

Last updated: 18 April, 2025

MICROBEMBEX

Microbembex Patton, 1879d:364. Type species: *Bembex monodonta* Say, 1824, by original designation.

Revisions: R. Bohart and Horning, 1971 (California); R. Bohart and Willink, 1989 (Argentina).

Key: Alayo Dalmau, 1976 (Cuba).

Nest: Barth, 1910:120.

1. albivena R. Bohart

Microbembex albivena R. Bohart, 1993f:276, ♀, ♂. Holotype: ♂, Mexico: Baja California Norte: Colonia Guerrero (UCD).

2. anilis (Handlirsch)

Bembex anilis Handlirsch, 1893c:886, ♀, ♂. Syntypes: Venezuela: no specific locality (NHMW, Mus. Stuttgart). – Dalla Torre, 1897:502 (in catalog of world Sphecidae, as *analis*, emendation or misspelling). – **As *Microbembex anilis***: Lohrmann, 1948:454 (new generic assignment, member of *Microbembex monodonta* species group); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

3. argentifrons (Cresson)

Bembex argentifrons Cresson, 1865a:141, ♀, ♂. Lectotype: ♀, Cuba: no specific locality (ANSP), designated by Cresson, 1916:96. – Cresson, 1869:294 (Cuba, variation); W. Fox, 1891d:342 (Jamaica); Ashmead, 1900:306 (in checklist of Caribbean Hymenoptera). – **As *Microbembex argentifrons***: W. Fox, 1985d:363 (new generic assignment, as synonym of *Microbembex monodonta*); Johnson and Rohwer, 1908:376 (as *Microbembex monodonta argentifrons*, new status); Alayo Dalmau, 1976:13 (in key to Cuban *Microbembex*), 29 (in checklist of Cuban Sphecidae); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Radović, 1985:66 (sting apparatus analyzed); Genaro and Sánchez Alonso, 1990b:1 (nesting and preying behavior); Genaro, 2006:53 (in checklist of Cuban Sphecidae and Crabronidae; also: Bahamas: Island of Bimini, Jamaica); Evans and O'Neil, 2007:125 (summary of information on nesting habits).

4. argentina Brèthes

Microbembex argentina Jörgensen, 1912:290, nomen nudum (Argentina: Mendoza Province).

Microbembex argentina Brèthes, 1913:128, ♀, ♂. Lectotype: ♂, Argentina: "Pampa Central": no specific locality (MACN), designated by R. Bohart and Willink, 1989:301. – Lohrmann, 1948:424 (in checklist of recently described *Microbembex*), 454 (member of *Microbembex difformis* species group); Willink, 1948b:321 (study of type material); Evans, 1966d:390 (synopsis of known behavioral information); Matthews and Evans, 1974:80 (nesting habits), 82 (description of larva); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); R. Bohart and Willink, 1989:301 (in revision of Argentinean *Microbembex*); Genise, 1990:26 (type material in MACN); Amarante, 2002:10 (in catalog of Neotropical Crabronidae); Evans and O'Neil, 2007:125 (summary of information on nesting habits).

5. argyropleura R. Bohart

Microbembex argyropleura R. Bohart, 1970a:203, ♀, ♂. Holotype: ♂, USA: California: Riverside County: 18 mi west of Blythe (UCD). – R. Bohart and Horning, 1971:25 (in revision of California Bembicini); Alcock, 1975c:337 (nesting behavior); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Evans, 1976b:188 (nesting behavior), 1977a:318 (Baja California Sur); Krombein, 1979b:1704 (in catalog of North American Hymenoptera, nesting sites, prey); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain); Spofford, Kurczewski, and Downes, 1989:258 (reference to records on nest parasite *Senotainia rufiventris* (Coquillett), a

miltogrammine fly); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae); Ohl and Linde, 2003:150 (number of ovarioles); Evans and O'Neil, 2007:126 (summary of information on nesting habits).

