THE TABANIDÆ OF COLOMBIA (DIPTERA) ¹

BY JOSEPH C. BEQUAERT

and

SANTIAGO RENJIFO-SALCEDO
Villavicencio, Colombia

The tabanid fauna of Colombia is rich and extremely varied. In the northwestern part it resembles that of the Republic of Panama, which is now well known through G. B. Fairchild's prolonged investigations. In the northeastern areas it is similar to that of the adjoining districts of Venezuela, a fauna which has recently been listed by A. Stone (1945). The fauna of the southwestern highlands has affinities with that of Ecuador. Finally many of the species of the great Amazonian rain forest extend into the southeastern territories.

At present, however, this vast country has been little investigated entomologically. Our preliminary list of definitely recorded species will probably be more than doubled by future discoveries. Indeed, our only purpose in publishing it is to incite to further collecting. The earliest records of Colombian tabanids by Macquart (1846 to 1855) were indefinite as to locality and some of his species are at present unrecognized. Schiner (1868), v. Röder (1886), and Ricardo (1902) added a few species. In recent years, Enderlein (1925), Szilády (1926), Dunn (1929), Kröber (1925 to 1940), and Antunes (1937) made more important additions.

The present enumeration includes all species recorded thus far from Colombia; but we have clearly indicated which of these we have not seen.² The asterisk, on the other hand, indicates the species of which we have studied specimens taken in Colombia. Material was seen from the Museum of Comparative

¹ Published with a grant from the Museum of Comparative Zoology at Harvard College.
² Entomologists should be warned not to trust always the locality record "Bogotá" so common in the literature. Often it means merely that the specimens were shipped from Bogotá to Europe, although they may have been collected in some other section of Colombia.
Zoology, the United States National Museum (through Dr. A. Stone), the Academy of Natural Sciences of Philadelphia (through Mr. E. T. Cresson, Jr.); and the American Museum of Natural History (through Dr. C. H. Curran). Much of it was of our collecting; the remainder being obtained by J. V. Acuña, P. Allen, W. A. Archer, D. Augustine, M. Bates, J. Boshell M., M. A. Carriker, E. H. Chapin, H. Daniel, P. Darlington, J. H. Egbert, G. B. Fairchild, F. L. Gallego, A. Gast, C. C. Gowdey, B. Guevara Amórtapuqui, W. H. W. Komp, B. Losada S., W. M. Mann, E. and H. Osorno, F. Otoya, L. Patiño-Camargo, Rómulo Patiño, G. Salt, H. F. Schwarz, H. Viereck, and N. Weber. We are indebted to Dr. Graham Fairchild for many favors, particularly for assistance in the case of certain critical species. Some of the specimens here listed were included in his papers on the Panamanian fauna (1939 to 1943); others were mentioned in the senior author's publications on the Tabanidae of the Antilles and Trinidad (1940 to 1944).

The localities are grouped into the major political divisions (Departments and Intendencias), which are enumerated in alphabetical sequence.

**Key to Genera**


   Hind tibiae without apical spurs. Subcosta generally hairy, at least with some hairs beneath. Subfamily *Tabaninae* ........................................ 9.

2. First two antennal segments elongate, together often as long as or longer than third. Third antennal segment consisting of a long basal part (which sometimes shows superficial rings) and four terminal annuli. Proboscis short, seldom exceeding the height of the head.......................... *Chrysops*.

   First two antennal segments short, seldom equaling together half the length of the third. Third antennal segment consisting of five to eight divisions. Proboscis often elongate ........................................ 3.

