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LESTICA

Lestica Billberg, 1820:107. Type species: *Crabro subterraneus* Fabricius, 1775, designated by Rohwer, 1911c:154.

Solenius Lepeletier de Saint Fargeau and Brullé, 1835:713. Type species: *Solenius interruptus* Lepeletier de Saint Fargeau and Brullé, 1835 [= *Crabro confluentus* Say, 1823], designated by International Commission on Zoological Nomenclature, 1974:16 (Opinion 1015), junior secondary homonym of *Crabro interruptus* Fabricius, 1787, now in *Palarus*. Westwood's (1839:80) designation of type species (*Solenius vagus* (Linnaeus, 1758) [= *Sphex vagus* Linnaeus, 1758], now known to be a *Mellinus*) is set aside by the same Opinion.

Ceratocolus Lepeletier de Saint Fargeau and Brullé, 1835:739. Type species: *Crabro alatus* Panzer, 1797, designated by Ashmead, 1899d:170.

Thyreus Lepeletier de Saint Fargeau and Brullé, 1835:761, junior homonym of *Thyreus* Panzer, 1806 and of *Thyreus* Swainson, 1821. Type species: *Crabro vexillatus* [= *Apis clypeata* Schreber, 1759], by monotypy.

Hypothyreus Ashmead, 1899d:171. Type species: *Crabro subterraneus* Fabricius, 1775, by original designation.

Clypeocrabro Richards, 1935a:167. Substitute name for *Thyreus* Lepeletier de Saint Fargeau and Brullé, 1835.

Ptyx Pate, 1947a:13. Type species: *Crabro pluschtschewskyi* F. Morawitz, 1891, by original designation and monotypy.

Review of biology: Kazenas, 2001b:210.

Keys: Leclercq, 1958c:79 (subgenus *Solenius* of South-East Asia); Marshakov, 1975a:151 (USSR); Leclercq, 2006d:215 (New World).

1. *alacris* (Bingham)

Crabro alacer Bingham, 1896b:443, ♀. Holotype: ♀, Indonesia: Sumatra: no specific locality (BMNH). – R. Turner, 1912:377 (transferred to subgenus *Solenius*). – **As *Lestica alacris***: Leclercq, 1951i:196 (new combination, as *alacer*), 1954c:293 (in catalog of world Crabronini; India: Darjeeling), 1956:6 (distinctive characters), 1958c:80 (in key to South-East Asian *Lestica*, as *alacer*); R. Bohart and Menke, 1976:430 (in checklist of world Sphecidae, as *alacer*); Leclercq, 1972d:678 (Sikkim, Taiwan), 1982b:155 (China: Szechuan); Porter, Stange, and Wang, 1999:13 (in checklist of Sphecidae of Taiwan, as *alacer*); Hua, 2006:280 (in list of Chinese insects, geographic distribution); Barthélémy and Guénard, 2025:15 (China: Hong Kong).

2. *alata* (Panzer)

Crabro alatus Panzer, 1797, Heft 46:6, [♂]. Holotype or syntypes: ♂, Germany: no specific locality (depository ?). – Panzer, 1806:183 (in critical review of his earlier work); Jurine, 1807:212 (in checklist of species of *Crabro*); von Siebold, 1844:132 (Germany: Preussen: vicinity of Danzig, now Poland: Gdańsk); Dahlbom, 1845:372 (in revision of Sphecidae and Pompilidae), 527 (in key to *Crabro*); Eversmann, 1849:423 (Russia: Kazan' and Orenburg provinces, Ural foothills); F. Smith, 1856:398 (in catalog of Hymenoptera in British Museum); Schenck, 1857:125 (in revision of fossorial wasps of Germany); A. Morawitz, 1864:455 (Russia: Sankt-Petersburg), 1866a:270 and 1866b:348 (specimens in Eversmann collection); Taschenberg, 1866:172 (in revision of Hymenoptera of Germany); A. Costa, 1867c:139 (in revision of Italian Sphecidae); Schenck, 1867a:351 (known from Germany); Thomson, 1870:176 (in revision of Swedish Crabroninae); A. Costa, 1871b:68 (in revision of Italian Sphecidae); Thomson, 1874:288 (in revision of Hymenoptera of Scandinavia); Taschenberg, 1875:383 (Germany: Leipzig?); Radoszkowski, 1877:77 (Kyrgyzstan: Shahimardan); Becker, 1880:151 (Russia: Sarepta, now Krasnoarmeysk south of Volgograd); Kohl, 1880:119 (Austria: Tirol, and Italy: Trentino–Alto Adige), 1883e:653 (Switzerland); von Heyden, 1884:122 (Germany: Frankfurt am Main area); Wüstnei, 1886:33 (Germany: Schleswig-Holstein); Kohl, 1888b:721 (Austria: Tirol, now Italy: Alto Adige), 1893:26 (Austria: Niederösterreich); F. Morawitz, 1893a:115 (Russia: Karelian Isthmus); Sickmann, 1893:59 (Germany: Niedersachsen: Iburg, analysis of color variation); Krieger, 1894:7 (Germany:

Kingdom of Saxony); Dalla Torre, 1897:580 (in catalog of world Sphecidae); Kozhevnikov, 1897:15 (Russia: Moscow Governorate); Strand, 1903:7 (first record from Norway); Antiga and Bofill, 1904:25 (Spain: Cataluña Province); Aurivillius, 1904:298 (in revision of Swedish Sphecidae); W. Schulz, 1904b:99 (discussion of subspecies); Kubes, 1905:84 (Czech Republic: Kolín); Vángel, 1905:167 (Hungary); Móczár and Henter, 1907:206 (Hungary: Tiszaalpár); Schmiedeknecht, 1907:189 (in key to Hymenoptera of Central Europe); Peets, 1909-1911:66 (*Crabro alatus* of Panzer = *Crabro alatus*); Dittrich, 1911b:18 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Alfken, 1914:271 (northwestern Germany); Birula, 1914:374 (Belorussia: Luskopol' and Tulovo near Vitebsk, Vitebsk, comparison with *Crabro subterraneus*); Kohl, 1915:125 (in revision of Palearctic Crabronini); Zilahi Kiss, 1915:80 (Hungary: Ferenczfalva); Honoré, 1919:268 (France: Seine-et-Oise: Bouray, Lardy, Saclas); O. Meyer, 1919:148 (Germany: Posen Province, now Poland: Poznań Region); Dubois, 1920:87 (Belgium); A. Wagner, 1920:44 (Germany: Lower Elbe region); Dubois, 1921b:151 (in key to Belgian Sphecidae), 164 (phenology); Hedicke, 1922:269 (Germany: Brandenburg: Gross Machnower Weinberg); Lauterborn, 1922:244 (Germany: Baden-Württemberg: Kaiserstuhl); Hellén, 1923:60 (recorded from Finland); Berland, 1925d:194 (in Sphecid Fauna of France); Bischoff, 1925:297 (Latvia); Schütze, 1925:110 (Germany: Lausitz Region); Shestakov, 1925:35 (Russia: Yaroslavl' area); K. Strohm, 1925:210 (Germany: Baden-Württemberg: Isteiner Klotz, Kaiserstuhl); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Friese, 1926:148 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Hellén, 1926:93 (recorded from Finland); Zavadil, 1926:31 (Czechoslovakia); Bouwman, 1930:67 (in revision of Sphecidae of Netherlands); Schmiedeknecht, 1930:645 (in keys to Hymenoptera of North and Central Europe); Pulkkinen, 1931:131 (in revision of Sphecidae of Finland); Bondroit, 1932:40 (Belgium: Campine, Petite Espinette); Zavadil, 1932:94 (Czechoslovakia, var. *rubidus*); Drogoszewski, 1933:117 (Poland: Włocławek); K. Strohm, 1933:337 (Germany: Baden: Württemberg: Kaiserstuhl); Balles, 1934:16 (Germany: Baden-Württemberg: Achern, Fautenbach, Mannheim-Rheinau, Ortenberg); Forsius in Forsius and Hellén, 1935:10 (in checklist of Hymenoptera of Finland); Steck, 1935:322 (Switzerland); Crèvecoeur and Maréchal, 1936:256 (in catalog of Belgian Hymenoptera); Goebel, 1937:38 (Poland: Poznań District: Głuszyna, Strzeszyn, Strzeszynek, Poznań-Dębina); Zavadil, Šustera, and Bat'a, 1937:155 (in catalog of Sphecidae of Czechoslovakia); Maréchal, 1938b:209 (Belgium: Louvain area, on flowers of *Jasione montana* L., Campanulaceae); Móczár, 1938:62 (Hungary); Guiglia, 1938b:10 (Italy: Sardegna); Iwata, 1938d:84 (Japan: Hokkaido; Korea; China: Manchuria: Kaigen); Móczár, 1938a:161 (Hungary: Kassa, now Slovakia: Košice), 1938b:62 (Hungary); A. Wagner, 1938a:116 (northwestern Germany); Móczár, 1939:5 (Hungary: Jászberény); Yasumatsu, 1939e:14 (China: Jilin: Changchun); Dovnar-Zapolskiy, 1940:303 (Russia: Kursk Oblast'); Paul, 1941:34 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Tsuneki, 1942b:54 (nesting habits); Yasumatsu, 1942c:114 (China: Beijing; Nei Mongol: Apaka at 44°N 114.96°E); Balthasar, 1943:40 (Czech Republic: Moravia: Zlin area); Benno, 1943:68 (Netherlands: Montferland); Giner Marí, 1943a:235 (in Sphecid Fauna of Spain); Guiglia, 1944b:37 (Italy); Tsuneki, 1947d:285 (Korea), 1948c:4 (Japan: Hokkaido); Zavadil in Zavadil and Šnoflák, 1948:119 (in key to Sphecidae of Czechoslovakia); Georgel, 1950:64 (France: Seine-et-Oise: Sucy-en-Brie); de Beaumont, 1951h:34 (Switzerland: Neuchâtel area); Fæster, 1951:458 (distribution in Scandinavia); Valkeila, 1952:48 (Finland: Lappeenranta); Móczár, 1953:311 (Hungary); Scobiola, 1954:883 (first record from Romania: several localities); Steiner, 1955:142 (France: Dordogne); Teschner, 1955:56 (Germany: Nordrhein-Westfalen: Hohe Ward near Münster); Vogrin, 1955:43 (Yugoslavia); Ceballos, 1956:392 (in catalog of Hymenoptera of Spain); Preuss, 1956:14 (Germany: Schleswig-Holstein: Mölln in Lauenburg); Zirmgiebl, 1957:175 (Germany: Rheinland-Pfalz: Birkenheide, Landau); Benno, 1958b:19 (in review of Dutch Sphecidae); Ceballos, 1959:230 (in supplement to catalog of Spanish Sphecidae, as *alata*); Noskiewicz and Puławski, 1960:138 (in key to Polish Sphecidae); Wengris, 1962:206 (Lithuania: Vilnius area); Lehrer and Scutaru, 1963:284 (Romania: Moldova: Baia in Suceava District); Scobiola, 1963:825 (Romania: Cardon and Letea in Delta of Danube), 1966b:393 (Romania: Tulcea District: C.A. Rosetti; also Periprava: forma *basalis*); Niedl and Deneš, 1967:70 (Czech Republic: Třeboň area, as *alata*); Scobiola-Palade, 1967b:52 (Romania); Tumšs and Maršakovs, 1970:25 (Latvia); Balthasar, 1972:76 (in Sphecid Fauna of Czechoslovakia); Fain, 1973:163 (parasite: *Crabrovidia*

popovi Zachvatkin, a saproglyphid mite); Skibińska, 1982:124 (Poland: Warszawa area); Kowalczyk, 1988a:46 (Poland: Rogów), 1988b:65 (Poland: environs of Łódź); Blagoveshchenskaya, 1994:89 (Russia: Ul'yanovsk Oblast'). – **As *Ceratocolus alatus***: Lepeletier de Saint Fargeau and Brullé, 1835:750 (new combination, in revision of Crabronini); Herrich-Schaeffer, 1840:293 (Germany: Bayern: Regensburg area); Lepeletier de Saint Fargeau, 1845:156 (in revision of world Hymenoptera); Kirchner, 1854:313 (Czechoslovakia: Kaplitz in Budweiser District, now České Budějovice); Ruthe and Stein, 1857:316 (Germany: Berlin area); Taschenberg, 1858:112 (in key to Sphecidae of Germany); Funk, 1859:58 (Germany: Bayern: Bamberg); Brischke, 1862:107 (Germany: Preussen Province, now Poland: Pomorze Region), 1864:210 (Germany: Pommern: Neustadt, now Poland: Wejherowo); Kirchner, 1867:225 (in catalog of European Hymenoptera); P. Ivanov, 1872:151 (Ukraine: Khar'kov Oblast': Kupyansk area); Ghiliani, 1873 (Italy: Piemonte: Susa); Dours, 1874:156 (in catalog of Hymenoptera of France); Wierzejski, 1874:262 (Ukraine: L'viv, Bukovina Region: Kalinowce); Beuthin, 1876:230 (Germany: Hamburg area); Yaroshevskiy, 1881:122 (Ukraine: Khar'kiv Oblast': Kupyansk); Friese, 1883:201 (Germany: Sachsen-Anhalt: Weissenfels); Sickmann, 1883:69 (Germany: Niedersachsen: Wellingholthausen); Brischke, 1888b:101 (Germany: Preussen Province, now Poland: Pomorze Region); De Stefani Perez, 1894:216 (Italy: Sicilia), 1895:228 (Italy: in catalog of Sicilian Hymenoptera); Acloque, 1897:88 (in Sphecid Fauna of France and Algeria); de Gaulle, 1908:122 (in catalog of French Hymenoptera); Rudow, 1912:71 (nesting in stems of *Cirsium*, Asteraceae, and of Apiaceae); Schirmer, 1912:164 (Germany: Berlin area); Haupt, 1913:50 (Germany: Sachsen-Anhalt: Brandbergen in Halle area); Hedicke, 1918:402 (Germany: Brandenburg: Gross Machnower Weinberg); Dubois, 1919:95 (Belgium: Bruxelles: Uccle); Forsius, 1921:119 (first record from Finland); Coulon, 1925:125 (France: Evreux); Forsius, 1925:119 (first record from Finland); A. Müller, 1930:181 (Romania: Măcin; Moldova or Ukraine: Tarutino); Iwata, 1933b:12 (collecting localities from Japan); Pattri, 1936:113 (Germany: Hessen: Darmstadt area, on sandy habitats); Schneid, 1941:1027 (Germany: Bayern: Bamberg area); Merisuo, 1946:139 (color variation); Aerts, 1950a:50 (Germany: Nordrhein-Westfalen: Rheidter Wertchens near Köln); Głowacki, 1953:518 (Poland: Brwinów near Warszawa); Valkeila, 1954:87 (Finland: Lappeenranta); Casolari and Casolari Moreno, 1980:118 (specimens in M. Spinola collection, Torino); Pagliano, 2011a:148, 149 (specimens in M. Spinola collection, Torino, are *Lestica alata*). – **As *Lestica alata***: Billberg, 1820:107 (new combination, specimens from Germany in collection Billberg); Rohwer, 1911c:154 (discussion of the name); Zavadil, 1946:8 (Czechoslovakia: Ostrava area, ab. *rubida*); Leclercq, 1949a:17 (Germany; Russia: Sarepta, now Krasnoarmeysk, Siberia: Yenissey River valley and Krasnoyarsk), 1951e:17 (bibliography of Belgian records); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romburg); Leclercq, 1954c:292 (in catalog of world Crabronini), 324 (nest and prey records); Aerts, 1955:60 (Germany: Rheinland); Hellén, 1955a:129 (Finland: Joutseno, Muolaa, Rautu, Taipalsaari); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); Móczár, 1958a:266, 271 (in annotated catalog of Hungarian Crabronini, correction to Kohl, 1915), 1958b:206 (Hungary: collecting localities); Wolf, 1959b:35 (Germany: Nassau); Tsuneki, 1960g:28 (nesting habits); de Beaumont, 1964c:131 (in Sphecid Fauna of Switzerland); B. Klug, 1965:142 (Germany: Baden-Württemberg: Freiburg im Breisgau area); Benno, 1967:41 (in checklist of Sphecidae of Netherlands); Gauss, 1967:558 (Germany: Baden-Württemberg); J. Heinrich, 1967:80 (Germany: Bayern: Unterfranken District); Tsuneki, 1967e:2 (China: Manchuria; as *Lestica alata basalis*); Benedek, 1968:76 (Hungary, floral records); Okuno, 1968:31 (Japan); Scobiola-Palade, 1968c:387 (Romania: Budești, Giurgiu, Segarcea, as *alatus*); Benedek, 1969a:85 (Hungary; marshy meadow); Lefeber, 1969c:235 (Netherlands: Sint-Pietersberg = Montagne Saint Pierre); Romanova, 1969:136 (Russia: North Caucasus); Tsuneki and Tano, 1969:30 (distribution in Japan); Leclercq, 1970c:map 40 (distribution in Belgium); Oehlke, 1970:767 (Democratic Germany); Kazenas, 1971:161 (in Kazakhstan found only in southeastern mountains); Schmidt, 1971b:47 (Germany: Rheinland-Pfalz: Mainzer Sand); Tsuneki, 1971m:34 (China: Beijing: Tiendang; as *alata basalis*); Kazenas, 1972b:169 (Kazakhstan; determination tentative); Scobiola-Palade, 1972a:152 (Romania: delta of Danube: Caraorman); Tsuneki, 1972a:148 (Mongolia); Simon Thomas, 1974:57 (Netherlands: Limburg: Tienray); Leclercq, 1975b:4 (France); Marshakov, 1975a:156, 157 (in key to *Lestica* of USSR), 158 (in

