

# Catalog and Bibliography of the Species of *Nectopsyche* (Trichoptera: Leptoceridae)

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The long-horned caddisfly genus *Nectopsyche* contains some 57 described species. The genus is restricted to the New World, where species occur from Canada south through the United States, Mexico, and Central and South America, to Argentina and Chile. Many new species await description and many more certainly occur in nature. A revision of the entire genus is sorely needed, the only one being that of Haddock (1977) for the Nearctic species. Flint, in a number of papers, has clarified the identity of many of the older names, especially those described by Navás, and placed many in synonymy, and Holzenthal (1995) has reviewed the *gemma* group as it occurs in Costa Rica. Identity of species is based largely on color pattern of the body and forewings, male genitalia being rather uniform throughout the genus. It is therefore essential to have pinned, unrubbed material for identification.

Larvae are well known for both the Nearctic (Ross 1944, Haddock 1977, Wiggins 1996) and Neotropical faunas (Marlier 1964, Roback 1966, Flint 1968, Botosaneanu and Flint 1982, Roldán Pérez 1988). They generally build long, slender, tubular cases of sand grains or plant material or both. They inhabit small and large lentic and lotic habitats and are classified trophically as shredders-herbivores and collectors-gatherers (Merritt and Cummins 1996). Larvae of some species have rows of long setae on the hind legs, enabling them to swim.

This catalog lists all of the species described through 1999 and associated taxonomic literature. Complete bibliographies, including synonyms, for publications which appeared before 1961 are given by Fischer (1966, 1972). Haddock (1977) provided extensive bibliographies and synonyms for the North American species, excluding Mexico. I have not included complete bibliographies for the North American species as these can be found in the works of Fischer and Haddock, but only those I consider to be important for taxonomic or identification purposes. I have tried, however, to give a complete listing of the literature pertaining to the Neotropical fauna. All accepted names of species are printed in boldface italic type followed by the authority, citation of the original description, and, in brackets, type locality, location of type material, sex of type, genus in which the species was first placed, and any other life history stages included in the original description. Abbreviations refer to the following institutions: Natural History Museum, London (**BMNH**); California Academy of Sciences, San Francisco (**CAS**); Institute für Pflanzenschutzforschung (formerly Deutches Entomologisches Institut), Kleinmachnow, Eberswalde (**DEI**); Illinois Natural History Survey, Urbana (**INHS**); Instituto San Miguel, Buenos Aires (**ISMA**); Museo Argentina de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires (**MACN**); Museum of Comparative Zoology, Harvard University, Cambridge (**MCZ**); Museum National d'Histoire Naturelle, Paris (**MNHNP**); L. Navás Insect Collection, Museo de Zoología, Parque de la Ciudadela, Barcelona (**MZBS**); Naturhistorisches Museum, Vienna (**NHMW**); National Museum of Natural History, Smithsonian Institution,

Washington, D.C. (**NMNH**); Zoological Institute of the Polish Academy of Sciences, Warsaw (**PAN**); Rijksmuseum van Natuurlijke Historie, Leiden (**RNH**); Zoological Institute, Academy of Sciences, Leningrad [St. Petersburg] (**ZIL**); Zoologisch Museum, Universiteit van Amsterdam (**ZMUA**); Zoologischen Staatsinstituts und Zoologischen Museums, Hamburg (**ZSMH**). Synonyms are given in italics and the work in which the synonymy was established is indicated as are any other significant works associated with the name. Finally, distributions are recorded by country.

A few sentences are in order concerning the Navás collection. Types of the majority of Navás' species were in his collection at Zaragoza, Spain (Colegio del Salvador). Before and after his death, much of the collection was moved from Zaragoza to Barcelona (MZBS) and a portion to Paris (MNHN). An undetermined number of specimens were destroyed during the Spanish Civil War (Schmid 1949). Types of many of his species, though, are housed in collections throughout Europe and other parts of the world and Navás usually gave no indication of where he ultimately placed them. A few of these have been relocated by Drs. O.S. Flint, Jr., and J.C. Morse and their current depositories are indicated below.

