

pletely bare except for hairy apical margins. Also, there is a marked tendency to melanism in the abdominal pattern in some individuals in all populations.

NOMINA NUDA

Temnocera obscurus Ragues, 1908: 312 (Cuba).

Volucella pectoralis Ragues, 1908: 312 (Cuba).

These two names appear in a list of Diptera of Cuba with no further information. The list was based on the collection at the Museum in Havana, which had been previously studied by Gundlach and, through him, Hermann Loew via Osten Sacken. Thus, these are undoubtedly manuscript names of either Loew or Gundlach.

TRIBE BRACHYOPINI WILLISTON

Genus *Lepidomyia* Loew

Lepidomyia Loew, 1864: 69. Type-species, *calopus* Loew (mono.).

Lepidostola Mik, 1886: 278 (unjustified new name for *Lepidomyia* Loew).

Lepromyia Williston, 1887: 31 (unjustified new name for *Lepidomyia* Loew).

References: Hull, 1946b (revision); Thompson, 1972: 116–117 (descript.).

Lepidomyia is a small, endemic New World genus, confined to the lowland tropical areas. Only 15 species are presently known, and they range from extreme southern Texas (*micheneri* Fluke) to northern Argentina (*ortalina* Wulp and *vulturella* Hull). One species is known from the West Indies. The immature stages are unknown, and the adults are extremely rare in collections; probably less than 50 specimens of them are known. The immatures of the related genus, *Myolepta*, are rat-tailed maggots, which breed in rot-holes in trees. The adults of *Myolepta* in tropical areas apparently are canopy dwellers (Thompson, 1974). This suggests that *Lepidomyia* is likewise a canopy dweller, probably in all its life stages, which would explain the apparent rarity of these flies.

Lepidomyia calopus Loew

Lepidomyia calopus Loew, 1864: 69. Type-loc. Cuba. Type ♀ MCZ (lost).

Lepromyia calopus: Williston, 1887: 31 (descript.).

Lepidostola calopus: Johnson, 1919: 443 (Jamaica); Gowdey, 1926: 79 (Jamaica); Hull, 1946b: 9, figs. 2, 11 (head), 18 (wing), 27 (mesonotum), 32 (abdomen) (descript.; Cuba), 1949b: 261, fig. 2b (wing).

Distribution: Cuba*, Jamaica*.

Genus *Orthonevra* Macquart

Orthonevra Macquart, 1829: 188. Type-species, *Chrysogaster elegans* Meigen (mono.).

Orthoneura Wirth et al., 1965: 591. Emendation.

Reference: Thompson, 1972: 119–121 (descript.).

Orthoneura is predominately a north temperate group with only a limited extension (eight species) into the New World tropics. The described Ethiopian species probably belong elsewhere. One species is known from the West Indies.

Orthoneura gewgaw (Hull)

Fig. 182

Chrysogaster gewgaw Hull, 1941a: 152, pl. 10, fig. 11 (wing). Type-loc.: Cuba, Soledad. Holotype ♂ MCZ*.

Orthoneura gewgaw: Thompson et al., 1976: 91.

Distribution.—Cuba*.

Orthoneura gewgaw is a member of the *bellula* Williston group as defined by Sedman (1964) and is related to *flukei* (Sedman). These species have scalelike pile on the face and similar eye patterns, male genital styles, and aedeagii. They differ in the shape of the male ninth sternum and color of the tibiae which are pale in *gewgaw* and black in *flukei*.

TRIBE ERISTALINI NEWMAN

Genus *Helophilus* Meigen

Helophilus Meigen, 1822: 368. Type-species, *Musca pendula* Linnaeus (Curtis, 1832: pl. 429).

Reference: Curran and Fluke, 1926: 211–229 (revision of American spp.).

Helophilus (*sensu stricto*) is an endemic holarctic genus. Elsewhere *Helophilus* is replaced by *Dolichogyna* Macquart in the Neotropical Region (Chilean subregion), by *Mesembrius* Rondani in the Old World tropics and the Australian region, and by *Prohelophilus* Curran and Fluke in New Zealand. Thus records of *Helophilus* species from the West Indies, if accurate, would be interesting. Most authors have accepted Walker's *impositus* as being based on an erroneously labeled specimen. Gowdey's record of *latifrons* has been previously overlooked. While it is more than probable that Gowdey's record is based on a mislabeled specimen (*v. Eoseristalis transversa*), examples of northern relicts existing on high mountains of the Greater Antilles are definitely known. The southward shift of northern forms during the various glacial episodes of the Pleistocene is the usual explanation for such relicts.

Helophilus fasciatus Walker

Helophilus fasciatus Walker, 1849: 605. Type-loc.: Canada, Hudson's Bay, Albany River, St. Martin's Falls. Type ♀, BM(NH).

Eristalis impositus Walker, 1860: 289. Type-loc.: Haiti. Type ♀ BM(NH).

Synonymy by Hull, 1943c: 10.

Helophilus latifrons of Gowdey, 1926: 80 (Jamaica, misspelling).

Distribution.—Canada (British Columbia to Quebec), south to USA (Florida) and Mexico.

The West Indian records of this species are considered to be based on erroneously labeled specimens.

Genus *Quichuana* Knab

Quichuana Knab, 1913: 13. Type-species, *sylicola* Knab (orig. des.).

References: Hull, 1946a (revision); Thompson, 1972: 135–136 (descript.).

Quichuana is an endemic Neotropical group of flies whose rat-tailed maggots are found only in bromeliads and other similar epiphytes. Some 26 species are known, the northernmost species occurs in Mexico (Durango) and the southernmost in Argentina (Tucumán). The species listed below are the first to be recorded from the West Indies.

KEY TO WEST INDIAN SPECIES OF *QUICHUANA* KNAB

- Wing with costal and basal cells completely microtrichose; abdomen almost completely white pilose; front with medial $\frac{1}{3}$ completely white pilose (Panama to Colombia; Cuba?) *calathea* Shannon
- Wing with basal $\frac{1}{2}$ of 2nd costal and 1st basal cells and anterior $\frac{1}{2}$ of 2nd basal cell bare; abdomen black pilose on apical $\frac{2}{3}$ or more of each tergum, 3–5; front black pilose medially (Dominica)
 *dominica*, new species

Quichuana calathea Shannon

Quichuana calathea Shannon, 1925b: 111. Type-loc.: Panama, Porto Bello.

Holotype ♂ USNM*. Subsequent reference: Hull, 1946a: 8, fig. 13 (head) (descript. note).

Distribution.—Cuba?; Panama, Colombia.

There are two specimens of this species in the USNM labeled as being reared at Philadelphia, Pennsylvania, “from pupae (taken) from *Heliconia bihai* from Cuba.” The material is from the Plant Protection Quarantine Service and undoubtedly arrived by ship. The labels are in C. T. Greene’s handwriting and thus predate the time when air travel was common. This being the case, the “from Cuba” may only refer to the last stop the ship made before being inspected at an American port. The known range of *calathea* is Panama and Colombia. It is quite possible that the plant may originally have come from Panama, a common stopping place for north bound traffic, and this species should therefore only tentatively be accepted as West Indian.

