



## Revision of the temperate South American genus *Apiochaeta* Czerny, 1903, with synonymy of *Alloclusia* Hendel, 1917 (Diptera: Clusiidae)

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## Abstract

*Apiochaeta* Czerny, 1903, the only genus of Clusiidae endemic to temperate South America, is revised with the description of 16 species from Chile and Argentina. The redefined *Apiochaeta* includes all former species of *Apiochaeta* and *Alloclusia* Hendel, 1917 **syn. n.**, as well as four species described here as new: *A. dacryodes* **sp. n.**, *A. furcillata* **sp. n.**, *A. lenticula* **sp. n.** and *A. mallochi* **sp. n.** *Apiochaeta aequalis* Malloch, **syn. n.** is included as a junior synonym of *Apiochaeta aterrima* Malloch, *Alloclusia varia* var. *claripennis* Malloch, **syn. n.** is included as a junior synonym of *Apiochaeta varia* (Malloch), **comb. nov.**, and *Peratochaetus limbipennis* Rondani **syn. n.** is treated as a junior synonym of *Apiochaeta vitticollis* (Blanchard), **comb. nov.**

**Key words:** Clusiidae, *Alloclusia*, *Apiochaeta*, synonymy, new species, revision, Chile, Argentina

## Introduction

The great majority of Clusiidae occurring in temperate South America belong to a clade of 16 species mostly restricted to Chile. This clade, here treated as the redefined genus *Apiochaeta* Czerny, 1903, includes all species formerly placed in the genus *Alloclusia* Hendel, 1917, **syn. n.** The 16 species of *Apiochaeta* belong to a clade defined (in part) by three pairs of dorsocentral bristles (Fig. 51), an oblique vein dm-cu (Figs 3–9), one pair of long spinulose lobes on the distiphallus (Fig. 37) and a characteristic ventral receptacle (Figs 10&11). Most species are also striking in appearance. One pair of sister-species is characterized by a broad head, inset posterior fronto-orbital bristles (Fig. 2) and (usually) white notal patches; most other species are large, pale. Strongly striped, and often with elaborately patterned wings (Figs 51& 52). The only other Clusiidae recorded from temperate South America are several widespread and relatively abundant neotropical species of the clusiodine genera *Craspedochaeta* Czerny, 1903 and *Heteromeringia* Czerny, 1903.

*Apiochaeta*, like the Holarctic and Oriental *Clusia* Haliday, 1839, has an inclinate anterior fronto-orbital bristle, a presutural intra-alar bristle, an  $M_{1+2}$  ratio less than 2.5 (3.0 in *A. bicolor* (Schiner)), a fore femur with several outstanding posterodorsal bristles, three rows of ventral ctenidial bristles on the male fore and mid femora (one anterior, two posterior), a subnotal stripe, an elongate and medially bent distiphallus and a truncate notch on the posterior margin of the frons behind the ocelli (Lonsdale & Marshall, 2006). *Apiochaeta* is also similar to *Sobarocephala* Czerny, 1903 and *Chaetoclusia* Coquillett, 1904 (which are also found in South America but do not occur in the southern temperate region) in that it has a dorsal preapical bristle on the mid tibia, a surstylus that is at least half as long as the epandrium and an enlarged ventrolateral hypandrial lobe. It differs from all of these genera, however, in that it has three pairs of well-developed dorsocentral bristles, an oblique vein dm-cu, one pair of elongate spinulose lobes fused to the base of the distiphallus, and a ventral receptacle with numerous transverse wrinkles and two ventral longitudinal furrows.

Malloch (1933) last revised the Chilean Clusiidae, describing nine species and providing figures of select wings and surstyli. Czerny (1903) and Melander & Argo (1924) had previously revised the species in this clade, but only four Chilean species (described by Rondani (1863), van der Wulp (1882) and Schiner (1868)) were known prior to Malloch's 1933 work.

## Synonymy of *Alloclusia*

*Alloclusia* **syn. n.** is here included as a new junior synonym of *Apiochaeta* because the type species of *Apiochaeta* (*Heterochroa bicolor* Schiner) and the type species of *Alloclusia* (*Peratochetus philippii* Rondani) belong to the same clade (formerly treated as *Alloclusia*; see Fig. 50). The other two species included in *Apiochaeta* by Malloch (1933) form the sister group to this clade. These two species form a distinctive species group characterized by numerous external and genitalic characters (see discussion), the most notable of which