6. *aurata* J. Parker

Microbembex aurata J. Parker, 1917:121, ♀, ♂. Holotype: sex not stated, USA: California: Los Angeles County no specific locality (USNM), see Cockerell, 1918:60. – C. Fox, 1923b:436 (Mexico: Gulf of California); J. Parker, 1929:160 (in generic revision of Stizini and Bembicini); G. Bohart and MacSwain, 1940a:16 (nest parasite: *Physocephala affinis* (Williston), now *Physocephala texana* (Williston), a conopid), 1940b:92 (nest parasite: *Parnopes edwardsii* (Cresson), a chrysidid); Lohrmann, 1948:454 (member of *Microbembex monodonta* species group); Burks in Muesebeck, Krombein and Townes, 1951:997 (in catalog of North American Hymenoptera); LaBerge, 1956:528 (paratypes in Snow Entomological Museum); Krombein, 1958f:196 (in supplement to catalog of North American Hymenoptera: as new synonym of *Microbembex nigrifrons*); Gillasp, 1963:230 (valid species, redescription); Evans, 1966d:390 (synopsis of known behavioral information); R. Bohart and Horning, 1971:26 (in revision of California Bembicini); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Krombein, 1979b:1706 (in catalog of North American Hymenoptera); Frommer, 1988:94 (California: Riverside County: Deep Canyon).

7. *australis* R. Bohart

Microbembex australis R. Bohart in R. Bohart and Willink, 1989:302, ♀, ♂. Holotype: ♂, Argentina: Río Negro: Río Colorado (Inst. M. Lillo). – Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

8. *bidens* J. Parker

Microbembex bidens J. Parker, 1929:157, ♀, ♂. Holotype: ♂, Argentina: La Rioja: no specific locality (USNM). – Willink, 1947:527 (in revision of Argentinean Bembicini); Lohrmann, 1948:454 (member of *Microbembex difformis* species group); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

9. *californica* R. Bohart

Microbembex californica R. Bohart, 1970a:202, ♀, ♂. Holotype: ♂, USA: California: Yolo County: Davis (UCD). – Goodman, 1970:207 (nesting habits); R. Bohart and Horning, 1971:27 (in revision of California Bembicini); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Krombein, 1979b:1706 (in catalog of North American Hymenoptera); Radović, 1985:66 (sting apparatus analyzed); Rust, Menke, and Miller, 1985:47 (California: Channel Islands); Rust, Hanks, and Bechtel, 1983:406 (Nevada: Churchill County: Sand Mountain); Piek and Spanjer, 1986:185 (in list of Sphecidae with known prey); Steiner, 1986:110 (references to publications on nesting habits); G. Scudder, 1994:76 (Canada: in checklist of rare and endangered invertebrates of British Columbia); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Amarante, 2002:10 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae); Evans and O'Neil, 2007:126 (summary of information on nesting habits); Ratzlaff, 2016:24 (Canada: British Columbia: from Scudder, 1994); Buck and Bennett, 2025:208 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality).

10. *catamarcae* Willink

Microbembex [sic] *catamarcae* Willink in R. Bohart and Willink, 1989:303, ♀, ♂. Holotype: ♂, Argentina: Catamarca: Minas Capillitus (IML). – Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

11. *ciliata* (Fabricius)

Bembex ciliata Fabricius, 1804:226, sex not stated. Lectotype: ♀, South America: no specific locality (ZMUC, collection de Sehestedt), designated by van der Vecht, 1961a:56. – Jurine, 1807:175 (in reclassification of Hymenoptera

and Diptera); Dahlbom, 1845:XVIII (study of type material), 488 (in key to world *Bembix*); Lepeletier de Saint Fargeau, 1845:279 (in revision of world Hymenoptera); F. Smith, 1856:329 (in catalog of Hymenoptera in British Museum); Taschenberg, 1870:19 (Argentina: Mendoza); Burmeister, 1874:129 (in revision of Argentinean Bembicinae); Dewitz, 1881:203 (Puerto Rico); Ashmead, 1900:306 (in checklist of Caribbean Hymenoptera); Holmberg, 1903:469 (Argentina); Wolcott, 1951:846 (in review of insects of Puerto Rico); Medina Gaud and Martorell, 1974:271 (Puerto Rico: island of Caja de Muertos at 17°54'N 66°32'W); Casolari and Casolari Moreno, 1980:115 (specimens in M. Spinola collection, Torino); Pagliano, 2011a:121 (specimens in M. Spinola collection, Torino, are *Microbembex* sp. and *M. ciliata*). – **As *Stizus ciliatus***: Handlirsch, 1892:153 (new generic assignment, original description copied); Dalla Torre, 1897:521 (in catalog of world Sphecidae). – **As *Microbembex ciliata***: W. Fox, 1985d:363 (as synonym of *Microbembex monodonta*); Evans, 1966d:388 (synopsis of known behavioral information); Matthews and Evans, 1974:82 (nesting habits); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Nascimento and Overal, 1980:7 (Brazil, Chile); Sielfeld, 1980b:75 (in checklist of Chilean Sphecidae); Steiner, 1986:110 (references to publications on nesting habits); Raymond, 1989:306 (French Guyana); R. Bohart and Willink, 1989:304 (in revision of Argentinean *Microbembex*); F. Fernández, 1990:24 (Colombia: Meta: Parque Nacional Natural La Macarena); Callan, 1991a:12 (Trinidad), 1991c:135 (nest, prey); Amarante, 2002:10 (in catalog of Neotropical Crabronidae); Starr and Hook, 2003:18 (in catalog of Aculeata of Trinidad, West Indies); Evans and O'Neil, 2007:127 (summary of information on nesting habits); Rasmussen and Asenjo, 2009:6 (in checklist of Crabronidae of Peru); Nemkov, 2012b:123, 124 (review of known prey); Buys, 2012b:74 (Brazil: Rio de Janeiro State: Rio de Janeiro); Chiappa, 2012:9 (Chile: Región de Valparaíso: no specific locality).

