

Last updated: 3 February 2025

TRACHYPUS

Trachypus Klug, 1810:41. Type species: *Trachypus gomesii* Klug, 1810 [= *Zethus elongatus* Fabricius, 1804], by monotypy.

Simblephilus Dahlbom, 1844:190. Type species: *Philanthus petiolatus* Spinola, 1842, by monotypy. Junior homonym of *Simblephilus* Jurine, 1807.

Philanthocephalus Cameron, 1890a:86. Type species: *Philanthocephalus gracilis* Cameron, 1890, designated by Pate, 1937c:49. Synonymized with *Trachypus* by Cameron, 1890c:314.

Revision: Rubio-Espina, 1975.

Status: Alexander, 1992a, found *Philanthus* to be paraphyletic with respect to *Trachypus*, but did not formally synonymize these genera.

1. *annulatus* Spinola

Trachypus annulatus Spinola, 1851:337, ♀. Holotype: ♀, South America: no specific locality (M. Spinola collection, Torino). – Rubio-Espina, 1975:56 (in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Casolari and Casolari Moreno, 1980:122 (specimens in M. Spinola collection, Torino); Garcete-Barrett, 2001c:65 (Paraguay: locality records); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Pagliano, 2014:99 (specimen in M. Spinola collection, Torino, is holotype of *Trachypus annulatus*); Dollfuss, 2017b:1268 (Paraguay: Caaguazú Department: 15 km southeast of Juan R. Chávez). – **As *Philanthus annulatus***: Kohl, 1891:366 (new generic assignment, in checklist of world *Philanthus*); Dalla Torre, 1897:483 (in catalog of world Hymenoptera).

? *Trachypus furcatus* Brèthes, 1910a:280, ♀. Holotype or syntypes: ♀, Argentina: Salta: no specific locality (MACN). Tentatively synonymized with *Trachypus annulatus* by Rubio-Espina, 1975:56. – Schrottky, 1913a:229 (Argentina: Salta); Genise, 1990:27 (type material in MACN).

2. *basalis* F. Smith

Trachypus basalis F. Smith, 1873b: 108, ♀. Holotype or syntypes: ♀, Brazil: Amazonas: São Paulo de Olivença (BMNH). – Rubio-Espina, 1975:46 (in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Amarante, 2002:64 (in catalog of Neotropical Crabronidae). – **As *Philanthus basalis***: Kohl, 1891:366 (new generic assignment, in checklist of world *Philanthus*); Dalla Torre, 1897:483 (in catalog of world Hymenoptera).

3. *batrachostomus* Schrottky

Trachypus batrachostomus Schrottky, 1909a:213, ♀. Holotype or syntypes: ♀, Paraguay: Encarnación (depository unknown). – Schrottky, 1913a:229 (Paraguay, as *bratrachostomus*); Rubio-Espina, 1975:65 (species dubia); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Garcete-Barrett, 2001c:65 (unrecognizable species); Amarante, 2002:64 (in catalog of Neotropical Crabronidae).

4. *boharti* Rubio-Espina

Trachypus boharti Rubio-Espina, 1975:64, ♀, ♂. Holotype: ♀, Brazil: Mato Grosso: Sierra Roncador (BMNH). – Garcete-Barrett, 2001c:65 (Paraguay: locality records); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Koedam, Slaa, Biesmeijer, and Nogueiro-Neto, 2009:691 (preying exclusively on male of stingless bee *Scaptotrigona postica* Latreille, most attacks at beehive are unsuccessful); Kaltenpoth, Schmitt, Polidori, Koedam, and Strohm, 2010:196 (symbiotic streptomyces *Streptomyces philanthi* in antennal glands).

5. *caenosus* Rubio-Espina

Trachypus caenosus Rubio-Espina, 1975:55, ♀, ♂. Holotype: ♀, Peru: Huanuco: Tingo María: Vale Monsón (CAS). – Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Morato, Amarante, and Silveira, 2008:793 (Brazil: Acre: Parque Nacional da Serra do Divisor); Rasmussen and Asenjo, 2009:14 (in checklist of Crabronidae of Peru); Dollfuss, 2017b:1268 (locality records from Argentina and Ecuador).

6. *cementarius* (F. Smith)

Philanthus cementarius F. Smith, 1860:81, ♀. Holotype or syntypes: ♀, Brazil: Amazonas: Saint Paul, now São Paulo de Olivença (BMNH). – Kohl, 1891:367 (in checklist of world *Philanthus*, in subgenus *Trachypus*); Dalla Torre, 1897:483 (in catalog of world Hymenoptera, as *caementarius*). – **As *Trachypus cementarius***: Rubio-Espina, 1975:51 (new generic assignment, in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Amarante, 2002:64 (in catalog of Neotropical Crabronidae).

7. *cisminutus* Rubio-Espina

Trachypus cisminutus Rubio-Espina, 1975:59, ♀, ♂. Holotype: ♀, Peru: Chanchamayo (BMNH). – Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Rasmussen and Asenjo, 2009:14 (in checklist of Crabronidae of Peru).