3. Third antennal segment consisting of a long basal part and four terminal annuli. Proboscis short. Wings
extensively blackish. Eyes bare. All posterior cells open .................................. *Hemichrysops*.
Third antennal segment consisting of seven or eight divisions ............................................ 4.
Fork of third longitudinal vein generally with an appendix .............................................. *Esenbeckia*.
Eyes hairy. Face more or less produced and snout-like. Proboscis often very long .......................... 5.
5. Third antennal segment of seven divisions, the first six bearing long finger-like processes 6.
Third antennal segment without finger-like processes 7.
6. First divisions of third antennal segment bearing processes only on the dorsal side; basal process longer than the others ........................................... *Elaphella*.
First divisions of third antennal segment with processes on both the dorsal and ventral sides; processes all about equally long ................................................ *Pityocera*.
7. First and fourth posterior cells closed and petiolate.
Wings often with dark markings .................. *Scione*.
First posterior cell closed or narrowly open, the fourth always open. Wings hyaline or smoky, never with prominent markings ........................................... 8.
8. Coxal and femora slightly pilose or nearly bare .... *Fidena*.
Coxal and femora densely covered with long hairs ............................... *Melpia*.
9. First antennal segment more or less elongate, not less than one-fourth of the length of the third segment.
First antennal segment short, about as long as thick; if longer, the body bears some green metallic scales.
Abdomen broad and short ........................................ 11.
10. Abdomen broad and short. Third antennal segment slender, never with a basal process or tooth, at most somewhat widened or slightly produced near the base ........................................ *Diachlorus*.
Abdomen slender, narrow and long. Third antennal segment with or without a tooth or finger-shaped process near the base .................................. *Acanthocera*.
11. First antennal segment greatly inflated. Palpi very
slender. Subepaulet bare, without macrotrichia. Upper branch of third vein turned abruptly forward, joining the costa closer to the second vein than to the wing apex. Face much swollen at insertion of antennae.  

First antennal segment not inflated, normal.  

12. Base of third antennal segment with a long, slender, usually finger-shaped process reaching close to or even beyond the first terminal annulus.  


Subepaulet either bare or rarely with a few macrotrichia over a small area only.  

14. Body very stout, often densely hairy. At least fore tibiae inflated, often strongly so; hind tibiae densely fringed with long hairs. Eyes bare. Stibasoma.  

Body not especially stout nor hairy. Tibiae not appreciably inflated, at most with a few scattered long hairs.  

15. Eyes pilose or pubescent in both sexes, the hairs sometimes short, scattered and easily overlooked. Labella small and compact, without shiny, sclerotized areas. Dasychela.  

Eyes bare in both sexes. Labella more or less sclerotized and shiny. Dichelacera.  

16. All tibiae strongly inflated.  

Tibiae normal. Palpi dull and hairy.  


Palpi flattened, shiny, bare. Subcallus denuded, shiny.  

18. Third antennal segment with basal division long and wide, nearly four times as long as terminal annuli, provided with a very short, broad tooth. Subepaulet covered with macrotrichia. Body without metallic green scales. Selasoma.  

Third antennal segment with basal portion narrow, with-
out tooth. Subepaulet bare, without macrotrichia. Body with some metallic green scales... *Lepiselaga.*

19. Subepaulet bare, without macrotrichia, rarely with a few macrotrichia either restricted to a small area or much more scattered than on the base of the costa... 20.

Subepaulet wholly covered with appressed macrotrichia, like the base of the costa. Frontal callus present. Labella fleshy, without shiny, sclerotized areas... 25.

20. No frontal callus. Labella short, with sclerotized, smooth and shiny areas. Body green or greenish in life... *Chlorotabanus.*

Frontal callus present... 21.

21. Third antennal segment of four divisions (only three well-marked annuli). Frons very broad; callus transverse, swollen, narrower than frons. Vertex of female with a small shiny area. Face with two deep, shiny pits... *Brachytabanus.*

Third antennal segment of five divisions (four terminal annuli); if some are partly fused, either frontal callus as wide as frons, or vertex of female without shiny area, or face without deep, shiny pits... 22.

22. Eyes pilose or pubescent in both sexes. Frons relatively wide, less than five times as high as wide, with a broad callus... *Agelanius.*

Eyes bare in both sexes... 23.

23. Vertex of female with a well-marked tubercle. Frons relatively narrow, at least five times as high as wide, with elongate callus. Labella fleshy or membranous, without shiny, sclerotized areas... *Stenotabanus.*

Vertex of female without tubercle, rarely with a small flat, denuded area; in doubtful cases, frons much broader... 24.

24. Body unicolorous, more or less greenish or pale yellow in life. Frontal callus elongate. Labella with sclerotized, shiny areas... *Cryptotyius.*

Body not greenish, usually with contrasting markings. Frontal callus as a rule wider than high and as wide as frons. Labella fleshy or membranous, without shiny, sclerotized areas... *Phaotabanus.*

25. Vertex of female with a more or less prominent, denuded tubercle, sometimes with traces of ocelli. Eyes bare or pilose... 26.
Vertex of female without tubercle, flat. Eyes of female bare, of male either bare or pilose. ............... *Tabanus*.