12. *coxalis* R. Bohart

Microbembex coxalis R. Bohart, 1993f:276, ♀, ♂. Holotype: ♂, Mexico: Guerrero: Acapulco: Playa Revolcadero (UCD). – Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

13. *cubana* R. Bohart

Bembex armata Cresson, 1865a:142, ♀, ♂, junior secondary homonym of *Bembex armata* (Sulzer, 1776). Lectotype: ♀, Cuba: no specific locality (ANSP), designated by Cresson, 1916:96. – Cresson, 1869:294 (Cuba, male characteristics); Dalla Torre, 1897:502 (in catalog of world Sphecidae); Ashmead, 1900:306 (in checklist of Caribbean Hymenoptera). – **As *Microbembex armata***: Lohrmann, 1948:454 (new generic assignment, member of *Microbembex monodonta* species group); Alayo Dalmau, 1969:22 (Cuba, in revision of Cuban Bembicinae), 1973:189 (in catalog of Cuban Hymenoptera); de Zayas, 1981:79 (Cuba).

Microbembex cubana R. Bohart in R. Bohart and Menke, 1976:539, substitute name for *Bembex armata* Cresson, 1865. – Alayo Dalmau, 1976:13 (in key to Cuban *Microbembex*), 30 (in checklist of Cuban Sphecidae); Alayo Soto, 1982 (nesting habits; as *cubana* Cresson); Toft, 1987a:427-438 (nesting habits), 1987b:338 (population structure in Bahama Islands); Fraizer, 1997:423 (size related differences in male behavior); Amarante, 2002:10 (in catalog of Neotropical Crabronidae); Fernández, Saríol, Vega, Ricardo, González, and Portuondo, 2002:46 (Cuba: Provincia Granma); Portuondo and Fernández, 2004:135 (Cuba: Sierra Maestra); Genaro, 2006:53 (in checklist of Cuban Sphecidae and Crabronidae; also: Isla de la Juventud and Bahamas: Staniel Key); Evans and O'Neil, 2007:127 (summary of information on nesting habits); Klein, 2025:130 (Leeward Antilles: Bonaire Island).

14. *difformis* (Handlirsch)

Bembex difformis Handlirsch, 1893c:878, ♂. Holotype: ♂, Brazil: Bahia: no specific locality (ZMHU). – Dalla Torre, 1897:504 (in catalog of world Sphecidae). – **As *Microbembex difformis***: Ducke, 1907b:91 (new generic assignment, Brazil: Maranhão State: Codo and São Luiz de Maranhão); Lohrmann, 1948:454 (member of *Microbembex difformis* species group); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Nascimento and Overal, 1980:7 (Brazil); Amarante, 1993:20 (northeastern Brazil); Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

15. elegans Griswold

Microbembex elegans Griswold, 1996:142, ♀, ♂. Holotype: ♂, USA: California: Imperial County: Glamis (USU).

16. equalis J. Parker

Microbembex equalis J. Parker, 1929:164, ♀. Holotype: ♀, Peru: Tingo (USNM). – Lohrmann, 1948:454 (member of *Microbembex difformis* species group); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Amarante, 2002:10 (in catalog of Neotropical Crabronidae); Rasmussen and Asenjo, 2009:6 (in checklist of Crabronidae of Peru).