Quichuana dominica Thompson, NEW SPECIES

Fig. 174

Female.—*Head*: Black, face shiny medially except under antennae, yellowish-white pollinose laterally and under antennae, yellow pilose; cheek sparsely white pollinose, yellow pilose; frontal lunule black; front long, about as long as face, slightly more than $\frac{1}{2}$ as long as broad at level of antennae, $2\frac{1}{2}$ × as broad at level of antennae as at level of ocellar triangle, shiny above antennae, dull black medially and yellowish-white pollinose laterally, yellow pilose on pale areas and black pilose on black areas; vertex dull black, black pilose; occiput silvery white pollinose, yellow pilose with some black cilia on upper $\frac{1}{4}$. Antenna brownish black, black pilose; 3rd segment $1\frac{3}{4}$ × as broad as long, with a large round basal pit on inner side; arista light brown. Eye light yellow, white pilose.

Thorax: Black; mesonotum dull grayish-black pollinose, with 2 very indistinct submedial gray pollinose vittae on anterior $\frac{1}{2}$, yellow pilose except for a few black spinelike hairs above wings, with pile thicker and more opaque on notopleuron and postalar callus; pleuron silvery-white pollinose, yellow pilose with pile thicker and more opaque on upper part of mesopleuron; scutellum dark brown, yellow pilose, without subscutellar fringe; plumula light brown; squama dark brown; spiracular fringe brown; halter dirty white. *Legs*: Coxae black, silver pollinose, yellow pilose; trochanters brownish black, shiny, yellow pilose; front and middle femora brownish black on basal $\frac{1}{3}$, sparsely pollinose basally, orange on apical $\frac{2}{3}$, yellow pilose except black pilose on posterodorsal $\frac{1}{4}$ of front femur and a few scattered black hairs posterodorsally on middle femur; hindfemur brownish black on basal $\frac{1}{2}$, orange on apical $\frac{1}{2}$, yellow pilose except black pilose on apical $\frac{1}{4}$; tibiae orange, yellow pilose except black pilose on dorsal edge of front and hindtibiae; tarsi brownish black except brown basitarsi, black pilose. *Wing*: Hyaline, microtrichose except bare as follows, 1st costal cell, basal $\frac{1}{2}$ of subcostal cell, above Rs, all of 1st basal cell except between R_{4+5} and spurious vein, anterior $\frac{2}{3}$ of 2nd basal cell, anterior $\frac{1}{4}$ of anal cell and narrowly in front of Ax; alula completely microtrichose; epaulet black pilose.

Abdomen: Black, 1st tergum silver pollinose, with thick golden tomentum-like pile; 2nd through 4th dull black pollinose, with basal $\frac{1}{2}$ of 2nd and basal $\frac{1}{3}$ of 3rd and 4th golden pilose, sides yellow pilose, elsewhere short black pilose; 5th tergum gray pollinose, black pilose; venter gray pollinose, white pilose.

Holotype.—♀, DOMINICA, South Chiltern, 1600 ft.; 19 February 1965; H. E. Evans. Paratype ♀, Dominica, Clarke Hall, 21–31 January 1965, W. W. Wirth, Malaise trap. Both deposited in USNM.

Discussion.—*Quichuana dominica* will trace to *calathea* Shannon in

Hull's key (1946a) to females of *Quichuana* with some difficulty because its antennal length is somewhat intermediate between those mentioned in couplet 3. Also, Hull transposed the names of the species in couplet 4 of this key. I have re-written couplets 3–5 of Hull's key to correct this error and to include *dominica*. Although the male of *dominica* is unknown, I suspect that it would trace to couplet 5 in Hull's key to males of *Quichuana*, but it can be distinguished from both *bezzii* (Ceresa) and *quixotea* Hull by its orange hindtibiae.

MODIFICATION OF HULL'S KEY TO FEMALES OF *QUICHUANA*

- 1–2. No change.
3. First abdominal tergum with bright-yellow, thick tomentum-like pile; antenna with 3rd segment $1.75\times$ or more as long as broad 5
- First tergum with only normal fine yellow or white pile; 3rd antennal segment $1.5\times$ as long as broad 4
4. Midfacial stripe conspicuous, but not reaching antennae or epistoma; face short, but produced a little downward, with small tubercle on lower part; eye heavily pilose. *bezzii* (Ceresa)
- Midfacial stripe almost wanting, at least not conspicuous; face produced farther forward, less below, concave and without tubercle; eye lightly pilose *parisii* (Ceresa)
5. Front entirely golden pilose on lower $\frac{1}{2}$ *quixotea* Hull
- Front partially black pilose on lower $\frac{1}{2}$ 5a
- 5a. Wing with costal and basal cells microtrichose; abdomen almost completely white pilose; front with medial $\frac{1}{3}$ completely white pilose *calathea* Shannon
- Wing with basal $\frac{1}{2}$ of 2nd costal and 1st basal cells and anterior $\frac{1}{2}$ of 2nd basal cell bare; abdomen black pilose on apical $\frac{2}{3}$ or more of each tergum, 3–5; front black pilose medially (Dominica) *dominica*, new species
- 6–14. No change.

Genus *Eristalis* Latreille

Eristalis Latreille, 1804: 194. Type-species, *Musca tenax* Linnaeus (Curtis, 1832: pl. 432). To preserve established usage, I have followed Wirth et al., 1965: 622, in using *Eristalis* instead of its senior synonym, *Elophilus*. Reference: Thompson, 1972: 139–140 (descript.).

Eristalis as presently interpreted includes two species, *tenax* (Linnaeus) and *proserpina* Wiedemann. *Eristalis tenax* is found throughout most of the world in association with man, although it probably had its origin in the Old

World tropics. *Eristalis proserpina* is only known from the type which was collected in China.

Eristalis tenax (Linnaeus)

Musca tenax Linnaeus, 1758: 591. Type-loc.: [Europe]. Type(s) Linnean Coll., London.

Syrphus tenax: Fabricius, 1775: 765.

Elophilus tenax: Meigen, 1803: 274.

Eristalis tenax: Latreille, 1804: 194; Hull, 1925: 305 (descript.); Gowdey, 1928: 9 (Jamaica); Bean, 1949: 149, fig. 15 (male genitalia).

Distribution.—Cosmopolitan, rare in Neotropics.

Eristalis tenax is perhaps the most common synanthropic syrphid fly. Collections of it from the New World tropics are very rare. In the USNM the only *tenax* material from the Neotropics is one large collection made at Nova Teutonia, Santa Catarina, Brazil. I have seen no material of *tenax* from the West Indies except for that on which Gowdey's record is based. I question the source of Gowdey's material (*q. v. Eoseristalis*). Whether the scarcity of *tenax* in the Neotropics is due to competition from other synanthropic flies, *Ornidia obesa* (Fabricius) and *Palpada vinetorum* (Fabricius) or other factors such as temperature-tolerance, I do not know.

Genus *Eoseristalis* Kanervo

Eoseristalis Kanervo, 1938: 12. Type-species, *Eristalis cerealis* Fabricius (orig. des.).

Eoseristalis is predominantly a north temperate group, and its only extension outside of that region is along the Andean Cordillera into Chile and Patagonia. The records of three species from the West Indies are rather dubious.

Eoseristalis pertinax (Scopoli), NEW COMBINATION

Conops pertinax Scopoli, 1763: 352. Type-loc.: Yugoslavia, Carniola. Types lost.