As pointed out by Flint (1974) *Leptocella kiansinica* Ulmer and *L. maculata* Banks, being Oriental, are probably not congeneric with *Nectopsyche*. The identity of *Leptocella nordmani* Klingstedt from Sweden is uncertain, but it, too, is undoubtedly not congeneric with *Nectopsyche*.

## Genus **Nectopsyche** Müller

*Nectopsyche* Müller, 1879:38 [Type species: *Setodes gemma* Müller 1880a, first included species].

*Leptocella* Banks, 1899:214 [Type species: *Mystacides uwarowii* Kolenati 1859, original designation]. —Flint, 1974:127 [to synonymy].

*Brethesella* Navás, 1920:71 [Type species: *Brethesella decorata* Navás 1920, monobasic]. —Flint, 1982:57 [to synonymy].

**acutiloba** Flint, 1974:133 [Type locality: Surinam, Kaboeri Creek, first camp; RNH; ♂].

DISTRIBUTION. —Guyana, Suriname.

**adusta** Flint, 1983:74 [Type locality: Argentina, Pcia. Entre Ríos, Salto Grande, Río Uruguay; NMNH; ♂].

DISTRIBUTION. —Argentina.

**albida** (Walker) 1852:71 [Type locality: Canada, Hudson's Bay, Albany River, St Martin's Falls; BMNH; ♂; in *Leptocerus*]. —Betten and Moseley 1940:61 [♂ holotype figured]. —Ross 1944:220 [♂, ♀, larva].

—Flint 1966a:383 [genitalia of ♂ types of *coloradensis* and *exilis* identical to *albida*]. —Haddock 1977:416 [♂, ♀, larva; distribution]. —Schmid 1998:293 [♀].

—*uwarowii* (Kolenati) 1859:148, 169, 189, 249-250 [Type locality: North America, Alaska?; ZIL?; sex not stated; *Mystacides*]. —Milne 1934:14, 19 [to synonymy].

—*nivea* (Hagen) 1861:281 [Type locality: Canada, St. Lawrence River; MCZ; ♂; in *Setodes*]. —Ross 1938:22 [♂ lectotype]. —Milne 1934:19 [to synonymy].

DISTRIBUTION. —Canada, U.S.A.

**argentata** Flint, 1991:94 [Type locality: Colombia, Dpto. Antioquia, Quebrada Honda, Marsella [12 km SW Fredonia]; NMNH; ♂]. —Holzenthal 1995:66 [♂; redescription, distribution, and corrections].

DISTRIBUTION. —Colombia, Costa Rica, Mexico, Peru, Venezuela.

**aureofasciata** Flint, 1981:34 [Type locality: Venezuela, Aragua, Maracay, El Limón; NMNH; ♂].

DISTRIBUTION. —Venezuela.

