 (Austria), 1988:26 (Austria: Niederösterreich: Oberweiden); Jacobs, 1989:15 (Germany: Mecklenburg-Vorpommern); Pádr *in* Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Jacobs and Oehlke, 1990:122 and 176 (not collected in Democratic Germany after 1960); Pagliano, 1990:79 (in catalog of Italian Sphecidae); Day, 1991:xvii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:131 (in key to Sphecidae of North and Central Europe); Pagliano, 1991b:329, 332 (in key to Italian Crabroninae); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Bitsch and Leclercq, 1993:257 (in revision of western European Crabroninae); Guichard, 1993b:530 and 532 (in key to European *Oxybelus*); Leclercq, 1993c:48 (references to recent publications); Blagoveshchenskaya, 1994:90 (Russia: Ul'yanovsk Oblast'); Dollfuss, 1994:99 (endangered in Austria); Theunert, 1994c:45 (Germany: summary of records from Niedersachsen and Bremen); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Jansen and Kaluza, 1995:7 (Germany: extinct in Sachsen); Józan, 1995:105 (Hungary: projected Duna-Dráva National Park); Negrisol *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:88 (Italy: Ferrara Province); Schmid-Egger, Risch, and Niehuis, 1995:199 (summary of records from Germany: Rheinland-Pfalz Province); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Scharrer, 1995:28 (Germany: Bayern: Aschaffenburg, Kahl); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: last collected in 1966); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Celary, 1997:59 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:22 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:28 (Germany: in list of Sphecidae of Brandenburg), 33 (extinct); Shkuratov, 1998:98 (Russia: Rostov Oblast'); K. Weber, 1998:145 (Germany: Bayern: Bamberg area); Majzlan, Rychlík, and Deván, 1999:146 (Slovakia: Čenkovská Step Nature Reserve); Pauly, 1999:109 (in catalog of Belgian aculeates); Blösch, 2000:268 (in Sphecid Fauna of Germany); Jacobs, 2000:9, 16 (Germany: Land Mecklenburg-Vorpommern: extinct); Shkuratov, 2000:60 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Józan, 2001:279 (Hungary: Somogy County); Ohl et al., 2001:140 (distribution in Germany by provinces); van der Smissen, 2001:62 (Germany: Schleswig-Holstein: extinct); Józan, 2002:53 (Hungary: Mecsek Mountains); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Józan, 2003:227 (Hungary: Látrányi Puszta Nature Conservation Area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:68 (Germany: in catalog of wasps and bees of Bayern); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:195 (Germany: Bayern: extinct or no longer collected); Majzlan and Deván, 2004:33 (Slovakia: Malacky-Široké); Shkuratov, 2004a:81 (Russia: Rostov Oblast': Tsimlyansk, Yelanskaya), 2004b:168 (Russia: Rostov Oblast': Gosudarstvennyi Muzey-Zapovednik M.A. Sholokhova); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Peeters, van Achterberg, et al., 2004:406 (in Wasp and Ant Fauna of Netherlands); Stolle et al., 2004:372 (Germany: Sachsen-Anhalt: last collected in 1866); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:46 and 61 (in checklist of Polish Sphecidae); Burger, 2005:34 (Germany: Thüringen); Gayubo and Özbek, 2005:25 (Turkey: seven localities); Pagliano and Negrisol, 2005:210 (in Sphecid Fauna of Italy); Riemann and Hohmann, 2005:562 (Germany: Niedersachsen: city of Bremen and adjacent area, last recorded by Alfken, 1915); Saure, 2005:17 (Germany: Berlin); Straka, 2005a:395 (extinct in Czech Republic); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1798 (Turkey: Ankara, Erzurum, and Kars provinces); Gorobchishin, 2006:117 (Ukraine: Cherkasy Oblast': village Prokhorovka near Kaniv); Liebig, 2006:39 (Germany: Sachsen: Muskauer Heide); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Jacobs, 2007:114, 117 (in key to Crabronidae of Germany); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia), 227 (first record from Moravia: Bzenec); Dollfuss, 2008a:479 (locality records from Bulgaria, Czech Republic, Hungary, Slovakia, and Turkey; variation); Ljubomirov and Yildirim, 2008:251 (in catalog of Crabronidae of Turkey);

- Bitsch and Leclercq, 2009:229 (in supplement to vol. I of Faune de France, 1993: France: Gironde: Lacanau-Océan and Landes: Capbreton); Mokrousov, 2010a:62 (Russia: Nizhniy Novgorod Oblast': no specific localities); Rudoiskatel', 2010:159 (Russia: recorded from Ural Mountains); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: very rare); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:184 (Germany: possibly occurred in Hessen in the XIX<sup>th</sup> century); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Yıldırım, 2012:80 (Turkey: Erzurum: Aşkale, and Oltu: Sarisaz); Akulov and Proshchalykin, 2013:114 (Russia: Siberia: Krasnoyarsk Krai: 12 km east of Minusinsk); Olszewski, Wiśniowski, Pawlikowski, and Szpila, 2013:132 (Poland: Glinki); A. Scholz and Liebig, 2013:24 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:180 (in annotated catalog of aculeate wasps of Belorussia); Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan); Nemkov, 2014c:287 (first record from Asiatic Russia: Malaya Minusa 12 km east of Minusinsk); Pagliano, 2014:80 (specimens in M. Spinola collection, Torino); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); P. Rosa and Pagliano, 2015:104 (Italy: Lombardia and Piemonte: Parco del Ticino); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:42 (Turkey: Artvin, Bayburt, and Erzurum, provinces); Antropov, 2017b:242 (in catalog of Crabroninae of Russia); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:14 (Azerbaijan: Nakhichevan Autonomous Republic); Kaplan and Yıldırım, 2021:72 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:326 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey). – **As *Oxybelus mucronatus* var. *lineatus***: Beuthin, 1876:230 (new status, Germany: Hamburg area, as *lineatus* Dahlbom).
- Oxybelus bellicosus* Olivier, 1812b:595, sex not stated. Holotype or syntypes: France: Paris area (lost). Synonymized with *Oxybelus lineatus* by Gerstaecker, 1867a:55, 58. – Vander Linden, 1829:38 (bibliographic references, France: Paris area); Shuckard, 1837a:110 (in revision of British Aculeata); von Siebold, 1839:49 (Germany: Danzig, now Poland: Gdańsk); Dahlbom, 1844:269 (in revision of Sphecidae and Pompilidae; Germany: Glogau, now Poland: Głogów), 1845:514 (in key to *Oxybelus*); Lepeletier de Saint Fargeau, 1845:217 (in revision of world Hymenoptera, southern France); Eversmann, 1849:417 (Russia: Sarepta); Lucas, 1849:262 (Algeria: Oran, citation after Lepeletier de Saint Fargeau, 1845); F. Smith, 1851c:23 (Great Britain: locality unknown), 1853:63 (in checklist of British Hymenoptera), 1856:384 (in catalog of Hymenoptera in British Museum), 1858c:165 (in review of British Aculeata, redescription); Taschenberg, 1858:118 (in key to Sphecidae of Germany: Glogau, now Poland: Głogów); Schenck, 1960:146 (Germany: Nassau Region); Brischke, 1864:209 (Germany: Preussen Province, now Poland: Pomorze Region); A. Costa, 1864c:124 (Italy: Campania: Benevento area, determination tentative); Funk, 1864:156 (Germany: Bayern: Bamberg); Taschenberg, 1866:160 (in revision of Hymenoptera of Germany); Kirchner, 1867:223 (in catalog of European Hymenoptera, as *bellicosus* Dahlbom); Schenck, 1867a:352 (Germany: Nassau Region); F. Smith, 1871b:17 (in catalog of British Aculeata); Dours, 1874:153 (in catalog of Hymenoptera of France); Wierzejski, 1874:261 (Ukraine: Podole Region: Bucyki, Sinków); Frivaldszky, 1876:357 (Hungary: Temes Komitat: Grebenáč, now in Timiș District in Romania); Friese, 1883:200 (Germany: Sachsen-Anhalt: Weissenfels); nec Brischke, 1888b:100 (= *Oxybelus quatuordecimnotatus*); Acloque, 1897:92 (in Sphecid Fauna of France and Algeria); nec N. Arnold, 1902:86 (= *Oxybelus quatuordecimnotatus*); de Cobelli, 1903:114 (Italy: Trentino: Rovereto); Morice, 1917:272 (specimen described by Shuckard, 1837 is a ♂); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:79, 80 (specimens in M. Spinola collection, Torino, are *Oxybelus lineatus* and *Oxybelus trispinosus*).

**131. *linguifer* R. Turner**

*Oxybelus linguifer* R. Turner, 1917e:193, ♀ (as *linguifera*, incorrect original termination). Holotype: ♀, Pakistan: Punjab: Gujranwala in Lahore District (BMNH). – Pate, 1938b:391 (in list of Oriental Oxybelini, as *linguiferum*); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae; as *linguiferus*); Manikandan, Dey, and Farooqi, 1999:12 (in key to Indian *Oxybelus*, as *linguiferus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*, as *linguiferus*).

**132. *lingula* Gerstaecker**

*Oxybelus lingula* Gerstaecker, 1867a:26, ♀. Syntypes: ♀, South Africa: Cape Province: no specific locality (ZMHU). – Kohl, 1884b:113 (in list of known *Oxybelus*); Dalla Torre, 1897:643 (in catalog of world Sphecidae); Arnold, 1927:105 (in revision of southern African *Oxybelus*), 1930:15 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Gess, 1981:20 (South Africa: Hilton Farm 18 km west-northwest of Grahamstown; nesting in sandy soils, prey); S. Gess and F. Gess, 2003:103 (Namibia, South Africa: visiting flowers of *Deverra denudata* (Viv.) Pfisterer and Podl. and *Foeniculum vulgare* Mill, Apiaceae, *Senecio burchellii* D.C., Asteraceae, *Maytenus linearis* (L. f.) Marais, Celastraceae); Dollfuss, 2008a:480 (locality records from Botswana, Mozambique, Senegal, South Africa, and Zimbabwe).

*Oxybelus pinnatus* de Saussure, 1892:562, ♀, ♂. Syntypes: South Africa: no specific locality (MHNG). Synonymized with *Oxybelus lingula* by Arnold, 1927:105. – Dalla Torre, 1897:646 (in catalog of world Sphecidae).

*Oxybelus spiniferus* Cameron, 1905m:226, ♀. Holotype or syntypes: ♀, South Africa: Western Cape Province: Stellenbosch (BMNH?). Synonymized with *Oxybelus lingula* by Arnold, 1927:105.

*Oxybelus striatiscutis* Cameron, 1905g:261, ♀. Holotype or syntypes: ♀, South Africa: Eastern Cape Province: Dunbrody at 33°29'S 25°33'E (BMNH). Synonymized with *Oxybelus lingula* by Arnold, 1927:105.

*Oxybelus kalaharicus* Bischoff, 1913b:114, ♂. Holotype or syntypes: ♂, Botswana: Sevrelela in Kakia District (ZMHU). Synonymized with *Oxybelus lingula* by Arnold, 1927:105.

**133. *linsleyi* R. Bohart and Schlinger**

*Oxybelus linsleyi* R. Bohart and Schlinger, 1956b:151, ♀, ♂. Holotype: ♂, USA: California: Riverside County: Keen Camp in San Jacinto Mountains (CAS). – R. Bohart and Schlinger, 1956c:161 (in checklist of North American *Oxybelus*), 1957:117 (in revision of Californian *Oxybelus*); Krombein, 1958f:202 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera).

**134. *lubricus* de Beaumont**

*Oxybelus lubricus* de Beaumont, 1950f:418, ♀, ♂. Holotype: ♀, Algeria: Aflou (BMNH). – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Leclercq, 1993c:48 (in catalog of western Palearctic Crabronini and Oxybelini); Dollfuss, 2008a:480 (Tunisia: Nefta oasis at 33°53'N 7°53'E.); Ben Khedher, Yildirim, Braham, and Chaaban, 2019:192 (known from Tunisia: Tozeur Province)

**135. *lusitanicus* I. Cross**

*Oxybelus lusitanicus* I. Cross, 2020:292, ♀, ♂. Holotype: ♂, Portugal: Carrapateira at 37.190°N 8.902°W (BMNH). – Cross, Baldock, and Wood, 2021:54 (in catalog of Sphecidae *sensu lato* of Portugal).

**136. *macswaini* R. Bohart and Schlinger**

*Oxybelus macswaini* R. Bohart and Schlinger, 1956b:153, ♀, ♂. Holotype: ♂, USA: California: San Joaquin County: Tracy (CAS). – R. Bohart and Schlinger, 1956c:161 (in checklist of North American *Oxybelus*), 1957:115 (in revision of Californian *Oxybelus*); Krombein, 1958f:202 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae; California, Arizona); Krombein, 1979b:1655 (in catalog of North American Hymenoptera).

**137. maculipes F. Smith**

- Oxybelus maculipes* F. Smith, 1856:386, ♀. Holotype or syntypes: ♀, Albania: no specific locality (BMNH or OXUM). – Kirchner, 1867:223 (in catalog of European Hymenoptera); Kohl, 1884b:105 (description of ♂), 113 (in list of known *Oxybelus*); Dalla Torre, 1897:643 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Hungary: Kis-Szentmiklós); Moidl in Schmiedeknecht, 1930:661, 664 (in keys to Hymenoptera of North and Central Europe); Gussakovskij, 1935:434 (Tajikistan); Zavadil, 1937a:72 (eastern Slovakia); Zavadil, Šustera, and Bat'a, 1937:173 (in catalog of Sphecidae of Czechoslovakia); Šnoflák in Zavadil and Šnoflák, 1948:32, 36 (in key to Czechoslovakian Sphecidae); Móczár, 1958b:208 (Hungary: collecting localities), 1958c:282, 288 (in key to western Palearctic *Oxybelus*); de Beaumont, 1960a:23 (Greece: island of Rhodes), 1965a:62 (Greece), 1967a:364 (Turkey); Benedek, 1968:78 (Hungary, visiting flowers of *Reseda lutea* L., Resedaceae and *Cirsium* sp., Asteraceae); Scobiola-Palade, 1968a:822 (first record from Romania: Ilfov District: Budești), 1968b:143 (Romania: Island of Letea in delta of Danube); Balthasar, 1972:153 (in Sphecid Fauna of Czechoslovakia); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Pulawski, 1978:275, 277 (in key to Sphecidae of European part of USSR); Schmidt and Westrich, 1983:123 (Greece); Scobiola-Palade, 1985:97 (Romania: delta of Danube); Józán, 1986:371 (Hungary: Kiskunság National Park); Pádr in Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Dollfuss, 1991:132 (in key to Sphecidae of North and Central Europe); Bitsch and Leclercq, 1993:257 (in revision of western European Crabroninae); Guichard, 1993b:531 and 533 (in key to European *Oxybelus*); Leclercq, 1993c:48 (in catalog of western Palearctic Crabronini and Oxybelini); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Wu and Zhou, 1996a:107 (in revision in Economic Insect Fauna of China); Esenbekova and Kazenas, 2000:44 (southeastern Kazakhstan: no specific locality); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:91 (geographic distribution, collecting localities in Kazakhstan); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Kazenas, 2004b:106 (Kazakhstan: western Tien Shan), 2004d:33 (Kazakhstan: Kharkino, Ryn-Peski); Yildirim and Ljubomirov, 2005:1798 (Turkey: İçel: Silifke; Konya: Güneysınır); Gorobchishin, 2006:117 (Ukraine: Kyiv Oblast': village Khotov); Hua, 2006:281 (in list of Chinese insects, geographic distribution); Kazenas, 2007a:91 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia, known only from Slovakia); Dollfuss, 2008a:480 (locality records from Bulgaria, Greece, Kazakhstan, Kyrgyzstan, Tajikistan, and Turkey); Kazenas, 2008c:255 (Kazakhstan: village Koktum south of Lake Alakol'); Ljubomirov and Yildirim, 2008:252 (in catalog of Crabronidae of Turkey); Rudoiskatel', 2010:159 (Russia: southern Ural Mountains); Tano, 2010d:48 (China: Guangxi Zhuang Autonomous Region: Guilin); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Yildirim, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); Mokrousov and Egorov, 2015:425 (Russia: Republic of Mordovia: Nature State Reserve Prisuskiy); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:42 (Turkey: Bingöl, Erzurum, Konya, and Tunceli provinces); Antropov, 2017b:243 (in catalog of Crabroninae of Russia); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:14 (Azerbaijan: Nakhichevan Autonomous Republic); Kaplan and Yildirim, 2021:73 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:350 (in revision of Sphecidae *sensu lato* of Europe); Pytel-Huta, Skyrpan, Tsaryk, Shydlovskyy, and Khamar, 2022:54 (western Ukraine); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).
- Oxybelus solskii* Radoszkowski, 1877:72, ♀, ♂ (as *Solskii*, incorrect original capitalization). Syntypes: Uzbekistan: Zaravshan valley and Sokh valley (ZMMU). Synonymized with *Oxybelus maculipes* by Gussakovskij, 1935:434. – Kohl, 1884b:115 (in list of known *Oxybelus*, as *Solskiyi*); Dalla Torre, 1897:648 (in catalog of world Sphecidae).
- Oxybelus acuticornis* F. Morawitz, 1891a:209, ♀. Syntypes: ♀, Russia: Astrakhan, and Kazakhstan: Ryn-Peski (ZIN). Synonymized with *Oxybelus maculipes* by Gussakovskij, 1935:434. – Dalla Torre, 1897:638 (in catalog of world Sphecidae).

*Oxybelus pictipes* F. Morawitz, 1891:210, ♂. Holotype or syntypes: ♂, Russia: Astrakhan (ZIN). Synonymized with *Oxybelus maculipes* by Gussakovskij, 1935:434. – Dalla Torre, 1897:646 (in catalog of world Sphecidae).

### 138. *maidlii* Kohl

*Oxybelus maidlii* Kohl, 1924:274, ♀ (as *Maidlii*, incorrect original capitalization). Holotype: ♀, "Baluchistan: Abou" (now in Pakistan), but actually: India: Rajasthan: Mount Abu (BMNH). – Pate, 38b:387 (listed); Krombein, 1985b:634 (redescription; Sri Lanka); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Dollfuss, 2008a:481 (Laos: Khammouan Province: Ban Khoun Ngeun at 18°07'N 104°29'E, variation).

### 139. *major* Mickel

*Oxybelus major* Mickel, 1916a:434, ♂. Holotype: ♂, USA: Nebraska: South Bend (UNL). – Mickel, 1918b:368 (in catalog of Nebraskan Sphecidae); Brimley, 1938:450 (North Carolina: Cruso); Burks in Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera); Muma, 1952:21 (holotype in UNL); R. Bohart and Schlinger, 1956c:161 (in checklist of North American *Oxybelus*, as *majus*), 1957:108 (in key to North American *Oxybelus*, as *majus*); Krombein, 1958f:202 (in supplement to catalog of North American Hymenoptera: eastern USA, Texas to North Carolina, north to Michigan and Virginia); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino, a species almost certainly different from Mickel's); Ahlstrom, 1995:110 (in checklist of insects of North Carolina).

### 140. *malaysianus* Tsuneki

*Oxybelus malaysianus* Tsuneki, 1974b:654, ♂. Holotype: ♂, Malaysia: Kuala Lumpur (T. Tano coll., Fukui).

### 141. *manaliensis* Manikandan, Dey, and Farooqi

*Oxybelus manaliensis* Manikandan, Dey, and Farooqi, 1999:9, ♀. Holotype: ♀, India: Himachal Pradesh: Manali (Indian Agricultural Research Institute, New Delhi). – Manikandan, Dey, and Farooqi, 1999:14 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Dollfuss, 2008a:481 (recognition characters, description of ♂, India: Uttaranchal: 55 km north of Bageshwar).

### 142. *mandibularis* Dahlbom

*Oxybelus mandibularis* Dahlbom, 1845:514, ♀, ♂. Syntypes: Europe: no specific locality (Lund). – Eversmann, 1849:417 (Russia: Orenburg province, Ural foothills, and lower Volga); von Kiesenwetter, 1849:90 (Germany: Kingdom of Saxony: Dresden); Wissmann, 1849:14 (Germany: Kingdom of Hannover: Münden); Ruthe and Stein, 1857:315 (G

Germany: Berlin area); Schenck, 1857:117 (Germany: in revision of fossorial wasps of Nassau Region); Taschenberg, 1858:119 (in key to Sphecidae of Germany); Schenck, 1860:146 (Germany: Nassau Region); Brischke, 1862:105 (Germany: Prussen Province, now Poland: Pomorze Region), 1864:209 (Germany: Prussen Province, now Poland: Pomorze Region); Taschenberg, 1866:162 (in revision of Hymenoptera of Germany); Kirchner, 1867:223 (in catalog of European Hymenoptera); Schenck, 1867a:350 (known from Germany); Thomson, 1870:178 (in revision of Swedish Crabroninae), 1874:290 (in revision of Hymenoptera of Scandinavia); Radoszkowski, 1877:76 (Uzbekistan: Samarkand; Kyrgyzstan: Shahimardan); E. Saunders, 1880:299 (in revision of British Aculeata); Kohl, 1881:56 (as new synonym of *Oxybelus variegatus*); A. Costa, 1882b:23 (Italy: Sardegna); Sajó, 1882:5 (Hungary); Friese, 1883:200 (Germany: Sachsen-Anhalt: Merseburg); Kohl, 1884b:113 (in list of known *Oxybelus*); Brischke, 1888b:100 (Germany: Prussen Province, now Poland: Pomorze Region), 1889:204 (Germany: Steegen east of Danzig, now Poland: Stegna east of Gdańsk); Kohl, 1893a:34 (Austria: Niederösterreich); Radoszkowski, 1893a:72 (Turkmenistan); Engel, 1894:52 (Germany: Bahrenfeld near Hamburg); Krieger, 1894:12 (Germany: Kingdom of Saxony); E. Saunders, 1896:123 (in revision of British Aculeata); Westerlund, 1896:28 (Finland: no specific locality, determination tentative); Borries, 1897:76 (nesting habits unknown); Dalla Torre, 1897:643 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Kingdom of Hungary, some localities are in today's Slovakia); O. Schneider, 1898:103 (Germany: Island of Borkum); Morice, 1901a:278 (Great Britain: Surrey: Wisley); Nevinson, 1900:62 (Great Britain: Wales: Criccieth, Towyn); DalGLISH, 1901:7 (Great Britain: Scotland: Irvine); N. Arnold, 1902:86 (Russia: Mohilev Province, now Belorussia); Aurivillius, 1904:300 (in revision of Swedish Sphecidae); W. Schulz, 1904b:102 (Bosnia and Herzegovina: Island of Hvar, as Lesina; Germany: Island of Borkum); Arnold, 1905:262 (Great Britain: Hampshire: Brockenhurst); Kubes, 1905:84 (Czech Republic: Kolín); Mortimer, 1905:261 (Great Britain: Wales: Aberdovey); von Heyden, 1905:82 (Germany: Hessen: Frankfurt); E. Saunders, 1907b:67 (Great Britain: West Suffolk and Eastbourne); Schmiedeknecht, 1907:204 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Dittrich, 1911b:21 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); nec Schirmer, 1912:165 (= *Oxybelus variegatus*); Hallett, 1916:221 (Great Britain: South Wales: Porthcawl); R. Perkins, 1916:231 (specimens in F. Smith collection); Noskiewicz, 1918:138 (Galicia, now western Ukraine: Brzuchowice, Hołosko, and Rudno near Lwów); O. Meyer, 1919:150 (Germany: Posen Province, now Poland: Poznań Region); Maidl, 1922:73 (Croatia); Berland, 1925d:210 (in Sphecidae Fauna of France); F. Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley); Benoist, 1928:411 (France: Alpes-Maritimes, Hautes-Alpes); Grandi, 1929:278 (list of prey), 289 (Italy: Toscana: valle della Limentra); Maidl *in* Schmiedeknecht, 1930:662, 665 (in keys to Hymenoptera of North and Central Europe); Grandi, 1931:58 (Italy: Toscana: Vallata delle Pozze near Le Mandriole); Nadig, 1933:77 (Morocco: Goundafa); Bondroit, 1934:62 (first record from Belgium: Ostende, Solbosch); Jansson, 1934:289 (Sweden); Nadig, 1934:31 (Italy: Sardegna: Gennargentu); Bernard, 1935:67 (France: Var: Fréjus area); Drogoszewski, 1936:129 (Poland: Łowicz); Goebel, 1937:39 (Poland: Poznań District: Poznań-Dębina); Zavadil, Šustera, and Bat'a, 1937:172 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938c:81 (Hungary: Kőszeg Hills); Poll, 1938 (first record from Belgium: Campthout); Móczár, 1939:5 (Hungary: Jászberény); Paul, 1941:39 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1033 (Germany: Bayern: Bamberg area); de Beaumont, 1942b:428 (in revision of Swiss *Oxybelus*); Giner Marí, 1943a:258 (in Sphecidae Fauna of Spain); Móczár, 1943a:59 (Hungary: Szeged); Giordani Soika, 1944:8 (Italy: Sicilia: Falcone); Guiglia, 1944b:41 (Italy); Šnoflák, 1944a:143 (Czech Republic: serpentine steppe near Mohelno); van Lith, 1947:105 (Netherlands, determination tentative); Balthasar, 1948:141 (Slovakia: Parkan); Šnoflák *in* Zavadil and Šnoflák, 1948:34, 39, 40 (in key to Czechoslovakian Sphecidae); P. Verhoeff, 1948:169 (in revision of Western European *Oxybelus*); Fæster, 1949:19, 33 (in revision of Western European *Oxybelus*); Sala de Castellarnau, 1949:89 (Spain: Teruel: Bronchales); Noskiewicz and Chudoba, 1950:312 (Poland: in revision of *Oxybelus* of Śląsk Region); Leininger, 1951:116 (Germany: Baden-Württemberg); Cleu, 1953:51 (France: Ardèche River basin); Głowacki, 1953:518 (Poland: Podkowa Leśna, Brwinów); Guiglia,

1953a:135 (in revision of Italian *Oxybelus*); Blüthgen, 1954:148 (in key to Central European *Oxybelus*), 154 (common in sandy habitats); Tjeder, 1954:69 (Sweden: eastern Skåne: Vitemölla); Valkeila, 1954:87 (Finland: Lappeenranta); Aerts, 1955:60 (Germany: Rheinland); Guiglia, 1955:105 (in revision of Great Britain *Oxybelus*); Hellén, 1955a:128 (Finland: north to Uleåborg, now Oulu); Vergne, 1955:6 (France: Auvergne); Vogrin, 1955:45 (Yugoslavia); Ceballos, 1956:396 (in catalog of Sphecidae of Spain); Fahlander, 1957:63 (Sweden); Benno, 1958b:18 (in review of Dutch Sphecidae); Móczár, 1958b:212 (Hungary: collecting localities), 1958c:285, 287 (in key to western Palearctic *Oxybelus*); Wolf, 1959b:35 (Germany: Nassau); Noskiewicz and Puławski, 1960:161, 164 (in key to Polish Sphecidae); Grandi, 1961:264 (nesting habits); Valkeila, 1962b:68 (southwestern Finland); de Beaumont, 1964c:160 (in Sphecid Fauna of Switzerland); Fæster, 1965:193 (Denmark: Hansted Nature Reserve); Mingo Pérez, 1966:74 (in revision of *Oxybelus* of Iberian Peninsula); Benno, 1967:39 (in checklist of Sphecidae of Netherlands); J. Heinrich, 1967:83 (Germany: Bayern: Unterfranken District); Hoop, 1967a:39 (Germany: Schleswig-Holstein: Heidkate); Niedl and Deneš, 1967:76 (Czech Republic: Třeboň area); Scobiola-Palade, 1967b:50 (Romania); Benedek, 1968:78 (Hungary, floral records); Scobiola-Palade, 1968c:386 (Romania: București); Benedek, 1969a:85 (Hungary: marshy meadow); Zangheri, 1969:1709 (Italy: in catalog of flora and fauna of Romagna Region); Benedek, 1970:104 (Hungary: Tapolca); Haeseler, 1970:74 (Germany: Schleswig-Holstein: Amrum); Hoop, 1970:60 (Germany: Schleswig-Holstein: Wendtorfer sluice to Heidkate); Oehlke, 1970:795 (Democratic Germany); Tumšs, 1970:83 (first record from Latvia); Schmidt, 1971b:53 (Germany: Rheinland-Pfalz: Gonsenheimer Wald, Mainzer Sand); Stritt, 1971a:105 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:160 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:177 (Kazakhstan); Lomholdt, 1972:123 (Denmark: Island of Læsø); Oehlke, 1972:141 (Germany: Island of Hiddensee); Scobiola-Palade, 1972a:152 (Romania: delta of Danube: Caraorman); Simon Thomas, 1972:187 (France: Landes, Lot-et-Garonne); Hoop, 1973:47 (Germany: Schleswig-Holstein: Segrahner Berg); Lomholdt, 1975b:32 (Denmark: Island of Anholt); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Haeseler, 1976b:73 (Germany: Friesian Islands: Island of Amrum); Lomholdt, 1976:280 (in Sphecid Fauna of Fennoscandia and Denmark); Simon Thomas, 1976:6 (France: Lot-et-Garonne: Forêt de Campet); Guichard, 1977:253 (Great Britain: Surrey); Kolesnikov, 1977:321 (Russia: Bryansk Oblast); Haeseler, 1978b:63 (Germany: Niedersachsen: a bog near Oldenburg); Pulawski, 1978:276, 276 (in key to Sphecidae of European part of USSR); Benedek, 1979:236 (Hungary: Bakony Hills); Edwards, 1979:70 (Great Britain: Sussex County); Leclercq, Gaspar, and Verstraeten, 1979:map 1426 (Belgium); Radović and Krunić, 1979:unpaginated foldout (nesting in sand, foreleg structure); Schmidt, 1979a:58 (Germany: Ost-Holstein); Schwammerberger, 1979:118 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Richards, 1980:60 (in key to Sphecidae of British Isles); Haeseler, 1981:51 (Germany: Friesian Island: Island of Amrum); Schmidt, 1981:175 (Germany: Baden-Württemberg); Axelsson, 1982:80 (Sweden); Donath, 1982:215 (Germany: Cottbus Bezirk); Skibińska, 1982:124 (Poland: Warszawa area); Dollfuss, 1983b:13 (in catalog of Sphecidae of Austria); Józán, 1983:102 (Hungary); Lefebvre, 1983a:85 (Netherlands: Waddendistrict: northern coast sand dunes, islands of Texel, Terschelling, and Ameland); Haack, Tschardtke, and Vidal, 1984:130 (Germany: Hamburg area); Janzon and Svensson, 1984:183 (Sweden: Island of Öland); Gayubo, 1985b:495 (first record from Spain: Zamora: Sotillo de Sanabria); Haeseler, 1985c:571 (Germany: Friesian Islands); Józán, 1985b:58 (Hungary south of Lake Balaton), 79 (floral records), 84 (ecological and zoogeographic characteristics); Radović, 1985:65 (sting apparatus analyzed); Scobiola-Palade, 1985:97 (Romania: delta of Danube); Brechtel, 1986:73 (Germany: Südpfalz); Gayubo and Sanza, 1986:58 (Spain: Burgos, Soria); Józán, 1986:371 (Hungary: Kiskunság National Park); Nemkov, 1986:100 (Russia: Siberia: Irkutsk Oblast); Skibińska, 1986b:151, 154 (Poland: suburbs of Warszawa), 158 (rural and suburban parks), 160 (gardens), 162 (urban parks), 165 (streetside green), 174 (various green urban habitats); Vikberg, 1986:76 (Finland); Lomholdt, 1987:93 (Denmark: western Jutland: Skallingen Peninsula); Schmidt and Westrich, 1987:375 (Germany: Mainz area); Dollfuss, 1988:14, 26 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Haeseler, 1988:211 (Germany: Friesian Islands); Kowalczyk, 1988a:46 (Poland: Rogów), 1988b:66 (Poland: environs of Łódź); Riemann, 1988:223 (Germany: Bremen area); Wolf, 1988b:141 (Germany:

Rheinland-Westfalen); Archer, 1989b:232 (Great Britain: Suffolk); Jacobs, 1989:16 (Germany: Mecklenburg-Vorpommern); Nilsson, 1989:48 (Sweden); Pádr *in* Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Pankevich, Belyavskaya, Molchanova, Shlyakhtenok, and Blinov, 1989:98 (Belorussia: Berezinskiy Nature Reserve); Jacobs and Oehlke, 1990:176 (new records from Democratic Germany); Pádr, 1990:89 (Czech Republic: Praha area); Pagliano, 1990:79 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:542 (Austria: Kärnten); von der Heide and Witt, 1990:64 (Germany: Niedersachsen); Archer, 1991a:34 (Great Britain); Day, 1991:xvii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:132 (in key to Sphecidae of North and Central Europe); Jacobs, 1991:46, 47 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Kowalczyk, 1991a:100, 102 (Poland: Łódź); Kuhlmann et al., 1991:91 (Germany: Senne Region); Pagliano, 1991b:329, 332 (in key to Italian Crabroninae); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Józán, 1992b:174 (Hungary: Boronka-melléki Protected Area); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Bitsch and Leclercq, 1993:258 (in revision of western European Crabroninae); Guichard, 1993b:531 and 532 (in key to European *Oxybelus*); Kuhlmann, 1993:77 (Germany: known from Westfalen); Leclercq, 1993c:48 (collecting localities from Europe); Kowalczyk, 1994:76 (Poland: Łagiewniki forest in Łódź); Theunert, 1994c:46 (Germany: summary of records from Niedersachsen and Bremen); Jansen and Kaluza, 1995:7 (Germany: endangered in Sachsen); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:424 (in key to Sphecidae of Russian Far East); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:28 (Germany: Bayern: Kahl); Schmid-Egger, Risch, and Niehuis, 1995:200 (Germany: summary of records from: Rheinland-Pfalz); Arens, 1996:441 (Germany: Bayern: Bayreuth area); Blösch, 1996:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Doronin, 1996:18 (Latvia: Ropayi, nest parasitized by *Hedychridium coriaceum* Dahlbom., a chrysidid); Fowles, 1996:35 (Great Britain: in checklist of aculeates of Wales); Jakubzik, 1996:253 (Germany: Köln); Kuhlmann, 1996:220 (Portugal: Serra de Estrela); Pawlikowski and Kruszyński, 1996:87 (Poland: Toruń Basin); Minoranskiy and Shkuratov, 1996:82 (Russia: Rostov Oblast'); Saure, 1996:503 (Germany: Berlin-Pankow: sewage irrigation field); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Witt, 1996:106 (Germany: Brandenburg), 110 (locality records); Woydak, 1996:47 (Germany: Westfalen: summary of distribution and nesting habits); Celary, 1997:59 (in checklist of Animals of Poland); Else and Field *in* R. Edwards, 1997:74 (Great Britain and Ireland: distribution, habitat, flight period, prey, nesting habits, map of distribution by Archer and Roberts); Schmidt and Schmid-Egger, 1997:22 (in checklist of German Sphecidae); Stuke, 1997:86 (Germany: Niedersachsen: Lüneburger Heide Nature Reserve); F. Burger, Saure, and Oehlke, 1998:28 (Germany: in list of Sphecidae of Brandenburg); Dollfuss, Gusenleitner, and Bregant, 1998:521 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km west-southwest of Hamburg); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Haeseler and Ritzau, 1998:51 (Germany: Bremen: Steller Heide); Jakubzik, Schlüter, and Cölln, 1998:1182, 1184 (Germany: Rheinland-Pfalz); Mauss and Schindler, 1998:136 (Germany: Schleswig-Holstein: Nordfriesland District); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); van der Smissen, 1998:64 (Germany: Mecklenburg-Vorpommern: Malk-Göhren; Niedersachsen, Schleswig-Holstein); K. Weber, 1998:145 (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: endangered in Nordrhein-Westfalen); Majzlan, Rychlík, and Deván, 1999:146 (Slovakia: Čenkovská Step Nature Reserve); Mandery, 1999:105 (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); Riemann, 1999:835 (Germany: Niedersachsen: sand pits near Bremen); Saure, 1999:33 (Germany: Berlin-Köpenick); M. Schwarz, 1999:86 (Austria: Oberösterreich: city of Linz area); Blösch, 2000:269 (in Sphecid Fauna of Germany); Dressler, 2000:33 (Germany: Hessen: Darmstadt area); Jacobs, 2000:9 (Germany: Land Mecklenburg-Vorpommern: not endangered); Józán,

2000:109 (Hungary: Bakony Mountains); Ljubomirov, 2000:10 (Bulgaria: specimens in N. Nedelkov collection); Mokrousov, 2000b:30 (Russia: Nizhniy Novgorod Oblast'); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Ohl et al., 2001:140 (distribution in Germany by provinces); Reemer and van der Meer, 2001:18 (Netherlands: along Almelo-Nordhorn canal); van der Smitsen, 2001:62 (Germany: Schleswig-Holstein: not endangered); Zettel, Gross, and Mazzucco, 2001:74 (Austria: Wien); Archer and Edwards, 2002:102 (Great Britain: West Sussex: Ambersham and Iping commons); Kazenas, 2002a:92 (geographic distribution, collecting localities in Kazakhstan); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Söderman and Vikberg, 2002:52 (in list of Aculeata of Finland); Cölln, Esser, and Jakubzik, 2003:62 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Haeseler, 2003:340 (Germany: Niedersachsen: Island of Harriersand near Bremen); Lukáš, 2003:73 (Slovakia: Bratislava: old fruit orchard); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:68 (Germany: in catalog of wasps and bees of Bayern); Tischendorf and Treiber, 2003:121, 125 (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); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:196 (Germany: Bayern: endangered); Archer, 2004g:9 (Great Britain: Cumbria: North Walney National Nature Reserve); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:263 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Majzlan and Deván, 2004:30 (Slovakia: Sekule), 33 (Slovakia: Malacky-Široké); Peeters, van Achterberg, et al., 2004:406 (in Wasp and Ant Fauna of Netherlands); Raemakers, van den Eijnde, and Kleukers, 2004:292 (Netherlands: Tungelerwalle near Weert); Shkuratov, 2004a:81 (Russia: Rostov Oblast': Migulinskaya), 2004b:168 (Russia: Rostov Oblast': Gosudarstvennyi Muzey-Zapovednik M.A. Sholokhova); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:372 (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, 2004:46 and 61 (in checklist of Polish Sphecidae); Blösch, 2005:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Burger, 2005:34 (Germany: Thüringen); Cölln and Jakubzik, 2005:809 (Germany: in synthesis of records from northwestern Rheinland-Pfalz); Haeseler, 2005:629 (Germany: Niedersachsen: Steller Heide near Bremen); Hallin, 2005:16 (Sweden: Örebro County: Hällefors); Kraatz, 2005:103 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Mandery, 2005:174 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Nemkov, 2005a:148 (Russia: Island of Sakhalin); Pagliano and Negrisolò, 2005:214 (in Sphecida Fauna of Italy); Pijfers, 2005:50 (Netherlands: Twente: Noorderlijke Manderheide); Reder, 2005:951 (Germany: Rheinland-Pfalz: Eisenberg); Riemann and Hohmann, 2005:562 (Germany: Niedersachsen: city of Bremen and adjacent area); Robinson, 2005:37 (Great Britain: Cumbria County); Saure, 2005:17 (Germany: Berlin); Straka, 2005a:401 (endangered in Czech Republic); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Venne and Bleidorn, 2005:43 (Germany: Nordrhein-Westfalen: Moosheide Nature Reserve); Yildirim and Ljubomirov, 2005:1798 (first record from Turkey: Erzurum and Kars provinces); Ziska and Saure, 2005:81 (Germany: Berlin: Biesenhorster Sand); Bock, 2006:41 (Germany: Bayern: Kelheim District: Abensberg sands); Gorobchishin, 2006:117 (Ukraine: Kyïv Oblast': several localities); Liebig, 2006:39 (Germany: Sachsen: Muskauer Heide); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Vepřek, 2006:511 (Czech Republic: Kokořínsko area); Archer, 2007a:151 (Great Britain: Norfolk: Thetford Warren Lodge); ); Burguet, 2007:unnumbered p. 25 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Chevin, Livory, Lair, Sagot, and Baldock, 2007:43 (France: Département de la Manche); Herrmann, 2007a:52 (Germany: Niedersachsen: Ostfriesland); Jacobs, 2007:115, 118 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:25 (Germany: northwestern Sachsen); Nemkov, 2007c:997 (in Appendix to Key for identification of Sphecidae of Far East of Russia); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Venne, Bleidorn, and Lauterbach, 2007:302 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia); Winkler, 2007:30 (Germany: Niedersachsen: eastern Friesland); Archer, 2008a:144 (Great Britain: Cumbria: North Walney Nature Reserve and Sandscale Haws);

Danilov, 2008:350 (Russia: Altayskiy Kray: Barnaul area); Dollfuss, 2008a:482 (locality records from Bulgaria, Finland, Hungary, Mongolia, and Turkmenistan); Haeseler, 2008:308 (Germany: Friesian Islands); Kochetkov, Bol'shakova, Butenko, and Priklonskiy, 2008:264 (Russia: Ryazan' Oblast': Oka Nature Reserve); Ljubomirov and Yildirim, 2008:252 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:20 (in catalog of Crabronidae of Asiatic Russia); Tannert and von der Dunk, 2008:181 (Germany: Bayern: west of Ernhofen and Weissenbrunn); Theunert, 2008:61 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Bitsch and Leclercq, 2009:229 (in supplement to vol. I of Faune de France, 1993: recently recorded from Austria, Bulgaria, Germany, Great Britain, Hungary, Italy, and Spain; France: first records from Manche: Beaubigny and Puy-de-Dôme: Orléat); U. Frommer, 2009a:28 (Germany: in checklist of Sphecidae of Hessen); Nemkov, 2009b:91 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Ødegaard, Sverdrup-Thygeson, Hansen, Hanssen, and Öberg, 2009:28 (known from Norway), 43, 71 (Norway: locality records); Budrys, 2010:138 (first record from Lithuania: Marcinkonys 3 km south of Puvočiai); Esser, Fuhrmann, and Venne, 2010:37 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:28 (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 and Nizhniy Novgorod Oblast's: no specific localities); Rudoiskatel', 2010:159 (Russia: southern Ural Mountains); Saure, 2010a:88 (Germany: Berlin-Reinickendorf: Baumberge), 2010b:176 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: relatively common); Shorenko and Konovalov, 2010:21 (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:346 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records); Archer, 2011b:54 (Great Britain: North Norfolk sand dunes); Baghirov, 2011b:149 (Russia: Altayskiy Kray: Savvushka); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Saure, 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg), 2011d:200 (Germany: Sachsen-Anhalt: conservation area "Heide südlich Burg"); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:76 (Germany: Hessen: endangered); Ziska and Saure, 2011:109 (Germany: Berlin: Tegeler Fließ valley); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Burguet in Durand and Burguet, 2012:3 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Nemkov, 2012c:440 (in catalog of Crabronidae of Russian Far East); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); A. Scholz and Liebig, 2013:24 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2012a:172 (Belorussia: collected in private plots); Yildirim, 2012:80 (Turkey: Adana, Bayburt, and Erzurum provinces); Danilov and Odintseva, 2013:332 (Russia: Western Siberia: 65 km north-northeast of Tobol'sk at 58°45'N 68°74'E); Saure, 2013:20 (Berlin: Treptow-Köpenick: Gosener Wiesen); Shlyakhtenok, 2013:180 (in annotated catalog of aculeate wasps of Belorussia); Wiśniowski and Szczepko, 2013:42 (Poland: Kampinos National Park near Warszawa); Flügel, 2014:255 (Brandenburg: Hangelsberger Heide); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan); Pagliano, 2014:82 (specimen in M. Spinola collection, Torino, is *Oxybelus variegatus*); Yildirim, Ljubomirov, and Lelej, 2014:14 (distribution in Turkey by biogeographic provinces); Archer, 2015:203 (Great Britain: English coastal sand dunes); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); P. Rosa and Pagliano, 2015:104 (Italy: Lombardia and Piemonte: Parco del Ticino); Cölln and Jakubzik, 2016:18 (Germany: Rheinland-Pfalz: Vulkaneifel District); Else, Bolton, and Broad, 2016:32 (in checklist of Aculeata of Great Britain and Ireland: England, Scotland, Wales, Isle of Man); Reemer and Peeters, 2016:10 (Netherlands: Hulshorsterzand); Saure, 2016c:205 (Germany: center of Berlin: Großer Tiergarten Park); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Antropov, 2017b: (in catalog of Crabroninae of Rus-

sia); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:6 (243 Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Carminati, Mora, and Cretin, 2019:20 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Olszewski and Kowalczyk, 2019:105 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13234 (Russia: Mordovia State Nature Reserve); Kejval, Blažej, and Erhart, 2020:104 (western Czech Republic); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Cross, Baldock, and Wood, 2021:54 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:73 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:350 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution); Pytel-Huta and Franchuk, 2024:81 (Ukraine: Rivno Nature Reserve).

*Oxybelus sericatus* Gerstaecker, 1867a:89, ♀, ♂. Syntypes: Germany: Berlin area (ZMHU). Synonymized with *Oxybelus mandibularis* by P. Verhoeff, 1948:169 and Blüthgen, 1949:88. – A. Costa, 1867c:150 (in revision of Italian Sphecidae); Chevrier, 1868:412 (summary of diagnostic characters); A. Costa, 1871b:79 (in revision of Italian Sphecidae); Beuthin, 1876:230 (Germany: Hamburg area); Kohl, 1880:143 (Austria: Tirol: Mühlau near Innsbruck), 1884b:115 (in list of known *Oxybelus*), 1893:33 (Austria: Niederösterreich); Sickmann, 1893:91 (Germany: Niedersachsen: Iburg); Dalla Torre, 1897:648 (in catalog of world Sphecidae); Kubes, 1905:84 (Czech Republic: Kolín); Schmiedeknecht, 1907:204 (in key to Hymenoptera of Central Europe); Dittrich, 1911b:21 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Schirmer, 1912:165 (Germany: Berlin area); Torcka, 1913:34 (Germany: Provinz Posen, now Poland: Poznań Region); Alfken, 1914:276 (northwestern Germany); Birula, 1914:380 (Belorussia: Luskinopol' near Vitebsk); Zilahi Kiss, 1915:80 (Hungary: Boksánbánya, Csepel); Morice, 1917:240 (*Oxybelus mandibularis* of Saunders, 1893 is actually *Oxybelus sericatus*); Noskiewicz, 1918:138 (Galicia, now western Ukraine: Brzuchowice, Hołosko, Łyczaków, and Rudno near Lwów, Janów, Strychowalec); Dubois, 1919:96 (first record from Belgium: Bruxelles: Uccle); O. Meyer, 1919:150 (Germany: Posen Province, now Poland: Poznań Region); R. Perkins, 1919a:9 (*sericatus* is correct name for *mandibularis* of Saunders, 1902); Dubois, 1920:87 (Belgium: Scopach, Uccle); A. Wagner, 1920:38 (Germany: Lower Elbe region); Dubois, 1922:191, 193 (in key to Belgian Sphecidae); Forsius, 1921:119 (Finland); Hedicke, 1922:270 (Germany: Brandenburg: Gross Machnower Weinberg); R. Perkins, 1924:227 (Great Britain: Devon); Forsius, 1925:119 (Finland); Schütze, 1925:111 (Germany: Lausitz Region); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Hellén, 1926:93 (recorded from Finland, determination tentative); Lieftinck, 1928:324 (Netherlands: Island of Texel); Maidl *in* Schmiedeknecht, 1930:662, 665 (in keys to Hymenoptera of North and Central Europe); Pulkkinen, 1931:159 (in revision of Sphecidae of Finland); Bouwman, 1932:392 (in revision of Sphecidae of Netherlands); Spooner, 1934b:278 (Great Britain: Devon: Braunton Burrows); Forsius *in* Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); Grandi, 1935a:109 (Italy); Crèvecoeur and Maréchal, 1936:257 (in catalog of Belgian Hymenoptera); Drogoszewski, 1936:129 (Poland: Łowicz); Goebel, 1937:39 (Poland: Poznań District: Poznań-Dębina); Richards, 1937b:105 (in checklist of British aculeates); Zavadil, Šusterka, and Baťa, 1937:171 (in catalog of Sphecidae of Czechoslovakia); A. Wagner, 1938a:119 (northwestern Germany); Hallett, 1939:16 (Great Britain: Wales: no specific locality); Hoop, 1941b:70 (Germany: Schleswig-Holstein: Süderhastedt); Paul, 1941:39 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1033 (Germany: Bayern: Bamberg area); Baťa, 1942:85 (Czech Republic); de Beaumont, 1942b:424 (in revision of Swiss *Oxybelus*); J. Perkins, 1942:199 (Sweden: Skåne: Löderup); Balthasar, 1943:41 (Czech Republic: Moravia: Zlin area); Spooner, 1943:75 (Great Britain: New Forest, Parley Heath); Baťa, 1944b:91 (Czech Republic: Veselí); van Lith, 1947:103 (Netherlands); Šnoflák *in* Zavadil and Šnoflák, 1948:34, 37 (in key to Czechoslovakian Sphecidae); Noskiewicz and Chudoba, 1950:302 (Poland in revision of *Oxybelus* of Śląsk Region); Szulczewski, 1950:103 (Poland: Wielkopolski National Park 15 km south of Poznań); Scobiola, 1951:274 (first record from Romania: Sighişoara and Venchiu in Sibiu Region); Baťa, 1952:167 (Czech Republic); Móczár, 1953:311 (Hungary); Teschner, 1955:57 (Germany:

Nordrhein-Westfalen: Hohe Ward near Münster); Vogrin, 1955:45 (Yugoslavia); Zirngiebl, 1957:178 (Germany: Rheinland-Pfalz: Birkenheide); Niedl and Deneš, 1967:75 (Czech Republic: Třeboň area).

