

Last updated: 2 March 2025

STENIOLIA

Steniolia Say, 1837:367. Type species: *Bembex longirostra* Say, 1837, by monotypy.

Revision: R. Bohart and Gillasp, 1985:41 (California species), with key to all species.

1. *californiensis* Gillasp

Steniolia californiensis Gillasp, 1964:52, ♀, ♂. Holotype: ♂, USA, California: San Bernardino County: Dollar Lake Trail (ANSP). – R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Krombein, 1979b:1719 (in catalog of North American Hymenoptera); R. Bohart and Gillasp, 1985:42 and 43 (in key to world *Steniolia*), 44 (in revision of Californian *Steniolia*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae).

2. *dissimilis* C. Fox

Steniolia dissimilis C. Fox, 1923b:429, ♂, ♀. Holotype: ♂, Mexico: Sonora: Guaymas (CAS). – J. Parker, 1929:52 (in revision of Stizini and Bembicini); Lohrmann, 1939:138 (relationships), 1948:458 (in review of *Steniolia*); Gillasp, 1964:103 (in revision of *Steniolia*); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Krombein, 1979b:1719 (in catalog of North American Hymenoptera); R. Bohart and Gillasp, 1985:42 and 43 (in key to world *Steniolia*); Amarante, 2002:12 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae).

3. *duplicata* Provancher

Steniolia duplicata Provancher, 1888:414, ♀, ♂. Lectotype: ♂, USA: California: Los Angeles (Laval Univ.), designated by Gahan and Rohwer, 1918:196. – W. Fox, 1893d:10 (Mexico: Baja California), 1894c:104 (Mexico: Baja California), 1895d:373 (in synopsis of North American Bembicini); Ashmead, 1899d:240 (in checklist of North American Crabronidae); Cockerell, 1899a:142 (New Mexico); Johnson and Rohwer, 1908:379 (Colorado, New Mexico); Rohwer, 1909b:245 (Colorado: Boulder County); J. Parker, 1917:10 (in revision of North American Bembicini); Rohwer, 1917a:249 (Arizona: Tucson); C. Fox, 1926:219 (Mexico: Gulf of California: Revillagigedo Islands); J. Parker, 1929:151 (in revision of Stizini and Bembicini); Rodeck, 1934:1 (Nevada); Lohrmann, 1939:138 (relationships), 1948:458 (in review of *Steniolia*); Burks in Muesebeck, Krombein, and Townes, 1951:995 (in catalog of North American Hymenoptera); Gillasp, 1964:89 (in revision of *Steniolia*); Evans, 1964b:263 (description of larva); Evans and Gillasp, 1964:259 (floral records, nocturnal clustering), 274 (nesting behavior); Evans, 1966d:209 (nocturnal clustering), 216 (nesting behavior), 217 (prey), 218 (killing prey), 218 (final closure of nest); Hurd and Linsley, 1975:117 (Arizona: Yuma County: Yuma; on flowers of *Larrea tridentata* (De Candolle) Coville, Zygophyllaceae); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Evans, 1977a:318 (Baja California Sur); Krombein, 1979b:1719 (in catalog of North American Hymenoptera, nesting sites, list of prey); R. Bohart and Gillasp, 1985:43 and 44 (in key to world *Steniolia*), 54 (in revision of Californian *Steniolia*); Piek and Spanjer, 1986:190 (in list of Sphecidae with known prey); Kingsley, Bailowitz, and Smith, 1987:19 (Arizona: Organ Pipe Cactus National Monument: Quitobaquito Springs area); Frommer, 1988:96 (California: Riverside County: Deep Canyon; as *Spilomena duplicata*); Amarante, 2002:12 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae).

Steniolia edwardsi Patton, 1894:45 (authorship attributed to Cresson). Nomen nudum. Synonymized with *Steniolia duplicata* by Patton, 1894:45.