8. *clypeatus* Rubio-Espina

Trachypus clypeatus Rubio-Espina, 1975:38, ♀. Holotype: ♀, Ecuador: Pichincha: Mindo (BMNH). – Amarante, 2002:64 (in catalog of Neotropical Crabronidae).

9. *denticollis* Spinola

Trachypus denticollis Spinola, 1851a:335, ♀. Lectotype (as holotype): ♀, Chile: central provinces: no specific locality (M. Spinola collection, Torino), designated by Rubio-Espina, 1975:49. – de Saussure, 1867:87 (Chile, determination questionable); Reed, 1894:644 (redescription); Brèthes, 1910b:145 (Chile); Ruiz Pereira, 1937:164 (Chile: Coquimbo Province); Gutiérrez, 1940:34 (Chile: Río Blanco); Rubio-Espina, 1975:47 (in revision of Chilean *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Casolari and Casolari Moreno, 1980:122 (specimens in M. Spinola collection, Torino); Nascimento and Overal, 1980:12 (Brazil, Chile); Sielfeld, 1980b:75 (in checklist of Chilean Sphecidae); Steiner, 1986:112 (references to publications on nesting habits); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Tormos, Polidori, Boesi, and Asís, 2007:52 (description of adult larva); Polidori, Boesi, Ruz, Montalva, and Andrietti, 1009:55 (list of prey, prey-predator size relationship); Kaltenpoth, Schmitt, Polidori, Koedam, and Strohm, 2010:196 (symbiotic streptomycetes *Streptomyces philanthi* in antennal glands); Chiappa, 2012:9 (Chile: Región de Valparaíso: no specific locality); Polidori, García, and Nieves-Aldrey, 2012:280 (study of female antennal sensillae); Pagliano, 2014:98 (specimens in M. Spinola collection, Torino, including lectotype, are *Trachypus denticollis*). – **As *Philanthus denticollis***: F. Smith, 1856:475 (new generic assignment, in catalog of Hymenoptera in British Museum); Kohl, 1891:367 (in checklist of world *Philanthus*); Dalla Torre, 1897:484 (in catalog of world Hymenoptera); Janvier, 1928:145 (nesting habits), 1929:419 (sleeping habits); Gazulla and Ruiz Pereira, 1929:299 (Chile: Hacienda de "Las Mercedes").

Trachypus incertus Spinola, 1851:336, ♂. Holotype: ♂, Chile: no specific locality (Torino). Synonymized with *Trachypus denticollis* by Rubio-Espina, 1975:47, and by Rubio-Espina in R. Bohart and Menke, 1976:568. – Reed, 1894:645 (in revision of Chilean *Trachypus*). – **As *Philanthus incertus***: F. Smith, 1856:473 (new generic assignment, in catalog of Hymenoptera in British Museum); Kohl, 1891:368 (in checklist of world *Philanthus*); Dalla Torre, 1897:487 (in catalog of world Hymenoptera).

Trachypus denticollis var. *rufipes* Reed, 1894:645, ♀. Syntypes: ♀, Chile: Colchagua Province: Baños de Cauquenes (depository unknown). Synonymized with *Trachypus denticollis* by Rubio-Espina in R. Bohart and Menke, 1976:568. – Ruiz Pereira, 1924:102 (Chile: Cerro San Cristóbal); Gazulla and Ruiz Pereira, 1929:299 (Chile: Hacienda de "Las Mercedes").

As *Trachypus chilensis* Spinola, 1910a:277 (in key to *Trachypus*), corrected to *Trachypus denticollis* by Rubio-Espina, 1975:47.

10. *disjunctus* F. Smith

Trachypus disjunctus F. Smith, 1873b:107, ♂. Holotype or syntypes: ♂, Brazil: Amazonas: São Paulo de Olivença (BMNH). – Rubio-Espina, 1975:53 (in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Amarante, 2002:64 (in catalog of Neotropical Crabronidae). – As *Philanthus disjunctus*: Kohl, 1891:367 (new generic assignment, in checklist of world *Philanthus*); Dalla Torre, 1897:485 (in catalog of world Hymenoptera).

11. *elongatus* (Fabricius)

Zethus elongatus Fabricius, 1804:283, sex not stated. Holotype: ♂, South America: no specific locality (ZMUC). – As *Philanthus elongatus*: Klug, 1846:42 (new generic assignment, belongs to subsection *Trachypus* of *Philanthus*); Dalla Torre, 1897:485 (in catalog of world Hymenoptera); W. Schulz, 1912:87 (additional description). – As *Trachypus elongatus*: van der Vecht, 1961a:62 (new generic assignment, study of type); Rubio-Espina, 1975:36 (in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Radović, 1985:66 (sting apparatus analyzed); Amarante, 1993:20 (northeastern Brazil); Garcete-Barrett, 2001c:66 (Paraguay: locality records); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Rasmussen and Asenjo, 2009:15 (in checklist of Crabronidae of Peru); Nechitaylo, Westermann, and Kaltenpoth, 2014:206, 207 (physiological diversity among defensive ‘*Streptomyces philanthi*’ symbionts); Dollfuss, 2017b:1268 (locality records from Ecuador); Trad and Silvestre, 2017:6 (Brazil: Mato Grosso do Sul); Pereira and Gonçalves, 2021:3 (nesting habits; prey: *Trigona spinipes* (Fabricius), a stingless bee).