- aureovittata** Flint, 1983:74 [Type locality: Argentina, Pcia. Misiones, Río Iguazú, Camp Nañdu; NMNH; ♂].  
 DISTRIBUTION. —Argentina, Paraguay.
- bella** (Müller), 1921:538 [Locality: Brazil, Santa Catarina; no type nor type depository designated; pupa; in *Setodes*].  
 DISTRIBUTION. —Brazil.
- brethesi** (Navás), 1920:40 [Type locality: Uruguay, Banda Oriental; MZBS; ♂; in *Leptocella*]; 1920:66 [♀; distribution]. —Schmid 1949:386 [no ♂ in Navás collection].  
 DISTRIBUTION. —Argentina, Uruguay.
- bruchi** (Navás), 1920:66 [Type locality: Argentina, Monte Veloz, estancia Barreto; MACN; ♂; in *Leptocella*]. —Flint 1972:243 [diagnosis, distribution]; 1982:55 [redescription, distribution].  
 DISTRIBUTION. —Argentina, Brazil, Paraguay.
- brunneofascia** Flint, 1983:71 [Type locality: Argentina, Pcia. Misiones, Puerto Libertad; NMNH; ♂].  
 DISTRIBUTION. —Argentina.
- cana** (Navás), 1924a:254 [Type locality: Venezuela, Arismondi; MNHNP; ♀; in *Leptocella*].  
 DISTRIBUTION. —Venezuela.
- candida** (Hagen) 1861:280 [Type locality: United States, Florida; MCZ; ♂; in *Setodes*]. —Ross 1938:22 [♂ lectotype]. —Ross 1944:217 [♂, ♀, larva]. —Fischer 1966:51 [as synonym of *albida*]. —Haddock 1977:396 [♂, larva; distribution].  
 DISTRIBUTION. —Canada, U.S.A.
- coloradensis** (Banks) 1899:215 [Type locality: United States, Colorado; MCZ; sex not stated; in *Leptocella*]. —Milne 1934:14, 19 [color form of *albida*]. —Ross 1938:22 [♂ lectotype]. —Flint 1966a:383 [as synonym of *albida*]. —Haddock 1977:419 [*incertae sedis*].  
 DISTRIBUTION. —U.S.A.
- cubana** (Banks), 1938:299 [Type locality: Cuba, Guines (sic); MCZ; ♂; in *Leptocella*]. —Flint, 1967:21 [♂ lectotype]; 1968:54 [♂, ♀; distribution]. —Kumanski, 1987:33 [distribution]. —Flint, 1992a:387 [♀; possibly *cubana* on Puerto Rico].  
 DISTRIBUTION. —Cuba, Dominican Republic, Jamaica, Puerto Rico [?].
- diarina** (Ross) 1944:218 [Type locality: United States, Illinois, Havana; INHS; ♂; ♀, larva; in *Leptocella*]. —Flint 1966a:383 [as synonym of *intervena*]. —Haddock 1977:414 [resurrected from synonymy; ♂, larva; distribution].  
 DISTRIBUTION. —Canada, U.S.A.
- diminuta** (Banks), 1920:353 [Type locality: British Guiana, Bartica; MCZ; ♂; in *Leptocella*]. —Flint, 1967:21 [♂ lectotype]; 1974:133 [♂; redescription, distribution]; 1992b:71 [distribution].  
 DISTRIBUTION. —Brazil, Guyana, Suriname.
- dorsalis** (Banks), 1901:368 [Type locality: Mexico, Veracruz, Jalapa; MCZ; sex not stated; in *Leptocella*]. —Flint, 1967:21 [type is ♀; topotypic ♂ illustrated]. —Haddock, 1977:408 [♂, larva; distribution]. —Maes and Flint, 1988:6 [distribution].  
 —*serrei* (Navás), 1924b:83 [Type locality: Costa Rica, Sarapiquí, La Virgen; MNHNP; ♂; in *Leptocella*]. —Flint 1981:34 [to synonymy].  
 DISTRIBUTION. —Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, U.S.A., Venezuela.
- exquisita** (Walker) 1852:72 [Type locality: United States, Georgia; BMNH; ♀; in *Leptocerus*]. —Betten and Mosely 1940:63 [♀ holotype figured; ♂]. —Ross 1944:217 [♂, larva]. —Haddock 1977:398 [♂, ♀, larva]. —Schmid 1998:293 [♂].  
 —*piffardii* (McLachlan) 1863:160 [Type locality: Canada, Nova Scotia; BMNH; sex not stated; in *Setodes*]. —Haddock 1977:398 [to synonymy].  
 DISTRIBUTION. —Canada, U.S.A.
- exophthalma** Holzenthal, 1995:68 [Type locality: Costa Rica, Alajuela, Río Agrio, ca. 3.5 km NE Bajo del Toro, 10.243°N, 84.279°W; NMNH; ♂].  
 DISTRIBUTION. —Costa Rica.
- flavofasciata** (Ulmer), 1907:18 [Type locality: Brazil, Santa Catarina; PAN; ♂; in *Leptocella*]. —Flint, 1966b:9 [♂, redescription]; 1972:242 [distribution].  
 —*decorata* (Navás), 1920:71 [Type locality: Argentina, Entre Ríos; MZBS; ♀; in *Brethesella*]. —Flint, 1982:56 [to synonymy].  
 —*sparsa* (Banks) 1920:353 [Type locality: Argentina, Misiones; MCZ; ♂; in *Leptocella*]. —Flint, 1966b:9 [to synonymy]; 1967:21 [♂ lectotype].