Steniolia meridionalis C. Fox, 1923b:430, ♀, ♂. Holotype: ♂, Mexico: Sonora: Guaymas (CAS). Synonymized with *Steniolia duplicata* by J. Parker, 1929:51.

4. *elegans* J. Parker

Steniolia elegans J. Parker, 1929:50, ♂. Holotype: ♂, Mexico: San Luis Potosí (originally Massachusetts Agric. College, now USNM). – Lohrmann, 1939:138 (relationships), 1948:458 (in review of *Steniolia*); Evans and Lin, 1956b:52 (description of larva); Krombein, 1958f:195 (in supplement to catalog of North American Hymenoptera: description of larva by Evans and Lin, 1956b reported); Evans and Linsley, 1960:32 (casual member of sleeping aggregation at Southwest Research Station, Arizona); Gillaspay, 1964:95 (in revision of *Steniolia*); Evans and Gillaspay, 1964:261 (nocturnal clustering), 276 (nesting behavior); Evans, 1966d:209 (nocturnal clustering), 1973a:29 (nesting habits); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); G. Bohart, Nye, and Hawthorn, 1970:48 (Utah: Logan, onion pollinator); Krombein, 1979b:1719 (in catalog of North American Hymenoptera, nesting sites, list of prey); R. Bohart and Gillaspay, 1985:42 and 44 (in key to world *Steniolia*), 46 (in revision of Californian *Steniolia*); Frommer, 1988:96 (California: Riverside County: Deep Canyon; in *Spilomena*); Amarante, 2002:12 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae); Ruíz Cancino, Coronado Blanco, and Horta Vega, 2005:170 (Mexico: recorded from Tamaulipas State); Evans and O'Neil, 2007:155 (summary of information on nesting habits); Nemkov, 2012b:122 (review of known prey).

5. *eremica* Gillaspay

Steniolia eremica Gillaspay, 1964:67, ♀, ♂. Holotype: ♂, California: Imperial County: Calexico (CAS). – Evans and Gillaspay, 1964:276 (asilid prey); Evans, 1966d:217 (prey); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Krombein, 1979b:1719 (in catalog of North American Hymenoptera); R. Bohart and Gillaspay, 1985:43 and 44 (in key to world *Steniolia*), 46 (in revision of Californian *Steniolia*); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae).

6. *guatemalensis* (Rohwer)

Stictia guatemalensis Rohwer, 1914:517, ♀. Holotype: ♀, Guatemala: Antigua (USNM). – **As *Steniolia guatemalensis*:** J. Parker, 1929:53 (new generic assignment, in revision of Stizini and Bembicini); Lohrmann, 1939:138 (relationships), 1948:426 (illustration of head in frontal view); Gillaspay, 1964:86 (in revision of *Steniolia*); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); R. Bohart and Gillaspay, 1985:42 and 43 (in key to world *Steniolia*); Hanson and Menke, 1995:648 (known from Costa Rica); Amarante, 2002:12 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae).

7. *longirostra* (Say)

Bembex longirostra Say, 1837:366, ♂. Holotype or syntypes: ♂, Mexico: no specific locality (lost). – F. Smith, 1856:331 (in catalog of Hymenoptera in British Museum). – Le Conte, 1859b:751 (original description copied); Cresson, 1863:316 (in catalog of North American Hymenoptera). – **As *Steniolia longirostra*:** Handlirsch, 1889a:508 (new generic assignment, in revision of world Bembicinae, as *longirostris*); Cameron, 1890a:92 (Mexico, Guatemala; re-description); Handlirsch, 1895:965 (reference to Cameron, 1890a; as *longirostris*); Dalla Torre, 1897:501 (in catalog of world Sphecidae, as *longirostris*); Ashmead, 1899d:240 (in checklist of North American Crabronidae); J. Parker, 1929:49 (in revision of Stizini and Bembicini, as *longirostris*); Lohrmann, 1939:138 (relationships, as *longirostris*); Gillaspay, 1964:84 (in revision of *Steniolia*); Evans, 1964b:264 (description of larva); Evans and Gillaspay, 1964:272 (nesting behavior); Evans, 1966d:216 (nesting behavior), 217 (nest structure, prey); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Casolari and Casolari Moreno, 1980:115 (specimens in M. Spinola collection, Torino); R. Bohart and Gillaspay, 1985:42 and 43 (in key to world *Steniolia*); Larsson, 1990a:65 (thermoregulation and activity pattern; Costa Rica); Hanson and Menke, 1995:648 (known from Costa Rica); Amarante, 2002:12 (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, 2007:156 (summary of information on nesting habits); Pagliano, 2011a:127 (specimens in M. Spinola collection, Torino).