Trachypus gomesii Klug, 1810:43, ♀ (as *Gomesii*, incorrect original capitalization). Holotype or syntypes: ♀, Brazil: Bahía (ZMHU). Synonymized with *Trachypus elongatus* by Rubio-Espina, 1975:36, and by Rubio-Espina in R. Bohart and Menke, 1976:568 (as new synonym). – Dahlbom, 1843:15 (redescription), 1845:431 (not seen by author); Klug, 1846:42 (belongs to subsection *Trachypus* of *Philanthus*); Dalla Torre, 1897:486 (in catalog of world Hymenoptera); Bristowe, 1925a:479 (preying on *Melipona ruficrus* Latreille, a stingless bee); Casolari and Casolari Moreno, 1980:122 (specimens in M. Spinola collection, Torino); Pagliano, 2014:97.98 (specimens in M. Spinola collection, Torino, are *Trachypus petiolatus*). – As *Philanthus gomesii*: de Saussure, 1854:8 (new generic assignment, bibliographic references); F. Smith, 1856:475 (in catalog of Hymenoptera in British Museum); Kohl, 1891:368 (in checklist of world *Philanthus*); Dalla Torre, 1897:486 (in catalog of world Hymenoptera).

Philanthus apicalis F. Smith, 1856:476, ♂. Syntypes: Brazil: Amazonas: Villa Nova, now Parintins (BMNH). Synonymized with *Trachypus elongatus* by Rubio-Espina, 1975:36, and by R. Bohart in R. Bohart and Menke, 1976:568 (as new synonym). – Kohl, 1891:366 (in checklist of world *Philanthus*); Dalla Torre, 1897:483 (in catalog of world Hymenoptera); Schrottky, 1913a:229 (Paraguay).

Trachypus surinamensis de Saussure, 1867:86, ♀. Holotype or syntypes: ♀, Surinam: no specific locality (depository unknown). Synonymized with *Trachypus elongatus* by Rubio-Espina, 1975:37, and by Rubio-Espina in R. Bohart and Menke, 1976:568 (as new synonym). – As *Philanthus surinamensis*: Kohl, 1891:369 (new generic assignment, in checklist of world *Philanthus*); Dalla Torre, 1897:491 (in catalog of world Hymenoptera).

Philanthus terminalis Taschenberg, 1875:405, ♂. Holotype or syntypes: ♂, Brazil: no specific locality (Halle). Synonymized with *Trachypus elongatus* by Rubio-Espina, 1975:37, and by Rubio-Espina in R. Bohart and Menke, 1976:568 (as new synonym). – Kohl, 1891:396 (in checklist of world *Philanthus*); Dalla Torre, 1897:491 (in catalog of world Hymenoptera).

Philanthus gomezi Strand, 1910a:142. Emendation of *Trachypus gomesii* Klug, 1910. – Amarante, 2005a:13 (correction to his 2002 catalog).

Philanthus gomezi var. *asuncionis* Strand, 1910a:142, ♀. Holotype: ♀, Paraguay: Asunción (ZMHU). Synonymized with *Trachypus elongatus* by Rubio-Espina, 1975:37, and by Rubio-Espina in R. Bohart and Menke, 1976:568 (as new synonym).

12. *fasciatus* Rubio-Espina

Trachypus fasciatus Rubio-Espina, 1975:61, ♀. Holotype: ♀, Brazil: Santa Catarina: Nova Teutônia (MCZ). – Garcete-Barrett, 2001c:66 (Paraguay: locality records); Amarante, 2002:64 (in catalog of Neotropical Crabronidae).

13. *flavidus* (Taschenberg)

Philanthus flavidus Taschenberg, 1875:406, ♂. Holotype or syntypes: ♂: Brazil: no specific locality (Halle). – Kohl, 1891:367 (in checklist of world *Philanthus*); Dalla Torre, 1897:485 (in catalog of world Hymenoptera). – **As *Trachypus flavidus***: Rubio-Espina, 1975:42 (new generic assignment, in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Garcete-Barrett, 2001c:66 (Paraguay: locality records); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Nechitaylo, Westermann, and Kaltenpoth, 2014:206, 207 (physiological diversity among defensive ‘*Streptomyces philanthi*’ symbionts); Trad and Silvestre, 2017:6 (Brazil: Mato Grosso do Sul).