- ditata* (Navás), 1933:118 [Type locality: Argentina, Santa Fe, Piquete; ISMA; ♀; in *Leptocella*]. —Flint, 1982:56 [to synonymy].  
 DISTRIBUTION. —Argentina, Bolivia, Brazil, Peru.
- fulva*** (Navás), 1930b:363 [Type locality: Chile, Perales; type depository not designated; ♀; in *Leptocella*]. —Schmid, 1949:386 [no ♂ in Navás collection].  
 DISTRIBUTION. —Chile.
- fuscomaculata*** Flint, 1983:73 [Type locality: Argentina, Pcia. Misiones, Arroyo Liso, 8 km W General Güemes; NMNH; ♂].  
 DISTRIBUTION. —Argentina, Brazil, Paraguay.
- gemma*** (Müller), 1880a:110, 130 [Type locality: Brazil, Santa Catarina; no type nor type depository designated; cases; in *Setodes*]; 1880b:59, 80 [case]. —Ulmer, 1905b:74 [♂; to *Leptocella*]. —Müller, 1921:539 [pupa; in *Nectopsyche*; figs. 186e, 189d in *Setodes*]. —Flint, 1974:129 [♂; distribution]; 1991:95 [Neotype: Brazil, Sta. Catarina, Itajahy; MCZ; ♂; species figured in Flint 1974 as *gemma*, is *ortizi* Holzenthal 1995].  
 —*festiva* (Navás), 1913:76 [Type locality: Ecuador, Loja; MNHNP; sex not stated; in *Leptocella* ?]. —Flint, 1991:95 [to synonymy].  
 —*genuosa* (Navás), 1920:39. [Bolivia]. —Fischer, 1966:56 [probably misprint for *gemma*].  
 DISTRIBUTION. —Argentina, Bolivia, Brazil, Colombia, Ecuador, Guatemala, Mexico, Panama, Paraguay, Peru, Suriname, Venezuela.
- gemmoides*** Flint, 1981:35 [Type locality: Venezuela, Aragua, Maracay, Río Limón, Estación Pisicultura; NMNH; ♂]. —Botosaneanu and Flint, 1982:19 [larva, pupa]. —Holzenthal 1995:69 [♂, ♀, larva; redescription, distribution].  
 —*cupreosquamosa* Botosaneanu, in Botosaneanu and Alkins-Koo, 1993:35 [Type locality: Trinidad, lower course of River Guanapo near WASA pump station; ZMUA; ♂]. —Flint 1996a: 104 [to synonymy].  
 DISTRIBUTION. —Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad, Venezuela.
- globigona*** Botosaneanu, in Botosaneanu and Hyslop, 1998:21 [Type locality: Jamaica, Rio Minho in its upper reach at Grantham, a few km. W of Frankfield, Clarendon; ZMUA; ♂; larva].  
 DISTRIBUTION. —Jamaica.
- gracilis*** (Banks), 1901:369 [Type locality: Mexico, Morelos, Cuernavaca; MCZ; ♂; in *Leptocella*]. —Fischer, 1966:51 [as synonym of *albida*]. —Flint, 1967:21 [♂ holotype]. —Haddock, 1977:403 [♂, ♀, larva; distribution]. —Wiggins, 1996:170-171 [larva, case; as *intervena*]. —Holzenthal, 1988:73 [distribution].  
 —*exilis* (Banks), 1905:19 [replacement name for *Leptocella gracilis* Banks 1904:110, preoccupied by *Leptocella gracilis* Banks 1901:369]. [Type locality: United States, New Mexico, Gallinas Canyon; MCZ; ♂; in *Leptocella*]. —Fischer, 1966:54 [*gracilis* Banks 1904 as synonym of *exilis*]. —Haddock 1977:403 [to synonymy].  
 —*intervena* (Banks) 1914:262 [Type locality: United States, Texas, Zavalla Co., Nueces River; NMNH; ♂; in *Leptocella*]. —Haddock, 1977:403 [to synonymy].  
 DISTRIBUTION. —Canada, Costa Rica, El Salvador, Guatemala, Mexico, U.S.A.
- jensenii*** (Ulmer), 1905b:75 [Type locality: Argentina, Mendoza, Santa Rosa; ZSMH; ♂; ♀, in *Leptocella*]. —Banks, 1913b:87 [distribution].  
 —*mixta* (Navás), 1920:67 [Type locality: Argentina, Córdoba, Alta Gracia; MZBS; ♂; in *Leptocella*]. —Schmid, 1949:386 [♂; redescription]. —Flint, 1966a:9 [to synonymy with *N. punctata*]. —Flint, Holzenthal, and Harris 1999:77 [to synonymy with *N. jensenii*].  
 —*lucipeta* (Navás), 1923a:200 [Type locality: Argentina, Alta Gracia; MACN & collection Navás, now lost?; ♀; in *Leptocella*]. —Schmid, 1949:386 [no ♂ in Navás collection]. —Flint, Holzenthal, and Harris 1999:77 [to synonymy].  
 DISTRIBUTION. —Argentina, Brazil.
- lahontanensis*** Haddock, 1977:412 [Type locality: United States, Utah, Jaub Co., .5 mile W Mills, on Sevier River; MCZ; ♂; larva].  
 DISTRIBUTION. —Canada, Mexico, U.S.A.
- lewisi*** (Flint), 1968:55 [Type locality: Jamaica, St. Andrew, Hardwar Gap, Dicks Pond Trail; NMNH; ♂; ♀, larva, pupa; in *Leptocella*].  
 DISTRIBUTION. —Jamaica.
- maculipennis*** Flint, 1983:75 [Type locality: Paraguay, Dpto. Amambay, 2 km S Cerro Corá; NMNH; ♂]; 1996b:419 [distribution].  
 DISTRIBUTION. —Paraguay, Peru.

