

41. Family ACROCERIDAE

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The family Acroceridae (Cyrtidae *olim*) is cosmopolitan, except for true oceanic islands, and contains 520 species in 3 subfamilies and 50 genera. Members of all 3 subfamilies occur in these regions, though most species have a quite limited distribution. The Philopotinae and Acrocerinae are represented here by only 1 genus each. In contrast, the most primitive subfamily, Panopinae, has 7 genera reported. *Panops* is recorded here only from Australia, however, Osten Sacken (1881a) lists an undetermined species from New Guinea. Endemicity in the family is 100% for species and 77% for genera in these areas. Altogether, 52 valid species in 10 genera and subgenera are listed.

All known species are internal parasitoids of true spiders (Araneae). They are either solitary or gregarious, with up to 14 larvae occurring per spider. Acrocerid eggs are tiny (microtype) and are usually deposited in high numbers (up to 5,000 per female). Eggs may be laid in flight (as in *Eulonchus* Gerstäcker), deposited on dead twigs (*Ogcodes*), on grass stems (*Acrocera* Meigen), or on tree trunks (some *Pterodontia*), but always away from the intended hosts. The 1st instar planidium actively seeks out and burrows inside the spider. There are 4 instars. The mature larva usually emerges posteriorly from the spider's epigastric

furrow area. It pupates free from the host inside a protective webbing prepared by the spider before its death. The life span of the short lived, adult acrocerids ranges from 1 (commonly) to 6 (rarely) weeks. Mating occurs in flight or on dead twigs (*Ogcodes*) or at flowers (*Eulonchus*), usually from 1 to 2 days after emergence. Adults of *Leucopsina*, *Mesophysa*, *Panops*, and *Helle* are active nectar (flower) feeders. Adults of *Ogcodes*, *Pterodontia*, and *Neopanops* have small or mostly nonfunctional mouthparts and must be carefully looked for in meadows, forests, or other vegetated areas. Little is known about the biology and host relationships of acrocerid flies from these regions although Maskell (1888), Dumbleton (1941), and Plomley (1947a,b) figured and discussed several species of *Ogcodes*. Humphreys (1976) discussed parasitism by *Pterodontia* and *Ogcodes*. Schlinger (1987) reviewed the biology and host relationships of the Acroceridae of the world, including new records for these regions.

Refs.: Miller (1950, cat. NZ spp.), Paramonov (1955a, 1957e, rev. Australian spp.), Schlinger (1960, rev. world *Ogcodes*; 1981, world family characteristics; 1987, world biol., host relationships), Neboiss (1971, rev. Australian Panopinae).

Subfamily PANOPINAE

Genus APSONA Westwood

APSONA Westwood, 1876b: 510. Type species: *Apsona muscaria* Westwood, 1876, mon.

APSOMA, error for *Apsona*.

muscaria Westwood, 1876b: 510. "Novâ Zelandiâ."

Genus LEUCOPSINA Westwood

LEUCOPSINA Westwood, 1876b: 510. Type species: *Leucopsina odyneroides* Westwood, 1876, mon.

burnsi Paramonov, 1957e: 529 (*Panops flavipes* var.). Australia (Vic).

odyneroides Westwood, 1876b: 510. "Novâ Hollandiâ," [= Australia (NSW); see Paramonov, 1957e: 525]; Australia (Vic).

Genus MESOPHYSA Macquart

MESOPHYSA Macquart, 1838b: 166 [1839b: 282]. Type species: *Mesophysa scapularis* Macquart, 1838 [= *Panops flavipes* Latreille, 1812], des. Brunetti, 1926: 580.
flavipes Latreille in Olivier, 1812: 710 (*Panops*). Australia (NSW) [neotype locality]; Australia (Qld).
scapularis Macquart, 1838b: 167 [1839b: 283]. "Patrie inconnue" [= Australia].
ilzei Neboiss, 1971: 218. Australia (Vic); Australia (NSW).
tenaria Neboiss, 1971: 218. Australia (ACT); Australia (NSW, Vic).
ultima Neboiss, 1971: 219. Australia (Qld); Australia (NSW).

Genus NEOPANOPS Schlinger

NEOPANOPS Schlinger, 1959: 157. Type species: *Neopanops boharti* Schlinger, 1959, orig. des.
boharti Schlinger, 1959: 157. Indonesia (Irian Jaya).

Genus PANOPS Lamarck

PANOPS Lamarck, 1804: 263. Type species: *Panops baudini* Lamarck, 1804, mon.
EPICERINA Macquart, 1850: 410(97). Type species: *Epicerina nigricornis* Macquart, 1850, mon.
austrae Neboiss, 1971: 209. Australia (NT).
baudini Lamarck, 1804: 265. Australia (NSW) [neotype locality]; Australia (Qld, Tas, Vic, WA).
marginata Macquart, 1838b: 168 [1839b: 284] (*Mesophysa*). "Patrie inconnue" [= Australia].
nigricornis Macquart, 1850: 402(98) (*Epicerina*). Australia (Tas) & "côte orientale."
australiae Thomson, 1869: 475 (*Mesophysa*). Australia (NSW).
lamarckianus Westwood, 1876b: 508 (*Panops*). Australia (NSW).
lamarkianus, error for *lamarckianus*.
conspicuus Brunetti, 1926: 579 (*Epicerna*). Australia (WA); Australia (Qld, Vic).