Eristalis guadelupensis Macquart, 1842: 92. Type-loc.: Guadeloupe. Lectotype ♂ NMHN, see Appendix B. Subsequent reference: Doesburg, 1970: 97 (citation). NEW SYNONYMY.

Distribution.—Guadeloupe?; Europe.

This is the second doubtful species Macquart recorded from Guadeloupe, the other being *Milesia virginiensis* (*q. v.*). In the section on Syrphidae in his "Diptera exotica . . .," Macquart recorded only three species from Guadeloupe with the collector (?) given as M. Beaupertuis. Apparently noth-

ing is known of this person that could aid in determining the true source of the material. *Eoseristalis pertinex* is a very common and widespread European species.

Eoseristalis arbustorum (Linnaeus)

Musca arbustorum Linnaeus, 1758: 591. Type-loc.: Europe. Type(s) Linnean Coll., London.

?*Eristalis arbustorum* of Gowdey, 1926: 80 (Jamaica).

Distribution.—Jamaica?; Palaeartic, eastern Nearctic.

No material of this species was found in the Gowdey Collection. See under *Eoseristalis transversa* for a discussion of this record.

Eoseristalis transversa (Wiedemann)

Eristalis transversa Wiedemann, 1830: 188. Type-loc.: North America. Type ♀ VMNH.

?*Eristalis transversus* of Gowdey, 1926: 80 (Jamaica).

Distribution.—Jamaica?; eastern and central Nearctic.

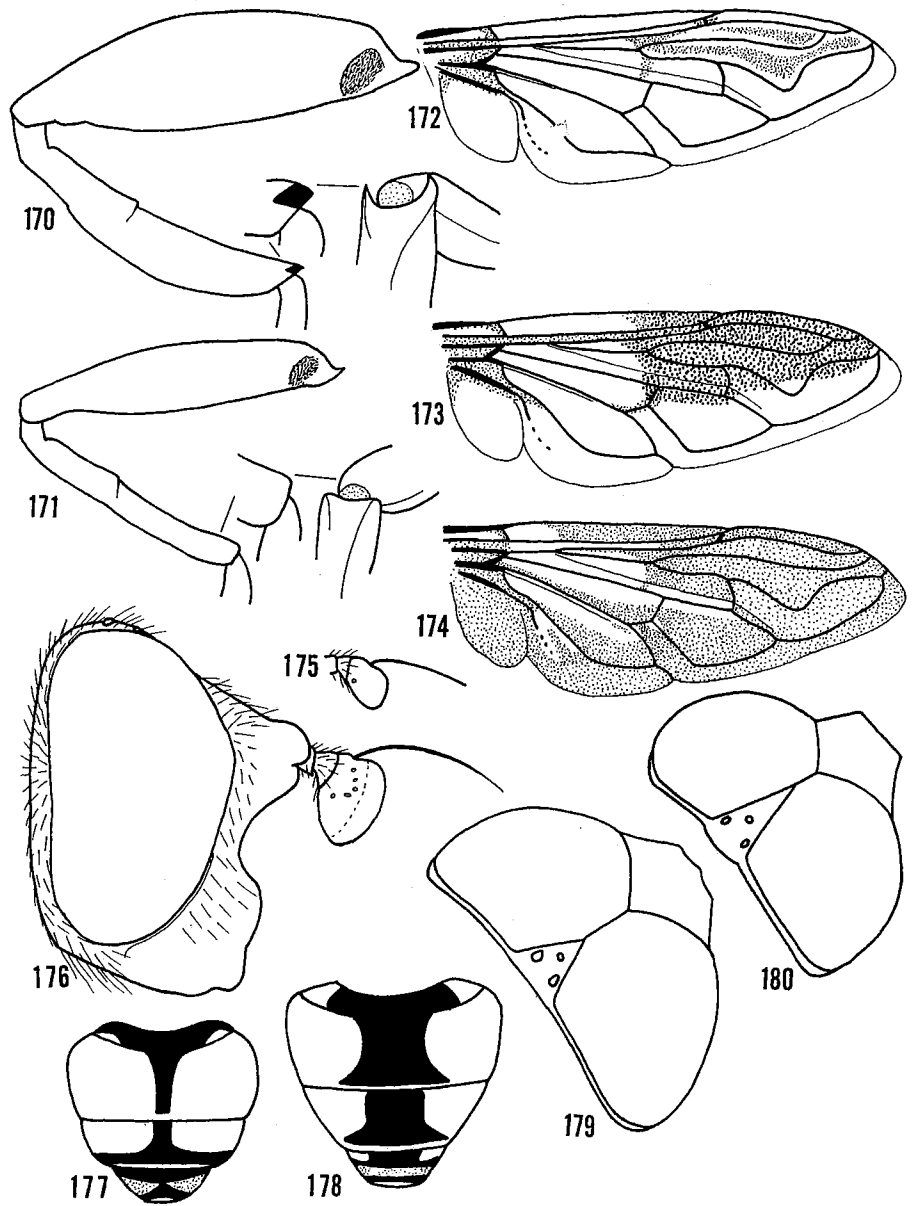
A single male specimen of *E. transversa* labeled as from Moneague and collected on 16 August 1920 by Gowdey was found in his collection. *Eoseristalis transversa* is an endemic North American species, ranging from Montana to Nova Scotia, south to Utah, Texas, and Florida. *Eoseristalis arbustorum* is a common widespread Palaeartic species, which has been introduced into North America and now ranges from Wisconsin to Labrador, south to Kansas and North Carolina. Gowdey also recorded *Helophilus fasciatus* and *Eristalis tenax* (q.v.), two other improbable records of northern species from Jamaica. The recording of these northern species from Jamaica by Gowdey makes one suspicious. Gowdey was a graduate of Massachusetts Agricultural College, Class of 1908. All these syrphids are very common in Amherst, Massachusetts, and could have been part of a student's insect collection (a requirement for entomology students). Moneague is also a town in Massachusetts close to Amherst. Gowdey may have retained his collection and later mixed some of the insects from it in with his Jamaican collection.

Genus *Palpada* Macquart

Palpada Macquart, 1834: 512. Type-species, *scutellata* Macquart (mono.) = *scutellaris* (Fabricius).

References: Curran, 1928b: 42 (key to Puerto Rican spp.), 1930c: 3–6, 1934: 407–411 (keys to New World species, as part of *Eristalis*); Bean, 1949 (male genitalia); Thompson, 1972: 142–144 (descript.).

Palpada is a large group of tropical eristaline flies found only in the New World. (10 Nearctic, 104 Neotropical). The genus can be divided into three



Figs. 170-171. *Palpada* spp., legs, lateral, with enlargement of tibiotarsal joint. 170, *P. vinetorum*. 171, *P. agrorum*. Figs. 172-174. Wings. 172, *P. vinetorum*. 173, *P. hortorum*. 174, *Quichuana dominica*. Fig. 175. *Meromacrus* sp., antenna, lateral. Fig. 176. *Meromacrus rufiricus*, head, male, lateral. Figs. 177-178. *Palpada* spp., male abdomen, dorsal. 177, *P. albifrons*. 178, *P. agrorum*. Figs. 179-180. *Palpada* spp., male heads. 179, *P. agrorum*. 180, *P. albifrons*.

subgroups (Vockeroth, *in litt.*) of which two are found in the West Indies, the *vinetorum* group (two species) and the *agrorum* group (five species). The *scutellaris* Fabricius group is absent from the West Indies.