revision of *Lestica* of USSR), 1975b:332 (Mongolia); R. Bohart and Menke, 1976:430 (in checklist of world Sphecidae); Lomholdt, 1976:340 (in Sphecidae Fauna of Fennoscandia and Denmark); Kolesnikov, 1977:320 (Russia: Bryansk Oblast'); Pulawski, 1978:268, 269 (in key to Sphecidae of European part of USSR); Schmidt, 1977/78:57 (Germany: Rheinland-Pfalz: Mainzer Sand); Benedek, 1979:235 (Hungary: Bakony Hills); Radović and Krunić, 1979:unpaginated foldout (nesting in sand, foreleg structure); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:118 (Russia: Siberia: Altayskiy Krai: basin of Aley River); Pagliano, 1980:124 (Italy: Lombardia); Schmidt, 1980:386 (Germany: Baden-Württemberg); Heath and Leclercq, 1981:map 19 (distribution in Europe); Woydak, 1981:45 (Germany: Westfalen: Hamm); van der Zanden, 1981:130 (Netherlands: Eindhoven, prey: adult *Agriphila tristella*, a pyralid); Donath, 1982:215 (Germany: Cottbus Bezirk); Leclercq, 1982b:155 (China); Tsuneki, 1982b:9 (Korea), 17 (known from Korea); Dollfuss, 1983b:19 (in catalog of Sphecidae of Austria); Józán, 1983:102 (Hungary); Lefeber, 1983a:85 (Netherlands: Waddendistrict: Island of Texel); Tsuneki, 1984e:59 (Ukraine: Borisovka; Kazakhstan: Akmolinsk, now Tselinograd; as *Lestica alata basalis*); Düweke, 1988:688 (Germany: Baden-Württemberg: Kaiserstuhl); Józán, 1985b:60 (Hungary south of Lake Balaton), 80 (floral records), 84 (ecological and zoogeographic characteristics); Lefeber, 1985:87 (Netherlands: southern Limburg); 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); Westrich and Schmidt, 1985b:111 (Germany: endangered in Baden-Württemberg); Brechtel, 1986:68 (Germany: Südpfalz); Józán, 1986:373 (Hungary: Kiskunság National Park); Nemkov, 1986:106 (Russia: Siberia: Irkutsk Oblast'); Steiner, 1986:108 (references to publications on nesting habits); Vikberg, 1986:78 (Finland); Andersson, Coulianos, Ehnström, Hammarstedt, Imby, Janzon, Lindelöw, and Waldén, 1987:72 (endangered in Sweden); Schmidt and Westrich, 1987:371 (Germany: Mainz area); Dollfuss, 1988:29 (Austria: Niederösterreich: Oberweiden); Karsai, 1988:100 (Hungary: Kiskunság National Park); Wolf, 1988b:140 (Germany: Rheinland-Westfalen); Jacobs, 1989:23 (Germany: Mecklenburg-Vorpommern); Józán, 1989:102 (Hungary: Tihany Nature Reserve); Pádr *in Šedivy*, 1989a:170 (in checklist of Czechoslovakian Sphecidae); Pankevich, Belyavskaya, Molchanova, Shlyakhtenok, and Blinov, 1989:98 (Belorussia: Berezinskiy Nature Reserve); Skibińska, 1989:206 (Poland: Warszawa area); Jacobs and Oehlke, 1990:202 (new records from Democratic Germany); Kowalczyk, 1990:291 (Poland: Góry Świętokrzyskie); Kuznetzova, 1990:24 (Russia: Voronezh Oblast': Galich'ya Gora Nature Reserve); Pádr, 1990:87 (Czech Republic: Praha area); Pagliano, 1990:92 (in catalog of Italian Sphecidae); Chinin, 1991:111 (Russia: Samara Oblast'); Day, 1991:xvi (summary of European Endangered Hymenoptera Lists); Schwammberger and Priesner, 1990:549 (Austria: Kärnten); Dollfuss, 1991:167 (in key to Sphecidae of North and Central Europe); Gayubo, Borsato, and Osella, 1991:411 (Italy: Piemonte); Jacobs, 1991:46, 47 (Germany: Mecklenburg-Vorpommern: Nature Reserve Elbtaldünen); Kowalczyk, 1991a:90, 99, 102, 107 (Poland: Łódź), 1991b:121 (Poland: Augustów Forest); Kuhlmann et al., 1991:90 (Germany: Senne Region); Pagliano, 1991b:355, 356 (in key to Italian Crabroninae); van der Smissen, 1991:96 (northwestern Germany); Budrys, 1992:37 (in list of Sphecidae of Lithuania); Delarze, 1992:68 (Switzerland: Valais: Les Follatères); Józán, 1992a:229 (Hungary: Béda-Karapanca Protected Area), 1992b:175 (Hungary: Boronka-melléki Protected Area), 1992c:289 (Hungary: Zselic Hills); K. Weber, 1992:87 (Germany: Bayern: Bamberg District); Bitsch and Leclercq, 1993:195 (in revision of western European Crabroninae); Kuhlmann, 1993:75 (Germany: known from Westfalen); Leclercq, 1993c:34 (population regress in western Europe); Leclercq and Barbier, 1993:74 (map of distribution in France); van der Smissen, 1993:128 (northwestern Germany); Dollfuss, 1994:102 (endangered in Austria); Theunert, 1994c:41 (Germany: summary of records from Niedersachsen and Bremen); Gayubo and Borsato, 1994:214 (Italy: Veneto); Józán, 1995:105 (Hungary: projected Duna-Dráva National Park); Krasnobayev et al., 1995:139 (Russia: Zhiguli Hills northwest of Samara); Negrisola *in* Minelli, Ruffo, and La Posta, 1995b:7 (in catalog of Italian fauna); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:451, 453 (in key to Sphecidae *sensu lato* of Russian Far East); Saure and Dürrenfeld, 1995:29 (Germany: Brandenburg: Gabower Hänge near Bad Freienwalde); Scharrer, 1995:27 (Germany: Bayern: Aschaffenburg, Kahl, Mainfranken); Schmid-Egger, Risch, and Niehuis, 1995:189 (summary of records from Germany: Rheinland-Pfalz Province); Blösch, 1996:5 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Flügel, 1996:524 (Germany:

Freizeitpark Marienfelde south of Berlin); Jakubzik, 1996:252 (Germany: Köln); Minoranskiy and Shkuratov, 1996:82 (Russia: Rostov Oblast'); Schmid-Egger, Schmidt, and Doczkal, 1996:377 (Germany: Baden-Württemberg: endangered); Voblenko, Gorobchishin, and Nesterov, 1996:15 (Ukraine: Polesye Region); von der Dunk and Amon, 1996:41 (Germany: Bayern: Altdorf sand dunes east of Nürnberg); Witt, 1996:106 (Germany: Brandenburg), 109 (locality records); Woydak, 1996:84 (Germany: Westfalen: summary of distribution and nesting behavior); Celary, 1997:59 (in checklist of Animals of Poland); Schmidt and Schmid-Egger, 1997:16 (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); Gorobchishin, 1998a:50 (Ukraine: Kiev and surroundings); Kulik, 1998:130 (northwestern Germany); Lefeber, 1998:182 (Netherlands: Limburg: Sint-Pietersberg near Maastricht at 50°50'N 5°41'E); H.-J. Schulz, 1998c:113 (Germany: Lausitz: former military training area near Mücka); van der Smissen, 1998:60 (Germany: Niedersachsen: Brünkendorf, Laasche; Schleswig-Holstein: Wulfsdorfer Heide); K. Weber, 1998:141 (Germany: Bayern: Bamberg area); Kuhlmann, Wolf, and Woydak, 1999:569 (Germany: threatened with extinction in Nordrhein-Westfalen); Mandery, 1999:105 (Germany: Bayern: Coburg area); Neumayer, Schwarz, and Bregant, 1999:224 (Austria: in checklist of Sphecidae of Land Kärnten); Pauly, 1999:110 (in catalog of Belgian aculeates); Saure, 1999:33 (Germany: Berlin-Köpenick); M. Schwarz, 1999:87 (Austria: Oberösterreich: city of Linz area); Theunert, 1999:138 (Germany: Niedersachsen); Blösch, 2000:345 (in Sphecidae Fauna of Germany); Dressler, 2000:32 (Germany: Hessen: Darmstadt area); Esenbekova and Kazenas, 2000:55 (southeastern Kazakhstan: near Alma Ata); Jacobi, 2000:145 (structure of male forebasitarsus in relation to copulation); Jacobs, 2000:8 (Germany: Land Mecklenburg-Vorpommern: not endangered); Ljubomirov, 2000:12 (Bulgaria: specimens in N. Nedelkov collection); M. Mader and Chalwatzis, 2000:60 (Germany: Hessen: Oderwald Mountains); Mokrousov, 2000b:31 (Russia: Nizhniy Novgorod Oblast'); Theunert, 2000:149 (Germany: Niedersachsen: Heeseberg); Ivanov and Ljubomirov, 2001:212 (Bulgaria: Kresna Gorge at 41°48'N 23°10'E); Józán, 2001:280 (Hungary: Somogy County); Kazenas, 2001b:43 (in checklist of Sphecidae of Kazakhstan and Central Asia), 211 (review of biology); Mazzucco, 2001:196, 203 (Austria: Niederösterreich: Steinfeld, endangered); Ohl et al., 2001:139 (distribution in Germany by provinces); Szczepko and Kowalczyk, 2001:188 (Poland: Kampinos National Park near Warszawa); van der Smissen, 2001:61 (Germany: Schleswig-Holstein: strongly endangered); Zettel, Gross, and Mazzucco, 2001:77 (Austria: Wien); Józán, 2002:54 (Hungary: Mecsek Mountains); Kazenas, 2002a:110 (geographic distribution, collecting localities in Kazakhstan); Kowalczyk, Szczepko, and Świątek, 2002:155 (Poland: Kampinos National Park near Warszawa); Shlyakhtenok and Skibinska, 2002:34 (Belorussia: no specific locality); Söderman and Vikberg, 2002:53 (in list of Aculeata of Finland); Drewes, 2003:138 (Germany: Hessen: Seeheim); Haneda, 2003:4 (Japan: Nagasaki Prefecture: Tsushima); Józán, 2003:228 (Hungary: Látrányi Pusztá Nature Conservation Area); Kowalczyk and Kurzac, 2003:209 (Poland: Łódź: Botanical Garden); Mandery, Kraus, Voith, Wickl, Scheuchl, Schubert, and Warncke, 2003:66 (Germany: in catalog of wasps and bees of Bayern); Protsenko, 2003:68, 69 (Ukraine: Odessa Oblast': Island of Malyy Tataru in Delta of Danube at 45.21°N 29.00°E); Tischendorf and Treiber, 2003:121, 124 (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); Dollfuss, 2004b:779 (Czech Republic, Mongolia, Ukraine: Simferopol); Esser, Jakubzik, Sonnenburg, and Woydak, 2004:262 (Germany: in checklist of Sphecidae of Nordrhein-Westfalen); Gorobchishin, 2004:34 (Ukraine: Zaporiz'ka Oblast': Obitichna Kosa Nature Reserve); Gorobchishin and Protsenko, 2004:39 (Ukraine: Kherson Oblast': Chernomorskiy Nature Reserve); Kazenas, 2004d:34 (Kazakhstan: Ryn-Peski); Klein and Lefeber *in* Peeters, van Achterberg, et al., 2004:389 (in Wasp and Ant Fauna of Netherlands); Majzlan and Deván, 2004:32 (Slovakia: Malacky-Široké); Shkuratov, 2004a:80 (Russia: Rostov Oblast', and Volgograd Oblast': Frolovo), 2004b:168 (Russia: Rostov Oblast': Gosudarstvennyi Muzei-Zapovednik M.A. Sholokhova); Skibińska *in* Bogdanowicz, Chudzicka, Pilipiuk, and Skibińska, 2004:356 (in catalog of Polish Crabronidae); Stolle et al., 2004:371 (Germany: Sachsen-Anhalt: in red list of Sphecidae); Szczepko and Kow-

alczyk, 2004:127 (Poland: Kampinos National Park near Warszawa); van Achterberg and Peeters, 2004:31 (in checklist of Sphecidae of Netherlands); Wiśniowski, 2004:49 and 62 (in checklist of Polish Sphecidae); Zettel, 2004:6 (Austria: Niederösterreich: Lasee); Blösch, 2005:5 (Germany: Bayern: Tennenloher Forst Nature Reserve near Erlangen); Burger, 2005:33 (Germany: Thüringen); Haeseler, 2005:629 (Germany: Niedersachsen: Steller Heide near Bremen); Kowalczyk and Kurzac, 2005:105 (Poland: Botanical Garden in Łódź); Landeck, Wöhler, and Landgraf, 2005:18 (Germany: Lausitz Region; visiting flowers of *Reseda luteola* Linnaeus, Resedaceae, and *Carthamus tinctorius* Linnaeus, Asteraceae); Mandery, 2005:174 (Germany: Bayern: Hainberg Nature Reserve near Nürnberg); Mokrousov and Selivanova, 2005:753 (Russia: Voronezh Oblast'); Pagliano and Negrisolò, 2005:281 (in Sphecidae Fauna of Italy); Riemann and Hohmann, 2005:559 (Germany: Niedersachsen: city of Bremen and adjacent area); Saure, 2005:16 (Germany: Berlin); Shorenko, 2005a:166 (Ukraine: Crimea); Straka, 2005a:401 (endangered in Czech Republic); Theunert, 2005a:17 (Germany: in checklist of Sphecidae of Niedersachsen and Bremen); Venne and Bleidorn, 2005:43 (Germany: Nordrhein-Westfalen: Moosheide Nature Reserve); Blösch, 2006:58 (males spend nights in galleries in wood, perhaps only occasionally); Bock, 2006:41 (Germany: Bayern: Kelheim District: Abensberg sands); Gorobchishin, 2006:130 (Ukraine: several localities); Hua, 2006:280 (in list of Chinese insects, geographic distribution); Liebig, 2006:38 (Germany: Sachsen: Muskauer Heide); Shlyakhtenok, 2006:112 (Belorussia: Polesye Radiological Nature Reserve); Cungs, Jakobzik, and Cölln, 2007:140 (Luxemburg: Haardt Nature Reserve); Jacobs, 2007:157, 158 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:24 (Germany: northwestern Sachsen); Kazenas, 2007a:92 (Kazakhstan: Akmala Oblast': Kurgandzhin Nature Reserve and vicinity); Kowalczyk and Nadolski, 2007:283 (Poland: Łódź: railway areas); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Venne, Bleidorn, and Lauterbach, 2007:301 (Germany: Nordrhein-Westfalen: Bielefeld); Vepřek and Straka, 2007:206 (in catalog of Sphecidae of Czech Republic and Slovakia); Danilov and Tshernyshev, 2008:42 (Russia: Novosibirsk Oblast': Karasuk area); Haneda, 2008:10, 11 (in key to Japanese Crabroninae); Ljubomirov and Yildirim, 2008:283 (in catalog of Crabroninae of Turkey); Nemkov, 2008b:23 (in catalog of Crabronidae of Asiatic Russia); S. Takahashi and Haneda, 2008a:59 (Japan: Hokkaido: Sapporo); Theunert, 2008:43 (Germany: map of distribution in Niedersachsen and Bremen); Bitsch and Leclercq, 2009:225 (in supplement to vol. I of Faune de France, 1993: recent records from Italy reported); U. Frommer, 2009a:27 (Germany: in checklist of Sphecidae of Hessen); Kowalczyk, Kurzac, and Nadolski, 2009:62 (Poland: between Warta and Widawka rivers); Kowalczyk, Kurzac, and Soszyński, 2009:129 (Poland: Łódź region); Nemkov, 2009b:123 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:236 (Russia: Primorskiy Krai: Lazovsky Nature Reserve); Ruchin, Antropov, and Shibayev, 2009:170 (Russia: Republic of Mordovia); Shorenko, 2009:368 (in list of Sphecidae *sensu lato* of Crimea); Szczepko and Wiśniowski, 2009:69 (Poland: Spała Landscape Park); S. Takahashi, Haneda, and Tano, 2009:42, 52 (distribution in Japan); van Diemen, 2009:49 (Netherlands: airbase Gilze-Rijen); Ermilov and Mokrousov, 2010:90 (phoretic mites *Crabrovia popovi* Zachvatkin and *Imparipes haeseleri* Ebermann and Hall in Middle Volga Region of Russia); Esser, Fuhrmann, and Venne, 2010:36 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:27 (Germany: Bayern: Sulz- and Ottmaringer Tal); Mokrousov, 2010a:62 (Russia: Ivanovo, Nizhniy Novgorod, and Yaroslavl oblast's, Chuvash Republic, Republic of Mordovia, Tatarstan: no specific localities); Rudoiskatel', 2010:158 (Russia: central and southern Ural Mountains); Saure, 2010a:87 (Germany: Berlin-Reinickendorf: Baumberge), 2010b:175 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:16 (in red list of Aculeata of Germany: rare); Schmidt, 2010:135 (Germany: Bayern: collected along Main-Donau canal); Shorenko and Konovalov, 2010:20 (Ukraine); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:101 (Western Slovakia: recorded from Borská nížina); van der Smissen, 2010a:342 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records); Wurdack and Gack, 2010:153 (Germany: Baden-Württemberg: Kaiserstuhl); Baghirov, 2011b:147 (Russia: Altayskiy Krai: Savvushka; Altay Republic: Chemal, Kosh-Agach); Burger, 2011a:287 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Gogala, 2011:23 (Slovenia: Podčetrtek); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov,

2011:74 (Russia: Chuvash Republic); Rudoiskatel', 2011d:243 (Russia: central Ural Mountains); Saure, 2011a:6 (Germany: Berlin: former airport Tempelhof), 2011c:198 (Germany: Berlin-Spandau: Fort Hahneberg), 2011d:199 (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., 2011:105 (Germany: Hessen: may be endangered); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Gerth, Mayer, Hering, Wolf, Schaffer, and Bleidorn, 2012:9 (Germany: Sachsen: Bienitz in Leipzig); Kazenas, 2012b:169 (Kazakhstan: Korgalzhin State Nature Reserve); Klimsa, 2012:69 (Germany: Bayern: Schwandorf District); Nemkov, 2012c:444 (in catalog of Crabronidae of Russian Far East); Prisiy, 2012:50 (Russia: Belgorod Oblast'); Saure, 2012b:229 (Germany: Berlin-Spandau: Spandauer Forst); Dyuzhaeva, 2013:117 (Russia: Samara Oblast': Zhiguli Nature Reserve); Pankov, 2013:229 (Russia: Ivanovo Oblast'); Saure, 2013:19 (Germany: Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:20 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:216 (in annotated catalog of aculeate wasps of Belorussia); Wiśniowski and Szczepko, 2013:36 (Poland: Kampinos National Park near Warszawa); Flügel, 2014:254 (Brandenburg: Hangelsberger Heide); Hellqvist, Abenius, and Norén, 2014:92 (Sweden: in catalog of Ampulicidae, Sphecidae, and Crabronidae, by provinces); J.-K. Kim, 2014:432 (in catalog of Sphecidae *sensu lato* of Korean Peninsula); Mokrousov and Vafin, 2014:57 (Russia: Republic of Tatarstan); Ruchin and Antropov, 2014:37 (Russia: Republic of Mordovia); Yıldırım, Ljubomirov, and Lelej, 2014:15 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:145 (in checklist of Hymenoptera of Turkey); Mokrousov and Egorov, 2015:425 (Russia: Republic of Mordovia: Nature State Reserve Priskuskiy); Peeters, Klein, van Kemenade, and Spijkers, 2015:59 (Netherlands: Noord-Brabant: Kaaistoep Nature Reserve); P. Rosa and Pagliano, 2015:102 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:14 (Germany: Berlin-Lichterfelde); Shorenko, 2015:324 (in list of Sphecidae *sensu lato* of Crimea); Weber, 2015:64 (Germany: Bayern: Nature Reserve Börsting near Hallstadt); Bleidorn, Gerth, Hopfe, et al., 2016:10 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Mokrousov and Popov, 2016:577 (Russia: Krasnodarskiy Krai); Saure, 2016b:49 (Germany: Sachsen-Anhalt: fruit orchards); Stolle and Saure, 2016:923 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Antropov, 2017b:234 (in catalog of Crabroninae of Russia); Shorenko, 2017:77 (in Crimea collected in June through August); Twerd, Krzyżyński, Waldon-Rudzionek, and Olszewski, 2017:6 (Poland: Inowrocław and Janikowo: nesting in postindustrial soda ash dumping sites); Jacobs and Liebig, 2018:142 (Russia: Irkutsk Oblast': Bol'shoye Goloustnoye and Ust'-Ordinski steppe; Zabaikal'skiy Krai: Daur'skiy Nature Reserve); Shorenko, 2018:127 (Crimea, including localities, habitats, and number of specimens); Olszewski and Kowalczyk, 2019:100 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13231 (Russia: Mordovia State Nature Reserve); Kejval, Blažej, and Erhart, 2020:102 (western Czech Republic); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Danilov, Odintseva, and Odintsev, 2021:22 (Russia: Omsk Oblast'); Bitsch and Leclercq in Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:116 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2021:53 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:92 (in commented list of Sphecidae *sensu lato* of Poland); Kejval, Blažej, and Erhart, 2020:101 (western Czech Republic); Saure, 2021:82 (Germany: Brandenburg: Nature Reserve Ferbitzer Bruch near Potsdam); Stetsun, 2021:1959 (detailed description of sting); Pytel-Huta, Skyrpan, Tsaryk, Shydlovskyy, and Khamar, 2022:54 (western Ukraine); Yue, Q. Li, and L. Ma, 2022:397, 398 (in key to *Lestica* of China); Kaplan and Yıldırım, 2023:1684 (in checklist of Sphecidae *sensu lato* of Turkey); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:425 (Uzbekistan: distribution); Olszewski, Sparks, Twerd, and Wiśniowski, 2024:5 (central Poland: common in river valleys: no specific localities, not endangered); Pytel-Huta and Franchuk, 2024:80 (Ukraine: Rivno Nature Reserve).

Crabro basalis F. Smith, 1856:415, ♀. Holotype or syntypes: ♀, Polish Ukraine, now Ukraine: no specific locality (BMNH). Synonymized with *Crabro alatus* by Kohl, 1915:125. – Kirchner, 1867:226 (in catalog of European Hymenoptera); Dalla Torre, 1897:613 (as synonym of *Crabro ochoticus*). – As *Crabro alatus* var. *basalis*: Sickmann,

1894:201 (new status, China: Hopei Province: Tientsin); Kohl *in* Dalla Torre, 1897:581 (in catalog of world Sphecidae, as new status); Kohl, 1913b:16 (Russia: Voronezh Oblast: Valuyki at 50°14'N 38°08'E); Noskiewicz, 1922b:30 (Poland: Podole Region: Kasperowce, now Ukraine); Yasumatsu and Narisada, 1935:74 (China: Liaodang: Dairen, now Dalian); Goebel, 1937:38 (Poland: Poznań District: Poznań-Dębina); Romanova, 1969:136 (Russia: North Caucasus). – As *Crabro alatus basalis*: W. Schulz, 1904:100 (new status; Turkey: Bursa); Wu and Zhou, 1996a:123 (in revision in Economic Insect Fauna of China); Haris, 2016:14 (in list of species described by F. Smith from Carpathian Basin). – As *Lestica alata* var. *basalis*: Móczár, 1958a:266 (new status, in annotated catalog of Hungarian Crabronini). – As *Lestica alatus* form *basalis*: Scobiola-Palade, 1968c:387 (new status, Romania: Budești, Copăceni).

