

NOTES ON SOME OLDER TYPES OF NEOTROPICAL
MICROPEZIDAE WITH DESCRIPTIONS OF NEW
SPECIES (DIPTERA, ACALYPTRATAE)

GEORGE C. STEYSKAL

ABSTRACT

Examination of types in the British Museum (Natural History) and United States National Museum (hereinafter abbreviated to BMNH and USNM, respectively) has enabled me to adduce some new synonymy, place species until now dubious, describe two new species, and offer some various descriptive notes. These results may be summarized as follows:

Original combination	Present name
<i>Calobata aloa</i> Walker, synonymy confirmed	<i>Taenaptera lasciva</i> (Fabricius)
<i>C. brevipennis</i> Walker	<i>Plocoscelus brevipennis</i> (Walker), generic reference confirmed.
<i>C. fulva</i> Walker	<i>Ptilosphen fulvus</i> (Walker), new combination.
<i>C. grata</i> Wulp	<i>Taenaptera grata</i> (Wulp), new combination, lectotype designated, placed in new key.
<i>C. guttata</i> Walker	<i>Cardiacephala guttata</i> (Walker), new combination.
<i>C. latifascia</i> Wulp	<i>Taenaptera latifascia</i> (Wulp), generic reference confirmed, species placed in existing key.
<i>C. leucomelas</i> Walker	<i>Poecilotylus leucomelas</i> (Walker), new combination, placed in existing key.
<i>C. manifesta</i> Wulp	<i>Scipopus manifestus</i> (Wulp), generic reference confirmed, species placed in existing key.

<i>C. mellea</i> Williston	<i>Grallipeza mellea</i> (Williston), new combination, removed from synonymy with <i>G. placida</i> (Loew).
<i>C. munda</i> Wulp	<i>Taeniptera munda</i> (Wulp), placed in new key.
<i>C. nigrifilum</i> Walker, synonymy confirmed	<i>Chobata diadema</i> (Wiedemann)
<i>C. robusta</i> Walker, synonymy confirmed	<i>Taeniptera tarsata</i> (Wiedemann)
<i>C. varipes</i> Walker, new synonym of	<i>Poecilotylus leucomelas</i> (Walker)
<i>Cardiacephala triluminata</i> Cresson, new synonym of	<i>Cardiacephala guttata</i> (Walker)
<i>Grallomyia buscki</i> Cresson	<i>Poecilotylus buscki</i> (Cresson), notes.
<i>G. latitibia</i> Enderlein, new synonym of	<i>Taeniptera tibialis</i> (Macquart)
<i>G. lauta</i> Cresson	<i>T. lauta</i> (Cresson), new combination, placed in new key.
<i>Mitromyia conifer</i> Cresson, new synonym of	<i>Taeniptera grata</i> (Wulp)
<i>Ptilosphen ochraceus</i> Enderlein, new synonym of	<i>Ptilosphen fulvus</i> (Walker)
<i>Rainieria trimaculata</i> Czerny	<i>Chobata trimaculata</i> (Czerny), removed from synonymy with <i>Cardiacephala guttata</i> (Walker).
<i>Scipopus melaneuris</i> Cresson	<i>Scipopus melaneuris</i> Cresson, placed in existing key.
<i>Systellapha baracoa</i> Cresson	<i>Grallipeza baracoa</i> (Cresson), removed from synonymy with <i>G. nebulosa</i> (Loew).
<i>Taeniptera dilator</i> Cresson, new synonym of	<i>Taeniptera tibialis</i> (Macquart)
<i>T. gratula</i> , sp. n.	(<i>Calobata grata</i> Wulp, in part)
<i>T. wulpi</i> , sp. n.	(<i>Calobata grata</i> Wulp, in part)

More detailed bibliography, synonymy, etc., will be given in the forthcoming pertinent fascicles of the Neotropical Catalogue or will be found in the works cited in References, below.

Calobata aloa Walker

Calobata aloa Walker, 1849: 1053.

The type from Jamaica in BMNH bears a label that could be read as "alba" and is so listed in the Museum's card file. It has been referred to in the literature also as "alva", but the description is printed as "Aloa". The species is clearly *Taeniptera lasciva* (Fabricius), as in Hennig (1934: 87).

