


Cordyligasterini Townsend, 1914 recognized as the valid tribal name for the former Sophiini Townsend, 1936 (Diptera, Tachinidae)

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Abstract. The family-group name Cordyligasterini Townsend 1914, has gone unnoticed as the older name for the tribe Sophiini Townsend, 1936 (Dexiinae, Tachinidae). The name Cordyligasterini is herein recognized as the valid tribal name for all genera of the former Sophiini with the exception of the type genus of Sophiini, *Sophia* Robineau-Desvoidy, 1830. *Sophia* and its type species *Sophia filipes* Robineau-Desvoidy, 1830 are unrecognized names and are moved to *nomina dubia* of Tachinidae. The Cordyligasterini as here circumscribed comprise the other eight genera formerly assigned to the Sophiini, namely *Cordyligaster* Macquart, 1844, *Cryptosophia* Santis, 2018, *Euantha* Wulp, 1885, *Euanthoides* Townsend, 1931, *Leptidosophia* Townsend, 1931, *Neoeuantha* Townsend, 1931, *Neosophia* Guimarães, 1982, and *Sophiella* Guimarães, 1982. Additionally, acting as First Reviser, the spelling *Cordyligaster capellii* Fleming & Wood, 2014 is selected as the correct original spelling, and the spelling “*capelli*” is thus an incorrect original spelling, under Article 24.2.3 of the *International Code of Zoological Nomenclature*.

Key words: Nomenclature, taxonomy, Tachinidae

NOMENCLATURAL AND TAXONOMIC HISTORY OF THE SOPHIINI

The genus *Sophia* was described by Robineau-Desvoidy (1830: 317) with four included nominal species, all new and from Brazil. One species, *Sophia filipes* Robineau-Desvoidy (1830: 318), was later designated as the type species of the genus by Townsend (1916: 9). The tribal name Sophiini was first used in a paper entitled *Notes on American Oestromusoid Types* by Townsend (1931: 95), but its appearance in that work did not satisfy later rules on the availability of family-group names and it was treated as a *nomen nudum* by Sabrosky (1999: 285; see also pp. 12–13 for a discussion of “*Nomina nuda* in family-group names”).

The name Sophiini became nomenclaturally available in a key to the tribes of “Exoristidae” in Part III of Townsend’s *Manual of Myiology* (Townsend 1936a: 28, 29; see Sabrosky 1999: 285). Later that same year, in Part IV of the *Manual*, Townsend (1936b: 50–54) gave a detailed description of Sophiini and included a key to the ten genera assigned to it. The genus *Cordyligaster* of Macquart (1844a, 1844b) was one of the genera included in Sophiini even though its own tribal name, Cordyligasterini (dating from Townsend 1914a) is older (Sabrosky 1999: 97).

The Sophiini of Townsend (1936b) were worldwide in distribution with seven genera in North and South America, two genera in the Oriental Region (*Prosophia* Townsend, 1927 and *Torocca* Walker, 1859), and one genus in the Afrotropical Region (*Tipulidomima* Townsend, 1933, from Equatorial Guinea). The Oriental genera were synonymized under

the older name *Torocca* by Malloch (1935) even before Townsend's (1936b) treatment of the tribe in Part IV of the *Manual*, and this synonymy has been followed by other authors to the present day. The genera *Torocca* and *Tipulidomima* were assigned to other tribes in the Oriental and Afrotropical catalogs of Crosskey (1976, 1980), thereby effectively restricting the Sophiini to the Americas.

The name-bearing type of *Sophia filipes*, the type species of *Sophia*, was already missing from the Muséum National d'Histoire Naturelle in Paris when Townsend visited the Muséum in 1928. He wrote:

"Ht [holotype], from Brazil, not in Paris. I have so far not been able to identify this species with any certainty but I am elsewhere describing as new two species of *Sophia*, RD., one on a female from Panama and the other on a male from Espirito Santo [Brazil]; both of which apparently come very close to *filipes* RD. The genus is close to *Euantha* Wlp." [Townsend 1931: 95.]

Townsend (1939) redescribed *Sophia* and noted that his concept of the genus was based on the two undescribed species mentioned in Townsend (1931), both of which had since been described:

"The genotype is still unidentified and the above characters are taken from *S. desvoidyi* TT (1931, Rev. Ent., 1, 338; Ht male from Espirito Santo, in Berlin DEI) and *S. nigra* TT (1931, l. c.; Ht female from Chiriqui, Panama, in Berlin DEI). *Euantha interrupta* Ald (1927), from Costa Rica, belongs here but is distinct from both the above species." [Townsend 1939: 170–171.]