Crabro alatus japonicus W. Schulz, 1904b:99, ♀, ♂. Syntypes: Japan: no specific locality (W. Schulz coll., Strasbourg?). Synonymized with *Crabro alatus* by Kohl, 1915:125, synonymy accepted by R. Bohart and Menke, 1976:430. – Kohl, 1915:126 (original description copied). – As *Crabro alatus* subsp. *japonicus*: Tsuneki, 1947:404 (Japan: Hokkaido).

Crabro alatus var. *rubidus* Schirmer, 1915:456, sex not stated. Holotype or syntypes: Germany: Berlin area (depository unknown). Synonymized with *Lestica alata* in here.

Lestica spinicollis Tsuneki, 1976d:305, ♂. Holotype: ♂, China: Heilongjiang : Maoershan 100 km east of Harbin (CAS). Synonymized with *Lestica alata* by Nemkov *in* Nemkov, Kazenas, Budrys, and Antropov, 1995:451. – Pulawski, 1994:27 (CAS holotype no. 1254).

3. *anatolica* Can and Gülmez

Lestica anatolica Can and Gülmez, 2022:430, ♂. Holotype: ♂, Turkey: Sivas: İmranlı: Aşağıçulha village at 39.905°N 38.130°E (Entomology Research Laboratory, Gaziosmanpaşa University, Tokat, Turkey).

4. *aurantiaca* (Kohl)

Crabro aurantiacus Kohl, 1915:129, ♀. Syntypes: China: Sinkiang: Shanguya near Khotan (ZMHU and NHMW). – As *Lestica aurantiaca*: Leclercq, 1954c:292 (new combination, in catalog of world Crabronini); Marshakov, 1975a:159 (in revision of *Lestica* of USSR, known only from China); R. Bohart and Menke, 1976:430 (in checklist of world Sphecidae); Dollfuss, 1989:10 (type material in NHMW); Kazenas, 2001b:43 (tentatively in checklist of Sphecidae of Kazakhstan and Central Asia); Yue, Q. Li, and L. Ma, 2022:397 (in key to *Lestica* of China).

5. *bibundica* Leclercq

Lestica bibundica Leclercq, 1972d:684, ♀. Holotype: ♀, Cameroon: Bibundi (ZMHU). – R. Bohart and Menke, 1976:430 (in checklist of world Sphecidae); Jacobs, 2025a:242 (first record from Togo: Téntkro at 8.08°N 0.27°E), 243 (in key to females of Sub-Saharan *Lestica*).

6. *biroi* Tsuneki

Lestica biroi Tsuneki, 1977d:15, ♀. Holotype: ♀, Papua New Guinea: Bismarck Archipelago: Island of Nusa (TMB).

7. *breviantennata* Yue and Q. Li

Lestica breviantennata Yue and Q. Li *in* Yue, Q. Li, and L. Ma, 2022:394, ♂. Holotype: ♂, China: Hunan: Chenzhou: Yizhang: Mang Mountain at 25°23'57"N 112°57'4"E (Yunnan Agricultural University, Kunming, China). – Yue, Q. Li, and L. Ma, 2022:397 (in key to *Lestica* of China).

8. *camelus* (Eversmann)

Crabro camelus Eversmann, 1849:424, ♂. Syntypes: Russia: Ural foothills: no specific locality (ZIN). – A. Morawitz, 1866a:270 and 1866b:348 (specimens in E. Eversmann collection); Kohl, 1888c:588 (redescription); F. Morawitz, 1889:549 (Russia: Siberia: Minusinsk; description of ♀); Dalla Torre, 1897:585 (in catalog of world Sphecidae); Kohl, 1915:119 (in revision of Palearctic Crabronini); Gussakovskij, 1932:17 (Russia: Primorskiy Krai: Sutshan); Iwata, 1938d:84 (Japan: Hokkaido; Russia: Island of Sakhalin); Tsuneki, 1947d:285 (Korea), 1947e:402 (Japan:

Hokkaido), 1948c:4 (Japan: Hokkaido). – **As *Thyreus camelus***: Iwata, 1933b:11 (new combination, collecting localities from Japan). – **As *Lestica camelus***: Leclercq, 1954c:295 (new combination, in catalog of world Crabronini); Tsuneki, 1957d:77 (Korea), 1957f:60 (Korea), 1960g:34 (nesting habits); Okuno, 1968:31 (Japan); Tsuneki and Tano, 1969:30 (distribution in Japan); Tsuneki, 1974a:377 (Korea); Marshakov, 1975a:156 (in key to *Lestica* of USSR), 160 (in revision of *Lestica* of USSR), 1975b:332 (Mongolia); R. Bohart and Menke, 1976:430 (in checklist of world Sphecidae); Tsuneki, 1976d:304 (China: Heilungkiang); Pulawski, 1978:268, 269 (in key to Sphecidae of European part of USSR); Leclercq, 1982b:155 (China: Szechuan: Mowchow); Tsuneki, 1982b:17 (known from Korea); Paik, 1985:201 (in list of Sphecidae *sensu lato* of Korea); Nemkov, 1986:106 (Russia: Irkutsk Oblast'); Tsuneki, 1991:202 (Korea); Leclercq, 1993c:35 (Asian species not found in Europe); Nemkov, 1992b:249 (Russia: Far East: Khingan Nature Reserve); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:451, 453 (in key to Sphecidae *sensu lato* of Russian Far East); Miyatake, 1996:102 (specimens in Hiroshi Aoki collection); Wu and Zhou, 1996a:124 (in revision in Economic Insect Fauna of China); Podgorbunskikh and Rudoiskatel', 1999:142 (Russia: Chelyabinsk Oblast': Il'men Nature Reserve); Kazenas, 2001b:43 (in checklist of Sphecidae of Kazakhstan and Central Asia), 211 (review of biology), 2002a:110 (geographic distribution, collecting localities in Kazakhstan); Dollfuss, 2004b:779 (Mongolia: Ulanbaator); Nemkov, 2005a:157 (Russia: Island of Sakhalin); Hua, 2006:280 (in list of Chinese insects, geographic distribution); Baghirov, 2007:93 (Russia: southwestern Siberia); Haneda, 2008:10, 11 (in key to Japanese Crabroninae); Danilov, 2008:349 (Russia: Altayskiy Kray: Barnaul area); Ljubomirov and Yildirim, 2008:285 (in catalog of Crabroninae of Turkey); Nemkov, 2008b:23 (in catalog of Crabronidae of Asiatic Russia), 2009b:123 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:237 (Russia: Primorskiy Kray: Lazovsky Nature Reserve); Ruchin, Antropov, and Shibayev, 2009:170 (Russia: Republic of Mordovia); S. Takahashi, Haneda, and Tano, 2009:42, 52 (distribution in Japan); Ermilov and Mokrousov: 2010:90 (phoretic mites *Imparipes haeseleri* Ebermann and Hall and *Schwiebea nova* (Oudemans) in Middle Volga Region of Russia); Mokrousov, 2010a:62 (Russia: Kirov and Nizhniy Novgorod oblast's, Chuvash Republic, Republic of Mordovia, Tatarstan: no specific localities), 2010c:108 (Russia: Chuvash Republic: State Nature Reserve “Prisurskiy”); Rudoiskatel', 2010:158 (Russia: central and southern Ural Mountains); Baghirov, 2011b:147 (Russia: Altay Republic: Kosh-Agach, Kuray); Mokrousov, Berezin, and Egorov, 2011:74 (Russia: Chuvash Republic); Rudoiskatel', 2011a:66 (Russia: Perm' Oblast': Okhansk), 2011b:68 (Russia: Republic of Bashkortostan), 2011d:243 (Russia: central Ural Mountains); Nemkov, 2012c:444 (in catalog of Crabronidae of Russian Far East); Mokrousov, Ruchin, and Egorov, 2013:201 (Russia: Republic of Mordovia: Mordovian State Nature Reserve); J.-K. Kim, 2014:432 (in catalog of Sphecidae *sensu lato* of Korean Peninsula); Mokrousov and Vafin, 2014:57 (Russia: Republic of Tatarstan); Yildirim, Ljubomirov, and Lelej, 2014:15 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:145 (in checklist of Hymenoptera of Turkey); Antropov, 2017b:234 (in catalog of Crabroninae of Russia); Jacobs and Liebig, 2018:142 (Russia: Irkutsk Oblast': Bol'shoye Goloustnoye and Sarma; Primorskiy Kray: Poshiga; Island of Sakhalin: Korsakov, Lugovoye, and Novoaleksandrovsk); Ruchin and Antropov, 2019a:13231 (Russia: Mordovia State Nature Reserve); Bitsch and Leclercq *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:120 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2021:55 (in catalog of Crabronidae of Turkey); Yue, Q. Li, and L. Ma, 2022:397 (in key to *Lestica* of China); Kaplan and Yildirim, 2023:1684 (in checklist of Sphecidae *sensu lato* of Turkey); Kochetkov and Korsun, 2025:8 (Russia: Zabaikalskiy Kray: Dauriski Nature Reserve); Barthélémy and Guénard, 2025:15 (China: Hong Kong, in error, actually an *Ectemnius*).

Crabro sapporensis Matsumura, 1911:114, ♀, ♂. Syntypes: Japan: Hokkaido: Sapporo (depository?). Synonymized with *Lestica camelus* by ...

9. *cinctella* (W. Fox)

Crabro cinctellus W. Fox, 1895:136, ♀. Lectotype: ♀, Nevada: no specific locality (ANSP), designated by Cresson, 1928:53. – Dalla Torre, 1897:588 (in catalog of world Sphecidae). – **As *Solenius cinctellus***: Ashmead, 1899d:173 (new combination, in checklist of North American Crabronidae). – **As *Lestica cinctella***: Krombein *in* Muesebeck,

Krombein, and Townes, 1951:1028 (new combination, in catalog of North American Hymenoptera); Leclercq, 1951c:171 (description of ♂), 1954c:294 (in catalog of world Crabronini); Krombein, 1958f:200 (in supplement to catalog of North American Hymenoptera: California); R. Bohart and Menke, 1976:430 (in checklist of world Sphecidae); Krombein, 1979b:1682 (in catalog of North American Hymenoptera); Leclercq, 2006d:216 (in key to New World *Lestica*, bibliographic and locality records).

10. *clypeata* (Schreber)

Apis clypeata Schreber, 1759:14, [♂]. Lectotype: ♂, Germany: Halle (Linnean Soc. London), designated by Day, 1979:59. – **As *Sphex clypeatus***: Linnaeus, 1767:945 (new combination, redescription); Fueßlin, 1775:50 (Switzerland); Schrank, 1781:386 (in revision of insects of Austria); von Scheven, 1784:86 (identity of species); de Villers, 1789:234 (redescription); Day and Fitton, 1978:193 (recuration of Schreber type material). – **As *Sphex clypearia***: Schreber, 1784:100 (new combination, misspelling or substitute name for *Apis clypeata*). – **As *Crabro clypeatus***: Fabricius, 1775:374 (new combination, redescription), 1781:471 (redescription), 1787:296 (redescription); Rossi, 1790:90 (Italy: in revision of insects of Etruria, now Toscana); Olivier, 1792a:515 (redescription); Fabricius, 1793:297 (redescription); nec Panzer, 1793, Heft 15:20 (= *Crabro cribrarius*), 21 (in revision of German insects); Roth von Schreckenstein, 1802:32 (Germany: Baden-Württemberg); Schrank, 1802:330 (Germany: in revision of insects of Bayern, as *clypearius*); Fabricius, 1804:312 (redescription); Latreille, [1805]:323 (redescription); Panzer, 1806:181 (in critical review of his earlier work, as synonym of *Sphex cribrarius*); Spinola, 1806:105 (Italy: Liguria); Illiger, 1807b:148 (synonymy, redescription); Jurine, 1807:212 (in checklist of species of *Crabro*); Klug, 1808:54 (male foretibia with shield-like appendage); Stephens, 1829a:364 (in catalog of British insects), 1829b:33 (in checklist of British insects); Vander Linden, 1829:44 (bibliographic references, taxonomic history, may be synonym of *Crabro patellatus*); Dahlbom, 1842a:15 (in review of Scandinavian aculeates), 1845:XXV (specimens in collection Fabricius are *Crabro vexillatus*); F. Smith, 1851c:26 (Great Britain: Surrey: Weybridge, Devon?), 1856:397 (in catalog of Hymenoptera in British Museum), 1858c:153 (in review of British Aculeata, redescription); Sichel, 1860:216 (France: Département des Basses-Alpes); A. Morawitz, 1864:454 (Russia: Sankt-Petersburg), 1866a:270 and 1866b:348 (specimens in E. Eversmann collection); Schenck, 1867a:350 (Germany: Nassau Region); Thomson, 1870:175 (in revision of Swedish Crabroninae); F. Smith, 1871b:15 (in catalog of British Aculeata); Thomson, 1874:287 (in revision of Hymenoptera of Scandinavia); Taschenberg, 1875:383 (Germany: Halle); Kohl, 1880:117 (Austria: Tirol, and Italy: Trentino–Alto Adige); E. Saunders, 1880:298 (in revision of British Aculeata); Siebke, 1880:73 (Norway); Kohl, 1883e:652 (Switzerland); E. Saunders, 1884:271 (Great Britain: Weybridge); von Heyden, 1884:122 (Germany: Frankfurt am Main area); Gasperini, 1887: 14 (Croatia: Island of Hvar: Brusije and San Giorgio, now Sućuraj); Kohl, 1888b:721 (Austria: Tirol, now Italy: Alto Adige); F. Morawitz, 1889b:459 (European Russia); Kohl, 1893:26 (Austria: Niederösterreich); F. Morawitz, 1893a:115 (Russia: Karelian Isthmus); Sickmann, 1893:59 (Germany: Niedersachsen: Iburg, analysis of color variation); Krieger, 1894:7 (Germany: Kingdom of Saxony); Schletterer, 1894:34 (Istria Peninsula, now part of Croatia, Slovenia, and Italy); E. Saunders, 1896:145 (in revision of British Aculeata); Dalla Torre, 1897:580 (in catalog of world Sphecidae); Strand, 1898b:96 (Norway); Nordenström, 1901:206 (Sweden: Småland: Vernamo); de Cobelli, 1903:116 (Italy: Province of Trentino); Antiga and Bofill, 1904:25 (Spain: Cataluña Province); Aurivillius, 1904:298 (in revision of Swedish Sphecidae); E. Saunders, 1904c:639 (Spain); W. Schulz, 1904b:99 (Czechoslovakia, France, Transbaicalia); Zilahi Kiss, 1904:77 (Hungary: Peér, Tasnád); Kubes, 1905:84 (Czech Republic: Kolín, Obora, Sušice); Vángel, 1905:167 (Hungary); Graeffe, 1906:455 (Tunisia: Tunis area); Móczár and Henter, 1907:206 (Hungary: Tiszaalpár, Romania: Mehadia); Schmiedeknecht, 1907:189 (in key to Hymenoptera of Central Europe); Gadeau de Kerville, 1908:70 (Tunisia: Ferhana); Cavo, 1910:685 (France: Département du Nord); Dittrich, 1911b:18 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Morice, 1911:134 (Algeria: Biskra, Constantine, Le Tarf); Zavattari, 1911:3 (Italy: Piemonte: Valle del Maira); Birula, 1912:535 (Ukraine: Zhytomyr Oblast': Radomyshl'); Kohl, 1913b:16 (Russia: Voronezh Oblast': Valuyki at 50°14'N 38°08'E); Alfken, 1914:272 (northwestern Germany: Hülsen); Birula,

1914:375 (Belorussia: Ambrosovich, Korolevo, and Luskopol' near Vitebsk); Szilády, 1914:90 (Hungary: Nagyenyed, Remete, Széplak, Torda); Kohl, 1915:115 (in revision of Palearctic Crabronini); R. Perkins, 1916:231 (a pair from Great Britain: Weybridge in F. Smith collection); O. Meyer, 1919:148 (Germany: Posen Province, now Poland: Poznań Region); Noskiewicz, 1920a:154 (Poland: Tatry Mountains: Palenica); Dubois, 1921b:151 (in key to Belgian Sphecidae), 164 (phenology, nesting habits); Berland, 1921:533 (Greece); Fahringer, 1922:181 (Turkey; Austria: nest in Wien area.); Maidl, 1922:75 (Albania, Montenegro); Berland, 1925d:192 (in Sphecidae Fauna of France); Bischoff, 1925:297 (Latvia; Poland: Białowieża); Grönblom, 1925:6 (nesting habits); Shestakov, 1925:35 (Russia: Yaroslavl' area); K. Strohm, 1925:110 (Germany: Baden-Württemberg: Kaiserstuhl); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Friese, 1926:147 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Zavadil, 1926:31 (Czechoslovakia); Crèvecoeur and Maréchal, 1927:138 (Belgium: La Chabresse and Lixhe); Benoist, 1928:410 (France: Basses-Alpes, Hautes-Alpes); Berland, 1928b:181 (add Fahringer, 1922 and Hamm and Richards, 1926 to bibliography in Berland, 1925d); Grandi, 1929:289 (Italy: Toscana: valle della Limentra); Bouwman, 1930:67 (in revision of Sphecidae of Netherlands); Schmiedeknecht, 1930:646 (in keys to Hymenoptera of North and Central Europe); Bischoff, 1931:9 (Spain); Grandi, 1931:57 (Italy: Toscana: Vallata delle Pozze near Le Mandriole), 58 (Italy: Umbria: Foligno); Pulkkinen, 1931:129 (in revision of Sphecidae of Finland); Bondroit, 1932:40 (Belgium: recorded from Bruxelles area by Wesmael); Giordani Soika, 1932a:23 (Italy: Lido di Venezia); Bondroit, 1933:32 (Belgium: Bruxelles); Dulac, 1933a:38 (France: Saône-et-Loire: Savianges); Gussakovskij, 1933b:285 (Iran); Maidl, 1933b:126 (Morocco); Nadig, 1933:76 (Morocco); E. Nielsen, 1933:265 (summary of nesting habits, some citations are erroneous); Balles, 1934:16 (Germany: Baden-Württemberg: seven localities); Bernard, 1934b:250 (nesting in galleries of *Chalcophora mariana*, a buprestid; prey: adult Lepidoptera); Giner Marí, 1934:136 (Spain); Grandi, 1934:128 (Italy), 1935a:109 (Italy); Forsius in Forsius and Hellén, 1935:10 (in checklist of Hymenoptera of Finland); Steck, 1935:322 (Switzerland); Vergne, 1935:119 (France: Auvergne: common); Crèvecoeur and Maréchal, 1936:256 (in catalog of Belgian Hymenoptera); Roller, 1936:316 (Austria: loess cliffs at Bisamberg near Vienna); Dulac, 1937:22 (France: Saône-et-Loire: Saint-Laurent d'Andenay, Savianges, Torcy); Goebel, 1937:38 (Poland: Poznań District: Poznań-Dębina and Środa District: Tulce); Zavadil, Šusterka, and Bat'a, 1937:155 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938c:81 (Hungary: Kőszeg Hills); A. Wagner, 1938a:116 (northwestern Germany); Móczár, 1939:5 (Hungary: Jászberény); Dovnar-Zapolskiy, 1940:303 (Russia: Kursk Oblast'); Balthasar, 1941b:112 (Czech Republic: eastern Moravia); Guiglia, 1941c:167 (Italy: Calabria: Grande Sila); Leclercq, 1941a:68 (Belgium: Pays de Liège), 1941b:15 (Belgium: Liège area, floral records); Paul, 1941:35 (Germany: Pommern: Stettin area, now Poland: Województwo Zachodniopomorskie: Szczecin area); Guiglia, 1942a:61 (Greece: Island of Rhodes: Kremasti, Villanova); Leclercq, 1942:4 (Belgium: Liège), 5 (visiting flowers of *Coriandrum sativum* L., Apiaceae); Balthasar, 1943:40 (Czech Republic: Moravia: Zlin area); Benno, 1943:68 (Netherlands); Guiglia, 1943b:72 (Albania: Kopliku); Giner Marí, 1943a:234 (in Sphecidae Fauna of Spain); Giordani Soika, 1944:8 (Italy: Sicilia: Agrigento); Guiglia, 1944a:150 (Cyprus: Limassol), 1944b:36 (Italy); Šnoflák, 1944a:143 (Czech Republic: serpentine steppe near Mohelno); Carl and de Beaumont, 1947:69 (Switzerland: Graubünden = Grisons Canton: Swiss National Park); de Beaumont, 1947b:397 (Cyprus); Guiglia, 1947a:28 (Italy: Piano Maiuri); Móczár, 1947a:60 (Hungary: Bars comitatus: Saskóvár, now in Slovakia: historical region Tekov: Šášovské Podhradie), 1947b:90 (Hungary: Siebenbürgen: Székelykeresztúr, now Romania: Transylvania: Cristuru Secuiese); van Lith, 1947:103 (Netherlands); Balthasar, 1948:140 (Slovakia: Kovačovské Kopce, Parkan); Guiglia, 1948c:202 (Italy: Sardegna: Villasalto); Zavadil in Zavadil and Šnoflák, 1948:119 (in key to Sphecidae of Czechoslovakia); de Andrade, 1949:23 (Portugal); Aerts, 1950a:50 (Germany: Nordrhein-Westfalen: Rheidter Wertchens near Köln), 1950b:23 (Germany: Rheinland-Pfalz: Lorelei); Cavro, 1950:49 (France: Département du Nord); de Beaumont, 1950f:411 (Algeria); Georgel, 1950:64 (France: Seine-et-Oise: Sucy-en-Brie); Pittioni, 1950:28 (Cyprus); Abrahamsen, 1951:115 (recorded from Denmark after J.C. Nielsen, 1907); de Beaumont, 1951h:34 (Switzerland: Neuchâtel area); Fæster, 1951:457 (distribution in Scandinavia); Caruel, 1952b:101 (France: Marne Department); Cleu, 1953:51 (France: Ardèche River basin); Móczár, 1953:311 (Hungary); Nouvel and Ribaut, 1953:183