Genus PANOCALDA Neboiss

PANOCALDA Neboiss, 1971: 212. Type species: *Panocalda grossi* Neboiss, 1971, orig. des.
grossi Neboiss, 1971: 214. Australia (NT).

Genus PTERODONTIA Gray

PTERODONTIA Gray in Griffith & Pidgeon, 1832: 779. Type species: *Pterodontia flavipes* Gray, 1832, mon.
NOTHRA Westwood, 1876b: 515. Type species: *Nothra bicolor* Westwood, 1876 [= *Pterodontia mellii* Erichson, 1840], mon.
davisi Paramonov, 1957e: 531. Australia (NSW); Australia (Qld).
longisquama Sabrosky, 1947b: 74. PNG (PNG).
mellii Erichson, 1840: 163. Australia (NSW); Australia (ACT, Qld, SA, Vic, WA).
macquarti Westwood, 1848b: 97 (unnec. n. n. for *flavipes* Macquart).
bicolor Westwood, 1876b: 515 (*Nothra*). "Novâ Hollandiâ."
flavipes, Macquart, 1838, not Gray, 1832, misid.
melli, error for *mellii*.
variegata White, 1914b: 68. Australia (Tas).

Subfamily PHILOPOTINAE

Genus HELLE Osten Sacken

HELLE Osten Sacken, 1896: 16. Type species: *Acrocera longirostris* Hudson, 1892, orig. des.
longirostris Hudson, 1892: 56, pl. vii, fig. 4 (*Acrocera*). NZ (NZ).
rufescens Brunetti, 1926: 572. NZ (NZ).
megalynoides Brunetti, 1926: 573. NZ (NZ).

Subfamily ACROCERINAE

Genus OGCODES Latreille

OGCODES Latreille, 1796: 154. Type species: *Musca gibbosa* Linnaeus, 1758, subs. mon. Latreille, 1802: 432 (as *Syrphus gibbous* Fabricius).

Subgenus OGCODES Latreille

OGCODES Latreille, 1796: 154 (as gen.). Type species: *Musca gibbosa* Linnaeus, 1758, subs. mon. Latreille, 1802: 432 (as *Syrphus gibbous* Fabricius).

ONCODES Meigen, 1822: 99 (unjust emend. of *Ogcodes*).

HENOPS, authors, not Illiger, 1798, misid.

ACRODES, *OGEODES*, *OGKODES*, errors for *Ogcodes*.

argigaster Schlinger, 1960: 260. NZ (NZ).

armstrongi Paramonov, 1957e: 537. Australia (NSW).

ater White, 1914b: 72. Australia (Tas); Australia (Vic).

basalis Walker, 1852: 203 (*Henops*). Australia (NSW); Australia (ACT, Qld, SA, Tas, Vic, WA).

darwinii Westwood, 1876b: 516. Australia (SA).

darwini, error for *darwinii*.

brunneus Hutton, 1881: 24 (*Henops*). NZ (NZ).

canberranus Paramonov, 1957e: 544. Australia (ACT).

castaneus Brunetti, 1926: 605. Australia (Qld).

consimilis Brunetti, 1926: 603. NZ (NZ).

deserticola Paramonov, 1957e: 538. Australia (Qld).

doddi Wandolleck, 1906: 131. Australia (Qld).

flavescens White, 1914b: 70. Australia (Tas).

fortnumi Westwood, 1876b: 516. Australia (SA); Australia (ACT, NSW, Qld, Tas, Vic, WA).

fratellus Brunetti, 1926: 604. Australia (Vic); Australia (Tas).

fraternus, error for *fratellus*.

froggatti Schlinger, n. n. Australia (NSW).

fumatus Froggatt, 1907: 298. Australia (NSW). [Preocc. Erichson, 1846.]

glomerosus Paramonov, 1957e: 544. Australia (NSW).

gressitti Schlinger, 1972: 96. PNG (PNG).

ignavus Westwood, 1876b: 516. "Novâ Hollandiâ."

insignis Brunetti, 1926: 601. Australia (WA).

leptisoma Schlinger, 1960: 259. NZ (NZ).

lucidus Paramonov, 1957e: 545. Australia (NSW).

nigrinervis White, 1914b: 71. Australia (Tas).

nitens Hutton, 1901: 29 (*Henops*). NZ (NZ).

pusillus Paramonov, 1957e: 539. Australia (Qld).

pygmaeus White, 1914b: 72. Australia (Tas); Australia (Vic).

similis Schlinger, 1960: 258. NZ (NZ).

tasmaniensis Westwood, 1876b: 516. Australia (Tas).

tenuipes Paramonov, 1957e: 542. Australia (Vic); Australia (NSW, Qld).

trifasciatus de Meijere, 1913c: xl [1915a: 109]. Indonesia (Irian Jaya).

variegatus Brunetti, 1926: 594. Australia (Qld).

victoriensis Brunetti, 1926: 594. Australia (Vic); Australia (NSW, Qld).

waterhousei Paramonov, 1957e: 537. Australia (NSW).

wilsoni Paramonov, 1957e: 538. Australia (WA).

Subgenus PROTOGCODES Schlinger

PROTOGCODES Schlinger, 1960: 247. Type species: *Ogcodes paramonovi* Schlinger, 1960, orig. des.

hirtifrons Paramonov, 1957e: 543. Australia (NSW); Australia (ACT, Tas).

paramonovi Schlinger, 1960: 247. NZ (NZ).