17. evansi R. Bohart

Microbembex evansi R. Bohart, 1993f:277, ♀, ♂. Holotype: ♂, USA: Texas: Ward County: Monahans Sandhills State Park (UCD). – Evans and O’Neil, 2007:127 (summary of information on nesting habits).

18. gratiosa (F. Smith)

Bembex gratiosa F. Smith, 1856:329, ♀, ♂. Syntypes: Brazil: Pará: Tapajós River (BMNH). – Handlirsch, 1893c:881 (in revision of world Bembicinae); Dalla Torre, 1897:505 (in catalog of world Sphecidae). – **As *Microbembex gratiosa***: Lohrmann, 1948:426 (new generic assignment, illustration of head in frontal view), 454 (member of *Microbembex difformis* species group); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Nascimento and Overal, 1980:7 (Brazil); Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

Microbembex natalis J. Parker, 1929:162, ♀. Holotype: ♀, Brazil: Natal (USNM). Synonymized with *Microbembex gratiosa* by R. Bohart in R. Bohart and Menke, 1976:539. – Lohrmann, 1948:454 (member of *Microbembex difformis* species group).

19. hirsuta J. Parker

Microbembex hirsuta J. Parker, 1917:122, ♀, ♂. Holotype: ♂, USA: Texas: Brewster County: no specific locality (USNM), see Cockerell, 1918:60. – J. Parker, 1929:161 (in generic revision of Stizini and Bembicini); Lohrmann, 1948:454 (member of *Microbembex monodonta* species group); Burks in Muesebeck, Krombein and Townes, 1951:997 (in catalog of North American Hymenoptera); R. Bohart and Horning, 1971:24 (in key to U.S. *Microbembex*); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Evans, 1976b:185 (nesting behavior); Krombein, 1979b:1706 (in catalog of North American Hymenoptera); Evans and O’Neil, 2007:128 (summary of information on nesting habits).

20. luteipes R. Bohart

Microbembex luteipes R. Bohart, 1993f:278, ♀, ♂. Holotype: ♂, Mexico: Sonora: Bahía San Carlos (UCD). – Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

21. mendozae R. Bohart

Microbembex mendozae R. Bohart in R. Bohart and Willink, 1989:305, ♂, ♀. Holotype: ♂, Argentina: Mendoza: 60 km south of San Bardas Blancas (IML). – Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

22. monodonta (Say)

Bembex monodonta Say, 1824:335, ♂. Holotype or syntypes: ♂, USA: Pennsylvania: no specific locality (originally William W. Wood collection, now lost). – F. Smith, 1856:331 (in catalog of Hymenoptera in British Museum); Le Conte, 1859a:226 (original description copied); Cresson, 1863:316 (in catalog of North American Hymenoptera), 1873:220 (Texas); Snow, 1881:96 (in checklist of Hymenoptera of Kansas: Douglas County: no specific locality); Cameron, 1890a:101 (Guatemala, Mexico); Handlirsch, 1893c:882 (in revision of world Bembicinae); W. Fox, 1894c:103 (Mexico: Baja California), 1895c:267 (Mexico: Baja California Sur); Handlirsch, 1895:1004 (reference to Provancher, 1889); Dalla Torre, 1897:508 (in catalog of world Sphecidae). – **As *Microbembex monodonta***: Patton, 1879d:362 (new generic assignment, description of ♀, USA: northwestern Kansas); Cresson, 1887:278 (in catalog of North American Hymenoptera); Provancher, 1888:413 (Canada: in addition to Sphecid Fauna of Que-