26. Vertex with at least traces of ocelli. Eyes in both sexes bare, unicolorous. Frons rather narrow. Scutellum covered with white or yellowish hairs .... *Leucotabanus*. 
Vertex without even traces of ocelli. Eyes in both sexes pilose, pubescent or with a few scattered hairs; in life often with color bands in the female. Frons relatively broad ........................................ *Hybomitra*.


— Vaupés: between San José del Guaviare and Calamar (A. Gast. — Determined by G. Fairchild). — Ad. Lutz (1909) and Kröber (1925) reported this species from Colombia, without definite locality, as *C. costatus* and *C. costatus* var. *subfascipennis*.

*2a. Chrysops laeta* Fabricius, 1805.


*2b. Chrysops laeta* var. nigroviolacea Kröber, 1925.

Amazonas: Río Igara-Paraná (reported by Pechuman, 1937). — Not seen by us from Colombia.

*3. Chrysops leucospila* Wiedemann, 1828.

Boyacá: Muzo (J. Bequaert). — Meta: El Caibe (reported by Antunes, 1937); Villavicencio (M. Bates. — Determined by


*5. Chrysops soror Kröber, 1925.
   Boyacá: Muzo (J. Bequaert).

   Santander Sur: Jazmín (reported by Dunn, 1929). — Not seen by us from Colombia.

7. Chrysops incisa Macquart, 1845.
   Originally described from the temperate regions of New Grenada, which may have meant Colombia, this species has not yet been properly recognized; but possibly C. auroguttata Kröber is a synonym. — Not seen by us from Colombia.

   One of the type specimens of this species was from Colombia, without definite locality. It may, however, be a synonym of C. incisa Macquart. Most probably the specimen, supposedly from Bogotá, which Kröber recorded in 1925 as C. incisa, was what he later described as C. auroguttata. — Not seen by us from Colombia.

   Valle del Cauca: Veneral, Río Yurumanguí (S. Renjifo), holotype and paratype of the species.

   Vaupés: Mitú (P. Allen), paratype of the species. The holotype is from British Guiana.

   Magdalena: Cincinnati, Santa Marta region, one male (W. M. Mann. — U.S.N.M.).
   This appears to be the undescribed male of C. chiriquensis, a species known thus far only from Panama. It agrees with the female in many characters, particularly in the shape of the antennæ and the presence of a median pollinose stripe on the fronto-clypeus (over the basal or upper half). The wing mark-
ings are similar also, but the basal cells are much more extensively black. The abdominal pattern is the same, but the yellow markings are slightly smaller. Length, 7 mm., of wing 7.5 mm. The fronto-clypeus is much swollen and divided by a deep median saddle.


The type specimen was from Colombia, without more definite locality. — Not seen by us.


Magdalena: Río Frío (G. Salt), one of the paratypes of the species.


Meta: Restrepo (J. Bequaert). — Putumayo: Puerto Limón (S. Renjifo); Urcusique (S. Renjifo); San Pedro (S. Renjifo). — Originally described from Colombia, without definite locality.


Boyacá: Muzo (J. Bequaert).


Cundinamarca: Bogotá (B. Guevara A.). — Magdalena: Río Frío (G. Salt); Agua Dulce, San Lorenzo Mts. (M. A. Carriker). — Originally described from Colombia, without definite locality. Kröber's (1932c) locality La Guayra is in Venezuela, not Colombia.

17. *Esenbeckia tinctipennis* Kröber, 1931d.

Chocó: Condoto, type locality of the species. — Not seen by us.


Kröber (1932c) described the male of this species from Colombia, without definite locality. — Not seen by us.


Kröber (1932c) records a female of this species from Co-
lombia, without definite locality. — Not seen by us from Colombia.

*20. Esenbeckia illota var. osornoi Fairchild; 1942.


Pangonia ferruginea Macquart, 1838 (not of Meigen, 1804), appears to be a synonym of one of the subspecies of E. illota Williston. Kröber’s (1932c) ferruginea, from Venezuela, and Antunes’ (1937) from Restrepo, were E. illota var. osornoi. Fairchild (1942) also records a specimen of the same form from Cristalina, Colombia (in Hine coll.), a locality unknown to us.


Cundinamarca: Tapias Las Cruces, Bogotá, one of the types of E. sexmaculata. — Meta: Restrepo (J. Bequaert).