? *Trachypus coriani* Schrottky, 1909a:213, ♂. Holotype or syntypes: ♂, Paraguay: Encarnación (depository unknown). Tentatively synonymized with *Trachypus flavidus* by Rubio-Espina, 1975:42. – Schrottky, 1909c:211 (visiting flowers of *Coriandrum sativum* Linnaeus, Apiaceae), 1913a:229 (Paraguay).

Trachypus sp.: Schrottky, 1908:48, 49, 50, 51 (visiting flowers of *Petroselinum sativum* Hoffm., Apiaceae, *Coriandrum sativum* L., Apiaceae, *Solidago microglossa* D.C., Asteraceae, and *Senecio brasiliensis* L.), Asteraceae, corrected to *Trachypus coriani* by Schrottky 1909c:208.

14. *fulvipennis* (Taschenberg)

Philanthus fulvipennis Taschenberg, 1875:404, ♀. Holotype or syntypes: ♀, Brazil: no specific locality (Halle). – Kohl, 1891:367 (in checklist of world *Philanthus*); Dalla Torre, 1897:486 (in catalog of world Hymenoptera). – **As *Trachypus fulvipennis***: Rubio-Espina, 1975:43 (new generic assignment, in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Garcete-Barrett, 2001c:66 (Paraguay: locality records); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Buys, 2014b:23 (Brazil: Espírito Santo: Santa Teresa; nesting gregariously, nest structure, prey: meliponine bees *Plebeia remota* (Holmberg), *Partamona* sp. aff. *cuprea* (Smith), and *Schwarziana quadripunctata* (Lepeletier)).

Trachypus brevipetiolatus Schrottky, 1909a:212, ♀. Holotype or syntypes: ♀, Paraguay: Encarnación (depository unknown). Tentatively synonymized with *Trachypus fulvipennis* by Rubio-Espina, 1975:43, definitely synonymized by Rubio-Espina in Bohart and Menke, 1976:568. – Schrottky, 1913a:229 (Paraguay).

15. *gerstaeckeri* Dewitz

Trachypus gerstaeckeri Dewitz, 1881:202, ♀ (as *Gerstäckeri*, incorrect original capitalization and diacritic mark). Holotype: ♀, Puerto Rico: no specific locality (ZMHU). – Ashmead, 1900:307 (in checklist of Caribbean Hymenoptera); Wolcott, 1951:839 (in review of insects of Puerto Rico); Rubio-Espina, 1975:39 (in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Perez-Gelabert, 2008:241 (in list of arthropods of island of Hispaniola). – **As *Philanthus gerstaeckeri***: Kohl, 1891:367 (new generic assignment, in checklist of world *Philanthus*); Dalla Torre, 1897:486 (in catalog of world Hymenoptera).

16. *gracilis* (Cameron)

Philanthocephalus gracilis Cameron, 1890a:88, ♀, ♂. Syntypes: Mexico: Guerrero: Presidio and Chilpancingo (BMNH). – **As *Philanthus gracilis***: Cameron, 1891a:134 (new generic assignment, listed); Kohl, 1891:368 (in checklist of world *Philanthus*); Dalla Torre, 1897:487 (in catalog of world Hymenoptera). – **As *Trachypus gracilis***: Ashmead, 1899d:297 (new generic assignment, in checklist of North American Crabronidae); Rubio-Espina, 1975:62 (in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Packer, 1985:293 (Mexico; prey: *Halictus hesperus* Smith, a halictid bee), 296 (according to Evans, 1964 seems to concentrate on *Halictus hesperus* Smith as prey); Hanson and Menke, 1995:649 (known from Costa Rica); Cambra and Santos, 2000:56 (first record from Panama: Provincia de Coclé: Valle de Antón); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:669 (in checklist of Mexican Sphecidae); Horta Vega, Pinson

Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 46 (Mexico: Tamaulipas); Horta-Vega, Vanoye-Eligio, García-Gutiérrez, Coronado-Blanco, and Barrientos-Lozano, 2013:384 (Mexico: Tamaulipas: Ciudad Victoria: Cañón del Novillo).

Philanthocephalus maculiceps Cameron, 1890a:88, ♀, ♂. Syntypes: Mexico: Yucatán: Temax (BMNH). Synonymized with *Trachypus gracilis* by Rubio-Espina, 1975:63, and by R. Bohart in R. Bohart and Menke, 1976:568 (as new synonym). – **As *Philanthus maculiceps***: Cameron, 1891a:134 (new generic assignment, listed); Kohl, 1891:368 (in checklist of world *Philanthus*); Dalla Torre, 1897:488 (in catalog of world Hymenoptera).