Calobata brevipennis Walker

Calobata brevipennis Walker, 1852: 389.

Examination of the type in BMNH confirms the placement of this species by Hennig (1935: 48) as *Plocoscelus brevipennis* (Walker).

Calobata fulva Walker

Calobata fulva Walker, 1849: 1050.

The type in BMNH is labeled "Amaz" although the locality was published as Pará. It and others in the series are conspecific with *Ptilosphen ochraceus* Enderlein, also from Pará. The differences cited by Hennig (1934: 321) are not evident in the specimens, and *P. ochraceus* is clearly a synonym. The species should be known as *Ptilosphen fulvus* (Walker).

Calobata grata Wulp

(Figs. 1, 2)

Calobata grata Wulp, 1897: 371, pl. 9, fig. 24.

The series of cotypes in BMNH consists of three species; one specimen from Dos Arroyos, Guerrero, Mexico, 1000 ft., Sept. (H. H. Smith), ♂, has been selected as lectotype because it was listed first by Wulp and agrees best with the description. The other specimens are described below as new species. All of these forms are definitely not *Hoplocheiloma*, in which genus *C. grata* has been placed, but are *Taeniptera* with more or less dorsally protruding vertical humps. *Mitromyia conifer* Cresson, 1930, is a synonym, and the genus *Mitromyia* will therefore become a synonym of *Taeniptera*. The group runs in the key of Hennig (1934: 75) to *Taeniptera munda* (Wulp), which differs as shown in the new section of key below. *Calobata grata* Wulp should be known as *Taeniptera grata* (Wulp).

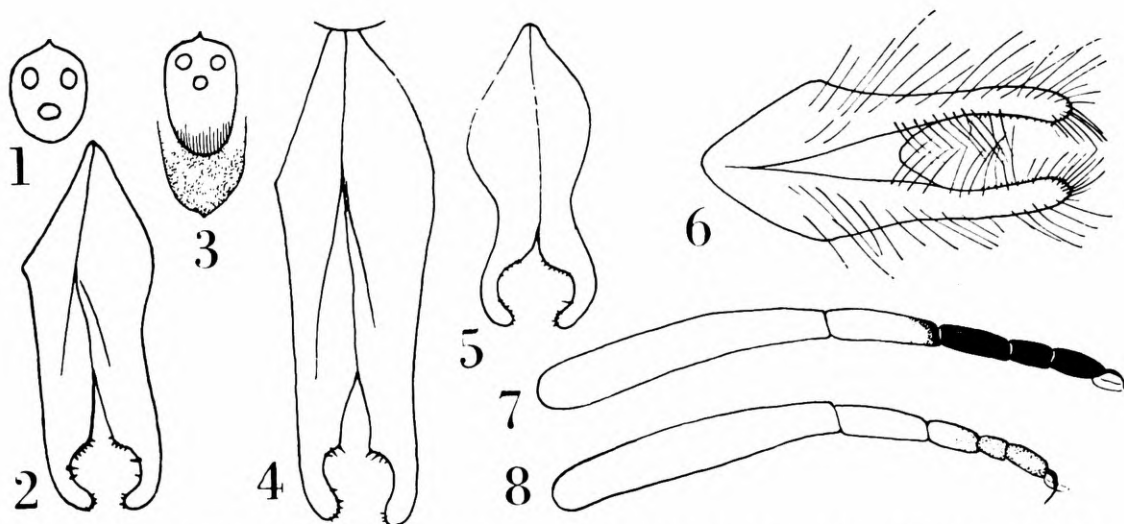
Taeniptera gratula, sp. n.

(Figs. 3, 4)

Male. Similar to *T. grata* (Wulp), but ocellar plate as in figure 3, elongated anteriorly, at tip with some fine rugulosity,

but otherwise shining; vertical humps quite low, nearly shining; mesonotum lacking brown presutural crossband; fore basitarsus black at tip for distance equal to diameter of segment; wing with subbasal and median brown bands narrowly connected for half of width of cell just above fifth vein; subgenital plate as in figure 4.