#### 143. *maracandicus* Radoszkowski

*Oxybelus maracandicus* Radoszkowski, 1877:71, ♀, ♂ (as *Maracandicus*, incorrect original capitalization). Syntypes: Uzbekistan: Samarkand; Kyrgyzstan: Shahimardan; also Pyandjikent (ZMMU). – Kohl, 1884b:113 (in list of known *Oxybelus*); Radoszkowski, 1893a:72 (Turkmenistan); Dalla Torre, 1897:644 (in catalog of world Sphecidae); Gussakovskij, 1933b:287 (eastern Iran); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:53 (Iran: known from eastern Iran); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

#### 144. *marginatus* F. Smith

*Oxybelus marginatus* F. Smith, 1856:389, ♀, ♂. Lectotype: ♀, Brazil: Amazonas: Villa Nova, now Parintins (BMNH), designated by R. Bohart, 1993a:191. – Kohl, 1884b:113 (in list of known *Oxybelus*); Dalla Torre, 1897:644 (in catalog of world Sphecidae); W. Fox, 1897b:386 (Brazil: Santarém); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Hanson and Menke, 1995:640 (known from Costa Rica); Amarante, 1993:20 (northeastern Brazil); R. Bohart, 1993a:191 (diagnostic characters), 1993d:67 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America), 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 161 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:482 (Argentina: Entre Ríos: Pronunciamento; Bolivia: Río Seco); Perez-Gelabert, 2008:240 (in list of arthropods of island of Hispaniola). Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru). *Oxybelus agnitus* Brèthes, 1913:144, ♀. Holotype or syntypes: ♀, Argentina: Salta: no specific locality (MACN). Synonymized with *Oxybelus marginatus* by R. Bohart, 1993a:191. – R. Bohart and Menke, 1976:366 (in checklist of world Sphecidae); Genise, 1990:26 (type material in MACN).

#### 145. *marginellus* Spinola

*Oxybelus marginellus* Spinola, 1851a:365, ♀, ♂. Lectotype: ♂, Chile: no specific locality (Torino), designated by R. Bohart, 1992:161. – F. Smith, 1856:390 (in catalog of Hymenoptera in British Museum); Kohl, 1884b:113 (in list of known *Oxybelus*); Reed, 1894:650 (in revision of Chilean Sphecidae); Dalla Torre, 1897:644 (in catalog of world Sphecidae); Jaffuel and Pirión, 1926:376 (Chile: valle de Marga Marga); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Sielfeld, 1980b:74 (in checklist of Chilean Sphecidae); R. Bohart, 1992:161 (in revision of Chilean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:482 (Chile: 40 km east of Curacautín, 10 km Lanquimay road Malacahuello-Languimay); Chiappas, 2012:8 (Chile: Región de Valparaíso: no specific locality); Pagliano, 2014:81 (specimens in M. Spinola collection, Torino, including lectotype).

#### 146. *marginicollis* Gussakovskij

*Oxybelus marginicollis* Gussakovskij, 1933b:287, correctly 387, ♀. Holotype: ♀, Iran: Kerman: Kuche: Kambil (ZIN). – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:54 (Iran: known from Kerman Province).

#### 147. *matabele* Arnold

*Oxybelus matabele* Arnold, 1927:86, ♀, ♂. Syntypes: Zimbabwe: Sawmills: banks of Umgusa River (SAM, TMP). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Hancock, Chahwanda, and Mhlanga, 1995:39 (syntypes in Bulawayo Museum); S. Gess and F. Gess, 2003:104 (visiting flowers of *Zygophyllum simplex*, Zygophyllaceae); Dollfuss, 2008a:482 (South Africa: Northern Cape Province: southwest of Loriesfontein, southwest of Springbok; Western Cape Province: 20 km north of Citrusdal).

**148. melanitus R. Bohart**

*Oxybelus melanitus* R. Bohart, 1993e:166, ♀, ♂. Holotype: ♀, Mexico: Puebla: Tehuacán (UCD). – R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*), 162 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae).

**149. menoni Manikandan, Dey, and Farooqi**

*Oxybelus menoni* Manikandan, Dey, and Farooqi, 1998:115, ♂. Holotype: ♂, India: Delhi (Indian Agricultural Research Institute, New Delhi). – Manikandan, Dey, and Farooqi, 1999:12 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Mawadda and Girish Kumar, 2023a:109 (in checklist of Crabroninae of Northern India).

**150. mendozae R. Bohart**

*Oxybelus mendozae* R. Bohart, 1993c:22, ♀, ♂. Holotype: ♀, Argentina: Mendoza: Tupungato (IML). – Amarante, 2002:44 (in catalog of Neotropical Crabronidae).

**151. merwensis Radoszkowski**

*Oxybelus merwensis* Radoszkowski, 1893c:242, ♀, ♂. Syntypes: Turkmenistan: Merv, now Mary (Kraków). – Dalla Torre, 1897:644 (in catalog of world Sphecidae; as *mervensis*); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia).

**152. metopias Kohl**

*Oxybelus metopias* Kohl, 1894:285, ♀. Holotype or syntypes: ♀, Mozambique: Delagoa Bay (Inst. Roy. Sci. Nat. Belgique). – Dalla Torre, 1897:644 (in catalog of world Sphecidae); Arnold, 1927:110 (original description translated into English), 1930:15 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae).

**153. mexicanus Ch. Robertson**

*Oxybelus mexicanus* Ch. Robertson, 1889:83, ♀. Holotype: ♀, Mexico: no specific locality (ANSP). – Cameron, 1891a:156 (Mexico: bibliographic reference); Dalla Torre, 1897:644 (in catalog of world Sphecidae); Cresson, 1928:54 (holotype in ANSP); R. Bohart and Schlinger, 1956c:61 (in checklist of North American *Oxybelus*, as *mexicanum*); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino, almost certainly a species different from Robertson's); R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 161 (in key to Central American and Caribbean *Oxybelus*); Hanson and Menke, 1995:640 (known from Costa Rica); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Pagliano, 2014:82 (specimens in M. Spinola collection, Torino, are *Oxybelus mexicanus* Robertson). – **As *Notoglossa mexicanus***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae).

*Oxybelus frontalis* C. Robertson, 1889:84, ♀, ♂. Lectotype: ♀, USA: southern Illinois: no specific locality (ANSP), designated by Cresson, 1928:54. Synonymized with *Oxybelus mexicanus* by R. Bohart, 1993e:160. – C. Robertson, 1892:108 (visiting flowers of *Pycnanthemum lanceolatum* Pursh. and *P. linifolium* Pursh., Lamiaceae), 1894:454 (visiting flowers of *Solidago missouriensis* Nutt., Asteraceae), 464 (visiting flowers of *Parthenium integrifolium* Linnaeus, Asteraceae); Dalla Torre, 1897:641 (in catalog of world Sphecidae); Burks in Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:160 (in checklist of North American *Oxybelus*, as *frontale*), 1957:111 (in key to North American *Oxybelus*, as *frontale*); Krombein, 1958f:201 (in supplement to catalog of North American Hymenoptera: USA east of Rocky Mountains, Texas, north to Michigan and Pennsylvania); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera); Ahlstrom, 1995:110 (in checklist of insects of North

Carolina). – **As *Notoglossa frontalis***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae); Mickel, 1918b:363 (in catalog of Nebraskan Sphecidae); Brimley, 1938:450 (North Carolina: Raleigh). *Oxybelus bugabensis* Cameron, 1891a:156, ♀. Holotype or syntypes: ♀, Panama: Bugaba (BMNH). Synonymized with *Oxybelus mexicanus* by R. Bohart, 1993e:160. – Dalla Torre, 1897:639 (in catalog of world Sphecidae; as *bugobensis*); W. Schulz, 1906:210 (*bugabensis* is correct spelling); R. Bohart and Schlinger, 1956c:159 (in checklist of North American *Oxybelus*, as *bugabense*); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae). – **As *Notoglossa bugabensis***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae). *Oxybelus longispina* Cameron, 1891a:157, ♂. Holotype or syntypes: ♂, Mexico: northern Yucatan: Temax (BMNH). Synonymized with *Oxybelus bugabensis* by R. Bohart in R. Bohart and Menke, 1976:367 and 1993e:160 (as new synonym). – Dalla Torre, 1897:643 (in catalog of world Sphecidae); R. Bohart and Schlinger, 1956c:161 (in checklist of North American *Oxybelus*). – **As *Notoglossa longispina***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae).

#### 154. *mimeticus* R. Bohart

*Oxybelus mimeticus* R. Bohart, 1992:161, ♀, ♂. Holotype: ♀, Chile: Atacama: 26 mi south of Copiapó (AMNH). – Amarante, 2002:44 (in catalog of Neotropical Crabronidae).

#### 155. *minutissimus* F. Morawitz

*Oxybelus minutissimus* F. Morawitz, 1892:180, ♀. Holotype or syntypes: Turkmenistan: Dort-kuyu (ZIN). – Dalla Torre, 1897:644 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia).

#### 156. *moczari* Tsuneki

*Oxybelus moczari* Tsuneki, 1972a:162, ♀. Holotype: ♀, Mongolia: Hovd Aymag: 10 km south-southwest of Somon Bulgan (TMB). – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae).

#### 157. *morrisoni* R. Bohart

*Oxybelus morrisoni* R. Bohart, 1993e:166, ♂. Holotype: ♂, Puerto Rico: Anasco District: no specific locality (USNM). – R. Bohart, 1993e:160 (in list of Central American and Caribbean *Oxybelus*), 163 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae).

#### 158. *mucronatus* (Fabricius)

NOTE: *Oxybelus mucronatus* of several XIX<sup>th</sup> century authors = *quatuordecimnotatus* (see that species for authors).

*Crabro mucronatus* Fabricius, 1793:300, sex not stated. Holotype: ♂, Germany: no specific locality (ZMUC). – Fabricius, 1796:51 (in Index to his Entomologia Systematica, 1793). – **As *Vespa mucronata***: Turton, 1801:532 (new generic assignment, Germany). – **As *Oxybelus mucronatus***: Fabricius, 1804:318 (new generic assignment, redescription); Latreille, [1805]:308 (redescription); Panzer, 1806, Heft 101:19 (in revision of German insects); Spinola, 1806:92 (Italy: Liguria); Jurine, 1807:217 (in checklist of species of *Oxybelus*); Olivier, 1812b:596 (redescription); Guérin-Méneville, 1827b:557 (in Dictionnaire classique d'histoire naturelle); Stephens, 1829:364 (in catalog of British insects), 1829b:33 (in checklist of British insects); Vander Linden, 1829:39 (bibliographic references, Belgium: Bruxelles, France: Paris area, Italy, almost all Europe, probably a misidentification of *Oxybelus argentatus* or *quatuordecimnotatus*); Herrich-Schaeffer, 1840:295 (Germany: Bayern: Regensburg area); Dufour, 1841a:497 and 1841b:236 (digestive tract), 1841a:503 and 1841b:239 (male reproductive system), 1841a:507 and 1841b:243 (female reproductive system); nec Dahlbom, 1842a:13, 1844:265 and 1845:512 (= *Oxybelus argentatus aculeatus*); von Siebold, 1844:132 (Germany: Preussen: vicinity of Danzig, now Poland: Gdańsk, probably a misidentification of *Oxybelus argentatus* or *quatuordecimnotatus*); Dahlbom, 1845:XXV (type material examined); Lepeletier de Saint Fargeau, 1845:216 (in revision of world Hymenoptera, Paris area); nec Schilling, 1848:105 (= *Oxybelus quatuordecimnotatus*); von Kiesenwetter, 1849:90 (Germany: Kingdom of Saxony: Hoflössnitz near Dresden, almost certainly

in error); Kirschbaum, 1853:47 (Germany: Herzogtum Nassau: Mombach and Weilburg, probably in error); F. Smith, 1856:383 (in catalog of Hymenoptera in British Museum); nec F. Smith, 1857a:35 (= *Oxybelus argentatus*); Taschenberg, 1858:118 (in key to Sphecidae of Germany); Assmus, 1859:616 (Russia: Moscow Governorate, probably *Oxybelus quatuordecimnotatus*); Funk, 1859:58 (Germany: Bayern: Bamberg, may be *Oxybelus quatuordecimnotatus*); Brischke, 1862:104 (Germany: Preussen Province, now Poland: Pomorze; probably *Oxybelus argentatus*); nec Taschenberg, 1866:1161 (= *Oxybelus argentatus*); Gerstaecker, 1867a:67 (in revision of *Oxybelus*; Germany: Berlin area, in error); Kirchner, 1867:223 (in catalog of European Hymenoptera); Schenck, 1867a:352 (Germany: Nassau Region, probably *Oxybelus argentatus*, see Schmidt, 1969:167); Wierzejski, 1868:117 (Ukraine: Janów, Bukowina Region: Kalinowce); von Aichinger, 1870:315 (Austria: Tirol); nec F. Smith, 1871b:16 (= *Oxybelus argentatus*); Dours, 1874:152 (in catalog of Hymenoptera of France); Wierzejski, 1874:261 (Poland: Mogilany, Kraków; Ukraine: Hołosko near L'viv, Podole Region: Sinkow, in error); Beuthin, 1876:230 (Germany: Hamburg area, probably *Oxybelus quatuordecimnotatus*); Kohl, 1880:143 (Austria: Tirol, and Italy: Trentino–Alto Adige); nec E. Saunders, 1880:300 (= *Oxybelus argentatus*); Kohl, 1883e:662 (Switzerland), 1884b:114 (in list of known *Oxybelus*); Radoszkowski, 1887b:97 (in list of Transcaspian Hymenoptera); nec Kohl, 1888b:727 (= *Oxybelus quatuordecimnotatus*); Wüstnei, 1886:40 (Germany: Schleswig-Holstein: Uetersen near Elmshorn, probably *O. argentatus*); Brischke, 1888a:54 (Germany: Hela Peninsula, now Poland: Hel Peninsula, certainly a misidentification), 1888b:100 (Germany: Preussen Province, now Poland: Pomorze Region, certainly a misidentification); Assmuss, 1892:53 (Russia: earlier record from Moscow Governorate repeated, probably *Oxybelus quatuordecimnotatus*); nec Alfken, 1893:120 (= *Oxybelus quatuordecimnotatus*); Radoszkowski, 1893a:72 (Turkmenistan); Sickmann, 1893:90 (Germany: Niedersachsen: Iburg, almost certainly a misidentification); nec Westerlund, 1893:28 (= *Oxybelus argentatus*); Krieger, 1894:11 (Germany: Kingdom of Saxony, almost certainly a misidentification); nec Marquet, 1896:16 (= *Oxybelus argentatus gerstaeckeri*); nec E. Saunders, 1896:123 (= *Oxybelus argentatus*); Westerlund, 1896:28 (Finland: no specific locality, probably *Oxybelus argentatus* or *O. quatuordecimnotatus*); Acloque, 1897:92 (in Sphecidae Fauna of France and Algeria); Borries, 1897:76 (nesting habits unknown); Dalla Torre, 1897:644 (in catalog of world Sphecidae); Lüderwaldt, 1897b:30 (Germany: Gollnow, now Poland: Pomorze Region: Goleniów, my be *Oxybelus argentatus* or *O. quatuordecimnotatus*); Mocsáry, 1897:81 (occurring in Hungary according to Kohl); O. Schneider, 1898:102 (Germany: Island of Borkum, may be *Oxybelus argentatus* or *O. quatuordecimnotatus*); nec Bradley, 1902:267 (Great Britain: North Wales, a misidentification); nec Nevinson, 1900:62, 1901:72, and 1902:12 (= *Oxybelus quatuordecimnotatus*); N. Arnold, 1902:86 (Russia: Mohilev Province, now Belorussia, almost certainly a misidentification); nec E. Saunders, 1902b:143 and 1907b:67 (= *Oxybelus argentatus*); de Cobelli, 1903:114 (Italy: Trentino: Alle Sarche); Kubes, 1905:84 (Czech Republic: Kolín, probably *Oxybelus quatuordecimnotatus*); Mortimer, 1905:261 (Great Britain: Wales: Aberdovey, probably *Oxybelus argentatus* or *O. quatuordecimnotatus*; prey: *Thereva annulata* Fabricius, Therevidae); Schmiedeknecht, 1907:202, 204 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Peets, 1909-1911:67 (*Oxybelus mucronatus* of Panzer = *Oxybelus mucronatus*); Cavro, 1910:685 (France: Département du Nord, probably *Oxybelus quatuordecimnotatus*); nec Dittrich, 1911b:20 (= *Oxybelus argentatus*); nec Schirmer, 1912:164 (= *Oxybelus argentatus debeaumonti*); nec Hallett, 1913:99 (= *Oxybelus argentatus*); Torka, 1913:34 (Germany: Provinz Posen, now Poland: Poznań Region, probably *Oxybelus argentatus debeaumonti* or *Oxybelus quatuordecimnotatus*); Alfken, 1914:275 (north-western Germany, probably *Oxybelus argentatus*); Zilahi Kiss, 1915:80 (Hungary: Boksánbánya, may be *Oxybelus argentatus*); nec Hallett, 1916:221 (= *Oxybelus argentatus*); O. Meyer, 1919:149 (Germany: Posen Province, now Poland: Poznań Region, probably *Oxybelus argentatus*); A. Wagner, 1920:38 (Germany: Lower Elbe region, almost certainly in error); nec Dubois, 1922:191, 192, 193 (= *Oxybelus argentatus*); Forsius, 1921:119 (Finland, most likely *Oxybelus argentatus* or *O. quatuordecimnotatus*); Strand, 1921:33 (Germany: Bayern: Kulmbach, may be *Oxybelus quatuordecimnotatus*); Hedicke, 1922:270 (Germany: Brandenburg: Gross Machnower Weinberg, probably *Oxybelus argentatus*); Jansson, 1922:26 (Sweden: Island of Öland, probably *Oxybelus argentatus*); Coulon, 1925:122 (France); nec Forsius, 1925:119 (= *Oxybelus argentatus* or *O. quatuordecimnotatus*); Schütze, 1925:111 (Germany:

Lausitz Region, probably *Oxybelus quatuordecimnotatus*); K. Strohm, 1925:211 (Germany: Baden-Württemberg: Achkarren); Bouwman, 1926:279 (in list of Sphecidae of Netherlands, probably *Oxybelus quatuordecimnotatus*); nec Friese, 1926:144 (= *Oxybelus quatuordecimnotatus*); Crèvecoeur and Maréchal, 1927:139 (Belgium: Assebroeck, probably *Oxybelus quatuordecimnotatus*); nec Barovskij, 1929:149 (Russia: north of Sankt-Petersburg, = *Oxybelus argentatus* or *O. quatuordecimnotatus*); Maidl in Schmiedeknecht, 1930:661, 664 (in keys to Hymenoptera of North and Central Europe); nec Pulkkinen, 1931:158 (= *Oxybelus argentatus* or *O. quatuordecimnotatus*); nec Bouwman, 1932:392 (= *Oxybelus quatuordecimnotatus*); Giner Marí, 1934:136 (Spain); Jansson, 1934:289 (Sweden, actually either *Oxybelus argentatus* or *O. quatuordecimnotatus*); nec Forsius in Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland, actually either *Oxybelus argentatus* or *quatuordecimnotatus*); Vergne, 1935:120 (France: Auvergne: common, may be *Oxybelus quatuordecimpunctatus*); Drogoszewski, 1936:129 (Poland: Łowicz, probably *Oxybelus argentatus*); Zavadil, 1937a:72 (eastern Slovakia); Goebel, 1937:39 (Poland: Poznań District: Głuszyna, Poznań-Dębina, may actually be *Oxybelus argentatus*); Zavadil, Šusterka, and Bat'a, 1937:170 (in catalog of Sphecidae of Czechoslovakia); Molitor, 1938:448, 449 (color recognition, may actually be *Oxybelus quatuordecimnotatus*); nec A. Wagner, 1938a:118 (= *Oxybelus argentatus*); Dovnar-Zapolskiy, 1940:303 (Russia: Kursk Oblast'); nec Balthasar, 1941b:112 (= *Oxybelus argentatus debeaumonti*); Schneid, 1941:1032 (Germany: Bayern: Bamberg area); de Beaumont, 1942b:423 (in revision of Swiss *Oxybelus*); Giner Marí, 1943a:257 (in Sphecid Fauna of Spain); Giner Marí, 1945b:360 (eastern Morocco: Ain Zorah, Muley Ali); Carl and de Beaumont, 1947:69 (Switzerland: Graubünden = Grisons Canton: Swiss National Park); Grandi, 1948:3 (nesting habits); Šnoflák in Zavadil and Šnoflák, 1948:33, 38 (in key to Czechoslovakian Sphecidae); nec P. Verhoeff, 1948:188 (= *Oxybelus quatuordecimnotatus*); de Andrade, 1949:21 (Portugal); nec Cavro, 1950:41 (= *Oxybelus quatuordecimnotatus*); nec de Beaumont, 1950f:420 and 1951h:35 (= *Oxybelus quatuordecimnotatus*); Blüthgen, 1949:88 (*Oxybelus mucronatus* is a synonym of *quatuordecimnotatus*); Noskiewicz and Chudoba, 1950:304 (in revision of *Oxybelus* of Śląsk Region, Poland, probably in error); Szulczewski, 1950:102 (Poland: Wielkopolski National Park 15 km south of Poznań, probably *Oxybelus argentatus*); nec Leininger, 1951:116 (= *Oxybelus quatuordecimnotatus*); Guiglia, 1953a:124 (in revision of Italian *Oxybelus*); Blüthgen, 1954:144, 152 (in key to Central European *Oxybelus*), 153 (summary of locality records from Germany); Grandi, 1954:244 (Italy); Aerts, 1955:60 (Germany: Rheinland); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster, probably *Oxybelus quatuordecimnotatus*); Vogrin, 1955:45 (Yugoslavia); nec Ceballos, 1956:397 (= *Oxybelus quatuordecimnotatus*); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); de Beaumont, 1957b:139 (northern Iran); Grandi, 1957:392 (Italy); Móczár, 1958b:211 (Hungary: collecting localities), 1958c:287, 289 (in key to western Palearctic *Oxybelus*), 297 (in revision of *Oxybelus* of Hungary); Nouvel and Ribaut, 1958:17 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Puławski, 1958a:189 (Bulgaria: Aitos, Kniazhevo near Sofia, Sandanski, Sozopol, Varna); Ceballos, 1959:232 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1959b:91 (gynandromorph); Diniz, 1959:32 (Portugal: nine localities); Suárez, 1959:60 (Spain: Almería Province); Wolf, 1959b:35 (Germany: Nassau); de Beaumont, 1960a:23 (Greece: Island of Rhodes), 1960c:172 (Afghanistan); Noskiewicz and Puławski, 1960:163, 164 (in key to Polish Sphecidae, not yet found in Poland); de Beaumont, 1961c:52 (Greece: Island of Crete); van der Vecht, 1961:72 (study of holotype); de Beaumont, 1962b:29 (Spain); Grandi, 1962:99 (Italy); Wengris, 1962:207 (Lithuania: Vilnius area, probably *Oxybelus argentatus* or *O. quatuordecimnotatus*); de Beaumont, 1963c:417 (Afghanistan); Ceballos, 1964:95 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:161 (in Sphecid Fauna of Switzerland), 1965a:62 (Greece); Gauss, 1966c:240 (specimen bearing dipteran egg); Mingo Pérez, 1966:91 (in revision of *Oxybelus* of Iberian Peninsula); de Beaumont, 1967a:365 (Turkey); Gauss, 1967:560 (Germany: Baden-Württemberg); Niedl and Deneš, 1967:75 (Czech Republic: Třeboň area); Scobiola-Palade, 1967b:50 (Romania); Benedek, 1968:79 (Hungary, visiting flowers of *Angelica silvestris* L. and *Pastinaca sativa* L., Apiaceae); Parré, 1968:124 (Germany: Sachsen-Anhalt: Staßfurt); Benedek, 1969a:85 (Hungary: marshy meadow); de Beaumont, 1969:94 (Turkey); Schmidt, 1969:167 (Germany: Rhein-Main area: record by Wolf, 1959 is wrong determination); Zangheri, 1969:1709 (Italy: in catalog of flora and fauna of

Romagna Region); Benedek, 1970:105 (Hungary: Tapolca); Oehlke, 1970:796 (Democratic Germany); Tumšs, 1970:83 (Latvia, almost certainly in error); Stritt, 1971a:105 (Germany: Baden-Württemberg: Karlsruhe); Atanasov, 1972a:190 (Bulgaria: Stara Planina Mountains), 1972b:32, 48 (Bulgaria: Stara Planina Mountains); Kazenas, 1972b:177 (Kazakhstan); Erlandsson, 1974:87 (Spain, Yugoslavia); Kazenas, 1974b:110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, and *Silaum besseri* L., Apiaceae, in Kazakhstan); Levi, Sysoletina, and Shernin, 1974:269 (Russia: Kirov Oblast': Klimkovka); Benedek, 1975:251 (Hungary; onion pollinator, as *mucrunatus*); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Kolesnikov, 1977:321 (Russia: Bryansk Oblast'); Guichard, 1978:272 (Greece); Marion, 1978:91 (France: Nièvre Department); Pulawski, 1978:276, 277 (in key to Sphecidae of European part of USSR); Benedek, 1979:236 (Hungary: Bakony Hills); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 1980:120 (Italy: Piemonte); Schmidt, 1981:176 (Germany: Baden-Württemberg); Donath, 1982:215 (Germany: Cottbus Bezirk); Gayubo, 1982b:9 (northern Spain: Sierra de Béjar), 1882e:103 (Spain: Cádiz Province); Dollfuss, 1983b:13 (in catalog of Sphecidae of Austria); Schmidt and Westrich, 1983:124 (Greece); Gayubo, 1984b:90 (Spain: Salamanca Province), 1984c:374 (Portugal: El Algarve Province); Gayubo and Tormos, 1984:18 (Spain: Valencia); Gayubo, 1985a:488 (prey: *Musca domestica* Linnaeus, Muscidae), 1985c:169 (Spain: Valladolid: Hornillos, Valladolid); Józán, 1985b:58 (Hungary south of Lake Balaton), 84 (ecological and zoogeographic characteristics); Westrich and Schmidt, 1985b:111 (Germany: endangered in Baden-Württemberg); Gayubo, 1986a:61 (Spain: Ciudad Real Province), 1986b:38 (Spain: Andalucía), 1986d:114 (Spain: Zamora Province); Gayubo and Heras, 1986:50 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:59 (Spain: Burgos, Soria); Gayubo and Tormos, 1986a:15 (Spain: Castellón de la Plana); Islamov, 1986:532 (Uzbekistan: Tashkent Oblast'); Asís and Jiménez, 1987:26 (Spain: Castellón Province); Tormos and Jiménez, 1987a:125 (Spain: Valencia); Dollfuss, 1988:14, 26 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Jacobs, 1989:16 (Friese's 1926, record from Mecklenburg is incorrect); Józán, 1989:101 (Hungary: Tihany Nature Reserve); Pádr *in* Šedivy, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Gayubo, Asís, and Tormos, 1990b:74 (Spain: Cáceres and Salamanca provinces); Jacobs and Oehlke, 1990:122 and 176 (not collected in Democratic Germany after 1960); Pádr, 1990:90 (Czech Republic: Praha area); Pagliano, 1990:79 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:542 (Austria: Kärnten); Day, 1991:xvii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:132 (in key to Sphecidae of North and Central Europe); Gayubo and Torres, 1991:Table I and p. 81 (Spain: Salamanca; effects of urban pressure); Pagliano, 1991b:329, 333 (in key to Italian Crabroninae); Budrys, 1992:32 (in list of Sphecidae of Lithuania, probably in error); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Gayubo, Borsato, and Osella, 1992:284 (Greece: island of Euboea); Józán, 1992b:174 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Bitsch and Leclercq, 1993:258 (in revision of western European Crabroninae); Guichard, 1993b:531 and 533 (in key to European *Oxybelus*, color variation); Leclercq, 1993c:48 (collecting localities from Europe, Lebanon, and China: Harbin); Torregrosa, Gayubo, Tormos, and Asís, 1993:19 (Spain: Alicante Province); Theunert, 1994c:46 (Germany: summary of records from Niedersachsen and Bremen); Tormos, Asís, and Gayubo, 1994:188, 212 (Spain: Albacete Province); Jansen and Kaluza, 1995:7 (Germany: endangered in Sachsen); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Minoranskiy and Shkuratov, 1996:82 (Russia: Rostov Oblast'); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Woydak, 1996: (Germany: Westfalen: no vaucher specimen for Sickman's, 1883 record); Celary, 1997:59 (in checklist of Animals of Poland, probably in error); Gauss, 1997:27 (egg of miltogrammatid flies deposited on adult specimens); Schmidt and Schmid-Egger, 1997:22 (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, 1998:521 (Austria: summary of collecting records from Burgenland); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); Neumayer, Schwarz, and Bregant, 1999:225 (Austria: in checklist of Sphecidae of Land Kärnten); Blösch, 2000:269 (in Sphecid

Fauna of Germany); Esenbekova and Kazenas, 2000:44 (southeastern Kazakhstan: twelve localities); Gayubo, González, and Torres, 2000:186 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:107 (Greece); Jacobs, 2000:9, 16 (Germany: Land Mecklenburg-Vorpommern: extinct); Józán, 2000:109 (Hungary: Bakony Mountains); Ljubomirov, 2000:10 (Bulgaria: specimens in N. Nedelkov collection); Mokrousov, 2000b:30 (Russia: Nizhniy Novgorod Oblast'); Neumeyer, 2000:99 (Switzerland: Basel); Schmid-Egger, 2000b:276, 279 (Germany: Baden-Württemberg: shores of Rhine River); Zettel, 2000:29 (Austria: Marchegg-Schloßhof, Marchfeld); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ljubomirov, 2001b:50 (Bulgaria: Mount Vitosha near Sofia); Mazzucco, 2001:197, 203 (Austria: Niederösterreich: Steinfeld, common there); Ohl et al., 2001:140 (distribution in Germany by provinces); Salzmänn-Wandeler and Rezbanyai-Reser, 2001:157 (Switzerland: Tessin Canton: Meride area); Zettel, Gross, and Mazzucco, 2001:74 (Austria: Wien); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:92 (geographic distribution, collecting localities in Kazakhstan); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Drewes, 2003:140 (France: Haute-Savoie: mouth of Dranse; Spain: Tarragona); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Gorobchishin, 2003:48 (Ukraine: Kiev: botanical garden); Pagliano, 2003b:129 (Italy: Island of Pantelleria); Schmid-Egger, 2003:755 (Italy: Sicilia: Vendicari); Deván, 2004:147 (western Slovakia); Esser, Jakubzik, and Sonnenburg, 2004:18 (Germany: Nordrhein-Westfalen); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:263 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Gayubo, Nieves-Aldrey, González, Tormos, Rey del Castillo, and Asís, 2004:108 (Spain: Madrid: Monte de El Pardo); Kazenas, 2004b:106 (Kazakhstan: western Tien Shan); Majzlan and Deván, 2004:30 (Slovakia: Sekule), 33 (Slovakia: Malacky-Široké); Shkuratov, 2004a:81 (Ukraine: Donetsk Oblast'; Russia: Rostov Oblast'); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae, probably in error); Stolle et al., 2004:372 (Germany: Sachsen-Anhalt: last collected in 1879); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar); Gayubo and Özbek, 2005:26 (Turkey: many localities); Jacobs, 2005a:448 (Bulgaria: Krasnovo near Hissarya, Melnik); Kofler, 2005:174 (Austria: Tirol: Lienz District: Unterpeischlach in Kals Common); Pagliano and Negrisolo, 2005:211 (in Sphecid Fauna of Italy); Saure, 2005:17 (Germany: Berlin, probably in error); Straka, 2005a:398 (critically endangered in Czech Republic); Yildirim and Ljubomirov, 2005:1798 (Turkey: Erzurum, Konya, and Kars provinces); Feitz, Gloden, Melchior, and Schneider, 2006:82 (first record from Luxemburg: Baggerweieren area in Haff Réimech Nature Reserve); M. Meyer, Proess, and Schneider, 2006:111 (Luxemburg); Gorobchishin, 2006:117 (Ukraine: Kyiv: botanical garden); Liška, 2006:88 (Slovakia: Váh river valley near Trenčín); Ljubomirov, 2006:541 (Bulgaria and Greece: earlier records from Rhodope Mountains summarized); Standfuss and Standfuss, 2006b:99 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Vepřek, 2006:511 (Czech Republic: Kokořínsko area); Baños-Picón, Gayubo, Asís, and González, 2007:257, 259 (Spain: Zamora: Cabañas de Aliste); Burguet, 2007:unnumbered p. 26 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Chevin, Livory, Lair, Sagot, and Baldock, 2007:43 (France: Département de la Manche); Jacobs, 2007:117, 120 (in key to Crabronidae of Germany); Józán, 2007:180 (Hungary: Zselic Hills); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Shorenko, 2007b:258 (Ukraine: Crimea: Opukskiy Nature Reserve); G. Turrisi and R. Turrisi, 2007:117 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia); Yildirim and Ljubomirov, 2007:120 (Turkey: İçel and Konya provinces); Cölln and Jakubzik, 2008:8 (Germany: first record from Rheinland-Pfalz: Strohn near Vulkaneifel); Danilov, 2008:350 (Russia: Altayskiy Krai: Barnaul area); Dollfuss, 2008a:482 (locality records from Bulgaria, China, Greece, Iran, Italy, Jordan, Kazakhstan, Kyrgyzstan, Moldova, Morocco, Serbia, Spain, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, and Uzbekistan); Gayubo, González, Tormos, and Asís, 2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Kazenas, 2008b:113 (Kazakhstan: foothills of Zailiskiy Alatau: rarely found on inclined surfaces of loess cliffs); Ljubomirov and Yildirim, 2008:253 (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); Bitsch and Leclercq, 2009:229 (in supplement to vol. I of Faune de France, 1993: recent records from Bulgaria, Germany, Luxemburg reported; France: first records from Ardèche: Chauzon and Pradon; Corse: Bucchinera; Lot-et-Garonne: Nérac; Haut-Rhin: Munster); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:265 (Bulgaria: Maleshevska Planina); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Esser, Fuhrmann, and Venne, 2010:37 (Germany: in checklist of aculeates of Nordrhein-Westfalen); J. Neumayer, 2010:334 (Austria: Niederösterreich: Thayatal National Park); Rudoiskatel', 2010:160 (Russia: central Ural Mountains); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: extremely rare); Shorenko and Konovalov, 2010:21 (Ukraine); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:89 (western Slovakia: Borská Nížina), 102 (western Slovakia: recorded from Borská Nížina); Treiber, 2010:136 (France: département du Haut-Rhin); Tüzün and Yüksel, 2010:4471 (Turkey: Niğde Province); van der Smissen, 2010b:385 (France: Ardèche: Saint-Thomé, Vagüé; Vaucluse: Bédoin); Baghirov, 2011b:149 (Russia: recorded from Altayskiy Kray by Danilov, 2008); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:499 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Gogala, 2011:25 (Slovenia); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Murai and Amr, 2011:119 (recorded from Syria by Dollfuss, 2008a); Rudoiskatel', 2011a:66 (Russia: Perm' Oblast': Okhansk), 2011d:244 (Russia: central Ural Mountains); N. Schneider and Feitz, 2011:122 (Luxemburg); Tischendorf, Frommer, Flügel et al., 2011:184 (Germany: occurrence in Hessen possible); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:3 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Prisniy, 2012:48 (Russia: Belgorod Oblast'); Strumia, Pagliano, and Gayubo, 2012:56 (Italy: Toscana: Riserva di San Rossore); Yildirim, 2012:80 (Turkey: Adana, Bayburt, and Erzurum provinces); Kazenas, 2013a:81 (color photograph of adult wasp, short information on geographic distribution and nesting habits), 2013b:497 (southeastern Kazakstan: foothills and low mounains); A. Scholz and Liebig, 2013:24 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Vieira, Oliveira, Brewster, and Gayubo, 2013:18 (Portugal: Douro International Natural Park); Zettel, Zimmermann, and Wiesbauer, 2013:13 (Austria: Wien: Donaupark); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Baldock, 2014:358 (Spain: Island of Mallorca); Bitsch, 2014:405 (France: Landes: Morcenx); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Kazenas, 2014a:136 (Kazakhstan: Karatau Mountain Range); Reder and Niehuis, 2014:9 (Germany: Rheinland-Pfalz: Birkenfeld); Pagliano, 2014:78 (specimens in M. Spinola collection, Torino, are *Oxybelus argentatus*, *O. haemorrhoidalis*, *O. variegatus*, and *O. trispinosus*); Yildirim, Ljubomirov, and Lelej, 2014:14 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); P. Rosa and Pagliano, 2015:104 (Italy: Lombardia and Piemonte: Parco del Ticino); Samin, Bagriacik, and Monaem, 2015:196 (Iran: Ardabil: no specific locality); Shorenko, 2015:326 (in list of Sphecidae *sensu lato* of Crimea); Cölln and Jakubzik, 2016:18 (Germany: Rheinland-Pfalz: Vulkaneifel District); Reder, Staudt, and N. Schneider, 2016:262 (Germany: Saarland); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:42 (Turkey: Antalya, Erzurum, Iğdır, Kars, and Tunceli provinces, as *Oxybelus mucronatus mucronatus*); Antropov, 2017b:243 (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); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:54 (Iran: known from Ardabil, Hamadan, and Tehran provinces); Shorenko, 2017:77 (in Crimea collected in August); Reder, Burger, and Kitt, 2018:46 (Germany: additional localities in Rheinland-Pfalz); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Carminati, Mora, and Cretin, 2019:20 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:15 (Azerbaijan: Nakhichevan Autonomous Republic); Kejval, Blažej, and Erhart, 2020:104 (not occurring in western Czech Republic); Cross, Baldock, and Wood, 2021:54 (in catalog of Sphecidae *sensu lato* of Portugal);

Kaplan and Yildirim, 2021:73 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:350 (in revision of Sphecidae *sensu lato* of Europe); Jakubzik and Cölln, 2022:5, 11 (Germany: Rheinland-Pfalz: Moselle River valley between Drohn and Kattenes); Pytel-Huta, Skyrpan, Tsaryk, Shydlovskyy, and Khamar, 2022:54 (western Ukraine); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution); Pytel-Huta and Franchuk, 2024:81 (Ukraine: Rivno Nature Reserve).

*Oxybelus pugnax* Olivier, 1812b:595, sex not stated. Holotype or syntypes: France: Paris area (lost). Synonymized with *Oxybelus mucronatus* by ... – Vander Linden, 1829:37 (bibliographic references, France: Paris area, Spain); Dahlbom, 1844:278 (bibliographic references, unknown to author), 1845:514 (in key, unknown to author); Wesmael, 1852:629 (redescription); F. Smith, 1856:385 (in catalog of Hymenoptera in British Museum); Ruthe and Stein, 1857:315 (Germany: Berlin area); Brischke, 1862:105 (Germany: Preussen Province, now Poland: Pomorze Region), 1864:209 (to be deleted from Preussen Province list); Kirchner, 1867:223 (in catalog of European Hymenoptera); Chevrier, 1868:408 (in revision of Swiss *Oxybelus*); Radoszkowski, 1877:75 (Uzbekistan: Zeravshan valley; Tashkent; Kyrgyzstan: Shahimardan; also Hoja-Chiburgan); Kohl, 1880:144 (Italy: Trentino–Alto Adige), 1883e:662 (Switzerland), 1884b:114 (in list of known *Oxybelus*); Gasperini, 1887:14 (Dalmatia: cited from Dalmatia, now Croatia, by Kohl, 1884); Kohl, 1888b:727 (Austria: Tirol, now Italy: Alto Adige), 1893:33 (Austria: Niederösterreich); Marquet, 1896:26 (in revision of *Oxybelus* of France); Dalla Torre, 1897:646 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Kingdom of Hungary, localities are in today's Croatia: Fiume, now Rijeka and Slovakia: Nyitra, now Nitra); de Cobelli, 1903:115 (Italy: Trentino: Alle Sarche); Antiga and Bofill, 1904:28 (Spain: Cataluña Province); W. Schulz, 1904b:101 (Transcaspia); Graeffe, 1911:45 (Italy: Trieste area); Morice, 1911:132 (Algeria: Alger, Biskra, Hippône); Schirmer, 1912:165 (recorded from Berlin area, Germany, by Gerstaecker, 1867); Morice, 1921:824 (Iraq: Amara); Fahringer, 1922:184 (Turkey); Maidl, 1922:74 (Croatia); Berland, 1925d:209 (in Sphecidae Fauna of France); Grandi, 1929:289 (Italy: Toscana: valle della Limentra); Maidl *in* Schmiedeknecht, 1930:664, 666 (in keys to Hymenoptera of North and Central Europe); Dusmet y Alonso, 1931:9 (Portugal: Coimbra, Val de Coimbras); Giner Marí, 1934:136 (Spain); Grandi, 1934:128 (Italy: Lazio: Acilia); Bernard, 1935:67 (France: Var: Fréjus area); Marchand and Dulac, 1935:61 (France: Saône-et-Loire: Saint Laurent d'Andenay); Dulac, 1937:24 (France: Saône-et-Loire: Saint-Laurent d'Andenay); Goebel, 1937:39 (Poland: Poznań District: Poznań-Dębina, Strzeszynek); Zavadil, Šusterka, and Baťa, 1937:173 (in catalog of Sphecidae of Czechoslovakia); Giordani Soika, 1939b:73 (Italy: Lido di Venezia); Schneid, 1941:1034 (Germany: Bayern: Bamberg area); de Beaumont, 1942b:426 (in revision of Swiss *Oxybelus*); Guiglia, 1942a:63 (Greece: Island of Rhodes: Kremasti, Villanova); Giner Marí, 1943a:258 (in Sphecidae Fauna of Spain); Giordani Soika, 1944:8 (Italy: Sicilia: Falcone); Guiglia, 1944a:156 (Cyprus: Cherkas), 1944b:41 (Italy); Šnoflák, 1944a:143 (Czech Republic: serpentine steppe near Mohelno); de Beaumont, 1947b:400 (Cyprus); Balthasar, 1948:141 (Slovakia: Kovačov); Guiglia, 1948c:203 (Italy: Sardegna: Cagliari); Šnoflák *in* Zavadil and Šnoflák, 1948:36, 40 (in key to Czechoslovakian Sphecidae); P. Verhoeff, 1948:195 (in revision of Western European *Oxybelus*); de Andrade, 1949:21 (Portugal); Fæster, 1949:22, 46 (in revision of Western European *Oxybelus*); Noskiewicz and Chudoba, 1949:420 (Poland: Dolny Śląsk: Sułów, Wrocław, record incorrect for zoogeographic reasons), Noskiewicz and Chudoba, 1950:310 (Poland: in revision of *Oxybelus* of Śląsk Region); Pittioni, 1950:28 (Cyprus); de Beaumont, 1952b:90 (Marquet's, 1896 specimens); Nouvel and Ribaut, 1953:184 (France: Haute-Garonne: Saint-Béat); de Beaumont, 1954e:98 (Italy); Grandi, 1954:244 (Italy); Steiner, 1955:147 (France: Dordogne); Vergne, 1955:6 (France: Auvergne); Vogrin, 1955:45 (Yugoslavia); Ceballos, 1956:397 (in catalog of Sphecidae of Spain); Compte Sart, 1959:139 (Spain: Mayorca); Diniz, 1959:32 (Portugal: seven localities);

- Ceballos, 1964:95 (in supplement to catalog of Spanish Sphecidae); Derwesh, 1965:71 (Iraq: no specific locality); Balthasar, M. Hrubant, and E. Hrubant, 1967:170 (Bulgaria: Slanchev Bryag near Nesebar); Niedl and Deneš, 1967:76 (Czech Republic: Třeboň area); Balthasar, 1972:155 (in Sphecid Fauna of Czechoslovakia); de Beaumont, Bytinski-Salz and Pulawski, 1973:25 (Israel); Georghiou, 1977:191 (Cyprus); Pádr, 1990:90 (Czech Republic: Praha area); Blagoveshchenskaya, 1994:90 (Russia: Ul'yanovsk Oblast').
- Oxybelus ambiguus* Gerstaecker, 1867a:75, ♀, ♂. Syntypes: Germany: Berlin (ZMHU). Synonymized with *Oxybelus pugnax* by P. Verhoeff, 1948:195. – Chevrier, 1868:412 (summary of diagnostic characters); Kohl, 1880:144 (Italy: Trentino–Alto Adige), 1884b:110 (in list of known *Oxybelus*); Gasperini, 1887:14 (Dalmatia: Spalato, now Croatia: Split); Kohl, 1888b:726 (Austria: Tirol, now Italy: Alto Adige); nec Marquet, 1896:28 (= *Oxybelus trispinosus*); Dalla Torre, 1897:638 (in catalog of world Sphecidae); Mocsáry, 1897:81 (occurring in Hungary according to Kohl); Ferton, 1901a:112 (prey), 1902:517 (prey preference, position of egg on prey); Antiga and Bofill, 1904:27 (Spain: Cataluña Province); W. Schulz, 1904b:101 (Spain: Castilia); Schmiedeknecht, 1907:205 (in key to Hymenoptera of Central Europe); Ferton, 1910:156 (prey selection), 159 (prey); Schirmer, 1912:165 (recorded from Berlin area, Germany, by Gerstaecker, 1867); Alfken, 1914:276 (northwestern Germany); Noskiewicz, 1918:138 (Galicia, now western Ukraine: Lesienice); O. Meyer, 1919:150 (Germany: Posen Province, now Poland: Poznań Region); Dubois, 1920:87 (Belgium: Uccle, determination tentative, description); Hedicke, 1922:270 (Germany: Brandenburg: Gross Machnower Weinberg); Ferton, 1923:82 (position of egg on prey), 320 (*Thereva arcuate* Love, Therevidae, is preferred prey, but *Asilus atricapillus* Fallén, Asilidae, *Onesia corsicana* Villeneuve, Calliphoridae, and *Thereva plebeja* (Linnaeus) are also captured); Ceballos, 1956:396 (in catalog of Sphecidae of Spain); Piek and Spanjer, 1986:186 (in list of Sphecidae with known prey); Steiner, 1986:105 (references to publications on nesting habits); .
- Oxybelus scutellaris* A. Costa, 1867c:148 and 1871b:77, ♂. Holotype: ♂, Italy: Piemonte: no specific locality (Napoli). Synonymized with *Oxybelus ...* by ... – Kohl, 1884b:115 (in list of known *Oxybelus*); Dalla Torre, 1897:648 (in catalog of world Sphecidae).
- Oxybelus meridionalis* Mocsáry, 1879:140, ♀. Holotype or syntypes: ♀, Hungary: "Thermae Herculis Mehadiensis", now Romania: Baile Herculane (TMB). Synonymized with *Oxybelus mucronatus* by Móczár, 1958c:297. – Kohl, 1880:144 (Italy: Trentino–Alto Adige), 221 (redescription), 1884b:113 (in list of known *Oxybelus*); Dalla Torre, 1897:644 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Kingdom of Hungary: Mehádia, now in Romania); Haris, 2016:16 (in list of species described by S. Mocsáry from Carpathian Basin).
- Oxybelus maculiventris* Tournier, 1901:256, ♀, ♂. Syntypes: Spain: Barcelona: and Switzerland: Genève (MHNG). Synonymized with *Oxybelus pugnax* by de Beaumont, 1942b:426. – Antiga and Bofill, 1904:27 (Spain: Cataluña Province); Ceballos, 1956:397 (in catalog of Sphecidae of Spain). – **As *Oxybelus pugnax maculiventris***: Balthasar, 1958:337 (new status, Slovakia: Čenkov).
- Oxybelus nigriventris* Tournier, 1901:257, ♀. Syntypes: Spain: Monistrol (MHNG). Synonymized with *Oxybelus pugnax* by de Beaumont, 1942b:426 (as questionable synonym). – Antiga and Bofill, 1904:28 (Spain: Cataluña Province); Ceballos, 1956:397 (in catalog of Sphecidae of Spain).
- Oxybelus nigripes* Olivier var. *immaculatus* Guiglia, 1944a:156, ♀. Holotype: ♀, Cyprus: Cherkas (Genoa). – Guiglia, 1944b:41 (Italy: Lazio); Pittioni, 1950:28 (Cyprus). – **A *Oxybelus mucronatus forma immaculata***: Guiglia, 1953a:128 (new status, additional morphological character); Móczár, 1958c:287 (in key to western Palearctic *Oxybelus*); R. Bohart and Menke, 1976:368 (as synonym of *Oxybelus mucronatus*).
- Oxybelus pugnax* ab. *bistillatus* Balthasar, 1972:156, sex not stated. Holotype or syntypes: Czechoslovakia: no specific locality (Praha). Not available (Articles 1.3.4, 15.2).

### **spp. moricei de Beaumont**

- As *Oxybelus pugnax*: Morice, 1911:132 (Algeria: Alger, Biskra, Hippône).
- Oxybelus pugnax moricei* de Beaumont, 1950f:420, ♀, ♂. Holotype: ♀, Algeria: Biskra (Lausanne). – de Beaumont, 1956a:213 (Libya: northern Tripolitania), 1957a:155 (Morocco). – **As *Oxybelus mucronatus moricei***: de Beaumont,

1958b:68 (Algeria: Tassili des Ajjer), 1960b:250 (Libya), 1968a:276 (Canary Islands: Island of Fuertaventura); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Báez and Ortega, 1978:192 (Canary Islands); Hohmann, La Roche, Ortega, and Barquín, 1993:251 (detailed locality records from Canary Islands); Dollfuss, 2008a:485 (locality records from Algeria, Morocco, and Tunisia); Ben Khedher, Yildirim, Braham, and Chaaban, 2019:192 (known from Tunisia: Tozeur Province); Ben Khedher, Yildirim, and Braham, 2020a:106 (Tunisia: many locality records).