Steniolia montezuma F. Smith, 1856:334, ♀, ♂ (as *Montezuma*, incorrect original capitalization). Syntypes: Mexico: no specific locality (BMNH). Synonymized with *Steniolia longirostris* by Handlirsch, 1889a:508. – As *Monedula montezuma*: Cresson, 1863:316 (in catalog of North American Hymenoptera).

8. *mexicana* Gillasp

Steniolia mexicana Gillasp, 1964:78, ♀, ♂. Holotype: ♂, Mexico: Jalisco: Guadalajara (USNM). – R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); R. Bohart and Gillasp, 1985:43 and 44 (in key to world *Steniolia*); Amarante, 2002:12 (in catalog of Neotropical Crabronidae); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae).

9. *nigripes* J. Parker

Steniolia nigripes J. Parker, 1917:8, ♂. Holotype: ♂, USA: California: Los Angeles County: Los Angeles (ANSP). – Cresson, 1928:46 (holotype in ANSP); J. Parker, 1929:49 (in revision of Stizini and Bembicini); Lohrmann, 1939:138 (relationships); Burks in Muesebeck, Krombein, and Townes, 1951:995 (in catalog of North American Hymenoptera); Gillasp, 1951:167 (nesting behavior); Evans and Lin, 1956b:53 (description of larva); Krombein, 1958f:195 (in supplement to catalog of North American Hymenoptera: description of larva by Evans and Lin, 1956b, reported; prey: *Aphoebantus* spp., Bombyliidae); Evans and Gillasp, 1964:272 (nesting behavior); Gillasp, 1964:108 (in revision of *Steniolia*); Evans, 1966d:216 (nesting behavior), 217 (prey); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Krombein, 1979b:1720 (in catalog of North American Hymenoptera); R. Bohart and Gillasp, 1985:42 and 44 (in key to world *Steniolia*), 47 (in revision of Californian *Steniolia*); Frommer, 1988:95 (California: Riverside County: Deep Canyon); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae); J. Thomas and Nonacs, 2002:317 (size dimorphism and male aggregation behavior); Evans and O'Neil, 2007:152 (summary of information on nesting habits).

10. *obliqua* (Cresson)