(France: Central Pyrénées: upper Garonne River valley, Hautes-Pyrénées: Cauterets); Balthasar, 1954b:268 (Palestine: Jerusalem); de Beaumont, 1954e:96 (Italy); Hertzog, 1954:101 (France: Bouches-du-Rhône: Camargue); Atanassov, 1955:196 (Bulgaria: Knyazhevo near Sofia, Kresnensko defile); Lehrer, 1955:266 (Romania: Moldova: Iași); Steiner, 1955:142 (France: Dordogne); Vogrin, 1955:43 (Yugoslavia); Bytinski-Salz, 1956:227 (Turkey: Istanbul, Kassaba, Kemer, Suadiye); Ceballos, 1956:393 (in catalog of Hymenoptera of Spain); Zirngiebl, 1957:175 (Germany: Rheinland-Pfalz: Pfalz region); Benno, 1958b:19 (in review of Dutch Sphecidae); Pulawski, 1958a:188 (Bulgaria: Knyazhevo near Sofia, Makotsevo, Nesebar, Sandanski, Varna); Diniz, 1959:31 (Portugal: Estoril, Lisboa, Torre da Marinha, Vale de Gaio); Scobiola-Palade, 1959:498 (Romania: Constanța Region: Agigea, Movila); Noskiewicz and Pulawski, 1960:138 (in key to Polish Sphecidae); Atanassov, 1962:122 (Bulgaria: Petrich area); Wengris, 1962:206 (Lithuania: Vilnius area); Ceballos, 1964:94 (in supplement to catalog of Spanish Sphecidae, as *clypeata*); Niedl and Deneš, 1967:70 (Czech Republic: Třeboň area); Balthasar, Hrubant, and Hrubant, 1967:169 (Bulgaria: Slanchev Bryag near Nessebar); Scobiola-Palade, 1967b:52 (Romania); Tumšs and Maršakovs, 1970:25 (Latvia); Atanassov, 1972a:190 (Bulgaria: Stara Planina Mountains), 1972b:32, 48, 49 (Bulgaria: Stara Planina Mountains); Balthasar, 1972:75 (in Sphecid Fauna of Czechoslovakia); Levi, Sysoletina, and Shernin, 1974:269 (Russia: Kirov Oblast': Kirov); Georghiou, 1977:190 (Cyprus); Józán, 1981:306 (Hungary: Hortobágy National Park); Skibińska, 1982:120, 124 (Poland: Warszawa) Tsuneki, 1984e:59 (Ukraine: Borisovka); Blagoveshchenskaya, 1994:89 (Russia: Ul'yanovsk Oblast'). – **As *Thyreopus clypeatus***: Lepeletier de Saint Fargeau and Brullé, 1835:758 (new combination, in revision of *Crabronini*); Lepeletier de Saint Fargeau, 1845:164 (in revision of world Hymenoptera); Acloque, 1897:89 (in Sphecid Fauna of France and Algeria); Kerenskiy, 1919:32 (Russia: Penza Governorate); Dusmet y Alonso, 1927:25 (Spain: Cataluña: Tarragona); Bradley, 1957:45 (Lepeletier's specimens in Turin); Casolari and Casolari Moreno, 1980:118 (specimens in M. Spinola collection, Torino); Pagliano, 2011a:148 (specimens in M. Spinola collection, Torino, are *Crabro peltatus*). – **As *Thyreus clypeatus***: Westerlund, 1893:27 (new combination, Russia: Karelian Republic: northern shore of Lake Ladoga); de Gaulle, 1908:122 (in catalog of French Hymenoptera); Graeffe, 1911:43 (Italy: Trieste area); Schirmer, 1912:164 (Germany: Berlin area); R. Perkins, 1913b:386, 387 (in key to British *Crabronini*); Dusmet, 1915:88 (Spain: Aragón); Haines, 1922:14 (Great Britain: not found in Dorset); Coulon, 1925:125 (France); Hamm and Richards, 1926:302 (summary of nesting habits); Harttig, 1930b:8 (specimen bearing dipteran egg); Baudot, 1931:255 (characteristics of cocoon); Bernard, 1933:62 (France: Drôme: Dieulefit), 1935:67 (France: Var: Fréjus area; prey: Microlepidoptera); Marchand and Dulac, 1935:60 (France: Saône-et-Loire: Saint Laurent d'Andenay); Szulczewski, 1950:104 (Poland: Wielkopolski National Park 15 km south of Poznań); Głowacki, 1953:518 (Poland: Podkowa Leśna near Warszawa); Hamann, 1960:196, 198 (Austria: Oberösterreich: Mönchgraben at 48°13'N 14°21'E). – **As *Ceratocolus clypeatus***: Beuthin, 1876:230 (new combination, Germany: Hamburg area); Jaennicke, 1868:8 (Germany: Hessen: Frankfurter Unterwald); F. Werner, 1927:66 (Austria: Niederösterreich: River Kamp valley). – **As *Clypeocrabro clypeatus***: Richards, 1935a:167, 1937b:106 (new combination), 1937b:106 (in checklist of British aculeates); Schneid, 1941:1027 (Germany: Bayern: Bamberg area). – **As *Lestica clypeata***: Billberg, 1820:107 (new combination, specimens from Sweden in collection Billberg); Rohwer, 1911c:154 (discussion of name); Leclercq, 1949a:17 (Russia: Sarepta, now Krasnoarmeysk; Croatia: Brusane), 1951e:17 (bibliography of Belgian records); Bischoff and Stadler, 1954:127 (Germany: Bayern: Romberg); Fahlander, 1954:250 (Sweden: Gästrikland Region); Grandi, 1954:244 (Italy; as *clypeatus*); Leclercq, 1954c:296 (in catalog of world *Crabronini*), 324 (nest and prey records); Aerts, 1955:60 (Germany: Rheinland); Harant and Leclercq, 1955:251 (France: Hérault: Lattes); Leclercq, 1956g:326 (Greece); Morel, Nouvel, and Ribaut, 1956:339 (France: Département des Pyrénées-Orientales); de Beaumont, 1957a:152 (Morocco), 1957b:137 (northern Iran); Grandi, 1957:392 (Italy); de Beaumont, 1958c:210 (Swiss National Park); Móczár, 1958b:206 (Hungary: collecting localities); Nouvel and Ribaut, 1958:16 (France: Pyrénées-Orientales: Banyuls-sur-Mer); de Beaumont, 1959a:37 (Italy); Suárez, 1959:60 (Spain: Almería Province); Wolf, 1959b:35 (Germany: Nassau); de Beaumont, 1960a:23 (Greece: Island of Rhodes), 1961c:52 (Greece: Island of Crete), 1962b:28 (Spain); Valkeila, 1962b:68 (southwestern Finland); Babiý, 1964:119 (Austria: Land Salzburg, as *clypeatus*); de Beaumont, 1964c:130 (in Sphecid Fauna of Switzerland), 1965a:60

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(*Crabro clypeatus*, recorded from Plauenscher Grund near Dresden, Germany, by von Block, 1799, is now *Lestica clypeata*); Feitz, Gloden, Melchior, and Schneider, 2006:82 (Luxemburg: Baggerweieren area in Haff Réimech Nature Reserve); U. Frommer, 2006:37 (Germany: Hessen: Runkel area); U. Frommer and Tischendorf, 2006:89 (Germany: Hessen: Schlüchterner Becken); Gadoum and Barbier, 2006:43 (France: départements of Val-d'Oise and Yvelines: Parc Naturel Régional du Vexin Français: Guernes and Mézy-sur-Seine); Ghazi-Soltani, Ebrahimi, and Iranipour, 2006:?? 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Schneider, 2006:140 (Luxemburg: anthropogenic habitats); Shlyakhtenok, 2006:112 (Belorussia: Polesye Radiological Nature Reserve); Standfuss and Standfuss, 2006b:99 (Greece: Thessalia: Magnisia Peninsula at 39°N 23°E); Archer, 2007e:79 (Great Britain: extinct or vagrant); Baghirov, 2007:93 (Russia: southwestern Siberia); Chevin, Livory, Lair, Sagot, and Baldock, 2007:36 (France: Département de la Manche); Cungs, Jakubzik, and Cölln, 2007:140 (Luxemburg: Haardt Nature Reserve); Dvořák, Straka, Smetana, Halada, Vepřek, and Karas, 2007:168 (Czech Republic: Vyšenské Kopce National Nature Reserve); Flügel, 2007:40 (Germany: Hessen: Halberg near Neumorschen); Herrmann, 2007b:95 (Germany: Baden-Württemberg: Fürstenberg in Konstanz); Jacobs, 2007:157 (in key to Crabronidae of Germany); Jansen and Kaluza, 2007:24 (Germany: northwestern Sachsen); Józán, 2007:180 (Hungary: Zselic hills); Roche, 2007a:105 and 2007b:7 (in checklist of Egyptian Ampulicidae, Sphecidae, and Crabronidae, first record from Egypt: Qaha); Saure, 2007:82 (Germany: in checklist of Aculeata of Brandenburg); Shlyakhtenok, 2007a:299 (Belorussia: Berezinsky Nature Reserve); Sipos and Móczár, 2007:205 (Hungary: Bács-Kiskun megye: vicinity of Foktő); G. Turrisi and R. Turrisi, 2007:119 (Italy: Sicilia: Mount Etna: Botanical Garden Nuova Gussonea and vicinity); Vago, 2007:175 (France: départements du Nord, Pas-de-Calais, and Somme); Vepřek and Straka, 2007:206 (in catalog of Sphecidae of Czech Republic and Slovakia); Vicidomini and Pignataro, 2007:2 (Italy: Salerno: known from Parco Nazionale del Cilento e Vallo di Diano), 15 (Italy: Provincia di Salerno: ubiquitous); Yildirim and Ljubomirov, 2007:121 (Turkey: İçel and Konya provinces); 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, 2008:138 (Spain: Salamanca: Parque Natural de Las Batuecas – Sierra de Francia); Ljubomirov and Ban-Calefariu, 2008:206 (Romania: Maramureş District: Poienile de Sub Munte); Ljubomirov and Yildirim, 2008:285 (in catalog of Crabroninae of Turkey); Nemkov, 2008b:23 (in catalog of Crabronidae of Asiatic Russia); Protsenko and Drozdovskaya, 2008:128 (Ukraine: Sumy Oblast': Mogritsa village); Theunert, 2008:43 (Germany: map of distribution in Niedersachsen and Bremen); Zettel, Zimmermann, Sorger, and Wiesbauer, 2008:5 (Austria: Wien); Baños-Picón, Asís, Gayubo, and Tormos, 2009:313 (Spain: frequency of specimens collected with hand nets and Malaise traps); Bitsch and Leclercq, 2009:225 (in supplement to vol. I of Faune de France, 1993; Jacobi, 2000, observations on mating behavior reported; recent record from Estonia reported; France: first record from Indre: La Châtre); Debuyser and Vago, 2009:6 (in list of Sphecidae *sensu lato* of northern France); Fallahzadeh, Ostovan, and Saghaei, 2009:237 (Iran: Fars: Jahrom), 245 (color photograph); Flügel, 2009b:63 (Germany: Hessen: Borken, in inactive open brown coal mine); U. Frommer, 2009a:27 (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, 2009:625 (Spain: Salamanca and Zamora provinces: Arribes del Duero Natural Park); Guéorguiev and Ljubomirov, 2009:265 (Bulgaria: Maleshevska Planina); Józán, 2009:166 (Croatia: Koromačno, Sveta Jelena); Kowalczyk, Kurzac, and Nadolski, 2009:63 (Poland: between Warta and Widawka rivers); Nemkov, 2009b:124 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Shorenko, 2009:368 (in list of Sphecidae *sensu lato* of Crimea); Szczepko and Wiśniowski, 2009:69 (Poland: Spała Landscape Park); Ermilov and Mokrousov: 2010:90 (phoretic mites *Acarus psenuli* (Vitzthum), *Acarus siro* Linnaeus, *Histiostoma sapromyzarum* (Dufour), *Imparipes haeseleri* Ebermann and Hall, *Schwiebea nova*

(Oudemans), and undetermined Uropodoidea in Middle Volga Region of Russia); Esser, Fuhrmann, and Venne, 2010:36 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Ghazi-Soltani, Ebrahimi, Iranipour, and Pour Abad, 2010:800 (Iran: East Azarbaijan: Mianeh: Gharechaman; Kaleybar; Maragheh: Checkan); Ghazi-Soltani, Khashaninia, and Shahim, 2010:638 (Iran: East Azerbaijan: Horand Forests); Hable, von der Dunk, and Knipfer, 2010:65 (Germany: Bayern: vicinity of Dietfurt); Hable, Krauss, von der Dunk, and Wickl, 2010:27 (Germany: Bayern: Sulz- and Ottmaringer Tal); Jakubzik and Cölln, 2010:1187 (Germany: Rheinland-Pfalz: Bruchertseifen near Altenkirchen); Jakubzik, Kinkler, and Cölln, 2010:155 (Germany: Rheinland-Pfalz: Leverkusen-Steinbüchel); Johansson, 2010:121 (Sweden: Småland: upper Emå river valley); Mokrousov, 2010a:62 (Russia: Ivanovo, Kirov, Nizhniy Novgorod, and Vladimir oblast's, Chuvash Republic, Tatarstan: no specific localities); J. Neumayer, 2010:334 (Austria: Niederösterreich: Thayatal National Park); Rudoiskatel', 2010:158 (Russia: central and southern Ural Mountains); Saure, 2010a:87 (Germany: Berlin-Reinickendorf: Baumberge), 2010b:175 (Germany: Berlin-Reinickendorf: airport Tempel and Flughafensee Protected Area); Schmid-Egger, 2010a:16 (in red list of Aculeata of Germany: relatively common); Schmidt, 2010:136 (Germany: Bayern: collected along Main-Donau canal); Shoreenko and Konovalov, 2010:20 (Ukraine); Smetana, Roller, Beneš, Bogusch, Dvořák, Holý, Karas, Macek, Straka, Šima, Tyrner, Vepřek, and Zeman, 2010:101 (Western Slovakia: recorded from Borská nížina); Treiber, 2010:135 (France: départements du Bas-Rhin and du Haut-Rhin); Tüzün and Yüksel, 2010:4472 (Turkey: Niğde Province); van der Smissen, 2010a:342 (Germany: Schleswig-Holstein: locality records), 2010b:385 (France: Ardèche, Gard, Haut-Rhin, and Vaucluse: locality records), 2010c:396 (Sweden: Södermanland: Rassa); Baghirov, 2011b:147 (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); Gogala, 2011:23 (Slovenia); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of Hungary); Mokrousov, Berezin, and Egorov, 2011:74 (Russia: Chuvash Republic); Murai and Amr, 2011:111, 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); Rudoiskatel', 2011b:68 (Russia: Republic of Bashkortostan), 2011d:243 (Russia: central Ural Mountains); Saure, 2011a:6 (Germany: Berlin: former airport Tempelhof); Schmid-Egger, 2011c:555 (Austria: Tirol: Tiroler Lech Nature Park); Saure, 2011c:198 (Germany: Berlin-Spandau: Fort Hahneberg); Schmid-Egger, 2011a:38 (France: Parc National du Mercantour, and Italy: Parco delle Alpi Marittime); Schwarz, Link, Pöll, Ambach, and Rabitsch, 2011:255 (Austria: Oberösterreich: Welser Heide); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:138 (Germany: Hessen: not endangered); Ziska and Saure, 2011:109 (Germany: Berlin: Tegeler Fließ valley); Amolin, 2012:29 (Ukraine: Donetsk); Boillat, 2012:226 (Switzerland: in checklist of insects of Canton de Genève); Burguet *in* Durand and Burguet, 2012:3, fiche 10 (France: Puy-de-Dôme: sands Girauts-Faures in Orléat commune); Cölln, Jakubzik, and Kinkler, 2012:24 (Germany: Nordrhein-Westfalen: Leverkusen); Gerth, Mayer, Hering, Wolf, Schaffer, and Bleidorn, 2012:9 (Germany: Sachsen: Bienitz in Leipzig); Hellrigl, 2012:129 (Italy: Provincia Autonoma di Bolzano-Alto Adige, as Südtirol); Prismaniy, 2012:50 (Russia: Belgorod Oblast'); Saure, 2012b:229 (Germany: Berlin-Spandau: Spandauer Forst); Shibayev and Polumordvinov, 2012:278 (Russia: Penza Oblast'); Shlyakhtenok, 2012a:171 (Belorussia, and Russia: Kirov Oblast': Arkhangel'skoye: collected in private plots), 2012b:91 (Belorussia: Beresina National Reserve: overgrowing dry meadow); Strumia, Pagliano, and Gayubo, 2012:56 (Italy: Toscana: Riserva di San Rossore); Yildirim, 2012:81 (Turkey: Adana, Baybur, Erzurum, and Kars provinces); Zettel, 2012:78 (Austria: Niederösterreich: Golitsch); Bayındır, Gürbüz, Ljubomirov, and Pohl, 2013:146 (Turkey: Isparta: Kasnak Oak Forest Nature Reserve); Bitsch, Grouet, and Savina, 2013:292 (France: Pyrénées centrales: département d'Ariège: Ascou-Pailhères); Danilov and Odintseva, 2013:333 (Russia: Western Siberia: 65 km north-northeast of Tobol'sk at 58°45'N 68°74'E); Dyuzhaeva, 2013:117 (Russia: Samara Oblast': Zhiguli Nature Reserve); Flügel, 2013a:119 (Germany: Brandenburg: Pimpinellenberg near Oderberg), 2013c:303 (Germany: Hessen: Kassel); Kazenas, 2013a:100, 101 (color photographs of adult wasps, short information on geographic distribution and nesting habits); Mokrousov, Ruchin, and Egorov, 2013:201 (Russia: Republic of Mordovia: Mordovian State Nature Reserve); Pankov, 2013:229 (Russia: Ivanovo Oblast'); Saure, 2013:19