Holotype. Northern Yucatan, Mexico (Gaumer), in BMNH.



Details of species of Micropezidae. *Taeniaptera grata* (Wulp), fig. 1: ocellar plate; fig. 2: ♂ subgenital plate. *Taeniaptera gratula*, n. sp., fig. 3: ocellar plate; fig. 4: ♂ subgenital plate. *Taeniaptera wulpi*, n. sp., fig. 5: ♂ subgenital plate. *Poecilotylus buscki* (Cresson), fig. 6: ♂ subgenital plate. *Grallipeza nebulosa* (Loew), fig. 7: fore tarsus ♂, Florida, U.S.A. *Grallipeza baracoa* (Cresson), fig. 8, fore tarsus ♂, Cayamas, Cuba. N.B.: Figures 6-8 were drawn with the aid of an ocular reticle; the others are freehand.

Taeniaptera wulpi, sp. n.

(Fig. 5)

Male. Similar to *T. grata* (Wulp), ocellar area virtually the same (figure 1), finely rugulose; vertical humps low, subshining; mesonotum with presutural brown crossband; fore basitarsus black at tip for distance equal to diameter of segment; subbasal and median brown wing bands well separated posterad of *ta*; subgenital plate as in figure 5.

Holotype. Venta de Zopilote, Guerrero, Mexico, 2800 ft., Oct. (H. H. Smith), in BMNH.

The above three species, *T. munda* (Wulp), and *T. lauta* (Cresson), may be separated as in the following key, which may be inserted at "10(11)" in the key of Hennig (1934: 75).

A(B) Thorax blue-black in lower part; vertex evenly rounded; hind tibia flattened, deeper than wide in section; ♂ subgenital plate 4-pronged *T. munda* (Wulp).

- B(A) Thorax wholly reddish; vertex sometimes with dorsally protruding humps on which the vertical bristles are situated; tibiae slender, as broad as deep in section, ♂ subgenital plate, so far as is known, with only a pair of apical prongs.
- C(D) Vertex not produced into humps, evenly rounded; ocellar plate short; wing pattern consisting of broken bands (2 spots each in cells r_{2+3} and r_{4+5} , between *ta* and *tp* and apicad of *tp*, respectively) and slightly brownish apex of wing; ♂ unknown *T. lauta* (Cresson)
- D(C) Vertex with humps; ocellar plate sometimes elongate; wing pattern of subbasal (narrow), median, and apical concrete bands.
- E(F) Ocellar plate extending anterad considerably farther than length of ocellar triangle, largely shining; vertical humps subshining; mesonotum unicolorous; subbasal and median brown wing bands connected below *ta*
..... *T. gratula*, sp. n.
- F(E) Ocellar plate extending but little anterad of anterior ocellus, finely rugulose; vertical humps dull to subshining; mesonotum with presutural brown bands, subbasal and median wing bands well separated.
- G(H) Basitarsus₁ nearly wholly white; vertical humps well developed, quite dull with minute rugulosity; ♂ subgenital plate with straight lateral margins, mesal teeth strong *T. grata* (Wulp).
- H(G) Basitarsus₁ decidedly blackish at tip; vertical humps quite low, subshining; subgenital plate medially narrowed, teeth quite small *T. wulpi*, sp. n.

Calobata guttata Walker

Calobata guttata Walker, 1852: 394.

The type in BMNH bears a label "*Cardiacephala longipes* Fabricius/Czerny 14-8-01", which name was originally proposed in *Musca*, is preoccupied by Scopoli, and was renamed *Cardiacephala triluminata* Cresson, 1930. The abdomen is missing, but the other parts clearly indicate that Czerny was correct in his determination and that Hennig (1934: 41) erred in referring it to *Cliobata*. The species should be known as *Cardiacephala guttata* (Walker), the Cresson name is unnecessary, and *Cliobata trimaculata* (Czerny, *Rainieria*) will become valid instead of a synonym of the Walker species, as in Hennig.

Calobata latifascia Wulp

Calobata latifascia Wulp, 1897: 372, pl. 9, fig. 25.