In addition we have seen a possibly undescribed species of Esenbeckia from Valle del Cauca: La Carmelita, Río Frío (S. Renjifo).


Pityocera festce Giglio-Tos is fairly common in the Republic of Panama, but has not yet been taken in Colombia. As the type locality is in Darién, it may be expected to occur in Chocó.


Meta: Restrepo (J. Bequaert); Villavicencio (M. Bates). — Nariño: Pasto (B. Guevara A.). — Originally described from Chiriqui, which is in Panama, not Colombia.


Putumayo: Puerto Asís (S. Renjifo).

25. Fidena pyrausta (Osten Sacken). Synonyms: Pangonia pyrausta Osten Sacken, 1886; Melpia auricauda Enderlein, 1925, according to Fairchild, 1941.

Boyacá: Muzo (type locality of auricauda). — Enderlein
seemingly records his *auricauda* also from Bogotá, but this is probably erroneous. Kröber (1930g) referred two females from the Magdalena River, Colombia, to *pyrausta*. — Not seen by us from Colombia.


Kröber's types of his *M. nigricans* came from Colombia (without definite locality) and Brazil. — Not seen by us.


Enderlein described this species originally from Colombia, without definite locality (“Cordillera, tierra caliente”). He also described a *F. auribarba var. albibarba* (Enderlein, 1925) from Colombia (“Cordillera, tierra caliente”). — Not seen by us.

28. **Fidena aureopygia** Kröber, 1931a.


29. **Fidena fulvosericea** Kröber, 1931a.

This species was described from “Darién, Colombia.” The region known as Darién borders on the Gulf of Urabá and extends more in the present territory of Colombia than in the Republic of Panama. — Not seen by us.

Kröber (1930c) records as *Sackenimyia analis* (Fabricius) two females from Colombia (“Cordillera, tierra caliente”). It is impossible to decide to which genus they may have belonged. The identity of Fabricius’ *Pangonia analis* (1805) is not settled. What Ad. Lutz referred (doubtfully) to *analis* was a species of *Melpia* (= *Bombylopsis* Ad. Lutz), a genus not definitely known from Colombia.

Kröber (1933a) also mentions having seen a female of *Fidena sorbens* (Wiedemann), at the Berlin Museum, labelled as from the Cordillera of Colombia. He doubts, however, the correctness of the locality, which we feel is certainly erroneous. It is most unlikely that this species from southern Brazil and Paraguay would occur in Colombia.

30. **Fidena columbiensis** (Kröber). Synonym: *Melpia columbiensis* Kröber, 1930g.

Chocó: Condoto (“Upper Condosa” is no doubt a misspelling
of Río Condoto, as "Condota" was of Condoto), type locality of the species. — Not seen by us.

In addition we have seen from Colombia specimens of four species of Fidena thus far unrecognized from the descriptions. Some of these may be new.

*31. Scione aurulans (Wiedemann). Synonyms: Pangonia aurulans Wiedemann, 1830; Scione lurida Enderlein, 1925.

Magdalena: Vista Nieve, San Lorenzo Mts. (M. A. Carricker); Cerro Quemado, San Lorenzo Mts. (M. C. Carricker).

— One of the types of Scione lurida was from Colombia, without definite locality.


Choco: La Unión (W. A. Archer). — Magdalena: San Lorenzo Mts. (M. A. Carricker); northwestern Sierra Nevada de Santa Marta (P. Darlington). — Originally described from "New Grenada," which may have meant Colombia.

S. albifasciata is about the size of S. distincta, from which it differs mainly in the russet femora; the inner orbits of the female converge slightly toward the vertex.

*33. Scione distincta (Schiner). Synonym: Diclisa distincta Schiner, 1868.

Cundinamarca: Medina, Upper Río Guacavia (J. V. Acuña).

— Putumayo: Upper Río Putumayo (B. Guevara A.). — Kröber (1930h) reported this species from Colombia, without definite locality.

Smaller than S. maculipennis and with blackish femora, the inner orbits of the female decidedly converging toward the vertex; the divisions of the third antennal segment are not swollen.

*34. Scione maculipennis (Schiner). Synonym: Diclisa maculipennis Schiner, 1868.