- minuta*** (Banks) 1900:257 [Type locality: United States, Pullman; MCZ; sex not stated; in *Leptocella*].  
 —Ross 1938:22 [♀ lectotype; ♂ allotype]. —Flint 1966a:383 [possible synonym of *albida*].  
 —Haddock 1977:406 [♂, ♀, larva].  
 DISTRIBUTION. —U.S.A.
- modesta*** Müller, 1921:535, fig. 186 f [Type locality: Brazil; type depository unknown; pupal abdominal segment 5; in *Setodes*]. —Ulmer, 1955:497 [bibliography]. —Flint, Holzenthal, and Harris 1999:78 [identity, to *Nectopsyche*, nomen dubium].  
 DISTRIBUTION. —Brazil.
- monticola*** Holzenthal, 1995:71 [Type locality: Costa Rica, San José, Quebrada Muerte, Rt. 2, 3.5 km (air) W Villa Mills, 9.562°N, 83.743°W; NMNH; ♂].  
 DISTRIBUTION. —Costa Rica.
- muelleri*** (Ulmer), 1905a:29 [Type locality: Brazil, Santa Catarina; PAN; ♂; in *Leptocella*]. —Flint 1966b:9 [♂].  
 DISTRIBUTION. —Brazil.
- muhni*** (Navás), 1916:68 [Type locality: Argentina, Santa Fe; MZBS; ♀; in *Leptocella*]. —Schmid, 1949:388 [♂; type is ♀]. —Flint, 1982:58 [distribution].  
 —*fulvocapilla* (Navás), 1922a:399 [Type locality: Argentina, LaPlata, Palo Blanco; MACN; ♂; in *Leptocella*]. —Flint, 1972:243 [to synonymy].  
 —*pretiosella* (Banks), 1924:447 [Type locality: Peru, Yurimaguas; MCZ; ♀; in *Setodes*]. —Flint, 1982:58 [to synonymy].  
 —*bridarollia* (Navás), 1930a:75 [Type locality: Argentina, Santa Fe, Piquete; ISMA; ♀; in *Leptocella*]. —Flint 1982:58 [to synonymy].  
 DISTRIBUTION. —Argentina, Bolivia, Brazil, Ecuador, Guyana, Paraguay, Peru, Suriname, Venezuela.
- multilineata*** Flint, 1983:73 [Type locality: Argentina, Pcia. Entre Ríos, Río Uruguay, Salto Grande; NMNH; ♂].  
 DISTRIBUTION. —Argentina, Venezuela.
- navasi*** Holzenthal, in Flint, Holzenthal, and Harris 1999:77 [replacement name for *Leptocella candida* Navás, 1923b:23, preoccupied by *Setodes candida* Hagen, 1861:280; lectotype]. [Type locality: Chile, Marga-Marga; MNHNP; ♀].  
 DISTRIBUTION. —Chile.
- nigricapilla*** (Navás), 1920:68 [Type locality: Paraguay, Río Paraguay; MZBS; ♂; in *Leptocella*]. —Schmid, 1949:389 [♂]. —Flint, 1972:243 [distribution, synonymy].  
 —*ornata* (Navás), 1933:119 [Type locality: Argentina, Santa Fe; type depository not given; ♂; in *Leptocella*]. —Flint, 1972:243 [to synonymy].  
 DISTRIBUTION. —Argentina, Colombia, Paraguay.
- onyx*** Holzenthal, 1995:71 [Type locality: Costa Rica, Puntarenas, Parque Nacional Corcovado, Piedra el Arco, 8.582°N, 83.709°W; NMNH; ♂].  
 DISTRIBUTION. —Costa Rica.
- ortizi*** Holzenthal, 1995:73 [Type locality: Costa Rica, Limón, Parque Nacional Tortuguero, Río Tortuguero, 3.5 km S Tortuguero, 10.509°N, 83.504°W; NMNH; ♂]. —Flint 1974:129 [♂; as *N. gemma*, nec Müller 1880a].  
 DISTRIBUTION. —Argentina, Brazil, Costa Rica, Guyana, Mexico, Panama, Paraguay, Peru, Suriname, Venezuela.
- padrenavasi*** Holzenthal, in Flint, Holzenthal, and Harris 1999:78 [replacement name for *Leptocella nivea* Navás, 1920:39, preoccupied by *Setodes nivea* Hagen, 1861:281; lectotype ♂]. [Type locality: Bolivia; MACN; sex not stated, but fig. is ♀].  
 DISTRIBUTION. —Bolivia.
- paludicola*** Harris 1986:38 [Type locality: United States, Alabama, Baldwin County, Farris Creek at Hwy. 59; NMNH; ♂, ♀].  
 DISTRIBUTION. —U.S.A.
- pantosticta*** Flint, 1983:71 [Type locality: Argentina, Pcia. Misiones, Arroyo Coatí, 15 km E San José; NMNH; ♂].  
 DISTRIBUTION. —Argentina, Brazil.
- pavida*** (Hagen), 1861:282 [Type locality: United States, Washington, D.C.; MCZ; sex not stated; in *Setodes*]. —Haddock, 1977:401 [♀ lectotype; ♂, larva, distribution]. —Holzenthal, 1988:73 [distribution]. —Aguila, 1992:543 [distribution].