Monedula obliqua Cresson, 1865b:469, ♀. Lectotype: ♀, USA: Colorado Territory: no specific locality (ANSP), designated by Cresson, 1916:97. – Snow, 1881:96 (in checklist of Hymenoptera of Kansas: Wallace County: no specific locality). – As *Steniolia obliqua*: Patton, 1879d:364 (new generic assignment); Cresson, 1887:278 (in catalog of North American Hymenoptera); Handlirsch, 1889a:511 (in revision of world Bembicinae); Ashmead, 1890:33 (in checklist of Hymenoptera of Colorado); W. Fox, 1895d:373 (in synopsis of North American Bembicini); Dalla Torre, 1897:501 (in catalog of world Sphecidae); Ashmead, 1899d:240 (in checklist of North American Crabronidae); Cameron, 1908c:237 (Colorado); Johnson and Rohwer, 1908:379 (Colorado); Rohwer, 1909b:243 (Colorado: Boulder County); J. Parker, 1917:12 (in revision of North American Bembicini), 1929:48 (in revision of Stizini and Bembicini); Rodeck, 1934:1 (USA: Colorado, Idaho, Wyoming); Lohrmann, 1939:138 (relationships); Burks in Muesebeck, Krombein, and Townes, 1951:995 (in catalog of North American Hymenoptera); Evans, 1963c:fig. 24 after p. 134 (photograph of sleeping aggregation); Gillasp, 1964:56 (in revision of *Steniolia*); Evans, 1964b:265 (description of larva); Evans and Gillasp, 1964:259 (floral records), 261 (nocturnal clustering), 265 (mating), 266 (nest, prey capture and transport, life cycle, cocoon), 277 (natural enemies); Evans, 1966d:209 (nocturnal clustering), 213 (mating behavior), 214 (nesting behavior), 217 (nest structure, prey), 218 (final closure of nest), 219 (natural enemies), 1970:494 (Wyoming: Jackson Hole, prey, nest parasites); Horning and Barr, 1970:105 (USA: Idaho: Craters of the Moon National Monument); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Krombein, 1979b:1719 (in catalog of North American Hymenoptera, nesting sites, list of parasites and prey); R. Bohart and Gillasp, 1985:42 and 43 (in key to world *Steniolia*), 48 (in revision of Californian *Steniolia*); Piek and Spanjer, 1986:190 (in list of Sphecidae with known prey); Steiner, 1986:112 (references to publications on nesting habits); Spofford, Kurczewski, and Downes, 1989:256, 260 (summary of previous records for nest parasites *Hilarella hilarella* (Zetterstedt) and *Taxigramma heteroneura* (Meigen), miltogrammine flies); Blades and Maier, 1996:72 (Canada: British Columbia: Osoyoos–Mount Kobau area at 119°40'W 49°05'N); Weissmann and Kondratieff, 1999:78 (Colorado: Great Sand Dunes National Monument); Evans and O'Neil, 2007:153 (summary of information

on nesting habits); Buck and Bennett, 2025:209 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality).

11. *powelli* Gillaspy

Steniolia powelli Gillaspy, 1964:81, ♀, ♂. Holotype: Mexico: Baja California Norte: Boca de Santa Maria (CAS). – R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Bohart and Gillaspy, 1985:43 (in key to world *Steniolia*).

12. *scolopacea* Handlirsch

Steniolia scolopacea Handlirsch, 1889a:510, ♀, ♂. Lectotype: ♀, USA: Nevada: no specific locality (NHMW), designated by Gillaspy, 1964:71. – W. Fox, 1985d:373, 1891e:195, and 1893d:10 (as synonym of *Steniolia duplicata*); Cameron, 1890a:94 (Mexico, redescription); Handlirsch, 1895:965 (additional bibliography); Dalla Torre, 1897:501 (in catalog of world Sphecidae); Cameron, 1908c:237 (Arizona); J. Parker, 1917:10 and 1929:51 (as synonym of *Steniolia duplicata*); Gillaspy, 1964:71 (in revision of *Steniolia*); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Krombein, 1979b:1720 (in catalog of North American Hymenoptera); R. Bohart and Gillaspy, 1985:43 and 44 (in key to world *Steniolia*), 48 (in revision of Californian *Steniolia*); Rust, Menke, and Miller, 1985:47 (California: Channel Islands); Dollfuss, 1989:12 (lectotype in NHMW); Ruíz Cancino, Coronado Blanco, Varela Fuente, and Horta Vega, 2002:666 (in checklist of Mexican Sphecidae); Buck and Bennett, 2025:209 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality).

