

## 9. Family LYGISTORRHINIDAE

By F. Christian Thompson

**L**ygistorrhinidae is a small family of fungus gnats (Sciaroidea) that are rather homogenous and easily recognized by elongate mouthparts and reduced wing venation. Overall size is ca. 4 to 5 mm; mouthparts are greatly elongate, at least 3x as long as height of head, and consist of 5 filaments, a pair of one-segmented palpi, a pair of labellae, and a hypopharynx. Wings are ca. 2 mm long, with Sc short and ending in the costal cell, R<sub>1</sub> and R<sub>5</sub> ending in C and separately extending to the base of the wing, M<sub>1</sub> and M<sub>2</sub> present only as apical fragments, CuA<sub>1</sub> (M<sub>4</sub> of earlier authors) also present only as an apical fragment, CuA<sub>2</sub> is entire, and the anal veins are absent or indistinct.

Lygistorrhine fungus gnats are considered to belong to a single genus, *Lygistorrhina*. This genus has usually been recognized as representing a separate entity in the higher classification of fungus gnats, either as a subfamily (Edwards 1925*b*, Tonnoir 1929*b*, Okada 1937, Shaw & Shaw 1951, Laffoon 1965, Vockeroth 1981) or as a family (Hen-

nig 1948, 1954, 1966, 1968*b*, 1969*b*, 1973; Brauns 1954*a,b*; Rohdendorf 1964; Stackelberg 1969; Thompson 1975; Papavero 1977*b*; Matile 1981, 1986*a*, 1988*a*). Only Tuomikoski (1966*b*) has combined lygistorrhine fungus gnats with another group (Keroplastidae), but Thompson (1975) demonstrated that his arrangement was based on symplesiomorphy. Pragmatically, Thompson recognized only 1 genus, divided into 3 subgenera: *Probolaeus* Williston (New World spp.); *Palaeogonoriste* Meunier (a fossil sp. in Baltic amber); and *Lygistorrhina* s. str. (Old World spp.).

Although lygistorrhine fungus gnats are extremely rare in collections, they can be locally abundant and are found in the warmer parts of all biotic regions: Nearctic (1 sp.), Neotropical (6), Palearctic (1), Oriental (2), Afrotropical (1), and Australasian/Oceanian (2). Since Thompson (1975), only 2 additional species have been described [Matile, 1979: 254 (*nassreddinei*) from the Comoro Is, Africa], 1986*a* (*vide infra*)].

Ref.: Thompson (1975, syst., key, checklist).

### Genus LYGISTORRHINA Skuse

**LYGISTORRHINA** Skuse, 1890*d*: 598. Type species: *Lygistorrhina insignis* Skuse, 1890, mon.  
*carayoni* Matile, 1986*a*: 286. New Caledonia (New Caledonia).  
*insignis* Skuse, 1890*d*: 600. Australia (NSW).