bec); Ashmead, 1890:33 (in checklist of Hymenoptera of Colorado); W. Fox, 1895d:363 (in revision of North American Bembicini); Ashmead, 1899d:240 (in checklist of North American Crabronidae); Bridwell, 1899:209 (Kansas: no specific locality); Cockerell, 1899a:142 (New Mexico); J. Smith, 1900:517 (in list of insects of New Jersey); Harrington, 1902:221 (Canada: Ontario: Ottawa); Hartman, 1905:21 (nesting habits); Snow, 1906:134 (Arizona); Hart, 1907:256 (Illinois); Johnson and Rohwer, 1908:375 (New Jersey, as *Microbembex monodonta monodonta*); H. Smith, 1908b:384 (in revision of Nebraskan Sphecidae); J. Smith, 1910:679 (in new list of insects of New Jersey); Grossbeck, 1912b:325 (Mexico: Baja California Sur: no specific locality); Faull, 1913:384 (Canada: Toronto region); Rohwer, 1916b:693 (in catalog of Hymenoptera of Connecticut); Mickel, 1917:287 (USA: Nebraska, as *Microbembix*); J. Parker, 1917:119 (in revision of North American Bembicinae), 134 (mating, nest, prey, life cycle, cocoon, parasite, predator); Stevens, 1917:422 (North Dakota); Stoehr, 1917:113 (mating, nest, prey); Mickel, 1918b:442 (in catalog of Nebraskan Sphecidae); Rau and Rau, 1918: 39 (nest structure, nest provision consists of variety of dead insects); Washburn, 1919:225 (in list of Hymenoptera of Minnesota); Britton, 1920:341 (in checklist of insects of Connecticut); Rau, 1922:28 (USA: Missouri: Island of Chestney), 29 (USA: Missouri: Silica); C. Fox, 1923b:436 (Mexico: Gulf of California); W. Wheeler, 1923:61 (provisions nests with dead insects collected on the soil); Rohwer in Viereck, 1925:693 (in key to Sphecidae of Connecticut); C. Fox, 1926:221 (Mexico: Baja California Sur: Cabo San Lucas); J.Ch. Bradley, 1928:1018 (in catalog of New York Sphecidae); J. Parker, 1929:161 (in generic revision of Stizini and Bembicini); E. Nielsen, 1933:299 (summary of nesting habits); Rodeck, 1934:2 (USA: Colorado, Wyoming; color variation); Brimley, 1938:449 (North Carolina: coastwise from Kitty Hawk to Fort Fisher, also Lake Waccamaw); Vesey-Fitzgerald, 1940:39 (Trinidad, preying on variety of insects); Rau, 1946:11 (prey: dead beetle *Discoderus parallelus* (Haldeman), Carabidae); Strickland, 1947:129 (Canada: Alberta: Medicine Hat); Lohrmann, 1948:454 (member of *Microbembex monodonta* species group); Krombein, 1950a:271 (North Carolina: Dare County); Burks in Muesebeck, Krombein and Townes, 1951:997 (in catalog of North American Hymenoptera); Dreisbach, 1951:107 (Michigan: locality records); Wolcott, 1951:847 (in review of insects of Puerto Rico); Krombein, 1952a:95 (Virginia: Westmoreland State Park), 1953a:288 (prey: a harvestman and a *Camponotus*, Formicidae, life cycle), 296 (visiting foliage of *Quercus marilandica* Muenchh., Fagaceae), 298 (visiting flowers of Virginia creeper and *Cephalanthus occidentalis* L., Rubiaceae), 336 (North Carolina), 1953b:123 (visiting foliage of *Quercus virginiana* Mill., Fagaceae), 133 (North Carolina: Kill Devil Hills), 1953c:17 (Bahamas: Bimini Islands); Callan, 1954:22 (Venezuela: Paria Peninsula: Cristóbal Colón); Evans and Lin, 1956b:55 (description of larva); Ristich, 1956:272 (*Senotainia trilineata* (van der Wulp), a sarcophagid, is nest parasite, eggs are laid on prey carried by wasp); Vesey-FitzGerald, 1956a:286 (Trinidad: Guayaguayare, list of prey); Evans, 1963c:81 (scavenging behavior, list of prey, use of midlegs for prey carrying); Gillaspay, 1963:230 (*Microbembex nigripes* is separate species, not a synonym of *M. monodonta*); Kurczewski and Kurczewski, 1963:148 (Pennsylvania: Presque Isle State Park); Evans, 1964b:266 (description of larva); Chandler, 1966:144 (in revision of Bembicini and Stizini of Indiana); Evans, 1966d:361 (nesting behavior); Alayo Dalmau, 1969:21 (Cuba, in revision of Cuban Bembicinae); R. Bohart and Horning, 1971:25 (in key to U.S. *Microbembex*); Alayo Dalmau, 1973:189 (in catalog of Cuban Hymenoptera); Medina Gaud and Martorell, 1974:271 (Puerto Rico: island of Caja de Muertos at 17°54'N 66°32'W); Percival, 1974:20 (Jamaica: visiting flowers of *Cordia globosa* (Jacq.) Kunth, Boraginaceae, *Eupatorium odoratum* L. Asteraceae, and *Waltheria indica* L., Malvaceae); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Evans, 1976b:187 (nesting behavior); L. Davis, 1978:217 (North Carolina: Kill Devil Hills, data from Krombein, 1953a); Fraizer, 1997:423 (size related differences in male behavior); Krombein, 1979b:1706 (in catalog of North American Hymenoptera, nesting sites, prey, parasites); de Zayas, 1981:79 (Cuba); Finnermore, 1982:229 (in Sphecid Fauna of southern Quebec); Hilchie, 1982:106 (prey of *Philanthus albopilosus*), 107 (Alberta: Empress); Piek and Spanjer, 1986:185 (in list of Sphecidae with known prey); Steiner, 1986:110 (references to publications on nesting habits); Ch. Porter, 1987:46 (Chile: Tarapacá Region); Toft, 1987a:427-438 (nesting habits); Maes, 1989:96 (in catalog of Nicaraguan Sphecidae); Spofford, Kurczewski, and Downes, 1989:258, 259, 260 (references to records on nest