ssp. albicantia J. Parker

Steniolia albicantia J. Parker, 1917:21, ♂. Holotype: ♂, USA: Washington: Grand Coulee County: Columbia River (USNM), see Cockerell, 1918:60. – J. Parker, 1929:52 (in revision of Stizini and Bembicini); Lohrmann, 1939:138 (relationships), 1948:458 (in review of *Steniolia*); Burks *in* Muesebeck, Krombein, and Townes, 1951:995 (in catalog of North American Hymenoptera). – **As *Steniolia scolopacea albicantia***: Gillaspy, 1964:75 (new status, in revision of *Steniolia*); Evans and Gillaspy, 1964:261 (nocturnal clustering); Evans, 1966d:209 (nocturnal clustering); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Krombein, 1979b:1720 (in catalog of North American Hymenoptera); R. Bohart and Gillaspy, 1985:43 and 44 (in key to world *Steniolia*), 49 (in revision of Californian *Steniolia*); Radović, 1985:66 (sting apparatus analyzed); Ratzlaff, 2016:24 (Canada: British Columbia: from Krombein, 1979).

13. *sulfurea* W. Fox

Steniolia sulfurea W. Fox, 1901a:84, ♂. Lectotype: ♂, California: Shasta County: no specific locality (AMNH), designated by Gillaspy, 1964:105. – J. Parker, 1917:9 (in revision of North American Bembicini), 1929:49 (in revision of Stizini and Bembicini); Lohrmann, 1948:458 (in review of *Steniolia*); Burks *in* Muesebeck, Krombein, and Townes, 1951:995 (in catalog of North American Hymenoptera); Gillaspy, 1964:105 (in revision of *Steniolia*); R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Krombein, 1979b:1720 (in catalog of North American Hymenoptera); R. Bohart and Gillaspy, 1985:42 and 43 (in key to world *Steniolia*), 49 (in revision of Californian *Steniolia*).

14. *tibialis* Handlirsch

Steniolia tibialis Handlirsch, 1889a:513, ♀, ♂. Lectotype: ♂, USA: Nevada: no specific locality (NHMW), designated by Gillaspy, 1964:56. – W. Fox, 1895d:374 (in synopsis of North American Bembicini); Handlirsch, 1895:966 (additional bibliography); Dalla Torre, 1897:501 (in catalog of world Sphecidae); Ashmead, 1899d:240 (in checklist of North American Crabronidae); J. Parker, 1917:14 (in revision of North American Bembicini), 1929:48 (in revision of Stizini and Bembicini); Lohrmann, 1939:138 (relationships); Burks *in* Muesebeck, Krombein, and Townes, 1951:995 (in catalog of North American Hymenoptera); Gillaspy, 1964:59 (in revision of *Steniolia*); Evans and Gillaspy, 1964:276 (nesting behavior); Evans, 1966d:217 (prey); R. Bohart and Menke, 1976:553 (in checklist of

world Sphecidae); Krombein, 1979b:1720 (in catalog of North American Hymenoptera, prey); R. Bohart and Gillasp, 1985:42 and 43 (in key to world *Steniolia*), 50 (in revision of Californian *Steniolia*); Radović, 1985:66 (sting apparatus analyzed); Tyler, 1986:226 (sleeping aggregations); Dollfuss, 1989:12 (lectotype in NHMW); Evans and O’Neil, 2007:153 (summary of information on nesting habits); Nemkov, 2012b:122 (review of known prey); Ratzlaff, 2016:24 (first record from Canada: British Columbia: Southern Interior), 33 (British Columbia: Goldstream); Buck and Bennett, 2025:209 (in checklist of Sphecidae *sensu lato* of Canada, Alaska, and Greenland: Canada: British Columbia: no specific locality).

15. *vanduzeei* Gillasp

Steniolia vanduzeei Gillasp, 1964:62, ♀, ♂. Holotype: ♂, USA: Nevada: Washoe County: Nixon (CAS). – R. Bohart and Menke, 1976:553 (in checklist of world Sphecidae); Krombein, 1979b:1720 (in catalog of North American Hymenoptera); R. Bohart and Gillasp, 1985:43 and 44 (in key to world *Steniolia*), 51 (in revision of Californian *Steniolia*).

sp.

Parks, 1986:35 (Torrey Pines State Reserve); Maes, 1989:96 (in catalog of Nicaraguan Sphecidae).