FORBESOMYIINI, A NEW TRIBE OF GALL MIDGES

(DIPTERA: CECIDOMYIIDAE)

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The genus *Forbesomyia* is known only from Malloch's (1941) meagre description and crude drawings of the wing and antenna of the type. Malloch referred to this genus as related to *Scatopse* Geoffroy, then included by him in the Bibionidae, but he stated that it was very difficult to locate properly in any of the families. Edwards (1930) considered *Forbesomyia* to belong to the Scatopsidae, but he had not studied a representative of the genus.

Forbesomyia is based on a single species, *F. atra* Malloch, and only females have been collected. The relationships of the genus can be demonstrated with more clarity when the male sex or the larva is known. In the meantime it is desirable to redescribe the midge, propose for it a suprageneric category, and indicate that it probably belongs to the gall midge subfamily Lestremiinae.

Dr. Richard H. Foote called my attention to the possibility that *Forbesomyia* may belong to the Cecidomyiidae and kindly sent me specimens from the U.S. National Museum. Dr. Edwin F. Cook, University of Minnesota, very kindly compared this species in considerable detail to the scatopsids.

Forbesomyiini, new tribe

With the characters of the genus.

Genus **Forbesomyia** Malloch

Forbesomyia Malloch, 1914, Bul. Ill. State Lab. Nat. Hist. 10 (4): 234; Edwards, 1930, Dipt. Patagonia So. Chili, 2 (3): 93; Tollet, 1959, Bul. Ann. Soc. Roy. Ent. Belg., 95 (5-6): 137. Type of genus: *Forbesomyia atra* Malloch, by original designation and monobasic.

Head orbicular. Eyes bare, confluent dorsally by a short, narrow bridge. Ocelli three. Palpus with four segments, bearing only tactile setae; first segment with a deep sensory pocket. Antenna of female with 2 + 6 segments; pedicel moderately enlarged; first flagellar segment with a short but distinct proximal stem, the second to fifth segments sessile, broader than long, the sixth segment about as long as broad; each flagellar segment except last with several short tactile setae. Many slender sensory setae distally except on inner face, and a deep, open pocket of sensory setae on outer distal margin; terminal segment with scattered sensory setae only. Legs with microchaetae and numerous tactile setae; tibiae each with a row of about 12 short ventrodistal spines; tarsus with five segments, the first nearly twice as long as the second; claws simple, slightly curved; empodium absent. Wing (fig.1) membrane with very fine microtrichia only; C extending around wing except for distinct break at end of R_5; h absent; Sc present; R_1 very short, strong; R_s obliterated; R_5 strong, very short, close to R_1 and united with it terminally; stem of medial fork very short, M_1 being strong and reaching anterior margin of wing, and M_2 faint and reaching margin before apex of wing;

M_{3+4} strong and free, being evanescent proximally; Cu strong, unbranched, sigmoid; PCu present, free; Pl faint. Female with two circular, pigmented spermathecae; first segment of lamellae of ovipositor fused with tergum of tenth segment.

Although the wing venation of *Forbesomyia* resembles that of *Scatopse*, other morphological features show the relationship to be quite distant. The eyes of *Forbesomyia* are bare; the ovipositor is slender, with two-segmented lamellae; and the membranous areas of the abdomen are smooth. *Forbesomyia* further differs from the Scatopsidae in that the costa is continuous around the wing (except

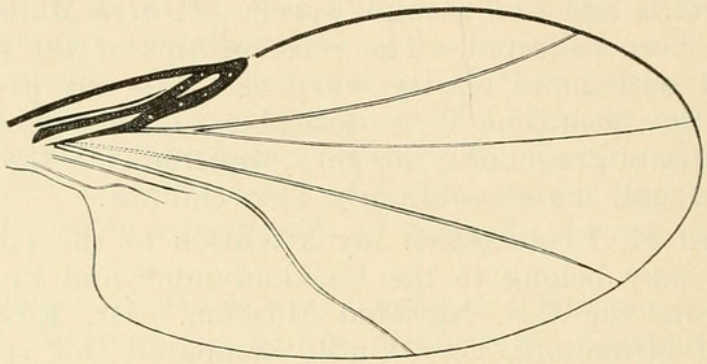

Fig. 1. Wing of *Forbesomyia atra*.

for a break at the end of R_5), the microchaetae on the wing membrane are very minute, the empodium is absent, the flagellar segments are sessile and without complete whorls of setae, the mesonotal phragma is comparatively small, and there are two spermathecae. All of these characters may be found in the Lestremiinae. Moreover, the four palpal segments and the sensory pockets of the female flagellum are characteristic of certain members of the Lestremiinae, and the ventrodistal spines on the tibiae are also characteristic of the lestremiine genus *Acoenonia* Pritchard.

The wing venation of *Forbesomyia* is distinctive in that the branches of the radius (R_1 and R_5) are very short and the very long anterior branches of the media (M_1 and M_2) both terminate on the costal margin of the wing.

Vein M_{3+4} is distinct but free as in some lestremiine tribes and the Scatopsidae. This vein is the same as that referred to as Cu_1 in part by Enderlein (1911, 1929) and Edwards (1938), and as M_4 in part by Hennig (1954). Pritchard (1947, 1953, 1958) presented reasons for considering M_{3+4} to be distinct from Cu_1, a branch near the middle of the cubitus that is often found in the Cecidomyiidae. Vein M_{3+4} arises from M in the lestremiine tribe Catotrichini, and it is often found concurrently with Cu_1 in the Cecidomyiinae.

Vein Cu is simple and sigmoid as in some members of the lestremiine tribe Catochini and in the Scatopsidae. PCu is present and free as in some lestremiine tribes, but not the Scatopsidae.

Forbesomyia atra Malloch

Forbesomyia atra Malloch, 1914, Bul. Ill. State Lab. Nat. Hist. 10 (4): 235. Type: female, Urbana, Illinois; in the collection of the Illinois State Natural History Survey.

Specimens examined.—1 female, Friday Harbor, Washington, July 9 (J. M. Aldrich); 1 female, Kaslo, British Columbia, June 22 (R. P. Currie); and 1 female, Hamilton Lake, Revalli Co., Montana, September 17, 1932 (C. B. Philip). An additional female, studied by Edwin F. Cook, is from Urbana, Illinois, June 13, 1915, at window.

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A NEW GENUS IN CYNIPOIDEA

(HYMENOPTERA)

Among some Cynipidae from Panama sent to the U.S. National Museum by Mr. Carl W. Rettenmeyer of the University of Kansas were some specimens which represent a new genus.