Kröber's (1930h) locality Guayaquil is in Ecuador, not Colombia. v. Röder (1886) recorded S. maculipennis from "Cerro Munchigne," Colombia, a locality unknown to us; and Ricardo (1902) reported it from Bogotá. It is not possible to refer these two records to one of the foregoing three species, which are so
closely allied that Fairchild (1942) regarded them all as one and the same. We believe, however, that they are distinct. *S. maculipennis* is larger than the other two, with russet femora, the divisions of the third antennal segment slightly swollen and somewhat bead-like, the wing markings better defined (the pale areas being decidedly yellowish), and the frons of the female nearly parallel-sided.


This species, originally described from "New Grenada," without definite locality, may have come from somewhere in Colombia. — Not seen by us.

36. *Scione obscurefemorata* Kröber, 1930h.

This species was originally described from Colombia, without definite locality ("Cordillera, tierra templada"). — Not seen by us.


Kröber (1930h) reported this species from Bogotá, Cundinamarca. — Not seen by us.

*38. Scione minor* (Macquart). Synonyms: *Pangonia minor* Macquart, 1847; *Scione aurea* Szilády, 1926.


Macquart’s *Pangonia incompleta* of 1850, from Colombia may have been this species, rather than his earlier *P. incompleta* of 1845.


Magdalena: Sierra San Lorenzo (J. Ujhelyi, recorded by Szilády, 1926), the type locality; Vista Nieve, San Lorenzo Mountains (H. L. Viereck). — Kröber (1930h) reported *R. flavescens* from Colombia ("Cordillera"), without definite locality.


Meta: Restrepo (J. Bequaert).
41. Scione minuta Szilády, 1926.
   Magdalena: Sierra San Lorenzo, the type locality. — Not seen by us.

42. Scione incompleta (Macquart). Synonym: Pangonia incompleta Macquart, 1845.
   Originally described from Colombia (♂ ♀), without more definite locality. Not seen by us.
   In addition we have seen from Colombia specimens of two species of Scione, as yet unrecognized.

43. Lepiselaga crassipes (Fabricius). Synonyms: Hæmatopota crassipes Fabricius, 1805; Lepiselaga recta Loew, 1869; Tabanus lepidotus Wiedemann, 1828. — The spelling Lepidoselaga Osten Sacken, 1876, is a superfluous emendation of Lepiselaga Macquart, 1838.

44. Stibasoma fulvohirtum (Wiedemann). Synonyms: Tabanus fulvohirtus Wiedemann, 1828; Tabanus compactus Walker, 1854.

45. Stibasoma chionostigma (Osten Sacken). Synonyms: Tabanus chionostigma Osten Sacken, 1886; Stibasoma pachycephalum Bigot, 1892; Stibasoma flavistigma Hine, 1912.
   Valle del Cauca: Buenaventura (recorded by Kröber, 1932, as S. flavistigma. Also collected by Rodriguez in August, 1942, according to G. Fairchild’s identification). — Not seen by us from Colombia.

This species was described from Santa Fé de Bogotá, first very briefly in 1921 and later (1923) more in detail. We have not seen it; but from the descriptions it appears to be extremely close to, or possibly even identical with the genotype, S. altivagus Ad. Lutz. We have seen two females of S. altivagus, from Brazil. The genus appears to be close to Selasoma, though readily separated by the characters given in the key. It differs from Stibasoma, which it resembles superficially, in the short antennal tooth. S. lutzi was omitted from Kröber's Catalogue of Neotropical Tabanidae (1934).

47. Selasoma tibiale (Fabricius). Synonym: Tabanus tibialis Fabricius, 1805.


*B. Bolbodimyia bicolor Bigot, 1892. Synonym: Atylotus erythrocephalus Bigot, 1892.

Boyacá: Muzo (J. Bequaert). — Meta: Restrepo (J. Bequaert); Retiro near Villavicencio (E. Osorno); Villavicencio (M. Bates. — Determined by G. Fairchild).

This species is extremely variable in color in the same locality. It may be completely black, with a black beard and black hairs on the pleura; or have the under side of the body, the entire head, most of the antennae and tibiae reddish, the beard and hairs on the pleura being also bright red. Some specimens are intermediate between these two extremes.

Dichelacera Macquart

We follow G. Fairchild (1943a) in subordinating Catachlorops and Psalidia as subgenera to Dichelacera.