The type in BMNH shows that Hennig (1934: 91) was correct in referring the species to *Taeniaptera* (as *latifasciata*, however), although he was unable to place it in his key to that genus (1934:

75). The species runs in Hennig's key to rubric 38 (*Taeniaptera vulgata* Hennig), but differs from that species in having the front black (only a little brownish at anterior margin), antenna black, fore tarsus blackish (only little brownish apically), and basal wing band lacking.

Calobata leucomelas Walker

Calobata leucomelas Walker, 1852: 392.

Calobata varipes Walker, 1852: 392. *New Synonym.*

The description of *C. varipes* immediately follows that of *C. leucomelas*; both are from "South America". The types in BMNH show that they are conspecific and should be referred to *Poecilotylus* rather than to *Ptilosphen* as in Hennig (1934: 314, 320), since the arista is virtually bare. Hennig's key to *Poecilotylus* (1934: 97) runs the Walker species to *P. trifasciatus* (Wiedemann), a rather poorly known species, but one which, according to the description, has the wing with a washed-out brown middle spot and tip (Flügel mit verwaschenem bräunlichen Mittelflecke und Spitze), rather than being unmarked. The forms treated as *Ptilosphen leucomelas* and *Ptilosphen varipes* by Hennig, if indeed they do have feathered aristae, are anomalous in that genus in being the only ones with postvertical bristles.

The Walker species should be considered very closely related to *Poecilotylus* (s.s.) *trifasciatus* (Wiedemann), and known as *Poecilotylus leucomelas* (Walker).

Calobata manifesta Wulp

Calobata manifesta Wulp, 1897: 370, pl. 9, fig. 20.

The type in BMNH shows that the species should be referred to *Scipopus* s. s., as had been done by Enderlein (1922: 208), although Hennig (1934: 67; 1935: 67) listed it as a species inquirenda. It runs in Hennig's key (1934: 322) to rubric 27 (*S. bolivianus* Hennig), but differs in having the epicephala reddish anteriorly, hind basitarsus wholly brownish with whitish setae in basal 2/3 below, and mesonotum dull bluish with broad sooty black lateral margins. The wing is as figured by Wulp, but with less contrast in the markings. The species should be known as *Scipopus manifestus* (Wulp).

Calobata mellea Williston

Calobata mellea Williston, 1896: 373, pl. 12, fig. 125.

The type series in BMNH from St. Vincent Island, West Indies, is distinct from material from other islands and not synonymous with *Grallipeza placida* (Loew), described from Cuba, as listed by Hennig (1934: 307). The small differences cited by Hennig between *G. placida* and *G. mellea* are apparently significant, since

specimens of species of *Grallipeza* from each island in the Antilles are consistently distinct. However, it is likely that a "Rassenkreis" is present here. The species should be known as *Grallipeza mellea* (Williston).

Calobata nigrifilum Walker

Calobata nigrifilum Walker, 1852: 393.

Examination of the type in BMNH confirms the placement of the species by Hennig (1935: 41) as a synonym of *Cliobata diadema* (Wiedemann).

Calobata robusta Walker

Calobata robusta Walker, 1849: 1051.

Examination of the type in BMNH confirms the placement of the species by Hennig (1934: 94) as a synonym of *Taeniaptera tarsata* (Wiedemann).

Grallomyia buscki Cresson

(Fig. 6)

Grallomyia buscki Cresson, 1930: 342.

The female type in USNM has a slender second dorsocentral bristle, but the evidently conspecific specimen from Costa Rica mentioned by Cresson and a male from Río Indio, Panamá, 28 Dec. 1936 (S. W. Frost) have no trace of a second dorsocentral. The subgenital plate of the male is shown in figure 6. The species is now known as *Poecilotylus buscki* (Cresson).

Grallomyia lauta Cresson

Grallomyia lauta Cresson, 1930: 345.