(Germany: Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:20 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:217 (in annotated catalog of aculeate wasps of Belorussia); Vieira, Oliveira, Brewster, and Gayubo, 2013:16 (Portugal: Douro International Natural Park); Wiśniowski and Szczepko, 2013:36 (Poland: Kampinos National Park near Warszawa); Zettel, Zimmermann, and Wiesbauer, 2013:12 (Austria: Wien: Donaupark); Ebrahimi, 2014:36 (Iran: Āzarbāijān-e Sharghi, Ilām, Markazi, Māzandarān, and Sistān-Baluchestān provinces); Flügel, 2014:254 (Brandenburg: Hangelsberger Heide); U. Frommer, 2014:27 (Germany: Hessen: Lorch); U. Frommer, M. Niehuis, and O. Niehuis, 2014:1322 (Germany, Hessen: Roßstein); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Jakovlev, Polevoi, and Humala, 2014:302 (Russia: Republic of Karelia: Zaonezhye Peninsula in Lake Onega); Józán, 2014:132 (Croatia: five localities); Mokrousov and Vafin, 2014:57 (Russia: Republic of Tatarstan); Ruchin and Antropov, 2014:37 (Russia: Republic of Mordovia); Yıldırım, Ljubomirov, and Lelej, 2014:15 (distribution in Turkey by biogeographic provinces); Atbaei, Fallahzadeh, and Ljubomirov, 2015:12 (Iran: Fars Province); Koçak and Kemal, 2015:145 (in checklist of Hymenoptera of Turkey); Mokrousov and Egorov, 2015:425 (Russia: Republic of Mordovia: Nature State Reserve Priskuskiy); Lett, 2015:5 (France: Loir-et-Cher: Gièvre); Rezaei and Fallahzadeh, 2015:6 (Iran: Fars: Dasht e Arzhan at 29°38'N 51°58'E, as *Lestica clypeata clypeata*); P. Rosa and Pagliano, 2015:102 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:14 (Germany: Berlin-Lichterfelde); Schedl, 2015:948 (Austria: Tirol: Innsbruck: Botanical Garden); Shorenko, 2015:324 (in list of Sphecidae *sensu lato* of Crimea); Blažej, Macek, and Trýzna, 2016:121 (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, 2016:17 (Germany: Rheinland-Pfalz: Vulkaneifel District); Else, Bolton, and Broad, 2016:26 (in checklist of Aculeata of Great Britain and Ireland: England); Mokrousov and Popov, 2016:577 (Russia: Abkhazia, Krasnodarskiy Krai); Saure, 2016a:8 (Germany: Brandenburg: Uckermark District: dry slopes near Altgalow-Stützkow), 2016b:49 (Germany: Sachsen-Anhalt: fruit orchards); Schmid-Egger, Dandria, and Xuereb, 2016:80 (in checklist of Crabronidae of Maltese islands); A. Scholz, 2016:72 (Germany: Sachsen: Kleinraschützer Heide); Stolle and Saure, 2016:923 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Wiśniowski, 2016:128 (Poland: Ojców National Park); Yıldırım, Ljubomirov, Özbek, and Yüksel, 2016:49 (Turkey: Erzurum and Tunceli provinces); Antropov, 2017b:234 (in catalog of Crabroninae of Russia); Burguet and Durand, 2017:9 (France: Puy-de-Dôme: basin of river Crouël); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:49 (Iran: known from Alborz, East Azerbaijan, Fars, Ilam, Markazi, Mazandaran, Sistan-o Baluchestan and Tehran provinces); Le Divelec, Chapelin-Viscardi, and Larivière, 2016:109 (northern France: in agricultural landscapes); Magdalou, 2017:15 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Forêt de la Massane, Mas Larrieu, Julols); Pagliano, 2017:189 (Italy: Island of Lampedusa); Shorenko, 2017:77 (in Crimea collected in May through August); Jacobs and Liebig, 2018:143 (Russia: Irkutsk Oblast': Sarma); Kemal and Koçak, 2018:34 (Turkey: in list of pterygot insects of Van Province); Lett, 2018:203 (France: Loir-et-Cher: Gièvres at 47°16'39"N 1°41'52"E); Shorenko, 2018:127 (Crimea, including localities, habitats, and number of specimens); Belyaev, 2019:57 (sounds generated by flight muscles); Carminati, Mora, and Cretin, 2019:17 (France: in list of Sphecidae *sensu lato* of Franche-Comté); Ljubomirov, 2019:101 (Bulgaria: Vrachanska Planina); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:13 (Azerbaijan: Nakhichevan Autonomous Republic); Ruchin and Antropov, 2019a:13231 (Russia: Mordovian State Nature Reserve), 2019b:163 (common in Mordovian State Nature Reserve); Sadeghi, Fallahzadeh, Ostovan, Ljubomirov, and Hesami, 2019a:263 (Iran: Fars: Kazeroon: Zavali); Shorenko, 2019:211 (among the commonest sphecid species in Crimea); Ben Khedher, Yıldırım, and Braham, 2020a:102 (Tunisia: numerous locality records); Kejval, Blažej, and Erhart, 2020:102 (western Czech Republic); Saure, 2020:276 (Germany: Sachsen-Anhalt: sand dunes); Shorenko, 2020:50 (Crimea: Karadag Nature Reserve); Turrisi, Altadonna, Lo Cascio, Nobile, and Selis, 2020:728 (Italy: Aeolian Archipelago: island of Lipari); Bitsch and Leclercq *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:118 (in revision of Sphecidae *sensu lato* of Europe); Cross, Baldock, and Wood, 2021:37 (in catalog of Sphecidae *sensu lato* of Portugal); Herb and Schmid-Egger, 2021:9 (Germany: Bayern: Kaufbeuren area); Kaplan and Yıldırım, 2021:55

- (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:92 (in commented list of Sphecidae *sensu lato* of Poland); 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); Pytel-Huta, Skyrpan, Tsaryk, Shydlovskyy, and Khamar, 2022:54 (western Ukraine); Yue, Q. Li, and L. Ma, 2022:397 (in key to *Lestica* of China); Kaplan and Yildirim, 2023:1684 (in checklist of Sphecidae *sensu lato* of Turkey); Yildirim, Anlaş, and Tezcan, 2023:1943 (Turkey: İzmir: Menemen); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:425 (Uzbekistan: distribution); Pytel-Huta and Franchuk, 2024:80 (Ukraine: Rivno Nature Reserve); Frommer and Klenke, 2025:164 (Germany: Hessen: Lahntal near Weilburg).
- ? *Vespa pteropoda* Scopoli, 1772:123, sex not stated. Holotype or syntypes: Hungary: “circa Cremnitzium”, now Slovakia: Kremnica (destroyed). Tentatively synonymized with *Lestica clypeata* by Haris, 2016:38 (head resembles *Lestica clypeata*, but not gaster).
- Sphex clypeatus ovatus* Christ, 1791:283, [♀] (as *clypeata ovata*, incorrect original termination). Not available: binominal nomenclature not observed (Article 11.4). Holotype or syntypes: Germany: no specific locality (lost). Synonymized with *Crabro clypeatus* by Kohl, 1915:115.
- Crabro vexillatus* Panzer, 1797, Heft 46:6, [♂]. Holotype or syntypes: Germany: no specific locality (depository?). Synonymized with *Crabro clypeatus* by Panzer, 1806:182. – Roth von Schreckenstein, 1802:32 (Germany: Baden-Württemberg); Panzer, 1806:182 (in critical review of his earlier work); Vander Linden, 1829:47 (bibliographic references, Belgium: Bruxelles, France, Germany, Italy, nearly all Europe); Shuckard, 1837a:132 (in revision of British Aculeata); Dahlbom, 1839:74 and 1839-40:74 (in revision of Scandinavian Crabronini); von Siebold, 1839:50 (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:15 (in review of Scandinavian aculeates), 1845:375 (in revision of Sphecidae and Pompilidae) and 527 (in key to *Crabro*), determination corrected to *Crabro clypeatus* by Thomson, 1870:175; Eversmann, 1849:423 (Russia: Ural foothills and lower Volga); von Kiesenwetter, 1849:92 (Germany: Kingdom of Saxony); Wissmann, 1849:16 (Germany: Kingdom of Hannover: Münden); Tischbein, 1850:10 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); Wesmael, 1852:613 (Belgium: Bruxelles); Kawall, 1857:26 (Kurland, now Latvia); Schenck, 1857:73 (Germany: in revision of fossorial wasps of Nassau Region), 1860:145 (Germany: Nassau Region); Giraud, 1863a:15 (France: Hautes-Alpes: Vallouise near Briançon); Taschenberg, 1866:172 (in revision of Hymenoptera of Germany); A. Costa, 1867c:140 (in revision of Italian Sphecidae); Dietrich, 1868:362 (Switzerland: Zurich Canton); von Aichinger, 1870:313 (Austria: Tirol); A. Costa, 1871b:69 (in revision of Italian Sphecidae); Schlechtendal, 1872:36 (Germany: Sachsen: Zwickau); Becker, 1880:151 (Russia: Sarepta, now Krasnoarmeysk south of Volgograd); Marquet, 1881:188 (southern France); Bezzi, 1892:123 (Italy: Lombardia: Provincia di Pavia); Radoszkowski, 1892:593 (male genitalia); Baldini, 1894:70 (Italy: Modena area); Meunier, 1896:269 (Belgium: Bruxelles area); Flamary, 1898:45 (France: Saône-et-Loire: Mâcon area); N. Arnold, 1902:87 (Russia: Mohilev Province, now Belorussia); von Heyden, 1905:83 (Germany: Hessen: Frankfurt); Peets, 1909-1911:66 (*Crabro vexillatus* of Panzer = *Crabro clypeatus*). – **As *Thyreus vexillatus***: Lepeletier de Saint Fargeau and Brullé, 1835:762 (new combination, in revision of Crabronini), 1838416 (is a synonym of *Solenius lapidarius*); Herrich-Schaeffer, 1840:295 (Germany: Bayern: Regensburg area); A. Costa, 1882b:23 (Italy: Sardegna), 1883:58 (Italy: Sardegna); Magretti, 1884b:106 (Italy: Firenze area), 1893b:8 (Tunisia). – **As *Solenius vexillatus*** Marquet, 1875:211 (new combination, France: Haute-Garonne: Toulouse). – **As *Ceratocolus vexillatus***: Kirchner, 1854:313 (new combination, Czechoslovakia: Kaplitz in Budweiser District, now České Budějovice); Ruthe and Stein, 1857:316 (Germany: Berlin area); Taschenberg, 1858:112 (in key to Sphecidae of Germany); Assmus, 1859:619 (Russia: Moscow Oblast’); Funk, 1859:58 (Germany: Bayern: Bamberg); Brischke, 1862:107 (Germany: Preussen Province, now Poland: Pomorze Region); A. Costa, 1863:66 (Italy: Calabria Ulteriore: Aspromonte), 1864c:124 (Italy: Campania: Benevento area); Jaenicke, 1867:146 (Germany: Hessen: Frankfurt area); Kirchner, 1867:225 (in catalog of European Hymenoptera); Wierzejski, 1868:118 (Poland: Kraków area; Ukraine: L'viv area and Podole Region; everywhere); Palma, 1867:41 (Italy: Sicilia settentrionale); Wierzejski,

1874:262 (Poland: Kraków, Mogilany, Tatry Mountains; Ukraine: Stanisławów, now Ivano-Frankivsk, Podole Region: Bucyki, Sinków, Skala, Toutry; Bukovina Region: Kalinowce); Mocsáry, 1874:120 (Siebenbürgen, now Romania: Transylvania: no specific locality); Schmiedeknecht, 1876:186 (Germany: Thüringen: Rothensteiner Felsen); Yaroshevskiy, 1881:122 (Ukraine: Khar'kiv Oblast': Khar'kiv); Friese, 1883:201 (Germany: Sachsen-Anhalt: Kösen, Weissenfels); Brischke, 1888b:101 (Germany: Preussen Province, now Poland: Pomorze Region), 1889:204 (Germany: Steegen east of Danzig, now Poland: Stegna east of Gdańsk); De Stefani Perez, 1894:216 (Italy: Sicilia), 1895:228 (Italy: in catalog of Sicilian Hymenoptera); Chyzer, 1902:34 (Hungary); Rudow, 1912:71 (nesting in stems of *Cirsium*, *Asteraceae*, and of *Apiaceae*); Bradley, 1957:46 (Lepeletier's specimens in M. Spinola collection, Turin); Casolari and Casolari Moreno, 1980:118 (specimens in M. Spinola collection, Torino); Pagliano, 2011a:150 (specimens in M. Spinola collection, Torino, are *Lestica clypeata*).

Crabro lapidarius Fabricius, 1804:374, sex not stated, primary homonym of *Crabro lapidarius* Panzer, 1804. Lectotype: ♀, Germany: Kiel (ZMUC), designated by van der Vecht, 1961a:71. Synonymized with *Thyreus vexillatus* by Dufour, 1838c:409, synonymy confirmed by van der Vecht, 1961a:71. – **As *Solenius lapidarius***: Lepeletier de Saint Fargeau, 1845:117 (new combination, in revision of world Hymenoptera); Marquet, 1875:211 (France: Haute-Garonne: Toulouse).

Philanthus clypeatus Thunberg, 1815a:138, sex not stated, junior secondary homonym of *Lestica clypeata* (Schreber, 1759). Holotype or syntypes: ♂, Barbaria, now Algeria: no specific locality (Uppsala). Synonymized with *Crabro clypeatus* by W. Schulz, 1912:70. – Thunberg, 1815a:1228 (diagnostic characters), 1815b:290 (diagnostic characters).

Crabro nigridentis Herrich-Schaeffer, 1840:293 (Germany: Bayern: Regensburg area). Nomen nudum (as *Nigridentis*, incorrect original capitalization).

Crabro nigridentis Herrich-Schaeffer, 1841:.... Synonymized with *Crabro clypeatus* by Kohl, 1915:115. – **As *Crabro guttatus* var. *nigridentis***: A. Morawitz, 1864:454 (new status); Dalla Torre, 1897:603 (in catalog of world Sphecidae).

Crabro quadrifera Dufour, 1841a:497 and 1841b:233, sex not stated. Holotype or syntypes: France: no specific locality (lost?). Synonymized with *Crabro clypeatus* by Dufour, 1841d:27. Not listed by R. Bohart and Menke, 1976. – Dufour, 1841a:497 and 1841b:236 (digestive tract), 1841a:503 and 1841b:239 (male reproductive system), 1841a:507 and 1841b:243 (female reproductive system).

Crabro quadriceps Bingham, 1897:327, ♀. Holotype: ♀, India: Uttarakhand: Kumaun (BMNH). Synonymized with *Lestica clypeata* by Pulawski, 2022b:357. – R. Brown, 1906:687 (in catalog of Philippine Hymenoptera); R. Turner, 1912g:376 (as new synonym of *Crabro alatus*); Ramakrishna Aiyar, 1916:560 (reference to new synonymy by Turner, 1912g:376); nec Yasumatsu, 1939:153 and 1942:83 (= *Lestica constricta* Krombein); Yasumatsu, 1942a:90 (China: Chekiang: Tienmushan; Taiwan); nec Townes, 1946:51 (= *Lestica constricta*). – **As *Lestica quadriceps***: Leclercq, 1950i:196 (new combination, interpretation of species: certainly not a synonym of *Lestica alata*), 1954c:293 (in catalog of world Crabronini), 1958c:80 (in key to South-East Asian *Lestica*); Baltazar, 1966:358 (occurrence in Philippines doubtful); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); S. Gupta, 1995:86 (India: Uttar Pradesh); Saini and Dey, 2021b:1075 (redescription of ♀, description of ♂, states of Himachal Pradesh, Jammu and Kashmir, and Uttarakhand); Mawadda and Girish Kumar, 2023a:109 (in checklist of Crabroninae of Northern India).

As *Solenius lapidarius*: Pagliano, 2011a:150 (specimens in M. Spinola collection, Torino, are *Lestica clypeata*).

As *Crabro fossorius* partim: Pagliano, 2011a:155 (specimens in M. Spinola collection, Torino, are *Lestica clypeata*).

As *Crabro lituratus*: Pagliano, 2011a:156 (specimens in coll. Spinola, Torino, are *Lestica clypeata*).

11. *collaris* (Matsumura)

Crabro collaris Matsumura, 1912:174, 175, ♀. Holotype or syntypes: ♀, Japan: Hokkaido: Sapporo (depository?). – Iwata, 1938d:84 (description of ♂, Japan: Hokkaido); Tsuneki, 1947e:405 (Japan: Hokkaido; redescription), 1948c:4 (Japan: Hokkaido). – **As *Lestica collaris***: Leclercq, 1954c:291 (new combination, in catalog of world Crabronini);

Tsuneki and Tanaka, 1955b:25 (Japan: near Nikko 120 km northwest of Tokyo); Tsuneki, 1957f:60 (Korea), 1958c:8 (Japan: Kyoto Prefecture), 1960g:26 (nesting habits); Tsuneki and Shimoyama, 1963:49 (Japan: Towada Prefecture); Tsuneki, 1966a:25 (Japan); Haneda, 1968a:47 (Japan), 1968b:56 (Japan: Nagano Prefecture: Ina District); Itami, 1968a:16 (Japan: Yamagata Prefecture: foot of Mount Iide); Okuno, 1968:31 (Japan); Itami, 1969:51 (Japan: Niigata Prefecture); Tsuneki, 1969e:27 (Japan: specimens in Osaka Museum of Natural History), 1969i:61 (Japan: Fukui); Yamada, 1970:14 (Japan: Nagano Prefecture: Shimajima Valley), 1971:36 (Japan: Aichi Prefecture); Haneda, 1972c:60 (Japan: Fukui Prefecture); Marshakov, 1975a:156 (in key to *Lestica* of USSR), 162 (in revision of *Lestica* of USSR: Russia: Primorskiy Kray); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Tsuneki, 1982b:17 (known from Korea); Paik, 1985:201 (in list of Sphecidae *sensu lato* of Korea); Nemkov in Nemkov, Kazenas, Budrys, et Antropov, 1995:452, 453 (in key to Sphecidae *sensu lato* of Russian Far East); Tano, Kurokawa, Murota, and Nozaka, 2003:32 (Japan: Nagasaki Prefecture: Tsushima); Suda, 2004:46 (Japan: Yamanashi Prefecture); Haneda, Inoue, Nozaka, Tano, Kurokawa, H. Murota, and T. Murota, 2005:67 (Japan: Fukui Prefecture: Mount Monju); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2005:52 (Japan: Gifu Prefecture); Negoro, Haneda, and Tano, 2005:48 (Japan: Toyama Prefecture); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2006a:28 (Japan: Toyama Prefecture), 2006b:49 (Japan: Nagasaki Prefecture: Tsushima); Nambu, 2006:247 (Japan: Tokyo: Imperial Palace garden); Nemkov, 2006b:169 (Russia: Primorskiy Kray: Kedrovaya Pad' Nature Reserve); Ohkusa, 2006a:25 (Japan: Honshu: Gifu Prefecture); Haneda, 2008:11, 13 (in key to Japanese Crabroninae); Ohkusa and Tajima, 2008:75 (Japan: central Honshu: Aichi Prefecture); S. Takahashi and Haneda, 2008a:59 (Japan: Hokkaido: Sapporo); Nemkov, 2008b:23 (in catalog of Crabronidae of Asiatic Russia), 2009b:124 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:237 (Russia: Primorskiy Kray: Lazovsky Nature Reserve); S. Takahashi and Haneda, 2009:26 (Japan: Hokkaido: Sapporo); S. Takahashi, Haneda, and Tano, 2009:52 (distribution in Japan); Nemkov, 2012c:444 (in catalog of Crabronidae of Russian Far East); J.-K. Kim, 2014:432 (in catalog of Sphecidae *sensu lato* of Korean Peninsula); Antropov, 2017b:234 (in catalog of Crabroninae of Russia); Jacobs and Liebig, 2018:143 (Russia: Primorskiy Kray: Dal'negorsk, Poshiga, and Ussuriyskiy Nature Reserve); Kurokawa, Tano, and Murota, 2019:40 (Japan: Gifu Prefecture: Gero City).