The Sophiini later appeared in three regional catalogs of the Americas, *A catalog of the Diptera of America north of Mexico* (Sabrosky & Arnaud 1965; two genera), *A catalogue of the Diptera of the Americas south of the United States* (Guimarães 1971b; six genera), and *Catalogue of the Tachinidae (Diptera) of America north of Mexico* (O'Hara & Wood 2004; two genera). Two new genera of Sophiini were described by Guimarães (1982) and one new genus by Santis (2018), resulting in the following nine genera (and 23 species) being listed in the world checklist of O'Hara *et al.* (2020):

Cordyligaster Macquart, 1844 [including *Eucordyligaster* Townsend, 1917, treated as valid in Sabrosky & Arnaud (1965), Guimarães (1971a,b) and Sabrosky (1973); and one additional species described in Fleming *et al.* 2014], nine species.

Cryptosophia Santis, 2018, one species

Euantha Wulp, 1885, three species

Euanthoides Townsend, 1931, one species

Leptidosophia Townsend, 1931, two species

Neoeuantha Townsend, 1931, two species

Neosophia Guimarães, 1982, three species

Sophia Robineau-Desvoidy, 1830, one species

Sophiella Guimarães, 1982, one species

REVIVAL OF TRIBAL NAME CORDYLIGASTERINI

The priority of tribal name Cordyligasterini over Sophiini, when both *Cordyligaster* and *Sophia* are assigned to the same tribe, has gone unnoticed to the present day. This error would have become increasingly more difficult to discover over time if not for the publi-

cation of Curtis Sabrosky's decades-long project to record all the family-group names in Diptera (Sabrosky 1999). This masterful work permits the existence, availability, and precedence of available family-group names to be quickly determined. A recent check of genus names in the Sophiini by the present author led to the rediscovery of the oldest available name for the tribe, the Cordyligasterini.

The tribal name Sophiini caught my attention when I realized it has no firm basis in taxonomy, let alone nomenclature. Stated simply, the type species of the type genus of the tribe, *Sophia filipes* Robineau-Desvoidy, 1830, cannot be recognized. It is a *nomen dubium*, as first noted by Townsend (1931: 95) in his remark: "I have so far not been able to identify this species with any certainty". Guimarães (1971b: 112) formally listed *Sophia filipes* in his catalog as "Unrecognized" but maintained the genus *Sophia* in its traditional sense and included in it a second species, *Sophia desvoidyi* Townsend, 1931. This second species was one of two upon which Townsend based his concept of *Sophia* (Townsend 1939: 170, quoted above), the other being *Sophia nigra* Townsend, 1931. This latter species was synonymized with *Euantha interrupta* Aldrich, 1927 in the catalog of Guimarães (1971b: 111).

The *Catalogue of the Diptera of the Americas south of the United States* listed *Sophia* as a genus comprising an unrecognized type species (*S. filipes*) and an enigmatic second species (*S. desvoidyi*). This second species was the *de facto* basis for both the genus *Sophia* and tribe Sophiini. Guimarães (1982) revisited the Sophiini in a partial revision of its South American genera and included a key to the genera and the description of two new genera. Notably absent from the key was the type genus *Sophia*. As the author explained:

"The genus *Sophia* Robineau-Desvoidy cannot be recognized from its descriptions. The type-species, *Sophia filipes* R. D. is probably lost. Townsend (1931) described *Sophia desvoidyi* based on a male from Espírito Santo, Brazil. Townsend (1939: 170) states that *Sophia* R. -D. has a low broad facial carina, but he did not mention [sic] this character in the diagnosis of his *Sophia desvoidyi*. Specimens fitting the description of *S. desvoidyi* do not present facial carina. The type specimens of *S. desvoidyi* deposited in Berlin was [sic] probably lost during the Second World War and this discrepancy cannot be cleared up.

Studying specimens in the collection of Museu de Zoologia from different localities, we are convinced that *Sophia desvoidyi* Town. is the male of *Neoeuantha aucta* (Wied.) and both sexes were collected in Terezópolis, RJ, in the same spot." [Guimarães 1982: 166–167.]