The female type from Panamá in USNM shows that although the third costal section is only 0.46 of the distance from *tp* to wing tip, measured in plane of longitudinal axis of wing, the arista is bare, the mesofrons is not tumid, and the palpi are lenticular in outline. The species therefore finds its place best in the genus *Taeniaptera*. In Hennig's key (1934: 75) it will run to *T. munda* (Wup), but may be distinguished therefrom as in the foregoing key that follows the description of *T. wulpi*. The species should be known as *Taeniaptera lauta* (Cresson).

Scipopus melaneuris Cresson

Scipopus melaneuris Cresson, 1926: 271.

The female type in USNM runs in Hennig's key to species of *Scipopus* (1934: 321) to rubric 10 (*S. erythrocephalus* [F.]), but

differs from that species in the markedly narrow front (0.36 of total head width) and the pterostigma extending no farther than level of *ta*. The mesonotum is uniformly dark brown pruinose, except for moderately broad complete dull gray mesal stripe. The head is entirely orange-yellow, with parafrontalia very narrow and dull. All tarsi are blackish with blackish hairs. The pleura are lightly whitish pruinose, without brown areas. The marking of the wing is not conspicuous and may be incompletely developed. Both *S. erythrocephalus* and *S. cartaboensis* of this section of the key have the front virtually half the total head width, as shown by Hennig (1934: 106, pl. 2, figs. 17 and 14 resp.).

***Systellapha baracoa* Cresson**

(figs. 7, 8)

Systellapha baracoa Cresson, 1926: 265.

Although Cresson (1930: 356) synonymized his species with *Grallipeza nebulosa* (Loew) "on further study of additional material", I cannot but consider the two as distinct species from a study of the type of *S. baracoa*, another specimen from Cayamas, Cuba, and numerous specimens of *G. nebulosa* (Loew), all in USNM. *Grallipeza nebulosa* (Loew) has the fore femur nearly entirely blackish, the fore tarsus with the apical segments together nearly as long as the basitarsus and black from apex of second segment (figure 7), and basal segment of male postabdomen wholly black. *G. baracoa* (Cresson), as the species is now known, has the fore femur yellowish, the fore tarsus with the apical segments together 3/4 of the length of the basitarsus and only brownish from the tip of the third segment (figure 8), and the male postabdomen is yellowish. Both species have two well developed dorsocentral bristles.

***Taeniaptera dilator* Cresson**

Taeniaptera dilator Cresson, 1926: 274; 1930: 354.

The type and the additional specimens from Trinidad (Cresson, 1930), all in USNM, show that enough variation exists in the length of the free part of the anal vein (other characters being equal) to bring *T. dilator* Cresson and *T. latitibia* (Enderlein, *Grallomyia*) both into synonymy with *T. tibialis* (Macquart), as was apparently suspected by Hennig (1934: 76).

REFERENCES

CRESSON, E. T., JR.

- 1926: Descriptions of new genera and species of Diptera (Ephydriidae and Micropezidae). *Trans. Amer. Ent. Soc.* 52:249-274.
- 1930: Notes on and descriptions of some neotropical Neriidae and Micropezidae (Diptera). *Trans. Amer. Ent. Soc.* 56:307-362.
- 1938: The Neriidae and Micropezidae of America north of Mexico (Diptera). *Trans. Amer. Ent. Soc.* 64:293-366, 1 fig., 3 pls.

ENDERLEIN, G.

- 1922: Klassifikation der Micropeziden. *Archiv f. Naturgesch.* 88(A):140-229.

HENNIG, W.

- 1934: Revision der Tyliden (Dipt., Acalypt.). I. Teil: Die Taeniapterinae Amerikas. *Stettin. Entomol. Ztg.* 95:65-108, 294-330.
1935: *Idem* (cont.). *Ibidem* 96:27-67.

WALKER, F.

- 1849: *List of the specimens of dipterous insects in the collection of the British Museum* 4:689-1172. London.
1852: Diptera, in [Saunders, W.W., ed.], *Insecta Saundersiana* 1:157-252, 253-414, 4 pls. London.

WILLISTON, S. W.

- 1896: On the Diptera of St. Vincent (West Indies). *Trans. Ent. Soc. London* 1896:253-446, pls. 8-14.

WULP, F. M. VAN DER

- 1897: *Biologia Centrali-Americana, Diptera*, vol. 2.

