Superfamily SCIAROIDEA

6. Family DITOMYIIDAE

By Loïc Matile

Ditomyiids form a small family of 8 genera and about 90 species. Distributed worldwide (except in the Afrotropical Region), most species are found in the Australasian and Neotropical regions. The earliest fossil dates from the European Eocene/Oligocene (in Baltic amber). It belongs to Symmerus Walker, a genus still extant in the Holarctic. Centrocenemis imperfecta Rick, described from the Tertiary Redbank Plains series of Queensland, probably belongs to Australosymmerus, still present in Australia (see Appendix 1). Biographical data imply a much greater antiquity for these genera.

Two genera, with 34 species, are known from the Australasian Region. All of these species are more or less closely related to groups with a Chilean center of endemism. Colless (1970b) noted that the Australian Australosymmerus seemed more closely allied to the Patagonian species than to the New Zealand species. That conclusion was also reached by Munroe (1974), who noted that both Australian and New Zealand species of this genus have a sister-group relationship with Chilean species instead of with one another. These Transantarctic tracks imply that the Southern Hemisphere ditomyiids must have a common ancestor dating as far back as the Lower Cretaceous.

Larvae of species belonging to 2 Holarctic genera (Symmerus and Ditomyia Winwertz) and 1 Chilean Australasian genus (Australosymmerus) are known. They live either in ligneous Polyporaceae (bracket fungi) or in dead but unrotten wood, where they bore galleries. Like other Mycetophilidea, the adults are mainly sylvan. They can be swept in low vegetation or collected in Malaise traps.


Genus AUSTRALOSYMMERUS Freeman

CENTROCNEMIS Philippi, 1865: 619. Type species: Centrocenemis stigmatica Philippi, 1865, mon. [Preocc. Signoret, 1852.]

AUSTRALOSYMMERUS Freeman, 1954b: 39 (n. n. for Australomyia).

Subgenus AUSTRALOSYMMERUS Freeman

CENTROCNEMIS Philippi, 1865: 619 (as gen.). Type species: Centrocenemis stigmatica Philippi, 1865, mon. [Preocc. Signoret, 1852.]

AUSTRALOSYMMERUS Freeman, 1954b: 39 (n. n. for Australomyia).

tilleyardi Tonnoir & Edwards, 1927: 758 (Centrocenemis). NZ (NZ).

Subgenus CRIONISCA Colless

aculeatus Edwards, 1921a: 434 (Centrocenemis). Australia (Tas).
riecki Colless, 1970b: 95 (Crionisca). Australia (Vic); Australia (ACT, Tas).

Subgenus VENTRILOBUS Munroe

cornutus Colless, 1970b: 95. Australia (NSW); Australia (Vic).
fuscinervis Edwards, 1921a: 434 (Centrocnemis). Australia (Tas); Australia (NSW).
nebulosus Colless, 1970b: 92. Australia (Tas).
propinquus Colless, 1970b: 90. Australia (Tas).

Unplaced species of Australosymmerus Freeman

aevius Colless, 1970b: 94. Australia (NSW); Australia (Vic).
tonnoiri Colless, 1970b: 92. Australia (Tas).

Genus NERVIJUNCTA Marshall


ARCTONEURA Hutton, 1904a: 133 (n. n. for Cyrtoneura).
CasA Hutton, 1904a: 133 (n. n. for Huttonia).
CYCLONEURA, error for Cyrtoneura.
nigrescens Marshall, 1896b: 266. NZ (NZ).
punctata Tonnoir in Tonnoir & Edwards, 1927: 768. NZ (NZ).
ssp. punctata s. str. NZ (NZ).
tridens Hutton, 1881: 12 (Platyura). NZ (NZ).
ssp. wakefieldi s.str. NZ (NZ).