17. *hirticeps* (Cameron)

Philanthocephalus hirticeps Cameron, 1890a:87, ♂. Lectotype: ♂, Mexico: Veracruz: Atoyac (BMNH), designated by Rubio-Espina, 1975:40. – **As *Philanthus hirticeps***: Cameron, 1891a:134 (new generic assignment, bibliographic references); Kohl, 1891:368 (in checklist of world *Philanthus*); Dalla Torre, 1897:487 (in catalog of world Hymenoptera). – **As *Trachypus hirticeps***: Ashmead, 1899d:297 (new generic assignment, in checklist of North American Crabronidae); Rubio-Espina, 1975:40 (in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:669 (in checklist of Mexican Sphecidae, as *hirticeps*).

18. *mandibularis* Rubio-Espina

Trachypus mandibularis Rubio-Espina, 1975:35, ♀. Holotype: ♀, Trinidad: Heights of Aripo (USNM). – Callan, 1991a:12 (Trinidad); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Starr and Hook, 2003:21 (in catalog of Aculeata of Trinidad, West Indies).

19. *mexicanus* de Saussure

Trachypus mexicanus de Saussure, 1867:86, ♀. Holotype or syntypes: ♀, Mexico: Tamaulipas: Tampico (MHNG). – Ashmead, 1899d:297 (in checklist of North American Crabronidae); Evans, 1964d:303 (nesting habits); Rubio-Espina, 1975:28 (in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Krombein, 1979b:1726 (in catalog of North American Hymenoptera, nesting sites, list of prey); Menke, 1980a:235 (nest and prey); Piek and Spanjer, 1986:191 (in list of Sphecidae with known prey); Hanson and Menke, 1995:649 (known from Costa Rica); Amarante, 2002:64 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:669 (in checklist of Mexican Sphecidae); Horta Vega, Pinson Domínguez, Barrientos Lozano, and Correa Sandoval, 2007: 46 (Mexico: Tamaulipas); Vanoye-Eligio, Meléndez-Ramírez, Ayala, Navarro-Alberto, and Delfín-González, 2015:995 (Mexico: in list of Sphecidae s.l. of Yucatán). – **As *Cerceris mexicanus* [sic]**: Bodkin, 1918:316 (new generic assignment, British Guiana, nesting in sandy soil). – **As *Philanthus mexicanus***: Cameron, 1891a:133 (new generic assignment, bibliographic references); Kohl, 1891:368 (in checklist of world *Philanthus*); Dalla Torre, 1897:488 (in catalog of world Hymenoptera); Casolari and Casolari Moreno, 1980:122 (specimens in M. Spinola collection, Torino).

Philanthocephalus mexicanus Cameron, 1890a:89, ♀, ♂, junior secondary homonym of *Trachypus mexicanus* de Saussure, 1867. Syntypes: Mexico: Guerrero: Río Papagaio, Rincón, Tierra Colorada, Chilpancingo; Jalisco: San Blas; Vera Cruz: Atoyac; Yucatán: Temax (BMNH). Synonymized with *Philanthus mexicanus* (de Saussure) by Cameron, 1891:133, by Dalla Torre, 1897:488, and by Rubio-Espina, 1975:28. – **As *Philanthus mexicanus***: Kohl, 1891:368 (new generic assignment, in checklist of world *Philanthus*). – **As *Trachypus mexicanus***: Rohwer, 1914:522 (new generic assignment, Guatemala: Quirigua).

Trachypus annulitarsis Cameron, 1908c:232, ♀ [sic]. Lectotype: ♂ [sic], Mexico: Yucatán: no specific locality (BMNH), designated by Rubio-Espina, 1975:28. Synonymized with *Trachypus mexicanus* by Rubio-Espina, 1975:28, and by Rubio-Espina in R. Bohart and Menke, 1976:568 (as new synonymy). – Burks in Muesebeck et al., 1951:1003 (in catalog of North American Hymenoptera, possibly occurring in southwestern USA); Krombein in Krombein and Burks, 1967:414 (the above record is from Nicaragua, not ?southwestern USA).

20. *miles* Schrottky

Trachypus miles Schrottky, 1909a:214, ♀, ♂. Syntypes: Paraguay: Encarnación (depository unknown). – Schrottky, 1913a:229 (Argentina, Paraguay); Rubio-Espina, 1975:66 (species dubia); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Garcete-Barrett, 2001c:66 (unrecognizable species); Amarante, 2002:65 (in catalog of Neotropical Crabronidae).

21. *minutus* Rubio-Espina

Trachypus minutus Rubio-Espina, 1975:58, ♀, ♂. Holotype: ♀, Argentina: Tucumán: San Pedro Colalao (UCD). – Amarante, 2002:65 (in catalog of Neotropical Crabronidae); Dollfuss, 2017b:1268 (Argentina: Catamarca: north of Ascochinga at 28°48'S 66°23'W).