KEY TO WEST INDIAN SPECIES OF *PALPADA* MACQUART

1. Wing hyaline and bare; hindtibia simple, without apicolateral tooth (Fig. 171) (*agrorum* group) 3
 - Wing microtrichose apically (Figs. 172-173); hindtibia with apicolateral black tooth (Fig. 170) (*vinetorum* group) 2
2. Wing with large apical brown fascia on anterior edge (Fig. 173), more extensively microtrichose; epaulet black pilose; pteropleuron black pilose; legs all bright orange (all islands?) .. *hortorum* (Fabricius)
 - Wing hyaline, less extensively microtrichose (Fig. 172); epaulet and pteropleuron yellow pilose; hindleg usually dark brown black (all islands) *vinetorum* (Fabricius)
3. Legs bright orange except blackish apical tarsal segments (Dominica) *xanthosceles*, new species
 - Femora black on basal $\frac{2}{3}$ or more; tibiae dark on apical $\frac{1}{4}$ or more 4
4. Eyes holoptic (male) 5
 - Eyes dichoptic (female) 9
5. Vertical triangle elongate, with that portion in front of anterior ocellus as long or longer than eye contiguity (Fig. 180); frontal triangle all silvery-white pilose; abdomen with medial black vitta on 2nd tergum narrow and not expanded apically (Fig. 177) (Greater Antilles, Bahamas) *albifrons* (Wiedemann)
 - Vertical triangle broad, with anterior portion much shorter than eye contiguity (Fig. 179); frontal triangle usually with some black hairs, rarely all yellow pilose; abdomen with medial black vitta on 2nd tergum broad and expanded apically (Fig. 178) 6
6. Third antennal segment black; mesonotum without a prescutellar gray fascia 7
 - Third antennal segment orange to fulvous; mesonotum with or without a gray prescutellar fascia 8
7. Pteropleuron and frontal triangle almost completely black pilose (Hispaniola, Puerto Rico) *atrimana* form "*willistoni*"
 - Pteropleuron and frontal triangle almost completely yellow pilose (Cuba) *atrimana* (Loew), typical form
8. Mesonotum completely yellowish-gray pollinose in front of suture; without a prescutellar gray pollinose fascia; 3rd abdominal tergum with yellow pilose on basal $\frac{1}{3}$ (Cuba) *pusilla* (Macquart)
 - Mesonotum with a black fascia in area in front of suture, thus breaking up gray pollinose area into two separate fasciae, with a

- prescutellar gray pollinose fascia; 3rd tergum completely black pilose (all islands) *agrorum* (Fabricius)
9. Antenna black (Greater Antilles) *atrimana* (Loew)
 – Antenna orange to fulvous 10
10. Mesonotum completely yellowish-gray pollinose in front of suture, without a prescutellar gray pollinose fascia; 3rd tergum extensively yellow pilose (Cuba) *pusilla* (Macquart)
 – Mesonotum with a black fascia in area in front of suture, thus breaking up gray pollinose area into two separate fascia, with a prescutellar gray pollinose fascia; 3rd tergum variable 11
11. Front black pilose medially on lower ½, laterally golden to yellow pilose; wing with cell behind stem vein densely microtrichose (all islands) *agrorum* (Fabricius)
 – Front all silvery-white pilose on lower ½; wing with cell behind stem vein almost completely bare (Bahamas, Greater Antilles) *albifrons* (Wiedemann)

Palpada agrorum (Fabricius)

Figs. 171, 178, 179

Syrphus agrorum Fabricius, 1787: 335. Type-loc.: "Americae Insulis" (restricted by Fabricius, 1794: 285). Lectotype ♂ MC*, see Appendix B. Subsequent reference: Zimsen, 1964: 478 (type).

Eristalis agrorum: Fabricius, 1805: 235; Wiedemann, 1830: 172 (redescript.); Wulp, 1882: 130 (Guadeloupe, synonymy); Curran, 1930c: 17 (notes on variation, distr. notes, synonymy); Bean, 1949: 143, fig. 4 (male genitalia) (distr. recs., descript. ♂ genitalia); Maldonado and Navarro, 1967: 59 (Puerto Rico); Doesburg, 1970: 95, 97 (Lesser Antilles, distr. notes); Telford, 1970: 1204, fig. 5 (♂ genitalia) (revision), 1973: 241 (Puerto Rico).

Palpada agrorum: Thompson, 1972: 143.

Eristalis cubensis Macquart, 1842: 102. Type-loc.: Cuba, Havana. Type ♀ OXFORD. Subsequent references: Bigot, 1857: 337 (Cuba, descript.); Hine, 1914: 341 (Jamaica, descript. notes); Johnson, 1919: 435 (Jamaica); Hull, 1925: 38, pl. 1, Fig. 1 (abdomen), pl. 2, fig. 14 (thorax) (Jamaica descript., distr. recs.); Gowdey, 1926: 80 (Jamaica); Curran, 1928b: 43 (Puerto Rico); Wolcott, 1936: 351, 1948: 468 (Puerto Rico); Drewry, 1970: E-147 (Puerto Rico). Synonymy by Curran, 1930c: 17.

Eristalis Gundlachi Loew, 1866a: 166. Type-loc.: Cuba. Syntypes ♂ ♀ MCZ. NEW SYNONYMY.

Palpada gundlachi: Thompson, 1972: 143.

Eristalis albiceps of Williston, 1887: 172 (in part (♀); San Domingo; descript.).

Distribution.—USA (Maryland to Texas) south to Peru and Argentina (Jujuy, Tucumán, Córdoba, Santa Fé, Entre Ríos); Cuba, Jamaica*, His-

paniola*, Puerto Rico*, Lesser Antilles (Anguilla, Guadeloupe, Dominica*, Grenada).

Palpada albifrons (Wiedemann)

Figs. 177, 180

Eristalis albifrons Wiedemann, 1830: 189. Type-loc.: Brazil. Type ♂ VMNH. Subsequent references: Roeder, 1885: 341 (Puerto Rico, descript. notes); Gundlach, 1887: 185 (Puerto Rico); Johnson, 1894: 277 (Jamaica), 1908: 74 (Bahamas), 1919: 435 (Jamaica); Coquillett, 1900: 253 (Puerto Rico); Wolcott, 1923: 220, 1936: 351, 1948: 468 (Puerto Rico, biol. note); Hull, 1925: 35, pl. 1, fig. 7 (abdomen) (descript.); Gowdey, 1926: 80 (Jamaica); Curran, 1928b: 42 (Puerto Rico, Virgin Is.); Telford, 1970: 1204, fig. 20 (♂ genitalia; combines with *pusilla*, *q.v.*), 1973: 241 (Puerto Rico).

Palpada albifrons: Thompson, 1972: 143.

Eristalis albiceps Macquart, 1842: 116. Type-loc.: "Carolina." Type(s) ♂ MNHN. Subsequent references: Williston, 1887: 172 (San Domingo, descript., in part); Wolcott, 1936: 351 (Puerto Rico; biol. note). Synonymy by Williston, 1892: 62.

