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Catalogue of Neotropical Diptera. Helosciomyzidae

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Introduction

The Helosciomyzidae (the comb-winged flies) correspond to a small family occurring only in the Southern Hemisphere, with species known from the Australasian and Oceanian Region (Australia, Tasmania, New Zealand, Snares Is. and Auckland Is.) and from southern South America (Brazil, Argentina and Chile) (Barnes, 1981). The current classification of helosciomyzids, its status, and its position within the acalyptrates varies considerably among authors. In its present composition (Evenhuis, 1996; McAlpine, 2012), the Helosciomyzidae comprises 28 species in 11 genera: *Cobergius* Barnes [1], *Dasysciomyza* Barnes [2]; *Eurotocus* Steyskal [1], *Helosciomyza* Hendel [11], *Luta* McAlpine [1], *Napaeosciomyza* Barnes [3], *Neosciomyza* Barnes [2], *Polytocus* Lamb [2], *Scordalus* Barnes [1], *Xenosciomyza* Tonnoir & Malloch [2], and *Sciogriphoneura* Malloch [2]. *Sciogriphoneura* is known only from South America and is the only genus of Helosciomyzidae known outside of Australasian and Oceanian Region (Barnes, 1981). Table I summarizes the history of classification of the family and the position of the genus among other acalyptrate families, according to different authors.

According to McAlpine (2012), the family is probably most closely related to the Dryomyzidae (which are restricted to the Northern Hemisphere) or maybe to the Helcomyzidae, that occurs in both hemispheres. The position of *Sciogriphoneura* among the helosciomyzids was proposed by Barnes (1981), recently corroborated by Mathis & Sueyoshi (2011) and McAlpine (2012). In general, the comb-winged flies are considered to have a relict distribution (McAlpine, 1989), and based on its morphological diversity the group may be considered to have a relatively ancient origin (Evenhuis, 1996). Actually, the Helosciomyzidae add to some few other small acalyptrate groups with disjunct clades between Australia/New Zealand and southern South America, as the ephidrid genus *Ephydrella* (Amorim & Silva, 2002). Nevertheless, origin of these clades and their disjunction should not be taken as Cretaceous, but mid Cenozoic because of the lasting connection between Australia, Antarctica and South America, as shown by Almeida et al. (2012).

This is a new catalogue for the family in the Neotropical region under the systematic view of the group as proposed by Mathis & Sueyoshi (2011) and McAlpine (2012), within the context of the updated catalogues for the region, including some new distributional data for *S. brunnea* Steyskal.

The abbreviations used in the text follow: Distr. (distribution), fig./figs. (figure/figures), Is. (islands), orig. des. (by original designation), pl. (plate), Refs. (references). The acronyms of the museums cited are:

DZUP – Coleção Entomológica ‘Pe. Jesus S. Moure’, Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Brazil.

NHM – The Natural History Museum, Department of Entomology, London, United Kingdom.

MZUSP – Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil.

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Table I. Historical classification of the family and *Sciogriphoneura* Malloch. Adapted from Barnes (1981) and McAlpine (1989). Note: + means included; – means excluded.

Author	Rank and remarks
Malloch (1933)	Sciomyzidae (+ <i>Sciogriphoneura</i>)
Steyskal (1965)	Helosciomyzinae (in Sciomyzidae; – <i>Sciogriphoneura</i>)
Griffiths (1972)	Helosciomyzidae (+ Huttonininae)
Hennig (1973)	Helosciomyzinae (– <i>Sciogriphoneura</i>)
Steyskal (1977)	Dryomyzidae (+ <i>Sciogriphoneura</i>)
Steyskal & Knutson (1978)	Helosciomyzinae (in Sciomyzidae; – <i>Sciogriphoneura</i>)
Barnes (1981)	Helosciomyzidae (family rank reaffirmed; + <i>Sciogriphoneura</i>)
McAlpine (1989)	Helosciomyzidae (+ <i>Sciogriphoneura</i>)
Mathis & Sueyoshi (2011)	Helosciomyzidae (+ <i>Sciogriphoneura</i>)
McAlpine (2012)	Helosciomyzidae (+ <i>Sciogriphoneura</i> : the position of the genus is confirmed from strong morphological evidence)

Family HELOSCIOMYZIDAE Steyskal, 1965

- Helosciomyzinae** Steyskal, 1965: 593 [in Sciomyzidae]. Type-genus: *Helosciomyza* Hendel, 1917.
 Helosciomyzidae; Griffiths, 1972: 180–181 (**new status**), 273 (key).
 Helosciomyzinae; Hennig, 1973: 56 [in Sciomyzidae].
 Helosciomyzinae; Steyskal & Knutson, 1978: 727 [in Sciomyzidae].
 Helosciomyzidae; Barnes, 1981: 45–72 (revision).
 Helosciomyzidae; McAlpine, 1989: 1444 (fig. 116.4, cladogram), 1451–1452 (phylogeny remarks).
 Helosciomyzidae; Buck *et al.*, 2009: 116 (Neotropical key).
 Helosciomyzidae; Mathis & Sueyoshi, 2011 (systematic position, catalogue).
 Helosciomyzidae; McAlpine, 2012: 51–70 (morphology, biology and sexual dimorphism; Australian key).

Genus *Sciogriphoneura* Malloch, 1933

- Sciogriphoneura** Malloch, 1933: 300. Type-species: *S. nigriventris* Malloch, 1933 (orig. des.).
 Refs. – Malloch, 1933: 298 (key), 300 (description); Hennig, 1971: 32 (notes); Steyskal, 1977: 1 (catalogue [in Dryomyzidae]); Barnes, 1981: 45–72 (key, revision); Mathis & Sueyoshi, 2011 (catalogue, systematic position); McAlpine, 2012: 54 (systematic position).
- brunnea** Steyskal, 1977: 1. Type-locality: Brazil, Rio de Janeiro, Itatiaia (Faz[enda] Serra); Distr.– Brazil (Rio de Janeiro; Paraná [new occurrence]). Refs. – Steyskal, 1977: 1 (description, catalogue [in Dryomyzidae]); Barnes, 1981: 47 (key), 66 (revision, listed); Mathis & Sueyoshi, 2011 (catalogue). Remarks: the DZUP holds a female specimen from Tijucas do Sul (Paraná) conspecific with the holotype (examined through photographs). Holotype ♀, MZUSP.
- nigriventris** Malloch, 1933: 301. Type-locality: Chile, Chiloé, Ancud. Distr.– Chile (Provincia Ancud; Provincia Santiago) and Argentina (Provincia Rio Negro, Puerto Blest). Refs. – Malloch, 1933: 300 (fig. 55C, head, profile), 301 (description [in Sciomyzidae]), pl. VII (4. wing); Steyskal, 1977: 1 (catalogue); Barnes, 1981: 48 (key), 65 (figs. 36, andrium and proctiger; 37, hypandrium, aedeagus and associated structures); Mathis & Sueyoshi, 2011 (catalogue). Holotype ♀, NHM. Remarks: ♂ and ♀ paratypes at the NHM [male lost?].
- sp.** Malloch, 1933: 302. Locality: ♀, Chile, Marga Marga, NHM. Remarks: this female may represent a distinct species related to *S. nigriventris* Malloch; for details, see Malloch (1933).

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