Crabro aberrans Gussakovskij, 1932:17, ♂. Holotype: ♂, Russia: Primorskiy Kray: Sedanka (Stockholm). Synonymized with *Lestica collaris* by Leclercq, 1954c:291.

ssp. *maculata* Tsuneki

Lestica collaris maculata Tsuneki, 1977c:20, ♀. Holotype: ♀, Taiwan: Nantou Prefecture: Pempuchi (T. Tano coll.). – Hua, 2006:280 (in list of Chinese insects, geographic distribution); Yue, Q. Li, and L. Ma, 2022:397 (in key to *Lestica* of China).

12. *combinata* Leclercq

Lestica combinata Leclercq, 1963:55, ♀. Holotype: ♀, Philippines: Mindanao: Iligan (USNM). – Baltazar, 1966:358 (in catalog of Hymenoptera of Philippines); Leclercq, 1972d:679 (Philippines, description of ♂); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Tsuneki, 1984f:27 (bibliographic reference), 46 (in key to Crabronini of Philippines).

13. *compacta* (Kohl)

Crabro compactus Kohl, 1915:132, ♂. Holotype: ♂, southwestern Iran: no specific locality (BMNH). – **As *Lestica compacta***: Leclercq, 1954c:291 (new combination, in catalog of world Crabronini); R. Bohart and Menke, 1986:431 (in checklist of world Sphecidae); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:50 (Iran: known from southwestern Iran).

14. *confluenta* (Say)

Solenius interruptus Lepeletier de Saint Fargeau and Brullé, 1835:716, ♀, junior secondary homonym of *Crabro interruptus* Fabricius, 1787, now in *Palarus*; and of *Thyreopus interruptus* Lepeletier de Saint Fargeau and Brullé,

- 1835:755, now in *Crabro*. Holotype or syntypes: ♀, Pennsylvania: Philadelphia (MNHN or M. Spinola collection., Torino). – Lepeletier de Saint Fargeau, 1845:122 (in revision of world Hymenoptera); Cresson, 1862:236 (in catalog of North American Hymenoptera), 1887:285 (in catalog of North American Hymenoptera); Ashmead, 1899d:173 (new combination, in checklist of North American Crabronidae); J. Smith, 1900:514 (in list of insects of New Jersey); Harrington, 1902:218 (Canada: Ontario: Ottawa); Faull, 1913:384 (Canada: Toronto region); Rohwer, 1916b:665 (in catalog of Hymenoptera of Connecticut); Mickel, 1918b:377 (in catalog of Nebraskan Sphecidae); Rohwer *in Viereck*, 1925:665 (in key to Sphecidae of Connecticut; New Haven, North Haven, Sachem's Head, Scotland, and Stafford); Rau, 1922:19 (Missouri: Saint Louis); Blackman and Stage, 1924:195 (New York: Syracuse, nesting in dead wood of hickory); Brues, 1927:82 (Massachusetts: Petersham, nesting in wood); J.Ch. Bradley, 1928:1020 (in catalog of New York Sphecidae); Rau, 1928b:378 (nesting in stems of *Catalpa*, Bignoniaceae); Krombein, 1936:99 (New York: Buffalo; floral records); Casolari and Casolari Moreno, 1980:119 (specimens in M. Spinola collection, Torino).
- **As *Crabro interruptus***: Dahlbom, 1845:387 (new combination, original description copied), 528 (unknown to author, but probably belonging to *Crabro* s.s.); Packard, 1866:74 (in revision of North American Crabroninae and Nysosoninae); Provancher, 1882:101 and 1883b:654 (in revision of Canadian Hymenoptera); C. Robertson, 1892:106 (visiting flowers of *Pycnanthemum muticum* Pers., Lamiaceae), 107 (visiting flowers of *Pycnanthemum linifolium* Ph., Lamiaceae), 1894:439 (visiting flowers of *Geum album* Gmelin, Rosaceae), 454 (visiting flowers of *Solidago missouriensis* Nutt., Asteraceae), 1894:455 (visiting flowers of *Solidago canadensis* Linnaeus, Asteraceae), 457 (visiting flowers of *Solidago nemoralis* Ait., Asteraceae), 464 (visiting flowers of *Parthenium integrifolium* Linnaeus, Asteraceae), 476 (visiting flowers of *Krigia amplexicaulis* Nutt., Asteraceae); W. Fox, 1895a:136 (in revision of North American Crabronini); C. Robertson, 1896:72 (visiting flowers of *Polygonum pennsylvanicum* Linnaeus, Polygonaceae); Dalla Torre, 1897:606 (in catalog of world Sphecidae); Bridwell, 1899:209 (Kansas: Baldwin); G. Peckham and E. Peckham, 1905:102 (nest and prey: moths); Snow, 1906:9 (Arizona: Oak Creek 20 mi. southwest of Flagstaff); H. Smith, 1908b:402 (in revision of Nebraskan Sphecidae); Hungerford and Williams, 1912:248 (nesting habits); Stevens, 1917:423 (North Dakota); Brimley, 1938:449 (North Carolina: Biltmore, Greensboro, Havelock, Marion, Raleigh, Swannanoa, Waynesville); Bradley, 1957:46 (type in Turin); Piek and Spanjer, 1986:183 (in list of Sphecidae with known prey). – **As *Lestica interrupta***: Pate, 1947a:13 (new combination, bibliographic references, as *interrupta interrupta*); Strickland, 1947:127 (Canada: Alberta: Lethbridge); Leclercq, 1949a:17 (Canada: no specific locality); Krombein *in* Muesebeck, Krombein, and Townes, 1951:1028 (in catalog of North American Hymenoptera, as *interrupta interrupta*); K. Cooper, 1953:34 (Massachusetts: Island of Penikese); Leclercq, 1954c:293 (in catalog of world Crabronini), 324 (nest and prey records); Horning and Barr, 1970:106 (Idaho: Craters of the Moon National Monument); Leclercq, 1972d:681 (synonymy); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator).
- Crabro confluentus* Say, 1837:376, ♀, ♂. Syntypes: Indiana: no specific locality (lost). Synonymized with *Crabro interruptus* by F. Smith, 1856:417 and with *Lestica interrupta* by Pate, 1947a:13. – F. Smith, 1856:420 (in catalog of Hymenoptera in British Museum); Le Conte, 1859b:758 (original description copied; name corrected to *confluens*); Cresson, 1862:235 (in catalog of North American Hymenoptera). – **As *Lestica confluens***: R. Bohart and Menke, 1976:431 (new combination, in checklist of world Sphecidae); Krombein, 1979b:1683 (in catalog of North American Hymenoptera, nesting sites); Finnamore, 1982:195 (in Sphecid Fauna of Southern Quebec); Ahlstrom, 1995:111 (in checklist of insects of North Carolina); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Buck, 2004:27 (in checklist of Crabronidae of Ontario, Canada); Leclercq, 2006d:216 (in key to New World *Lestica*, bibliographic and locality records); Ratzlaff, 2016:25 (Canada: British Columbia: from Leclercq, 2006); Buck and Bennett, 2025:213 (in checklist of Sphecidae sensu lato of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Ontario, Quebec, Saskatchewan, first records from Manitoba, New Brunswick, and Nova Scotia: no specific locality).
- Crabro dubius* F. Smith, 1856:417. Substitute name for *Crabro interruptus* (Lepeletier and Brullé, 1835) F. Smith, 1856:417.

- Crabro confluens* Le Conte, 1859b:758 (unjustified emendation of *Crabro confluentus* Say, 1837).
- Crabro bellus* Cresson, 1865b:481, ♀. Holotype: ♀, Colorado Territory: no specific locality (ANSP). Synonymized with *Lestica confluenta* by R. Bohart in R. Bohart and Menke, 1976:431. – Packard, 1866:77 (listed); Cresson, 1887:284 (in catalog of North American Hymenoptera); Ashmead, 1890:32 (in checklist of Hymenoptera of Colorado); W. Fox, 1895a:137 (in revision of North American Crabronini); Dalla Torre, 1897:584 (in catalog of world Sphecidae); Kincaid, 1900a:354 (Oregon: Corvallis; Washington: Olympia); Snow, 1906:9 (Arizona: Oak Creek 20 mi. southwest of Flagstaff); Rohwer, 1908b:246 (Colorado), 258 (in key to *Crabro* of Colorado and New Mexico); Cresson, 1916:102 (holotype in ANSP). – **As *Solenius bellus***: Ashmead, 1899d:173 (new combination, in checklist of North American Crabronidae); Mickel, 1918b:377 (in catalog of Nebraskan Sphecidae); Rau, 1922:19 (Missouri: St. Louis). – **As *Lestica interrupta bella***: Pate, 1947a:14 (new combination, new status, listed); Krombein in Muesebeck, Krombein, and Townes, 1951:1028 (in catalog of North American Hymenoptera); Leclercq, 1954c:294 (in catalog of world Crabronini); Evans, 1970:492 (Wyoming: Jackson Hole).
- Crabro atrifrons* Cresson, 1865b:483, ♂. Holotype: ♂, Colorado: no specific locality (ANSP), see Cresson, 1916:102. Synonymized with *Lestica interrupta bella* by Krombein in Muesebeck, Krombein, and Townes, 1951:1028. – Packard, 1866:77 (in revision of North American Crabroninae and Nyssoninae); Cresson, 1887:284 (in catalog of North American Hymenoptera); Ashmead, 1890:32 (in checklist of Hymenoptera of Colorado); Cresson, 1916:102 (holotype in ANSP).
- Crabro eburneus* Taschenberg, 1875:383, ♂. Holotype: ♂, "America meridionalis": no specific locality (Halle). Synonymized with *Lestica interrupta* by Leclercq, 1972d:681. – **As *Lestica eburnea***: Leclercq, 1951c:172 (new combination, study of holotype), 1954c:295 (in catalog of world Crabronini).
- Crabro cinctibellus* Viereck, 1908:401, ♀, ♂. Holotype: ♀, Arizona: Coconino County: Oak Creek Canyon (Kansas Univ.). Synonymized with *Lestica confluenta* by R. Bohart in R. Bohart and Menke, 1976:431. – LaBerge, 1956:526 (syntypes in Snow Entomological Museum). – **As *Lestica cinctibella***: Krombein in Muesebeck, Krombein, and Townes, 1951:1028 (new combination, in catalog of North American Hymenoptera); Leclercq, 1954c:294 (in catalog of world Crabronini).
- Crabro opwana* Rohwer, 1908b:248, ♂ (noun in apposition). Syntypes: Colorado: Florissant (USNM). Synonymized with *Lestica interrupta bella* by Pate, 1947a:14. – Rohwer, 1908b:259 (in key to *Crabro* of Colorado and New Mexico).
- Crabro townsendi* Rohwer, 1911b:563, ♀. Holotype: ♀, Mexico: Meadow Valley (USNM). Synonymized with *Lestica interrupta bella* by Pate, 1947a:14.
- Crabro planaris* Mickel, 1916a:427, ♂. Holotype: ♂, Nebraska: Sioux County: Monroe Canyon (UNL). Synonymized with *Lestica confluenta* by R. Bohart in R. Bohart and Menke, 1976:431. – **As *Solenius planaris***: Mickel, 1918b:377 (new combination, in catalog of Nebraskan Sphecidae); Muma, 1952:18 (type in UNL). – **As *Lestica planaris***: Krombein in Muesebeck, Krombein, and Townes, 1951:1028 (new combination, in catalog of North American Hymenoptera); Leclercq, 1954c:294 (in catalog of world Crabronini).
- Solenius seamansi* W. Carter, 1925:135, ♂. Holotype: ♂, Canada: Alberta: Waterston Lakes (CNC). Synonymized with *Lestica confluenta* by R. Bohart in R. Bohart and Menke, 1976:431. – Krombein in Muesebeck, Krombein, and Townes, 1951:1029 (new combination, in catalog of North American Hymenoptera); Sarazin, 1986:306 (holotype in CNC). – **As "*Solenius*" *seamansi***: Strickland, 1947:128 (new combination, Canada: Alberta: Waterton).

15. *consolator* Leclercq

- Lestica consolator* Leclercq, 1963:49, ♂. Holotype: ♂, Malaysia: Borneo: Sandakan (USNM). – R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae).

16. *constricta* Krombein

As *Crabro quadriceps*: Yasumatsu, 1939d:153 (Palau Islands, description of ♂) and 1942:83 (eastern China, Taiwan), corrected to *Lestica constricta* by Krombein, 1949b:389; Townes, 1946:51 (Palau Islands), corrected to *Lestica constricta* by Tsuneki, 1949b:389.

Lestica constricta Krombein, 1949b:389, ♀, ♂. Holotype: ♂, Philippines: Palau Islands: Island of Koror (USNM). – Krombein, 1949b:381 (in key to Sphecidae of Micronesia); Leclercq, 1954c:293 (in catalog of world Crabronini), 1956c:5 (Philippines), 1958c:81 (in key to South-East Asian *Lestica*), 1963:48 (Philippines; description of ♂); Baltazar, 1966:358 (in catalog of Hymenoptera of Philippines); Tsuneki, 1966d:1 (listed from Taiwan), 1968g:27 (Taiwan), 33 (in key to Crabronini of Taiwan and Ryukyus); Leclercq, 1972d:678 (Philippines); Marshakov, 1975a:155 (in key to *Lestica* of USSR), 162 (in revision of *Lestica* of USSR: Russia: Primorskiy Krai); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Tsuneki, 1984b:47 (Philippines), 1984f:46 (in key to Crabronini of Philippines); Radović, 1985:65 (sting apparatus analyzed); Tsuneki et al., 1992ba:42 (Philippines: Mindanao); Porter, Stange, and Wang, 1999:13 (in checklist of Sphecidae of Taiwan); Antropov, 2017b:234 (in catalog of Crabroninae of Russia); Terayama, 2020:17 (Micronesia: Palau); Yue, Q. Li, and L. Ma, 2022:397 (in key to *Lestica* of China).

17. *cubensis* (Cresson)

Crabro cubensis Cresson, 1865a:152, ♀. Lectotype: ♀, Cuba: no specific locality (ANSP), designated by Cresson, 1916:103. – Packard, 1866:81 (listed); Dalla Torre, 1897:595 (in catalog of world Sphecidae); Ashmead, 1900:305 (in checklist of Caribbean Hymenoptera). – As *Lestica cubensis*: Pate, 1947f:29 (new combination, in revision of Caribbean Crabronini, description of ♂); Leclercq, 1954c:294 (in catalog of world Crabronini); Alayo Dalmau, 1968b:17 (in revision of Cuban Sphecidae), 1973:194 (in catalog of Cuban Hymenoptera), 1976:33 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); de Zayas, 1981:81 (Cuba); Amarante, 2002:30 (in catalog of Neotropical Crabronidae); Fernández, Saríol, Vega, Ricardo, González, and Portuondo, 2002:46 (Cuba: Provincia Granma); Genaro, 2006:54 (in checklist of Cuban Sphecidae and Crabronidae; also: Isla de la Juventud); Leclercq, 2006d:216 (in key to New World *Lestica*, bibliographic and locality records).

18. *dasymera* Pate

Lestica dasymera Pate, 1948c:160, ♂ (as *dasymerus*, incorrect original termination). Holotype: ♂, Nigeria: Lagos: Oloke-Meji to Ibadan (USNM). – Leclercq, 1954c:292 (in catalog of world Crabronini, as *dasymerus*); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Jacobs, 2025:242 (taxonomic history).

19. *eurypus* (Kohl)

Crabro eurypus Kohl, 1898a:358, ♂. Holotype: Armenia: no specific locality (NHMW). – Kohl, 1915:127 (in revision of Palearctic Crabronini). – As *Lestica eurypus*: Leclercq, 1954c:292 (new combination, in catalog of world Crabronini); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Leclercq, 1993c:36 (known only from holotype from Armenia); Dollfuss, 2004b:780 (Turkey: Mezikaran Gecidi 20 km east of Gurun); Ljubomirov and Yildirim, 2008:284 (in catalog of Crabroninae of Turkey); Yildirim, Ljubomirov, and Lelej, 2014:15 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:145 (in checklist of Hymenoptera of Turkey); Kaplan and Yildirim, 2021:55 (in catalog of Crabronidae of Turkey); Kaplan and Yildirim, 2023:1684 (in checklist of Sphecidae *sensu lato* of Turkey).

20. *florkini* Leclercq

Lestica florkini Leclercq, 1956c:1, ♀. Holotype: ♀, Mexico: Veracruz: Orizaba (FSAG). – Leclercq, 1972d:681 (Mexico, Costa Rica); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Dollfuss, 1989:10 (paratype in NHMW); Amarante, 2002:30 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae, as *florquini*); Leclercq, 2006d:216 (in key to New World *Lestica*), 217 (bibliographic and locality records), 2007g:194 (holotype in FSAG).

ssp. *colorata* Leclercq

Lestica florkini var. *colorata* Leclercq, 1956:4. Holotype: ♀, Mexico: Guerrero: Tierra Colorada (BMNH). – **As *Lestica florkini colorata***: Leclercq, 2006d:216 (in key to New World *Lestica*), 217(new status, bibliographic and locality records).

21. *formosana* Tsuneki

Lestica formosana Tsuneki, 1977j:285, ♀. Holotype: ♀, Taiwan: Kosempo (TMB). – Hua, 2006:280 (in list of Chinese insects, geographic distribution); Yue, Q. Li, and L. Ma, 2022:397 (in key to *Lestica* of China).

22. *fulvipes* Tsuneki

Lestica fulvipes Tsuneki, 1977j:287, ♀. Holotype: ♀, Taiwan: Kosempo (TMB). – Hua, 2006:280 (in list of Chinese insects, geographic distribution); Yue, Q. Li, and L. Ma, 2022:397 (in key to *Lestica* of China).

23. *hentona* Tsuneki

Lestica hentona Tsuneki, 1990a:95, ♀, ♂. Holotype: ♀, Japan: Okinawa: Hentona (originally K. Tsuneki coll., now Hyogo Mus.). – Tano, 1994a:7 (holotype in K. Tsuneki collection); Hashimoto and Nakanishi, 1997:17 (holotype transferred to Hyogo Mus.); Haneda, 2008:11, 13 (in key to Japanese Crabroninae); S. Takahashi, Haneda, and Tano, 2009:43, 54 (distribution in Japan).

24. *heros* (Kohl)

Crabro heros Kohl, 1915:120, ♀. Holotype or syntypes: ♀, Korea: no specific locality (NHMW). – Iwata, 1938d:84 (Japan: Hokkaido, description of ♂); Tsuneki, 1947d:286 (Korea), 1947e:407 (Japan: Hokkaido), 1948c:4 (Japan: Hokkaido). – **As *Lestica heros***: Tsuneki, 1952c:66 (new combination, Japan: Shikoku); Leclercq, 1954c:293 (in catalog of world Crabronini); Tsuneki and Tanaka, 1955b:25 (Japan: near Nikko 120 km northwest of Tokyo); Tsuneki, 1960g:28 (nesting habits); Tsuneki, Iida, Hirai, and Sabi, 1964:60 (Japan: Aomori Prefecture: Towada); Haneda, 1968a:47 (Japan), 1968b:56 (Japan: Nagano Prefecture: Ina District); Okuno, 1968:31 (Japan); Itami, 1969:51 (Japan: Niigata Prefecture), 1971:28 (Japan: new locality records); Marshakov, 1975a:156, 157 (in key to *Lestica* of USSR), 161 (in revision of *Lestica* of USSR: Russia: Primorskiy Krai); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Tsuneki, 1982b:17 (known from Korea); Paik, 1985:200 (in list of Sphecidae *sensu lato* of Korea); Steiner, 1986:108 (references to publications on nesting habits); Dollfuss, 1989:10 (type material in NHMW); Nemkov *in* Nemkov, Kazenas, Budrys, et Antropov, 1995:452, 453 (in key to Sphecidae *sensu lato* of Russian Far East); Haneda, 2008:10, 11 (in key to Japanese Crabroninae); Nemkov, 2008b:23 (in catalog of Crabronidae of Asiatic Russia), 2009b:124 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); S. Takahashi, Haneda, and Tano, 2009:44, 54 (distribution in Japan); Nemkov, 2012c:444 (in catalog of Crabronidae of Russian Far East); J.-K. Kim, 2014:432 (in catalog of Sphecidae *sensu lato* of Korean Peninsula); Antropov, 2017b:234 (in catalog of Crabroninae of Russia).

