

## 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>3</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 1925b, Tonnoir 1929b, Okada 1937, Shaw & Shaw 1951, Laffoon 1965, Vockeroth 1981) or as a family (Hen-

nig 1948, 1954, 1966, 1968b, 1969b, 1973; Brauns 1954a,b; Rohdendorf 1964; Stackelberg 1969; Thompson 1975; Papavero 1977b; Matile 1981, 1986a, 1988a). Only Tuomikoski (1966b) 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.); *Palaeognoriste* 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), 1986a (*vide infra*)].

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

### Genus LYGISTORRHINA Skuse

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