22. *patagonensis* (de Saussure)

Philanthus patagonensis de Saussure, 1854:10, ♂. Holotype or syntypes: ♂, Argentina: northern Patagonia: no specific locality (depository unknown, not MHNG). – F. Smith, 1856:475 (in catalog of Hymenoptera in British Museum); Kohl, 1891:369 (in checklist of world *Philanthus*); Dalla Torre, 1897:489 (in catalog of world Hymenoptera). – **As *Trachypus patagonensis***: Holmberg, 1903:489 (Argentina); Brèthes, 1910a:277 (new generic assignment, redescription); Jørgensen, 1912:288 (Argentina: Mendoza Province); Schrottky, 1913a:229 (Patagonia, as *patagonicus*); Rubio-Espina, 1975:31 (in revision of *Trachypus*); R. Bohart and Menke, 1976:568 (in checklist of world Sphecidae); Amarante, 1993:20 (northeastern Brazil); Garcete-Barrett, 2001c:66 (Paraguay: locality records); Amarante, 2002:65 (in catalog of Neotropical Crabronidae); Vardy, 2017:14 (Argentina: Río Negro: Paso Córdoba; prey: honey bee).

Philanthus egregius Taschenberg, 1875:409, ♀. Holotype or syntypes: ♀, Argentina: Mendoza: no specific locality (Halle). Synonymized with *Trachypus patagonensis* by Brèthes, 1910a:278. – Kohl, 1891:367 (in checklist of world *Philanthus*); Dalla Torre, 1897:485 (in catalog of world Hymenoptera); Schrottky, 1903b:124 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay).

Trachypus martialis Holmberg, 1903:489, ♀, ♂. Syntypes: Argentina: Central Pampa: no specific locality (MACN). Synonymized with *Trachypus patagonensis* by Brèthes, 1910a:278.

Trachypus magnificus Schrottky, 1909b:246, ♀. Syntypes: ♀, Paraguay: Encarnación and Puerto Bertoni (depository unknown). Synonymized with *Trachypus patagonensis* by Rubio-Espina in Bohart and Menke, 1976:569. – Bertoni, 1911:134 (nest and prey); Schrottky, 1913a:229 (Paraguay); Rubio-Espina, 1975:31 (as synonym of *Trachypus patagonensis*).

23. *peruviansis* Rubio-Espina

Trachypus peruviansis Rubio-Espina, 1975:32, ♂. Holotype: ♂, Peru: Madre de Dios: Avispas (MCZ). – Amarante, 2002:65 (in catalog of Neotropical Crabronidae); Rasmussen and Asenjo, 2009:15 (in checklist of Crabronidae of Peru).

24. *petiolatus* (Spinola)

Philanthus petiolatus Spinola, 1842:121, ♀, ♂. Lectotype: ♀, French Guiana: Cayenne (M. Spinola collection, Torino), designated by Rubio-Espina, 1975:25. – Klug, 1846:42 (belongs to subsection *Trachypus* of *Philanthus*); de Saussure, 1854:8 (as synonym of *Philanthus gomesii*); F. Smith, 1856:475 (in catalog of Hymenoptera in British Museum, as synonym of *Philanthus gomesii*); Kohl, 1891:369 (in checklist of world *Philanthus*); Melo, 2000:100 (female associations for use of natal nest). – **As *Simblephilus petiolatus***: Dahlbom, 1844:190 (new generic assignment, in revision of Sphecidae and Pompilidae), 1845:496 (in key to *Simblephilus*). – **As *Trachypus petiolatus***: Evans and Matthews, 1973a:165 (new generic assignment, nesting habits; Colombia and Argentina), 171 (description of larva); Rubio-Espina, 1975:25 (in revision of *Trachypus*); R. Bohart and Menke, 1976:569 (in checklist of world Sphecidae); Menke, 1980a:236 (list of prey from Trinidad); Callan, 1990c:111 (nesting habits in Trinidad), 1991a:12 (Trinidad); Hanson and Menke, 1995:649 (known from Costa Rica); Cambra and Santos, 2000:56 (Panama: Parque Nacional Coiba in Isla de Coiba, Pacific Ocean); Garcete-Barrett, 2001c:66 (Paraguay: locality records); Amarante, 2002:65 (in catalog of Neotropical Crabronidae); Starr and Hook, 2003:21 (in catalog of Aculeata of Trinidad, West Indies); Wcislo, Fernández-Marin, and