Eristalis seniculus Loew, 1866a: 168. Type-loc.: Cuba. Type ♂ MCZ. Synonymy by Williston, 1892: 62.

Distribution.—USA (North Carolina), south to Brazil; Bahamas*, Cuba*, Jamaica*, Hispaniola*, Puerto Rico*.

Palpada atrimana (Loew)

Eristalis atrimanus Loew, 1866a: 167. Type-loc.: Cuba. Type ♀ MCZ. Subsequent references: Williston, 1887: 173 (San Domingo, descript.); Johnson, 1894: 277 (Jamaica), 1908: 74 (Bahamas), 1919: 435 (Jamaica); Townsend, 1895: 46 (?Jamaica, descript. notes); Kertész, 1910: 213 (suggests synonymy of *willistoni*); Hine, 1914: 341 (Cuba); Wolcott, 1923: 220, 1936: 351, 1948: 468 (Puerto Rico, descript., biol. notes); Hull, 1925: 37 (Jamaica, Cuba, descript.); Gowdey, 1926: 80 (Jamaica); Curran, 1928b: 43 (Puerto Rico), 1930c: 16 (redescript.); Miskimen and Bond, 1970: 65 (St. Croix, biol. note); Telford, 1973: 241 (Puerto Rico).

Palpada atrimana: Thompson, 1972: 143.

Eristalis willistoni Townsend, 1895: 47. Type-loc.: Santo Domingo. Lecto-type ♂ USNM*, see Appendix B. NEW SYNONYMY.

Distribution.—Bahamas, Cuba*, Jamaica*, Hispaniola*, Puerto Rico.

The males from Puerto Rico and Hispaniola are much darker in pile color as indicated in the key; the females from these islands are apparently indistinguishable from those of Cuba. I consider this difference in pile color to be trivial and consider *willistoni* to represent a geographic variant of *atrimana*.

Palpada hortorum (Fabricius)

Fig. 173

Syrphus hortorum Fabricius, 1775: 764. Type-loc.: Virgin Islands, St. Thomas (restricted by Wiedemann, 1830: 169). Lectotype ♀ KIEL*, now in MC, see Appendix B. Subsequent reference: Fabricius, 1794: 286 (restricts type-loc. to "Americae Insulis"); Zimsen, 1964: 478 (type).

Eristalis hortorum: Fabricius, 1805: 236; Wiedemann, 1830: 169 (re-descript.); Williston, 1887: 173, pl. 7, fig. 10 (wing) (San Domingo, descript.); Hull, 1925: 41, pl. 1, fig. 8 (abdomen) (Puerto Rico, descript.); Curran, 1930c: 23 (descript. notes); Wolcott, 1936: 351, 1948: 468 (Puerto Rico); Telford, 1973: 241 (Puerto Rico).

Eristalis hortorum: Ragues, 1908: 312 (Cuba; misspelling).

Palpada hortorum: Thompson, 1973b: 354 (corrects synonymy).

Distribution.—Bahamas*, Cuba*, Hispaniola*, Puerto Rico*.

Palpada pusilla (Macquart)

Eristalis pusillus Macquart, 1842: 114. Type-loc.: "De Lamana" [=French Guiana, (La) Mana River]. Lectotype ♂ see Appendix B. MNHN. Subsequent references: Hull, 1925: 36, pl. 1, fig. 2 (abdomen), pl. 2, fig. 17 (thorax) (Cuba, descript.; distr. notes); Bean, 1949: 144, fig. 2 (♂ genitalia) (descript. ♂ genitalia).

Eristalis albifrons pusillus: Telford, 1970: 1204 (descript. notes).

Palpada pusilla: Thompson et al., 1976: 108.

Distribution.—USA (Texas), south to Argentina (Tucumán, Formosa); ?Cuba.

I have not seen material of this species from the West Indies and suspect that Hull's record from Cuba may be based on a misidentification. Telford (1970: 1204) treated *pusilla* as a subspecies of *albifrons* because he considered the male genitalia of the two "identical." He added further, "Although the markings of *pusillus* in the few specimens examined remained relatively constant, gradations with *a. albifrons* may be found if larger series should be examined." Even if these statements of Telford were true, it would be ludicrous to consider as subspecies two forms which are sympatric over most of their ranges. However, as noted by Bean (1949: 144), the male genitalia of the two are quite distinct. I have noted no significant variation or intergradation in the shape of the male vertical triangle and abdominal pattern in the material I have studied. Although there may be some variation in the pollinosity of the mesonotum, which would make the separation of females difficult, I feel the pale (*pusilla*) versus dark (*albifrons*) facial vitta will permit the identity of this sex. I consider *pusilla* a valid species.

Palpada vinetorum (Fabricius)

Figs. 170, 172

Syrphus vinetorum Fabricius, 1798: 562 (emendation, Fabricius, 1799: 48).
Type-loc.: "Americae Insulis." Type KIEL now in MC (only a name label remains, Zimsen, 1964: 478).

Eristalis vinetorum: Fabricius, 1805: 235; Wiedemann, 1830: 163 (re-descript.); Macquart, 1842: 101 (Cuba, descript. notes, distr. notes); Bigot, 1857: 336 (Cuba; descript.); Wulp, 1882: 130 (Guadeloupe, synonymy); Stahl, 1883: 206 (Puerto Rico); Roeder, 1885: 341 (Puerto Rico); Gundlach, 1887: 185 (Puerto Rico); Williston, 1887: 171, pl. 7, fig. 8a (hindleg) (descript., Cuba), 1896: 346 (St. Vincent, synonymy); Johnson, 1894: 276 (Jamaica), 1908: 74 (Bahamas), 1919: 435 (Jamaica); Townsend, 1895: 50 (Jamaica; descript. notes); Coquillett, 1900: 252 (Puerto Rico); Ragues, 1908: 312 (Cuba); Hine, 1914: 342 (Cuba, distr. notes); Wolcott, 1923: 220, 1936: 351, fig. (habitus), 1941: 115, 1948: 468, fig. (habitus) (Puerto Rico, descript., biol. notes); Hull, 1925: 40, pl. 1, fig. 9 (abdomen) (Cuba, descript., distr. notes); Gowdey, 1926: 80 (Jamaica); Curran, 1928b: 42 (Puerto Rico, Virgin Is.), 1939d: 174 (Martinique); Beatty, 1944: 149 (St. Croix); Bean, 1949: 146, fig. 8 (♂ genitalia) (Puerto Rico, descript. ♂ genitalia); Tucker, 1952: 349 (Barbados); Doesburg, 1970: 95, 99, 100 (Grenada, Barbados, St. Vincent, St. Lucia, Martinique, Dominica, Guadeloupe, Antigua, Montserrat, St. Kitts, St. Martin; distr. notes); Miskimen and Bond, 1970: 66 (St. Croix); Telford, 1970: 1202, fig. 1 (♂ genitalia), 1973: 242 (Puerto Rico).

Palpada vinetorum: Thompson, 1972: 143.

Eristalis uvarum Walker, 1849: 623. Type-loc.: Jamaica. Syntypes 5 BM(NH). Synonymy by Williston, 1887: 171.

Eristalis soulouquensis Bigot, 1880: 228. Type-loc.: Haiti. Holotype ♀ BM(NH). Synonymy by Hull, 1943c: 10.

