THE FAMILY POSITION AND ADDITIONAL DESCRIPTIVE DATA CONCERNING TENUIA NIGRIPES MALLOCH (Diptera : Pseudopomyzidae)

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Abstract: The genus Tenuia is placed in the family Pseudopomyzidae.

Malloch (1926: 493) described the genus *Tenuia* and its single species *T. nigripes* (type by original designation) from a unique φ specimen from Baguio, Benguet Subprovince, Luzon, Philippines and placed it in the family Opomyzidae. In order to confirm its classification or to place it more accurately, I examined the holotype in the United States National Museum of Natural History with the following results.

The original description is fairly lengthy and should be adequate for recognition of the species. However, the dorsal preapical tibial bristles, which Malloch characterized as "minute", are so small as to be equally well described as undeveloped, being no larger than surrounding setulae. The row of small bristles on the margin of the wing (fig. 4) are on the lower anterior surface of the costa, in a position similar to that of the species of *Fucellia* (Anthomyidae), rather than more directly anterior, as in most Heleomyzidae (incl. Trixoscelididae). The mesopleuron (anepisternum) and pteropleuron (anepimeron) are entirely bare. The prosternum is small, bare, and isolated in membrane. The φ postabdomen (7th and following urites) are as shown in fig. 6 and 7; the ovipositor sheath consists of the 7th tergum and sternum well fused laterally, but with the line of fusion well marked by lighter sclerotization; the 6th (preabdominal) sternum is a small plate without apodemes (fig. 5). Additional structural details may be seen in fig. 1 to 7.

The Opomyzidae, as represented by the type-genus *Opomyza* and as understood by Hendel (1922) and most recent workers, lack *poc* (*pvt*), *vi*, and lower *fo* bristles, but a strong *mspl* is present and vein *sc* of the wing runs into a break in the costa at a considerable distance proximad of the end of r_1 . *Tenuia* runs to Opomyzidae (genus *Neossos*) in the Curran manual (1934), but that family therein is a mixture of discordant elements, including what are generally recognized now as Anthomyzidae, Tethinidae, and Trixoscelididae (genus *Neossos*).

In Hendel's pioneering classification of the Acalyptratae (1922), *Tenuia* runs to Group C (rubric 47), where the presence of outwardly inclined lower *fo* could be interpreted as suiting either alternative. If run to rubric 48, the combination of reclinate lower *fo* and convergent *poc* will suit neither alternative, and if run to rubric 51, one is led to

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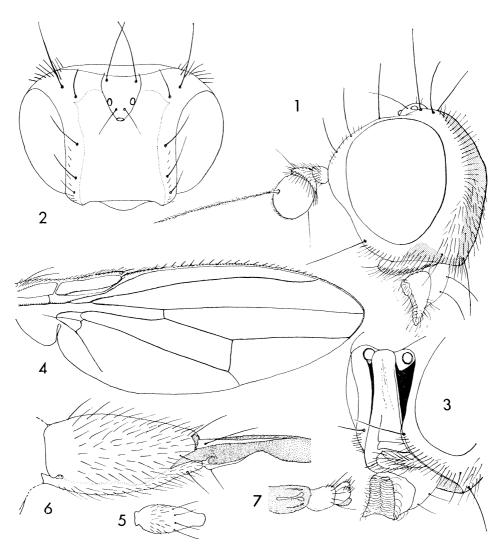


Fig. 1-7. *Tenuia nigripes* Malloch, holotype φ . 1, profile of head; 2, dorsal view of head; 3, anterolateral view of lower part of head; 4, wing; 5, 6th sternum; 6, profile of extended postabdomen, less tip; 7, tip of same, ventral view.

the obviously erroneous Drosophilidae. If *Tenuia* is run to Group B (rubric 22; costal break at some distance proximad of end of r_1), greater difficulties are met with, chiefly because of fusion of sc with r_1 although if it is considered as complete and ending in the costa, one is led to Chyromyidae. In Brues, Melander & Carpenter (1954), the genus runs easily to Tethinidae, but if run from rubric 109 in the 1st alternative (sc complete and ending in costa), it will run to Trixoscelididae and Chyromyidae.

The Chyromyidae are quite small, largely or entirely yellow flies lacking propleural and costal bristles. The Tethinidae, as characterized by Hennig (1958: 652) are flies

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quite different from *Tenuia* in possessing interfrontal rows of bristles and long, reflexed labellae and in lacking the anal vein of the wing.

In the key to acalyptrates by Malloch (1948), published as the last part of his work on the Diptera of Patagonia and South Chile, *Tenuia* will run to Heleomyzidae better than elsewhere, the chief difficulty in placing it in that family being the lack (or great reduction) of preapical tibial bristles and presence of well developed lower fo. Malloch (1933), however, includes in the Heleomyzidae a few genera with well developed lower fo; in fact, *Tenuia* therein appears to be closely related to *Gephyromyza* and *Cephodapedon*. In Harrison (1959), *Tenuia* will also run to Heleomyzidae.

The best clue to the correct classification of *Tenuia* was given by Hennig (1969: 590), who stated that he thought it possible that the genus belongs with the Pseudopomyzidae. Comparison of the type of *Tenuia* with the type-species and a few other species of *Latheticomyia* Wheeler (1956) shows that such is indeed true and that the 2 genera differ but little from each other. *Tenuia* will run in Hennig's key to the genera of Pseudopomyzidae (op. cit.) to rubric 3, at which point the following may be inserted:

3b (3a). All costal setae short and recumbent; basal crossvein absent or faint; legs sharply bicolored
Latheticomyia Wheeler

Tenuia is thus evidently an Oriental vicariant of the neotropical genus *Latheticomyia* and quite properly placed in the Pseudopomyzidae.

REFERENCES CITED

- Brues, C. T., A. L. Melander & F. M. Carpenter. 1954. Classification of Insects, etc. Bull. Mus. Comp. Zool. 108: i-v, 1-917.
- Curran, C. H. 1934. The families and genera of North American Diptera. privately publ., 512 p.
- Harrison, R. A. 1959. Acalypterate Diptera of New Zealand. N. Zealand Dept. Sci. Industr. Res. Bull. 128: i-vii, 1-382.

Hendel, F. 1922. Die paläarktischen Muscidae acalyptrate Girsch. = Haplostomata Frey nach ihren Familien und Gattungen. 1. Die Familien. Konowia 1: 145-60, 253-65.

Hennig, W. 1958. Die Familien der Diptera Schizophora und ihre phylogenetischen Verwandtschaftsbeziehungen. *Beitr. zur Ent.* 8 (5/6): 505-688.

1969. Neue Gattungen und Arten der Acalyptratae. Canad. Ent. 101: 589-633.

Malloch, J. R. 1926. Notes on oriental Diptera, with descriptions of new species. *Philippine J.* Sci. 31: 491-512.

- 1933. Acalyptrata. Diptera of Patagonia and So. Chile (Brit. Mus. [Nat. Hist.]), 6 (4): 177-391, pls. 1-7.
- 1948. Key to the families of Acalyptrata, with notes on some of the families. *Ibid.* 6 (6): 491-99.

Melander, A. L. 1952. The American species of Trixoscelidae. J. N. Y. Ent. Soc. 60: 37-52.

Wheeler, W. M. 1956. Latheticomyia, a new genus of Acalyptrate flies of uncertain family relationship. Proc. U. S. Nat. Mus. 103: 305-14.