#### 159. *nanus* Bingham

*Oxybelus nanus* Bingham, 1897:317, ♂. Holotype: ♂, Burma: Rangoon (BMNH). – Pate, 1938b:391 (in list of Oriental Oxybelini, as *nanum*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

#### 160. *napoensis* R. Bohart

*Oxybelus napoensis* R. Bohart, 1993d:72, ♀, ♂. Holotype: ♀, Ecuador: Napo: Huahua Sumaco 45 km on Hallin-Loreto Road (UCD). – R. Bohart, 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:485 (French Guiane: 25 km south of Saint Laurent de Maroni).

#### 161. *nasutus* Bischoff

*Oxybelus nasutus* Bischoff, 1913b:115, ♀. Holotype or syntypes: ♀, Namibia: Rooibank (ZMHU). – Arnold, 1927:100 (in revision of southern African *Oxybelus*), 1930:15 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae).

#### 162. *natalensis* Arnold

*Oxybelus natalensis* Arnold, 1927:91, ♀, ♂. Syntypes: South Africa: QwaZulu-Natal: Durban, Mlavern, Doonside (Durban Mus., SAM). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Dollfuss, 2008a:485 (Kenya: Voi; Zimbabwe: 140 km northwest of Beitbridge, Bubi 80 km northeast of Beitbridge, Chimanimani, Kami Ruins, Mount Selinda).

#### 163. *neuvillei* Magretti

*Oxybelus neuvillei* Magretti, 1908:188, ♂. Holotype or syntypes: Kenya: Rift Valley Province: south of Lake Rudolph, now Lake Turkana (MNHN). – Arnold, 1927:111 (original description translated into English), 1930:15 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae).

#### 164. *niger* Ch. Robertson

*Oxybelus niger* Ch. Robertson, 1889:82, ♂. Holotype: ♂, USA: Illinois: no specific locality (ANSP). – Dalla Torre, 1897:645 (in catalog of world Sphecidae); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Cresson, 1928:54 (holotype in ANSP); Pate, 1930b:40 (first record from New York State: Ithaca); Burks in Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:162 (in checklist of North American *Oxybelus*, as *nigrum*); Krombein, 1958f:202 (in supplement to catalog of North American Hymenoptera: southeastern Canada and northeastern USA, Minnesota and Illinois to New York; prey: *Lonchaea polita* Say, a lonchaeid); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera); Finnamore, 1982:126 (in Sphecid Fauna of southern Quebec); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Ontario, Quebec: no specific locality).

#### 165. *nigrilamellatus* X. Li and Q. Li

*Oxybelus nigrilamellatus* X. Li and Q. Li, 2008:65 and 68, ♂. Holotype: ♂, China: Xizang Autonomous Region: no specific locality (Yunnan Agricultural University, Kunming).

**166. nigrutilus R. Turner**

*Oxybelus nigrutilus* R. Turner, 1917e:189, ♀, ♂. Syntypes: India: Assam: Shillong (BMNH). – Pate, 1938b:391 (in list of Oriental Oxybelini, as *nigritulum*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Manikandan, Dey, and Farooqi, 1999:13 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

**167. nipponicus Tsuneki**

*Oxybelus nipponicus* Tsuneki, 1966f:3, ♀, ♂. Holotype: ♀, Japan: Niigata Prefecture: northern coastal area (originally K. Tsuneki coll., now Hyogo Mus.). – Itami, 1968b:17 (Japan); Itami, 1969:53 (Japan: Niigata Prefecture); Tsuneki, 1969a:4 (nesting habits); Nambu, 1975b:78 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Tano, 1994a:6 (holotype in K. Tsuneki collection); Hashimoto and Nakanishi, 1997:17 (holotype transferred to Hyogo Mus.); Ohkusa, 2006b:57 (Japan: central Honshu: Aichi Prefecture); Haneda, 2008:4 (in key to Japanese Crabroninae, as *nipponicus nipponicus*); Ohkusa, 2007:34 (Japan: central Honshu: Aichi Prefecture); Ohkusa and Tajima, 2008:75 (Japan: central Honshu: Aichi Prefecture); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Kishi and Nagase, 2015:16 (Japan: Tokyo University: Yayoi Campus: visiting flowers); Komeda, 2021b:64 (Japan: Honshu: Yamanashi Prefecture, as *nipponicus nipponicus*).

**ssp. formosus Tsuneki**

As *Oxybelus agilis*: Sonan, 1940b:21 (Taiwan), corrected to *Oxybelus nipponicus formosus* by Tsuneki, 1968g:26.

*Oxybelus nipponicus formosus* Tsuneki, 1968g:26, ♀, ♂. Holotype: ♂, Taiwan: Pingtung Prefecture: Hengchun (originally K. Tsuneki coll., now USNM). – Tsuneki, 1971a:29 (Taiwan: list of localities); Haneda, 1972a:6 (Taiwan); Murota, 1973b:119 (Taiwan); Tsuneki, 1977j:292 (Taiwan: Kosempo, Tainan), 1982d:13 (in key to *Oxybelus* of Taiwan); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Nuhn and Menke, 1994:25 (holotype transferred to USNM); Porter, Stange, and Wang, 1999:10 (in checklist of Sphecidae of Taiwan); Hua, 2006:281 (in list of Chinese insects, geographic distribution).

**168. oasicola Tsuneki**

*Oxybelus oasicola* Tsuneki, 1972a:171, ♂. Holotype: ♂, Mongolia: Bayanhongor Aymag: spring Talyn Bileghbulag (TMB). – R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae).

**169. occitanicus Marquet**

*Oxybelus occitanicus* Marquet, 1896:18, ♀, ♂. Lectotype: ♀, France: Hérault: Cette, now Sète (Lausanne), designated by de Beaumont, 1952b:90. – de Beaumont, 1942b:424 (Switzerland: Peney near Geneva; redescription); Šnoflák in Zavadil and Šnoflák, 1948:34, 38 (in key to Czechoslovakian Sphecidae, not yet found in Czechoslovakia); Fæster, 1949:24, 35 (in revision of Western European *Oxybelus*); de Beaumont, 1952b:90 (Fæster's record from Switzerland is erroneous); Guiglia, 1953a:139 (in revision of Italian *Oxybelus*, occurring in France); Móczár, 1958c:282, 288 (in key to western Palearctic *Oxybelus*); Balthasar, 1972:161 (in Sphecidae Fauna of Czechoslovakia: not yet found in country); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Gayubo, 1983d:204 (taxonomic history, redescription; Spain: Cádiz: Cañas de Meca), 1984c:375 (Portugal: El Algarve Province: Pêra; on *Polygonum equisetiforme* Sibth and Sm., Polygonaceae); Bitsch and Leclercq, 1993:260 (in revision of western European Crabroninae); Guichard, 1993b:531 and 532 (in key to European *Oxybelus*); Leclercq, 1993c:48 (reference to Bitsch and Leclercq, 1993); Ljubomirov, 2000:10 (Bulgaria: specimens in N. Nedelkov collection, record questionable for geographic reasons); Bitsch and Leclercq, 2009:230 (in supplement to vol. I of Faune de France, 1993: record from Bulgaria reported); Cross, Baldock, and Wood, 2021:54 (in catalog of Sphecidae *sensu lato* of Portugal); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:351 (in revision of Sphecidae *sensu lato* of Europe).

**170. *osteni* R. Bohart**

*Oxybelus osteni* R. Bohart, 1993d:72, ♀, ♂. Holotype: ♀, Argentina: Salta: Chicoana (originally M. Fritz coll., now AMNH). – R. Bohart, 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:44 (in catalog of Neotropical Crabronidae).

**171. *pacificus* (Rohwer)**

*Notoglossa pacifica* Rohwer, 1909a:119, ♂. Holotype of syntypes: ♂, USA: Washington: Pullman (USNM). – **As *Oxybelus pacificus***: Burks in Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera, as *pacifica*); Krombein, 1955b:73 (as new synonym of *Oxybelus emarginatus*); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: first records from Canada: Alberta, British Columbia, ad Saskatchewan: no specific locality). 288 (resurrected from synonymy, recognition characters)

**172. *packardii* Ch. Robertson**

*Oxybelus packardii* Ch. Robertson, 1889:80, ♀, ♂ (as *Packardii*, incorrect original capitalization). Lectotype: ♀, USA: southern Illinois: no specific locality (ANSP), designated by Cresson, 1928:55. – Cockerell and Baker, 1896:23 (New Mexico: Albuquerque); Dalla Torre, 1897:646 (in catalog of world Sphecidae); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); J. Smith, 1900:513 (in list of insects of New Jersey), 1910:682 (in new list of insects of New Jersey); Mickel, 1918b:367 (in catalog of Nebraskan Sphecidae); Brimley, 1938:450 (North Carolina: Raleigh); Burks in Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera); Krombein, 1955b:71 (as synonym of *Oxybelus laetus*); R. Bohart and Schlinger, 1956c:162 (good species, in checklist of North American species), 1957:113 (in revision of Californian *Oxybelus*); Krombein, 1958f:201, 202 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus carolinus* reported), 202, 204 (synonymy with *Oxybelus heterolepis*, *heterolepis* var. *defectus*, *texanus* and *unicus* reported); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera); Burk, 1982:92 (preys predominantly on fly males congregating around its nest in search of females); R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Ahlstrom, 1995:110 (in checklist of insects of North Carolina); D. Peckham and Hook, 1980:559 (nesting habits); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed).

*Oxybelus packardii* var. *texanus* Robertson, 1889:81, ♀, ♂. Lectotype: ♀, USA: Texas: no specific locality (ANSP), designated by Cresson, 1928:56. Synonymized with *Oxybelus laetus* by Krombein, 1955b:71 and with *Oxybelus packardii* by R. Bohart and Schlinger, 1956c:162. – Dalla Torre, 1897:646 (in catalog of world Sphecidae); Burks in Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera).

*Oxybelus heterolepis* Cockerell and Baker, 1896:22, ♂. Holotype: ♂, USA: New Mexico: Albuquerque (USNM). Synonymized with *Oxybelus laetus* by Krombein, 1955b:71 and with *Oxybelus packardii* by R. Bohart and Schlinger, 1956c:162. – Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Burks in Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera).

*Oxybelus heterolepis* var. *defectus* Cockerell and Baker, 1896:22, ♂. USA: New Mexico: Albuquerque (USNM). Synonymized with *Oxybelus laetus* by Krombein, 1955b:71 and with *Oxybelus packardii* by R. Bohart and Schlinger, 1956c:162. – Burks in Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera). – **As *Oxybelus defectus*** [lapsus]: Ashmead, 1899d:162 (in checklist of North American Oxybelidae).

*Oxybelus unicus* Mickel, 1918a:323, ♀. Holotype: ♀, USA: Nebraska: Mitchell (UNL). Synonymized with *Oxybelus laetus* by Krombein, 1955b:71 and with *Oxybelus packardii* by R. Bohart and Schlinger, 1956c:162. – Mickel, 1918b:368 (in catalog of Nebraskan Sphecidae); Hendrickson, 1930:158 (Iowa); Burks in Muesebeck, Krombein, and Townes, 1951:1034 (in catalog of North American Hymenoptera); Muma, 1952:22 (holotype in UNL), 27 (paratypes in UNL).

*Oxybelus carolinus* Banks, 1921:18, ♀. Holotype: ♀, USA: North Carolina: Southern Pines (MCZ). Synonymized with *Oxybelus packardii* by R. Bohart and Schlinger, 1956c:162. – Brimley, 1938:450 (North Carolina: Raleigh, as *carolina*); Burks in Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera).

### 173. *paenemarginatus* Viereck

*Notoglossa paenemarginata* Viereck, 1906:214, ♀. Holotype: ♀, USA: Kansas: Clark County: no specific locality (KU). – As *Oxybelus paenemarginatus*: Burks in Muesebeck, Krombein, and Townes, 1951:1033 (new generic assignment, in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:162 (in checklist of North American *Oxybelus*, as *paenemarginatum*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of North American Hymenoptera).

### 174. *pallens* Kazenas

*Oxybelus pallens* Kazenas, 1990:63, ♀. Holotype: ♀, Kazakhstan: 17 km northwest of Bakanas (ZIN). – Esenbekova and Kazenas, 2000:44 (southeastern Kazakhstan: 3 km northeast of Borandysu); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:92 (geographic distribution, collecting localities in Kazakhstan), 2004a:212 (description of ♂), 2008a:103 (southeastern Kazakhstan: Ili River valley: 17 km northwest of Bakanas, 3 km northeast of Borandysu), 2013b:497 (southeastern Kazakhstan: Borandysu, 3 km northeast and 30 km east of Chilik).

### 175. *pallidus* Arnold

*Oxybelus pallidus* Arnold, 1927:101, ♀, ♂. Syntypes: Tanzania: Kilimatinde: Kihu River (ZMHU). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae), 1951:166 (Ethiopia: Ufdem); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Dollfuss, 2008a:485 (Algeria: Tassili n'Ajjer, Kenya: Voi; Morocco: Mhamid 100 km south of Zagora, Tanzania: Arusha Region, Mbuyuni east of Iringa).

### 176. *palmetorum* de Beaumont

*Oxybelus palmetorum* de Beaumont, 1950f:416, ♀. Holotype: ♀, Algeria: Tadjemout (BMNH). – de Beaumont, 1953a:176 (Mauritania), 1958b:68 (Algeria: Tassili des Ajjer); Pulawski, 1964:147 (Egypt: Abu Rawash, Aswan, Ghiza); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Guichard, 1990b:282 (Saudi Arabia); Leclercq, 1993c:48 (in catalog of western Palearctic Crabronini and Oxybelini); Gadallah and Assery, 2004a:216 (Saudi Arabia: in key to Sphecidae of Jeddah Region); Gadallah and Assery, 2004a:226 (in catalog of Sphecidae of Saudi Arabia); Roche, 2007a:103 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Dollfuss, 2008a:486 (Morocco: Mhamid 80 km south of Zagora, 5 km south of Tafa, 6 km south of Zagora); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:352 (in new catalog of Sphecidae of Saudi Arabia); Gadallah, 2020b:43 (in list of aculeate wasps of Arabian Peninsula).

*Oxybelus deserticola* de Beaumont, 1950f:417, ♂. Holotype: ♂, Algeria: Laghouat (BMNH). Synonymized with *Oxybelus palmetorum* by de Beaumont, 1953a:176.

### 177. *paraagilis* Manikandan, Dey, and Farooqi

*Oxybelus paraagilis* Manikandan, Dey, and Farooqi, 1999:5, ♂. Holotype: ♂, India: Punjab: Jammu (Indian Agricultural Research Institute, New Delhi). – Manikandan, Dey, and Farooqi, 1999:13 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Mawadda and Girish Kumar, 2023a:109 (in checklist of Crabroninae of Northern India).

### 178. *paracochise* R. Bohart and Schlinger

*Oxybelus paracochise* R. Bohart and Schlinger, 1956a:37, ♀, ♂. Holotype: ♂, USA: Arizona: Sonoita (CAS). – R. Bohart and Schlinger, 1956c:162 (in checklist of North American *Oxybelus*), 1957:107 (in key to North American *Oxybelus*); Krombein, 1958f:202 (in supplement to catalog of North American Hymenoptera: Arizona, Texas, northern Mexico); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1655 (in catalog of

North American Hymenoptera); R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae).

### 179. *paraguayensis* Brèthes

*Oxybelus paraguayensis* Brèthes, 1909d:239, ♀. Holotype or syntypes: ♀, Paraguay: San Bernardino (MACN). – Schrottky, 1913a:234 (Paraguay); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Genise, 1990:27 (type material in MACN); R. Bohart, 1993a:191 (diagnostic characters), 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:44 (in catalog of Neotropical Crabronidae); Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru).

*Oxybelus Jörgenseni* Brèthes: Jörgensen, 1912:294, nomen nudum (Argentina: Mendoza Province).

*Oxybelus jörgenseni* Brèthes, 1913:141, ♀ (as *Jörgenseni*, incorrect original capitalization and diacritic mark). Holotype: ♀, Argentina: Mendoza: no specific locality (MACN). Synonymized with *Oxybelus paraguayensis* by R. Bohart, 1993a:191. – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Genise, 1990:26 (type material in MACN); R. Bohart, 1992:161 (in revision of Chilean *Oxybelus*).

### 180. *paramenoni* Manikandan, Dey, and Farooqi

*Oxybelus paramenoni* Manikandan, Dey, and Farooqi, 1998:116, ♂. Holotype: ♂, India: Delhi (Indian Agricultural Research Institute, New Delhi). – Manikandan, Dey, and Farooqi, 1999:12 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Mawadda and Girish Kumar, 2023a:110 (in checklist of Crabroninae of Northern India).

### 181. *paratransiens* Manikandan, Dey, and Farooqi

*Oxybelus paratransiens* Manikandan, Dey, and Farooqi, 1998:119, ♀. Holotype: ♀, India: Bihar: Chapra (Indian Agricultural Research Institute, New Delhi). – Manikandan, Dey, and Farooqi, 1999:12 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Dollfuss, 2008a:486 (India: Uttaranchal: 13 km northwest of Nainital); Mawadda and Girish Kumar, 2023a:110 (in checklist of Crabroninae of Northern India).

### 182. *paratridentatus* Manikandan, Dey, and Farooqi

*Oxybelus paratridentatus* Manikandan, Dey, and Farooqi, 1999:8, ♂. Holotype: ♂, India: Bihar: Banhar (Indian Agricultural Research Institute, New Delhi). – Manikandan, Dey, and Farooqi, 1999:13 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Mawadda and Girish Kumar, 2023a:110 (in checklist of Crabroninae of Northern India).

### 183. *parvus* Cresson

*Oxybelus parvus* Cresson, 1865b:476, ♀. Holotype: ♀, USA: Colorado: no specific locality (ANSP). – Packard, 1867:436 (in revision of North American *Oxybelus*); Kohl, 1884b:114 (in list of known *Oxybelus*); Cresson, 1887:286 (in catalog of North American Hymenoptera), 1916:103 (holotype in ANSP); R. Bohart and Schlinger, 1956c:162 (in checklist of North American *Oxybelus*, as *parvum*), 1957:127 (in revision of Californian *Oxybelus*, as *parvum*); Krombein, 1958f:201 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus coloradensis* reported), 202 (synonymy with *Oxybelus incisura* and *intermedius* reported; USA west of 100°W, Nebraska and Utah to southern California and northern Mexico); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1656 (in catalog of North American Hymenoptera); Peckham, 1985:868 (nesting habits); U. Frommer, 1988:94 (California: Riverside County: Deep Canyon; as *parvum*); Spofford, Kurczewski, and Downes, 1989:258 (reference to publication on nest parasite *Senotainia nana* Coquillett, a miltogrammine fly); R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument, as *parvum*); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado

Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed).

*Oxybelus intermedius* C. Baker, 1896b:160, ♀. Holotype or syntypes: ♀, USA: Colorado: Fort Collins (USNM). Synonymized with *Oxybelus parvus* by R. Bohart and Schlinger, 1956c:162. – Pate, 1930b:40 (first record from New York State: Ithaca); Krombein, 1951a:143 (Virginia: Dunn Loring; visiting tulip-tree honeydew); Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera). – **As *Notoglossa intermedia***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae); H. Smith, 1908b:406 (in revision of Nebraskan Sphecidae); Mickel, 1918b:364 (in catalog of Nebraskan Sphecidae).

*Oxybelus coloradensis* C. Baker, 1896b:160, ♂. Holotype or syntypes: ♂, USA: Colorado: Fort Collins (USNM). Synonymized with *Oxybelus intermedius* by Krombein, 1955b:72, and with *Oxybelus parvus* by R. Bohart and Schlinger, 1956c:163. – Cockerell and Baker, 1896:23 (New Mexico: Las Cruces); Strickland, 1947:127 (Canada: Alberta: Medicine Hat, Lethbridge); Burks *in* Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera). – **As *Notoglossa coloradensis***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae).

*Notoglossa incisura* Mickel, 1916a:430, ♂. Holotype: ♂, USA: Nebraska: Harrison (UNL). Synonymized with *Oxybelus intermedius* by Krombein, 1955b:72, and with *Oxybelus parvus* by R. Bohart and Schlinger, 1956c:163. – Mickel, 1918b:364 (in catalog of Nebraskan Sphecidae); Muma, 1952:21 (holotype in UNL), 27 (paratypes in UNL). – **As *Oxybelus incisurus***: Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (new generic assignment, in catalog of North American Hymenoptera, as *incisura*).

#### 184. *paucipunctatus* Arnold

*Oxybelus paucipunctatus* Arnold, 1927:84, ♀, ♂. Syntypes: Zimbabwe: Sawmills (SAM); South Africa: Eastern Cape Province: Willowmore (TMP). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Hancock, Chahwanda, and Mhlanga, 1995:39 (syntypes in Bulawayo Museum); Dollfuss, 2008a:486 (locality records from Kenya, Malawi, Namibia, and South Africa).

#### 185. *pectoralis* F. Morawitz

*Oxybelus pectoralis* F. Morawitz, 1893b:416, ♀. Holotype or syntypes: ♀, Tajikistan: Varzaminor (ZIN). – Dalla Torre, 1897:646 (in catalog of world Sphecidae); Gussakovskij, 1935:434 (Tajikistan); Myartseva, 1963b:61 (Turkmenistan: lower Murgab River), 1965:96 (Turkmenistan: Akibay and Bayram-Ali District), 1972:95 (Turkmenistan); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Esenbekova and Kazenas, 2000:45 (southeastern Kazakhstan: near Bakanas, 3 km northeast and 15 km southeast of Borandysu, 2 km north of Kokpek Valley, as *pectotalis*); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:92 (geographic distribution, collecting localities in Kazakhstan), 2004b:106 (Kazakhstan: western Tien Shan); Dollfuss, 2008a:486 (locality records from Kazakhstan, Kyrgyzstan, Mongolia, Turkmenistan, and Uzbekistan); Kazenas, 2013b:497 (southeastern Kazakstan: Borandysu, 15 km southeast of Borandysu, 3 km northeast, 30 km east, and 30 km southeast of Chilik, Kokpek canyon), 2014a:136 (Kazakhstan: Karatau Mountain Range); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

#### 186. *penai* R. Bohart

*Oxybelus penai* R. Bohart, 1992:162, ♀, ♂. Holotype: ♀, Chile: Valparaiso: Concon (Catolica Mus., Valparaiso). – Amaranante, 2002:45 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:487 (Chile: Talca, Nahuelbuta 30 km west of Angol).

#### 187. *peringueyi* de Saussure

*Oxybelus peringueyi* de Saussure, 1892:563, ♀. Holotype or syntypes: ♀: South Africa: no specific locality (MHNG). – Dalla Torre, 1897:646 (in catalog of world Sphecidae, as *peringuezii*); W. Schulz, 1906:210 (correct spelling is *Péringueyi*); Arnold, 1927:92 (in revision of southern African *Oxybelus*, South Africa: Cape Province, Orange),

1930:14 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Gess, 1981:20 (South Africa: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils); S. Gess and F. Gess, 2003:104 (South Africa: visiting flowers of *Athanasia trifurcata* (L.) L., *Pentzia suffruticosa* (L.) Hutch. ex Merxm., *Senecio rosmarinifolius* L. f., Asteraceae, and *Leucadendron* sp., Proteaceae), 2006:10 (South Africa: visiting flowers of *Leucadendron* sp., Proteaceae); Dollfuss, 2008a:487 (locality records from Malawi and South Africa).

### 188. *perornatus* Arnold

*Oxybelus perornatus* Arnold, 1945:186, ♀, ♂. Syntypes: Madagascar: Bekily (MNHN). – Leclercq, 1961d:118 (Madagascar); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Leclercq, 1990b:120 (Madagascar); Pulawski, 2003b:797 (in checklist of Malagasy Sphecidae); Madl, 2014a:959 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

### 189. *peruensis* R. Bohart

*Oxybelus peruensis* R. Bohart, 1993d:73, ♀, ♂. Holotype: ♀, Peru: Huanuco: Tingo María (UCD). – R. Bohart, 1993d:67 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru).

### 190. *peruvicus* R. Bohart

*Oxybelus peruvicus* R. Bohart, 1993d:73, ♀, ♂. Holotype: ♀, Peru: Huanuco: Tingo María (CAS). – R. Bohart, 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America), 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution) and 163 (in key to Central American and Caribbean *Oxybelus*); Hanson and Menke, 1995:640 (known from Costa Rica); Cambra and Santos, 2000:53 (Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:487 (Venezuela: Bolivar: Río Caroni 120 km west of Santa Elena); Rasmussen and Asenjo, 2009:11 (in checklist of Crabronidae of Peru); Silvestre, Demétrio, Trad, de Oliveira Lima, Auko, and de Souza, 2014:68 (Brazil: Mato Grosso do Sul: dry forests in Bodoquena Mountain Range and Brazilian Chaco); Trad and Silvestre, 2017:5 (Brazil: Mato Grosso do Sul).

### 191. *philippinensis* Pate

*Oxybelus philippinensis* Pate, 1938b:383, ♀ (as *philippinense*, incorrect original termination). Holotype: ♀, Philippines: Luzon: Los Baños (ANSP). – Pate, 1938b:392 (in list of Oriental Oxybelini); H. Allen, 1995:15 (holotype in ANSP); Baltazar, 1966:359 (in catalog of Hymenoptera of Philippines, as *Oxybelus philippinense philippinense*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

### *ssp. reticulatus* Pate

*Oxybelus philippinense* forma *reticulatus* Pate, 1938b:385, ♀ (as *reticulatum*, incorrect original termination). Holotype: ♀, Philippines: Mindanao: Kolambugan (USNM). – Pate, 1938b:392 (in list of Oriental Oxybelini); Baltazar, 1966:359 (in catalog of Hymenoptera of Philippines). – As *Oxybelus philippinensis reticulatus*: R. Bohart and Menke, 1976:369 (new status, in checklist of world Sphecidae); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

### 192. *phyllophorus* Kohl

*Oxybelus phyllophorus* Kohl, 1898a:355, ♀, ♂. Syntypes: Egypt: Cairo and Adelen-Insel opposite Dahshur, not Darfur (NHMW and TMB). – Honoré, 1942:51 (in catalog of Egyptian Sphecidae); de Beaumont, 1950f:413 (southern Algeria), 1956a:212 (Tibesti), 1958b:68 (Algeria: Tassili des Ajjer); Pulawski, 1964:147 (Egypt: Aswan, Maadi); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Leclercq, 1993c:48 (Algeria: Ahaggar: Oued Tekouiat); Roche, 2007a:102 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae);

Dollfuss, 2008a:487 (Morocco: 5 km north of Agadir, Mhamid 100 km south of Zagora, Tagounite 60 km south of Zagora, 5 km south of Zagora); Schmid-Egger, 2011b:559 (in key to *Oxybelus lamellatus* species group of Arabian Peninsula; United Arab Emirates: Al-Ajban, Dubai/al-Awir, Dubai/Nakhalai, Mahafiz), 562 (color photographs of female and of apex of thorax and propodeum), 2014:586 (United Arab Emirates); Gadallah, 2020b:43 (in list of aculeate wasps of Arabian Peninsula); Rezaei, Fallahzadeh, Dousti, and Saghaei, 2020b:12 (Iran: Fars: Larestan: Karmostaj at 27°31'55"N 54°26'01"E); Gadallah, Abu el-Ghiet, and Edmardash, 2021:1711 (first record from Saudi Arabia: Jazan Province); Gadallah and Abu El-Ghiet, 2024:87 (Saudi Arabia: Jazan Province: Damad).

### 193. *pictisentis* Cameron

*Oxybelus aurifrons* Cameron, 1902c:287, ♀, junior primary homonym of *Oxybelus aurifrons* F. Smith, 1856. Holotype or syntypes: ♀, India: Gujarat: Deesa (BMNH). Synonymized with *Oxybelus pictisentis* by R. Turner, 1917e:190. – Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Mawadda and Girish Kumar, 2023a:110 (in checklist of Crabroninae of Northern India).

*Oxybelus pictisentis* Cameron, 1908b:302, ♀. Holotype or syntypes: ♀, India: Gujarat: Deesa (BMNH). – Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); R. Turner, 1917e:190 (recognition characters, common in Northern India and Punjab, as *pictiscutis*); Pate, 1938b:388 and 392 (in list of Oriental *Oxybelini*); Tsuneki, 1963c:43 (Thailand, as *pictiscutis*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Manikandan, Dey, and Farooqi, 1999:13 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Dollfuss, 2008a:487 (Laos: Bolikhamsai: Ban Nape area).

### 194. *pictus* Arnold

*Oxybelus pictus* Arnold, 1927:115, ♀. Holotype: ♀, Zimbabwe: Sawmills (originally R. Stevenson coll., now SAM). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae), 1951:166 (Mali: Tillembeya); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae).

### 195. *pilosus* Arnold

*Oxybelus pilosus* Arnold, 1927:114, ♀, ♂. Syntypes: Ethiopia: Harar (BMNH). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae); Scott in Arnold, 1933a:369 (Ethiopia: Harar District); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Bonelli, 1976:231 (nesting habits); Steiner, 1986:105 (references to publications on nesting habits); Dollfuss, 2008a:487 (Malawi: Dedza 85 km southeast of Lilongwe, Zambia: 45 km southeast of Kitwe, 60 km west of Solwezi).

### 196. *pitanta* Pate

*Oxybelus pitanta* Pate, 1943h:123, ♂. Holotype: ♂, USA: California: San Bernardino County: Cronise (ANSP). – Burks in Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:163 (in checklist of North American *Oxybelus*), 1957:129 (in revision of Californian *Oxybelus*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1656 (in catalog of North American Hymenoptera); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Blow Sand Mountains); R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); H. Allen, 1995:16 (holotype in ANSP); Amarante, 2002:45 (in catalog of Neotropical Crabronidae, authorship attributed to Cresson); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Amarante, 2005a:11 (correction to his 2002 catalog).

### 197. *platensis* Brèthes

*Oxybelus platensis* Brèthes, 1902:195, ♀. Syntypes: Argentina: Buenos Aires: San Martin near Buenos Aires (lost: R. Bohart, 1993a:191). Neotype: ♀, Argentina: Lonacepin (La Plata Mus.), designated by R. Bohart, 1993a:191. – Schrottky, 1903b:177 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay); Jörgensen, 1912:294

(Argentina: Mendoza Province); Brèthes, 1913:145 (additional description); Schrottky, 1913a:234 (Argentina: Buenos Aires); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Steiner, 1986:105 (references to publications on nesting habits); Genise, 1990:26 (type material in MACN); R. Bohart, 1993a:191 (diagnostic characters), 1993d:67 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:45 (in catalog of Neotropical Crabronidae), 2005a:11 (correction to his 2002 catalog); Dollfuss, 2008a:487 (Argentina: Buenos Aires: San Osidos in Sierra de la Ventana).

*Oxybelus tarijensis* Brèthes, 1913:144, ♀. Lectotype: ♀, Argentina: Tarija (MACN), designated by R. Bohart, 1993a:191. Synonymized with *Oxybelus platensis* by R. Bohart, 1993a:191. – R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Genise, 1990:27 (type material in MACN).

#### 198. *plaumanni* R. Bohart

*Oxybelus plaumanni* R. Bohart, 1993d:74, ♀, ♂. Holotype: ♀, Brazil: Santa Catarina: Nova Teutonia (UCD). – R. Bohart, 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Menezes de Jesus, Onody, dos Santos Ramos, de Oliveira Andrade, Doria dos Santos, and Ferreira Brandão, 2019:3 (paratypes in Mus. Zool. Univ. São Paulo).

#### 199. *polyacanthus* A. Costa

*Oxybelus polyacanthus* A. Costa, 1882a:197, [♂]. Holotype or syntypes: ♂, Italy: Sardegna: no specific locality (Napoli). – Dalla Torre, 1897:646 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Pagliano, 1990:79 (in catalog of Italian Sphecidae); Leclercq, 1993c:48 (unrecognizable species); Pagliano and Negrisolò, 2005:489 (in Sphecid Fauna of Italy, as nomen dubium).

#### 200. *polyceros* Pate

*Oxybelus polyceros* Pate, 1943g:284, ♀, ♂. Holotype: ♂, Venezuela: Carabobo: San Esteban (ANSP). Paratypes: Colombia, Ecuador, French Guiana, Trinidad. – R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Callan, 1991a:12 (Trinidad); H. Allen, 1995:16 (holotype in ANSP); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Starr and Hook, 2003:19 (in catalog of Aculeata of Trinidad, West Indies).

#### 201. *propodealis* R. Bohart

*Oxybelus propodealis* R. Bohart, 1993e:166, ♂. Holotype: ♂, Honduras: Zamora (USNM). – R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*), 163 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:45 (in catalog of Neotropical Crabronidae).

#### 202. *pulawskii* Tsuneki

*Oxybelus pulawskii* Tsuneki, 1972a:169, ♂. Holotype: ♂, Mongolia: South Gobi Aymag: Tahila ul (TMB). – R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Dollfuss, 2008a:488 (description of ♀, locality records from Mongolia).

#### 203. *pygidialis* Gussakovskij

*Oxybelus pygidialis* Gussakovskij, 1952:257, ♀, ♂. Syntypes: Tajikistan: Djilikul (ZIN). – R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia).

#### 204. *pyrurus* (Rohwer)

*Notoglossa pyrura* Rohwer, 1914:520, ♀, ♂. Holotype: sex not stated, Guatemala: Quirigua (USNM). – **As *Oxybelus pyrura***: R. Bohart and Schlinger, 1956c:163 (in checklist of North American *Oxybelus*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Vanoye-Eligio, Meléndez-

Ramírez, Ayala, Navarro, and Delfín-González, 2014:638 (Mexico: Yucatán Peninsula). – As *Oxybelus pyrurus*: Amarante, 2002:45 (in catalog of Neotropical Crabronidae).

### 205. *quatuordecimnotatus* Jurine

*Oxybelus quatuordecimnotatus* Jurine, 1807:217 and pl. 11, Fig. 14, ♂ (as *14 notatus*, incorrect original spelling). Holotype or syntypes: ♂, Europe, probably Switzerland: no specific locality (lost: Frei-Gessner, Kohl, and Kriechbaumer, 1882:395). – Olivier, 1812b:596 (redescription, as *quatuordecim notatus* in the text); Vander Linden, 1829:39 (bibliographic references, southern France, Greece, Italy); Shuckard, 1837a:112 (in revision of British Aculeata, as *quatuordecimguttatus*); Herrich-Schaeffer, 1840:295 (Germany: Bayern: Regensburg area); Ghiliani, 1842:25 (listed from Italy: Sicilia, as *14-guttatus*); Dahlbom, 1844:270 (original description copied, as *14-guttatus*), 1845:513 (in key to *Oxybelus*, as *14-guttatus*); Lepeletier de Saint Fargeau, 1845:220 (in revision of world Hymenoptera, Paris area; as *quator-decimnotatus*); Eversmann, 1849:416 (Russia: Ural foothills); F. Smith, 1851c:23 (Great Britain: unknown locality, as *14-guttatus*); Wesmael, 1852:630 (interpretation of species); F. Smith, 1853:63 (in checklist of British Hymenoptera), 1856:383 (in catalog of Hymenoptera in British Museum, as *quatuordecim-notatus*); A. Costa, 1858:20 (Italy: Campania: Monti Partenii in Benevento Region, as *14-notatus*); F. Smith, 1858c:165 (in review of British Aculeata, redescription, as *14-notatus*); A. Morawitz, 1864:458 (Russia: Sankt-Petersburg); A. Costa, 1867c:148 (in revision of Italian Sphecidae); Gerstaecker, 1867a:62 (in revision of *Oxybelus*); Kirchner, 1867:223 (in catalog of European Hymenoptera); Chevrier, 1868:402 (in revision of Swiss *Oxybelus*); Palma, 1869:41 (Italy: Sicilia settentrionale, as *14-guttatus*); Thomson, 1870:179 (in revision of Swedish Crabroninae, as *14-guttatus*); A. Costa, 1871b:77 (in revision of Italian Sphecidae); F. Smith, 1871b:17 (in catalog of British Aculeata); Dours, 1874:153 (in catalog of Hymenoptera of France); Marquet, 1875:210 (France: Haute-Garonne: Toulouse); Taschenberg, 1875:380 (Germany: Halle); Radoszkowski, 1877:75 (Uzbekistan: Samarkand; Tajikistan: Varzaminor; Kyrgyzstan: Osh; Kazakhstan: Bayrakum); Kohl, 1880:143 (Austria: Tirol, and Italy: Trentino–Alto Adige); Magretti, 1881:213 (Italy: Lombardia), 271 (in list of species discussed in this paper); Marquet, 1881:185 (southern France); A. Costa, 1882b:23 (Italy: Sardegna; as *14-guttatus*), 1883:58 (Italy: Sardegna: Tissi; as *14-notatus*), 90 (description of aberrant specimen, as *quadrinotatus* and *14-notatus*); Kohl, 1883e:662 (Switzerland); von Heyden, 1884:119 (Germany: Frankfurt am Main area, as *14-notatus* Olivier); Wüstnei, 1886:39 (Germany: Schleswig Holstein: Uetersen near Elmshorn); Riggio and De Stefani-Perez, 1888:149 (Italy: Island of Ustica); F. Morawitz, 1889a:161 (China or Mongolia, as *14-punctatus*); F. Gasperini, 1889:68 (Dalmatia: Spalato, now Croatia: Split, as *quatuordecimnotatus*); Morawitz, 1891a:211 (Russia: Astrakhan Governorate); Baldini, 1894:73 (Italy: Modena area); Krieger, 1894:11 (Germany: Kingdom of Saxony: Leipzig); F. Morawitz, 1894:345 (Turkmenistan: Serax); De Stefani Perez, 1895:228 (Italy: in catalog of Sicilian Hymenoptera); Marquet, 1896:24 (in revision of *Oxybelus* of France); Schmiedeknecht, 1896:149 (Algeria: Oran Province); Acloque, 1897:92 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:647 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Croatia); Flamary, 1898:45 (France: Saône-et-Loire: Mâcon area); Chyzer, 1902:34 (Hungary); Ferton, 1902:516 (prey, prey carrying); Kokujev, 1902:11 (Turkmenistan: Merv, now Mary); Antiga and Bofill, 1904:28 (Spain: Cataluña Province); E. Saunders, 1904c:639 (Spain, as *14-notatus*); W. Schulz, 1904b:101 (Austria, Croatia); Mantero, 1905:71 (Italy: Toscana: Isola del Giglio); W. Schulz, 1906:210 (Dahlbom's use of the name *quatuordecimnotatus* and *quatuordecimguttatus*); Schmiedeknecht, 1907:202, 205 (in key to Hymenoptera of Central Europe); Cecconi, 1908:23 (Italy: Puglia: Isole Tremiti); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Ferton, 1908:564 (prey); Dittrich, 1911b:20 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:44 (Italy: Trieste area); Mantero, 1911:73 (Italy: Sardegna: Isola dell'Asinara, determination tentative); Morice, 1911:132 (Algeria); Schirmer, 1912:165 (Germany: Berlin area); Alfken, 1914:275 (northwestern Germany); Zilahi Kiss, 1915:80 (Hungary: Bethlen, Boksánbánya, Debreczen, Felső-Ilosva, Nagyilonda); Morice, 1917:272 (Shuckard's, 1837 specimens are *Oxybelus quatuordecimnotatus*); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); Kerenskiy, 1919:33 (Russia: Penza Gov-

ernorate); O. Meyer, 1919:149 (Germany: Posen Province, now Poland: Poznań Region); A. Wagner, 1920:38 (Germany: Lower Elbe region); Morice, 1921:824 (Iran: Qazvin); Dubois, 1922:191, 192, 193 (in key to Belgian Sphecidae); Hedicke, 1922:270 (Germany: Brandenburg: Gross Machnower Weinberg); Maidl, 1922:74 (Croatia); Berland, 1925d:210 (in Sphecidae Fauna of France); Coulon, 1925:122 (France: Oise, Germany; Morocco: Tanger); Lauterborn, 1925:355 (Germany: Nordrhein-Westfalen: Neuhofen); K. Strohm, 1925:211 (Germany: Baden-Württemberg: Ihringen); Chevalier, 1926a:11 (nesting habits); von Schulthess, 1926b:219 (Libya: Benghazi); Kuznetsov-Ugamskij, 1927:246 (Kazakhstan: Aulie-Ata, now Dzhambul); F. Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley, as *XIV notatus*); Benoist, 1928:411 (France: Basses-Alpes: Saint-Pons); Grandi, 1929:289 (Italy: Toscana: valle della Limentra), 1930: 341 (Italy: Toscana: Maremma); A. Müller, 1930:181 (Romania: Măcin; Ukraine: Tarutino, as *XIV-notatus*); Maidl in Schmiedeknecht, 1930:664, 665 (in keys to Hymenoptera of North and Central Europe); Dusmet y Alonso, 1931:9 (Portugal: Évora, Mitra); Grandi, 1931:58 (Italy: Toscana: Vallata delle Pozze near Le Mandriole); Giordani Soika, 1932a:23 (Italy: Lido di Venezia); Gussakovskij, 1932:28 (Russia: Primorskiy Krai); Bernard, 1933:62 (France: Drôme: Dieulefit); Bischoff, 1933:4 (Morocco); Drogoszewski, 1933:118 (Poland: Łowicz); Nadig, 1933:77 (Morocco); Bondroit, 1934:62 (Belgium: Ostende); Giner Marí, 1934:136 (Spain); Grandi, 1934:128 (Italy: Lazio: Acilia, and Toscana: San Vincenzo); Guiglia, 1934b:306 (Libya: bibliography and summary of locality records); Gussakovskij, 1934a:10 (China: Szechuan); Bernard, 1935:67 (France: Var: Fréjus area); Gussakovskij, 1935:434 (Tajikistan); Crèvecoeur and Maréchal, 1936:257 (in catalog of Belgian Hymenoptera); Goebel, 1937:39 (Poland: Poznań District: Poznań-Dębina, Puszczykowo, Strzeszyn, Strzeszynek); Zavadil, Šusterka, and Bat'a, 1937:173 (in catalog of Sphecidae of Czechoslovakia); Guiglia, 1938b:10 (Italy: Sardegna); Blüthgen, 1937:235 (Germany: Saale River valley: Eulau); Móczár, 1938c:81 (Hungary: Kőszeg Hills, as *14-notatus*); A. Wagner, 1938a:118 (northwestern Germany); Móczár, 1939:5 (Hungary: Jászberény, as *quattuordecimnotatus*); Benno, 1940a:205 (Netherlands: Drunen); Struve, 1940:823 (Germany: Island of Borkum); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Guiglia, 1941c:168 (Italy: Calabria: Grande Sila); Leclercq, 1941b:16 (Belgium: Liège area); Paul, 1941:38 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1034 (Germany: Bayern: Bamberg area); de Beaumont, 1942b:427 (in revision of Swiss *Oxybelus*); Guiglia, 1942a:63 (Greece: Island of Rhodes: Villanova); Yasumatsu, 1942c:114 (China: Beijing); Giner Marí, 1943a:259 (in Sphecidae Fauna of Spain); Guiglia, 1943b:73 (Albania: Kopluku); Giordani Soika, 1944:8 (Italy: Sicilia: Falcone); Guiglia, 1944a:151 (Cyprus: Cherkas), 1944b:42 (Italy); Šnoflák, 1944a:143 (Czech Republic: serpentine steppe near Mohelno, as *quattuordecimnotatus*); Giner Marí, 1945b:360 (Morocco: Ain Zorah); Deleurance, 1946b:64 (nest vertical, prey impaled on sting during transportation, list of prey), 67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); Guiglia, 1947a:28 (Italy: Piano Maiuri); Balthasar, 1948:141 (Slovakia: Kovačov, Parkan); Šnoflák in Zavadil and Šnoflák, 1948:36, 40 (in key to Czechoslovakian Sphecidae); P. Verhoeff, 1948:188 (in revision of western European *Oxybelus*); de Beaumont, 1950f:420 (southern Algeria); Noskiewicz and Chudoba, 1950:311 (Poland: in revision of *Oxybelus* of Śląsk Region); Pittioni, 1950:29 (Cyprus); Szulczewski, 1950:103 (Poland: Wielkopolski National Park 15 km south of Poznań); Bat'a, 1952:167 (Czech Republic); de Beaumont, 1952b:90, 91 (Marquet's, 1896 specimens); Guiglia, 1953a:106 (in revision of Italian *Oxybelus*); Głowacki, 1953:518 (Poland: Podkowa Leśna); Móczár, 1953:311 (Hungary); Nouvel and Ribaut, 1953:184 (France: Central Pyrénées: common in Garonne River valley); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romburg); Blüthgen, 1954:146, 152 (in key to Central European *Oxybelus*, as *quattuordecimnotatus*), 153 (common in sandy areas); de Beaumont, 1954e:98 (Italy); Grandi, 1954:244 (Italy); Hertzog, 1954:102 (France: Bouches-du-Rhône: Camargue); Vogrin, 1955:45 (Yugoslavia); Bytinski-Salz, 1956:227 (Turkey: Dinar, Elmali, Istanbul, Karapınar, Ulu Dag); Morel, Nouvel, and Ribaut, 1956:340 (France: Département des Pyrénées-Orientales); de Beaumont, 1957a:156 (Morocco; geographic variation; as *quattuordecimnotatus*), 1957b:139 (northern Iran; as *14-notatus*); Grandi, 1957:392 (Italy); Zirngiebl, 1957:178 (Germany: Rheinland-Pfalz: Pfalz region, as *XIV-notatus*); Benno, 1958b:18 (in review of Dutch Sphecidae); Móczár, 1958b:210 (Hungary: collecting localities, as *14-notatus*), 1958c:286, 291 (in key to western Palearctic *Oxybelus*, as *14-notatus*), 296 (in revision of *Oxybelus* of Hungary); Nouvel and Ribaut,

1958:17 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Puławski, 1958a:189 (Bulgaria: Kniazhevo near Sofia, Sandanski, Varna); Ceballos, 1959:232 (in supplement to catalog of Spanish Sphecidae); Scobiola Palade, 1959:499 (Romania: Constanța Region: Agigea Vasile Roaită); Suárez, 1959:60 (Spain: Almería Province); Wolf, 1959b:35 (Germany: Nassau); de Beaumont, 1960a:23 (Greece: Island of Rhodes); Noskiewicz and Puławski, 1960:163, 165 (in key to Polish Sphecidae); de Beaumont, 1961b:276 (Afghanistan), 1961c:52 (Greece: Island of Crete), 1962b:29 (Spain); Grandi, 1962:99 (Italy); Wengris, 1962:207 (Lithuania: Vilnius area); de Beaumont, 1963c:417 (Afghanistan); Lehrer and Scutaru, 1963:286 (Romania: Moldova: Găureni in Iași District); Scobiola, 1963:825 (Romania: Periprava in Danube delta, as *quatordecimpunctata*); Ceballos, 1964:95 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:162 (in Sphecid Fauna of Switzerland); Hüsing and Jäger, 1964:192 (Germany: Sachsen-Anhalt: Nietleben near Halle, as *quatuordecimnotatus*), 196 (visiting flowers of *Daucus carota* L., *Falcaria vulgaris* Bernh., and *Pastinaca sativa* L., all Apiaceae); de Beaumont, 1965a:62 (Greece); B. Klug, 1965:144 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Mingo Pérez, 1966:99 (in revision of *Oxybelus* of Iberian Peninsula, as *14-notatus*); Balthasar, M. Hrubant, and E. Hrubant, 1967:170 (Bulgaria: Slanchev Bryag near Nesebar); Benno, 1967:39 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:365 (Turkey); Gauss, 1967:560 (Germany: Baden-Württemberg); Niedl and Deneš, 1967:76 (Czech Republic: Třeboň area); Scobiola-Palade, 1967a:162 (Romania: Constanța District: Hagieni; as *quadridecimpunctatus*), 1967b:50 (Romania); Benedek, 1968:79 (Hungary, floral records); Scobiola-Palade, 1968b:143 (Romania: Island of Letea in delta of Danube; as *quatordecimpunctatus*), 1968c:386 (Romania: eleven localities); Benedek, 1969a:85 (Hungary: marshy meadow), 1969b:421 (Hungary: Csopak, collected in vicinity of aphid *Hyalopteritena pruni* (Geoffroy)); Dathe, 1969:438 (Germany: Berlin Zoological Garden); Lefeber, 1969a:78 (Netherlands: Schinveld, Sint-Pietersberg), 1969c:234 (Netherlands: Sint-Pietersberg = Montagne Saint Pierre); Zangheri, 1969:1709 (Italy: in catalog of flora and fauna of Romagna Region); Benedek, 1970:105 (Hungary: Tapolca); de Beaumont, 1970a:404 (Afghanistan), 1970c:17 (Iran: Teheran); Gauss and Perraudin, 1970:360 (Germany: Baden-Württemberg: Bodensee area); Oehlke, 1970:796 (Democratic Germany); Tumšs, 1970:84 (first record from Latvia); Dathe, 1971:234 (Germany: Berlin Zoological Garden; phenology); Schmidt, 1971b:53 (Germany: Rheinland-Pfalz: Gonsenheimer Wald, Mainzer Sand, Mombacher Feld); Stritt, 1971a:105 (Germany: Baden-Württemberg: Karlsruhe; as *quatordecimpunctatus*); Balthasar, 1972:157 (in Sphecid Fauna of Czechoslovakia); Kazenas, 1972b:177 (Kazakhstan); Oehlke, 1972:141 (Germany: Island of Hiddensee); Scobiola-Palade, 1972a:152 (Romania: delta of Danube: Caraorman); Simon Thomas, 1972:187 (France: Gironde, Landes); Tsuneki, 1972a:164 (Mongolia); de Beaumont, Bytinski-Salz and Pulawski, 1973:24 (Israel); Erlandsson, 1974:88 (Italy, Yugoslavia); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp., Tamaricaceae, in Kazakhstan), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, *Nitraria schoberi* L., Zygophyllaceae, and *Daucus carota* L., Apiaceae, in Kazakhstan), 111 (feeding on flowers of *Lepidium crassifolium* W. et K., Brassicaceae, in Kazakhstan); Levi, Sysoletina, and Shernin, 1974:270 (Russia: Kirov Oblast: Kirov); Scobiola-Palade, 1974:145 (Romania: Sărăturile sandbank in Danube delta); Simon Thomas, 1974:58 (Netherlands: Limburg: Tienray); Benedek, 1975:251 (Hungary: onion pollinator); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Tsuneki, 1976d:308 (China: Heilungjiang: Harbin); Georghiou, 1977:191 (Cyprus); Haeseler, 1978b:63 (Germany: Niedersachsen: a bog near Oldenburg), 1978c:195 (Germany: Friesian Islands: Island of Borkum); Marion, 1978:91 (France: Nièvre Department); Pulawski, 1978:276, 278 (in key to Sphecidae of European part of USSR, as *quatuordecimnotatus*); Benedek, 1979:236 (Hungary: Bakony Hills); Leclercq, Gaspar, and Verstraeten, 1979:map 1427 (Belgium); Radović and Krunic, 1979:unpaginated foldout (nesting in sand, foreleg structure, as *14-notatus*); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Guichard, 1980:228 (Oman); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:118 (Russia: Siberia: Altayskiy Kray: basin of Aley River); Pagliano, 1980:120 (Italy: Piemonte); Schmidt, 1981:177 (Germany: Baden-Württemberg); Donath, 1982:215 (Germany: Cottbus Bezirk); Gayubo, 1982b:11 (northern Spain: Sierra de Béjar), 1882e:103 (Spain: Cádiz Province); Skibińska, 1982:124 (Poland: Warszawa area); Dollfuss, 1983b:13 (in catalog of Sphecidae of Austria); Gayubo, 1983a:126 (prey of an asilid); Józán, 1983:103 (Hungary); Riemann, 1983:87