DISTRIBUTION. —Canada, Costa Rica, Guatemala, Mexico, Nicaragua, Panama, U.S.A.

**punctata** (Ulmer), 1905b:75 [Type locality: Brazil, Santa Rita, Boquero, Rio Preto; NHMW; ♂; in *Leptocella*]. —Flint, 1966b:9 [♂ lectotype]; 1991:94 [distribution].

—*fenestrata* (Banks), 1913a:237 [Type locality: Panama, Lino; MCZ; ♂; in *Leptocella*]. —Flint, 1966b:9 [to synonymy].

—*spegazzinii* (Navás), 1920:69 [Type locality: Paraguay, Río Paraguay; MZBS; ♂; in *Leptocella*]. —Flint, 1981:34 [to synonymy].

—*ambitiosa* (Navás), 1933:118 [Type locality: Argentina, Santa Fe; MZBS; ♂; in *Leptocella*]. —Schmid, 1949:386 [to synonymy with *N. mixta*]. —Flint, 1966:9 [to synonymy].

DISTRIBUTION. —Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guyana, Mexico, Panama, Paraguay, Peru, Suriname, Venezuela.

**quatuorguttata** (Navás), 1922c:61 [Type locality: Bolivia; collection Navás, now lost?; ♀; in *Leptocella*]. —Schmid, 1949:386 [no ♂ in Navás collection]. —Flint, 1974:131 [♂; distribution]; 1996b:419 [distribution].

DISTRIBUTION. —Bolivia, Guyana, Suriname, Peru.