Distribution.—USA (Wisconsin to Pennsylvania) south to Peru and Argentina (Misiones, Formosa); Galapagos, Cuba*, Hispaniola*, Puerto Rico*, Lesser Antilles (St. Croix, St. Martin, St. Kitts, Antigua, Montserrat, Guadeloupe, Dominica*, Martinique*, St. Lucia, St. Vincent, Barbados*, Grenada).

Palpada xanthosceles Thompson, NEW SPECIES

Female.—*Head*: Black; face shiny medially except under antennae, silvery-white pollinose laterally and under antennae, yellow pilose laterally; cheek shiny on anterior $\frac{2}{3}$, grayish-white pollinose and yellow pilose on posterior $\frac{1}{3}$; facial stripes black pilose on lower $\frac{1}{3}$; frontal lunule dark brown, more yellowish laterally; front long, about as long as face, $\frac{3}{5} \times$ as

long as broad at level of antennae, about $\frac{1}{2}$ as broad at level of ocellar triangle as at level of antennae, mostly black pollinose, narrowly silvery-white pollinose on sides on lower $\frac{2}{3}$, narrowly shiny behind frontal lunule and brownish pollinose behind shiny area, black pilose; vertex black pollinose and pilose; occiput silvery-white pollinose and yellow pilose on lower $\frac{2}{3}$, brownish to black pollinose and black pilose on upper $\frac{1}{3}$. Antenna brownish black except more reddish brown on basoventral $\frac{1}{3}$ of 3rd segment, black pilose; 3rd segment bluntly rounded apically, about $1\frac{1}{3}\times$ as long as broad, with a large basal sensory pit on inner side. Eye brownish-black pilose.

Thorax: Black, humerus grayish-brown pollinose, orange pilose; mesonotum mainly bluish-gray pollinose, silvery-white pollinose on transverse suture, tawny pollinose on notopleuron and side above wing with 2 broad indistinct submedial black pollinose vittae extending from anterior edge to posterior $\frac{1}{3}$, with 2 broader sublateral black pollinose vittae which are interrupted by silvery-white pollinose suture and thus appearing as pair of sublateral triangles, with narrow medial black pollinose vitta starting from in front of scutellum and extending to transverse suture, mainly black pilose, orange pilose on notopleuron and side above wing, with postalar callus all black pilose except for few orange basolateral hairs; pleuron bluish-gray pollinose except more silvery white in color on pilose areas, orange pilose; scutellum yellowish orange except black basal $\frac{1}{3}$, black pilose, with subscutellar fringe orange; plumula yellow; squama yellow on basal $\frac{1}{3}$, brownish black on apical $\frac{2}{3}$ and fringe; halter yellow; sternopleuron uniformly pilose on posterior $\frac{2}{3}$; spiracular fringe brownish black. *Legs:* Coxae black, gray pollinose and orange pilose; trochanters black, subshiny, orange pilose; femora and tibiae orange, orange pilose; tarsi with basitarsi brownish orange, with 2nd tarsomeres brown, and apical 3 tarsomeres black, mainly black pilose. *Wing:* subhyaline, bare except microtrichose on subcostal cell basad of stigmatic crossvein; epaulet black, orange pilose.

Abdomen: 1st tergum black, gray pollinose, orange pilose, 2nd and 3rd terga dull black, except for orange basolateral spots, orange pilose on basolateral corners and black pilose elsewhere; spots on 2nd tergum large, extending from anterior margin to apical $\frac{1}{5}$ laterally and apical $\frac{1}{3}$ submedially, separated by $\frac{1}{3}$ of tergal width; spots on 3rd tergum smaller, extending only to apical $\frac{2}{5}$ and separated by $\frac{1}{2}$ of tergal width; 4th tergum dull black except for shiny medial fasciate spots, black pilose except orange on basolateral corners; 5th tergum shiny black, orange pilose except for a few apical black hairs; 1st sternum gray pollinose, orange pilose; 2nd sternum shiny orange, orange pilose; 3rd sternum orange except black basal $\frac{1}{3}$, orange pilose; 4th sternum black, orange pilose; 5th sternum black, sparsely gray pollinose, orange pilose.

Holotype.—♀, DOMINICA, .2 miles east of Pont Cassé; 5 May 1966; R. J. Gagné. Deposited in USNM.

Discussion.—In the last comprehensive key to the New World species of *Eristalis* [*sensu lato*, including *Palpada*] (Curran, 1934: 407–411) *Palpada xanthosceles* will key to *penaltis* Curran [= *interrupta* Fabricius]⁸ if one makes an exception for the dark tarsus in reference to couplet 3. *Palpada xanthosceles* can be contrasted with *interrupta* Fabricius as follows: 1) Facial vitta broad, not narrow; 2) mesonotal pattern very obscure, not distinct; 3) tibiae completely orange pilose, not extensively black pilose; and 4) without a shiny transverse band on 3rd abdominal tergum. It is possible that *xanthosceles* may represent a distinctive island population of *interrupta*, but I feel that the differences enumerated above, in respect to differences between known biological species of *Palpada*, are sufficient to justify species status for the island population. The name, *xanthosceles*, is derived from the Greek and is an adjective alluding to the color of the legs.

DUBIOUS RECORDS

PALPADA (*AGRORUM* GROUP) SPECIES

Eristalis lateralis of Walker, 1849: 622 (Jamaica); Johnson, 1894: 277, 1919: 435 (Jamaica); Gowdey, 1926: 80 (Jamaica).

Eristalis pusio of Roeder, 1885: 342 (Puerto Rico; *descript. notes*); Gundlach, 1887: 185 (Puerto Rico); Wolcott, 1923: 220, 1936: 351, 1948: 468 (Puerto Rico); Telford, 1973: 241 (Puerto Rico).

Both Walker's and Roeder's records are probably based on a misidentified member of the *agrorum* group, but without examination of the specimens involved it is not possible to assign these records to a particular species. *Palpada lateralis* Walker is a species restricted to the Chilean subregion and *Palpada pusio* Wiedemann is a species described from Brazil and apparently restricted to the mainland.

Eristalis fasciatus of Ragues, 1908: 312 (Cuba).

This name appears only in a list of species of Diptera of Cuba.

Genus *Meromacrus* Rondani

Plagiocera Macquart, 1842: 119 (*preocc.* by Klug, 1834). Type-species, *Milesia cruciger* Wiedemann (*orig. des.*) = *acutus* (Fabricius).

Meromacrus Rondani, 1848: 70. Type-species, *ghilianii* Rondani (*mono.*).

Pteroptila Loew, 1866a: 165. Type-species, *decorus* Loew (Coquillett, 1910: 598).

References: Sack, 1920: 257–271 (*revision*); Hull, 1942c (*revision*); Thompson, 1972: 144–145 (*descript.*).

⁸ I have recently examined the two remaining syntypes of *interrupta* Fabricius in the Zoologiske Museum, Copenhagen, and have found them to be the same as *penaltis* Curran. **NEW SYNONYMY.**

Meromacrus is a characteristic, endemic New World genus. Some 40 species are known from Virginia to northern Argentina. Fewer species occur in the West Indies.