parasites *Senotainia rufiventris* (Coquillett), *Senotainia trilineata* (Wulp), and *Senotainia vigilans* Allen, miltogrammine flies), 261 (nest parasite: undetermined species of Miltogrammini); Kurczewski and Acciavatti, 1990:61 (New York: Cayuga County); Spofford and Kurczewski, 1990:748, 749, 751 (nest parasites: *Senotainia trilineata* (Van der Wulp), *Senotainia vigilans* Allen, and unknown species of Miltogrammini, Sarcophagidae); Elliott, 1992:45 (in list of wasps of Bahama Islands: occurring on Island of Bimini); Spofford and Kurczewski, 1992:999 (species of miltogrammine parasites listed), 1002 (counter-cleptoparasitic behavior: diversionary flight); Snelling, 1993:18 (British Virgin Islands: Island of Anegada); Ahlstrom, 1995:113 (in checklist of insects of North Carolina); Hanson and Menke, 1995:648 (known from Costa Rica); Kurczewski, 1998d:250 (pine barrens in upstate New York); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Cambra and Santos, 2000:52 (Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean); Skevington et al., 2001:128 (Canada: Ontario: Lambton County); Amarante, 2002:10 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae); Buck, 2004:27 (Canada: in checklist of Crabronidae of Ontario); Evans and O'Neil, 2007:128 (summary of information on nesting habits); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 46 (Mexico: Tamaulipas); Ardila-García, Umphrey, and Gregory, 2010:339 (genome size dataset); Nemkov, 2012b:124 (review of known prey); Cormons and Zeil, 2023:1 (females locate nest entrance exclusively on visual cues); Buck and Bennett, 2025:208 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: Alberta, Manitoba, Ontario, Quebec, Saskatchewan: no specific locality).

Microbembex monodonta occidentalis Johnson and Rohwer, 1908:375, ♀, ♂. Lectotype: ♀, USA: Texas: Paris (USNM). Synonymized with *Microbembex monodonta* by R. Bohart, 1970a:206.

Microbembex tarsalis Rohwer, 1914:516, ♀, ♂. Holotype: ♀, Guatemala: Quirigua (USNM). Synonymized with *Microbembex monodonta* by Krombein in Muesebeck, Krombein, and Townes, 1951:998.

23. *monstrosa* Willink

Microbembex monstrosa Willink in R. Bohart and Willink, 1989:306, ♂. Holotype: ♂, Argentina: San Juan: Valle Fértil (IML). – Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

24. *nasuta* J. Parker

Microbembex nasuta J. Parker, 1929:163, ♀. Holotype: ♀, Argentina: San Juan: Pie de Palo (Cornell Univ.). – Willink, 1947:531 (as synonym of *Microbembex argentina*); Lohrmann, 1948:454 (member of *Microbembex difformis* species group); R. Bohart and Willink, 1989:307 (in revision of Argentinean *Microbembex*); Amarante, 2002:10 (in catalog of Neotropical Crabronidae), 2005a:9 (correction to his 2002 catalog).