(Germany: Bremen-Daverden area); Schmidt and Westrich, 1983:124 (Greece); Gayubo, 1984b:91 (Spain: Salamanca Province); Haack, Tschardtke, and Vidal, 1984:130 (Germany: Hamburg area); Tsuneki, 1984e:59 (Russia: Sarepta, now Krasnoarmeysk); Chevin and Chevin, 1985:39 (France: Aude); Gayubo, 1985a:488 (prey: *Chryzomiza* sp., Uldidae), 1985c:169 (Spain: Valladolid: Hornillos, Traspinedo, Valladolid); Haeseler, 1985c:571 (Germany: Friesian Islands); Józán, 1985a:181 (Hungary), 1985b:58 (Hungary south of Lake Balaton), 79 (floral records), 84 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Radović, 1985:65 (sting apparatus analyzed); Scobiola-Palade, 1985:97 (Romania: delta of Danube); Brechtel, 1986:73 (Germany: Südpfalz); Gayubo, 1986a:61 (Spain: Ciudad Real Province), 1986d:114 (Spain: Zamora Province); Gayubo and Heras, 1986:50 (Spain: Segovia and Valladolid Provinces; floral records); Gayubo and Sanza, 1986:59 (Spain: Burgos, Soria); Islamov, 1986:532 (Uzbekistan: Tashkent Oblast'); Józán, 1986:371 (Hungary: Kiskunság National Park); Nemkov, 1986:100 (Russia: Siberia: Irkutsk Oblast'); Piek and Spanjer, 1986:186 (in list of Sphecidae with known prey); Schmidt and Westrich, 1987:375 (Germany: Mainz area; as *quatuordecimmaculatus*); Tormos and Jiménez, 1987b:316 (Spain: Valencia Province: Dehesa de El Saler); Dollfuss, 1988:14, 26 (Austria: Bisamberg near Wien; Niederösterreich: Oberweiden); Düweke, 1988:688 (Germany: Baden-Württemberg: Kaiserstuhl); Haeseler, 1988:211 (Germany: Friesean Islands); Karsai, 1988:100 (Hungary: Kiskunság National Park); Kowalczyk, 1988a:46 (Poland: Rogów), 1988b:66 (Poland: environs of Łódź, as *quatuordecimnotatus*); Borsato, 1989:201 (Italy: Lombardia: Busatello marsh); Jacobs, 1989:16 (Germany: Mecklenburg-Vorpommern); Pádr in Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae, as *quatuordecimnotatus*); Scobiola-Palade, 1989:88 (Romania: delta of Danube, as *quatuordecimnotatus*); Gayubo, Asís, and Tormos, 1990b:74 (Spain); Guichard, 1990b:283 (Saudi Arabia: Hofuf); Jacobs and Oehlke, 1990:177 (new records from Democratic Germany); Kuznetzova, 1990:25 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pádr, 1990:90 (Czech Republic: Praha area); Pagliano, 1990:79 (in catalog of Italian Sphecidae); Schwammerberger and Priesner, 1990:542 (Austria: Kärnten); von der Heide and Witt, 1990:64 (Germany: Niedersachsen); Day, 1991:xvii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:132 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:405 (Italy); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Guichard, 1991a:340 (Jordan); Gusenleitner, 1991:646 (Austria: Linz); Józán, 1991:603 (Hungary: Bátorliget Nature Reserve, as *quatuordecimnotatus*); Kowalczyk, 1991a:100, 102 (Poland: Łódź, as *quatuordecimnotatus*), 1991b:121 (Poland: Augustów Forest); Negrisoló, 1991:319 (Italy: Venezia Province); Pagliano, 1991b:331, 332 (in key to Italian Crabroninae); van der Smissen, 1991:97 (northwestern Germany); Budrys, 1992:32 (in list of Sphecidae of Lithuania, as *quatuordecimnotatus*); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Gayubo, Borsato, and Osella, 1992:284 (France, Greece, Turkey); Józán, 1992a:229 (Hungary: Béda-Karapanca Protected Area), 1992b:174 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills, as *quatuordecimnotatus*); Kazenas, 1992c:28 (Turkmenistan: Repetek Nature Reserve); Leclercq, 1992c:208 (prey); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Bitsch and Leclercq, 1993:260 (in revision of western European Crabroninae); Guichard, 1993b:531 and 533 (in key to European *Oxybelus*); Leclercq, 1993c:48 (collecting localities from Europe, North Africa, and Turkey); Torregrosa, Gayubo, Tormos, and Asís, 1993:19 (Spain: Alicante Province); Blagoveshchenskaya, 1994:90 (Russia: Ul'yanovsk Oblast'); Gayubo and Borsato, 1994:210 (Italy: Lombardia, Toscana, Lazio); Theunert, 1994c:46 (Germany: summary of records from Niedersachsen and Bremen); Tormos, Asís, and Gayubo, 1994:189, 212 (Spain: Albacete Province); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Jansen and Kaluza, 1995:7 (Germany: endangered in Sachsen); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Negrisoló, 1995a:18 (visiting flowers of *Echinophora spinosa* L., Apiaceae), 22 (Italy: Veneto); Negrisoló in Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Nemkov in Nemkov, Kazenas, Budrys, et Antropov, 1995:424 (in key to Sphecidae of Russian Far East); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:28 (Germany: Bayern: Alzenau, Aschaffenburg, Eckertsmühle, Kahl, Karlstadt, Klingenberg, Lohr; Hungary: Siófok); Schmid-Egger, 1995:62 (Germany: northwestern Baden-Württemberg); Schmid-Eg-

ger, Rich, and Niehuis, 1995:200 (Germany: summary of records from Rheinland-Pfalz); Flügel, 1996:524 (Germany: Freizeitpark Marienfelde south of Berlin); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Kuhlmann, 1996:220 (Portugal: Serra de Estrela, as *quattuordecimnotatus*); Minoranskiy and Shkuratov, 1996:82 (Russia: Rostov Oblast'); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: may be endangered); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Witt, 1996:106 (Germany: Brandenburg), 110 (locality records); Celary, 1997:59 (in checklist of Animals of Poland, as *quattuordecimnotatus*); Nazarova and Shomirsaidov, 1997:24 (Tajikistan: fruit tree orchards in Vakhsh River valley, as *guttuordecimnotatus*); Schmidt and Schmid-Egger, 1997:22 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg); Dollfuss, Gusenleitner, and Bregant, 1998:521 (Austria: summary of collecting records from Burgenland); Flügel, 1998:60 (Germany: Brandenburg: Unteres Odertal National Park); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings), 1998b:54 (Ukraine: Sumy Oblast': Vakalivshchina); Haeseler and Ritzau, 1998:51 (Germany: Bremen: Steller Heide); Jakubzik, Schlüter, and Cölln, 1998:1182, 1184 (Germany: Rheinland-Pfalz); Józán, 1998:311 (Hungary: Duna-Dráva National Park, as *quattuordecimnotatus*); Nazarova, 1998:41 (Tajikistan: Tigrovaya Balka Nature Reserve); van der Smissen, 1998:64 (Germany: Schleswig-Holstein: Eichholz, Schlutup, Wulfsdorfer Heide); K. 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Schwarz, 1999:86 (Austria: Oberösterreich: city of Linz area); Wickl, 1999a:107 (Germany: Bayern: Oberpfalz area); Zehnder and Zettel, 1999:131 (Switzerland: recolonization of flooded area in Valais Canton); Blösch, 2000:270 (in Sphecid Fauna of Germany); Dressler, 2000:33 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:45 (southeastern Kazakhstan: eight localities); Gayubo, González, and Torres, 2000:186 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:107 (Greece, as *quattuordecimnotatus*); Jacobs, 2000:9 (Germany: Mecklenburg-Vorpommern: not endangered); Józán, 2000:109 (Hungary: Bakony Mountains, as *quattuordecimnotatus*); Ljubomirov, 2000:10 (Bulgaria: specimens in N. Nedelkov collection, as *quattuordecimnotatus*); Mokrousov, 2000b:31 (Russia: Nizhniy Novgorod Oblast', as *quattuordecimnotatus*); Schmid-Egger, 2000b:276 (Germany: Baden-Württemberg: shores of Rhine River); Shkuratov, 2000:60 (Russia: Rostov Oblast': Vëshenskaya village area at 49°37'N 41°45'E); Józán, 2001:279 (Hungary: Somogy County, as *quattuordecimnotatus*); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia), 181 (review of biology); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ljubomirov, 2001b:50 (Bulgaria: Mount Vitosha near Sofia); Mazzucco, 2001:203 (Austria: Niederösterreich: Steinfeld); Ohl et al., 2001:140 (distribution in Germany by provinces); van der Smissen, 2001:62 (Germany: Schleswig-Holstein: threatened with extinction); Zettel, Gross, and Mazzucco, 2001:74 (Austria: Wien); Józán, 2002:53 (Hungary: Mecsek Mountains, as *quattuordecimnotatus*); Kazenas, 2002a:92 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:154 (Poland: Kampinos National Park near Warszawa); Shkuratov, 2002b:142 (Russia: Rostov Oblast': Rostovskiy Nature Reserve at 46°27'N 42°41'E); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Cölln, Esser, and Jakubzik, 2003:62 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); Drewes, 2003:140 (France: Haute-Savoie: mouth of Dranse; Germany: Bayern: Karlstadt am Main; Hungary: Harkany); Freundt and Illmer, 2003:10 (Germany: Nordrhein-Westfalen: Wesel District); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Józán, 2003:227 (Hungary: Látányi Puszta Nature Conservation Area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:68 (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); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Island of Malyi

Tataru in Danube delta at 45.21°N 29.00°E); Schmid-Egger, 2003:755 (Italy: Sicilia: six localities); 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); 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, 2004:263 (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, 2004:34 (Ukraine: Zaporiz'ka Oblast': Obitichna Kosa Nature Reserve); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve, as *quattuordecimnotatus*); Kazenas, 2004b:106 (Kazakhstan: western Tien Shan), 2004d:33 (Kazakhstan: Atyrau, Ryn-Peski); Majzlan and Deván, 2004:33 (Slovakia: Malacky-Široké, as *quattuordecimnotatus*); Peeters, van Achterberg, et al., 2004:407 (in Wasp and Ant Fauna of Netherlands); Shkuratov, 2004a:81 (Russia: Rostov Oblast', as *quattuordecimnotatus*), 2004b:168 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova, as *quattuordecimnotatus*); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:372 (Germany: Sachsen-Anhalt: in red list of Sphecidae); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:46 and 61 (in checklist of Polish Sphecidae); Cruz-Sánchez, Gayubo, González, and Torres, 2005:220 (Spain: Salamanca: San Martín del Castañar, as *quattuordecimnotatus*); Gayubo and Özbek, 2005:26 (Turkey: eight localities); Haeseler, 2005:629 (Germany: Niedersachsen: Steller Heide near Bremen); Jacobs, 2005a:448 (Bulgaria: Melnik, Nesebar, Plovdiv, Starosel near Hissarya); Kowalczyk and Kurzac, 2005:106 (Poland: Botanical Garden in Łódź, as *quattuordecimnotatus*); Landeck, Wöhler, and Landgraf, 2005:18 (Germany: Lausitz Region; visiting flowers of *Reseda luteola* Linnaeus, Resedaceae); Mandery, 2005:174 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Nazarova, 2005:94 (alfalfa fields in southwestern Tajikistan, as *quattuordecimnotatus*); Pagliano and Negrisola, 2005:211 (in Sphecid Fauna of Italy); Riemann and Hohmann, 2005:562 (Germany: Niedersachsen: city of Bremen and adjacent area); Saure, 2005:17 (Germany: Berlin, as *quattuordecimnotatus*); Shorenko, 2005b:98 (Ukraine: Crimea: Karadagh Nature Reserve); Straka, 2005a:402 (endangered in Czech Republic); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1798 (Turkey: Erzincan, Erzurum, Kars, Konya, Niğde, and Sivas provinces); Bock, 2006:41 (Germany: Bayern: Kelheim District: Abensberg sands); Gorobchishin, 2006:117 (Ukraine: many localities); Hua, 2006:281 (in list of Chinese insects, geographic distribution); Liebig, 2006:39 (Germany: Sachsen: Muskauer Heide); Ljubomirov, 2006:541 (Bulgaria: Rhodope Mountains: Peshtera, Yadenitsa River valley); Magdalou, 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, as *quattuordecimnotatus*); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve, as *quattuordecimnotatus*); Standfuss and Standfuss, 2006b:99 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E, as *quattuordecimnotatus*); Baños-Picón, Gayubo, Asís, and González, 2007:257, 259 (Spain: Zamora: Cabañas de Aliste, as *quattuordecimnotatus*); Burguet, 2007:un-numbered p. 26 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Chevin, Livory, Lair, Sagot, and Baldock, 2007:43 (France: Département de la Manche, as *quattuordecimnotatus*); Jacobs, 2007:115, 120 (in key to Crabronidae of Germany); Józán, 2007:180 (Hungary: Zselic hills, as *quattuordecimnotatus*); Kazenas, 2007a:91 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity, as *quattuordecimnotatus*); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Shorenko, 2007b:258 (Ukraine: Crimea: Opukskiy Nature Reserve); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia, as *quattuordecimnotatus*); Winkler, 2007:30 (Germany: Niedersachsen: eastern Friesland); Yildirim and Ljubomirov, 2007:120 (Turkey: Erzurum, İçel, and Konya provinces); Danilov, 2008:350 (Russia: Altayskiy Kray: Barnaul area, as *quattuordecimnotatus*); Dollfuss, 2008a:488 (locality records from Algeria, Bulgaria, China, Croatia, France, Greece, Italy, Iran,

Jordan, Kazakhstan, Kyrgyzstan, Moldova, Mongolia, Montenegro, Morocco, Pakistan, Romania, Russia: Krasnoyarsk, Serbia, Spain, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan, and Yemen); Gayubo, González, Tormos, and Asís, 2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas–Sierra de Francia, as *quattuordecimnotatus*); Haeseler, 2008:308 (Germany: Friesian Islands); Kazenas, 2008c:255 (Kazakhstan: village Koktum south of Lake Alakol', as *quattuordecimnotatus*); Larnhof, 2008:46 (Austria: Niederösterreich: Nature Reserve “in den Sandbergen” near Drösing); Ljubomirov and Yildirim, 2008:253 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:20 (in catalog of Crabronidae of Asiatic Russia); Protsenko and Drozdovskaya, 2008:128 (Ukraine: Sumy Oblast': Mogritsa village, as *quattuordecimnotatus*); Theunert, 2008:62 (Germany: map of distribution in Niedersachsen and Bremen); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Bitsch and Leclercq, 2009:230 (in supplement to vol. I of Faune de France, 1993: France: first records from Ain: Sermoyer; Hautes-Alpes: Embrun; and Isère: Arandon); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero, as *quattuordecimnotatus*); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park, as *quattuordecimnotatus*); Guéorguiev and Ljubomirov, 2009:265 (Bulgaria: Maleshevska Planina); Hessling, 2009:104 (Germany: Niedersachsen: Hunte River valley south of Oldenburg); Kowalczyk, Kurzac, and Nadolski, 2009:63 (Poland: between Warta and Widawka rivers, as *quattuordecimnotatus*); Mokrousov, 2009:288 (Russia: Republic Mari El, as *quattuordecimnotatus*); Nemkov, 2009b:91 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:237 (Russia: Primorskiy Krai: Lazovsky Nature Reserve); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Esser, Fuhrmann, and Venne, 2010:37 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:28 (Germany: Bayern: Sulz- and Ottmaringer Tal); Mokrousov, 2010a:62 (Russia: Nizhniy Novgorod Oblast', Mari El Republic: no specific localities, as *quattuordecimnotatus*); Rudoiskatel', 2010:159 (Russia: southern Ural Mountains, as *quattuordecimnotatus*); Saure, 2010b:176 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: relatively common); Shorenko and Konovalov, 2010:21 (Ukraine); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:102 (western Slovakia: recorded from Borská nížina, as *quattuordecimnotatus*); Tüzün and Yüksel, 2010:4472 (Turkey: Niğde Province, as *quattuordecimnotatus*); van der Smissen, 2010a:346 (Germany: Schleswig-Holstein: locality records), 2010b:385 (France: Gard: Collias; Vaucluse: Bédoin); Wurdack and Gack, 2010:153 (Germany: Baden-Württemberg: Kaiserstuhl); Baghirov, 2011b:149 (Russia: Altayskiy Krai: Savvushka, as *quattuordecimnotatus*); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:499 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire, as *quattuordecimnotatus*); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Murai and Amr, 2011:119 (recorded from Syria by Dollfuss, 2008a); Protsenko and Drozdovskaya, 2011:91 (Ukraine: Mikolaiv Oblast': Bugskiy Guard National Park); Saure, 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg, as *quattuordecimnotatus*); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:76 (Germany: Hessen: endangered); Ziska and Saure, 2011:109 (Germany: Berlin: Tegeler Fließ valley); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Nemkov, 2012c:440 (in catalog of Crabronidae of Russian Far East); Prisiy, 2012:48 (Russia: Belgorod Oblast'); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); Shibayev and Polumordvinov, 2012:278 (Russia: Penza Oblast'); Shlyakhtenok, 2012a:172 (Belorussia: collected in private plots), 2012b:92 (Belorussia: Beresina National Reserve: overgrowing dry meadow); Strumia, Pagliano, and Gayubo, 2012:56 (Italy: Toscana: Riserva di San Rossore); Yildirim, 2012:80 (Turkey: Adana, Adiyaman, Artvin, Bayburt, Erzinan, Erzurum, and Kars provinces); Akulov and Proshchalykin, 2013:114 (Russia: Siberia: Krasnoyarsk Krai: Minusinsk); Danilov and Odintseva, 2013:332 (Russia: Western Siberia: 65 km northnortheast of Tobol'sk at 58°45'N 68°74'E); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:352 (in new catalog of Sphecidae of Saudi Arabia); Kazenas, 2013a:82 (color photograph of adult wasp, short information on geographic distribution and nesting habits), 2013b:497 (southeastern Kazakstan: almost everywhere in Ili River

valley and adjacent semideserts and deserts, in foothills. and low mountains, as *quattuordecimnotatus*); Mokrousov, Ruchin, and Egorov, 2013:202 (Russia: Republic of Mordovia: Mordovian State Nature Reserve, as *quattuordecimnotatus*); Pankov, 2013:230 (Russia: Ivanovo Oblast', as *quattuordecimnotatus*); A. Scholz and Liebig, 2013:24 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:181 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:18 (Portugal: Douro International Natural Park, Serras de Aire e Candeeiros Natural Park, and Paúl do Boquilobo Nature Reserve); Wiśniowski and Szczepko, 2013:42 (Poland: Kampinos National Park near Warszawa, as *quattuordecimnotatus*); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed, as *quattuordecimnotatus*); Bitsch, 2014:405 (France: Puy-de-Dôme: Orléat: Les Sables des Girauds-Faures); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Ebrahimi, 2014:39 (Iran: Khorāsān-Razavi: Mashad: Torogh); Kazenas, 2014a:136 (Kazakhstan: Karatau Mountain Range, as *quattuordecimnotatus*); Pagliano, 2014:80 (specimen in M. Spinola collection, Torino, are *Oxybelus quattuordecimnotatus* and *Oxybelus lineatus*); Paukkunen, 2014:42 (first record from Fennoscandia: Russia: Karelian Republic: Kuytezh; and Arkhangelsk Oblast: near Rovdino); Yıldırım, Ljubomirov, and Lelej, 2014:14 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:18 (Iran: Fars Province); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); Rezaei and Fallahzadeh, 2015:7 (Iran: Fars: Dasht e Arzhan at 29°38'N 51°58'E and Kaftarak at 29°34'N 52°41'E); P. Rosa and Pagliano, 2015:104 (Italy: Lombardia and Piemonte: Parco del Ticino); Shorenko, 2015:326 (in list of Sphecidae *sensu lato* of Crimea); Weber, 2015:64 (Germany: Bayern: Nature Reserve Börsting near Hallstadt, as *14-notatus*); Mokrousov and Popov, 2016:583 (Russia: Krasnodarskiy Krai); Reemer and Peeters, 2016:10 (Netherlands: Hulshorsterzand, as *quattuordecimnotatus*); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province); Samin and Bagriacik, 2016:496 (Iran: West Azarbaijan Province: Mahabad and Ourmieh); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:42 (Turkey: Antalya, Artvin, Erzurum, and Tunceli provinces); Antropov, 2017b:243 (in catalog of Crabroninae of Russia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:54 (Iran: known from Fars, Kerman, Khorasan-e Razavi, Mazandaran, Qazvin, and West Azerbaijan provinces); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Mas Larrieu); Shorenko, 2017:77 (in Crimea collected in August); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:7 (Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:31 (Iran: Hormozgan: Sar Kahnan at 27°24'N 57°07'E); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Ben Khedher, Yildirim, Braham, and Chaaban, 2019:192 (known from Tunisia: Tozeur Province); Carminati, Mora, and Cretin, 2019:20 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:15 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:105 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:1335 (Russia: Mordovia State Nature Reserve); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:266 (Iran: Fars: nine localities); Stetsun, Rajabi, Matushkina, and Gorb, 2019: 2 (sting structure); Ben Khedher, Yildirim, and Braham, 2020a:104 (Tunisia: numerous locality records); Gadallah, 2020b:43 (in list of aculeate wasps of Arabian Peninsula); Kejval, Blažej, and Erhart, 2020:104 (western Czech Republic, as *quattuordecimnotatus*); Shorenko, 2020:50 (Crimea: Karadag Nature Reserve); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Cross, Baldock, and Wood, 2021:54 (in catalog of Sphecidae *sensu lato* of Portugal, as *quattuordecimnotatus*); Kaplan and Yildirim, 2021:73 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:351 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Langfeld, 2023:61 (Germany: Mecklenburg-Vorpommern: Baltic island Greifswalder Oie); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution, as *quattuordecimnotatus*); Olszewski and Grzywacz, 2025:1065 (nesting habits).

- Crabro crassipes* Walckenaer, 1817:35, sex not stated, junior primary homonym of *Crabro crassipes* Fabricius, 1798. Holotype or syntypes: sex unknown, France: Paris area (lost, not preserved by the author). Synonymized with *Oxybelus quatuordecimnotatus* by Leclercq in R. Bohart and Menke, 1976:369.
- Crabro punctatus* Walckenaer, 1817:35, sex not stated. Holotype or syntypes: sex unknown, France: Paris area (lost, not preserved by the author). Synonymized with *Oxybelus quatuordecimnotatus* by Leclercq in R. Bohart and Menke, 1976:369.
- Crabro parisinus* Kittel, 1828:925, sex not stated. Holotype or syntypes: France: Paris area (lost?). Synonymized with *Oxybelus quatuordecimnotatus* by Bitsch and Leclercq, 1993:260. – As *Oxybelus parisinus*: R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae).
- Oxybelus bellus* Dahlbom, 1844:268, ♂. Holotype: ♂, Germany: Silesia: Glogau, now Poland: Głogów (Lund). Synonymized with *Oxybelus quatuordecimnotatus* by Gerstaecker, 1867a:62, with *Oxybelus fasciatus* by Thomson, 1870:179, and with *Oxybelus mucronatus* (correctly: *quatuordecimnotatus*) by Fæster, 1949:29. – von Kiesenwetter, 1849:90 (Germany: Kingdom of Saxony: Dresden); F. Smith, 1856:385 (in catalog of Hymenoptera in British Museum); Ruthe and Stein, 1857:315 (Germany: Berlin area); Schenck, 1857:115 (Germany: in revision of fossorial wasps of Nassau Region); Taschenberg, 1858:120 (in key to Sphecidae of Germany); Funk, 1859:58 (Germany: Bayern: Bamberg); Schenck, 1860:146 (Germany: Nassau Region); Brischke, 1862:104 (Germany: Preussen Province, now Poland: Pomorze Region), 1864:209 (*Oxybelus bellus* is a synonym of *Oxybelus furcatus*); Kirchner, 1867:223 (in catalog of European Hymenoptera); Schenck, 1867a:352 (Germany: Nassau Region); Kohl, 1884b:111 (in list of known *Oxybelus*); Brischke, 1888b:100 (Germany: Preussen Province, now Poland: Pomorze Region; = ♂ of *furcatus*); Dalla Torre, 1897:638 (in catalog of world Sphecidae); N. Arnold, 1902:87 (Russia: Mohilev Province, now Belorussia); de Cobelli, 1903:114 (Italy: Trentino: Isera, Malè); Dubois, 1920:87 (Belgium: Beverloo).
- Oxybelus furcatus* Lepeletier de Saint Fargeau, 1845:214, ♀. Holotype or syntypes: ♀, France: Paris area (depository?). Synonymized with *Oxybelus quatuordecimnotatus* by Gerstaecker, 1867a:623, synonymy confirmed by Bitsch and Leclercq, 1993:260. – Wesmael, 1852:624 (Belgium); F. Smith, 1856:384 (in catalog of Hymenoptera in British Museum); Schenck, 1857:114 (Germany: in revision of fossorial wasps of Nassau Region); Funk, 1859:58 (Germany: Bayern: Bamberg); Schenck, 1860:146 (Germany: Nassau Region); Brischke, 1862:104 (Germany: Preussen Province, now Poland: Pomorze Region), 1864:209 (Germany: Preussen Province, now Poland: Pomorze Region); Kirchner, 1867:223 (in catalog of European Hymenoptera); Schenck, 1867a:352 (Germany: Nassau Region); Chevrier, 1868:397 (in revision of Swiss *Oxybelus*); P. Ivanov, 1872:151 (Ukraine: Khar'kov Oblast': Kupyansk area); Dours, 1874:152 (in catalog of Hymenoptera of France); Becker, 1880:152 (Russia: Sarepta, now Krasnoarmeysk south of Volgograd); Kohl, 1880:143 (Italy: Trentino–Alto Adige); Yaroshevskiy, 1881:121 (Ukraine: Khar'kiv Oblast': Kupyansk); Kohl, 1883e:662 (Switzerland), 1884b:112 (in list of known *Oxybelus*); von Heyden, 1884:119 (Germany: Frankfurt am Main area); Gasperini, 1887:14 (Dalmatia: San Giorgio, now Sućuraj on Island of Hvar); Brischke, 1888b:100 (Germany: Preussen Province, now Poland: Pomorze Region); Kohl, 1893a:33 (Austria: Niederösterreich); Marquet, 1896:32 (in revision of *Oxybelus* of France); Meunier, 1896:270 (Belgium: Bruxelles area); Acloque, 1897:92 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:641 (in catalog of world Sphecidae); Meunier, 1897b:353 (Belgium: coastal sand dunes at Blankenberge); Mocsáry, 1897:81 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); de Cobelli, 1903:114 (Italy: Trentino: Isera, Malè, Mollaro, Mori, Rovereto); Antiga and Bofill, 1904:27 (Spain: Cataluña Province); W. Schulz, 1904b:101 (Spain); Kohl, 1905c:233 (Turkey: Kayseri: Erciyes Dağı); Kubes, 1905:84 (Czech Republic: Kolín); Mantero, 1905:71 (Italy: Toscana: Isola del Giglio); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Graeffe, 1911:44 (Italy: Trieste area); Maidl, 1922:73 (Albania, Croatia); Vogrin, 1955:45 (Yugoslavia); Bradley, 1957:48 (Lepeletier's specimens in Turin); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:82 (specimens in M. Spinola collection, Torino, are *Oxybelus quatuordecimnotatus*).
- Oxybelus raptor* Lepeletier de Saint Fargeau, 1845:219, ♀. Holotype or syntypes: ♀, France: Paris area (M. Spinola collection, Torino). Synonymized with *Oxybelus quatuordecimnotatus* by Bitsch and Leclercq, 1993:260. – F. Smith,

- 1856:385 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:223 (in catalog of European Hymenoptera); Dours, 1874:153 (in catalog of Hymenoptera of France); Kohl, 1884b:114 (in list of known *Oxybelus*); Aclouque, 1897:92 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:647 (in catalog of world Sphecidae); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Bradley, 1957:48 (Lepeletier's specimens in M. Spinola collection, Turin); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:79 (specimens in M. Spinola collection, Torino, including holotype, are *Oxybelus quattuordecimnotatus*).
- Oxybelus timidus* Chevrier, 1868:399, ♀, ♂. Syntypes: Switzerland: Lake Léman area: no specific locality (MHNG). Synonymized with *Oxybelus quattuordecimnotatus* by de Beaumont, 1942b:427. – Kohl, 1883e:662 (Switzerland), 1884b:115 (in list of known *Oxybelus*); Dalla Torre, 1897:648 (in catalog of world Sphecidae); de Gaulle, 1908:121 (in catalog of French Hymenoptera).
- Oxybelus venustus* Sickmann, 1894:207, ♀, ♂. Syntypes: China: Tientsin, now Tienjin (Westf. Provinz. Mus. Naturk., Münster i. W.). Synonymized with *Oxybelus quattuordecimnotatus* by Bitsch and Leclercq, 1993:261. – Dalla Torre, 1897:650 (in catalog of world Sphecidae); Yasumatsu, 1942c:114 (China: Beijing); Tsuneki, 1969a:1 (nesting habits), 1971m:35 (China: Beijing; redescription); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Dollfuss, 1989:11 (type material in NHMW).
- Oxybelus maritimus* Marquet, 1896:25, ♀. Lectotype: ♀, France: Hérault: Cette, now Sète (Lausanne), designataed by de Beaumont, 1952b:90. Synonymized with *Oxybelus quattuordecimnotatus* by de Beaumont, 1952b:90.
- As *Oxybelus bellicosus*: Schenck, 1857:114 (Germany: in revision of fossorial wasps of Nassau Region); Brischke, 1862:104 (Germany: Preussen Province, now Poland: Pomorze Region), 1888b:100 (Germany: Preussen Province, now Poland: Pomorze Region; = ♂ of *furcatus*); N. Arnold, 1902:86 (Russia: Mohilev Province, now Belorussia, = *Oxybelus quattuordecimnotatus* given as synonym).
- As *Oxybelus mucronatus*: Schilling, 1848:105 (Germany: Breslau area, now Poland: Wrocław), present correction; Wesmael, 1852:623 (Belgium: Ostende), present correction; Kawall, 1857:25 (Kurland, now Latvia); Ruthe and Stein, 1857:315 (Germany: Berlin area), present correction; F. Smith, 1858c:163 (in review of British Aculeata, redescription), present correction; Taschenberg, 1866:161 (in revision of Hymenoptera of Germany), present correction; Thomson, 1870:17 (in revision of Swedish Crabroninae), present correction; Taschenberg, 1875:380 (Germany: Halle); present correction; Kohl, 1888b:727 (Austria: Tirol, now Italy: Alto Adige; present correction: *pugnax* used simultaneously); Alfken, 1893:120 (Germany: Friesian Islands: Island of Juist), present correction based on geographic distribution; Nevinson, 1900:62 (Great Britain: Wales: Towyn), 1901:72 (Great Britain: Wales: Criccieth), 1902:12 (Great Britain: Cornwall: Holywell Bay); Aurivillius, 1904:298 (in revision of Swedish Sphecidae), present correction based on geographic distribution; Friese, 1926:144 (in key to Sphecidae of Central Europe, short morphological and biological characteristics), present correction based on geographic distribution; Harttig, 1930b:8 (specimen bearing dipteran egg), present correction based on geographic distribution; Bouwman, 1932:391 (in revision of Sphecidae of Netherlands), present correction; P. Verhoeff, 1948:188 (in revision of Western European *Oxybelus*); Fæster, 1949:29, 42 (in revision of Western European *Oxybelus*), corrected to *Oxybelus quattuordecimnotatus* by Fæster, 1951:456; Cavro, 1950:41 (France: Département du Nord), present correction; de Beaumont, 1950f:420 (Algeria; as senior synonym of *quattuordecimnotatus*), 1951h:35 (Switzerland: Neuchâtel area; as senior synonym of *quattuordecimnotatus*); Leininger, 1951:116 (Germany: Baden-Württemberg); Ceballos, 1956:397 (in catalog of Sphecidae of Spain); J. Heinrich, 1967:83 (Germany: Bayern: Unterfranken District; synonym of *quattuordecimnotatus*).
- 206. *rancocas* Pate**
- Oxybelus rancocas* Pate, 1943f:91, ♂. Holotype: ♂, USA: New Jersey: Camden County: Atco (ANSP). – Burks in Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:163 (in checklist of North American *Oxybelus*), 1957:108 (in key to North American *Oxybelus*);

R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1656 (in catalog of North American Hymenoptera); H. Allen, 1995:16 (holotype in ANSP).

### 207. *rejectus* C. Baker

*Oxybelus rejectus* C. Baker, 1896a:59, ♂. Holotype or syntypes: ♂, USA: Colorado: Fort Collins (USNM). – Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Burks *in* Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:163 (in checklist of North American *Oxybelus*, as *rejectum*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1656 (in catalog of North American Hymenoptera).

### 208. *rhodopyga* R. Bohart

*Oxybelus rhodopyga* R. Bohart, 1993e:167, ♀, ♂. Holotype: ♀, Mexico: Jalisco: La Primavera (UCD). – R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae).

### 209. *robertsonii* C. Baker

*Oxybelus robertsonii* C. Baker, 1896b:156, ♂. Holotype or syntypes: ♂: USA: Colorado: 5 mi. west of Fort Collins (USNM). – Ashmead, 1899d:162 (in checklist of North American Oxybelidae); H. Smith, 1908b:409 (in revision of Nebraskan Sphecidae); Mickel, 1918b:366 (in catalog of Nebraskan Sphecidae); Burks *in* Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:163 (in checklist of North American *Oxybelus*), 1957:119 (in revision of Californian *Oxybelus*); Krombein, 1958f:200 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus apicatus* reported), 201 (synonymy with *Oxybelus glenensis* reported), 202 (synonymy with *Oxybelus hirsutus* reported), 204 North America (synonymy with *Oxybelus varicoloratus* reported); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1656 (in catalog of North American Hymenoptera); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Alberta, Saskatchewan: no specific locality).

*Oxybelus varicoloratus* C. Baker, 1896b:157, ♀. Holotype or syntypes: ♀, USA: Colorado: Fort Collins (USNM). Synonymized with *Oxybelus robertsonii* by Krombein, 1955b:71. – Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Burks *in* Muesebeck, Krombein, and Townes, 1951:1034 (in catalog of North American Hymenoptera).

*Oxybelus hirsutus* C. Baker, 1896b:157, ♀. Holotype or syntypes: ♀, USA: Colorado: Fort Collins (USNM). Synonymized with *Oxybelus robertsonii* by Krombein, 1955b:71. – Ashmead, 1899d:162 (in checklist of North American Oxybelidae).

*Oxybelus apicatus* H. Smith, 1908b:409, ♂. Holotype: ♂, USA: Nebraska: Sioux County: Warbonnet Canyon (UNL). Synonymized with *Oxybelus robertsonii* by R. Bohart and Schlinger, 1956c:163. – Mickel, 1918b:366 (in catalog of Nebraskan Sphecidae); Muma, 1952:21 (holotype in UNL); Burks *in* Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera).

*Oxybelus glenensis* H. Smith, 1908b:410, ♀. Holotype: ♀, USA: Nebraska: Sioux County: Glen (UNL). Synonymized with *Oxybelus robertsonii* by R. Bohart and Schlinger, 1956c:163. – Mickel, 1918b:366 (in catalog of Nebraskan Sphecidae); Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera); Muma, 1952:21 (holotype in UNL).

### 210. *robustus* Cameron

*Oxybelus robustus* Cameron, 1890b:276, ♀. Holotype or syntypes: ♀, India: Maharashtra: Poona (OXUM). – Bingham, 1897:315 (in Wasp Fauna of British India); Dalla Torre, 1897:647 (in catalog of world Sphecidae); Rothney, 1903:106 (India: West Bengal: Barrackpore); Pate, 1938b:392 (in list of Oriental Oxybelini, as *robustum*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Manikandan, Dey, and Farooqi, 1999:12 (in key to Indian

*Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*); Dollfuss, 2008a:492 (locality records from India and Laos).

### 211. *romingeri* R. Bohart

*Oxybelus romingeri* R. Bohart, 1993e:167, ♀, ♂. Holotype: ♀, Dominican Republic: Monti Cristi (UCD). – R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Perez-Gelabert, 2008:240 (in list of arthropods of island of Hispaniola).

### 212. *roraimae* R. Bohart

*Oxybelus roraimae* R. Bohart, 1993d:74, ♀, ♂. Holotype: ♀, Brazil: Roraima Territory: Surumú (UCD). – R. Bohart, 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Menezes de Jesus, Onody, dos Santos Ramos, de Oliveira Andrade, Doria dos Santos, and Ferreira Brandão, 2019:4 (paratypes in Mus. Zool. Univ. São Paulo).

### 213. *rubrocaudatus* Arnold

*Oxybelus rubrocaudatus* Arnold, 1927:107, ♀, ♂. Syntypes: Zimbabwe: no specific locality; South Africa: QwaZulu-Natal: Scottsburg; Tanzania: no specific locality (SAM, TMP). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Gess, 1981:20 (South Africa: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils); Hancock, Chahwanda, and Mhlanga, 1995:39 (syntypes in Bulawayo Museum; Zimbabwean syntypes are from Bulawayo); S. Gess and F. Gess, 2003:104 (South Africa: visiting flowers of *Berula erecta* (Hudson) Cov. and *Foeniculum vulgare* Mill., Asteraceae, and *Maytenus linearis* (L. f.) Marais, Celastraceae); Dollfuss, 2008a:492 (locality records from Malawi, Mozambique, South Africa, Tanzania, and Zimbabwe).

### 214. *ruficaudis* Cameron

*Oxybelus ruficaudis* Cameron, 1905f:208, ♀. Holotype or syntypes: ♀, South Africa: Cape Province: Grahamstown (AMG). – Cameron, 1905g:262 (comparison with *Oxybelus striatiscutis*); Arnold, 1927:89 (in revision of southern African *Oxybelus*), 1930:14 (in checklist of Afrotropical Sphecidae); Scott in Arnold, 1933a:370 (Ethiopia: Harar District); Jacot-Guillarmod, 1961:13 (type in Albany Museum, Grahamstown); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Gess, 1981:20 (South Africa: Hilton Farm 18 km west-northwest of Grahamstown; nesting in friable soils); S. Gess and F. Gess, 2003:104 (Lesoto, South Africa: visiting flowers of *Berula erecta* (Hudson) Cov. and *Foeniculum vulgare* Mill., Asteraceae, *Maytenus linearis* (L. f.) Marais, Celastraceae, *Calpurnia glabrata* Brummitt, Fabaceae, and *Leucadendron* sp., Proteaceae), 2006:10 (South Africa: visiting flowers of *Leucadendron* sp., Proteaceae); Dollfuss, 2008a:493 (locality records from Kenya, Malawi, Namibia, South Africa, and Zimbabwe).

*Oxybelus capensis* Cameron, 1905f:209, ♂. Holotype or syntypes: ♂, South Africa: Eastern Cape Province: Brak Kloof (AMG). Synonymized with *Oxybelus ruficaudis* by Arnold, 1927:89. – Jacot-Guillarmod, 1961:13 (type in Albany Museum, Grahamstown).

### *ssp. melanarius* Arnold

*Oxybelus ruficaudis* var. *melanarius* Arnold, 1927:91, ♀, ♂. Holotype: sex not stated, South Africa: Eastern and Western Cape Province: Port Elizabeth, Ladismith, or Willowmore (TMP). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae). – As *Oxybelus ruficaudis melanarius*: R. Bohart and Menke, 1976:369 (new status, in checklist of world Sphecidae).

### 215. *ruficornis* F. Smith

*Oxybelus ruficornis* F. Smith, 1856:388, ♀. Holotype or syntypes: ♀, India: no specific locality (BMNH). – F. Smith, 1871a:369 (in catalog of Oriental Aculeata); Cameron, 1890b:276 (in list of Oriental Sphecidae); Kohl, 1884b:114

(in list of known *Oxybelus*); Bingham, 1897:317 (in Wasp Fauna of British India); Dalla Torre, 1897:647 (in catalog of world Sphecidae); Pate, 1938b:392 (in list of Oriental Oxybelini); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Manikandan, Dey, and Farooqi, 1999:14 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

#### 216. *rufopictus* F. Morawitz

*Oxybelus rufopictus* F. Morawitz, 1892:180, ♀. Holotype or syntypes: ♀, Turkmenistan: Dort-kuyu (ZIN). – Dalla Torre, 1897:647 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia).

#### 217. *sajiae* Schmid-Egger

*Oxybelus sajiae* Schmid-Egger in Schmid-Egger and van Harten, 2022:565, ♀. Holotype: ♀, United Arab Emirates: Ar-Ruwais: Houbara Protected Area (Ch. Schmid-Egger personal collection, Berlin, Germany)

#### 218. *sarafschani* Radoszkowski

*Oxybelus sarafschani* Radoszkowski, 1877:69, ♀, ♂ (as *Sarafschani*, incorrect original capitalization). Syntypes: Uzbekistan: Zeravshan valley: no specific locality (ZMMU). – Kohl, 1884b:115 (in list of known *Oxybelus*); Radoszkowski, 1888b:344 (Turkmenistan: Ashkhabad); Dalla Torre, 1897:647 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:93 (geographic distribution, collecting localities in Kazakhstan); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

#### 219. *schlingeri* R. Bohart

*Oxybelus schlingeri* R. Bohart, 1993c:22, ♀, ♂. Holotype: ♀, Venezuela: Zulia: El Tucuco: Perija (UCD). – Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:493 (Ecuador: Napo: Puerto Napo 8 km south of Tena); Rasmussen and Asenjo, 2009:12 (in checklist of Crabronidae of Peru).

#### 220. *schusteri* R. Bohart

*Oxybelus schusteri* R. Bohart, 1993c:22, ♀, ♂. Holotype: ♀, Ecuador: Galapagos Islands: Island of Santa Cruz: Darwin Research Station (UCD). – Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Menezes de Jesus, Onody, dos Santos Ramos, de Oliveira Andrade, Doria dos Santos, and Ferreira Brandão, 2019:4 (paratype in Mus. Zool. Univ. São Paulo).

#### 221. *scutellatus* R. Bohart

*Oxybelus scutellatus* R. Bohart, 1993d:76, ♂. Holotype: ♂, Argentina: Neuquén: Piedra Aguila (originally M. Fritz coll., Salta, Argentina, now AMNH). – Amarante, 2002:45 (in catalog of Neotropical Crabronidae).

#### 222. *sericeus* Ch. Robertson

*Oxybelus sericeus* Ch. Robertson, 1889:81, ♀. Holotype: ♀, USA: Illinois: no specific locality (ANSP). – Dalla Torre, 1897:648 (in catalog of world Sphecidae); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Cresson, 1928:56 (holotype in ANSP); Pate, 1930b:41 (first record from New York State); Burks in Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); Krombein and Evans, 1954:235 (Florida); R. Bohart and Schlinger, 1956c:163 (in checklist of North American *Oxybelus*, as *sericeum*), 1957:113 (in revision of Californian *Oxybelus*, as *Oxybelus sericeum sericeum*); Krombein, 1958f:201 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus delicatus* reported); R. Bohart and Marsh, 1976:115 (nesting habits, as *sericeum*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1656 (in catalog of North American Hymenoptera); Hook and Matthews, 1980:21 (nesting habits, nest guarding by male); Parks, 1986:35 (California: Torrey Pines State Reserve); Piek and Spanjer, 1986:186 (in list of Sphecidae with known prey, as *sericeum*); Spofford, Kurczewski, and Downes, 1989:257, 258 (references to publications on nest parasites *Opsidia* sp. and *Senotainia littoralis* Allen, miltogrammine flies); R. Bohart, 1993e:161 (in list of

Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Ahlstrom, 1995:110 (in checklist of insects of North Carolina); Hanson and Menke, 1995:640 (known from Costa Rica); Cambra and Santos, 2000:53 (first record from Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean; Provincia de Coclé: Antón); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario), 30 (distribution within Ontario), 56 (first record from Canada: Ontario: Windy Point; Quebec: New Richmond); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Ontario, Quebec, first records from Alberta and Saskatchewan: no specific locality).

*Oxybelus delicatus* Mickel, 1918a:322, ♂. Holotype: ♂, USA: Nebraska: Mitchell (UNL). Synonymized with *Oxybelus sericeus* by R. Bohart and Schlinger, 1956c:163. – Mickel, 1918b:367 (in catalog of Nebraskan Sphecidae); Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera); Muma, 1952:21 (holotype in UNL).

*Oxybelus sericeus crocatus* Krombein, 1955c:73, ♀, ♂. Holotype: ♂, Mississippi: Jackson County: Pascagoula (USNM). Synonymized with *Oxybelus sericeus* by R. Bohart *in* R. Bohart and Menke, 1976:369. – R. Bohart and Schlinger, 1956c:163 (in checklist of North American *Oxybelus*, as *sericeum crocatum*).

### 223. *similis* Cresson

*Oxybelus similis* Cresson, 1865b:476, ♀. Holotype: ♀, USA: Colorado: no specific locality (ANSP). – Packard, 1867:434 (in revision of North American *Oxybelus*); Cresson, 1887:287 (in catalog of North American Hymenoptera); Ashmead, 1890:31 (in checklist of Hymenoptera of Colorado); Dalla Torre, 1897:648 (in catalog of world Sphecidae); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Cresson, 1916:103 (holotype in ANSP); Kohl, 1884b:115 (in list of known *Oxybelus*); Ch. Robertson, 1889:79 (in revision of North American *Oxybelus*); Burks *in* Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:164 (in checklist of North American *Oxybelus*, as *simile*), 1957:121 (in revision of Californian *Oxybelus*, as *simile*); Horning and Barr, 1970:106 (USA: Idaho: Craters of the Moon National Monument); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1656 (in catalog of North American Hymenoptera); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: first record from Canada: Alberta: no specific locality).

*Notoglossa striatifrons* Mickel, 1916a:429. Holotype: ♂, USA: Wyoming: Newcastle (UNL). Synonymized with *Oxybelus similis* by R. Bohart and Schlinger, 1956c:164. – Muma, 1952:21 (holotype in UNL), 27 (paratype in UNL). – **As *Oxybelus striatifrons***: Burks *in* Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera).

### 224. *slanskyae* R. Bohart

*Oxybelus slanskyae* R. Bohart, 1993c:24, ♀, ♂. Holotype: ♀, Peru: Huanuco: Tingo María (UCD). – Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:493 (Ecuador: Napo: Puerto Napo 8 km south of Tena); Rasmussen and Asenjo, 2009:12 (in checklist of Crabronidae of Peru).

### 225. *solitarius* Arnold

*Oxybelus solitarius* Arnold, 1927:88, ♂. Holotype: ♂, Zimbabwe: Sawmills (SAM). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae), 1934:26 (Zimbabwe: Khami, description of ♀); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae).