- Di Trani, 2004:323 (nesting habits); Rasmussen and Asenjo, 2009:15 (in checklist of Crabronidae of Peru); Dollfuss, 2017b:1268 (locality records from Argentina, Ecuador, French Guyana, and Paraguay); Trad and Silvestre, 2017:6 (Brazil: Mato Grosso do Sul); Vardy, 2017:14 (Argentina: Río Negro: Paso Córdoba); López García, Mazzitelli, Fruitos, González, Marcucci, Giusti, Alemanno, del Barrio, Portela, and Debandi, 2019:315 (Argentina: Mendoza: departamento de Tupungato: vineyards in Gualtallary); León-Burgos, Murillo-Pacheco, Bautista-Zamora, and Quinto, 2019:6 (Colombia: Meta: Villavicencio at 4°04'30"N 73°35'07"W).
- Philanthus elegans* F. Smith, 1856:476, ♂. Holotype or syntypes: ♂, Brazil: Amazonas: Villa Nova, now Parintins (BMNH). Synonymized with *Trachypus petiolatus* by Rubio-Espina, 1975:25, and by R. Bohart in R. Bohart and Menke, 1976:569 (as new synonym). – Kohl, 1891:367 (in checklist of world *Philanthus*); Dalla Torre, 1897:485 (in catalog of world Hymenoptera); Jörgensen, 1912:288 (Argentina: Mendoza Province).
- Philanthus elegans* Taschenberg, 1875:407, ♀, ♂, junior primary homonym of *Philanthus elegans* F. Smith, 1856. Syntypes: Argentina: Mendoza: no specific locality (Halle). Synonymized with *Trachypus petiolatus* by Rubio-Espina, 1975:25, and by Rubio-Espina in R. Bohart and Menke, 1976:569 (as new synonym). – Kohl, 1891:367 (in checklist of world *Philanthus*).
- Philanthocephalus punctifrons* Cameron, 1890a:90, ♂. Lectotype: ♂, Panama: Bugaba (BMNH), designated by Rubio-Espina, 1975:26. Synonymized with *Trachypus petiolatus* by Rubio-Espina, 1975:26, and by R. Bohart in R. Bohart and Menke, 1976:569 (as new synonym). – **As *Philanthus punctifrons***: Cameron, 1891a:133 (new generic assignment, bibliographic reference); Kohl, 1891:369 (in checklist of world *Philanthus*); Dalla Torre, 1897:489 (in catalog of world Hymenoptera); Ashmead, 1899d:297 (in checklist of North American Crabronidae). – **As *Trachypus punctifrons***: Heithaus, 1979:193 (new generic assignment; Costa Rica: Guanacaste: Hacienda las Ciruelas 30.5 km northwest of Cañas).
- Philanthus mendozae* Dalla Torre, 1897:488. Substitute name for *Philanthus elegans* Taschenberg, 1875. – Schrottky, 1903b:124 (in checklist of Hymenoptera of Argentina, Paraguay, and Uruguay, as *mendozae* Taschenberg), 1909b:246 (Argentina: Catamarca); Brèthes, 1910a:278 (Argentina: Mendoza); Strand, 1910a:142 (Paraguay); Jörgensen, 1912:288 (Argentina: Mendoza Province, floral records); Schrottky, 1913a:229 (Argentina).
- Trachypus mendozae* var. *flavus* Brèthes, 1910a:278, sex not stated. Syntypes: Argentina: Mendoza and Salta: no specific localities (MACN). Synonymized with *Trachypus petiolatus* by Rubio-Espina, 1975:26, and by Rubio-Espina in Bohart and Menke, 1976:569 (as new synonym). – Jörgensen, 1912:288 (Argentina: Mendoza Province, as forma *flavus*).
- Trachypus mendozae* var. *ruficeps* Brèthes, 1910a:278, sex not stated. Syntypes: Argentina: Mendoza and Salta: no specific locality (MACN). Synonymized with *Trachypus petiolatus* by Rubio-Espina, 1975:26, and by Rubio-Espina in Bohart and Menke, 1976:569 (as new synonym). – Jörgensen, 1912:289 (Argentina: Mendoza Province, as forma *rubriceps*).
- Trachypus peruanus* Giner Marí, 1944:353, ♀. Holotype or syntypes: ♀, Peru: no specific locality (Mus. Barcelona). Synonymized with *Trachypus petiolatus* by Rubio-Espina, 1975:26, and by Rubio-Espina in R. Bohart and Menke, 1976:569 (as new synonym).

25. *romandi* (de Saussure)

- Philanthus romandi* de Saussure, 1854:8, ♀ (as *Romandi*, incorrect original capitalization). Holotype or syntypes: ♀, Brazil: no specific locality (MHNG). – F. Smith, 1856:476 (in catalog of Hymenoptera in British Museum); Kohl, 1891:369 (in checklist of world *Philanthus*, as *Romandii*); Dalla Torre, 1897:490 (in catalog of world Hymenoptera, as *romandii*); W. Fox, 1897b:379 (Brazil: Chapada; as *Romandii*). – **As *Trachypus romandi***: Bertoni, 1911:134 (new generic assignment, nest and prey); Schrottky, 1913a:229 (Paraguay); Rubio-Espina, 1975:33 (in revision of *Trachypus*); R. Bohart and Menke, 1976:569 (in checklist of world Sphecidae); Amarante, 2002:65 (in catalog of Neotropical Crabronidae); Buys, 2014b:23 (Brazil: Espírito Santo: Santa Teresa).

26. *soniae* Rubio-Espina

- Trachypus soniae* Rubio-Espina, 1975:52, ♀. Holotype: ♀, Brazil: Mato Grosso: Sierra Roncador (BMNH). – Garcete-Barrett, 2001c:67 (Paraguay: locality records); Amarante, 2002:65 (in catalog of Neotropical Crabronidae).