KEY TO WEST INDIAN SPECIES OF *MEROMACRUS* RONDANI

1. Without yellow tomentose pile on body; mesonotum with 3 transverse yellow pollinose fasciae; alula bare (Fig. 167); legs mainly orange and orange pilose (Jamaica) *farr*i, new species
- With yellow tomentose pile on body; mesonotum without transverse fasciae 2
2. First abdominal tergum with submedial patches of yellow tomentose pile; alula usually microtrichose, if bare, then 2nd basal and anal cells and anal lobe also bare (Fig. 169); legs partially orange and orange pilose 4
- First abdominal tergum without such patches; alula extensively bare, rest of wing microtrichose (Fig. 165); legs black and black pilose 3
3. Thorax black pilose except for a pair of yellow tomentose pile spots behind head (Cuba) *bruneri* Curran
- Thorax with yellow tomentose pile on notopleuron, mesopleuron, postalar callus, and in front of scutellum, in addition to anterior submedial spots (Cuba, Jamaica, Hispaniola, Puerto Rico) *pinguis* (Fabricius)
4. Wings extensively bare basoposteriorly, alula bare, most of 2nd basal and anal cells bare, anal lobe mostly bare (Fig. 169); 3rd antennal segment kidney shaped, much wider than long (Fig. 176) (Cuba) *ruficrus* (Wiedemann)
- Wings microtrichose, except bare narrowly along anterior margin of anal cell and in front of Ax (Fig. 168); 3rd antennal segmental oval to elongate, never wider than long (Fig. 175) 5
5. Tomentose markings on mesonotal suture entire; tarsi orange 6
- Tomentose markings on mesonotal suture divided to form 2 separate spots on each side; apical 3 tarsomeres brownish black; facial vitta black; hindfemur black pilose on dorsoapical $\frac{1}{3}$ (Cuba) .. *decorus* (Loew)
6. Hindfemur wholly orange and reddish-yellow pilose except for black ventral setulae; facial vitta orange to brownish orange (Hispaniola, Puerto Rico, Lesser Antilles) *pratorum* (Fabricius)
- Hindfemur black pilose dorsoapically, usually extensively brownish black to black on medial $\frac{2}{3}$; facial vitta black (Cuba) *milesiformis* (Macquart)

Meromacrus acutus (Fabricius)

Milesia acuta Fabricius, 1805: 189. Type-loc.: "Carolina." Type(s) Bosc

- Coll., MNHN (lost, Zimsen, 1964: 473). Subsequent reference: Wiedemann, 1830: 110 (repeats orig. descript.).
- Pteroptila acuta*: Osten Sacken, 1876: 133.
- Meromacrus acutus*: Aldrich, 1905: 390; ?Gowdey, 1920: 80 (Jamaica (=pratorum Fabricius?)).
- Milesia cruciger* Wiedemann, 1830: 105. Type-loc.: "Neugeorgien" (=U.S.A., Georgia). Type ? ZMB. Synonymy by Williston, 1887: 180, 1892: 66.
- Pteroptila crucigera*: Osten Sacken, 1878: 133; Williston, 1887: 180 (descript.; synonymy).
- Meromacrus cruciger*: Hine, 1924: 21 (in part; key ref., descript., distr. notes).

Distribution.—Southeastern USA; not West Indian or Neotropical.

Meromacrus acutus appears to be part of a large superspecies involving five or six vicariant species: *Meromacrus acutus*, a southeastern United States form, ranging from Virginia to eastern Texas; *draco* Hull, a middle American form, ranging from southernmost Texas (Brownsville) to Costa Rica; *milesiformis* (Macquart) (*q.v.*), a West Indian form, restricted to Cuba; *panamensis* Curran, a South American form, ranging from Panama to Brazil; and *pratorum* (Fabricius) (*q.v.*), a West Indian form, ranging from Hispaniola to the Lesser Antilles. *Meromacrus gloriosus* Hull undoubtedly belongs to this superspecies complex and may be the same as *draco* Hull. If *gloriosus* is valid, then it is a southwestern form, replacing *draco* in the southwestern part of the United States (Arizona, New Mexico, and westernmost Texas) and northwestern Mexico, whereas *draco* would then be restricted in the northern part of its range to subtropical Texas (Brownsville) and the Gulf Coast of Mexico. My interpretation of *gloriosus* Hull is based on a male specimen in the USNM from El Paso, Texas. This specimen is very similar to *draco* except that the hindfemur is orange and orange pilose like *pratorum*. The species of the *pratorum* superspecies are distinguished in the following key.

KEY TO SPECIES OF THE *MEROMACRUS PRATORUM* COMPLEX

1. Facial vitta reddish brown to orange; 3rd antennal segment light reddish brown; anterobasal margin of wing orange; basicosta orange pilose 2
- Facial vitta almost completely black, rarely reddish laterally; 3rd antennal segment darker, brown to black 3
2. Hindfemur all orange, and yellow pilose; male 4th sternum yellow pilose; male surstyle with apex straight (Hispaniola to Lesser Antilles) *pratorum* (Fabricius)
- Hindfemur mainly dark brownish black, black pilose on apical ¼; male 4th sternum black pilose; male surstyle with apex decurved, hooklike (southwestern USA to Panama) *draco* Hull

3. Wing with anterobasal $\frac{1}{2}$ orange; basicosta all orange pilose; antenna brown; hindtarsus orange pilose above (southeastern USA) *acutus* (Fabricius)
 — Wing with anterior margin brown; basicosta extensively black pilose 4
4. Antenna black; hindtarsus extensively orange pilose, with only a few scattered black hairs (Cuba) *milesiformis* (Macquart)
 — Antenna brown; hindtarsus extensively black pilose (Panama to Brazil) *panamensis* Curran

Meromacrus bruneri Curran

Meromacrus bruneri Curran, 1936a: 2. Type-loc.: Cuba, "E.E.A." Holotype ♀ AMNH. Subsequent reference: Doesburg, 1970: 97 (suggests that this is the same as *unicolor* Wulp).

Distribution.—Cuba*.

Meromacrus decorus (Loew)

Fig. 168

Pteroptila decora Loew, 1866a: 165. Type-loc.: Cuba. Syntypes ♂ ♀ MCZ. Subsequent reference: Williston, 1887: 181 (descript.).

Plagiocera deccora: Ragues, 1908: 312 (Cuba; misspelling).

Meromacrus decorus: Aldrich, 1905: 391; Hine, 1924: 21 (Cuba; descript., distr. notes); Hull, 1942c: 2 (key ref.).

Distribution.—Cuba* (including Isla de Pinos*).

Meromacrus farri Thompson, NEW SPECIES

Figs. 167, 183

Female.—*Head*: Face orange, golden pollinose and yellow pilose laterally, shiny medially, with facial tubercle low and flattened; facial stripe yellowish-white pollinose and pilose; cheek orange, bare and shiny on anterior $\frac{1}{2}$, whitish-yellow pollinose and yellow pilose on posterior $\frac{1}{2}$; frontal lunule reddish brown; front dark orange except more brownish medially, golden pollinose and yellow pilose laterally, brownish-black pollinose and black pilose medially except shiny above frontal lunule; vertex brownish black, black pilose; occiput dark, densely whitish-yellow pollinose, yellow pilose. Eye bare. Antenna dark reddish orange, black pilose on 1st 2 segments; 3rd segment oval, with a large basoventral sensory pit on mesial side; arista bare, about $1\frac{1}{2}\times$ as long as antenna.