**226. *sparideus* Cockerell**

*Oxybelus sparideus* Cockerell, 1895a:292, ♂. Lectotype: ♂, USA: New Mexico: Las Cruces (ANSP), designated by Cresson, 1928:56. – W. Fox, 1896e:171 (is a valid species); Dalla Torre, 1897:648 (in catalog of world Sphecidae, as *sparidens*); Burks in Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:164 (in checklist of North American *Oxybelus*, as *sparideum*), 1957:111 (in key to North American *Oxybelus*, as *sparideum*); R. Bohart, Lin, and Holland, 1966:818 (nesting habits); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1656 (in catalog of North American Hymenoptera, list of prey); Burk, 1982:92 (preys predominantly on fly males congregating around its nest in search of females); D. Peckham, 1985:871 (nesting habits); Spofford, Kurczewski, and Downes, 1989:259 (reference to publication on nest parasite *Senotainia trilineata* (Wulp), a miltogrammine fly); D. Peckham, 1991:170 (use of female sarcophagid as prey and resulting destruction of nest content); R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution, in key to Central American and Caribbean *Oxybelus*); Hanson and Menke, 1995:640 (known from Costa Rica); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:216 (behavioral features reviewed). – **As *Notoglossa sparidens*** [lapsus]: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae).

**227. *spectabilis* Gerstaecker**

*Oxybelus spectabilis* Gerstaecker, 1867a:83, ♂. Holotype or syntypes: ♂, Spain: Andalucía: no specific locality (ZMHU). – Chevrier, 1868:412 (summary of diagnostic characters); Kohl, 1884b:115 (in list of known *Oxybelus*); Dalla Torre, 1897:648 (in catalog of world Sphecidae); Antiga and Bofill, 1904:28 (Spain: Cataluña Province); Giner Marí, 1943a:260 (in Sphecid Fauna of Spain); P. Verhoeff, 1948:207 (in revision of Western European *Oxybelus*); de Andrade, 1949:22 (Portugal); de Beaumont, 1950f:413 (southern Algeria: Aflou); Ceballos, 1956:397 (in catalog of Sphecidae of Spain); de Beaumont, 1957a:155 (Morocco; diagnostic characters); Móczár, 1958c:284, 287 (in key to western Palearctic *Oxybelus*); Ceballos, 1959:232 (in supplement to catalog of Spanish Sphecidae); Diniz, 1959:32 (Portugal: Cascais); de Beaumont, 1962b:29 (Spain); Ceballos, 1964:95 (in supplement to catalog of Spanish Sphecidae); Mingo Pérez, 1966:70 (in revision of *Oxybelus* of Iberian Peninsula); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Gayubo, 1982b:14 (Spain: Ávila, Cáceres, and Salamanca provinces), 1882e:103 (Spain: Cádiz Province); Gayubo, 1984b:91 (Spain: Salamanca Province), 1984c:375 (Portugal: El Algarve Province), 1985c:169 (Spain: Valladolid: Traspinedo), 1986d:115 (Spain: Zamora Province), 1986f:1000 (prey: an anthomyiid fly and calliphorid *Pollenia rudis* F.); Gayubo and Heras, 1986a:51 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:60 (Spain: Burgos, Soria); Gayubo, 1986:61 (Spain: Ciudad Real Province); Gayubo, Asís, and Tormos, 1990b:74 (Spain: Cáceres and Toledo Provinces); Bitsch and Leclercq, 1993:261 (in revision of western European Crabroninae); Guichard, 1993b:530 and 532 (in key to European *Oxybelus*); Leclercq, 1993c:49 (collecting localities from Spain and Morocco); Tormos, Asís, and Gayubo, 1994:189, 213 (Spain: Albacete Province); Asís, Tormos, and Gayubo, 1997b:60 (description of larva); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Baños-Picón, Gayubo, Asís, and González, 2007:257, 259 (Spain: Zamora: Cabañas de Aliste); Dollfuss, 2008a:493 (Morocco: Ifrane, 10 km north of Rich); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Bitsch and Leclercq, 2009:230 (in supplement to vol. I of Faune de France, 1993: recently recorded from Spain, occurs also in Tunisia: no specific locality); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid: Reserva Natural Riberas de Castronuño – Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Ben Khedher, Yildirim, and Braham, 2021a:60 (Tunisia: Mahdia governorate: Lemsanaa, 35°19'44.5"N 10°54'51.3"E and Aouled Bouzid at 35°20'34"N 10°53'34.6"E); Cross, Baldock, and Wood, 2021:54 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:75 (in catalog of Crabronidae of Turkey, first record from Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger,

K. Schmidt, and Straka, 2021:352 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey).

### 228. *spinulosus* Gussakovskij

*Oxybelus spinulosus* Gussakovskij, 1935:434, ♂. Syntypes: Tajikistan: Kulab area; Uzbekistan: Tashkent area, Samarkand area, Bukhara (ZIN). – R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Islamov, 1986:532 (Uzbekistan: Tashkent Oblast’); Esenbekova and Kazenas, 2000:45 (southeastern Kazakhstan: 3 km northeast of Borandysu, 2 km northwest of Zhabagly); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:93 (geographic distribution, collecting localities in Kazakhstan), 2004b:106 (Kazakhstan: western Tien Shan); Dollfuss, 2008a:493 (locality records from Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan); Kazenas, 2013b:497 (southeastern Kazakhstan: Borandysu, 3 km northeast and 30 km east of Chilik), 2014a:136 (Kazakhstan: Karatau Mountain Range); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution).

### 229. *stangei* R. Bohart

*Oxybelus stangei* R. Bohart, 1993c:24, ♀, ♂. Holotype: ♀, Argentina: Salta: Angustaco (IML). – Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Menezes de Jesus, Onody, dos Santos Ramos, de Oliveira Andrade, Doria dos Santos, and Ferreira Brandão, 2019:4 (paratype in Mus. Zool. Univ. São Paulo).

### 230. *stevensoni* Arnold

*Oxybelus stevensoni* Arnold, 1927:85, ♂ (as *Stevensoni*, incorrect original capitalization). Holotype: ♂, Zimbabwe: Bulawayo (originally R. Stevenson coll., now SAM). – Arnold, 1930:14 (in checklist of Afrotropical Sphecidae), 1934:23 (further description, description of ♀); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1985b:637 (taxonomy).

### 231. *strandi* Yasumatsu

*Oxybelus strandi* Yasumatsu, 1935d:39, ♀, ♂. Holotype: ♂, Japan: Honshu: Shinano: Kamikôchi (Entomol. Lab. Fukuoka Univ.). – Matsuda, 1939a:47 (nesting habits); Tsuneki, 1946e:81 (nesting habits); Tsuneki and Shimoyama, 1963:50 (Japan: Towada Prefecture); Tsuneki, 1967g:44 (western Japan: Mount Hyonosen); Haneda, 1968a:47 (Japan); Itami, 1968a:17 (Japan: Yamagata Prefecture: foot of Mount Iide); Tano, 1968:35 (Japan); Itami, 1969:53 (Japan: Niigata Prefecture); Tsuneki, 1969a:5 (nesting habits); Haneda, 1970:13 (Japan: Akita Prefecture); Yamada, 1971:36 (Japan: Aichi Prefecture); Nambu, 1972e:91 (Japan: Saitama Prefecture), 1973a:153 (Japan: Saitama Prefecture); Suda, 1973:124 (Japan: Yamanashi Prefecture); Tsuneki, 1974a:384 (Korea); Nambu, 1975b:78 (Japan: Saitama Prefecture); Tsuneki, 1979d:12 (Japan), 1982b:10 (Korea), 16 (known from Korea); Paik, 1985:200 (in list of Sphecidae of Korea); Y. Tanaka, 1985:277-283 (alternative prey-carrying mechanisms); Tsuneki, 1991:203 (Korea); Miyatake, 1996:102 (specimens in Hiroshi Aoki collection); Haneda, Nosaka, Tano, Kurokawa, and Murota, 2004:33 (Japan: Gifu Prefecture); Suda, 2004:41 (Japan: Yamanashi Prefecture); Haneda, Inoue, Nozaka, Tano, Kurokawa, H. Murota, and T. Murota, 2005:66 (Japan: Fukui Prefecture: Mount Monju); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2005:48 (Japan: Gifu Prefecture); Kinota, Haneda, and Tano, 2005:30 (Japan: Hokkaido); Negoro, Haneda, and Tano, 2005:46 (Japan: Toyama Prefecture); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2006a:24 (Japan: Toyama Prefecture); Nambu, 2006:247 (Japan: Tokyo: Imperial Palace garden); Ohkusa, 2006a:24 (Japan: Honshu: Gifu Prefecture); Haneda, 2008:4 (in key to Japanese Crabroninae); Ohkusa, 2007:34 (Japan: central Honshu: Aichi Prefecture); Ohkusa and Tajima, 2008:75 (Japan: central Honshu: Aichi Prefecture), 2010:12 (Japan: Island of Honshu: Shiga Prefecture); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:217 (behavioral features reviewed); J.-K. Kim, 2014:437 (in catalog of Sphecidae *sensu lato* of Korean Peninsula); Kishi and Nagase, 2015:16 (Japan: Tokyo University: Yayoi Campus: visiting flowers); Terayama, 2021:18 (Japan: Port of Tokyo Wild Bird Park).

**232. subcornutus Cockerell**

*Oxybelus subcornutus* Cockerell, 1895a:293, ♀. Lectotype: ♀, USA: New Mexico: Las Cruces (ANSP), designated by Cresson, 1928:56. – Dalla Torre, 1897:648 (in catalog of world Sphecidae); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Pate, 1946a:165 (USA: District of Columbia, prey); Burks *in* Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:164 (in checklist of North American *Oxybelus*, as *subcornutum*), 1957:107 (in key to North American *Oxybelus*, as *subcornutum*); Krombein, 1958f:201 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus cockerelli* and *denverensis* reported); Kurczewski and Kurczewski, 1963:149 (Pennsylvania: Presque Isle State Park, as *subcornutum*); D.J. Peckham, Kurczewski, and D.B. Peckham, 1973:656 (nesting habits); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1656 (in catalog of North American Hymenoptera, list of prey); Burk, 1982:92 (preys predominantly on fly males congregating around its nest in search of females, as *subcornutus*); Spofford, Kurczewski, and Downes, 1989:256, 259 (references to publications on nest parasites *Macronychia aurata* (Coquillett) and *Senotainia trilineata* (Wulp), miltogrammine flies), 251 (nest parasite: undetermined species of Miltogrammini); Kurczewski and Acciavatti, 1990:61 (New York: Cayuga County); Spofford and Kurczewski, 1990:751 (nest parasites: unknown species of Miltogrammini, Sarcophagidae), 1992:998 (species of miltogrammine nest parasites listed); R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 162 (in key to Central American and Caribbean *Oxybelus*); Kurczewski, 1996:86 (nest, prey), 1998d:250 (pine barrens in upstate New York); Peckham and Hook, 1980:562 (nesting habits); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario), 30 (distribution within Ontario), 56 (first record from Canada: Ontario: list of localities); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:217 (behavioral features reviewed); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Ontario, first record from Alberta: no specific locality).

*Oxybelus cockerellii* C. Baker, 1896a:61, ♂. Holotype or syntypes: ♂, USA: Colorado: Fort Collins (USNM). Synonymized with *Oxybelus subcornutus* by R. Bohart and Schlinger, 1956c:164. – Burks *in* Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera). – **As *Notoglossa cockerellii***: Ashmead, 1899d:162 (new generic assignment, in checklist of North American Oxybelidae); H. Smith, 1908b:406 (in revision of Nebraskan Sphecidae); Mickel, 1918b:364 (in catalog of Nebraskan Sphecidae).

*Oxybelus punctatus* C. Baker, 1896a:60, ♂, junior secondary homonym of *Oxybelus punctatus* (Walckenaer, 1817). Holotype or syntypes: ♂, USA: Colorado: Fort Collins (USNM). Synonymized with *Oxybelus subcornutus* by R. Bohart and Schlinger, 1956c:164. – Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Burks *in* Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera).

*Oxybelus striatus* C. Baker, 1896a:60, ♂. Holotype or syntypes: ♂, USA: Colorado: Fort Collins (USNM). Synonymized with *Oxybelus subcornutus* by R. Bohart and Schlinger, 1956c:164. – Ashmead, 1899d:162 (in checklist of North American Oxybelidae); H. Smith, 1908b:409 (in revision of Nebraskan Sphecidae); Mickel, 1918b:367 (in catalog of Nebraskan Sphecidae); Burks *in* Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera).

*Oxybelus denverensis* Rohwer, 1909a:118, ♀. Holotype or syntypes: ♀, USA: Colorado: Denver (USNM). Synonymized with *Oxybelus subcornutus* by R. Bohart and Schlinger, 1956c:164. – Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera).

**233. subcristatus de Saussure**

*Oxybelus subcristatus* de Saussure, 1892:561, ♀. Syntypes: ♀, Madagascar: Bezanozano Province: Anosibé (MHNG). – Dalla Torre, 1897:648 (in catalog of world Sphecidae); Arnold, 1945:188 (Madagascar, redescription); Leclercq, 1960a:100 (Madagascar), 1961d:118 (Madagascar); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Leclercq, 1990b:120 (Madagascar); Madl, 1997:821 (Madagascar: Island of Nosy Boraha), 822 (in checklist

of Nosy Boraha Sphecidae); Pulawski, 2003b:797 (in checklist of Malagasy Sphecidae); Madl, 2014a:959 (in catalog of Ampulicidae, Crabronidae, and Sphecidae of Madagascar, with synonymy and locality records).

### 234. *subspinosus* Klug

*Oxybelus subspinosus* Klug in Waltl, 1835:98, ♀. Holotype: ♀, Spain: Andalusia: no specific locality (ZMHU). – Klug in Waltl, 1835:88 (in list of Hymenoptera of Andalusia); Kirchner, 1867:223 (in catalog of European Hymenoptera); Marquet, 1875:210 (France: Haute-Garonne: Toulouse), 1881:185 (southern France); Kohl, 1884b:115 (in list of known *Oxybelus*); Marquet, 1896:20 (in revision of *Oxybelus* of France); Dalla Torre, 1897:648 (in catalog of world Sphecidae); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Berland, 1925d:208 (in Sphecid Fauna of France); Guiglia, 1929:397 (Libya: Cirenaica: Jarabub oasis and Porto Bardia), 1932d:480 (Libya: Augila), 1934b:306 (Libya: bibliography and summary of locality records); de Beaumont, 1942b:427 (Switzerland: Peney near Geneva; redescription); Honoré, 1942:50 (in catalog of Egyptian Sphecidae); Yasumatsu, 1942c:114 (China: Nei Mongol: Apaka at 44°N 114.96°E); Giner Marí, 1943a:257 (in Sphecid Fauna of Spain); Šnoflák in Zavadil and Šnoflák, 1948:36 (in key to Czechoslovakian Sphecidae, not yet found in Czechoslovakia); P. Verhoeff, 1948:202 (in revision of Western European *Oxybelus*); Fæster, 1949:26, 44 (in revision of Western European *Oxybelus*); de Beaumont, 1950f:418 (Algeria), 1952b:90 (Marquet's, 1896 specimens); Guiglia, 1953a:73 (in revision of Italian *Oxybelus*); Grandi, 1954:244 (Italy); Ceballos, 1956:397 (in catalog of Sphecidae of Spain); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); de Beaumont, 1957a:155 (Morocco); Móczár, 1958b:208 (Hungary: collecting localities), 1958c:283, 290 (in key to western Palearctic *Oxybelus*), 291 (in revision of *Oxybelus* of Hungary); Nouvel and Ribaut, 1958:17 (France: Pyrénées-Orientales: Banyuls-sur-Mer area); Puławski, 1958a:190 (Bulgaria: Sozopol); Ceballos, 1959:232 (in supplement to catalog of Spanish Sphecidae); Suárez, 1959:60 (Spain: Almería Province); de Beaumont, 1960b:250 (Libya), 1962b:29 (Spain); Ceballos, 1964:95 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1965a:62 (Greece); Bonelli, 1966c:221 (Italy: Trentino–Alto Adige: Montagna); Mingo Pérez, 1966:97 (in revision of *Oxybelus* of Iberian Peninsula); de Beaumont, 1967a:366 (Turkey); Benedek, 1968:78 (Hungary, visiting flowerw of *Cicuta virosa* L., Apiaceae); de Beaumont, 1969:94 (Turkey), 1970a:405 (Afghanistan), 1970c:17 (Iran: Kerman); Balthasar, 1972:148 (in Sphecid Fauna of Czechoslovakia); de Beaumont, Bytinski-Salz and Pulawski, 1973:25 (Israel; ssp.?); Erlandsson, 1974:88 (Spain); Kazenas, 1974b:109 (feeding on flowers of *Tamarix* sp., Tamaricaceae, and *Cynanchum sibiricum* Willd., Asclepiadaceae, in Kazakhstan), 110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan); Scobiola-Palade, 1974:146 (first record from Romania: Sărăturile sandbank in Danube delta); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Pulawski, 1978:275, 279 (in key to Sphecidae of European part of USSR); Benedek, 1979:236 (Hungary: Bakony Hills); Pagliano, 1980:120 (Italy: Lazio); Gayubo, 1982b:15 (Spain: Ávila, Cáceres, and Salamanca provinces), 1982e:103 (Spain: Cádiz Province); Gayubo, 1984b:91 (Spain: Salamanca Province), 1984c:376 (Portugal: El Algarve Province), 1985c:169 (Spain: Palencia: Paredes de Nava; Valladolid: Rioseco, Valladolid), 1986a:61 (Spain: Ciudad Real Province), 1986d:115 (Spain: Zamora Province), 1986f:1001 (mating on flowers); Gayubo and Heras, 1986:52 (Spain: Segovia Province; floral records); Gayubo and Sanza, 1986:61 (Spain: Burgos); Józán, 1986:371 (Hungary: Kiskunság National Park); Tormos and Jiménez, 1987b:316 (Spain: Valencia Province: Dehesa de El Saler); Gayubo, Asís, and Tormos, 1990b:75 (Spain); Guichard, 1990b:283 (Saudi Arabia); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Pagliano, 1990:80 (in catalog of Italian Sphecidae); Dollfuss, 1991:132 (in key to Sphecidae of North and Central Europe); Guichard, 1991a:340 (Jordan); Pagliano, 1991b:329, 331 (in key to Italian Crabroninae); Budrys, 1992:32 (in list of Sphecidae of Lithuania); Gayubo, Borsato, and Osella, 1992:284 (Greece: Euboea); Bitsch and Leclercq, 1993:262 (in revision of western European Crabroninae); Guichard, 1993b:530 and 533 (in key to European *Oxybelus*); Leclercq, 1993c:49 (collecting localities from Europe and Turkey); Torregrosa, Gayubo, Tormos, and Asís, 1993:19 (Spain: Alicante Province); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Negrisoló in Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Voblenko, Gorobchishin, and

Nesterov, 1996:14 (Ukraine: Polesye Region); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Shkuratov, 1998:98 (Russia: Rostov Oblast'); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); Gonzáles, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); Gayubo, González, and Torres, 2000:186 (Spain: Salamanca Province); Mokrousov, 2000b:31 (Russia: Nizhniy Novgorod Oblast'); Ljubomirov, 2001b:50 (Bulgaria: Mount Vitoshka near Sofia); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Gorobchishin, 2003:48 (Ukraine: Kiev: botanical garden); Nieves-Aldrey, Fontal-Cazalla, Garrido-Torres, and Rey del Castillo, 2003:42 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Island of Malyi Tataru in Danube delta at 45.21°N 29.00°E); Schmid-Egger, 2003:755 (Italy: Sicilia: Armerina); Gadallah and Assery, 2004a:216 (Saudi Arabia: in key to Sphecidae of Jeddah Region), 226 (in catalog of Sphecidae of Saudi Arabia); Gayubo et al., 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Gorobchishin and Protsenko, 2004:40 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Shkuratov, 2004a:81 (Russia: Donetsk and Rostov Oblast's), 2004b:168 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova); Gayubo and Özbek, 2005:26 (Turkey: ten localities); Jacobs, 2005a:448 (Bulgaria: Primorsko); Pagliano and Negrisolo, 2005:209 (in Sphecidae Fauna of Italy); Gorobchishin, 2006:118 (Ukraine: Cherkasy Oblast': Keleberda near Kaniv; Khmel'nitskiy Oblast': Medzhybozh; Kyiv Oblast': Khotov, Kruglyk near Kyiv, Kyiv); Standfuss and Standfuss, 2006b:99 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Roche, 2007a:103 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae); Shorenko, 2007b:258 (Ukraine: Crimea: Opukskiy Nature Reserve, Shchelkino village in Leninskiy District); Danilov, 2008:350 (Russia: Altayskiy Krai: Barnaul area); Dollfuss, 2008a:494 (support for Guichard's 1993b:534 opinion that *latidens* is a junior synonym of *subspinus*, locality records from Algeria, Armenia, Bulgaria, Czech Republic, Greece, Iran, Italy, Jordan, Kazakhstan, Kyrgyzstan, Morocco, Romania, Slovakia, Spain, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, and Ukraine); Gayubo, González, Tormos, and Asís, 2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:254 (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); Bitsch and Leclercq, 2009:230 (in supplement to vol. I of Faune de France, 1993: France: first record from Alpes-de-Haute Provence: Moustiers-Sainte-Marie); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid: Reserva Natural Riberas de Castronuño–Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Pagliano, 2009:180 (Italy: recorded from Campania by A. Costa, 1869); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Shorenko and Kononov, 2010:21 (Ukraine); Tüzün and Yüksel, 2010:4472 (Turkey: Niğde Province); van der Smitten, 2010b:385 (France: Ardèche: Saint-Maurice d'Isle); Baghirov, 2011b:149 (Russia: Altayskiy Krai: Savvushka); Cruz-Sánchez, Asís, Gayubo, Tormos, and González, 2011:499 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park: effects of wildfire); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Murai and Amr, 2011:119 (recorded from Syria by Dollfuss, 2008a); Protsenko and Drozdovskaya, 2011:91 (Ukraine: Mikolaiv Oblast': Bugskiy Guard National Park); Sakenin, Samin, Bagriacik, and Rastegar, 2011:3 (Iran: Khuzestan: Andimeshk); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Prismaniy, 2012:48 (Russia: Belgorod Oblast'); Standfuss and Standfuss, 2012:427 (Greece: to be removed from list of sphecids of Magnisia Peninsula); Yildirim, 2012:81 (Turkey: Erzurum: Oltu); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:352 (in new catalog of Sphecidae of Saudi Arabia); Bitsch, 2014:405 (recorded from France by van der Smitten, 2010b); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Yildirim, Ljubomirov, and Lelej, 2014:14 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:19 (Iran: Fars Province); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); Shorenko, 2015:326 (in list of Sphecidae *sensu lato* of Crimea); Antropov, 2017b:243 (in catalog of Crabroninae of Russia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:54 (Iran: known from Fars, Isfahan, Kerman, Khuzestan, and Yazd provinces); Shorenko, 2017:77 (in Crimea collected in August), 2018:128 (Crimea,

including localities, habitats, and number of specimens); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:15 (Azerbaijan: Nakhichevan Autonomous Republic); Akulov, Proshchalykin, and Mokrousov, 2020:49 (Russia: central Krasnoyarsk Krai); Gadallah, 2020b:43 (in list of aculeate wasps of Arabian Peninsula); Cross, Baldock, and Wood, 2021:55 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:75 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:352 (in revision of Sphecidae *sensu lato* of Europe); 353 (in key to subspecies of *Oxybelus subspinosus*, *as subspinosus subspinosus*); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Kochetkov and Korsun, 2025:9 (Russia: Zabaikalskiy Krai: Daurskiy Nature Reserve).

*Oxybelus fissus* Lepageletier de Saint Fargeau, 1845:215, ♂. Holotype or syntypes: ♂, France: Lyon area (depository?). Synonymized with *Oxybelus subspinosus* by ..., synonymy confirmed by Bitsch and Leclercq, 1993:262. – F. Smith, 1856:386 (in catalog of Hymenoptera in British Museum); A. Costa, 1867c:149 and 1871b:78 (in revision of Italian Sphecidae); P. Ivanov, 1872:151 (Ukraine: Khar'kov Oblast': Kupyansk area); Dours, 1874:152 (in catalog of Hymenoptera of France); Yaroshevskiy, 1881:121 (Ukraine: Khar'kiv Oblast': Kupyansk); A. Costa, 1883:58 (Italy: Sardegna: Molentargius); Kohl, 1884b:112 (in list of known *Oxybelus*); Acloque, 1897:91 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:640 (in catalog of world Sphecidae); de Gaulle, 1908:121 (in catalog of French Hymenoptera); R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae).

*Oxybelus latidens* Gerstaecker, 1867a:93, ♀. Syntypes: ♀, Germany: Brieselanger Forst near Berlin and Austria: no specific locality (ZMHU). Synonymized with *Oxybelus subspinosus* by Fæster, 1949:26, 44, and Guichard, 1993b:534, synonymy confirmed by Dollfuss, 2008a:477. – Chevrier, 1868:413 (summary of diagnostic characters); Taschenberg, 1875:380 (Germany: Halle); Beuthin, 1876:230 (Germany: Hamburg area); Kohl, 1883e:662 (Switzerland), 1884b:113 (in list of known *Oxybelus*); F. Morawitz, 1894:348 (Turkmenistan: Dort-kuyu); Dalla Torre, 1897:642 (in catalog of world Sphecidae); Schmiedeknecht, 1907:203 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Dittrich, 1911b:21 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Schirmer, 1912:165 (Germany: Berlin area); Zilahi Kiss, 1915:80 (Hungary: Simontornya); O. Meyer, 1919:150 (Germany: Posen Province, now Poland: Poznań Region); A. Wagner, 1920:38 (Germany: Lower Elbe region); Coulon, 1925:122 (Morocco: Tanger); Maidl *in* Schmiedeknecht, 1930:662, 665 (in keys to Hymenoptera of North and Central Europe); Drogoszewski, 1936:129 (Poland: Łowicz); Goebel, 1937:39 (Poland: Poznań District: Poznań-Dębina, Strzeszynek); Zavadil, 1937a:72 (eastern Slovakia); Zavadil, Šusterka, and Baťa, 1937:171 (in catalog of Sphecidae of Czechoslovakia); Kuntze and Noskiewicz, 1938:406 (Poland: Podole region, now Ukraine, also known from more northern parts of Poland); A. Wagner, 1938a:118 (northwestern Germany); Móczár, 1939:5 (Hungary: Jászberény); Zavadil, 1939:121 (Czech Republic: Morava: Čejč, Kobyly; Slovakia: Filakovo); Dovnar-Zapolskiy, 1940:303 (Russia: Kursk Oblast'); Paul, 1941:39 (Germany: Pommern: Bublitz and Tempelburg now Poland: Województwo Zachodniopomorskie: Bobolice and Czaplinek); de Beaumont, 1942b:428 (Switzerland: Peney near Geneva; redescription); Balthasar, 1948:141 (Slovakia: Parkan); Šnoflák *in* Zavadil and Šnoflák, 1948:34, 38 (in key to Czechoslovakian Sphecidae); P. Verhoeff, 1948:201 (in revision of Western European *Oxybelus*); Noskiewicz and Chudoba, 1950:312 (Poland: in revision of *Oxybelus* of Śląsk Region); Szulczewski, 1950:102 (Poland: Wielkopolski National Park 15 km south of Poznań); Scobiola, 1951:274 (first record from Romania: Furceni in Putna Region); Guiglia, 1953a:76 (in revision of Italian *Oxybelus*); Blüthgen, 1954:146, 151 (in key to Central European *Oxybelus*); Puławski, 1954:106 (Poland: Błędów); Vogrin, 1955:45 (Yugoslavia); Móczár, 1958b:208 (Hungary: collecting localities), 1958c:284, 291 (in key to western Palearctic *Oxybelus*); Wolf, 1959b:35 (known from Germany, but not from Nassau); Noskiewicz and Puławski, 1960:161, 164 (in key to Polish Sphecidae); Balthasar, M. Hrubant, and E. Hrubant, 1967:170 (Bulgaria: Slanchev Bryag near Nesebar); de Beaumont, 1967a:366 (Turkey); Benedek, 1968:78 (Hungary, floral records), 1969a:85 (Hungary: marshy meadow), 1970:104 (Hungary: Tapolca); Oehlke, 1970:793 (Democratic Germany); Balthasar, 1972:147 (in Sphecid

Fauna of Czechoslovakia); Kazenas, 1972b:176 (Kazakhstan); Scobiola-Palade, 1972a:152 (Romania: delta of Danube: Caraorman); Kazenas, 1974b:110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, *Nitraria schoberi* L., Zygophyllaceae, and *Silaum besseri* L., Apiaceae, in Kazakhstan), 111 (feeding on flowers of *Barbarea vulgaris* R. Br., Brassicaceae, in Kazakhstan); Scobiola-Palade, 1974:147 (Romania: Sărăturile sandbank in Danube delta); R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Lomholdt, 1976:281 (in Sphecidae Fauna of Fennoscandia and Denmark); Kolesnikov, 1977:321 (Russia: Bryansk Oblast'); Pulawski, 1978:275, 277 (in key to Sphecidae of European part of USSR); Benedek, 1979:236 (Hungary: Bakony Hills); Skibińska, 1982:124 (Poland: Warszawa area); Dollfuss, 1983a:75 (Austria: endangered in Niederösterreich), 79 (Austria: endangered in Kärnten), 1983b:13 (in catalog of Sphecidae *sensu lato* of Austria); Józán, 1985b:58 (Hungary south of Lake Balaton), 84 (ecological and zoogeographic characteristics); Scobiola-Palade, 1985:97 (Romania: delta of Danube); Islamov, 1986:532 (Uzbekistan: Tashkent Oblast'); Józán, 1986:371 (Hungary: Kiskunság National Park); Skibińska, 1986b:162 (Poland: Warszawa: urban parks), 174 (various green urban habitats); Dollfuss, 1988:14, 25 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Karsai, 1988:100 (Hungary: Kiskunság National Park); Pádr *in* Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Jacobs and Oehlke, 1990:122 and 175 (not collected in Democratic Germany after 1960); Kuznetzova, 1990:25 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pagliano, 1990:79 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:542 (Austria: Kärnten); Day, 1991:xvii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:131 (in key to Sphecidae of North and Central Europe); Pagliano, 1991b:329, 331 (in key to Italian Crabroninae); Bitsch and Leclercq, 1993:256 (in revision of western European Crabroninae); Guichard, 1993b:34 (as new synonym of *Oxybelus subspinus*); Leclercq, 1993c:47 (Slovakia: Gbelce); Negrisoló *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Wu and Zhou, 1996a:107 (in revision in Economic Insect Fauna of China); Celary, 1997:58 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:22 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:28 (Germany: in list of Sphecidae of Brandenburg), 33 (extinct); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Gusenleitner, 1999:594 (Austria: Burgenland: Heidl bei Nickelsdorf); Neumayer, Schwarz, and Bregant, 1999:225 (Austria: in checklist of Sphecidae of Land Kärnten); Blösch, 2000:267 (in Sphecidae Fauna of Germany); Esenbekova and Kazenas, 2000:44 (southeastern Kazakhstan: near Bakanas, near Taldy-Kurgan, Uzun-Agach); Jacobs, 2000:8, 16 (Germany: Land Mecklenburg-Vorpommern: extinct); Józán, 2000:109 (Hungary: Bakony Mountains), 2001:279 (Hungary: Somogy County); Kazenas, 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia); Ohl et al., 2001:140 (distribution in Germany by provinces); van der Smissen, 2001:62 (Germany: Schleswig-Holstein: extinct); Zettel, Gross, and Mazzucco, 2001:74 (Austria: Wien); Kazenas, 2002a:90 (geographic distribution, collecting localities in Kazakhstan); Kazenas, 2004b:106 (Kazakhstan: western Tien Shan); Shkuratov, 2004a:81 (Russia: Donetsk, Rostov, and Volgograd oblast's); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:372 (Germany: Sachsen-Anhalt: last collected before 1954); Wiśniowski, 2004:46 and 61 (in checklist of Polish Sphecidae); Gayubo and Özbek, 2005:25 (Turkey: eight localities); Pagliano and Negrisoló, 2005:208 (in Sphecidae Fauna of Italy); Straka, 2005a:395 (extinct in Czech Republic); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Gorobchishin, 2006:116 (Ukraine: Kyiv); Hansen, Kvamme, and Lønnve, 2006:305 (in Red List of Hymenoptera of Norway); Hua, 2006:281 (in list of Chinese insects, geographic distribution); Jacobs, 2007:114, 120 (in key to Crabronidae of Germany); Kazenas, 2007a:91 (Kazakhstan: Akmalá Oblast': Kurgandzhin Nature Reserve and vicinity); Nemkov, 2007c:997 (in Appendix to Key for identification of Sphecidae of Far East of Russia); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia); Dollfuss, 2008a:477 (support for Guichard's 1993b:534 opinion that *latidens* is a synonym of *Oxybelus subspinus*, locality records from Bulgaria, Iran, Kazakhstan, Mongolia, Serbia, Turkey, Turkmenistan, and Ukraine); Nemkov, 2008b:20 (in catalog of Crabronidae of Asiatic Russia); Bitsch and Leclercq, 2009:229 (in supplement to vol. I of Faune de France, 1993: review of recent opinions on the species status); Nemkov, 2009b:91 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Schmid-Egger,

2010a:17 (in red list of Aculeata of Germany: extremely rare), 2010b:43 (Germany: Brandenburg: Mallnow at 52°56'N 13°17'E, previously collected in Germany in 1911); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen), 2011b:29 (the species author's name should be spelled Gerstaecker, as in the original publication); Tischendorf, Frommer, and Flügel et al., 2011:44 (Germany: extinct in Hessen, last collected in 1947); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Kazenas, 2013a:79, 80 (color photographs of adult wasps, short information on geographic distribution and nesting habits), 2013b:497 (southeastern Kazakstan: many localities on the plain and in river valleys); Bitsch, 2014:405 (record from Sweden by Johansson, 2012 noted); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Yıldırım, Ljubomirov, and Lelej, 2014:13 (distribution in Turkey by biogeographic provinces); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Langfeld, 2023:61 (Germany: Mecklenburg-Vorpommern: Baltic island Greifswalder Oie); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (Uzbekistan: distribution). – As *Oxybelus subspinosus latidens*: Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:353 (new status, in key to subspecies of *Oxybelus subspinosus*)

*Oxybelus psammobius* Kohl, 1884b:108, ♀, ♂. Syntypes: Turkey: Bursa (NHMW). Synonymized with *Oxybelus latidens* by ... – Kohl, 1884b:114 (in list of known *Oxybelus*), 1893:34 (Austria: Niederösterreich: Wien: Türken-schanze and Piesting); Dalla Torre, 1897:646 (in catalog of world Sphecidae); Mocsáry, 1897:81 (Kingdom of Hungary, some localities are in today's Croatia, Romania, and Slovakia); Zavadil, Šusterka, and Bat'a, 1937:174 (Slovakia); Šnoflák in Zavadil and Šnoflák, 1948:34, 37 (in key to Czechoslovakian Sphecidae); Dollfuss, 1989:11 (type material in NHMW); Johansson, 2012:59 (first record from Sweden: Skåne: Ravlunda).

### **ssp. *flavitibialis* Tsuneki**

*Oxybelus latidens flavitibialis* Tsuneki, 1971:36, ♂. Holotype: China: Inner Mongolia: Apaka (originally K. Tsuneki coll., now USNM). – R. Bohart and Menke, 1976:368 (in checklist of world Sphecidae); Nuhn and Menke, 1994:25 (holotype transferred to USNM); Hua, 2006:281 (in list of Chinese insects, geographic distribution).

### **235. *subtilis* Gussakovskij**

*Oxybelus subtilis* Gussakovskij, 1935:436, ♀. Holotype: ♀, Tajikistan: Say-Varzob in Hissar Mountains (ZIN). – R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia).

### **236. *subulatus* Ch. Robertson**

*Oxybelus mucronatus* Packard, 1867:436, ♀, ♂, junior secondary homonym of *Oxybelus mucronatus* (Fabricius, 1793). Lectotype: ♂, USA: Illinois: no specific locality (ANSP), designated by Cresson, 1928:54. – Cresson, 1887:286 (in catalog of North American Hymenoptera); J. Smith, 1900:513 (in list of insects of New Jersey).

*Oxybelus subulatus* Ch. Robertson, 1889:79, ♀, ♂. Syntypes: USA: Colorado, Illinois, Montana, Pennsylvania (ANSP). Synonymized with *Oxybelus mucronatus* Packard by R. Bohart and Schlinger, 1956c:164. – Ashmead, 1890:31 (in checklist of Hymenoptera of Colorado); C. Baker, 1896a:61 (Colorado: Fort Collins); Dalla Torre, 1897:648 (in catalog of world Sphecidae); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); J. Smith, 1900:513 (in list of insects of New Jersey); H. Smith, 1908b:407 (in revision of Nebraskan Sphecidae); J. Smith, 1910:682 (in new list of insects of New Jersey); Stevens, 1917:423 (North Dakota); Mickel, 1918b:368 (in catalog of Nebraskan Sphecidae); Washburn, 1919:217 (in list of Hymenoptera of Minnesota); Pate, 1930b:41 (first record from New York State: Cold Spring Harbor); Brimley, 1938:450 (North Carolina: Aberdeen, Bryson City); Strickland, 1947:127 (Canada: Alberta: Lethbridge, Medicine Hat); Burks in Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); R. Bohart and Schlinger, 1956c:164 (in checklist of North American *Oxybelus*, as *subulatum*), 1957:108 (in key to North American *Oxybelus*, as *subulatum*); Krombein, 1958f:200, 204 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus acutus* and *albosignatus* reported), 202, 204

- (synonymy with *Oxybelus mottensis* reported), 202 (Colorado to Massachusetts, north to Canada); D.J. Peckham, Kurczewski, and D.B. Peckham, 1973:652 (male habits, nest structure, prey transport, nest parasites); Evans, 1975a:263 (rapid colonizer of new habitats); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); D. Peckham, 1977:823 (males guarding nest entrance against miltogrammine nest parasites); Krombein, 1979b:1657 (in catalog of North American Hymenoptera, list of prey); Peckham and Hook, 1980:562 (nesting habits); Burk, 1982:92 (preys predominantly on fly males congregating around its nest in search of females); Finnamore, 1982:127 (in Sphecid Fauna of Southern Quebec); Radović, 1985:65 (sting apparatus analyzed); Spofford, Kurczewski, and Downes, 1989:256, 257 (references to publications on nest parasites *Macronychia* sp., *Metopia argyrocephala* (Meigen), *Metopia* sp., *Phrosinella fulvicornis* (Coquillett), miltogrammine flies), 257, 259, 261 (nest parasites: *Phrosinella aurifacies* Downes, *Senotainia trilineata* (Wulp), miltogrammine flies, and undetermined species of Miltogrammini); Spofford and Kurczewski, 1990:746, 748, 751 (nest parasites: *Phrosinella aurifacies* Downes, *Senotainia trilineata* (Van der Wulp), and unknown species of Miltogrammini, Sarcophagidae), 1992:998 (species of miltogrammine nest parasites listed), 1002 (counter-cleptoparasitic habits: diversionary flight), 1003 (counter-cleptoparasitic habits: male guarding), 1005 (post-larvipositional counter-cleptoparasitic habits: abandon prey, inordinate amount of post-provisioning time in burrow); Ahlstrom, 1995:110 (in checklist of insects of North Carolina); Kurczewski, 1996:86 (nest), 1998d:250 (pine barrens in upstate New York); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario); Matthews and Matthews, 2005:67 (Nebraska: Keith County; nesting habits); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:217 (behavioral features reviewed); Buck and Bennett, 2025:217 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Alberta, Ontario, Quebec, Saskatchewan, first records from British Columbia and Manitoba: no specific locality).
- Oxybelus packardi* Dalla Torre, 1890:203 (as *Packardi*, incorrect original capitalization), junior primary homonym of *Oxybelus packardii* Robertson, 1889. Substitute name for *Oxybelus mucronatus* Packard.
- Oxybelus acutus* C. Baker, 1896:61, ♀. Holotype or syntypes: ♀, USA: Colorado: Fort Collins (USNM). Synonymized with *Oxybelus subulatus* by R. Bohart and Schlinger, 1956c:164. – Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Burks *in* Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera).
- Oxybelus albosignatus* H. Smith, 1908b:407, ♀. Holotype: ♀, USA: Nebraska: West Point (UNL). Synonymized with *Oxybelus subulatus* by R. Bohart and Schlinger, 1956c:164. – Mickel, 1918b:368 (in catalog of Nebraskan Sphecidae); Carter, 1925:131 (Canada: Alberta: Lethbridge); Burks *in* Muesebeck, Krombein, and Townes, 1951:1031 (in catalog of North American Hymenoptera); Muma, 1952:21 (holotype in UNL), 27 (paratype in UNL).
- Oxybelus mottensis* Mickel, 1918a:323, ♀. USA: North Dakota: Mott (UNL). Synonymized with *Oxybelus subulatus* by R. Bohart and Schlinger, 1956c:165. – Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera); Muma, 1952:21 (holotype in UNL), 27 (paratype in UNL).

### 237. *suluensis* Pate

- Oxybelus suluensis* Pate, 1938b:377, ♀, ♂ (as *suluense*, incorrect original termination). Holotype: ♂, Borneo: Sandakan (USNM). – Pate, 1938b:393 (in list of Oriental Oxybelini); Baltazar, 1966:359 (in catalog of Hymenoptera of Philippines). – **As *Oxybelus suluensis***: R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Manikandan and Dey, 2001:264 (in checklist of Oriental *Oxybelus*).

### 238. *taenigaster* (Viereck)

- Notoglossa taenigaster* Viereck, 1906:215, ♀. Holotype: ♀, USA: Kansas: Morton County: no specific locality (KU). – **As *Oxybelus taenigaster***: R. Bohart and Schlinger, 1956c:165 (new generic assignment, in checklist of North American *Oxybelus*), 1957:109 (in key to North American *Oxybelus*); Krombein, 1958f:200, 204 (in supplement to catalog of North American Hymenoptera: synonymy with *Oxybelus albomaculatus* reported), 201, 204 (synonymy with *Oxybelus fastigatus* reported), 204 (Arizona, New Mexico, Nebraska, south to Mexico: Oaxaca); R. Bohart and

Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1979b:1657 (in catalog of North American Hymenoptera); R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:151 (number of ovarioles).

*Oxybelus fastigatus* Mickel, 1916a:433. Holotype: ♂, USA: Nebraska: Harrison (UNL). Synonymized with *Oxybelus tenigaster* by R. Bohart and Schlinger, 1956c:165. – Mickel, 1918b:367 (in catalog of Nebraskan Sphecidae); Muma, 1952:21 (holotype in UNL), 27 (paratypes in UNL).

*Notoglossa albomaculata* Mickel, 1918a:320, ♂. Holotype: ♂, USA: Nebraska: Mitchell (UNL). Synonymized with *Oxybelus taenigaster* by R. Bohart and Schlinger, 1956c:165. – Mickel, 1918b:364 (in catalog of Nebraskan Sphecidae); Muma, 1952:21 (holotype in UNL), 27 (paratype in UNL). – As *Oxybelus albomaculatus*: Burks in Muesebeck, Krombein, and Townes, 1951:1031 (new generic assignment, in catalog of North American Hymenoptera, as *albomaculata*).

### 239. *taprobanensis* Pate

*Oxybelus ceylonicus* Cameron, 1900a:41, ♀, junior primary homonym of *Oxybelus ceylonicus* Cameron, 1897. Holotype or syntypes: ♀, Sri Lanka: no specific locality (BMNH). – Ramakrishna Aiyar, 1916:559 (in catalog of Indian aculeates described after Bingham, 1897); Manikandan and Dey, 2001:265 (in checklist of Oriental *Oxybelus*).

*Oxybelus taprobanensis* Pate, 1930a:20. Substitute name for *Oxybelus ceylonicus* Cameron, 1900. – Pate, 1938b:389 and 393 (in list of Oriental Oxybelini, as *taprobanense*); R. Bohart and Menke, 1976:369 (in checklist of world Sphecidae); Krombein, 1983:38 (diagnostic characters); Manikandan and Dey, 2001:265 (in checklist of Oriental *Oxybelus*).

### 240. *tarapacae* R. Bohart

*Oxybelus tarapacae* R. Bohart, 1992:163, ♀, ♂. Holotype: ♀, Chile: Tarapaca: Chusmisa (Catolica Mus., Valparaiso). – Amarante, 2002:45 (in catalog of Neotropical Crabronidae).

### 241. *tartagalae* R. Bohart

*Oxybelus tartagalae* R. Bohart, 1993d:75, ♀, ♂. Holotype: ♀, Argentina: Salta: Tartagal (originally M. Fritz coll., Salta, Argentina, now AMNH). – R. Bohart, 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Dollfuss, 2008a:496 (Bolivia: Río Seco).

### 242. *taschenbergi* Kohl

*Oxybelus fasciatus* Taschenberg, 1875:380, ♂, junior primary homonym of *Oxybelus fasciatus* Dahlbom, 1845. Holotype: ♂, South Africa: Cape Province (Eastern or Western?): no specific locality (Halle).

*Oxybelus taschenbergi* Kohl, 1884b:112 and 115 (as *Taschenbergi*, incorrect original capitalization). Substitute name for *Oxybelus fasciatus* Taschenberg. – Dalla Torre, 1897:648 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Dollfuss, 1989:11 (type material in NHMW).

### 243. *tengu* Tsuneki

*Oxybelus tengu* Tsuneki, 1972a:167, ♂. Holotype: ♂, Mongolia: Hovd Aymag: 10 km south-southwest of Soman Bulgan (TMB). – R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae).

### 244. *thailanditus* Tsuneki

*Oxybelus transiens thaianus* Tsuneki, 1963c:42, ♂, junior primary homonym of *Oxybelus thaianus* Tsuneki, 1961. Holotype: Thailand: Chieng Mai (Sasayama Univ.).

*Oxybelus thailanditus* Tsuneki, 1974b:654. Substitute name for *Oxybelus thaianus* Tsuneki, 1963 (full species status). – R. Bohart and Menke, 1976:629 (in checklist of world Sphecidae); Dollfuss, 2008a:496 (Laos: Lao Pako area 35 km northeast of Vientiane at 18°10'N 102°52'E).

*Oxybelus transiens thaiensis* Tsuneki, 1977i:4. Substitute name for *Oxybelus thaianus* Tsuneki, 1963.

#### 245. *timberlakei* R. Bohart and Schlinger

*Oxybelus timberlakei* R. Bohart and Schlinger, 1956b:150, ♀, ♂. Holotype: ♂, USA: California: Riverside County: Sherk Creek in San Jacinto Mountains (CAS). – R. Bohart and Schlinger, 1956c:165 (in checklist of North American *Oxybelus*), 1957:119 (in revision of Californian *Oxybelus*), 1958f:204 (in supplement to catalog of North American Hymenoptera); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Krombein, 1979b:1657 (in catalog of North American Hymenoptera).

#### 246. *tinklyi* Guichard

*Oxybelus tinklyi* Guichard, 1990b:282, ♀, ♂. Holotype: ♀, Israel: Jericho: Wadi Qilt (BMNH). Paratypes: Mali, Niger, Saudi Arabia, United Arab Emirates, Yemen. – Leclercq, 1993c:49 (in catalog of western Palearctic Crabronini and Oxybelini); Gadallah and Assery, 2004a:226 (in catalog of Sphecidae of Saudi Arabia); Dollfuss, 2008a:496 (locality records from Jordan, Senegal, Syria, and Yemen); Murai and Amr, 2011:119 (recorded from Syria by Dollfuss, 2008a); Schmid-Egger, 2011b:563 (United Arab Emirates: Al-Ajban, Dubai/Al-Awir, Dubai/Nakhalai, Jebel Hafit south of Al-Ain, Sharjah, Sharjah Desert Park, Wadi al-Helo, Wadi Madaq), 564 (color photographs of female), 565 (color photograph of female head); Gadallah, Al Dhafer, Aldryhim, Fadl, and Elgharbawy, 2013:352 (in new catalog of Sphecidae of Saudi Arabia); Schmid-Egger, 2014:586 (United Arab Emirates); Atbaei, Fallahzadeh, and Ljubomirov, 2015:19 (first record from Iran: Fars Province); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:54 (Iran: known from Fars Province); Fallahzadeh, Ljubomirov, Tavakoli Roodi, and Saghaei, 2018:31 (Iran: Hormozgan: Sar Kahnan at 27°24'N 57°07'E); Gadallah, 2020b:43 (in list of aculeate wasps of Arabian Peninsula); Gadallah, Abu el-Ghiet, and Edmardash, 2021:1713 (Saudi Arabia: Jazan Province); Gadallah and Abu El-Ghiet, 2024:87 (Saudi Arabia: Jazan Province: Abu Arish, Damad, Haffadhiya).

#### 247. *toroi* R. Bohart

*Oxybelus toroi* R. Bohart, 1992:163, ♀, ♂. Holotype: ♀, Chile: Antofagasta: San Pedro (Catolica Mus., Valparaiso). – Amarante, 2002:45 (in catalog of Neotropical Crabronidae).

#### 248. *transcaspicus* Radoszkowski

*Oxybelus transcaspicus* Radoszkowski, 1888b:345, ♀. Holotype or syntypes: ♀, Turkmenistan: Ashkhabad (Kraków). – Radoszkowski, 1888b:345 (Turkmenistan: Ashkhabad); Dalla Torre, 1897:649 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia).

#### 249. *transiens* R. Turner

*Oxybelus transiens* R. Turner, 1917e:192, ♀. Syntypes: ♀, India: Bihar: Chapra (BMNH). – Pate, 1938b:3393 (in list of Oriental Oxybelini); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Manikandan, Dey, and Farooqi, 1999:12 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:265 (in checklist of Oriental *Oxybelus*); Mawadda and Girish Kumar, 2023a:110 (in checklist of Crabroninae of Northern India).