25. *nigrifrons* (Provancher)

Monedula nigrifrons Provancher, 1888:415, ♀, ♂. Lectotype: ♀, USA: California: Los Angeles (Laval Univ.), designated by Gahan and Rohwer, 1918:103 and R. Bohart, 1970a:206. – Ashmead, 1899d:240 (in checklist of North American Crabronidae). – **As *Bembidula nigrifrons***: Handlirsch, 1895:963 (tentative new generic assignment, original description translated into German); Dalla Torre, 1897:495 (in catalog of world Sphecidae). – **As *Microbembex nigrifrons***: Burks in Muesebeck, Krombein and Townes, 1951:997 (as synonym of *Microbembex monodonta*); Krombein, 1958f:169 (valid species); Gillasp, 1963:230 (validity of species confirmed); R. Bohart and Horning, 1971:28 (in revision of California Bembicini); Alcock and Ryan, 1973:144 (nesting behavior); Alcock and Gamboa, 1975b:161 (nesting habits); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Krombein, 1979b:1707 (in catalog of North American Hymenoptera, prey, nest parasites); Radović, 1985:66 (sting apparatus analyzed); Frommer, 1988:94 (California: Riverside County: Deep Canyon); Amarante, 2002:10 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae); Evans and O'Neil, 2007:128 (summary of information on nesting habits); Ratzlaff, 2016:24 (first record from Canada: British Columbia: Southern Interior), 32 (Canada: British Co-

lumbia: locality records); Buck and Bennett, 2025:208 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality).

Microbembex monodonta neomexicana Johnson and Rohwer, 1908:375, ♀, ♂. Lectotype: ♀, USA: New Mexico: Las Cruces (USNM). Synonymized with *Microbembex nigrifrons* by R. Bohart, 1970a:206.

Microbembex monodonta deltaensis Johnson and Rohwer, 1908:375, ♂. Lectotype: ♂, USA: Colorado: Delta (USNM). Synonymized with *Microbembex nigrifrons* by R. Bohart, 1970a:206.

26. *patagonica* (Brèthes)

Bembex patagonica Brèthes, 1913:128, ♂. Lectotype: ♂, Argentina: La Pampa: no specific locality (MACN), designated by R. Bohart and Willink, 1989:307. – Genise, 1990:26 (type material in MACN). – **As *Microbembex patagonica***: Willink, 1947:529 (in revision of Argentinean Bembicini); Lohrmann, 1948:424 (in checklist of recently described *Microbembex*), 454 (member of *Microbembex monodonta* species group); Willink, 1948b:322 (study of type material); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

27. *platytarsis* R. Bohart

Microbembex platytarsis R. Bohart in R. Bohart and Willink, 1989:308, ♂, ♀. Holotype: ♂, Argentina: Buenos Aires: Monte Hermoso (IML). – Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

28. *pygidialis* (Handlirsch)

Bembex pygidialis Handlirsch, 1893c:887, ♀. Holotype: ♀, Brazil: Amazonia: no specific locality (BMNH). – Dalla Torre, 1897:511 (in catalog of world Sphecidae). – **As *Microbembex pygidialis***: Lohrmann, 1948:454 (new generic assignment, member of *Microbembex monodonta* species group); R. Bohart and Menke, 1976:539 (new generic assignment, in checklist of world Sphecidae); Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

29. *rufiventris* R. Bohart

Microbembex rufiventris R. Bohart, 1970a:204, ♀, ♂. Holotype: ♂, USA: California: Fresno County: Coalinga (UCD). – R. Bohart and Horning, 1971:29 (in revision of California Bembicini); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Krombein, 1979b:1707 (in catalog of North American Hymenoptera).

30. *sternalis* R. Bohart

Microbembex sternalis R. Bohart, 1993f:278, ♂. Holotype: ♂, El Salvador: Acajutla (depository not stated, possibly UCD). – Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

31. *subgratiosa* (Strand)

Bembex subgratiosa Strand, 1910a:149, ♀. Holotype: Paraguay: Asunción (ZMHU). – Strand, 1927:253 (in list of species described by author). – **As *Microbembex subgratiosa***: Lohrmann, 1948:424 (new generic assignment, in checklist of recently described *Microbembex*), 454 (member of *Microbembex difformis* species group); R. Bohart and Menke, 1976:539 (new generic assignment, in checklist of world Sphecidae); Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

32. *sulphurea* (Spinola)