25. *indonesica* Leclercq

Lestica indonesica Leclercq, 1958c:82, ♀. Holotype: ♀, Indonesia: Sumatra: Anaikloof (RMNH). – Leclercq, 1958c:81 (in key to South-East Asian *Lestica*); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae).

26. *joseana* Leclercq

Lestica joseana Leclercq, 2006d:217, ♀. Holotype: ♀, Costa Rica: San José (Univ. Kansas).

27. *krombeini* Tsuneki

Lestica krombeini Tsuneki, 1983h:26, ♀ (subgenus *Solenius*). Holotype: ♀, Papua New Guinea: Morobe Province: Nadzab: Markham (USNM). – Nuhn and Menke, 1994:26 (holotype in USNM).

28. *lieftincki* Leclercq

Lestica lieftincki Leclercq, 1958c:83, ♀, ♂. Holotype: ♀, Indonesia: western Java: Tjisarna, Mount Panggerango (RMNH). – Leclercq, 1958c:82 (in key to South-East Asian *Lestica*); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae).

Lestica lieftincki var. *peraki* Leclercq, 1958c:85, ♀. Holotype: ♀, Malaysia: Perak: Batang Padang (BMNH). Synonymized with *Lestica lieftincki* by R. Bohart and Menke, 1976:431. – Leclercq, 1963:57 (northeastern Borneo).

29. *luzonia* Leclercq

Lestica luzonia Leclercq, 1963:57, ♀. Holotype: ♀, Philippines: Island of Luzon: Mount Makiling (USNM). – Baltazar, 1966:358 (in catalog of Hymenoptera of Philippines); Leclercq, 1972d:680 (Philippines, description of ♂); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Tsuneki, 1984f:26 (bibliographic reference), 46 (in key to Crabronini of Philippines).

30. *moluca* Leclercq

Lestica molucca Leclercq, 1956c:5, ♀. Holotype: ♀, Indonesia: Amboina (NHMW). – Leclercq, 1958c:82 (in key to South-East Asian *Lestica*); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Dollfuss, 1989:10 (holotype in NHMW).

31. *okinawana* Tsuneki

Lestica okinawana Tsuneki, 1990a:93, ♂. Holotype: ♂, Japan: Okinawa: Kunigami Mura, Yona (originally K. Tsuneki coll., now Hyogo Mus.). – Tano, 1994a:7 (holotype in K. Tsuneki collection); Hashimoto and Nakanishi, 1997:17 (holotype and paratype transferred to Hyogo Mus.); Yamane, Ikudome, and Terayama, 1999:507 (in Identification Guide to Crabronidae of Nansei = Ryukyu Islands, Japan); Haneda, Nozaka, Tano, Kurokawa, H. Murota, and T. Murota, 2007:54 (Japan: Kagoshima Prefecture: Amami Oshima Islands); Haneda, 2008:11, 13 (in key to Japanese Crabroninae); Murota and Kurokawa, 2009:15 (Japan: Ryukyu Archipelago: Amami Oshima Islands); S. Takahashi, Haneda, and Tano, 2009:43, 54 (distribution in Japan).

32. *plumata* Leclercq

Lestica plumata Leclercq, 1963:53, ♀, ♂. Holotype: ♂, Indonesia: Borneo: Sandakan (USNM). – R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae).

33. *pluschtschewskyi* (F. Morawitz)

Crabro pluschtschewskyi F. Morawitz, 1891a:229, ♀, ♂ (as *Pluschtschewskyi*, incorrect original capitalization). Syntypes: European Kazakhstan: Ryn-Peski (ZIN). – Dalla Torre, 1897:618 (in catalog of world Sphecidae); Kohl, 1915:122 (in revision of Palearctic Crabronini); Giner Marí, 1934:136 (Spain), 1943a:234 (in Sphecid Fauna of Spain); Ceballos, 1956:395 (in catalog of Sphecidae of Spain), 1959:231 (in supplement to catalog of Spanish Sphecidae). – **As *Thyreus pluschtschewskyi***: Dusmet y Alonso, 1935:49 (new combination, Spain: Madrid: Montarco and Vaciamadrid). – **As *Lestica pluschtschewskyi***: Leclercq, 1949a:17 (new combination; Kazakhstan: Semipalatinsk, now Semey), 1954c:292 (in catalog of world Crabronini); Kazenas, 1971:161 (in Kazakhstan found only in southeastern mountains); Leclercq, 1971:224 (Spain); Kazenas, 1972b:169 (Kazakhstan); Marshakov, 1975a:155, 157 (in key to *Lestica* of USSR), 158 (in revision of *Lestica* of USSR); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Pulawski, 1978:268, 269 (in key to Sphecidae of European part of USSR); Mityaev, Matesova, Kulenova, Kazenas, and Zhdanko, 1980:118 (Russia: Siberia: Altayskiy Kray: basin of Aley River); Bitsch and Leclercq, 1993:196 (in revision of western European Crabroninae); Leclercq, 1993c:37 (not collected in Spain after 1922); Esenbekova and Kazenas, 2000:55 (southeastern Kazakhstan: no specific locality); Kazenas, 2001b:43 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:111 (geographic distribution, collecting localities in Kazakhstan), 2004d:34 (Kazakhstan: Ryn-Peski, shores of Ural River); Yildirim and Ljubomirov, 2005:1795 (first records from Turkey: Erzurum: Konakli, Horasan, Olur, and Tortum); Kazenas, 2007a:92 (Kazakhstan: Akmala Oblast': Kur-gandzhin Nature Reserve and vicinity); Ljubomirov and Yildirim, 2008:283 (in catalog of Crabroninae of Turkey);

Baghirov, 2010:678 (Russia: Altai Territories: village Kosh-Agach); Rudoiskatel', 2010:158 (Russia: southern Ural Mountains); Baghirov, 2011b:147 (Russia: Altay Republic: Kosh-Agach); Kazenas, 2012b:170 (Kazakhstan: Korgalzhin State Nature Reserve); Yıldırım, Ljubomirov, and Lelej, 2014:15 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:145 (in checklist of Hymenoptera of Turkey); Antropov, 2017b:234 (in catalog of Crabroninae of Russia); Fresno, 2017:195 (Spain: Madrid: Tiernes and Titulcia); Bitsch and Leclercq *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:117 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yıldırım, 2021:53 (in catalog of Crabronidae of Turkey), 2023:1684 (in checklist of Sphecidae *sensu lato* of Turkey).

34. *primitiva* Leclercq

Lestica primitiva Leclercq, 1958c:85, ♀. Holotype: ♀, Indonesia: Island of Bangka: Mount Menuambing (RMNH). – Leclercq, 1958c:82 (in key to South-East Asian *Lestica*); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae).

35. *producticollis* (Packard)

Crabro producticollis Packard, 1866:76, ♂. Lectotype: ♂, New Jersey: no specific locality (ANSP), designated by Cresson, 1928:55. – Cresson, 1887:285 (in catalog of North American Hymenoptera); W. Fox, 1895a:138 (in revision of North American Crabronini); Dalla Torre, 1897:619 (in catalog of world Sphecidae); Kincaid, 1900a:354 (Washington: Olympia, Seattle, Island of Whidby); J. Smith, 1910:681 (in new list of insects of New Jersey); Stevens, 1917:423 (North Dakota); Brimley, 1938:449 (North Carolina: Mount Mitchell). – *As Solenius producticollis*: Ashmead, 1899d:173 (new combination, in checklist of North American Crabronidae); J. Smith, 1900:514 (in list of insects of New Jersey); Harrington, 1902:218 (Canada: Ontario: Ottawa); Britton, 1920:339 (in checklist of insects of Connecticut); Rohwer *in* Viereck, 1925:665, 666 (in key to Sphecidae of Connecticut, New Haven); J.Ch. Bradley, 1928:1020 (in catalog of New York Sphecidae); A. Brown, 1934:265 (Canada: Ontario: Timagami); Krombein, 1936:99 (New York: Buffalo; floral records). – *As Lestica producticollis*: Strickland, 1947:127 (new combination, Canada: Alberta); Krombein, 1951a:143 (Virginia: Dunn Loring; visiting tulip-tree honeydew); Krombein *in* Muesebeck, Krombein, and Townes, 1951:1028 (new combination, in catalog of North American Hymenoptera); Krombein, 1952a:96 (Virginia: Westmoreland State Park), 1952b:184 (West Virginia: Lost River State Park), 1953a:338 (North Carolina), 1953b:122 (visiting foliage of *Quercus marilandica* Münchhausen, Fagaceae), 123 (visiting foliage of *Liquidambar styraciflua* Linnaeus, Altingiaceae), 134 (North Carolina: Kill Devil Hills), 1954a:7 (West Virginia: Lost River State Park); Leclercq, 1954c:294 (in catalog of world Crabronini); Krombein, 1963f:279 (Maryland: Plummers Island near Washington, D.C.); Steiner, 1973:30 (Canada: Northwest Territories); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); L. Davis, 1978:217 (North Carolina: Kill Devil Hills, data from Krombein, 1953a); Krombein, 1979b:1683 (in catalog of North American Hymenoptera); Finnamore, 1982:197 (in Sphecid Fauna of Southern Quebec); Ahlstrom, 1995:111 (in checklist of insects of North Carolina); Finnamore, 1997:894 (expected to occur in Yukon); Sugar *et al.*, 1998:16 (Canada: southern Ontario); Skevington *et al.*, 2001:128 (Canada: Ontario: Lambton County); Buck, 2004:27 (Canada: in checklist of Crabronidae of Ontario); Dollfuss, 2004b:780 (Washington: Prosser); Leclercq, 2006d:216 (in key to New World *Lestica*), 217 (bibliographic and locality records); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 45 (Mexico: Tamaulipas); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:382 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo); Ratzlaff, 2016:25 (Canada: British Columbia: from Leclercq, 2006); Buck and Bennett, 2025:213 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Alberta, British Columbia, Northwest Territories, Nova Scotia, Ontario, Quebec, first records from Manitoba, New Brunswick, and Saskatchewan: no specific locality).

Crabro quadrimaculatus Provancher, 1882:102, ♀ (as *4-maculatus*, incorrect original spelling), junior primary homonym of *Crabro quadrimaculatus* Fabricius, 1793. Lectotype: ♀, Canada: no specific locality (Laval Univ.), designated by

Gahan and Rohwer, 1917:391. Synonymized with *Lestica producticollis* by Krombein in Muesebeck, Krombein, and Townes, 1951:1028.

Crabro quadrimaculatus Provancher, 1883:654, ♀ (as *4-maculatus*, incorrect original spelling and hyphenation), junior primary homonym of *Crabro quadrimaculatus* Fabricius, 1793. Objective synonym of *Crabro quadrimaculatus* Provancher, 1882. – Gahan and Rohwer, 1917:392 (study of type).

36. *pygidialis* (Pérez)

Ceratocolus pygidialis Pérez, 1905a:154, ♀, ♂. Syntypes: Japan: no specific locality but presumably Tokyo area (MNHN). – Pérez, 1905a:26 (in list of aculeates collected in central Japan); Kohl, 1915:133 (original description copied). – As *Lestica pygidialis*: Leclercq, 1954c:292 (new combination, in catalog of world Crabronini); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae).

37. *reiteri* (Kohl)

Crabro reiteri Kohl, 1915:119, ♀ (as *Reiteri*, incorrect original capitalization). Holotype or syntypes: ♀, Japan: Tokyo (NHMW). – Tsuneki, 1948c:4 (Japan: Hokkaido). – As *Thyreus reiteri*: Iwata, 1933b:11 (new combination, collecting localities from Japan). – As *Lestica reiteri*: Tsuneki, 1952c:66 (new combination, Japan: Shikoku); Leclercq, 1954c:295 (in catalog of world Crabronini); Tsuneki and Tanaka, 1955b:25 (Japan: near Nikko 120 km southwest of Toyo); Tsuneki, 1960g:31 (nesting habits); Tsuneki and Shimoyama, 1963:49 (Japan: Towada Prefecture); Tsuneki, 1967g:44 (western Japan: Mount Hyonoson); Haneda, 1968b:56 (Japan: Nagano Prefecture: Ina District); T. Iida, 1968:22 (Japan); Itami, 1968a:16 (Japan: Yamagata Prefecture: foot of Mount Iide); Tano, 1968:35 (Japan); Haneda, 1969:70 (Japan: Yamanashi Prefecture); Itami, 1969:51 (Japan: Niigata Prefecture); Tsuneki, 1969e:27 (Japan: specimens in Osaka Museum of Natural History), 1970:11 (central Japan); Haneda, 1972c:59 (Japan: Fukui Prefecture); Nambu, 1972e:91 (Japan: Saitama Prefecture), 1973a:153 (Japan: Saitama Prefecture); Marshakov, 1975a:157 (in key to *Lestica* of USSR), 162 (in revision of *Lestica* of USSR; Russia: Primorskiy Krai); Nambu 1975b:74 (Japan: Saitama Prefecture); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Tsuneki, 1982b:9 (Korea), 17 (known from Korea); Paik, 1985:201 (in list of Sphecidae *sensu lato* of Korea); Dollfuss, 1989:10 (type material in NHMW); Nemkov in Nemkov, Kazenas, Budrys, et Antropov, 1995:452, 453 (in key to Sphecidae *sensu lato* of Russian Far East); Haneda, 2003:4 (Japan: Nagasaki Prefecture: Tsushima); Haneda and Tano, 2003:12 (Japan: Nagasaki Prefecture: Tsushima); Tano, Kurokawa, Murota, and Nozaka, 2003:32 (Japan: Nagasaki Prefecture: Tsushima); Haneda, Nosaka, Tano, Kurokawa, and Murota, 2004:36 (Japan: Gifu Prefecture); Suda, 2004:45 (Japan: Yamanashi Prefecture); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2005:52 (Japan: Gifu Prefecture); Negoro, Haneda, and Tano, 2005:48 (Japan: Toyama Prefecture); Haneda, Nozaka, Tano, Kurokawa, and Murota, 2006a:28 (Japan: Toyama Prefecture), 2006b:49 (Japan: Nagasaki Prefecture: Tsushima); Haneda, 2008:10, 13 (in key to Japanese Crabroninae); S. Takahashi and Haneda, 2008a:59 (Japan: Hokkaido: Sapporo); Nemkov, 2008b:23 (in catalog of Crabronidae of Asiatic Russia), 2009b:124 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2009c:237 (Russia: Primorskiy Krai: Lazovsky Nature Reserve); S. Takahashi and Haneda, 2009:26 (Japan: Hokkaido: Sapporo); S. Takahashi, Haneda, and Tano, 2009:54 (distribution in Japan); Ohkusa and Tajima, 2010:13 (Japan: Island of Honshu: Shiga Prefecture); Nemkov, 2012c:444 (in catalog of Crabronidae of Russian Far East); J.-K. Kim, 2014:433 (in catalog of Sphecidae *sensu lato* of Korean Peninsula); Antropov, 2017b:234 (in catalog of Crabroninae of Russia); Jacobs and Liebig, 2018:143 (Russia: Primorskiy Krai: Lazo); Kurokawa, Tano, and Murota, 2019:40 (Japan: Gifu Prefecture: Gero City).

Crabro reiteri subsp. *kuramaensis* Iwata, 1938d:83, ♀. Holotype: ♀, Japan: Hokkaido: Jozankei (Hokkaido Univ.). Synonymized with *Lestica reiteri* by Tsuneki, 1952c:66. – As *Crabro reiteri kuramaensis*: Iwata, 1941a:3 (nest, prey: adult *Lamprystica igneola*, a glyhipterid moth); Tsuneki, 1947d:285 (Korea, as *kuramensis*), 1947e:402 (Japan: Hokkaido, description of ♂, as *kuramensis*); Leclercq, 1954c:324 (nest and prey records).

38. *relicta* Leclercq

Lestica relicta Leclercq, 1951c:169, ♀. Holotype: ♀, Australia: no specific locality (MHNG). – Leclercq, 1954c:293 (in catalog of world Crabronini), 1958c:80 (in key to South-East Asian *Lestica*); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Cardale, 1985:277 (in catalog of Australian Sphecidae).

39. *robustispinosa* Yue and L. Ma

Lestica robustispinosa Yue and L. Ma in Yue, Q. Li, and L. Ma, 2022:392, ♀. Holotype: ♀, China: Xinjiang: Yili at 43°55'19"N 81°19'4"E (Yunnan Agricultural University, Kunming, China). – Yue, Q. Li, and L. Ma, 2022:397 (in key to *Lestica* of China).

40. *rufigaster* Tsuneki

Lestica rufigaster Tsuneki, 1984a:7, ♀, ♂. Holotype: ♂, Japan: Ogasawara (= Bonin) Islands: Island of Hahadzima: Kirihama (originally K. Tsuneki coll., now Hyogo Mus.). – Tano, 1994a:7 (holotype in K. Tsuneki collection); Hashimoto and Nakanishi, 1997:17 (holotype transferred to Hyogo Mus.); Takahashi and Shimizu, 2001:13 (Japan: Ogasawara Islands: Haha-Jima); Haneda, 2008:10, 11 (in key to Japanese Crabroninae); S. Takahashi, Haneda, and Tano, 2009:43, 54 (distribution in Japan); Takahashi, 2010:19 (Japan: in list of Hymenoptera of Ogasawara = Bonin islands); Hisasue, 2022:43 (Japan: Ogasawara Islands: new record from Haha-jima Island).

41. *sculpturata* (F. Smith)

Crabro sculpturatus F. Smith, 1873b:103, ♀. Holotype or syntypes: ♀, Brazil: Ega, now Tefé (BMNH). – Dalla Torre, 1897:631 (in catalog of world Sphecidae, as *sulphuratus*). – **As *Lestica sculpturata***: Leclercq, 1950e:17 (new combination), 1954c:295 (in catalog of world Crabronini), 1956c:4 (redescription; Brazil: Para, Rio de Janeiro), 1972d:682 (in key), 683 (Colombia, Guyana, Peru; variation); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Amarante, 2002:30 (in catalog of Neotropical Crabronidae); Leclercq 2006d:215 (in key to New World species), 217 (bibliographic and locality records); Rasmussen and Asenjo, 2009:9 (in checklist of Crabronidae of Peru).

ssp. *constanceae* (Cameron)

Crabro constanceae Cameron, 1891a:149, ♀, ♂. Syntypes: Mexico: Yucatán: Temax; and Panama: Volcan de Chiriquí (BMNH). Synonymized with *Lestica sculpturata* by Leclercq, 2006d:216, 217. – **As *Lestica constanceae***: Leclercq, 1950e:17 (new combination), 1954c:295 (in catalog of world Crabronini), 1956c:5 (Brazil, Paraguay), 1972d:681 (Mexico, Costa Rica, Brazil), 682 (in key); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Callan, 1991a:12 (Trinidad); Amarante, 2002:30 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:664 (in checklist of Mexican Sphecidae); Starr and Hook, 2003:19 (in catalog of Aculeata of Trinidad, West Indies). – **As *Lestica sculpturata constanceae***: Leclercq, 2006d:215 (new status, in key to New World *Lestica*).

42. *siblina* Leclercq

Lestica siblina Leclercq, 1972d:679, ♀. Holotype: ♀, Indonesia: Sulawesi: Patumuang (NHMW). – R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Dollfuss, 1989:10 (holotype in NHMW).