#### 250. *tricolor* Gussakovskij

*Oxybelus tricolor* Gussakovskij, 1952:256, ♀. Syntypes: Tajikistan: Djilikul (ZIN). – R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia).

#### 251. *tridentatus* F. Smith

*Oxybelus tridentatus* F. Smith, 1856:387, ♂. Syntypes: ♂, India: no specific locality (BMNH). – F. Smith, 1871a:369 (in catalog of Oriental Aculeata); Kohl, 1884b:115 (in list of known *Oxybelus*); Cameron, 1890b:276 (in list of Oriental

Sphecidae); Bingham, 1897:317 (in Wasp Fauna of British India; Burma); Dalla Torre, 1897:649 (in catalog of world Sphecidae); Pate, 1938b:393 (in list of Oriental Oxybelini, as *tridentatum*); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Manikandan, Dey, and Farooqi, 1999:13 (in key to Indian *Oxybelus*); Manikandan and Dey, 2001:265 (in checklist of Oriental *Oxybelus*).

## 252. *trispinosus* (Fabricius)

*Apis trispinosa* Fabricius, 1787:303, ♀. Holotype: ♀, Germany: Halae Saxonum, now Sachsen-Anhalt: Halle (Halle, Taschenberg coll.: P. Verhoeff, 1948:195, Blüthgen, 1949:86). – **As *Crabro trispinosus***: Fabricius, 1793:301 (new generic assignment, Germany: Halle), 1796:51 (in Index to his Entomologia Systematica, 1793). – **As *Vespa trispinosa***: Turton, 1801:533 (new generic assignment, Germany: Halle). – **As *Oxybelus trispinosus***: Fabricius, 1804:318 (new generic assignment, redescription); Latreille, 1806:pl. XIII, fig. 13 (illustration); Jurine, 1807:217 (in checklist of species of *Oxybelus*); Stephens, 1829:364 (in catalog of British insects), 1829b:33 (in checklist of British insects); Vander Linden, 1829:40 (bibliographic references, Germany); Herrich-Schaeffer, 1840:295 (Germany: Bayern: Regensburg area); Dahlbom, 1844:270 (in revision of Sphecidae and Pompilidae), 1845:XXV (type material examined), 512 (in key to *Oxybelus*); Lepeletier de Saint Fargeau, 1845:222 (in revision of world Hymenoptera; Paris area); Schilling, 1848:105 (Germany: Breslau area, now Poland: Wrocław); Eversmann, 1849:416 (Russia: Ural foothills); von Kiesenwetter, 1849:90 (Germany: Kingdom of Saxony: Oberlausitz area); Wissmann, 1849:14 (Germany: Kingdom of Hannover: Regenstein); Tischbein, 1850:10 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); Wesmael, 1852:625 (Belgium); Kirschbaum, 1853:47 (Germany: Herzogtum Nassau: Mombach); F. Smith, 1856:383 (in catalog of Hymenoptera in British Museum); Kawall, 1857:25 (Kurland, now Latvia); Ruthe and Stein, 1857:315 (Germany: Berlin area); Schenck, 1857:113 (Germany: in revision of fossorial wasps of Nassau Region); Taschenberg, 1858:120 (in key to Sphecidae of Germany; identity); Assmuss, 1859:616 (Russia: Moscow Governorate); Funk, 1859:58 (Germany: Bayern: Bamberg); Schenck, 1860:146 (Germany: Nassau Region); Brischke, 1862:104 (Germany: Preussen Province, now Poland: Pomorze Region); Taschenberg, 1866:161 (in revision of Hymenoptera of Germany); Kirchner, 1867:223 (in catalog of European Hymenoptera); Schenck, 1867a:352 (Germany: Nassau Region); Chevrier, 1868:406 (in revision of Swiss *Oxybelus*); Jaennicke, 1868:8 (Germany: Hessen: Bieberer Höhe); von Aichinger, 1870:315 (Austria: Tirol); P. Ivanov, 1872:151 (Ukraine: Khar'kov Oblast': Kupyansk area); Dours, 1874:152 (in catalog of Hymenoptera of France); Wierzejski, 1874:261 (Ukraine: Podole Region: Janów, Kalinowce); Marquet, 1875:210 (France: Haute-Garonne: Toulouse); Beuthin, 1876:230 (Germany: Hamburg area); Kohl, 1880:144 (Austria: Tirol, and Italy: Trentino–Alto Adige); Marquet, 1881:185 (southern France); Yaroshevskiy, 1881:121 (Ukraine: Khar'kiv Oblast': Kupyansk); Sickmann, 1883:80 (Germany: Niedersachsen: Wellingholthausen); Kohl, 1884b:116 (in list of known *Oxybelus*); Brischke, 1888b:100 (Germany: Preussen Province, now Poland: Pomorze Region), 1889:204 (Germany: Steegen east of Danzig, now Poland: Stegna east of Gdańsk); Assmuss, 1892:53 (Russia: earlier record from Moscow Governorate repeated); Acloque, 1897:92 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:649 (in catalog of world Sphecidae); N. Arnold, 1902:87 (Russia: Mohilev Province, now Belorussia); de Cobelli, 1903:114 (Italy: Province of Trentino: Mollaro, Mori, Rovereto); E. Saunders, 1904c:639 (Spain); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Schirmer, 1912:165 (*Oxybelus trispinosus* is a synonym of *nigrripes*); Coulon, 1925:122 (Germany); Verhoeff, 1948:192 (in revision of Western European *Oxybelus*); Fæster, 1949:21 (as junior synonym of *Oxybelus uniglumis*); de Beaumont, 1951h:35 (Switzerland: Neuchâtel area), 1952b:90 (Marquet's, 1896 specimens); Guiglia, 1953a:116 (in revision of Italian *Oxybelus*); Nouvel and Ribaut, 1953:184 (France: Central Pyrénées: Garonne River valley, Hautes-Pyrénées: Caunterets, Orédon); Blüthgen, 1954:144, 150, 152 (in key to Central European *Oxybelus*), 153 (common in sandy habitats); Grandi, 1954:245 (Italy); Aerts, 1955:60 (Germany: Rheinland); Steiner, 1955:146 (France: Dordogne); Ceballos, 1956:397 (in catalog of Sphecidae of Spain); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); Fahlander, 1957:63 (Sweden: Småland: Södra Vi); Grandi, 1957:392 (Italy); Zirngiebl, 1957:178 (Germany: Rheinland-Pfalz: Leistadt); Benno, 1958b:18 (in review of Dutch Sphecidae); de Beaumont, 1958c:213 (Swiss National

Park); Compte Sart, 1959:138 (Spain: Mayorca); Móczár, 1958b:211 (Hungary: collecting localities), 1958c:286, 290 (in key to western Palearctic *Oxybelus*); Wolf, 1959b:35 (Germany: Nassau); Hamann, 1960:197, 198 (Austria: Oberösterreich: Mönchgraben at 48°13'N 14°21'E); Noskiewicz and Puławski, 1960:162, 165 (in key to Polish Sphecidae); van der Vecht, 1961a:73 (taxonomic history); Valkeila, 1962b:68 (southwestern Finland); Babiý, 1964:119 (Austria: Land Salzburg); Ceballos, 1964:95 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:161 (in Sphecid Fauna of Switzerland); B. Klug, 1965:144 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Bonelli, 1966c:221 (Italy: Trentino–Alto Adige: Piazzòl, Varena); Lefeber, 1966:209 (Netherlands: Bemelen, Sint-Pietersberg); Mingo Pérez, 1966:79 (in revision of *Oxybelus* of Iberian Peninsula); Benno, 1967:39 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:365 (Turkey); Gauss, 1967:560 (Germany: Baden-Württemberg); J. Heinrich, 1967:83 (Germany: Bayern: Unterfranken District); Niedl and Deneš, 1967:76 (Czech Republic: Třeboň area); Scobiola-Palade, 1967b:50 (Romania), 1968c:386 (Romania: București, Turnu Măgurele); Bonelli, 1969c:176 (nesting habits); Lefeber, 1969c:234 (Netherlands: Sint-Pietersberg = Montagne Saint Pierre); Romanova, 1969:136 (Russia: North Caucasus); Zangheri, 1969:1709 (Italy: in catalog of flora and fauna of Romagna Region); Gauss and Perraudin, 1970:360 (Germany: Baden-Württemberg: Bodensee area); Oehlke, 1970:797 (Democratic Germany); Tumšs, 1970:83 (Latvia); Schmidt, 1971b:53 (Germany: Mombach area, identification tentative); Kofler, 1972:116 (Austria: eastern Tirol); Niedl and Deneš, 1972:151 (Czech Republic: Třeboň area); Simon Thomas, 1972:187 (France: Gironde, Landes); Kofler, 1974:320 (Austria: Kärnten); Lefeber, 1975b:156 (Belgium); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Lomholdt, 1976:285 (in Sphecid Fauna of Fennoscandia and Denmark); Kolesnikov, 1977:321 (Russia: Bryansk Oblast'); Marion, 1978:91 (France: Nièvre Department); Pulawski, 1978:276, 277 (in key to Sphecidae of European part of USSR); Schwammberger, 1978:421 (Germany: Württemberg); Benedek, 1979:236 (Hungary: Bakony Hills); Leclercq, Gaspar, and Verstraeten, 1979:map 1428 (Belgium); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Jacob-Remacle and Leclercq, 1980:192 (Belgium: gardens in Liège); Pagliano, 1980:120 (Italy: Piemonte); Dollfuss and Ressler, 1981:322 (Austria: Niederösterreich: Scheibbs District); Schmidt, 1981:177 (Germany: Baden-Württemberg); Donath, 1982:215 (Germany: Cottbus Bezirk); Leclercq, 1982a:124 (Belgium: Liège); Skibińska, 1982:124 (Poland: Warszawa area); Dollfuss, 1983b:13 (in catalog of Sphecidae of Austria); Józán, 1983:103 (Hungary); Gayubo, 1984b:92 (Spain: Salamanca Province); Jacob Remacle, 1984:260 (Belgium: urban center of Liège); Lefeber, 1984:29 (Netherlands: Maastricht); Józán, 1985b:58 (Hungary south of Lake Balaton), 69 (map of distribution in Hungary), 79 (floral records), 84 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Brechtel, 1986:73 (Germany: Südpfalz); Gayubo, 1986d:115 (Spain: Zamora Province); Nemkov, 1986:100 (Russia: Siberia: Irkutsk Oblast'); Vikberg, 1986:76 (Finland); Holtappels, 1987:26 (Germany: Nordrhein Westfalen: Effelder Waldsee); Tormos and Jiménez, 1987a:125 (Spain: Valencia); Dollfuss, 1988:14, 26 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Düweke, 1988:688 (Germany: Baden-Württemberg: Kaiserstuhl); Kowalczyk, 1988a:46 (Poland: Rogów); Jacobs, 1989:16 (Germany: Mecklenburg-Vorpommern); Pádr *in* Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Gayubo, Asís, and Tormos, 1990b:75 (Spain: Salamanca Province); Jacobs and Oehlke, 1990:123 (population regress in Democratic Germany after 1960), 177 (new records from Democratic Germany); Kowalczyk, 1990:292 (Poland: Góry Świętokrzyskie); Pádr, 1990:90 (Czech Republic: Praha area); Pagliano, 1990:80 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:542 (Austria: Kärnten); Day, 1991:xvii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:132 (in key to Sphecidae of North and Central Europe); Kowalczyk, 1991a:100, 102 (Poland: Łódź), 1991b:121 (Poland: Augustów Forest); Pagliano, 1991b:329, 332 (in key to Italian Crabroninae); Budrys, 1992:32 (in list of Sphecidae of Lithuania); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Józán, 1992b:174 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Bitsch and Leclercq, 1993:263 (in revision of western European Crabroninae); Guichard, 1993b:531 and 532 (in key to European *Oxybelus*); Kuhlmann, 1993:77 (Germany: known from Westfalen); Leclercq, 1993c:50 (collecting localities from Europe); Sorg and Wolf, 1993:60 (Germany: Rheinland-Westfalen:

Nature Reserve Die Spey); Wiśniowski, 1993a:95 (Poland: Białowieża Primeval Forest); Wolf, 1993:14 (Germany: Bayern: Gersthofen); Theunert, 1994c:46 (Germany: summary of records from Niedersachsen and Bremen); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Jansen and Kaluza, 1995:7 (Germany: endangered in Sachsen); Negrisolino *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:424 (in key to Sphecidae of Russian Far East); Schmid-Egger, Rich, and Niehuis, 1995:200 (summary of records from Germany: Rheinland-Pfalz Province); Arens, 1996:441 (Germany: Bayern: Bayreuth area); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: not endangered); Tischendorf, 1996:47 (Germany: Hessen: near Bensheim); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Woydak, 1996:48 (Germany: Westfalen: summary of distribution and nesting habits), 104 (not recorded after 1950); Wolf, 1997a:3 (Germany: Bayern: Hirblinger Höhen near Augsburg); Celary, 1997:59 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:22 (in checklist of German Sphecidae); F. Burger, Saure, and Oehlke, 1998:29 (Germany: in list of Sphecidae of Brandenburg); Dollfuss, Gusenleitner, and Bregant, 1998:521 (Austria: summary of collecting records from Burgenland); Flügel, 1998:60 (Germany: Brandenburg: Unteres Odertal National Park); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); Petit, 1998a:109 (Belgium: Bassenge, visiting flowers of *Polygonum cuspidatum* Siebold and Zucc., Polygonaceae); K. Weber, 1998:145 (Germany: Bayern: Bamberg area); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); Gusenleitner, 1999:599 (Austria: Vorarlberg: locality records); W. Klein, 1999:17 (in corrected key to *Oxybelus* of Benelux); Kuhlmann, Wolf, and Woydak, 1999:568 (Germany: extinct or presumably extinct in Nordrhein-Westfalen); Ljubomirov, 1999b:52 (Bulgaria: Mount Vitosha near Sofia); Majzlan, Rychlík, and Deván, 1999:146 (Slovakia: Čenkovská Step Nature Reserve); Neumayer, Schwarz, and Bregant, 1999:225 (Austria: in checklist of Sphecidae of Land Kärnten); Pagliano and Scaramozzino, 1999:157 (Italy: Piemonte: Borgomale); Pauly, 1999:109 (in catalog of Belgian aculeates); Salzmänn-Wandeler and Rezbanyai-Resser, 1999:101 (Switzerland: Tessin: Monte Generoso); M. Schwarz, 1999:86 (Austria: Oberösterreich: city of Linz area); Skibińska, 1999:96 (Poland: previously recorded from Białowieża Primeval Forest); Blösch, 2000:270 (in Sphecidae Fauna of Germany); Jacobs, 2000:9, 16 (Germany: Mecklenburg-Vorpommern: extinct); Józán, 2000:109 (Hungary: Bakony Mountains); M. Mader and Chalwatzis, 2000:60 (Germany: Hessen: Oderwald Mountains); Mokrousov, 2000b:31 (Russia: Nizhniy Novgorod Oblast'); Neumeyer, 2000:99 (Switzerland: Basel); Schmid-Egger, 2000b:276 (Germany: Baden-Württemberg: shores of Rhine River); Basset, 2001:83 (France: Département de Gironde); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia); Ohl et al., 2001:140 (distribution in Germany by provinces); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); van der Smissen, 2001:62 (Germany: Schleswig-Holstein: extinct); Wolf, 2001a:171 (Germany: Bayern: Lech valley from Augsburg to Donau); van der Smissen, 2001:59 (Germany: Schleswig-Holstein: extinct); Zettel, Gross, and Mazzucco, 2001:74 (Austria: Wien); Bieri, 2002:77 (Liechtenstein); Herrmann and Zinnert, 2002:26 (Germany: Baden-Württemberg: Bettenberg near Konstanz); Józán, 2002:53 (Hungary: Mecsek Mountains); Shlyakhtenok and Skibinska, 2002:33 (Belorussia: no specific locality); Söderman and Vikberg, 2002:52 (in list of Aculeata of Finland); Wiśniowski, 2002:70 (Poland: Ojców National Park); Ziska, 2002:9 (Germany: Berlin-Köpenick: Krumme Lake); Feitz, Schneider, and Pauly, 2003:81 (first record from Luxemburg: Dudelange); Gorobchishin, 2003:48 (Ukraine: Kiev: botanical garden); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:68 (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); Wiśniowski *in* Dylewska and Wiśniowski, 2003:155 (Poland: Ojców National Park); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:263 (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:173 (Italy: Trentino-Alto Adige, as Südtirol: Sigmundskron near Bozen = Bolzano); Litt, 2004:222 (Switzerland: Valais: Vissoie); Majzlan and Deván, 2004:30 (Slovakia: Sekule), 33 (Slovakia: Malacky-Široké); Nicoli Aldini, 2004:255 (nesting habits); Peeters, van Achterberg, et al., 2004:407 (in Wasp and Ant Fauna of Netherlands); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:372 (Germany: Sachsen-Anhalt: in red list of Sphecidae); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:46 and 61 (in checklist of Polish Sphecidae); Burger, 2005:34 (Germany: Thüringen); Dubitzky, Blank, and Schönitzer, 2005:275 (Germany: Bayern: area north of Dachau); Kofler, 2005:174 (Austria: Tirol: Lienz District: several localities); Kowalczyk and Kurzac, 2005:106 (Poland: Botanical Garden in Łódź); Mandery, 2005:174 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Pagliano and Negrisola, 2005:213 (in Sphecidae Fauna of Italy); Riemann and Hohmann, 2005:562 (Germany: Niedersachsen: city of Bremen and adjacent area, last recorded by Alfken, 1915); Saure, 2005:17 (Germany: Berlin); Schmalz, 2005:57 (references to XIX<sup>th</sup> century authors); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Ziska and Saure, 2005:81 (Germany: Berlin: Biesenhorster Sand); Dathe, 2006:38 (*Crabro trispinosus*, recorded from Plauenscher Grund near Dresden, Germany, by von Block, 1799, is *Oxybelus trispinosus* now); Gorobchishin, 2006:118 (Ukraine: several localities); Liebig, 2006:39 (Germany: Sachsen: Muskauer Heide); Liška, 2006:88 (Slovakia: Váh river valley near Trenčín); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Vepřek, 2006:511 (Czech Republic: Kokořínsko area); Burguet, 2007:unnumbered p. 26 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Chevin, Livory, Lair, Sagot, and Baldock, 2007:44 (France: Département de la Manche); Cungs, Jakubzik, and Cölln, 2007:140 (Luxemburg: Haardt Nature Reserve); Dvořák, Straka, Smetana, Halada, Vepřek, and Karas, 2007:169 (Czech Republic: Vyšenské Kopce National Nature Reserve); Herrmann, 2007b:95 (Germany: Baden-Württemberg: Fürstenberg in Konstanz); Jacobs, 2007:116, 119 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:25 (Germany: northwestern Sachsen); Józán, 2007:180 (Hungary: Zselic hills); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg Land); Vago, 2007:175 (France: départements d’Aisne, Nord, and Somme); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia); Dollfuss, 2008a:497 (locality records from Bulgaria, Croatia, France, Finland, Italy, Mongolia, and Romania); Dvořák, Bogusch, Malenovský, Bezděčka, Bezděčková, Holý, Liška, Macek, Roller, Říha, Smetana, Straka, and Šima, 2008:66 (Czech Republic: Hády Hill near Brno); Gayubo, González, Tormos, and Asís, 2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas–Sierra de Francia); Ljubomirov and Ban-Calefariu, 2008:205 (Romania: Maramureş District: Poienile de Sub Munte); Ljubomirov and Yildirim, 2008:254 (in catalog of Crabronidae of Turkey); Nemkov, 2008b:20 (in catalog of Crabronidae of Asiatic Russia); Protsenko and Drozdovskaya, 2008:128 (Ukraine: Sumy Oblast': Mogritsa village); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Belkheir, 2009:18 (France: Pyrénées-Orientales: commune d’Eyne); Bitsch and Leclercq, 2009:230 (in supplement to vol. I of Faune de France, 1993: observations by Nicoli Aldini reported; France: first record from Ardèche: Aстет); Debuyser and Vago, 2009:6 (in list of Sphecidae *sensu lato* of northern France); Flügel, 2009b:63 (Germany: Hessen: Borken, in inactive open brown coal mine); U. Frommer, 2009a:28 (Germany: in checklist of Sphecidae of Hessen); Guéorguiev and Ljubomirov, 2009:265 (Bulgaria: Maleshevska Planina, as *trispinosa*); Kowalczyk, Kurzac, and Nadolski, 2009:63 (Poland: between Warta and Widawka rivers); Nemkov, 2009b:92 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Ruchin, Antropov, and Shibayev, 2009:169 (Russia: Republic of Mordovia); Straka, Dvořák, and Bogusch, 2009:262 (Czech Republic: Meandry Smědé Nature Reserve); Esser, Fuhrmann, and Venne, 2010:37 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:28 (Germany: Bayern: Sulz- and Ottmaringer Tal); Mokrousov, 2010a:62 (Russia: Kirov and Nizhniy Novgorod Oblast's, Tatarstan: no specific localities), 2010c:108 (Russia: Chuvash Republic: State Nature Reserve “Prisurskiy”); J. Neumayer, 2010:334 (Austria: Niederösterreich: Thayatal National Park); Rudoiskatel', 2010:160 (Russia: central and southern Ural Mountains); Saure, 2010a:88 (Germany: Berlin-Reinickendorf: Baumberge), 2010b:176 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:17 (in red list of

Aculeata of Germany: relatively common); Schmidt, 2010:137 (Germany: Bayern: collected along Main-Donau canal); Shorenko and Kononov, 2010:22 (Ukraine: Khar'kov Oblast': village Gaidary; Dnepropetrovsk Oblast': village Rayevka); 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: départements du Bas-Rhin and du Haut-Rhin); van der Smitten, 2010a:346 (Germany: Schleswig-Holstein: locality records), 2010b:385 (France: Ardèche: Lachamp-Raphaël, Plateau du Coiron); Wurdack and Gack, 2010:153 (Germany: Baden-Württemberg: Kaiserstuhl); Baghirov, 2011b:149 (Russia: Altayskiy Kray: Savvuchka; Altay Republic: Kosh-Agach); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Gogala, 2011:25 (Slovenia); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:76 (Russia: Chuvash Republic); Rudoiskatel', 2011b:69 (Russia: Republic of Bashkortostan), 2011d:244 (Russia: central Ural Mountains); Saure, 2011a:6 (Germany: Berlin: former airport Tempelhof), 2011c:199 (Germany: Berlin-Spandau: Fort Hahneberg); Schmid-Egger, 2011a:38 (France: Parc National du Mercantour: Le Pra, Millefont, Mollières, Saint Sauveur), 2011c:556 (Austria: Tirol: Tiroler Lech Nature Park); N. Schneider and Feitz, 2011:122 (Luxemburg); Shlyakhtenok, 2011:95 (Belorussia: city of Minsk); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:151 (Germany: Hessen: not endangered); Ziska and Saure, 2011:109 (Germany: Berlin: Tegeler Fließ valley); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:3 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Gerth, Mayer, Hering, Wolf, Schaffer, and Bleidorn, 2012:9 (Germany: Sachsen: Bienitz in Leipzig); Nemkov, 2012c:440 (in catalog of Crabronidae of Russian Far East); Saure, 2012b:230 (Germany: Berlin-Spandau: Spandauer Forst); Shlyakhtenok, 2012a:172 (Belorussia: collected in private plots); Strumia, Pagliano, and Gayubo, 2012:56 (Italy: Toscana: Riserva di San Rossore); Zettel, 2012:78 (Austria: Niederösterreich: Golitsch); 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); Danilov and Odintseva, 2013:333 (Russia: Western Siberia: 65 km north-northeast of Tobol'sk at 58°45'N 68°74'E); Mokrousov, Ruchin, and Egorov, 2013:202 (Russia: Republic of Mordovia: Mordovian State Nature Reserve); Saure, 2013:20 (Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:24 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:181 (in annotated catalog of aculeate wasps of Belorussia); Wiśniowski and Piotrowski, 2013:22 (Poland: Poleski National Park); Wiśniowski and Szczepko, 2013:42 (Poland: Kampinos National Park near Warszawa); Zettel, Zimmermann, and Wiesbauer, 2013:13 (Austria: Wien: Donaupark); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:206 (nesting behavior in comparison with that of *Oxybelus argentatus*), 217 (behavioral features reviewed); Bitsch, 2014:404 (paper by Andrietti et al., 2013 noted), 405 (recorded from France by Vago, 2007); Flügel, 2014:255 (Brandenburg: Hangelsberger Heide); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Józán, 2014:132 (Croatia: Prezid pass); Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan); Pagliano, 2014:82 (specimens in M. Spinola collection, Torino, are *Oxybelus uniglumis* and *Oxybelus trispinosus*); Yıldırım, Ljubomirov, and Lelej, 2014:14 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); Makovetskaya and Khvir, 2015:268 (Belorussia: Minsk; visiting flowers of *Mentha piperita* L., Lamiaceae); P. Rosa and Pagliano, 2015:104 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:14 (Germany: Berlin-Lichterfelde); Simon, Lorthiois, and Macé, 2015:54 (France: alluvial terraces in Seine-Maritime Department: Anneville-Ambourville); Blažej, Macek, and Trýzna, 2016:123 (Czech Republic: České Švýcarsko = Bohemian Switzerland National Park); Bleidorn, Gerth, Hopfe, et al., 2016:10 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Mokrousov and Popov, 2016:583 (Russia: Krasnodarskiy Kray); Saure, 2016a:8 (Germany: Brandenburg: Uckermark District: dry slopes near Altgalow-Stützkow); A. Scholz, 2016:72 (Germany: Sachsen: Kleinraschützer Heide); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Wiśniowski, 2016:129 (Poland: Ojców National Park); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:43 (Turkey: Erzurum Province); Antropov, 2017b:243 (in catalog of Crabroninae of Russia);

Flügel, 2017:5 (Germany: Rheinland-Pfalz: Doline near Rockensüß); Magdalou, 2017:16 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Forêt de la Massane, Vallée d' Eyne); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:6 (Poland: Inowrocław: nesting in postindustrial soda ash dumping sites); Jacobs and Liebig, 2018:144 (Russia: Primorskiy Krai: Anisimovka, Kalinovka, and Saratovka); Carminati, Mora, and Cretin, 2019:20 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Ljubomirov, 2019:101 (Bulgaria: Vrachanska Planina); Olszewski and Kowalczyk, 2019:105 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13235 (Russia: Mordovia State Nature Reserve); U. Frommer, 2020:149, 158 (Germany: Hessen: Gießen); Cassar, Mifsud, and Schmid-Egger, 2020a:76 (Malta: Mellieħa); Herb and Schmid-Egger, 2021:9 (Germany: Bayern: Kaufbeuren area); Kejval, Blažej, and Erhart, 2020:104 (western Czech Republic); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Cross, Baldock, and Wood, 2021:55 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:75 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:354 (in revision of Sphecidae *sensu lato* of Europe); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Olszewski, Bogusch, Wiśniowski, and Szpila, 2024:769 (life history, description of larva); Frommer and Klenke, 2025:164 (Germany: Hessen: Lahntal near Weilburg).

*Oxybelus nigripes* Olivier, 1812b:596, sex not stated. Holotype or syntypes: France: Paris area (lost). Synonymized with *Oxybelus trispinosus* by F. Smith, 1856:383, Schirmer, 1912:165, and Blüthgen, 1949:87. – Vander Linden, 1829:39 (bibliographic references, France); Shuckard, 1837a:109 (in revision of British Aculeata); von Siebold, 1839:49 (Germany: Danzig, now Poland: Gdańsk); Dufour, 1841a:497 and 1841b:236 (digestive tract), 1841a:503 and 1841b:239 (male reproductive system), 1841a:507 and 1841b:243 (female reproductive system); Dahlbom, 1842a:13 (in review of Scandinavian aculeates), 1845:513 (in key to *Oxybelus*); Lepeletier de Saint Fargeau, 1845:217 (in revision of world Hymenoptera, France: Paris area); F. Smith, 1851c:22 (Great Britain: Devon: near Spitchwick Park), 1853:63 (in checklist of British Hymenoptera); Ruthe and Stein, 1857:315 (Germany: Berlin area); F. Smith, 1858c:164 (in review of British Aculeata, redescription); A. Morawitz, 1864:459 (Russia: Sankt-Petersburg); A. Costa, 1867c:149 (in revision of Italian Sphecidae); Gerstaecker, 1867a:71 (in revision of *Oxybelus*); Kirchner, 1867:223 (in catalog of European Hymenoptera); Thomson, 1870:177 (in revision of Swedish Crabroninae); A. Costa, 1871b:78 (in revision of Italian Sphecidae); F. Smith, 1871b:17 (in catalog of British Aculeata); Thomson, 1874:289 (in revision of Hymenoptera of Scandinavia); Taschenberg, 1875:380 (Germany: Halle); E. Saunders, 1880:300 (in revision of British Aculeata); Magretti, 1881:214 (Italy: Lombardia), 271 (in list of species discussed in this paper); A. Costa, 1883:58 (Italy: Sardegna: Alghero, Oristano); Friese, 1883:200 (Germany: Thüringen: Gumperda); Kohl, 1883e:662 (Switzerland), 1884b:114 (in list of known *Oxybelus*); 1893:33 (Austria: Niederösterreich); F. Morawitz, 1893a:115 (Russia: Karelian Isthmus: Terijoki); Sickmann, 1893:90 (Germany: Niedersachsen: Iburg); Krieger, 1894:11 (Germany: Kingdom of Saxony); E. Saunders, 1896:123 (in revision of British Aculeata); Westerland, 1896:28 (Finland: no specific locality); Acloque, 1897:92 (in Sphecid Fauna of France and Algeria); Dalla Torre, 1897:645 (in catalog of world Sphecidae); Kozhevnikov, 1897:15 (Russia: Moscow Governorate); Mocsáry, 1897:81 (Kingdom of Hungary, some localities are in today's Romania); Flamary, 1898:45 (France: Saône-et-Loire: Mâcon area); Chyzer, 1902:34 (Hungary); Antiga and Bofill, 1904:27 (Spain: Cataluña Province); Aurivillius, 1904:300 (in revision of Swedish Sphecidae); Mortimer, 1905:261 (Great Britain: Wales: not found in Aberdovey); von Heyden, 1905:82 (Germany: Hessen: Frankfurt); Schmiedeknecht, 1907:203, 205 (in key to Hymenoptera of Central Europe); Cecconi, 1908:23 (Italy: Puglia: Isole Tremiti); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Dittrich, 1911b:21 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:45 (Italy: Trieste area); Schirmer, 1912:165 (Germany: Berlin area); Birula, 1913:536 (Ukraine: Zhytomyr Oblast': Radomyshl'); Smits van Burgst, 1913a:319 and 1913b:5 (Tunisia: no specific locality); Alfken, 1914:275 (northwestern Germany: Baden); Birula, 1914:379 (Belorussia: Ambrosovich near Vitebsk); Zavattari, 1915:2 (Italy: Abruzzi: Vallata del Sangro); Drenowski, 1936:247 (Bulgaria); Yasumatsu, 1942c:114 (China: Nei Mongol:

Apaka at 44°N 114.96°E); R. Perkins, 1916:231 (specimens in F. Smith collection); Morice, 1917:243 (the insect recorded from British Isles by Shuckard, 1837 if not of British origin, the one recorded by Saunders, 1896, is not *Oxybelus nigripes*); Noskiewicz, 1918:138 (Galicia, now western Ukraine: Brzuchowice and Hołosko near Lwów, Janów, Strychowalec, Winniki); O. Meyer, 1919:149 (Germany: Posen Province, now Poland: Poznań Region); A. Wagner, 1920:38 (Germany: Lower Elbe region); Dubois, 1922:191, 192, 193 (in key to Belgian Sphecidae); Berland, 1925d:209 (in Sphecidae Fauna of France); Coulon, 1925:122 (France: Pont-de-l'Arche); Schütze, 1925:111 (Germany: Lausitz Region); Shestakov, 1925:36 (Russia: Yaroslavl' area); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Friese, 1926:144 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); F. Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley); Benoist, 1928:411 (France: Alpes-Maritimes: Saint-Martin-Vésubie); Maidl *in* Schmiedeknecht, 1930:663, 666 (in keys to Hymenoptera of North and Central Europe); Minkiewicz, 1931b:211 (nesting habits); Pulkkinen, 1931:158 (in revision of Sphecidae of Finland); Bondroit, 1932:42 (Belgium: recorded by Wesmael); Bouwman, 1932:392 (in revision of Sphecidae of Netherlands); Giordani Soika, 1932a:23 (Italy: Lido di Venezia; determination tentative); Balles, 1934:17 (Germany: Baden-Württemberg: Achern); Giner Marí, 1934:136 (Spain); Bernard, 1935:67 (France: Var: Fréjus area); Forsius *in* Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); Marchand and Dulac, 1935:61 (France: Saône-et-Loire: Saint Laurent d'Andenay); Minkiewicz, 1935:215, 219 (Poland: Lake Garbaś 20 km west of Suwałki); Richards, 1935a:166 (incorrectly recorded from British Isles); Vergne, 1935:120 (France: Auvergne: Clermont-Ferrand); Crèvecoeur and Maréchal, 1936:257 (in catalog of Belgian Hymenoptera); Drogoszewski, 1936:129 (Poland: Łowicz, Opatów); Minkiewicz, 1936:3 (male of on-place watcher type); Richards, 1936a:170 (second specimen recorded from British Isles by F. Smith, clearly not *Oxybelus nigripes*); Dulac, 1937:24 (France: Saône-et-Loire: Saint-Laurent d'Andenay); Zavadil, Šustera, and Baťa, 1937:172 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938c:81 (Hungary: Kőszeg Hills); Redikortsev, 1938:144 (Russia: Mordovian State Nature Reserve); A. Wagner, 1938a:119 (northwestern Germany); Maréchal, 1939:341 (Belgium: Loën); Teunissen, 1939:174 (Netherlands: Mechelen); Dovnar-Zapolskiy, 1940:303 (Russia: Kursk Oblast'); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Leclercq, 1941b:16 (Belgium: Liège area); Paul, 1941:38 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1033 (Germany: Bayern: Bamberg area); Balthasar, 1942:4 (Czech Republic: Moravia); de Beaumont, 1942b:425 (in revision of Swiss *Oxybelus*); Giner Marí, 1943a:257 (in Sphecidae Fauna of Spain); Móczár, 1943a:59 (Hungary: Szeged); Šnoflák, 1944a:143 (Czech Republic: serpentine steppe near Mohelno); Deleurance, 1946b:67 (France: Bouche-du-Rhône: Camargue: Bois des Rièges); van Lith, 1947:104 (Netherlands); Balthasar, 1948:141 (Slovakia: Parkan); Guiglia, 1948c:203 (Italy: Sardegna: Cagliari); Muller, 1948:139 (Belgium: Lanaye); Šnoflák *in* Zavadil and Šnoflák, 1948:36, 38 (in key to Czechoslovakian Sphecidae); Fæster, 1949:22, 39 (in revision of Western European *Oxybelus*); Cavro, 1950:42 (France: Département du Nord); Georgel, 1950:64 (France: Seine-et-Oise: Sucy-en-Brie); Noskiewicz and Chudoba, 1950:308 (Poland: in revision of *Oxybelus* of Śląsk Region); Szulczewski, 1950:103 (Poland: Wielkopolski National Park 15 km south of Poznań); Caruel, 1951:100 (France: Marne Department); Pittioni, 1950:28 (Cyprus); Głowacki, 1953:518 (Poland: Podkowa Leśna); Valkeila, 1954:87 (Finland: Lappeenranta); Vogrin, 1955:45 (Yugoslavia); Babiý, 1964:119 (Austria: Land Salzburg); Plavil'shchikov, 1964:122 (Russia: Mordovian State Nature Reserve); Niedl and Deneš, 1967:76 (Czech Republic: Třeboň area); Balthasar, 1972:156 (in Sphecidae Fauna of Czechoslovakia); Georghiou, 1977:191 (Cyprus); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Skibińska, 1989b:291 (Poland: moist meadow in Warszawa area); Gorobchishin, 1993:47 (Ukraine: Kanev Nature Reserve); Pagliano, 2014:79 (specimens in M. Spinola collection, Torino, are *Oxybelus trispinosus*). – As *Oxybelus trispinosus* var. *nigripes*: A. Costa, 1858:20 (new status; Italy: Campania: Monti Partenii in Benevento Region).

As *Oxybelus haemorrhoidalis*: Dahlbom, 1844:272 (in revision of Sphecidae and Pompilidae) and 1845:512 (in key to *Oxybelus*), determination corrected to *Oxybelus trispinosus* by Thomson, 1870:179.

As *Oxybelus ambiguus*: Marquet, 1896:28 (in revision of *Oxybelus* of France), determination corrected to *Oxybelus trispinosus* by de Beaumont, 1952b:90.

### 253. *tshardarensis* Kazenas

*Oxybelus tshardarensis* Kazenas, 1994f:911, ♀, ♂. Holotype: ♀, Kazakhstan: 8 km southwest of Chardary (ZIN). – Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:93 (geographic distribution, collecting localities in Kazakhstan).

### 254. *uniglumis* (Linnaeus)

*Vespa uniglumis* Linnaeus, 1758:573, sex not stated. Lectotype: ♀, Europe: no specific locality (Linnean Society, London), designated by Day, 1979:75. – Christ, 1791:246 (redescription, as *uniglummis*); Day and Fitton, 1978:194 (recuration of Linnean type material). – As *Crabro uniglumis*: Fabricius, 1775:376 (new generic assignment, redescription), 1781:472 (redescription), 1787:297 (redescription); Rossi, 1790:92 (Italy: in revision of insects of Etruria, now Toscana); Olivier, 1792:518 (redescription); Fabricius, 1793:300 (redescription), 1796:51 (in Index to his Entomologia Systematica, 1793); Panzer, 1799, Heft 64 (in revision of German insects, illustration of habitus); Roth von Schreckenstein, 1802:32 (Germany: Baden-Württemberg); Illiger, 1807b:151 (synonymy, redescription). – As *Spheg uniglumis*: Gistel, 1837:15 (new generic assignment, collected on flowers of *Sphondylium*, now *Heracleum sphondylium* L., Apiaceae). – As *Oxybelus uniglumis*: Latreille, 1802b:343 (new generic assignment); Fabricius, 1804:316 (redescription); Latreille, [1805]:307 (redescription); Panzer, 1806:191 (in critical review of his earlier work); Jurine, 1807:217 (in checklist of species of *Oxybelus*); Olivier, 1812b:595 (redescription); Stephens, 1829:364 (in catalog of British insects), 1829b:33 (in checklist of British insects); Vander Linden, 1829:37 (bibliographic references, Belgium: Bruxelles, most of Europe); Haliday, 1833:516 (Ireland: eastern coast north of Dublin); Guérin-Méneville, 1835:pl. 71, Fig. 2 (illustration of habitus); Shuckard, 1836:57 (preying on small Diptera), 1837a:107 (in revision of British Aculeata); Zetterstedt, 1838:446 (in revision of insects of Lapland); von Siebold, 1839:49 (Germany: Danzig, now Poland: Gdańsk); Herrich-Schaeffer, 1840:295 (Germany: Bayern: Regensburg area); von Siebold, 1841:1 (nesting habits); Dahlbom, 1842a:13 (in review of Scandinavian aculeates), 1844:273 (in revision of Sphecidae and Pompilidae), 1845:XXV (specimens in collection Fabricius examined), 514 (in key to *Oxybelus*); Guérin-Méneville, 1844:441 (explanations of his 1835 figure, bibliographic references); Lepeletier de Saint Fargeau, 1845:221 (in revision of world Hymenoptera, Paris area); Schilling, 1848:105 (Germany: Breslau area, now Poland: Wrocław); von Siebold, 1849 (Germany: Danzig, now Poland: Gdańsk, reference to his biological observations of 1841); von Kiesenwetter, 1849:90 (Germany: Kingdom of Saxony); F. Smith, 1849b:2551 (preying on flies); Wissmann, 1849:14 (Germany: Kingdom of Hannover: sandy habitats); Tischbein, 1850:10 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); F. Smith, 1851c:22 (Great Britain: no specific locality); Wesmael, 1852:623 (Belgium); Kirchner, 1854:313 (Czechoslovakia: Kaplitz in Budweiser District, now České Budějovice); Fabre, 1856a:139 (France: Vaucluse: Avignon area); F. Smith, 1853:63 (in checklist of British Hymenoptera), 1856:382 (in catalog of Hymenoptera in British Museum); Kawall, 1857:25 (Kurland, now Latvia); Ruthe and Stein, 1857:315 (Germany: Berlin area); Schenck, 1857:116 (Germany: in revision of fossorial wasps of Nassau Region); F. Smith, 1858c:162 (in review of British Aculeata, redescription); Taschenberg, 1858:119 (in key to Sphecidae of Germany); Assmuss, 1859:616 (Russia: Moscow Governorate); Funk, 1859:58 (Germany: Bayern: Bamberg); Schenck, 1860:146 (Germany: Nassau Region), 1861:142 (legs may be all black); Brischke, 1862:105 (Germany: Preussen Province, now Poland: Pomorze Region); A. Morawitz, 1864:458 (Russia: Sankt-Petersburg); Siła-Nowicki, 1864:54 (Ukraine: L'viv), 1865:54 (western Ukraine: Galicia region: no specific locality); F. Smith, 1865b:86 (Great Britain: Dorset County: Bournemouth); Taschenberg, 1866:162 (in revision of Hymenoptera of Germany); Gerstaecker, 1867a:85 (in revision of *Oxybelus*); Kirchner, 1867:223 (in catalog of European Hymenoptera); Schenck, 1867a:352 (Germany: Nassau Region); Chevrier, 1868:388 (in revision of Swiss *Oxybelus*); Jaenicke, 1868:8 (Germany: Hessen: Offenbach); Wierzejski, 1868:117 (Poland: Kraków); F. Smith, 1869d:78 (Great Britain: Norfolk: Cromer); von Aichinger, 1870:315 (Austria: Tirol); Bold, 1870:150 (Great Britain: Northumberland

and Durham); Thomson, 1870:178 (in revision of Swedish Crabroninae, as *I-glumis*); F. Smith, 1871b:16 (in catalog of British Aculeata); P. Ivanov, 1872:151 (Ukraine: Khar'kov Oblast': Kupyansk area); Schlechtendal, 1872:36 (Germany: Sachsen: Zwickau); Dours, 1874:152 (in catalog of Hymenoptera of France); Thomson, 1874:290 (in revision of Hymenoptera of Scandinavia, as *I-glumis*); Wierzejski, 1874:261 (Poland: Kraków); Schlechtendal, 1872:36 (Germany: Zwickau); Marquet, 1875:210 (France: Haute-Garonne: Toulouse); Taschenberg, 1875:380 (Germany: Halle); Beuthin, 1876:230 (Germany: Hamburg area); Schmiedeknecht, 1876:186 (Germany: Thüringen: Rothensteiner Felsen); Girard, 1879:938 (morphology and habits), 961 (reference to Siebold, 1841); Becker, 1880:152 (Russia: Sarepta, now Krasnoarmeysk south of Volgograd); Kohl, 1880:142 (Austria: Tirol, and Italy: Trentino–Alto Adige), 221 (preying on Diptera *Homalomyia incisurata* (Zetterstedt) and *H. scalaris* Fabricius, Fannidae); E. Saunders, 1880:299 (in revision of British Aculeata); Siebke, 1880:72 (Norway, as *I-glumis*); Marquet, 1881:185 (southern France); Yaroshevskiy, 1881:121 (Ukraine: Khar'kiv Oblast': Kupyansk); Kohl, 1883e:663 (Switzerland); Sickmann, 1883:80 (Germany: Niedersachsen: Wellingholthausen); Harwood, 1884:212 (England: Essex: Colchester area); Kohl, 1884b:116 (in list of known *Oxybelus*); Sickmann, 1886:280 (Germany: Friesean Islands: Island of Spiekeroog); Wüstnei, 1886:39 (Germany: Schleswig-Holstein); Cresson, 1887:287 (in catalog of North American Hymenoptera); Brischke, 1888a:54 (Germany: Hela Peninsula, now Poland: Hel Peninsula), 1888b:100 (Germany: Preussen Province, now Poland: Pomorze Region), 1889:204 (Germany: Steegen east of Danzig, now Poland: Stegna east of Gdańsk); Ch. Robertson, 1889:85 (listed, in revision of North American *Oxybelus*); F. Morawitz, 1891a:213 (Russia: Astrakhan Governorate); Assmuss, 1892:53 (Russia: earlier record from Moscow Governorate repeated, as *uniclumis*); Bezzi, 1892:123 (Italy: Lombardia: Provincia di Pavia); Alfken, 1893:120 (Germany: Friesian Islands: Island of Juist); Kohl, 1893a:33 (Austria: Niederösterreich); F. Morawitz, 1893a:115 (Russia: Karelian Isthmus); Sickmann, 1893:91 (Germany: Niedersachsen: Iburg); Westerlund, 1893:28 (Russia: Karelian Republic: northern shore of Lake Ladoga); Krieger, 1894:11 (Germany: Kingdom of Saxony); Freke, 1896:41 (Ireland); Marquet, 1896:31 (in revision of *Oxybelus* of France); Meunier, 1896:270 (Belgium: Bruxelles area); E. Saunders, 1896:122 (in revision of British Aculeata); Acloque, 1897:92 (in Sphecid Fauna of France and Algeria); Borries, 1897:76 (nesting habits); Dalla Torre, 1897:649 (in catalog of world Sphecidae); Meunier, 1897b:353 (Belgium: coastal sand dunes at Blankenberge); Mocsáry, 1897:81 (Kingdom of Hungary, some localities are in today's Romania and Slovakia); O. Schneider, 1898:102 (Germany: Island of Borkum); Strand, 1898b:96 (Norway); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); R. Bradley, 1900:13 (Great Britain: Birmingham); Nevinson, 1900:62 (Great Britain: Wales: Criccieth, Towyn); Adlerz, 1901:193 (nesting habits); Carr, 1901:16 (Great Britain: Lincolnshire: Skegness); Dalglish, 1901:7 (Great Britain: Scotland: Irvine); Gardner, 1901:379 (Great Britain: Cheshire coast north to Lancaster: Southport, also Cheshire: Bowden and Rock Ferry); Thornley, 1901:63 (Great Britain: Skegness); N. Arnold, 1902:86 (Russia: Mohilev Province, now Belorussia); Chyzer, 1902:34 (Hungary); Friese, 1902:478 (occurring in Lapland according to Zetterstedt, 1838); Kieffer, 1902:81 (nesting habits); Nevinson, 1902:12 (Great Britain: Cornwall: Newquay); E. Saunders, 1902a:52 (southwestern Ireland), 1902b:143 (Great Britain: Channel Islands: islands of Guernsey and Jersey; France: Bretagne: Saint-Briac); de Cobelli, 1903:114 (Italy: Trentino: Malè, Rovereto); Strand, 1903:7 (Norway: Austad); Adlerz, 1904:41 (nesting habits); Antiga and Bofill, 1904:28 (Spain: Cataluña Province); W. Schulz, 1904b:102 (Germany: Island of Borkum); Kubes, 1905:84 (Czech Republic: Kolín); Mortimer, 1905:261 (Great Britain: Wales: Aberdovey); Móczár and Henter, 1907:205 (Hungary: Tiszaalpár); Schmiedeknecht, 1907:204 (in key to Hymenoptera of Central Europe); de Gaulle, 1908:121 (in catalog of French Hymenoptera); Jourdain, 1909:189 (Great Britain: Derbyshire: Breadsall); Morley, 1909:305 (Great Britain: Isle of Wight); Orr, 1909a:25 (Ireland: Down County); Peets, 1909-1911:67 (*Oxybelus uniglumis* of Panzer = *Oxybelus uniglumis*); Cavro, 1910:685 (France: Département du Nord); Ferton, 1910:159 (prey); Dittrich, 1911b:21 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Graeffe, 1911:45 (Italy: Trieste area); Schirmer, 1912:165 (Germany: Berlin area); Kohl, 1913b:16 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Latter, 1913:24 (nesting habits); Torka, 1913:34 (Germany: Provinz Posen, now Poland: Poznań Region); Alfken, 1914:276 (northwestern Germany); Birula, 1914:379 (Belorussia: Ambrosovich and Luskopol' near Vitebsk); Haines,