Bembex sulphurea Spinola, 1851a:319, sex not stated. Holotype or syntypes: Chile: central regions: no specific locality (Torino). Synonymized with *Microbembex ciliata* by van der Vecht, 1961a:56, treated as valid by R. Bohart and Willink, 1989:305. – F. Smith, 1856:330 (in catalog of Hymenoptera in British Museum); Handlirsch, 1893c:885 (in revision of world Bembicinae, as *sulfura*); Reed, 1894:607 (in revision of Scoliidae, Pompilidae, and Sphecidae of Chile); Dalla Torre, 1897:514 (in catalog of world Sphecidae); Schrottky, 1903b:177 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay, as *sulfurea*); Brèthes, 1910b:145 (Chile); Jörgensen, 1912:290 (Argentina: Mendoza Province); Schrottky, 1913a:231 (Argentina, Paraguay, Uruguay, as *sulfurea*); Janvier, 1928:113 (nesting habits); Ruíz Pereira, 1942:32 (common to Chile and Argentina). – **As *Microbembex sulphurea***: Ducke,

1907b:91 (new generic assignment, Brazil: Maranhão State: Alcantara; as *sulfurea*), 1910:114 (Brazil: Ceará: Humayta); Bodkin, 1917:122 (Guyana, as *sulfurea*); Janvier, 1929:418 (sleeping habits); J. Parker, 1929:158 (in generic revision of Stizini and Bembicini); Richards, 1937a:115 (Guyana); Willink, 1947:524 (in revision of Argentinean Bembicini); Lohrmann, 1948:454 (member of *Microbembex monodonta* species group, as *sulfurea*); Aguilar, 1966:95 (Peru: hills in vicinity of Lima), 1976:59 (Peru: coastal hills); R. Bohart and Menke, 1976:539 (as junior synonym of *Microbembex ciliata*); Piek and Spanjer, 1986:185 (in list of Sphecidae with known prey, as *sulfurea*); Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

33. *tricolor* J. Parker

Microbembex tricolor J. Parker, 1929:159, ♀, ♂. Holotype: ♂, Jamaica: no specific locality (USNM). – Lohrmann, 1948:454 (member of *Microbembex monodonta* species group); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Amarante, 2002:10 (in catalog of Neotropical Crabronidae).

34. *uruguayensis* (Holmberg)

Bembex uruguayensis Holmberg, 1884:216, ♂. Holotype: ♂: Uruguay: no specific locality (depository?). – Handlirsch, 1893:880 (in revision of world Bembicinae); Dalla Torre, 1897:515 (in catalog of world Sphecidae); Schrottky, 1903b:177 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay), 1913a:231 (Uruguay). – **As *Microbembex uruguayensis***: Willink, 1947:522 (new generic assignment, in revision of Argentinean Bembicini); Lohrmann, 1948:454 (member of *Microbembex difformis* species group); Fritz, 1958:55 (Argentina, Paraguay); Llano, 1959:97 (nest and prey, metamorphosis); Evans, 1966d:390 (synopsis of known biological information); Alcock, 1976d:195 (nest, preying on dead insect, mass provisioning of nest follows oviposition); R. Bohart and Menke, 1976:539 (in checklist of world Sphecidae); Fritz, 1982:14 (Argentina: Corrientes: Ituzaingo); Piek and Spanjer, 1986:185 (in list of Sphecidae with known prey); Steiner, 1986:110 (references to publications on nesting habits); R. Bohart and Willink, 1989:309 (in revision of Argentinean *Microbembex*); Amarante, 2002:10 (in catalog of Neotropical Crabronidae); Evans and O’Neil, 2007:128 (summary of information on nesting habits); Silvestre, Demétrio, Trad, de Oliveira Lima, Auko, and de Souza, 2014:68 (Brazil: Mato Grosso do Sul: dry forests in Bodoquena Mountain Range and Brazilian Chaco); Trad and Silvestre, 2017:4 (Brazil: Mato Grosso do Sul).

Microbembex schrottkyi Willink, 1947:534, ♀. Holotype: ♀, Argentina: Santa Fé: Villa Ocampo (IML). Synonymized with *Microbembex uruguayensis* by Willink, 1953:348. – Willink, 1952d:75 (additional description; Argentina, Brazil, Uruguay), 1953:347 (variation, diagnostic characters); Matthews and Evans, 1974:81 (nesting habits).

sp.

Abbott, 1936:197 (preying on *Chrysopa*, Chrysopidae); Elliott, 1992:45 (in list of wasps of Bahama Islands: occurring on Long Island); Fernández, Saríol, Vega, Ricardo, González, and Portuondo, 2002:46 (Cuba: Provincia Granma); Portuondo and Fernández, 2004:135 (Cuba: Sierra Maestra).