43. *subterranea* (Fabricius)

Crabro subterraneus Fabricius, 1775:374, sex not stated. Lectotype: ♀, Denmark: Hafniae, now Copenhagen (ZMUC), designated by van der Vecht, 1961a:71. – Fabricius, 1781:470 (redescription), 1787:295 (redescription); Rossi, 1790:92 (Italy: in revision of insects of Etruria, now Toscana); Olivier, 1792a:512 (redescription); Fabricius, 1793:295 (redescription); Rossi, 1794:122 (Italy: Etruria, now Toscana: no specific locality); Fabricius, 1796:51 (in Index to his Entomologia Systematica, 1793), 1804:309 (redescription); Schrank, 1802:331 (Germany: in revision of insects of Bayern); Latreille, [1805]:324 (redescription); Roth von Schreckenstein, 1802:32 (Germany: Baden-Württemberg); Panzer, 1806:179 (in critical review of his earlier work); Illiger, 1807b:151 (synonymy, redescription);

Jurine, 1807:211 (in checklist of species of *Crabro*); nec Stephens, 1829a:365 and 1829b:33 (= *Ectemnius lapidarius* (Panzer, 1803)); Vander Linden, 1829:48 (bibliographic references, all Europe, redescription); Dahlbom, 1839:71 and 1839-40:71 (in revision of Scandinavian Crabronini), 1842a:15 (in review of Scandinavian aculeates), 1845:370 (in revision of Sphecidae and Pompilidae), 527 (in key to *Crabro*); von Kiesenwetter, 1849:92 (Germany: Kingdom of Saxony: Oberlausitz area); Wissmann, 1849:16 (Germany: Kingdom of Hannover: Münden); Tischbein, 1850:10 (Germany: Rheinland-Pfalz: Herrstein in Fürstenthum Birkenfeld); Wesmael, 1852:612 (Belgium: Bruxelles); F. Smith, 1856:398 (in catalog of Hymenoptera in British Museum); Kawall, 1857:26 (Kurland, now Latvia); Schenck, 1857:74 (Germany: in revision of fossorial wasps of Nassau Region); Belke, 1859:70 (Ukraine: Kamieniec Podolski); Schenck, 1860:145 (Germany: Nassau Region); Giraud, 1863a:15 (France: Hautes-Alpes: Vallouise near Briançon); A. Morawitz, 1864:455 (Russia: Sankt-Petersburg); Siła-Nowicki, 1864:54 (Poland: Tatry Mountains), 1865:54 (western Ukraine: Galicia region: no specific locality); Taschenberg, 1866:172 (in revision of Hymenoptera of Germany); A. Costa, 1867c:138 (in revision of Italian Sphecidae); Schenck, 1867a:350 (Germany: Nassau Region); von Aichinger, 1870:313 (Austria: Tirol); Thomson, 1870:176 (in revision of Swedish Crabroninae); A. Costa, 1871b:67 (in revision of Italian Sphecidae); Thomson, 1874:287 (in revision of Hymenoptera of Scandinavia); Taschenberg, 1875:383 (Germany: Leipzig?); Kohl, 1880:119 (Austria: Tirol, and Italy: Trentino–Alto Adige), 213 (prey: adult *Sciaphila argentata*, Oecophoridae); Siebke, 1880:72 (Norway); Kohl, 1883e:653 (Switzerland); Wüstnei, 1886:33 (Germany: Schleswig-Holstein); Kohl, 1888b:721 (correction of earlier determination); F. Morawitz, 1889a:161 (China: Kansu: Monasterium Džoni); Kohl, 1893a:26 (Austria: Niederösterreich); F. Morawitz, 1893a:115 (Russia: Karelian Isthmus); Sickmann, 1893:60 (Germany: Niedersachsen: Iburg, analysis of color variation); Krieger, 1894:7 (Germany: Kingdom of Saxony); Meunier, 1896:269 (Belgium: Bruxelles area); Dalla Torre, 1897:630 (in catalog of world Sphecidae); Strand, 1898b:96 (Norway); Adlerz, 1901:192 (nesting habits); Nordenström, 1901:206 (Sweden: Linköping); N. Arnold, 1902:87 (Russia: Mohilev Province, now Belorussia); Adlerz, 1904:49 (nesting habits); Antiga and Bofill, 1904:24 (Spain: Cataluña Province); Aurivillius, 1904:298 (in revision of Swedish Sphecidae); Zilahi Kiss, 1904:77 (Hungary: Hadad, Tasnád); Kubes, 1905:84 (Czech Republic: Kolín); von Heyden, 1905:83 (Germany: Hessen: Frankfurt); Schmiedeknecht, 1907:189 (in key to Hymenoptera of Central Europe); Peets, 1909-1911:66 (*Crabro subterraneus* of Panzer = *Crabro subterraneus*); Dittrich, 1911b:18 (Germany: Niederschlesien Province, now Poland: Dolny Śląsk Region); Alfken, 1914:271 (northwestern Germany); Birula, 1914:374 (Belorussia: Ambrosowichi near Vitebsk); Kohl, 1915:129 (in revision of Palearctic Crabronini); O. Meyer, 1919:147 (Germany: Posen Province, now Poland: Poznań Region); Strand, 1920:14 (Germany: Mecklenburg-Vorpommern: Rostock), 23 (Germany: Berlin Dahlem); A. Wagner, 1920:43 (Germany: Lower Elbe region); Dubois, 1921b:151 (in key to Belgian Sphecidae), 164 (phenology, nesting habits); Strand, 1921:33 (Germany: Bayern: Kulmbach); Hedicke, 1922:270 (Germany: Brandenburg: Gross Machnower Weinberg); Maidl, 1922:75 (Albania); Leininger, 1924:120 (Germany: Baden-Württemberg: Karlsruhe); Berland, 1925d:195 (in Sphecid Fauna of France); Bischoff, 1925:297 (Latvia); Grönblom, 1925:6 (nesting habits); Schütze, 1925:110 (Germany: Lausitz Region); Shestakov, 1925:35 (Russia: Yaroslavl' area); Bouwman, 1926:279 (in list of Sphecidae of Netherlands); Friese, 1926:147 (in key to Sphecidae of Central Europe, short morphological and biological characteristics); Zavadil, 1926:31 (Czechoslovakia); Benoist, 1928:411 (France: Basses-Alpes, Hautes-Alpes); Berland, 1928b:181 (add Maneval, 1926 to bibliography in Berland, 1925d); Bouwman, 1930:67 (in revision of Sphecidae of Netherlands); Schmiedeknecht, 1930:645 (in keys to Hymenoptera of North and Central Europe); Molitor, 1931a:90 (exceptional prey: adult lycaenids), 1931b:421 (preying on adult lycaenids, nests); Pulkkinen, 1931:131 (in revision of Sphecidae of Finland); Bondroit, 1932:40 (Belgium: Solbosch); Crèvecoeur and Maréchal, 1932:68 (in catalog of Belgian Hymenoptera); Bondroit, 1933:32 (Belgium: Hal); E. Nielsen, 1933:273 (summary of nesting habits); Balles, 1934:16 (Germany: Baden-Württemberg: Heinstadt, Oberachern); Jansson, 1934:288 (Sweden); Forsius *in* Forsius and Hellén, 1935:10 (in checklist of Hymenoptera of Finland); Steck, 1935:322 (Switzerland); Vergne, 1935:119 (France: Auvergne: Cantal, La Bourboule, Le Mont-Dore, Les Martres-d'Artières, Menet); Crèvecoeur and Maréchal, 1936:256

(in catalog of Belgian Hymenoptera); Zavadil, Šusterka, and Bat'a, 1937:156 (in catalog of Sphecidae of Czechoslovakia); Móczár, 1938c:81 (Hungary: Kőszeg Hills); Poll, 1938 (Belgium: Camphout); A. 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Frommer, 2009a:27 (Germany: in checklist of Sphecidae of Hessen), 35 (Germany: Hessen: locality records); Nemkov, 2009b:125 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia); Ruchin, Antropov, and Shibayev, 2009:170 (Russia: Republic of Mordovia); Shorenko, 2009:368 (in list of Sphecidae *sensu lato* of Crimea, as *subterranea subterranea*); Szczepko and Wiśniowski, 2009:69 (Poland: Spała Landscape Park); van Diemen, 2009:49 (Netherlands: airbase Gilze-Rijen); Esser, Fuhrmann, and Venne, 2010:36 (Germany: in checklist of aculeates of Nordrhein-Westfalen); Hable, Krauss, von der Dunk, and Wickl, 2010:27 (Germany: Bayern: Sulz- and Ottmaringer Tal); Johansson, 2010:121 (Sweden: Småland: upper Emå river valley); Mokrousov, 2010a:62 (Russia: Ivanovo, Kirov, and Nizhniy Novgorod Oblast's, Republic of Mordovia: no specific localities); Rudoiskatel', 2010:158 (Russia: central and southern Ural Mountains); Schmid-Egger, 2010a:16 (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 Nižina); Treiber, 2010:135 (France: département du Bas-Rhin); van der Smissen, 2010a:342 (Germany: Schleswig-Holstein and Mecklenburg-Vorpommern: locality records); Baghirov, 2011b:147 (Russia: Altay Republic: Kosh-Agach); Burger, 2011a:287 (Germany: in red list of Sphecidae *sensu lato* of Thüringen); Józán, 2011:182 (in checklist of Sphecidae *sensu lato* of

Hungary); Rudoiskatel', 2011b:68 (Russia: Republic of Bashkortostan), 2011d:243 (Russia: central Ural Mountains); Theunert, 2011a:20 (Germany: in checklist of aculeates of Niedersachsen including city of Bremen); Tischendorf, Frommer, Flügel et al., 2011:105 (Germany: Hessen: may be 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); Klimsa, 2012:69 (Germany: Bayern: Schwandorf District); Prismaniy, 2012:50 (Russia: Belgorod Oblast'); Yildirim, 2012:81 (Turkey: Erzurum Province: several localities); Flügel, 2013a:119 (Germany: Brandenburg: Pimpinellenberg near Oderberg); Kazenas, 2013a:102 (color photograph of male, short information on geographic distribution and nesting habits); Pankov, 2013:229 (Russia: Ivanovo Oblast'); Saure, 2013:19 (Germany: Berlin: Treptow-Köpenick: Gosener Wiesen); A. Scholz and Liebig, 2013:20 (Germany: Sachsen: in list of Sphecidae *sensu lato*); Shlyakhtenok, 2013:218 (in annotated catalog of aculeate wasps of Belorussia); Flügel, 2014:254 (Brandenburg: Hangelsberger Heide); Hellqvist, Abenius, and Norén, 2014:92 (in catalog of Ampulicidae, Sphecidae, and Crabronidae of Sweden, by provinces); Mokrousov and Vafin, 2014:57 (Russia: Republic of Tatarstan); Yıldırım, Ljubomirov, and Lelej, 2014:15 (distribution in Turkey by biogeographic provinces); Koçak and Kemal, 2015:145 (in checklist of Hymenoptera of Turkey); P. Rosa and Pagliano, 2015:102 (Italy: Lombardia and Piemonte: Parco del Ticino); Saure, 2015:14 (Germany: Berlin-Lichterfelde); Shorenko, 2015:325 (in list of Sphecidae *sensu lato* of Crimea); Simon, Lorthiois, and Macé, 2015:54 (France: alluvial terraces in Seine-Maritime Department: Anneville-Ambourville); Voigt, 2015:69, 70 (Germany: Schleswig-Holstein: Sorgwohld area); Bleidorn, Gerth, Hopfe, et al., 2016:10 (Germany: Sachsen: Trages circa 20 km south of Leipzig); Samin and Bagriacik, 2016:496 (Iran: West Azarbaijan Province: Mahabad); U. Sörensen, 2016:427 (Germany: Schleswig-Holstein: der Ochsenweg south of Leck); Stolle and Saure, 2016:923 (Germany: in list of Sphecidae *sensu lato* of Sachsen-Anhalt); Yildirim, Ljubomirov, Özbek, and Yüksel, 2016:48 (Turkey: Erzurum Province); Antropov, 2017b:234 (in catalog of Crabroninae of Russia, as *Lestica subterranea subterranea*); Jahantigh, Rakhshani, Mokhtari, and Ramroodi, 2017:50 (Iran: known from West Azerbaijan Province); Magdalou, 2017:15 (France: Pyrénées-Orientales: Réserves Naturelles Catalanes: Vallée d'Eye); Shorenko, 2017:77 (in Crimea collected in June); Lett, 2018:203 (France: Loir-et-Cher: Gièvres at 47°16'39"N 1°41'52"E); Shorenko, 2018:127 (Crimea, including localities, habitats, and number of specimens); Mokrousov, Proshchalykin, Aliyev, and Maharramov, 2019:13 (Azerbaijan: Nakhichevan Autonomous Republic); Olszewski and Kowalczyk, 2019:101 (northern Poland: Pomorze Gdańskie = Gdańsk Pomerania); Ruchin and Antropov, 2019a:13232 (Russia: Mordovia State Nature Reserve); Kejval, Blažej, and Erhart, 2020:102 (western Czech Republic); Bitsch and Leclercq *in* Bitsch, Antropov, Gayubo, Leclercq, Schmid-Egger, K. Schmidt, and Straka, 2021:118 (in revision of Sphecidae *sensu lato* of Europe); Kaplan and Yildirim, 2021:53 (in catalog of Crabronidae of Turkey); Olszewski, Wiśniowski, and Ljubomirov, 2021:92 (in commented list of Sphecidae *sensu lato* of Poland); Yue, Q. Li, and L. Ma, 2022:397, 398 (in key to *Lestica* of China, as *subterranea subterranea*); Kaplan and Yildirim, 2023:1684 (in checklist of Sphecidae *sensu lato* of Turkey); Olszewski, Sparks, Twerd, and Wiśniowski, 2024:5 (central Poland: common in river valleys: no specific localities, near threatened); Frommer and Klenke, 2025:164 (Germany: Hessen: Lahntal near Weilburg).

Crabro philanthoides Panzer, 1801, Heft 83:15, [♂]. Holotype or syntypes: ♂, Germany: no specific locality (depository?). Synonymized with *Crabro subterraneus* by Dahlbom, 1839:72 and 1839-40:72 and by Schenck, 1867a:350. – Fabricius, 1804:309 (description); Panzer, 1806:182 (in critical review of his earlier work); Jurine, 1807:211 (in checklist of species of *Crabro*); Spinola, 1808:177 (Italy: Liguria); Stephens, 1829a:365 (in catalog of British insects), 1829b:33 (in checklist of British insects). – As *Ceratocolus philanthoides*: Lepeletier de Saint Fargeau and Brullé, 1835:742 (new combination, in revision of Crabronini); Herrich-Schaeffer, 1840:294 (Germany: Bayern: Regensburg area); Dahlbom, 1845:XXIV (specimens in collection Fabricius are *Crabro vexillatus*); Lepeletier de Saint Fargeau, 1845:147 (in revision of world Hymenoptera); Dours, 1874:156 (in catalog of Hymenoptera of France); Acloque, 1897:88 (in Sphecid Fauna of France and Algeria); Coulon, 1925:125 (France: Oise); Bradley, 1957:45 (Lepeletier's specimens in Turin); Casolari and Casolari Moreno, 1980:118 (specimens in M. Spinola collection,

Torino); Pagliano, 2011a:149 (specimens in M. Spinola collection, Torino, are *Lestica subterranea* and *Ectemnius* sp.).

ssp. ochotica (A. Morawitz)

Crabro ochoticus A. Morawitz, 1866a:128, ♀, ♂. Syntypes: Russia: Siberia: Okhotsk area (ZIN). – Gussakovskij, 1934a:11 (China: Kansu). – **As *Lestica ochotica***: Leclercq, 1954c:291 (new combination, in catalog of world Crabronini); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae). – **As *Lestica subterranea ochotica***: Marshakov, 1975a:156, 157 (new status, in key to *Lestica* of USSR), 1975b:332 (Mongolia); R. Bohart and Menke, 1976:628 (subspecies status recorded); Nemkov in Nemkov, Kazenas, Budrys, et Antropov, 1995:451, 453 (in key to Sphecidae *sensu lato* of Russian Far East); Dollfuss, 2004b:780 (China: Zhongtiao Shan Mountains: Xiexian, Mongolia: Ulanbaator); Hua, 2006:280 (in list of Chinese insects, geographic distribution); Nemkov, 2009b:125 (in new catalog of Sphecidae and Crabronidae of Asiatic Russia), 2012c:444 (in catalog of Crabronidae of Russian Far East); Antropov, 2017b:234 (in catalog of Crabroninae of Russia); Jacobs and Liebig, 2018:143 (Russia: Irkutsk Oblast': Sarma); Yue, Q. Li, and L. Ma, 2022:397, 398 (in key to *Lestica* of China).

Crabro ochoticus A. Morawitz, 1866b:337a. Objective synonym of *Crabro ochoticus* A. Morawitz, 1866a:128.

44. sylvatica (Arnold)

Thyreopus sylvaticus Arnold, 1932:24, ♀, ♂. Syntypes: Zimbabwe: Chirinda Forest (SAM). – **As *Lestica sylvatica***: Leclercq, 1954c:295 (new combination, in catalog of world Crabronini); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Rodgers and Homewood, 1982:233 (Tanzania: Usambara Mountains); Jacobs, 2025:242 (taxonomic history), 243 (in key to females of Sub-Saharan *Lestica*).

45. tobleri Tsuneki

Lestica tobleri Tsuneki, 1977d:17, ♀, ♂ (subgenus *Solenius*). Holotype: ♂: Solomon Islands: Kieta District: Buka: Hanahan (CAS). – Tsuneki, 1983h:25 (Solomon Islands: islands of Guadalcanal and Florida); Pulawski, 1994:27 (CAS holotype no. 13734); Tano, 1995:44 (two paratypes in K. Tsuneki collection).

46. wollmanni (Kohl)

Crabro wollmanni Kohl, 1915:121, ♀ (as *Wollmanni*, incorrect original capitalization). Syntypes: Kazakhstan: Baigakum near Dzhulek (NHMW). – Fain, 1973:161 (parasite: *Crabrovidia gussakovskii* Zachvatkin, a saprogllyphid mite). – **As *Ceratocolus wollmanni***: Kuznetsov-Ugamskij, 1927:244 (new combination, Kazakhstan: Berkara, 70 km west of Aulie-Ata, now Dzhambul; description of ♂). – **As *Lestica wollmanni***: Leclercq, 1954c:295 (new combination, in catalog of world Crabronini); Kazenas, 1974b:110 (feeding on flowers of *Euphorbia* spp., Euphorbiaceae, in Kazakhstan), 111 (feeding on flowers of *Lepidium crassifolium* W. et K., Brassicaceae, in Kazakhstan); Marshakov, 1975a:156, 157 (in key to *Lestica* of USSR), 161 (in revision of *Lestica* of USSR); R. Bohart and Menke, 1976:431 (in checklist of world Sphecidae); Islamov, 1986:531 (Uzbekistan: Surkhandarya Oblast'); Dollfuss, 1989:10 (type material in NHMW); Esenbekova and Kazenas, 2000:55 (southeastern Kazakhstan: 3 km northwest of Bakanas, 5 km south of Lake Biylikul', 12 km south of village Kazakhstan, 2 km north of Rayevka); Kazenas, 2001b:43 (in checklist of Sphecidae of Kazakhstan and Central Asia), 2002a:112 (geographic distribution, collecting localities in Kazakhstan); Dollfuss, 2004b:780 (Kyrgyzstan: 10 km north-northeast of Telek in Chu valley); Kazenas, 2004b:108 (Kazakhstan: western Tien Shan Mountains), 2014a:137 (Kazakhstan: Karatau Mountain Range); Medetov, Embergenov, Kholmatov, Elmurodova, Rakhimov, and Tajibaeva, 2024:425 (Uzbekistan: distribution).

sp.

Blades and Maier, 1996:72 (Canada: British Columbia: Osoyoos–Mount Kobau area at 119°40'W 49°05'N); Dollfuss, 2004b:781 (Borneo: Saban west of Apin Apin); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007:45 (Mexico: Tamaulipas); Pagliano, 2011a:148 (*Ceratocolus* sp. in M. Spinola collection, Torino, are *Ectemnius borealis* and *E. guttatus*), 151 (specimens in M. Spinola collection, Torino, are *Lestica clypeata*), 157 (*Crabro*

scabriculus in M. Spinola collection, Torino, is *Lestica* sp. from Philippines); Barthélémy and Guénard, 2025:15 (China: Hong Kong).

NOMINA NUDA IN *LESTICA*

Solenius croesus: Pagliano, 2011a:157 (specimens in M. Spinola collection, Torino, are *Ectemnius* sp. from Cuba).

Solenius fluctatus: Casolari and Casolari Moreno, 1980:119 (specimen in M. Spinola collection, Torino); Pagliano, 2011a:157 (specimen in M. Spinola collection, Torino, is *Ectemnius* sp.).

Solenius lateralis: Casolari and Casolari Moreno, 1980:119 (specimen in M. Spinola collection, Torino); Pagliano, 2011a:157 (specimen in M. Spinola collection, Torino, is *Ectemnius lapidarius*).

Solenius treticus: Casolari and Casolari Moreno, 1980:118 (specimens in M. Spinola collection, Torino); Pagliano, 2011a:153 (specimens in M. Spinola collection, Torino, are *Ectemnius cephalotes*).