1914:129 (Great Britain: Dorset); Szilády, 1914:89 (Hungary: Budaörs); Krausse, 1915:157 (Germany: Eberswalde); Hallett, 1916:221 (Great Britain: South Wales: Porthcawl); R. Perkins, 1916:231 (specimens in F. Smith collection); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); Hallett, 1919:262 (Great Britain: Island of Guernsey); O. Meyer, 1919:149 (Germany: Posen Province, now Poland: Poznań Region); Morley, 1919:209 (Great Britain: Hampshire: New Forest); R. Robertson, 1919:60 (Great Britain: Kent: Faversham area); A. Wagner, 1920:38 (Germany: Lower Elbe region); Dubois, 1922:190, 193 (in key to Belgian Sphecidae); Jansson, 1922:26 (Sweden: Island of Öland); Alfken, 1924:425 (Germany: Island of Memmert; prey); R. Perkins, 1924:227 (Great Britain: Devon); Berland, 1925d:208 (in Sphecid Fauna of France); Coulon, 1925:122 (France); Grönblom, 1925:9 (prey); R. Perkins, 1925:153 (Great Britain: Somersetshire: Berrow and Burnham); Schütze, 1925:111 (Germany: Lausitz Region); Shestakov, 1925:36 (Russia: Yaroslavl' area); K. Strohm, 1925:211 (Germany: Baden-Württemberg: Ihringen); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Chevalier, 1926a:1 (nesting habits); Friese, 1926:144 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Hémon, 1926:200 (France: Finistère: Fouesnant); Stelfox, 1927:303 (Ireland: list of localities); Jones, 1928b:14 (Great Britain: Hampshire: Milford-on-Sea); Hamm and Richards, 1930:114 (summary of nesting habits), 125 (list of prey); Harttig, 1930b:8 (specimen bearing dipteran egg); Maidl *in* Schmiedeknecht, 1930:662, 665 (in keys to Hymenoptera of North and Central Europe); Butterfield and Fordham, 1931:156 (Great Britain: Yorkshire); Minkiewicz, 1931b:212 (nesting habits); Pulkkinen, 1931:159 (in revision of Sphecidae of Finland); Spooner, 1931:15 (Great Britain: Cambridgeshire); Bondroit, 1932:42 (Belgium: abundant in Bruxelles area); Bouwman, 1932:393 (in revision of Sphecidae of Netherlands); Chambers, 1933:188 (Great Britain: Bedfordshire); Merisuo, 1933a:60 (Finland: city of Turku); E. Nielsen, 1933:274 (summary of nesting habits, description of nest); Spooner, 1933:203 (Great Britain: Bedfordshire: Sandy); Balles, 1934:17 (Germany: Baden-Württemberg: Achern, Fautenbach, Gamshurst, Mannheim-Rheinau); Bondroit, 1934:62 (Belgium: Ostende); Jansson, 1934:289 (Sweden); Spooner, 1934b:278 (Great Britain: Devon: Braunton Burrows); Forsius *in* Forsius and Hellén, 1935:11 (in checklist of Hymenoptera of Finland); Minkiewicz, 1935:209 (Poland: Kazimierz on Wisła), 215, 219 (Poland: Lake Garbaś 20 km west of Suwałki); Richards, 1935a:166 (study of type: the species is correctly interpreted); Crèvecoeur and Maréchal, 1936:257 (in catalog of Belgian Hymenoptera); Vergne, 1935:120 (France: Auvergne: common); Drogoszewski, 1936:129 (Poland: Łowicz); Blüthgen, 1937:235 (Germany: Saale River valley including Naumburg); Goebel, 1937:39 (Poland: Poznań District: Poznań-Dębina and Środa District: Tulce); Richards, 1937b:105 (in checklist of British aculeates); Zavadil, Šustera, and Ba'ta, 1937:170 (in catalog of Sphecidae of Czechoslovakia); Hallett, 1938:73 (Great Britain: Herefordshire: Mathon); Guichard, 1938:72 (Great Britain: Norfolk coast); Móczár, 1938c:81 (Hungary: Kőszeg Hills); A. Wagner, 1938a:118 (north-western Germany); Aerts, 1939:134 (Germany: Nordrhein-Westfalen: loess cliff at Weilerswist near Köln); Guichard, 1939b:77 (Great Britain: Surrey: Limpsfield Common); Móczár, 1939:5 (Hungary: Jászberény); Yarrow, 1939:16 (Great Britain: Dorset: Lytchett Minster); Yasumatsu, 1939e:16 (China: Manchuria: Hsinking); de Graham, 1941:99 (Great Britain: Lincolnshire); Kloet, 1941:235 (Great Britain: Wales: Cardiff); Leclercq, 1941b:16 (Belgium: Liège area); Paul, 1941:39 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Schneid, 1941:1033 (Germany: Bayern: Bamberg area); Alfken, 1942:231 (Germany: Niedersachsen: Lüneburger Heide); Audcent, 1942:25 (nest parasites: *Metopia leucocephala* Rossi, *Sphecapata conica* Fallén, *Macronychia griseola* Fallén, Sarcophagidae); de Beaumont, 1942b:424 (in revision of Swiss *Oxybelus*); Leclercq, 1942:4 (Belgium: Liège), 5 (visiting flowers of *Coriandrum sativum* L., Apiaceae); Spooner, 1942:110 (Great Britain: Bedfordshire); Boyd, 1943:163 (Great Britain: eastern Dorset); Giner Marí, 1943a:263 (in Sphecid Fauna of Spain); Spooner, 1943:75 (Great Britain); Guiglia, 1944b:40 (Italy); Guibé, 1944:193 (France: Caen; nesting habits); Šnoflák, 1944a:143 (Czech Republic: serpentine steppe near Mohelno); T. Fletcher, 1945:53 (Great Britain: Gloucestershire: Basiley Lane End, Mitcheldean); Nuorteva, 1945:218 (nesting habits, floral records); Carl and de Beaumont, 1947:69 (Switzerland: Graubünden = Grisons Canton: Swiss National Park); Guiglia, 1947a:28 (Italy: Piano Maiuri); van Lith, 1947:103 (Netherlands); Balthasar, 1948:141 (Slovakia: Kovačov, Parkan); Bristowe, 1948:29 (nesting habits); Guichard and Yarrow, 1948:91 (Great Britain: London: Hampstead Heath); Šnoflák *in*

Zavadil and Šnoflák, 1948:33, 39 (in key to Czechoslovakian Sphecidae); P. Verhoeff, 1948:181 (in revision of Western European *Oxybelus*); Chambers, 1949:226 (Great Britain: Bedfordshire); Fæster, 1949:21, 36 (in revision of Western European *Oxybelus*); Wahis, 1949:200 (list of prey); Aerts, 1950a:51 (Germany: Nordrhein-Westfalen: Rheidter Wertchens near Köln); Cavro, 1950:41 (France: Département du Nord); Georgel, 1950:64 (France: Seine-et-Oise: Sucy-en-Brie); Noskiewicz and Chudoba, 1950:309 (Poland: in revision of *Oxybelus* of Śląsk Region); Richards, 1950:79 (Great Britain: Wales: Pembrokeshire: Cwm-yr-Eglwys); Szulczewski, 1950:103 (Poland: Wielkopolski National Park 15 km south of Poznań); Caruel, 1951:100 (France: Marne Department); de Beaumont, 1951h:35 (Switzerland: Neuchâtel area); Leininger, 1951:116 (Germany: Baden-Württemberg); de Beaumont, 1952b:91 (Marquet's, 1896 specimens); Richards, 1952:142 (Great Britain: Anglesea); Głowacki, 1953:518 (Poland: Podkowa Leśna, Brwinów, Warszawa); Guiglia, 1953a:129 (in revision of Italian *Oxybelus*); Móczár, 1953:311 (Hungary); Nouvel and Ribaut, 1953:184 (France: Haute-Garonne: Saint-Béat); Blüthgen, 1954:147, 149 (in key to Central European *Oxybelus*), 153 (common everywhere); de Beaumont, 1954e:98 (Italy); Fahlander, 1954:250 (Sweden: Gästrikland Region); Grandi, 1954:245 (Italy); Puławski, 1954:106 (Poland: Błędów); Tjeder, 1954:69 (Sweden: eastern Skåne: Vittemölla); Aerts, 1955:60 (Germany: Rheinland); Guiglia, 1955:104 (in revision of Great Britain *Oxybelus*); Lehrer, 1955:266 (Romania: Moldova: Iași); Steiner, 1955:146 (France: Dordogne); Teschner, 1955:57 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vogrin, 1955:45 (Yugoslavia); Boreham, 1956a:246 (nesting habits); Bytinski-Salz, 1956:227 (Turkey: Erciyas Dag); Ceballos, 1956:397 (in catalog of Sphecidae of Spain); Hertzog, 1956:183 (carrying prey impaled on stinger); Fahlander, 1957:63 (Sweden); Yeo, 1957:19 (Great Britain: Middlesex, now in London; prey: dipteran *Chironia parvicornis*); Zirngiebl, 1957:178 (Germany: Rheinland-Pfalz: Pfalz region); Benno, 1958b:18 (in review of Dutch Sphecidae); de Beaumont, 1958c:213 (Swiss National Park); Móczár, 1958b:211 (Hungary: list of collecting localities), 1958c:285, 289 (in key to western Palearctic *Oxybelus*); Tonapi, 1958a:510 (spiracular structures), 1958b:250 (respiratory system); Olberg, 1959:376-381 (photographs of nest digging and prey carrying: fly prey impaled on stinger during transportation, in flight also held with hindlegs); Wolf, 1959b:35 (Germany: Nassau); Hamann, 1960:197 (Austria: Oberösterreich: Mönchgraben at 48°13'N 14°21'E); Noskiewicz and Puławski, 1960:162, 165 (in key to Polish Sphecidae); Hoop, 1961:64 (Germany: Schleswig-Holstein); Valkeila, 1962b:68 (southwestern Finland); Wengris, 1962:207 (Lithuania: Vilnius area); Erlandsson, 1963:66 (Denmark: Island of Bornholm); Felton, 1963:178 (Great Britain: Kent County); Hoop, 1963a:73 (Germany: Schleswig-Holstein: Reher Kratt); Valkeila, Brander, and Käpylä, 1963:42 (Finland: historical region Lounais-Hämeen = southwestern Häme); Babiy, 1964:119 (Austria: Land Salzburg); de Beaumont, 1964c:161 (in Sphecid Fauna of Switzerland); Hüsing and Jäger, 1964:192 (Germany: Sachsen-Anhalt: Nietleben near Halle), 197 (prey carried impaled on sting); Valkeila, Brander, and Käpylä, 1964:76 (Finland: southern Finland: Tammela); Fæster, 1965:193 (Denmark: Hansted Nature Reserve); B. Klug, 1965:144 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Gauss, 1966c:240 (specimen bearing dipteran egg); Mingo Pérez, 1966:77 (in revision of *Oxybelus* of Iberian Peninsula); Benno, 1967:39 (in checklist of Sphecidae of Netherlands); de Beaumont, 1967a:364 (Turkey); Gauss, 1967:560 (Germany: Baden-Württemberg); J. Heinrich, 1967:83 (Germany: Bayern: Unterfranken District); Leclercq, Simon, and Verstraeten, 1967:261 (France: Landes: Seignosse, collected in resin pot); Niedl and Deneš, 1967:75 (Czech Republic: Třeboň area); Scobiola-Palade, 1967b:50 (Romania); Benedek, 1968:79 (Hungary, floral records); Leclercq, 1968b:39 (Great Britain: Kent), 1968d:109 (Belgium: city of Liège); Scobiola-Palade, 1968c:386 (Romania: Andronache, București, Budești, Păsarea); Benedek, 1969a:85 (Hungary: marshy meadow), 1969b:421 (Hungary: Csopak, collected in vicinity of aphid *Hyalopteritena pruni* (Geoffroy)); de Beaumont, 1969:94 (Turkey); Lefebvre, 1969c:234 (Netherlands: Sint-Pietersberg = Montagne Saint Pierre); Benedek, 1970:104 (Hungary: Tapolca); Hoop, 1970:60 (Germany: Schleswig-Holstein: many localities); Lefebvre and Petit, 1970:130 (Belgium: Plombières); Oehlke, 1970:797 (Democratic Germany); Tumšs, 1970:84 (Latvia); Dathe, 1971:234, 238 (Germany: Berlin Zoological Garden; phenology); Schmidt, 1971b:53 (Germany: Rheinland-Pfalz: recorded from Mombach by Kirschbaum, 1853); Stritt, 1971a:105 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:159 (in

Sphecid Fauna of Czechoslovakia); Haeseler, 1972:157, 171, 175, 187, 188, 191, 197 (Germany: Schleswig-Holstein; anthropogenic habitats); Kazenas, 1972b:178 (Kazakhstan); Kofler, 1972:116 (Austria: eastern Tirol); Lomholdt, 1972:123 (Denmark: Island of Læsø); Oehlke, 1972:141 (Germany: Island of Hiddensee); Scobiola-Palade, 1972a:152 (Romania: delta of Danube: Caraorman), 1972b:255 (Romania); Tsuneki, 1972a:160 (Mongolia); Wolf, 1973:41 (Germany: Siegerländer Hüttensand); Erlandsson, 1974:88 (Italy); Käpylä, 1974:64 (Finland: diurnal activity); Kazenas, 1974b:110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan); Levi, Sysoletina, and Shernin, 1974:269 (Russia: Kirov Oblast': Kirov); Scobiola-Palade, 1974:146 (Romania: Sărăturile sandbank in Danube delta); Simon Thomas, 1974:58 (Netherlands: Limburg: Tienray); Burn, 1975:144 (Great Britain: Yorkshire: Doncaster district); Lefeber, 1975b:120 (Netherlands: Schiepersberg); Lomholdt, 1975b:32 (Denmark: Island of Anholt); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Haeseler, 1976b:73 (Germany: Friesian Islands: Island of Amrum); Leclercq, Gaspar, Lajoinie, and Thirion, 1976:178 (Belgium: Chaumont-Gistoux); Lomholdt, 1976:282 (in Sphecid Fauna of Fennoscandia and Denmark); Simon Thomas and Wiering, 1976:109 (Netherlands: IJsselmeer Polders); Wolf, 1976:30 (Germany: Nordrhein-Westfalen: Victoria Mine near Littfeld); Guichard, 1977:252 (Great Britain: Surrey); Kolesnikov, 1977:321 (Russia: Bryansk Oblast'); Schmidt, 1977:99 (Germany: Baden-Württemberg: Enzklösterle in Schwarzwald), 1977/78:59 (Germany: Rheinland-Pfalz: Mombacher Sand); Haeseler, 1978a:371 (Germany: Niedersachsen: Island of Mellum), 1978b:63 (Germany: Niedersachsen: a bog near Oldenburg), 1978c:195 (Germany: Friesian Islands: Island of Borkum); Marion, 1978:91 (France: Nièvre Department); Pulawski, 1978:276, 277 (in key to Sphecidae of European part of USSR); Schwammberger, 1978:421 (Germany: Württemberg); Steiner, 1978a:393 (female stings dipteran prey usually only once, behind foreleg base, and keeps the sting inside for transportation); Benedek, 1979:236 (Hungary: Bakony Hills); Krombein, 1979b:1657 (in catalog of North American Hymenoptera, list of prey); Leclercq, Gaspar, and Verstraeten, 1979:map 1429 (Belgium); Marchal and Leclercq, 1979:10 (Belgium: Gembloux); Radović and Krunic, 1979:unpaginated foldout (nesting in sand, foreleg structure); Richards, 1979:399 (British Channel Islands); Schmidt, 1979a:58 (Germany: Ost-Holstein); Schwammberger, 1979:118 (Germany: Nordrhein-Westfalen: Gildehauser Venn Nature Reserve); Steiner, 1979:953 (detailed study of prey stinging; one stinging corresponds to one neural ganglion mass); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Jacob-Remacle and Leclercq, 1980:192 (Belgium: gardens in Liège); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:118 (Russia: Siberia: Altayskiy Kray: basin of Aley River); Pagliano, 1980:120 (Italy: Trentino Alto Adige); Peckham and Hook, 1980:563 (nesting habits); Richards, 1980:60 (in key to Sphecidae of British Isles); Westrich, 1980:635 (Germany: Baden-Württemberg: Tübingen area); Dollfuss and Ressler, 1981:322 (Austria: Niederösterreich: Scheibbs District); Haeseler, 1981:51 (Germany: Friesian Island: Island of Amrum); Józán, 1981:306 (Hungary: Hortobágy National Park); Nelson, 1981:145 (Great Britain: Isle of Man); Schmidt, 1981:178 (Germany: Baden-Württemberg); Woydak, 1981:42 (Germany: Westfalen: Hamm); Axelsson, 1982:80 (Sweden); Burk, 1982:92 (preys predominantly on fly males congregating around its nest in search of females); Donath, 1982:215 (Germany: Cottbus Bezirk); Finnamore, 1982:128 (in Sphecid Fauna of Southern Quebec); Gayubo, 1982b:16 (Spain: Ávila, Cáceres, and Salamanca provinces); Haeseler, 1982a:20 (Germany: Niedersachsen: urban habitats in Oldenburg), 1982c:60 (Germany: Friesian Islands: Island of Mellum); Leclercq, 1982a:125 (Belgium: Liège), 1982e:100 (Norway: Hedmark: Osen; Nord-Trøndelag: Stod); Silvestre de Sacy, 1982:4 (France: Côtes-du-Nord: Paimpol area); Skibińska, 1982:124 (Poland: Warszawa area); Steiner, 1982b:183 (in females, hunting periods alternate with basking periods); Dollfuss, 1983b:13 (in catalog of Sphecidae of Austria); Gayubo, 1983a:124 (prey: Diptera Anthomyiidae); Józán, 1983:104 (Hungary); Kvamme and Axelsson, 1983:58 (Norway); Lefeber, 1983a:85 (Netherlands: Waddendistrict: northern coast sand dunes and West Friesian Islands); Archer, 1984:25 (Great Britain: York); Chevin and Silvestre de Sacy, 1984:7 (France: Yvelines Department); Gayubo, 1984b:96 (Spain: previously recorded from Salamanca Province); Haack, Tschartke, and Vidal, 1984:131 (Germany: Hamburg area); Jacob-Remacle, 1984:260 (Belgium: urban center of Liège); Janzon and Svensson, 1984:183 (Sweden: Island of Öland); Lefeber, 1984:29 (Netherlands: Maastricht); Steiner, 1984b:33 (detailed analysis of nesting habits); Veenendaal, 1984:19 (Netherlands: Amsterdam); Verbeke, 1984:390 (Belgium: list

of *Fannia*, Fanniidae, used as prey in West Flanders); Haeseler, 1985:350 (Germany: Schleswig-Holstein), 1985c:571 (Germany: Friesian Islands), 577 (Island of Mellum); Józán, 1985b:58 (Hungary south of Lake Balaton), 79 (floral records), 84 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); Plachter, 1985:60 (Germany: Bayern: lower Brombach valley); Radović, 1985:65 (sting apparatus analyzed); Rust, Menke, and Miller, 1985:47 (California: Channel Islands), 55 (variation on Channel Islands); Scobiola-Palade, 1985:97 (Romania: delta of Danube); Brechtel, 1986:73 (Germany: Südpfalz); Gayubo and Sanza, 1986:61 (Spain: Burgos); Józán, 1986:371 (Hungary: Kiskunság National Park); McCorquodale, 1986:1621 (flight characteristics as defense against *Senotainia trilineata* van der Wulp, Sarcophagidae); Meyer-Holzappel, 1986:102 (nest parasite: *Senotainia conica* (Fallen), Sarcophagidae); Nemkov, 1986:100 (Russia: Siberia: Irkutsk Oblast'); Parks, 1986:35 (California: Torrey Pines State Reserve); Piek and Spanjer, 1986:186 (in list of Sphecidae with known prey); Steiner, 1986:106 (references to publications on nesting habits); Vikberg, 1986:76 (Finland); Holtappels, 1987:26 (Germany: Nordrhein Westfalen: Effelder Waldsee); Scobiola-Palade, 1987:64 (Romania: Dobrogea); Haeseler, 1987b:668 (Germany: Ipweger Moor near Oldenburg); Lomholdt, 1987:93 (Denmark: western Jutland: Skallingen Peninsula); Riemann, 1987a:340 (Germany: Niedersachsen: Bremen area), 1987b:42 (Germany: Niedersachsen: Nature Reserves Dünengebiet near Neumühlen and Voßberge); Schmidt and Westrich, 1987:375 (Germany: Mainz area); Archer, 1988b:27 (Great Britain: Yorkshire: Strensall Common); Chevin, 1988:15 (France: La Manche Department); Dollfuss, 1988:14, 26 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Düweke, 1988:689 (Germany: Baden-Württemberg: Kaiserstuhl); Haeseler, 1988:211 (Germany: Friesian Islands); Kowalczyk, 1988a:46 (Poland: Rogów), 1988b:66 (Poland: environs of Łódź); Nilsson, 1988:98 (Sweden); 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, 1989:16 (Germany: Mecklenburg-Vorpommern); Pádr in Šedivý, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Pankevich, Belyavskaya, Molchanova, Shlyakhtenok, and Blinov, 1989:98 (Belorussia: Berezinskiy Nature Reserve); Scobiola-Palade, 1989:88 (Romania: delta of Danube); Skibińska, 1989b:291 (Poland: moist meadow in Warszawa area); Spofford, Kurczewski, and Downes, 1989:256, 257, 258, 259, 261 (nest parasites: *Macronychia confundens* (Townsend), *Phrosinella aurifacies* Downes, *Senotainia rubriventris* Macquart., references to publications on miltogrammine flies, undetermined species of Miltogrammini, and references to publications on nest parasites *Metopia argyrocephala* (Meigen), *Phrosinella fulvicornis* (Coquillett), and *Senotainia trilineata* (Wulp), miltogrammine flies); Weiffenbach, 1989:108 (Germany: Hessen: Gießen area); Archer, 1990c:17 (Great Britain: Leicestershire); Jacobs and Oehlke, 1990: (new locality records from Democratic Germany); Kowalczyk, 1990:292 (Poland: Góry Świętokrzyskie); Kurczewski and Acciavatti, 1990:61 (New York: Cayuga County); Pádr, 1990:90 (Czech Republic: Praha area); Pagliano, 1990:80 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:542 (Austria: Kärnten); Spofford and Kurczewski, 1990:745, 746 748 (nest parasites: *Macronychia confundens* (Townsend), *Phrosinella aurifacies* Downes, *Senotainia trilineata* (Van der Wulp), and unknown species of Miltogrammini, Sarcophagidae); von der Heide and Witt, 1990:64 (Germany: Niedersachsen); Dollfuss, 1991:133 (in key to Sphecidae of North and Central Europe); Jakubzik, 1991:75 (Germany: Köln); Józán, 1991:603 (Hungary: Bátorliget Nature Reserve); Kowalczyk, 1991a:91, 94, 97, 100, 102, 105, 107 (Poland: Łódź), 1991b:121 (Poland: Augustów Forest); Kuhlmann et al., 1991:91 (Germany: Senne Region); Negrisolo, 1991:319 (Italy: Treviso Province); Nilsson, 1991:83 (Sweden: Lake Mälaren); Pagliano, 1991b:329, 332 (in key to Italian Crabroninae); von der Heide, 1991:63 (Germany: peat bog near Oldenburg); Archer, 1992b: 21 (Great Britain: Yorkshire: Skipwith Common); Budrys, 1992:32p (in list of Sphecidae of Lithuania); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Józán, 1992a:229 (Hungary: Béda-Karapanca Protected Area), 1992b:174 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); Leclercq, 1992c:208 (prey); Nilsson, 1992:54 (Sweden); N. Schneider, 1992:178 (Luxemburg); Sorg and Cölln, 1992:132 (Germany: Rheinland-Pfalz: Gönnersdorf); Spofford and Kurczewski, 1992:998 (species of miltogrammine nest parasites listed), 1002 (counter-cleptoparasitic habits: diversionary flight); K. Weber, 1992:88 (Germany: Bayern: Bamberg District); Archer, 1993d:129 (Great Britain: Lincolnshire: Risby Warren 3 km northeast of Scunthorpe); Bitsch

and Leclercq, 1993:264 (in revision of western European Crabroninae); R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Guichard, 1993b:531 and 532 (in key to European *Oxybelus*, color variation); Kuhlmann, 1993:77 (Germany: known from Westfalen); Leclercq, 1993c:50 (collecting localities from Europe); Schuberth and Schönitzer, 1993:264 (presence of facial fovea questionable); Sorg and Wolf, 1993:60 (Germany: Rheinland-Westfalen: Nature Reserve Die Spey); Wiśniowski, 1993a:95, 97 (Poland: Białowieża Primeval Forest); Archer, 1994b:104 (British Channel Islands); Blagoveshchenskaya, 1994:90 (Russia: Ul'yanovsk Oblast'); Finnamore, 1994:210 (Canada: Alberta: Wagner Natural Area 8 km west of Edmonton); Kowalczyk, 1994:76 (Poland: Łagiewniki forest in Łódź); U. Peters, Sohmen, Stuke, and Prüter, 1994:66 (Germany: Schleswig-Holstein: gardens in Hof Möhr); Schmid-Egger, 1994a:688 (Germany: Rheinland-Pfalz: Höllenberg near Grünstadt); Theunert, 1994c:46 (Germany: summary of records from Niedersachsen and Bremen); Ahlstrom, 1995:110 (in checklist of insects of North Carolina); Archer, 1995a:23 (Great Britain: Yorkshire: frequency); Archer and Burn, 1995:59 (Great Britain: Yorkshire: Crow Wood near Funningley); Gorobchishin, 1995:18 (Ukraine: Kanev Nature Reserve); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Krasnobayev et al., 1995:139 (Russia: Zhiguli Hills northwest of Samara); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:424 (in key to Sphecidae of Russian Far East); Riemann, 1995:52 (Germany: Bremen); Scharrer, 1995:28 (Germany: Bayern: Aschaffenburg; Fischerhohle; Friesian Islands: Island of Borkum; also: Striet); Schmid-Egger, 1995:62 (Germany: northwestern Baden-Württemberg); Schmid-Egger, Rich, and Niehuis, 1995:200 (Germany: summary of records from Rheinland-Pfalz); Verves and Gorobchishin, 1995:54 (preying on *Senotainia conica* (Fallén), Sarcophagidae); Archer, 1996a:58 (Great Britain: Channel Islands), 1996b:37 (Great Britain: Nottinghamshire: Sherwood Forest); 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); Gorobchishin, 1996:53 (Ukraine: Kanev Nature Reserve); Harvey and Plant, 1996:74 (Great Britain: summary of records from Essex); Jakubzik, 1996:253 (Germany: Köln); Jakubzik and Cölln, 1996b:400 (Germany: Rheinland-Pfalz); Kurczewski, 1996:87 (prey); Minoranskiy and Shkuratov, 1996:82 (Russia: Rostov Oblast'); Pawlikowski and Kruszyński, 1996:87 (Poland: Toruń Basin); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (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); Woydak, 1996:48 (Germany: Westfalen: summary of distribution and nesting habits); Archer, 1997a:49 (Great Britain: Yorkshire: Cave Wold); Else and Field *in* R. Edwards, 1997:72 (Great Britain and Ireland: distribution, habitat, flight period, prey, nesting habits, nest parasites, map of distribution by Archer and Roberts); Finnamore, 1997:889 (Canada: Yukon); Gauss, 1997:27 (egg of miltogrammatid flies deposited on adult specimens); Haeseler, 1997:30 (Germany: ubiquitous in Friesian Islands); Petit, 1997:351 (Belgium: Liège Province: Lanaye: colonization of new habitat); Riemann, 1997:50 (Germany: Achim 14 km southeast of Bremen); R. Edwards, 1997:76 (Great Britain and Ireland: distribution, status, habitat, flight period, prey collected, nesting habits, and nest parasites, by G.R. Else and J.P. Field), 77 (map of distribution in Great Britain by M.E. Archer and S.P.M. Roberts); Schmidt and Schmid-Egger, 1997:22 (in checklist of German Sphecidae); Shlyakhtenok, Blinov, and Belyavskaya, 1997:156 (Belorussia: Pripyatskiy National Park); Stuke, 1997:86 (Germany: Niedersachsen: Lüneburger Heide Nature Reserve); 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, 1998:521 (Austria: summary of collecting records from Burgenland); Drewes, 1998:49 (Germany: Niedersachsen: Goldbeck 26 km west-southwest of Hamburg); Flügel, 1998:60 (Germany: Brandenburg: Unteres Odertal National Park); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Haeseler and Ritzau, 1998:51 (Germany: Bremen: Island of Harriersand 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, 1998:19 (Great Britain: Wales: Carmarthenshire County); Petit, 1998a:109 (Belgium: Bassenge, visiting flowers of *Polygonum cuspidatum* Siebold and Zucc., Polygonaceae); Salzmann-Wandeler, 1998a:98 (Switzerland: Luzern Canton: Sempach); N. Schneider and Wahis, 1998:22 (Luxemburg: sandstone quarries); van der Smissen, 1998:64 (Germany: Mecklenburg-Vorpommern, Niedersachsen, Schleswig-Holstein); K. Weber, 1998:146 (Germany: Bayern: Bamberg area); Anan'eva and Kochetkov, 1999:7 (Russia: Ryazan' Oblast': no specific locality); Archer, 1999a:9 (Great Britain: Lancashire); Erhardt, 1999:75 (Germany: Niedersachsen: Ammerland area); Gonzáles, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega); Herrmann, 1999:7 (Germany: Niedersachsen: Oldenburg area; habitats size); W. Klein, 1999:17 (in corrected key to *Oxybelus* of Benelux); Mandery, 1999:105 (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, 1999:113 (Netherlands: Boschkapelle, Nieuw-Namen); Riemann, 1999:835 (Germany: Niedersachsen: sand pits near Bremen); M. Schwarz, 1999:86 (Austria: Oberösterreich: Linz area); 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); Blösch, 2000:271 (in Sphecida Fauna of Germany); Dressler, 2000:33 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:45 (southeastern Kazakhstan: 3 km south of Alma Ata, 3 km south of Talgar); Gayubo, González, and Torres, 2000:186 (Spain: Salamanca Province); Gibbs, 2000:13 (Great Britain: Bristol: Troopers Hill); González, Gayubo, and Tormos, 2000:20 (Andorra: Santa Coloma); Grace, Yates, and Triplet, 2000:20 (Great Britain: East Sussex: Rye Bay area); Jacobs, 2000:9 (Germany: Land Mecklenburg-Vorpommern: not endangered); Józán, 2000:109 (Hungary: Bakony Mountains); M. Mader and Chalwatzis, 2000:60 (Germany: Hessen: Oderwald Mountains); Mokrousov, 2000b:31 (Russia: Nizhniy Novgorod Oblast'); Nachtigall, 2000:6 (wing bending and folding during flight without or with prey); Pijfers, 2000:5 (Netherlands: Twente Region); Schmalz, 2000:20 (Germany: Hessen: Fulda area); Wiśniowski, 2000:161 (Poland: Bieszczady Mountains); Archer, 2001a:107 (Great Britain: Watsonian Yorkshire), 2001d:109 (Great Britain: Lincolnshire Kirkby Moor 7.5 km south of Horncastle); Cungs and Jakubzik, 2001:122, 123 (Luxemburg); Dillier and Neumeyer, 2001:29, 33 (Switzerland: delta of Reuss River on Lake Uri); Haeseler, 2001:266 (Germany: Niedersachsen: Brookdeich near Oldenburg); Józán, 2001:279 (Hungary: Somogy County); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia), 181 (review of biology); Kazenas and Esenbekova, 2001:134 (Kazakhstan: Almatinskiy Nature Reserve); Ljubomirov, 2001b:51 (Bulgaria: Mount Vitosha near Sofia); Ohl et al., 2001:140 (distribution in Germany by provinces); Reemer and van der Meer, 2001:16 (Netherlands: along Almelo-Nordhorn canal); Skibińska, 2001:220 (Poland: Białowieża Primeval Forest); Szczepko and Kowalczyk, 2001:188 (Poland: Kampinos National Park near Warszawa); Tischendorf, 2001:30 (Germany: Hessen: Kühkopf-Knoblochsaue Nature Reserve); van der Smissen, 2001:62 (Germany: Schleswig-Holstein: not endangered); Wolf, 2001a:172 (Germany: Bayern: Lech valley from Augsburg to Donau); Zettel, Gross, and Mazzucco, 2001:74 (Austria: Wien); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Archer, 2002b:120 (Great Britain: Watsonian Yorkshire: distribution map), 2002d:11 (Great Britain: Worcestershire: Hartlebury Common 17 km north of Worcester), 2002e:42 (Great Britain: Watsonian Yorkshire); Archer and Edwards, 2002:102 (Great Britain: West Sussex: Ambersham and Iping commons); Beavis, 2002:109 (Great Britain: Kent: Tunbridge Wells area, prey: *Phaonia pallida* (Fabricius), Muscidae); Esser and Cölln, 2002:1136 (southwestern Germany: Eifel region); Józán, 2002:53 (Hungary: Mecsek Mountains); Kazenas, 2002a:93 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:154 (Poland: Kampinos National Park near Warszawa); Litt, 2002:166 (Belgium); Mokrousov, 2002:148 (Russia: Nizhniy Novgorod Oblast': Kerzhenskiy Nature Reserve); Reemer and van der Meer, 2002:Bijlage 5 (Netherlands: Gelderland: Zaltbommel area); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); C. Schlüter, 2002:141 (Germany: Niedersachsen: anthropogenic habitats in Ammerland District); Shlyakhtenok and Skibinska, 2002:34 (Belorussia: no specific locality); Söderman and Vikberg, 2002:52 (in list of Aculeata of Finland); Wiśniowski, 2002:70 (Poland: Ojców National Park); Archer, 2003a:58 (Great Britain: Watsonian Yorkshire); Cölln,

Esser, and Jakubzik, 2003:62 (Germany: northwestern Rheinland-Pfalz: excavation sites and quarries); de Bruyn and Sinning, 2003:9 (Germany: Niedersachsen: Wümme-Nordarm northeast of Bremen); Drewes, 2003:140 (France, Germany: miscellaneous locality records); Flügel, 2003:8 (Germany: Hessen: Knüllwald); Haeseler, 2003:340 (Germany: Niedersachsen: Island of Harriersand near Bremen); Józán, 2003:227 (Hungary: Látványi Puszta Nature Conservation Area); Kula and Tyrner, 2003a:150 (Czech Republic: Děčín Sandstone Uplands: forest district Snežník: birch stands in air-polluted area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:68 (Germany: in catalog of wasps and bees of Bayern); Pitts and Parker, 2003:8 (nest parasite: mutillid *Odontophotopsis succinea* Viereck); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Island of Malyi Tataru in Danube delta at 45.21°N 29.00°E); Reemer, 2003:62 (Netherlands: Gelderland: Zaltbommel area); von der Dunk and Niedling, 2003:181 (Germany: Bayern: Zeckern north of Erlangen); von der Heide and Metscher, 2003:103 (Germany: Niedersachsen: Emsland area); Wiśniowski *in* Dylewska and Wiśniowski, 2003:156 (Poland: Ojców National Park); Abenius, 2004:40 (Sweden: Norrbottens: Luleå area); Archer, 2004a:47 (Great Britain: Worcestershire: Devils Spittleful Nature Reserve), 2004g:9 (Great Britain: Cumbria: North Walney National Nature Reserve), 2004h:44 (Great Britain: Watsonian West Norfolk: Roydon Common); Bergsten, Nilsson, and Hellquist, 2004:7 (Sweden: Västerbotten: Nordmaling); Buck, 2004:26 (Canada: in checklist of Crabronidae of Ontario); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:263 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); 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); Krivonogova and Rudoiskatel', 2004:109 (Russia: Sverdlovsk Oblast': near Gari village); Peeters, van Achterberg, et al., 2004:408 (in Wasp and Ant Fauna of Netherlands); Shkuratov, 2004a:81 (Russia: Rostov and Volgograd Oblast's; prey: *Hilarella hilarella* Meigen and *Senotainia deserta* Rohdendorf, Sarcophagidae, and *Musca domestica* Linnaeus, Muscidae); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:46 and 61 (in checklist of Polish Sphecidae); Archer, 2005a:30 and 2005b:92 (Great Britain: Watsonian Yorkshire), 2005c:56 (Great Britain: Suffolk County); Beavis, 2005:196 (Great Britain: Isles of Scilly); Blösch, 2005:4 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Burger, 2005:34 (Germany: Thüringen); Dubitzky, Blank, and Schönitzer, 2005:275 (Germany: Bayern: area north of Dachau); Fuhrmann, 2005:89 (Germany: Nordrhein-Westfalen: Grubengelände Littfeld Nature Reserve); Gayubo and Özbek, 2005:26 (Turkey: Bayburt: Kop Mountain; Erzurum: Palandöken, Penkaya; Konya: Güneysýnýr); 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), 29 (Sweden: Örebro County: Nydalen); Kofler, 2005:174 (Austria: Tirol: Lienz District: several localities); Kowalczyk and Kurzac, 2005:106 (Poland: Botanical Garden in Łódź); Kraatz, 2005:103 (Germany: Niedersachsen: Bümmerstede near Oldenburg); Nemkov, 2005a:149 (Russia: Island of Sakhalin); Pagliano and Negrisoló, 2005:215 (in Sphecidae Fauna of Italy); Pijfers, 2005:50 (Netherlands: Twente: Noordelijke Manderheide); Riemann and Hohmann, 2005:562 (Germany: Niedersachsen: city of Bremen and adjacent area); Robinson, 2005:37 (Great Britain: Cumbria County); Saure, 2005:17 (Germany: Berlin); Schmalz, 2005:57 (references to XIX<sup>th</sup> century authors); Shorenko, 2005b:98 (Ukraine: Crimea: Karadagh Nature Reserve); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Wiśniowski, 2005a:312 (Poland: Ojców National Park; occurring in all non-forest biotopes); Yildirim and Ljubomirov, 2005:1799 (Turkey: Erzurum Province); Archer, 2006a:21 (Great Britain: Lincolnshire: Rauceby Warren National Park), 2006c:217 (Great Britain: Staffordshire: Highgate Common), 2006d:76 (Great Britain: Watsonian Yorkshire: Pollington Quarry); Dathe, 2006:38 (*Crabro uniglumis*, recorded from Plauenscher Grund near Dresden, Germany, by von Block, 1799, is *Oxybelus uniglumis* now); Feitz, Gloden, Melchior, and Schneider, 2006:82 (Luxemburg: Baggerweieren area in Haff Réimech Nature Reserve); Gorobchishin, 2006:119 (Ukraine: many localities); Kroupa, 2006b:25 (Germany: Bayern: Oberfranken Region); Liebig, 2006:39 (Germany: Sachsen: Muskauer Heide); Ljubomirov, 2006:541 (Bulgaria: Rhodope Mountains: Peshtera); Peeters, Krekels, and Megens, 2006:22 (Netherlands: Reichswald forest near Nijmegen); N. Schneider, 2006:137,

142 (Luxemburg: anthropogenic habitats); Shlyakhtenok, 2006:111 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006a:86 (Germany: Nordrhein-Westfalen: Dortmund); Vepřek, 2006:511 (Czech Republic: Kokořinsko area); Alieva and Humbatov, 2007:79 (nest and prey, from literature); Archer, 2007a:151 (Great Britain: Norfolk: Thetford Warren Lodge), 2007c:152 (Great Britain: South Devon coast); Baghirov, 2007:93 (Russia: southwestern Siberia); Baños-Picón, Gayubo, Asís, and González, 2007:257, 259 (Spain: Zamora: Cabañas de Aliste); Beavis, 2007:94 (Great Britain: Tunbridge Wells and Central High Weald); Burguet, 2007:unnumbered p. 26 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Chevin, Livory, Lair, Sagot, and Baldock, 2007:44 (France: Département de la Manche); Flügel, 2007:40 (Germany: Hessen: Halberg near Neumorschen); Hallin, 2007b:25 (Sweden: Blekinge County); Herrmann, 2007a:52 (Germany: Niedersachsen: Ostfriesland); Jacobs, 2007:116, 118 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:25 (Germany: northwestern Sachsen); Józán, 2007:180 (Hungary: Zselic Hills); Kazenas, 2007a:91 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Kowalczyk and Nadolski, 2007:284 (Poland: Łódź: railway areas); Nemkov, 2007b:70 (Russia: Kuril Islands: Island of Iturup); Saure, 2007:82 (Germany: in checklist of Aculeata of Land Brandenburg); Shlyakhtenok, 2007a:299 (Belorussia: Berezinsky Nature Reserve); Shorenko, 2007b:258 (Ukraine: Crimea: Simferopol', Karasevka village in Belogorskiy District); Smit and Megens, 2007:17 (Netherlands: Noort Brabant: vicinity of Leende); Vago, 2007:175 (France: départements du Nord, Pas-de-Calais, and Somme); Venne, Bleidorn, and Lauterbach, 2007:302 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia); Winkler, 2007:30 (Germany: Niedersachsen: eastern Friesland); Yildirim and Ljubomirov, 2007:120 (Turkey: Erzurum and Konya provinces); Archer, 2008a:144 (Great Britain: Cumbria: North Walney Nature Reserve, Sandscale Haws, and Lindisfarne Nature Reserve); Danilov, 2008:350 (Russia: Altayskiy Kray: Barnaul area); Dollfuss, 2008a:497 (locality records from Bulgaria, Estonia, Finland, France, Hungary, Italy, Kazakhstan, Kyrgyzstan, Mongolia, Poland, Romania, Slovenia, Spain, Tajikistan, Turkey, Ukraine, and USA: Washington: Prosser); Gayubo, González, Tormos, and Asís, 2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas–Sierra de Francia); Haeseler, 2008:308 (Germany: Friesian Islands); Ljubomirov and Ban-Calefariu, 2008:205 (Romania: Maramureş District: Bârsana, Vişeu de Jos); Ljubomirov and Yildirim, 2008:255 (in catalog of Crabronidae of Turkey); Löhr, 2008:9 (Germany: Hessen: Mücke); Nemkov, 2008b:20 (in catalog of Crabronidae of Asiatic Russia); Protsenko and Drozdovskaya, 2008:128 (Ukraine: Sumy Oblast': Mogritsa village); Theunert, 2008:62 (Germany: map of distribution in Niedersachsen and Bremen); Archer, 2009b:170 (Great Britain: Lindisfarne National Nature Reserve on Island of Lindisfarne); Baños-Picón, Asís, Gayubo, and Tormos, 2009:312 (Spain: frequency of specimens collected with hand nets and Malaise traps); Bitsch and Leclercq, 2009:230 (in supplement to vol. I of Faune de France, 1993: recent record from Bulgaria reported; France: first record from Aisne: Chézy-sur-Marne; Alpes-de-Haute-Provence: Moustiers-Sainte-Marie; Ardèche: Chauzon, Saint-Thomé; Haute-Loire: Tence); Debuysse and Vago, 2009:6 (in list of Sphecidae *sensu lato* of northern France); Donie, 2009:9 (Germany: Niedersachsen: Oldenburg); Flügel, 2009a:67 (Germany: Thüringen: Weimar), 2009b:63 (Germany: Hessen: Borken, in inactive open brown coal mine); U. Frommer, 2009a:28 (Germany: in checklist of Sphecidae of Hessen); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid: Reserva Natural Riberas de Castronuño–Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Hessling, 2009:104 (Germany: Niedersachsen: Hunte River valley south of Oldenburg); Humala and Polevoi, 2009:63 (Russia: Republic of Karelia east of Lake Onega); Kowalczyk, Kurzac, and Nadolski, 2009:63 (Poland: between Warta and Widawka rivers); Nemkov, 2009b:92 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Ødegaard, Sverdrup-Thygeson, Hansen, Hanssen, and Öberg, 2009:71 (Norway: locality records); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Straka, Dvořák, and Bogusch, 2009:263 (Czech Republic: Meandry Smědé Nature Reserve); Vago, 2009:front cover (France: Pas-de-Calais: Wissant); van Diemen, 2009:49 (Netherlands: airbase Gilze-Rijen); Archer, 2010a:52 (Great Britain: Watsonian Nottinghamshire: Spalford Warren), 2010b:99 (Great Britain: Watsonian Staffordshire: Cannock Chase Country Park); Esser, Fuhrmann, and

Venne, 2010:37 (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, 2010:28 (Germany: Bayern: Sulz- and Ottmaringer Tal); Howe, Knight, and Clee, 2010:100 (Great Britain: occurring on coastal sand dunes); Jakubzik, Kinkler, and Cölln, 2010:155 (Germany: Rheinland-Pfalz: Leverkusen-Steinbüchel); 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"); J. Neumayer, 2010:334 (Austria: Niederösterreich: Thayatal National Park); Rudoiskatel', 2010:160 (Russia: central and southern Ural Mountains); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: relatively common); Schmidt, 2010:137 (Germany: Bayern: collected along Main-Donau canal); Shorenko and Konovalov, 2010:22 (Ukraine); Treiber, 2010:136 (France: département du Haut-Rhin); Tüzün and Yüksel, 2010:4472 (Turkey: Niğde Province); van der Smissen, 2010a:346 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records), 2010c:397 (Sweden: Öland: Gårdby); Archer, 2011a:42 (Great Britain: Yorkshire: Strensall Common), 2011b:54 (Great Britain: North Norfolk sand dunes), 2011d:187 (Great Britain: Watsonian Yorkshire: Hatfield Moor); Baghirov, 2011b:149 (Russia: Altayskiy Krai: Savvushka); Falk, 2011:67 (Great Britain: Sussex: South Downs); Gogala, 2011:25 (Slovenia); Józsan, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:77 (Russia: Chuvash Republic); Rudoiskatel', 2011b:69 (Russia: Republic of Bashkortostan), 2011d:244 (Russia: central Ural Mountains); Schmid-Egger, 2011a:39 (France: Parc National du Mercantour: Millefontes), 2011c:556 (Austria: Tirol: Tiroler Lech Nature Park); Schwarz, Link, Pöll, Ambach, and Rabitsch, 2011:255 (Austria: Oberösterreich: Welser Heide); Shlyakhtenok, 2011:95 (Belorussia: city of Minsk); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:152 (Germany: Hessen: not endangered); Tripotin, 2011:23 (France: Seine-Maritime: artificial sand site near Sandouville); Archer, 2012a:130 (Great Britain: Watsonian Yorkshire: Al-lerthorpe Common), 2012b:183 (Great Britain: urban York); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:3 (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, 2012:26 (Sweden: Skåne: Kullaberg Peninsula); Gerth, Mayer, Hering, Wolf, Schaffer, and Bleidorn, 2012:9 (Germany: Sachsen: Bienitz in Leipzig); Nemkov, 2012c:440 (in catalog of Crabronidae of Russian Far East); Prisiy, 2012:48 (Russia: Belgorod Oblast'); Shlyakhtenok, 2012a:172 (Belorussia and Russia: Kirov Oblast': Arkhangelskoye: collected in private plots), 2012b:92 (Belorussia: Beresina National Reserve: overgrowing dry meadow); Tripotin, 2012:23 (France: Seine-Maritime: estuary of Seine River); Akulov and Proshchalykin, 2013:114 (Russia: Siberia: Krasnoyarsk Krai); Archer, 2013b:118 (Great Britain: Leicestershire: suburban garden in Leicester); Braun-Reichert, 2013:14 (Germany: Bayern: pastures between Regensburg and Nürnberg); Dyuzhaeva, 2013:117 (Russia: Samara Oblast': Zhiguli Nature Reserve); Flügel, 2013a:120 (Germany: Brandenburg: Pimpinellenberg near Oderberg); Mokrousov, Ruchin, and Egorov, 2013:202 (Russia: Republic of Mordovia: Mordovian State Nature Reserve); Pankov, 2013:230 (Russia: Ivanovo Oblast'); A. Scholz and Liebig, 2013:24 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:182 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:18 (Portugal: Douro International Natural Park); Wiśniowski and Szczepko, 2013:42 (Poland: Kampinos National Park near Warszawa); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:217 (behavioral features reviewed); Bitsch, 2014:405 (recent records from France recorded); U. Frommer, 2014:27 (Germany: Hessen: Lorch); 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); Mokrousov and Vafin, 2014:58 (Russia: Republic of Tatarstan); Pagliano, 2014:81, 82 (specimens in M. Spinola collection, Torino, are *Oxybelus uniglumis* and *Oxybelus variegatus*), 82 (specimens in M. Spinola collection, Torino, are *Oxybelus uniglumis* and *Oxybelus mandibularis*); Yıldırım, Ljubomirov, and Lelej, 2014:14 (distribution in Turkey by biogeographic provinces); Archer, 2015:202 (Great Britain: English coastal sand dunes); Koçak and Kemal, 2015:148 (in

- checklist of Hymenoptera of Turkey); Lett, 2015:5 (France: Loir-et-Cher: Gièvre); Makovetskaya and Khvir, 2015:268 (Belorussia: Minsk; visiting flowers of *Mentha piperita* L., Lamiaceae); P. Rosa and Pagliano, 2015:104 (Italy: Lombardia and Piemonte: Parco del Ticino); Shorenko, 2015:326 (in list of Sphecidae *sensu lato* of Crimea); Stetsun and Matushkina, 2015:181 (sting structure); Blažej, Macek, and Trýzna, 2016:123 (Czech Republic: České Švýcarsko = Bohemian Switzerland National Park); Cölln and Jakubzik, 2016:18 (Germany: Rheinland-Pfalz: Vulkaneifel District); Else, Bolton, and Broad, 2016:332 (in checklist of Aculeata of Great Britain and Ireland: England, Scotland, Wales, Ireland, Isle of Man); Matushkina and Stetsun, 2016:347 (detailed description of sting apparatus); Mokrousov and Popov, 2016:583 (Russia: Abkhazia, Krasnodarskiy Krai); Ratzlaff, 2016:26 (Canada: British Columbia: from R. Bohart and Schlinger, 1957); U. Sörensen, 2016:427 (Germany: Schleswig-Holstein: der Ochsenweg south of Leck); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Wiśniowski, 2016:129 (Poland: Ojców National Park); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:43 (Turkey: Bayburt, Erzurum, and Kirikkale provinces); Antropov, 2017b:243 (in catalog of Crabroninae of Russia); Durand and Burguet, 2017:2 (France: Puy-de-Dôme: Réserve Naturelle Nationale Chastreix-Sancy); Shorenko, 2017:77 (in Crimea collected in June and July); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:7 (Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Jacobs and Liebig, 2018:144 (Russia: Irkutsk Oblast: Sarma); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Carminati, Mora, and Cretin, 2019:20 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:15 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:106 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13235 (Russia: Mordovia State Nature Reserve); Kejval, Blažej, and Erhart, 2020:105 (western Czech Republic); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Shorenko, 2020:50 (Crimea: Karadag Nature Reserve); Cross, Baldock, and Wood, 2021:55 (in catalog of Sphecidae *sensu lato* of Portugal); Herb and Schmid-Egger, 2021:9 (Germany: Bayern: Kaufbeuren area); Kaplan and Yildirim, 2021:75 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:354 (in revision of Sphecidae *sensu lato* of Europe); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); Jakubzik and Cölln, 2022:11 (Germany: Rheinland-Pfalz: Moselle River valley between Drohn and Kattenes); U. Frommer and Bahmer, 2023:194 (Germany: Hessen: Giessen University Botanical Garden); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Langfeld, 2023:61 (Germany: Mecklenburg-Vorpommern: Baltic island Greifswalder Oie); Olszewski, Sparks, Twerd, and Wiśniowski, 2024:5 (central Poland: common in river valleys: no specific localities); Buck and Bennett, 2025:216 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Alaska: no specific locality, Canada: Alberta, British Columbia, Manitoba, New Brunswick, Northwest Territories, Ontario, Quebec, Saskatchewan, and Yukon Territory, first records from Newfoundland Island, Nova Scotia, and Prince Edward Island: no specific locality); Frommer and Klenke, 2025:164 (Germany: Hessen: Lahntal near Weilburg).
- As *Vespa biglumis*: Linnaeus, 1758:419 (biological data only), corrected to *Oxybelus uniglumis* by Day, 1979:52. – Bondroit, 1933:33 (biological data refer to an *Oxybelus*).
- Nomada punctata* Fabricius, 1793:346. Holotype or syntypes: Canada: no specific locality (depository unknown: van der Vecht, 1961a:72). Synonymized with *Oxybelus tridens* by Fabricius, 1804:318. – Fabricius, 1796:115 (in Index to his Entomologia Systematica, 1793); van der Vecht, 1961a:72 (discussion of name identity).
- Crabro tridens* Fabricius, 1798:270, sex not stated. Holotype: ♀, Germany: Halae Saxonum, now Sachsen-Anhalt: Halle (ZMUC). Synonymized with *Oxybelus lineatus* by Dahlbom, 1845:XXV, and with *Oxybelus uniglumis* by P. Verhoeff, 1948:181, synonymy confirmed by Faester, 1949:21, and van der Vecht, 1961a:72. – Fabricius, 1799:17 (in Index to his Supplementum, 1798). – As *Oxybelus tridens*: Fabricius, 1804:313 (new generic assignment, redescription); Jurine, 1807:217 (in checklist of species of *Oxybelus*); Olivier, 1812b:596 (redescription); Stephens, 1829:364 (in catalog of British insects), 1829b:33 (in checklist of British insects); Vander Linden, 1829:39 (bibliographic references, France, Germany); Lepeletier de Saint Fargeau, 1845:223 (in revision of world Hymenoptera,

Paris area); F. Smith, 1855: 99 (*Oxybelus tridens* of Stephens, 1829 = *Oxybelus uniglumis*); Dours, 1874:153 (in catalog of Hymenoptera of France); Marquet, 1875:210 (France: Haute-Garonne: Toulouse), 1881:185 (southern France); Acloque, 1897:92 (in Sphecidae Fauna of France and Algeria); Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:79 (specimens in M. Spinola collection, Torino, are *Oxybelus mucronatus*).