Thorax: Brownish black; dorsum dull brownish-black pollinose, with 3 transverse yellow pollinose fasciae, with 1st fascia extending between anterior $\frac{1}{2}$ of humeri, 2nd between notopleura, and 3rd in front of scutellum and between posterior $\frac{1}{2}$ of postalar calli, yellow pilose except black pilose

between wings; scutellum dull brownish-black pollinose, black pilose except for some yellow marginal hairs, without ventral pile fringe; pleuron mainly grayish-yellow pollinose and yellow pilose, more densely yellow pollinose on posterior $\frac{1}{2}$ of mesopleuron and upper $\frac{1}{2}$ of sternopleuron, more brownish pollinose on pteropleuron, black pilose on upper edge of pteropleuron; metasternum black pilose; squama, plumula, and halter orange. *Legs*: Mainly orange and orange pilose; front and hindcoxae black, grayish-yellow pilose, yellow pilose except black pilose medially on hindcoxa; middle coxa sparsely yellow pollinose, orange pilose laterally, black pilose medially; all trochanters with some black pile; hindtrochanter more reddish brown in color; hindfemur slightly swollen, with some short black spinelike pile apicoventrally. *Wing*: Almost hyaline, with slight brownish tinge, microtrichose except bare as follows: Behind Rs and spurious vein, alula, along anterior and posterior edges of 2nd basal and cubital cells, along anterior and posterior edges of discal cell on basal $\frac{1}{3}$, broadly along all margins of anal cell, anal lobe, and behind anal cell. Epaulet and basicosta black pilose.

Abdomen: First tergum brownish black except orange laterally, sparsely white pollinose, black pilose with a few yellow hairs laterally; 2nd tergum mainly orange, with small black basomedial triangle, black on apicolateral corners, shiny, orange pilose on anterior $\frac{2}{3}$, black pilose on apical $\frac{1}{3}$; 3rd tergum orange except black on apicolateral corners, orange pilose on anterior $\frac{2}{3}$ and black pilose on apical $\frac{1}{3}$; 4th tergum all orange, orange pilose anterolaterally, black pilose posteriorly; 5th tergum black, black pilose; 1st sternum dark reddish brown, sparsely white pollinose, yellow pilose; 2nd-4th sterna shiny, reddish brown, paler on basal margins and darker on apical ones, orange pilose basal $\frac{2}{3}$ of 2nd basal $\frac{1}{3}$ or 3rd, black pilose elsewhere; 5th shiny, dark brownish black, black pilose; cercus orange.

Holotype.—♀, JAMAICA, Trelawny, Windsor Estate, 12 miles south of Falmouth, 11 August 1956, B. and B. Valentine. Deposited in USNM.

Discussion.—*Meromacrus farri* is readily distinguished from all other known species of *Meromacrus* by its transverse yellow fasciae on the mesonotum and lack of tomentose-like pile. The lack of tomentose-like pile suggests that *farri* may represent the sister-group to all other species of *Meromacrus* and thereby could be placed in its own subgenus.

Meromacrus farri is named after Dr. Thomas H. Farr, the distinguished Jamaican entomologist.

Meromacrus milesiformis (Macquart)

Mallota milesiformis Macquart, 1834: 500 (as *millesiformis*). Type-loc.: Cuba. Type ♂ MNHN (Macquart, 1842: 60). Emendation by Macquart, 1835: 686.

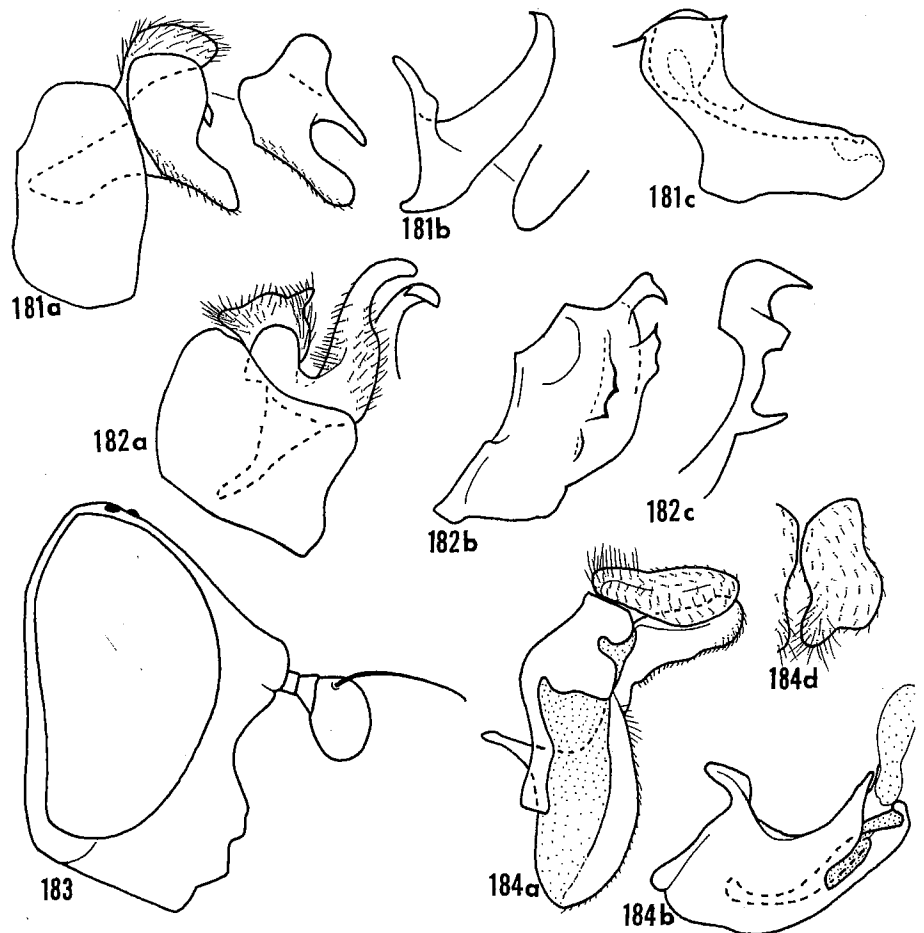


Fig. 181. *Paramicrodon delicatulus*, male genitalia, lateral. a, 9th tergum and associated structures, with oblique view of surstyle. b, 9th sternum, with outline of ligula. c, Aedeagus. Fig. 182. *Orthonevra gewgaw*, male genitalia, lateral. a, 9th tergum and associated structures. b, 9th sternum. c, Aedeagus. Fig. 183. *Meromacrus farri*, head, female, lateral. Fig. 184. *Ceriana weemsi*, male genitalia. a, 9th tergum and associated structures. b, 9th sternum. d, cercus, dorsal.

Plagiocera cruciger of Macquart, 1842: 60 (Cuba, synonymy); Bigot, 1857: 337 (Cuba, descript.).

Meromacrus cruciger of Hine, 1924: 21 (in part) (descript., distr. notes, Cuba).

Eristalis opulentus Bigot, 1883: 336. Type-loc.: Cuba. Holotype ♀ BM(NH)*. NEW SYNONYMY.

Pteroptila opulentus: Williston, 1887: 183.

Meromacrus opulentus: Aldrich, 1905: 391; Hine, 1924: 22 (Cuba; (descript.,