In hindsight, the tribal name Sophiini became untenable from Guimarães (1982) onward. The only species remaining in *Sophia* was the type species *S. filipes*, a *nomen dubium*. The genus name *Sophia* was therefore also a *nomen dubium*, and the tribe needed another name. Guimarães (1982) did not draw attention to the implications of his taxonomic assessment of *Sophia*, and subsequent authors continued to use Sophiini as the valid name for the members of the tribe. O'Hara & Wood (2004: 46) recognized the Sophiini for two genera in North America, Fleming *et al.* (2014) mentioned the tribe in a paper on *Cordyligaster*, Santos (2018) described a new genus of Sophiini from Brazil and presented a new key to the genera (sans *Sophia*), and O'Hara *et al.* (2020) listed all the genera (see above) and species of the tribe. The latter authors missed the classification of *S. filipes* as unrecognized in Guimarães (1971b) and this assessment of the species in Santos (2018: 440): "From the original description, it is impossible to state even if *S. filipes* belongs to Sophiini".

Sophia Robineau-Desvoidy, 1830 and its type species *Sophia filipes* Robineau-Desvoidy, 1830 will be recognized as *nomina dubia* in a forthcoming catalogue of world Tachinidae (O'Hara & Henderson, in prep.). The name *Sophiini* is no longer valid and *Cordyligasterini* becomes the valid name for the tribe and its eight genera, listed above. The family-group name *Cordyligasterini* is recognized for the first time as older than *Sophiini* – dating from 1914 vs. 1936 – as determined by the dating of the names in Sabrosky (1999).

NOTES ON THE GENUS *CORDYLIGASTER* MACQUART, 1844

The genus *Cordyligaster* Macquart, 1844, type genus of the *Cordyligasterini*, was treated as two genera, *Cordyligaster* and *Eucordyligaster* Townsend, 1917, by Guimarães (1971a,b) and Sabrosky (1973). Wood (1987: 1249) synonymized *Eucordyligaster* with *Cordyligaster* and this was followed by subsequent authors (O'Hara & Wood 2004: 46, Fleming *et al.* 2014: 5, O'Hara *et al.* 2020: 116). The list of species and their synonyms in Fleming *et al.* (2014) were improperly typeset and gave the impression that all of the names were valid. O'Hara *et al.* (2020) listed only the nine valid names, leaving some doubt as to the proper assignment of the synonyms. For the sake of clarity, and also to act as First Reviser of a name with two original spellings, the valid species names and synonyms of *Cordyligaster* are listed here from an upcoming world catalogue of Tachinidae (O'Hara & Henderson, in prep.):

analis (Macquart, 1851).– Neotropical: South America, Brazil.

Megistogaster analis Macquart, 1851a: 187 [also 1851b: 214].

capellii Fleming & Wood, 2014.– Neotropical: Middle America (Costa Rica).

Cordyligaster capellii Fleming & Wood in Fleming *et al.*, 2014: 6.

Note: There are two original spellings for *Cordyligaster capellii* in Fleming *et al.* (2014): *capellii* (pp. 1, 6, etc.) and *capelli* (pp. 6–9). As **First Reviser**, I select *capellii* as the correct original spelling (Article 24.2.3 of the *International Code of Zoological Nomenclature*, ICZN 1999).

fuscipennis (Macquart, 1851).– Neotropical: Middle America (Costa Rica, Guatemala, Panama), South America (Bolivia, Brazil, Ecuador, Guyana, Peru), ?Argentina (Sabrosky 1973: 222).

Megistogaster fuscipennis Macquart, 1851a: 186 [also 1851b: 213].

Eucordylidexia ategulata Townsend, 1915: 41.

minuscula Wulp, 1891.– Neotropical: Middle America (Mexico).

Cordyligaster minuscula Wulp, 1891: 252.

nyomula Townsend, 1914.– Neotropical: South America (Peru).

Cordyligaster nyomula Townsend, 1914: 93.

petiolata (Wiedemann, 1830).– Neotropical: Middle America (Panama), South America (Brazil, Venezuela).

Dexia petiolata Wiedemann, 1830: 374.

Cordyligaster fuscifacies Bigot, 1888: 101.

septentrionalis Townsend, 1909.– Nearctic: USA (Florida, Great Plains, Northeast, Southeast; “Montana” in O'Hara & Wood (2004: 46) was an error for Missouri).

Cordyligaster septentrionalis Townsend, 1909: 250.

tipuliformis Walker, 1858.– Neotropical: South America (Brazil).

Cordyligaster tipuliformis Walker, 1858: 205.

townsendi Guimarães, 1971.– Neotropical: Middle America (Guatemala), South America (Brazil).

Cordyligaster townsendi Guimarães, 1971: 101.

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