*Vespa decimmaculata* Donovan, 1806:43, [♀] (as *decim-maculata*, incorrect original hyphenation). Holotype: ♀, Great Britain: Kent: no specific locality (lost). Synonymized with *Oxybelus uniglumis* by Gerstaecker, 1867a:86. – R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae, as tentative synonym of *Oxybelus uniglumis*).

*Oxybelus pygmaeus* Olivier, 1812b:597, sex not stated. Holotype or syntypes: France: Paris area (lost). Synonymized with *Oxybelus uniglumis* by Gerstaecker, 1867:86. – Vander Linden, 1829:40 (bibliographic references, France: Versailles); F. Smith, 1856:385 (in catalog of Hymenoptera in British Museum); Kirchner, 1867:223 (in catalog of European Hymenoptera); Dours, 1874:153 (in catalog of Hymenoptera of France).

*Oxybelus quadrinotatus* Say, 1824:338, sex not stated (as *4-notatus*, incorrect original spelling). Holotype or syntypes: USA: Pennsylvania: no specific locality (lost). Synonymized with *Oxybelus uniglumis* by R. Bohart and Menke, 1976:370. – Say, 1837:375 (coloration, comparison with *Oxybelus trispinosus* F.); F. Smith, 1856:390 (in catalog of Hymenoptera in British Museum); Le Conte, 1859a:228 (original description copied), 1859b:758 (reprint of Say, 1837:375); Cresson, 1862:234 (in catalog of North American Hymenoptera); Packard, 1867:437 (in revision of North American *Oxybelus*); Provancher, 1882:99 and 1883b:652 (in revision of Canadian Hymenoptera; as *4-notatus*); Kohl, 1884b:114 (in list of known *Oxybelus*); Cresson, 1887:286 (in catalog of North American Hymenoptera, as *4-notatus*); Ashmead, 1890:31 (in checklist of Hymenoptera of Colorado); C. Baker, 1896a:61 (Colorado: Fort Collins); Cockerell and Baker, 1896:23 (New Mexico: Santa Fe); C. Robertson, 1896:73 (visiting flowers of *Polygonum hydropiperoides* Michx., Polygonaceae, as *4-notatus*); Dalla Torre, 1897:646 (in catalog of world Sphecidae); G. Peckham and E. Peckham, 1898:73 (nesting habits); Ashmead, 1899d:162 (in checklist of North American Oxybelidae); Bridwell, 1899:209 (Kansas: no specific locality); J. Smith, 1900:513 (in list of insects of New Jersey); Harrington, 1902:218 (Canada: Ontario: Ottawa); G. Peckham and E. Peckham, 1905:76 (popular account of nesting habits); Snow, 1906:136 (Arizona: Oak Creek 20 mi. southwest of Flagstaff); H. Smith, 1908b:408 (in revision of Nebraskan Sphecidae); J. Smith, 1910:682 (in new list of insects of New Jersey); J. Parker, 1915:74 (nesting habits); Rohwer, 1916b:659 (in catalog of Hymenoptera of Connecticut); Viereck, 1916:659 (in guide to the insects of Connecticut); Rohwer, 1917a:241 (California: Alameda and San Francisco counties); Stevens, 1917:423 (North Dakota); Mickel, 1918b:368 (in catalog of Nebraskan Sphecidae); Britton, 1920:338 (in checklist of insects of Connecticut); Carter, 1925:131 (Canada: Alberta); Rohwer in Viereck, 1925:659 (in key to Sphecidae of Connecticut; Branford, Colebrook, New Haven, Poquonock, Prospect, Putnam, and Scotland); J.Ch. Bradley, 1926:175 (New York: Lloyd-Cornell Reservation near McLean), 1928:1021 (in catalog of New York Sphecidae); Pate, 1930b:40 (first record from New York State); Krombein, 1936:95 (dipteran prey), 99 (floral records); Brimley, 1938:450 (North Carolina: Charlotte, as *quadrimaculatus*); Strandtmann, 1945a:313 (nest and prey); Strickland, 1947:127 (Canada: Alberta); Krombein, 1948a:67 (prey, as *quadrinotatum*); Burks in Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera); K. Cooper, 1953:34 (Massachusetts: Island of Penikese); Evans, 1957b:112 (description of larva); Kurczewski and Kurczewski, 1963:149 (Pennsylvania: Presque Isle State Park); Horning and Barr, 1970:107 (USA: Idaho: Craters of the Moon National Monument). – **As *Oxybelus uniglumis quadrinotatus***: R. Bohart and Schlinger, 1956c:165 (new status, in checklist of North American *Oxybelus*, as *quadrinotatum*), 1957:111 (in revision of Californian *Oxybelus*); Krombein, 1958f:204 (is a North American subspecies of *Oxybelus uniglumis*, synonymy with *Oxybelus quadrinotatus* var. *montanus* recorded); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator, as *quadrinotatum*); Evans, 1970:493 (Wyoming: Jackson Hole, nesting habits, list of prey); Steiner, 1973:30 (Canada: Northwest Territories); Elliott and Kurczewski, 1973:80 (Alaska); D. Peckham, Kurczewski, and D. Peckham, 1973:651 (nesting habits); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument).

- Oxybelus bispinosus* of Stevens: F. Smith, 1855:99 = *Oxybelus uniglumis*.
- Oxybelus impatiens* F. Smith, 1856:390, ♀. Holotype or syntypes: ♀, USA: California: no specific locality (BMNH). Synonymized with *Oxybelus uniglumis* by Ch. Robertson, 1889:78. – Cresson, 1862:234 (in catalog of North American Hymenoptera); Kohl, 1884b:112 (in list of known *Oxybelus*); Cresson, 1887:286 (in catalog of North American Hymenoptera).
- Oxybelus interruptus* Cresson, 1865b:475, ♀. Holotype: ♀, USA: Colorado: no specific locality (ANSP). Synonymized with *Oxybelus uniglumis* by Ch. Robertson, 1889:78. – Packard, 1867:436 (in revision of North American *Oxybelus*); Cresson, 1887:286 (in catalog of North American Hymenoptera); Dalla Torre, 1897:641 (in catalog of world Sphecidae); Cresson, 1916:103 (holotype in ANSP); Kohl, 1884b:112 (in list of known *Oxybelus*).
- Oxybelus fallax* Gerstaecker, 1867a:91, ♀. Holotype: ♀, Germany: Brieselanger Forst near Berlin (ZMHU). Synonymized with *Oxybelus uniglumis* by Blüthgen, 1949:88. – Chevrier, 1868:413 (summary of diagnostic characters); Kohl, 1884b:112 (in list of known *Oxybelus*); Dalla Torre, 1897:640 (in catalog of world Sphecidae); Schmiedeknecht, 1907:204 (in key to Hymenoptera of Central Europe); Schirmer, 1912:165 (recorded from Berlin area, Germany, by Gerstaecker, 1867); Maidl in Schmiedeknecht, 1930:662, 665 (in keys to Hymenoptera of North and Central Europe); Giner Marí, 1943a:259 (in Sphecid Fauna of Spain); van Lith, 1947:104 (Netherlands, determination tentative); Šnoflák in Zavادل and Šnoflák, 1948:33 (in key to Czechoslovakian Sphecidae; not yet found in Czechoslovakia).
- Oxybelus brodiei* Provancher, 1883a:36, ♀ (as *Brodiei*, incorrect original capitalization). Lectotype: ♀, Canada: Toronto (Laval Univ.), designated by Gahan and Rohwer, 1918:105. Synonymized with *Oxybelus uniglumis* by Ch. Robertson, 1889:78. – Kohl, 1884b:111 (in list of known *Oxybelus*); Cresson, 1887:286 (in catalog of North American Hymenoptera); Faull, 1913:385 (Canada: Toronto region).
- Oxybelus brodiei* Provancher, 1883b:811, ♀ (as *Brodiei*, incorrect original capitalization). Objective synonym of *Oxybelus brodiei* Provancher, 1882.
- Oxybelus quadrinotatus* var. *montanus* Robertson, 1889:78, ♀, ♂. Syntypes: USA: Montana (...). Synonymized with *Oxybelus uniglumis quadrinotatus* by R. Bohart and Schlinger, 1956c:165. – Dalla Torre, 1897:647 (in catalog of world Sphecidae); Stevens, 1917:423 (North Dakota, as *Oxybelus quadridnotatus montanus*); F. Williams, 1936a:1 (California: San Francisco; nesting habits); Strickland, 1947:127 (Canada: Alberta: Lethbridge, as *Oxybelus quadridnotatus montanus*); Burks in Muesebeck, Krombein, and Townes, 1951:1033 (in catalog of North American Hymenoptera).
- Oxybelus hispanicus* García Mercet (nomen nudum): Dusmet y Alonso, 1935:48 (Spain: Madrid: Ribas de Jarama), 53 (Spain: Madrid: Río Alberche), 65 (Spain: Avila: Las Navas del Marqués); Móczár, 1958c:285 (in key to western Palearctic *Oxybelus*).
- Oxybelus hispanicus* Giner Marí, 1943a:260, ♀, ♂ (authorship attributed to Mercet). Syntypes: Spain: Río Alberche, Ribas (IEE). Synonymized with *Oxybelus uniglumis* by Guiglia, 1953:129.
- 255. uralensis Tsuneki**
- Oxybelus deserticola* Tsuneki, 1972a:161, ♀, junior primary homonym of *Oxybelus deserticola* de Beaumont, 1950. Holotype: ♀, Mongolia: Central Aymag: Ulan Khodag (TMB). – R. Bohart and Menke, 1976:367 (in checklist of world Sphecidae).
- Oxybelus uralensis* Tsuneki, 1976:434. Substitute name for *Oxybelus deserticola* Tsuneki, 1972. – Dollfuss, 2008a:498 (Mongolia: Gichigniy Nuruu Mountains: 10 km southwest of Talshand).
- 256. uturoae Cheesman**
- Oxybelus uturoae* Cheesman, 1928a:177, ♀, ♂. Syntypes: Society Islands: Islands of Raiatea and Bora-Bora (BMNH). – R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae).

**257. *vardyi* R. Bohart**

*Oxybelus vardyi* R. Bohart, 1993c:25, ♀, ♂. Holotype: ♀, Peru: Lima: Lurin (IML). – Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Rasmussen and Asenjo, 2009:12 (in checklist of Crabronidae of Peru).

**258. *varians* F. Morawitz**

*Oxybelus varians* F. Morawitz, 1891a:211, ♀. Holotype or syntypes: European Kazakhstan: Mount Bogdo (ZIN). – Dalla Torre, 1897:650 (in catalog of world Sphecidae); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Kazenas, 2001b:38 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:93 (geographic distribution, collecting localities in Kazakhstan), 2004d:33 (Kazakhstan: Ryn-Peski).

**259. *variegatus* Wesmael**

*Oxybelus variegatus* Wesmael, 1852:628, ♀. Syntypes: ♀, Switzerland: Genève (Bruxelles). – F. Smith, 1856:386 (in catalog of Hymenoptera in British Museum); A. Costa, 1867c:150 (in revision of Italian Sphecidae); Gerstaecker, 1867a:94 (in revision of *Oxybelus*; Germany: Berlin area); Kirchner, 1867:223 (in catalog of European Hymenoptera); Chevrier, 1868:391 (in revision of Swiss *Oxybelus*); A. Costa, 1871b:79 (in revision of Italian Sphecidae); Kohl, 1880:143 (Austria: Tirol, and Italy: Trentino–Alto Adige), 1881:56 (synonymy); Marquet, 1881:185 (France: Haute-Garonne: Toulouse); A. Costa, 1883:58 (Italy: Sardegna: montagna d'Aggius, Oschiri); Kohl, 1883e:663 (Switzerland); Baldini, 1894:73 (Italy: Modena area); Marquet, 1896:34 (in revision of *Oxybelus* of France); Dalla Torre, 1897:650 (in catalog of world Sphecidae, as *variegatus* Marquet); Chyzer, 1902:34 (Hungary); Antiga and Bofill, 1904:28 (Spain: Cataluña Province); de Gaulle, 1908:121 (in catalog of French Hymenoptera); P. Verhoeff, 1948:198 (in revision of Western European *Oxybelus*); de Andrade, 1949:22 (Portugal); Fæster, 1949:27, 45 (in revision of Western European *Oxybelus*); de Beaumont, 1951h:35 (Switzerland: Neuchâtel area), 1952b:91 (Marquet's, 1896 specimens); Guiglia, 1953a:111 (in revision of Italian *Oxybelus*); Nouvel and Ribaut, 1953:184 (France: Central Pyrénées: common in Garonne River valley); Blüthgen, 1954:148, 152 (in key to Central European *Oxybelus*), 154 (summary of locality records from Germany); de Beaumont, 1954e:98 (Italy); Grandi, 1954:245 (Italy); Bytinski-Salz, 1956:227 (Turkey: Istanbul); Ceballos, 1956:398 (in catalog of Sphecidae of Spain); Morel, Nouvel, and Ribaut, 1956:340 (France: Département des Pyrénées-Orientales); de Beaumont, 1957b:139 (northern Iran); Móczár, 1958b:211 (Hungary: list of collecting localities), 1958c:285, 291 (in key to western Palearctic *Oxybelus*); Nouvel and Ribaut, 1958:17 (France: Pyrénées-Orientales: Banyuls-sur-Mer); Puławski, 1958a:190 (Bulgaria: Kniazhevo near Sofia); Diniz, 1959:32 (Portugal: Lisboa); Suárez, 1959:60 (Spain: Almería Province); Wolf, 1959b:35 (known from Germany, but not from Nassau); Noskiewicz and Puławski, 1960:163, 165 (in key to Polish Sphecidae); de Beaumont, 1962b:29 (Spain); Grandi, 1962:99 (Italy); Ceballos, 1964:95 (in supplement to catalog of Spanish Sphecidae); de Beaumont, 1964c:162 (in Sphecid Fauna of Switzerland), 1965a:63 (Greece); Bonelli, 1966c:221 (Italy: Trentino–Alto Adige: Montagna); Mingo Pérez, 1966:89 (in revision of *Oxybelus* of Iberian Peninsula); Balthasar, M. Hrubant, and E. Hrubant, 1967:170 (Bulgaria: Slanchev Bryag near Nesebar); de Beaumont, 1967a:366 (Turkey); Benedek, 1968:80 (Hungary, floral records), 1969a:85 (Hungary: marshy meadow), 1970:105 (Hungary: Tapolca); de Beaumont, 1970a:404 (Afghanistan); Gauss and Perraudin, 1970:362 (Germany: Baden-Württemberg: Taubergiessen near Kappel am Rhein); Oehlke, 1970:798 (Democratic Germany); Stritt, 1971a:105 (Germany: Baden-Württemberg: Karlsruhe); Balthasar, 1972:161 (in Sphecid Fauna of Czechoslovakia); Erlandsson, 1974:88 (Italy, Spain, Yugoslavia); Scobiola-Palade, 1974:146 (first record from Romania: Sărăturile sandbank in Danube delta); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Kolesnikov, 1977:321 (Russia: Bryansk Oblast); Guichard, 1978:272 (Greece); Marion, 1978:91 (France: Nièvre Department); Pulawski, 1978:276, 278 (in key to Sphecidae of European part of USSR); Benedek, 1979:237 (Hungary: Bakony Hills); Dathe, 1980:209 (Russia: northern Caucasus: Teberda); Pagliano, 1980:120 (Italy: Piemonte); Schmidt, 1981:178 (Germany: Baden-Württemberg); Gayubo, 1982b:16 (Spain: Ávila, Cáceres, and Salamanca provinces), 1882e:103 (Spain: Cádiz Province); Dollfuss, 1983b:13 (in catalog of Sphecidae of Austria); Józán, 1983:104 (Hungary); Schmidt and Westrich, 1983:124 (Greece); Gayubo, 1984b:92 (Spain: Salamanca Province), 1984c:376 (Portugal: El Algarve Province),

1985c:170 (Spain: Valladolid: Hornillos, Traspinedo, Valladolid); Józán, 1985b:58 (Hungary south of Lake Balaton), 79 (floral records), 84 (ecological and zoogeographic characteristics); Westrich and Schmidt, 1985b:111 (Germany: endangered in Baden-Württemberg); Gayubo, 1986a:62 (Spain: Ciudad Real Province), 1986d:115 (Spain: Zamora Province); Gayubo and Heras, 1986:52 (Spain: Valladolid Province); Gayubo and Sanza, 1986:62 (Spain: Burgos); Gayubo and Tormos, 1986a:15 (Spain: Castellón de la Plana; prey: *Musca domestica* L., Muscidae); Józán, 1986:371 (Hungary: Kiskunság National Park); Asís and Jiménez, 1987:27 (Spain: Castellón Province); Dollfuss, 1988:14, 26 (Austria: Bisamberg near Vienna; Niederösterreich: Oberweiden); Düweke, 1988:689 (Germany: Baden-Württemberg: Kaiserstuhl); Karsai, 1988:100 (Hungary: Kiskunság National Park); Kowalczyk, 1988a:46 (Poland: Rogów), 1988b:66 (Poland: environs of Łódź); Jacobs, 1989:16 (Germany: Mecklenburg-Vorpommern); Józán, 1989:101 (Hungary: Tihany Nature Reserve); Pádr *in* Šedivy, 1989a:171 (in checklist of Czechoslovakian Sphecidae); Gayubo, Asís, and Tormos, 1990b:75 (Spain); Jacobs and Oehlke, 1990:123 (population regress in Democratic Germany after 1960), 178 (new records from Democratic Germany); Kuznetzova, 1990:25 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pagliano, 1990:80 (in catalog of Italian Sphecidae); Schwammberger and Priesner, 1990:542 (Austria: Kärnten); Day, 1991:xvii (summary of European Endangered Hymenoptera Lists); Dollfuss, 1991:133 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:405 (Italy); Gayubo and Torres, 1991:Table I (Spain: Salamanca; effects of urban pressure); Pagliano, 1991b:331, 332 (in key to Italian Crabroninae); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Gayubo, Borsato, and Osella, 1992:285 (France, Greece); Józán, 1992a:229 (Hungary: Béda-Karapanca Protected Area), 1992b:174 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); Bitsch and Leclercq, 1993:265 (in revision of western European Crabroninae); Guichard, 1993b:531 and 533 (in key to European *Oxybelus*); Leclercq, 1993c:50 (collecting localities from Europe and Turkey); Torregrosa, Gayubo, Tormos, and Asís, 1993:19 (Spain: Alicante Province); Blagoveshchenskaya, 1994:90 (Russia: Ul'yanovsk Oblast'); Gayubo and Borsato, 1994:211 (Italy: Veneto); Schmid-Egger, 1994b:16 (Germany: conservation in upper Rhein area); Theunert, 1994c:46 (Germany: summary of records from Niedersachsen and Bremen); Tormos, Asís, and Gayubo, 1994:189, 213 (Spain: Albacete Province); Gusenleitner, 1995:161 (Austria: Steiermark); Jansen and Kaluza, 1995:7 (Germany: endangered in Sachsen); Negrisolo, 1995a:18 (visiting flowers of *Echinophora spinosa* L., Apiaceae), 22 (Italy: Veneto); Negrisolo *in* Minelli, Ruffo, and La Posta, 1995b:6 (in catalog of Italian fauna); Pagliano and Pesarini, 1995:88 (Italy: Ferrara Province); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Schmid-Egger, Rich, and Niehuis, 1995:200 (summary of records from Germany: Rheinland-Pfalz Province); Kuhlmann, 1996:220 (Portugal: Serra de Estrela); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:14 (Ukraine: Polesye Region); Celary, 1997:59 (in checklist of Animals of Poland); Schmid-Egger and Niehuis, 1997:14 (Germany: Rheinland-Pfalz); Schmidt and Schmid-Egger, 1997:23 (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, 1998:521 (Austria: summary of collecting records from Burgenland); Flügel, 1998:60 (Germany: Brandenburg: Unteres Odertal National Park); Gonzáles, Gayubo, and Torres, 1998:74, 75 (Spain: Valladolid Province); Gorobchishin, 1998a:49 (Ukraine: Kiev and surroundings); Józán, 1998:311 (Hungary: Duna-Dráva National Park); H.-J. Schulz, 1998b:9 (Germany: Brandenburg: Unteres Odertal National Park); Gayubo, García, Torres, and González, 1999:90 (Spain: Soria Province); Salzmann-Wandeler and Rezbanyai-Reser, 1999:101 (Switzerland: Tessin: Monte Generoso); Wickl, 1999a:107 (Germany: Bayern: Oberpfalz area), 1999c:201 (Germany: Bayern: near Freihung); Blösch, 2000:273 (in Sphecid Fauna of Germany); Gayubo, González, and Torres, 2000:186 (Spain: Salamanca Province); Giachino, Grosso, Marchetti, Pagliano, Scaramozzino, and Vailati, 2000:107 (Greece); Jacobs, 2000:9, 17 (Germany: Land Mecklenburg-Vorpommern: endangered); Józán, 2000:109 (Hungary: Bakony Mountains); Ljubomirov, 2000:11 (Bulgaria: specimens in N. Nedelkov collection); Schmid-Egger, 2000b:276, 280 (Germany: Baden-Württemberg: shores of Rhine River); Zettel, 2000:29 (Austria: Fürth, Hundsheimer Kogel); Józán, 2001:279 (Hungary: Somogy County); Ljubomirov, 2001b:51 (Bulgaria: Mount Vitoshka near Sofia); Ohl et al., 2001:140 (distribution in Germany by provinces); Schmid-Egger,

2001:17 (France: Alsace: Bollenbergs), 19 (distribution in Germany); Zettel, Gross, and Mazzucco, 2001:74 (Austria: Wien); Józán, 2002:53 (Hungary: Mecsek Mountains); Drewes, 2003:140 (Germany: Bayern: Erlangen; Hungary: Harkany); Generani, Pagliano, Scaramozzino, and Strumia, 2003:65 (Italy: Arcipelago Toscano); González, Gayubo, Asís, Tormos, and García, 2003:61 (Spain: Soria: Chavaler); Gusenleitner, 2003:804 (Austria: Oberösterreich: Kappen southeast of Marchtrenk at 48°11'N 14°08'E); Józán, 2003:227 (Hungary: Látrányi Puszta Nature Conservation Area); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:68 (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, 2003:755 (Italy: Sicilia: Armerina); Wagemann, 2003:27 (Germany: Rheinland-Pfalz: Ebenberg Nature Reserve); Wickl, Voith, Mandery, Weber, Kraus, Bausenwein, and Blösch, 2003:195 (Germany: Bayern: no longer endangered); Gayubo et al. 2004:131 (Spain: Madrid: Estación Biogeológica de El Ventorrillo in Sierra de Guadarrama); Nicoli Aldini, 2004:254 (nesting habits); Shkuratov, 2004a:81 (Russia: Donetsk and Rostov oblast's); Skibińska in Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:372 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Wiśniowski, 2004:46 and 61 (in checklist of Polish Sphecidae); Burger, 2005:34 (Germany: Thüringen); Gayubo and Özbek, 2005:27 (Turkey: Erzurum: University campus, Palandöken, Turnalı, Pasinler, Rabat; Kars: Akkurt); Gusenleitner, 2005:1204 (Austria: Oberösterreich: Gstocket north of Alkoven at 48°18'N 14°07'E and Steyregg/Pulgarn at 48°16'58"N 14°23'14"E); Landeck, Wöhler, and Landgraf, 2005:18 (Germany: Lausitz Region; visiting flowers of *Reseda luteola* Linnaeus, Resedaceae); Pagliano and Negrisoló, 2005:216 (in Sphecidae Fauna of Italy); Saure, 2005:17 (Germany: Berlin); Shorenko, 2005b:98 (Ukraine: Crimea: Karadagh Nature Reserve); Straka, 2005a:404 (vulnerable in Czech Republic); Theunert, 2005a:18 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Yildirim and Ljubomirov, 2005:1799 (Turkey: Erzurum, Kars, and Niğde provinces); Gorobchishin, 2006:119 (Ukraine: several localities); Liebig, 2006:39 (Germany: Sachsen: Muskauer Heide); Liška, 2006:88 (Slovakia: Váh river valley near Trenčín); Ljubomirov, 2006:542 (Greece: earlier records from Rhodope Mountains by Schmidt and Westrich, 1983, reported); Standfuss and Standfuss, 2006b:99 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Baños-Picón, Gayubo, Asís, and González, 2007:257, 259 (Spain: Zamora: Cabañas de Aliste); Burguet, 2007:unnumbered p. 26 (France: Puy-de-Dôme: sands Girauds-Faures in Orléat commune); Chevin, Livory, Lair, Sagot, and Baldock, 2007:45 (France: Département de la Manche); Jacobs, 2007:116, 120 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:25 (Germany: northwestern Sachsen); Józán, 2007:180 (Hungary: Zselic hills); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Shorenko, 2007b:258 (Ukraine: Crimea: Krasnoles'ye village in Simferopol' District, Demerdzhy Mountain, Rybach'ye village in Alushta District, Pravda village in Pervomayskiy District); G. Turrisi and R. Turrisi, 2007:118 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Vepřek and Straka, 2007:204 (in catalog of Sphecidae of Czech Republic and Slovakia); Yildirim and Ljubomirov, 2007:120 (Turkey: Erzurum: Oltu); Danilov, 2008:350 (Russia: Altayskiy Krai: Barnaul area); Dollfuss, 2008a:498 (locality records from Bulgaria, Croatia, France, Greece, Hungary, Italy, Iran, Kazakhstan, Kyrgyzstan, Moldova, Romania, Spain, Turkey, Turkmenistan, Ukraine, and Uzbekistan); Gayubo, González, Tormos, and Asís, 2008:139 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Yildirim, 2008:256 (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, as *variegatus* Linnaeus); Bitsch and Leclercq, 2009:230 (in supplement to vol. I of Faune de France, 1993: behavioral observations by Nicoli Aldini, 2004, reported; France: first record from Ardèche: Saint-Thomé; Isère: Saint-Laurent-de-Beaumont); Gayubo, González, Tormos, and Asís, 2009:364 (Spain: Valladolid: Reserva Natural Riberas de Castronuño–Vega del Duero); González, Gayubo, Asís, and Tormos, 2009:624 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:265 (Bulgaria: Maleshevska Planina); Shorenko, 2009:367 (in list of Sphecidae *sensu lato* of Crimea); Budrys, 2010:138 (first record from Lithuania: Pilaitė, Žaliakalnis); Mokrousov, 2010a:62 (Russia: Nizhniy Novgorod Oblast': no specific localities), 2010b:100 (Russia: Nizhniy Novgorod Oblast': no specific localities); Rudoiskatel', 2010:160 (Russia:

southern Ural Mountains); Schmid-Egger, 2010a:17 (in red list of Aculeata of Germany: rare); Shorenko and Kononov, 2010:22 (Ukraine: Khar'kov Oblast': villages Martovaya and Rogan'); van der Smissen, 2010b:385 (France: Ardèche: Plateau du Coiron, Saint-Maurice-d'Ibie); Wurdack and Gack, 2010:153 (Germany: Baden-Württemberg: Kaiserstuhl); Baghirov, 2011b:149 (Russia: recorded from Altayskiy Kray by Danilov, 2008); Burger, 2011a:288 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Gogala, 2011:26 (Slovenia); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Murai and Amr, 2011:112, 119 (first record from Syria: Al Thawrah Nature Reserve at 35°51'N 28°38'E); Protsenko and Drozdovskaya, 2011:91 (Ukraine: Mikolaiv Oblast': Bugskiy Guard National Park); Saure, 2011d:200 (Germany: Sachsen-Anhalt: conservation area "Heide südlich Burg"); Schwarz, Link, Pöll, Ambach, and Rabitsch, 2011:255 (Austria: Oberösterreich: Welser Heide); Theunert, 2011:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:184 (Germany: occurrence in Hessen probable); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:3 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Shlyakhtenok, 2012a:172 (Belorussia: collected in private plots); Yildirim, 2012:81 (Turkey: Erzurum, and Iğdır provinces); Zettel, 2012:78 (Austria: Niederösterreich: Golitsch); Bayındır, Gürbüz, Ljubomirov, and Pohl, 2013:146 (Turkey: Isparta: Kasnak Oak Forest Nature Reserve); A. Scholz and Liebig, 2013:24 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:183 (in annotated catalog of aculeate wasps of Belorussia); Wiśniowski and Piotrowski, 2013:22 (Poland: Poleski National Park); Wiśniowski and Szczepko, 2013:42 (Poland: Kampinos National Park near Warszawa); Dunford, Turbyville, and Leavengood, 2014:10 (listed as medically important in Afghanistan); Yildirim, Ljubomirov, and Lelej, 2014:14 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:19 (Iran: Fars Province); Koçak and Kemal, 2015:148 (in checklist of Hymenoptera of Turkey); Rezaei and Fallahzadeh, 2015:7 (Iran: Fars: Dalin at 30°03'N 52°07'E and Dasht e Arzhan at 29°38'N 51°58'E); Shorenko, 2015:325 (in list of Sphecidae *sensu lato* of Crimea); Mokrousov and Popov, 2016:583 (Russia: Krasnodarskiy Kray); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2016:431 (Iran: Fars Province); Saure, 2016a:8 (Germany: Brandenburg: Uckermark District: dry slopes near Altgalow-Stützkow), 2016b:49 (Germany: Sachsen-Anhalt: fruit orchards); Stolle and Saure, 2016:924 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:43 (Turkey: Adana, Antalya, Erzurum, Kars, and Tunceli provinces); Antropov, 2017b:243 (in catalog of Crabroninae of Russia); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:54 (Iran: known from Fars, Isfahan, Mazandaran, Qazvin, and Tehran provinces); Říha, 2017:175 (Czech Republic: Brno); Shorenko, 2017:77 (in Crimea collected in June through August); Twerd, Krzyżyński, Waldon-Rudziołek, and Olszewski, 2017:7 (Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Shorenko, 2018:128 (Crimea, including localities, habitats, and number of specimens); Carminati, Mora, and Cretin, 2019:20 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Eroğlu and Yüksel, 2019:5230 (recorded from Niğde Province of Turkey by de Beaumont, 1967, but not rediscovered since then); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:15 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:106 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13235 (Russia: Mordovia State Nature Reserve); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:266 (Iran: Fars: ten localities; Kejval, Blažej, and Erhart, 2020:105 (western Czech Republic); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Shorenko, 2020:50 (Crimea: Karadag Nature Reserve); Cross, Baldock, and Wood, 2021:55 (in catalog of Sphecidae *sensu lato* of Portugal); Kaplan and Yildirim, 2021:76 (in catalog of Crabronidae of Turkey); Leclercq, Bitsch, K. Schmidt, and Antropov *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:355 (in revision of Sphecidae *sensu lato* of Europe); Olszewski, Bogusch, and Szpila, 2021:1 (life history, description of larva); Kaplan and Yildirim, 2023:1686 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:424 (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).

*Oxybelus pulchellus* Gerstaecker, 1867a:65, ♂. Syntypes: ♂, Germany: Berlin area (ZMHU). Synonymized with *Oxybelus variegatus* by Marquet, 1896:14 and Blüthgen, 1949:88. – Chevrier, 1868:412 (summary of diagnostic characters); Marquet, 1875:210 (France: Haute-Garonne: Toulouse); Kohl, 1880:143 (Austria: Tirol, and Italy: Trentino–Alto Adige); Marquet, 1881:185 (southern France); Kohl, 1883e:662 (Switzerland), 1884b:114 (in list of known *Oxybelus*); Krieger, 1894:11 (Germany: Kingdom of Saxony); Dalla Torre, 1897:646 (in catalog of world Sphecidae); Antiga and Bofill, 1904: (Spain: Cataluña Province); Kubes, 1905:84 (Czech Republic: Kolín); Schmiedeknecht, 1907:205 (in key to Hymenoptera of Central Europe); Schirmer, 1912:165 (Germany: recorded from Berlin area by Gerstaecker, 1867); Alfken, 1914:275 (northwestern Germany: Baden, Hülsen); O. Meyer, 1919:150 (Germany: Posen Province, now Poland: Poznań Region); Stöckert, 1919:39 (Germany: Franken); A. Wagner, 1920:38 (Germany: Lower Elbe region); Noskiewicz, 1924a:114 (Poland: vicinity of Kraków); Balles, 1934:17 (Germany: Baden-Württemberg: Mannheim-Rheinau); Dovnar-Zapolskiy, 1940:303 (Russia: Kursk Oblast', determination tentative); Paul, 1941:38 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Szulczewski, 1950:103 (Poland: Wielkopolski National Park 15 km south of Poznań); Ceballos, 1956:397 (in catalog of Sphecidae of Spain); Gauss, 1967:560 (Germany: Baden-Württemberg: nördliches Rheinvorland); Stritt, 1968:110 (Germany: Baden-Württemberg, is a junior synonym of *Oxybelus variegatus*).

As *Oxybelus mandibularis*: Schirmer, 1912:165 (Germany: Berlin area), present correction based on synonymy with *variegatus*; de Beaumont, 1942b:428 (Switzerland).

#### 260. *ventralis* W. Fox

*Oxybelus ventralis* W. Fox, 1894c:107, ♀. Holotype or syntypes: ♀, Mexico: Baja California Sur: San José del Cabo (CAS). – Dalla Torre, 1897:650 (in catalog of world Sphecidae); R. Bohart and Schlinger, 1956c:165 (in checklist of North American *Oxybelus*, as *ventrale*), 1957:117 (in revision of Californian *Oxybelus*, as *ventrale*); Krombein, 1958f:202, 204 (in supplement to catalog of North American Hymenoptera: Washington south to Baja California, synonymy with *Oxybelus manni* reported); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Krombein, 1979b:1658 (in catalog of North American Hymenoptera); D. Peckham, 1985:865 (nesting habits); R. Bohart, 1993e:161 (in list of Central American and Caribbean *Oxybelus*, geographic distribution), 163 (in key to Central American and Caribbean *Oxybelus*); Amarante, 2002:45 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Dollfuss, 2008a:499 (Washington: Benton County: Prosser); Andrietti, Polidori, Casiraghi, Bellati, Passerini, and Martinoli, 2014:217 (behavioral features reviewed); Ratzlaff, 2016:26 (first record from Canada: British Columbia: Southern Interior), 35 (British Columbia: Vernon); Buck and Bennett, 2025:217 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality).

*Oxybelus manni* Rohwer, 1909a:117, ♀. Holotype or syntypes: ♀, USA: Washington: Pullman (USNM). Synonymized with *Oxybelus ventralis* by R. Bohart and Schlinger, 1956c:165. – Burks *in* Muesebeck, Krombein, and Townes, 1951:1032 (in catalog of North American Hymenoptera).

#### 261. *verhoeffi* de Beaumont

*Oxybelus verhoeffi* de Beaumont, 1950f:415, ♀. Holotype: ♀, Algeria: Tadjemout (BMNH). – de Beaumont, 1953a:176 (Mauritania), 1956a:212 (Libya: Fezzan); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Guichard, 1990b:281 (United Arab Emirates, Oman); Leclercq, 1993c:50 (in list of Crabronini of Europe and Mediterranean Basin); Dollfuss, 2008:500 (Morocco: 10 km north of Mhamid; Tunisia: Ghar el Melh 35 km southeast of Bizerte, Monastir-Skanes at 35°45'N10°44'E); Schmid-Egger, 2011b:563 (United Arab Emirates: Dubai/Nakhalai, Mahafiz, Sharja Desert Park), 566 (color photograph of female), 2014:586 (United Arab Emirates); Gadallah, 2020b:43 (in list of aculeate wasps of Arabian Peninsula).

**262. wasbaueri R. Bohart**

*Oxybelus wasbaueri* R. Bohart, 1993c:25, ♀, ♂. Holotype: ♀, Ecuador: Carchi: Río Chota at 35 km on Ibarra-Tulcán section of Pan American Highway (UCD). – Amarante, 2002:45 (in catalog of Neotropical Crabronidae).

**263. willinki R. Bohart**

*Oxybelus willinki* R. Bohart, 1993d:75, ♀, ♂. Holotype: ♀, Argentina: Buenos Aires: Buenos Aires (UCD). – R. Bohart, 1993d:66 (in key to *Oxybelus uniglumis* and *O. scutellatus* species groups in South America); Amarante, 2002:45 (in catalog of Neotropical Crabronidae).

**264. willowmorensis Arnold**

*Oxybelus willowmorensis* Arnold, 1927:99, ♀. Holotype: ♀, South Africa: Eastern Cape Province: Willowmore (TMP). – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); S. Gess and F. Gess, 2003:104 (Namibia: visiting flowers of *Eriocephalus luderitzianus* O. Hoffm., Asteraceae).

**265. woosnami Arnold**

*Oxybelus woosnami* Arnold, 1927:111, ♀ (as *Woosnami*, incorrect original capitalization). Holotype: ♀, Botswana: Lake Ngami (BMNH). Paratypes: South Africa: Pretoria. – Arnold, 1930:15 (in checklist of Afrotropical Sphecidae), 1935a:502 (South Africa: Kalahari); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Dollfuss, 2008:500 (Namibia: Rundu).

**266. xanthogaster Pate**

*Oxybelus xanthogaster* Pate, 1938b:378, ♀. Holotype: ♀, East Malaysia (Borneo): Lebang: Hara (Mus. Hamburg according to original description, actually ANSP). – Pate, 1938b:393 (in list of Oriental Oxybelini); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); H. Allen, 1995:16 (holotype in ANSP); Manikandan and Dey, 2001:265 (in checklist of Oriental *Oxybelus*).

**267. xerophilus R. Bohart and Schlinger**

*Oxybelus xerophilus* R. Bohart and Schlinger, 1956b:154, ♂ (as *xerophilum*, incorrect original termination). Holotype: ♂, USA: California: Inyo County: Stovepile Wells in Death Valley (CAS). – R. Bohart and Schlinger, 1956c:165 (in checklist of North American *Oxybelus*), 1957:115 (in revision of Californian *Oxybelus*, as *xerophilum*); Krombein, 1958f:204 (in supplement to catalog of North American Hymenoptera; California, Arizona); R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae); Krombein, 1979b:1658 (in catalog of North American Hymenoptera); Hook, 1998:251 (first record from Colorado: Weld County: Rogen); Ohl and Linde, 2003:151 (number of ovarioles, identification tentative).

**268. zavattarii Guiglia**

*Oxybelus zavattarii* Guiglia, 1943c:74, ♂ (as *Zavattarii*, incorrect original capitalization). Holotype: ♂, Ethiopia: Gamo Gofa: Gondaraba at 4°58'N 36°49'E (MSNG). – R. Bohart and Menke, 1976:370 (in checklist of world Sphecidae). *Oxybelus zavattarii* Guiglia, 1950:259. Objective synonym of *Oxybelus zavattarii* Guiglia, 1943.

**269. zohnsteini Kazenas**

*Oxybelus zohnsteini* Kazenas, 2004a:210, ♂. Holotype: ♂, Kazakhstan: South Kazakhstan: 50 km southwest of village Bairkum at about 42°N 67°E (ZMMU).

**sp.**

Schrottky, 1908:48 (visiting flowers of *Petroselinum sativum* Hoffm., Apiaceae); Morice, 1911:133 (Algeria: Biskra); Rohwer, 1917a:241 (California: Santa Barbara); Dubois, 1919:96 (Belgium: Bruxelles: Uccle); Morice, 1921:824 (Iraq: Amara); von Schulthess, 1927:304 (Iraq: Basra); Bischoff, 1931:9 (Spain), 1933:4 (Morocco); Bondroit, 1934:62 (Belgium); Guiglia, 1939c:190 and 1942b:235 (Libya; *lamellatus* species group); Yasumatsu, 1942c:115 (China: Nei Mongol: Apaka at 44°N 114.96°E); Arnold, 1943:84 (Zaire: Albert National Park, now Virunga National

Park); de Beaumont, 1960c:172 (Afghanistan), 1963c:417 (Afghanistan), 1967b:512 (South Africa), 1970a:404 (Afghanistan); Kumar, Lavigne, Lloyd, and Pfadt, 1976:51 (Colorado: Pawnee National Grassland); Al-Ali, 1977:100 (Iraq: Baghdad, Basra); Guichard, 1980:228 (listed); Roche, 1981:4 (in checklist of Sphecidae of United Arab Emirates); Hilchie, 1982:107 (Alberta: Empress); Rodgers and Homewood, 1982:233 (Tanzania: Usambara Mountains); Al-Houty, 1989:160 (Kuwait: Sobiya); Callan, 1991a:12 (Trinidad); Guichard, 1991a:340 (Jordan, sp. near *variegatus*); Elliott, 1992:45 (in list of wasps of Bahama Islands: occurring on Long Island and San Salvador); Amarante, 1993:20 (northeastern Brazil); Cambra, 1993:16 (Peru: Pakitza at 11°57'S, 71°17'W); Snelling, 1993:19 (British Virgin Islands: Island of Mona); Kuhlmann, 1996:220 (Portugal: Serra de Estrela, sp. aff. *mucronatus*); Gonzáles, Gayubo, and Torres, 1999:355 (Spain: Valladolid: Viana de Cega, aff. *subspinosus*); Molina, 1999:2 (Peru: Lima; the nest contained an unusual prey: a mirid *Rhinacloa* sp. in addition to the agromyzid flies *Liriomyza huidobrensis* (Blanchard), Agromyzidae); Wetsching and Depisch, 1999:178 (pollinator of *Welwitschia mirabilis*); Gayubo, González, and Torres, 2000:186 (Spain: Salamanca Province); Skevington et al., 2001:128 (Canada: Ontario: Lambton County); Starr and Hook, 2003:19 (in catalog of Aculeata of Trinidad, West Indies); Kazenas, 2007a:91 (Kazakhstan: Akkala Oblast': Kurgandzhin Nature Reserve and vicinity, two species) Dollfuss, 2008:500-504 (16 species from Africa); Wiesenborn, Heydon, and Lorenzen, 2008:54 (Arizona: Topock Marsh); Kazenas, 2012b:169 (Kazakhstan: Korgalzhin State Nature Reserve); Polidori, Crottini, Della Venezia, Selfa, Saino, and Rubolini, 2013:40 (animal protein as food for larva, unable to manipulate food load, flight muscle ratio, wing loading); Pagliano, 2014:80 (undetermined *Oxybelus* in M. Spinola collection, Torino, are *Oxybelus haemorrhoidalis*, *Oxybelus trispinosus*, and *Oxybelus* sp.); Tano and Kurokawa, 2015:27 (central Vietnam: My Son); Gadallah, 2020b:43, 44 (in list of aculeate wasps of Arabian Peninsula, three species).

#### NOMINA NUDA IN OXYBELUS

- Oxybelus antigae* Tournier: Antiga and Bofill, 1904:27 (Spain: Cataluña Province); Ceballos, 1956:396 (in catalog of Sphecidae of Spain).
- Oxybelus barrei* Radoszkowski: Kazenas, 2001b:37, 39 (Turkmenistan).
- Oxybelus bispinosus* of Stevens: F. Smith, 1855:99 = *Oxybelus uniglumis*.
- Oxybelus difficilis* Tournier: Destefani, 1894:216 (Italy: Sicilia, 1895:228 (in catalog of Sicilian Hymenoptera).
- Oxybelus duponti*: Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:81 (specimens in M. Spinola collection, Torino, are *Oxybelus* sp.).
- Oxybelus eburneus* Dufour: Dours, 1874:153 (in catalog of French Hymenoptera); de Gaulle, 1908:121 (in catalog of French Hymenoptera).
- Oxybelus eburneofasciatus* Dufour: Dours, 1874:153 (in catalog of Hymenoptera of France).
- Oxybelus egregius* Kazenas, 1992c:27 (Turkmenistan: Repetek Nature Reserve), 2001b:37, 39 (in checklist of Sphecidae of Kazakhstan and Central Asia).
- Oxybelus fennicus* Westerlund, 1896:28 (Finland: no specific locality)
- Oxybelus hastatus* var. *schulthessi*: von Schulthess, 1926b:219 (Tunisia, authorship attributed to Kohl).
- Oxybelus genisei* R. Bohart: Amarante, 1993:20 (northeastern Brazil).
- Oxybelus major* Spinola: Pagliano, 2014:78, 79 (specimens in M. Spinola collection, Torino, is *Oxybelus argentatus*)
- Oxybelus ornatus*: Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:80 (specimen in M. Spinola collection, Torino, are *Oxybelus lineatus*).
- Oxybelus pusillus*: Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:82 (specimens in M. Spinola collection, Torino, are *Oxybelus bipunctatus*).
- Oxybelus sericeomarginatus* Kohl: Ferton, 1912a:369 (Algeria, list of prey).
- Oxybelus siculus*: Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:80 (specimens in M. Spinola collection, Torino, are *Oxybelus dissectus* and *Oxybelus mucronatus*).

*Oxybelus trispinilabris* L. Dufour: Dours, 1874:153 (in catalog of Hymenoptera of France); de Gaulle, 1908:121 (in catalog of French Hymenoptera).

*Oxybelus trispinosulus* L. Dufour: Dours, 1874:153 (in catalog of Hymenoptera of France); de Gaulle, 1908:121 (in catalog of French Hymenoptera).

*Oxybelus vagabundus*: Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:78 (specimens in M. Spinola collection, Torino, are *Oxybelus lineatus*).

*Oxybelus zonatus*: Casolari and Casolari Moreno, 1980:120 (specimens in M. Spinola collection, Torino); Pagliano, 2014:81 (specimens in M. Spinola collection, Torino, are *Oxybelus mucronatus*).

#### **SPECIES DESCRIBED IN *OXYBELUS* AND TRANSFERRED TO OTHER GENERA**

*argenteolineatus* Cameron, 1890 = *Encopognathus*

*bellulus* Dalla Torre, 1897 = *Encopognathus*

*bellus* Cameron, 1890, nec Dahlbom, 1844 = *Encopognathus*

*cladothricis* Cockerell, 1895 = *Belomicrus*

*columbianus* Kohl, 1892 = *Belomicrus*

*forbesii* Robertson, 1889 = *Belomicrus*

*modestus* Kohl, 1892 = *Belomicrus*

*nitidus* Cameron, 1890 = *Entomognathus*

*obscurus* Kohl, 1892 = *Belomicrus*

*odontophorus* Kohl, 1892 = *Belomicrus*

*parvulus* Radoszkowski, 1877 = *Belomicrus*

*radoszkowskyi* Dalla Torre, 1897 = *Belomicrus*

*rufipes* in collection Fabricius = *Nomada* (Dahlbom, 1845:XXV)

*santschii* von Schulthess, 1925 = *Pseudomicroides*