27. *spgazzinii* Brèthes

Trachypus spgazzinii Brèthes, 1910a:279, ♀ (as *Spegazzinii*, incorrect original capitalization). Holotype or syntypes: Argentina: Jujuy: no specific locality (MACN). – Schrottky, 1913a:229 (Argentina: Jujuy); Rubio-Espina, 1975:49 (in revision of *Trachypus*); R. Bohart and Menke, 1976:569 (in checklist of world Sphecidae); Genise, 1990:27 (type material in MACN); Amarante, 2002:65 (in catalog of Neotropical Crabronidae); Rasmussen and Asenjo, 2009:15 (in checklist of Crabronidae of Peru); Dollfuss, 2017b:1269 (locality records from Argentina); Vardy, 2017:14 (Argentina: Río Negro: Paso Córdoba).

Trachypus punctuosus Brèthes, 1910a:278, ♂. Syntypes: Argentina: Mendoza and Salta: no specific localities (MACN). Synonymized with *Trachypus spgazzinii* by Rubio-Espina, 1975:49, and by Rubio-Espina in R. Bohart and Menke, 1976:569 (as new synonym). – Jörgensen, 1912:289 (Argentina: Mendoza Province); Schrottky, 1913a:229 (Argentina); Genise, 1990:27 (type material in MACN).

28. *spinosus* Rubio-Espina

Trachypus spinosus Rubio-Espina, 1975:60, ♀, ♂. Holotype: ♀, Costa Rica: Cartago: Pacuare (USNM). – Dollfuss, 1989:13 (paratype in NHMW); Hanson and Menke, 1995:649 (known from Costa Rica); Cambra and Santos, 2000:56 (first record from Panama: Provincia de Coclé: El Copé; Provincia de Veraguas: Santa Fe); Amarante, 2002:65 (in catalog of Neotropical Crabronidae).

29. *stictosus* Rubio-Espina

Trachypus stictosus Rubio-Espina, 1975:34, ♀. Holotype: ♀, Brazil: Pará: Belém (BMNH). – Amarante, 2002:65 (in catalog of Neotropical Crabronidae).

30. *taschenbergi* Rubio-Espina

Trachypus taschenbergi Rubio-Espina, 1975:45, ♀, ♂. Holotype: ♀, Brazil: no specific locality (Halle). – Amarante, 2002:65 (in catalog of Neotropical Crabronidae); Pereira and Gonçalves, 2021:3 (nesting habits; prey: mainly drones of *Paratrigona subnuda* Moure, a stingless bee).

31. *varius* (Taschenberg)

Philanthus varius Taschenberg, 1875:405, ♀, ♂. Lectotype: ♀, Brazil: no specific locality (Halle), designated by Rubio-Espina, 1975:53. – Kohl, 1891:3691 (in checklist of world *Philanthus*); Dalla Torre, 1897:493 (in catalog of world Hymenoptera). – **As *Trachypus varius***: Rubio-Espina, 1975:53 (new generic assignment, in revision of *Trachypus*); R. Bohart and Menke, 1976:569 (in checklist of world Sphecidae); Amarante, 2002:65 (in catalog of Neotropical Crabronidae); Dollfuss, 2017b:1269 (Argentina: Entre Ríos: north of Parana at 31°14'S 59°59'W); Pereira and Gonçalves, 2021:3 (nesting habits; prey: worker of *Paratrigona subnuda* Moure, a stingless bee).

sp.

Callan, 1954:25 (Venezuela: Paria Peninsula: Cristóbal Colón); Zapata, 1974:37 (Chile: Lampa near Santiago); Maes, 1989:95 (in catalog of Nicaraguan Sphecidae); F. Fernández, 1990:24 (Colombia: Meta: Parque Nacional Natural La Macarena); Amarante, 1993:20 (northeastern Brazil); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State).

NOMINA NUDA IN TRACHYPUS

Trachypus leprieuri: Casolari and Casolari Moreno, 1980:122 (specimens in M. Spinola collection, Torino); Pagliano, 2014:98 (specimens in M. Spinola collection, Torino, are *Trachypus petiolatus*).

Trachypus obscurus: Casolari and Casolari Moreno, 1980:122 (specimens in M. Spinola collection, Torino); Pagliano, 2014:99 (specimen in M. Spinola collection, Torino, is *Trachypus romandi*).

Trachypus stigma: Casolari and Casolari Moreno, 1980:122 (specimens in M. Spinola collection, Torino); Pagliano, 2014:98 (specimens in M. Spinola collection, Torino, are *Trachypus elongates*).

SPECIES DESCRIBED IN *TRACHYPUS* AND TRANSFERRED TO OTHER GENERA

albolineatus Cameron, 1908 = *Cerceris*

nursei Bingham, 1898 = *Philanthus*

subconcolor Bingham, 1898 = *Philanthus*