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Manual of Neotropical Diptera. Apioceridae¹

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Yeates & Irwin (1996) redefined this family and reduced it to the single genus *Apiocera* Westwood, 1835, with four subgenera, and established the phylogeny of the latter. The synapomorphies now supporting this family are the following: two antennal flagellomeres, the first pear-shaped or elongate-oval, the second small and cylindrical; line of desclerotization at apex of labrum; postoccipital suture slightly arched between occipital foramen and post occipital suture; sternites 5-7 overlapping tergites; phallus needle-shaped; female sternite 10 well sclerotized and elongate (*op. cit.*, p. 285). The key to the four subgenera given by those authors (p. 288) is as follows:

1. R4 joining fused R1-3 at wing margin; epandrium with locking fold on inner surface (Southwestern Canada, western U. S. A. and northern Mexico) *Pyrocera* Yeates & Irwin, 1995
- R4 joining fused veins R1-3 before wing margin; epandrium without locking fold on inner surface 2
- 2 (1). Apex of gonocoxites with long plume of white or brown hairs (South Africa) *Ripidosyrma* Hermann, 1909
- Apex of gonocoxites without a long plume of hairs 3
- 3 (2). Dorsal surface of hypandrium with a patch of small hairs medianly (Chile) *Anypenus* Philippi, 1865
- Dorsal surface of hypandrium without hairs (Australia) *Apiocera* Westwood, 1835

Data on apiocerid bionomics are meager, but some information exist for the Australian *Apiocera* (*Apiocera*) *maritima* Hardy, 1933 (English, 1947) and for the North American *Apiocera* (*Pyrocera*) *painteri* Cazier, 1962 (Cazier, 1963); Lavigne (1975) studied the behavior of *Apiocera* (*Pyrocera*) *clavator* Painter, 1935; Toft & Kimsey (1982) described the behavior and habitat of some North American species and the immature stages of *Apiocera* (*Pyrocera*) *hispida* Cazier, 1941; Cazier (1982) summarized what is known about the habitat of the Nearctic species. The apparently related family †*Protapioceridae* (Ren, 1998; Zhang & Ren, 2007) is known from the Late Jurassic of China.

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Figure 1. *Apiocera annipenus* Phillipi, Chile, Santiago.