**separata** (Banks), 1920:353 [Type locality: Brazil, Santa Catarina; MCZ; ♂; in *Leptocella*]. —Flint, 1967c:22 [♂ lectotype]; 1972:242 [distribution].

—*graphica* (Navás), 1932:65 [Type locality: Brazil, Rio de Janeiro, Barao Homen de Mello; DEI; ♂; in *Leptocella*]. —Flint, 1982:59 [distribution, to synonymy].

DISTRIBUTION. —Argentina, Brazil, Paraguay.

**spiloma** (Ross), 1944:219 [Type locality: United States, Kansas, Junction City; INHS; ♂; in *Leptocella*; ♀, larva]. —Haddock, 1977:392 [♂, larva; distribution]. —Flint and Reyes, 1991:488 [distribution]. —Aguila, 1992:544 [distribution].

DISTRIBUTION. —Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, U.S.A.

**splendida** (Navás), 1917b:403 [Type locality: Argentina, Santa Fe; collection Navás, now lost?; ♂; in *Leptocella*]. —Schmid, 1949: 386 [no ♂ in Navás collection]. —Flint, 1982:60 [redescription; distribution]; 1996b:418 [distribution].

DISTRIBUTION. —Argentina, Bolivia, Brazil, Colombia, Ecuador, Guyana, Paraguay, Peru, Venezuela.

**stigmatica** (Banks), 1914:262 [Type locality: United States, New Mexico, Jemez Mts.; MCZ; ♂; in *Leptocella*]. —Haddock, 1977:410 [♂, ♀, larva; distribution]. —Bueno and Flint, 1980:212 [distribution].

—*aeola* (Denning), 1948:16 [Type locality: United States, Wyoming, Sybille River, near Wheatland; CAS; ♂; in *Leptocella*]. —Haddock, 1977:410 [to synonymy].

—*vakaca* (Schmid), 1949:391 [replacement name for *Leptocerus stigmaticus* Navás 1917a:8, preoccupied by *Leptocella stigmatica* Banks, 1914:262]. [Type locality: United States, New Mexico; MZBS; ♂]. —Haddock, 1977:410 [to synonymy].

DISTRIBUTION. —Mexico, U.S.A.

**taleola** Flint, 1974:134 [Type locality: Surinam, Litani River, Waremapan rapids; RNH; ♂]; 1996b:419 [distribution].

DISTRIBUTION. —Peru, Suriname.

**tapanti** Holzenthal, 1995:75 [Type locality: Costa Rica, Cartago, Reserva Tapantí, Quebrada Palmitos and falls, 9.72°N, 83.78°W; NMNH; ♂].

DISTRIBUTION. —Costa Rica.

**tavara** (Ross) 1944:287 [Type locality: United States, Florida, Chiefland; INHS; ♂; in *Leptocella*]. —Haddock 1977:395 [♂]. —Daigle and Haddock 1981:327 [larva].

DISTRIBUTION. —U.S.A.

**texana** (Banks) 1905:19 [Type locality: United States, Texas, San Antonia; MCZ; sex not stated; in *Leptocella*]. —Milne 1934:13, 19 [color form of *albida*]. —Ross 1938:23 [type is ♀; ♂ lectotype]. —Flint 1966a:383 [type is ♀; Ross's lectotype designation invalid]. —Haddock 1977:420 [*incertae sedis*].

DISTRIBUTION. —U.S.A.

**thallina** (Navás), 1922b:264 [Type locality: Paraguay, Río Paraguay; collection Navás, now lost?; ♀; in *Leptocella*].

DISTRIBUTION. —Paraguay.

**tuanis** Holzenthal, 1995:76 [Type locality: Costa Rica, Heredia, Parque nacional Braulio Carrillo, Est. El Ceibo, Río Peje, 10.327°N, 84.078°W; NMNH; ♂].

DISTRIBUTION. —Costa Rica.

***utleyorum*** Holzenthal, 1995:80 [Type locality: Costa Rica, Puntarenas, Reserva Bosque Nuboso Monteverde, Quebrada Cuecha, 10.31°N, 84.79°W; NMNH; ♂].

DISTRIBUTION. —Costa Rica.

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