Psalidia Enderlein (1922) has as type, by original designation, Tabanus furcatus Wiedemann, 1828. This group was originally proposed, as a genus, for Neotropical Tabaninae with a long, finger-shaped basal process on the third antennal segment and the first posterior cell closed and stalked before the margin of the wing. In the more complete diagnosis of 1925, Enderlein states that the eyes are bare. The closed or open first posterior cell is not a character of generic value in Tabaninae. Only species with the subepaulet bare or with a few macrotrichia only should be included.
KEY TO SUBGENERA

1. Labella large, about half the length of the proboscis, mostly soft and pollinose, but with a small, shiny, sclerotized area near the base. Subgenus *Catachlorops*. Labella small, hardly one-third of the length of the proboscis, mostly shiny and sclerotized

2. Frons narrow; callus not as wide as frons. Thorax and abdomen without transverse markings. Species generally 15 mm. or longer. Subgenus *Psalidia*. Frons moderately to very broad; callus as wide as frons. Thorax and abdomen with prominent transverse markings. Species generally less than 12 mm. long

*49. Dichelacera (Dichelacera) analis Hine, 1920. Synonym: *Dichelacera costaricensis* Kröber, 1931g.*


*50. Dichelacera (Dichelacera) marginata Macquart, 1847.*


*51. Dichelacera (Dichelacera) regina Fairchild, 1940.*


*Dichelacera scapularis* Macquart (1847) was recorded by Dunn (1929) from La Dorada, Caldas. The identification appears to be open to question, as this species is known with certainty only from Mexico and the Republic of Honduras.

*52. Dichelacera (Dichelacera) submarginata Ad. Lutz, 1915.*


This species was originally described from Brazil. In 1845, Macquart referred to it a female from New Grenada, which may have meant Colombia. Whether this specimen was conspecific with the type seems doubtful. — Not seen by us.


This species was originally described without definite locality from “the temperate regions of New Grenada,” which may have meant Colombia. The description is rather vague as to the shape of the antenna, the third segment having a “pointe assez forte.” Kröber (1931), who never saw it, placed it tentatively in *Catachlorops*. — Not seen by us.

*55. Dichelacera (Catachlorops) testacea* Macquart, 1846.

Meta: Restrepo (J. Bequaert); Villavicencio (M. Bates). — Vaupés: between San José de Guaviare and Calamar (A. Gast). — Originally described from Colombia, without more definite locality.


*T. quadrimaculatus* was originally described without definite locality from “New Grenada,” which may have meant Colombia. — Not seen by us.

*57. Dichelacera (Catachlorops) rufescens* (Fabricius). Synonym: *Tabanus rufescens* Fabricius, 1805.

Magdalena: Vista Nieve, Sierra Nevada de Santa Marta (H. Viereck).

*58. Dichelacera (Catachlorops) transposita* Walker, 1854.

Colima: La Brea (S. Renjifo). — Valle del Cauca: Puerto Merizalde, Río Naya (S. Renjifo). — This species was originally described from the “West Coast of America,” which may possibly have been in Colombia.


Chocó: Río Nimiquia (E. Osorno and J. Boshell). — Cundinamarca: Bogotá (B. Guevara. — This locality needs to be confirmed). — Meta: Villavicencio (G. Fairchild); Restrepo (J. Bequaert). — Valle del Cauca: La Carmelita, Río Frío (S.
The species was originally described by Macquart from the temperate regions of "New Grenada," which may have meant Colombia.

60. *Dichelacera (Psalidia) fulminea* (Hine). Synonyms: *Tabanus fulmineus* Hine, 1920; *Tabanus festivus* Hine, 1920, not of Wiedemann, 1828; *Psalidia ocellata* Enderlein, 1925; possibly also *Bellardia furcata* Bigot, 1892 (described without locality), which name is antedated in *Dichelacera* by *Dichelacera (Psalidia) furcata* (Wiedemann, 1828).

Boyacá: Muzo, the type locality of *Psalidia ocellata* (also collected by J. Bequaert and by A. Gast). — Enderlein's additional locality "Bogotá" probably was only the place from which the specimen was shipped to Europe.

61. *Dichelacera (Psalidia) cinnamomea* (Schiner). Synonyms: *Tabanus cinnamomeus* Schiner, 1868; and, according to Krober (1931), *Chelommia fibulata* Enderlein, 1922 and 1925. Schiner's specific name is not duplicated by the earlier *Tabanus cinnamoneus* Doleschall, 1858, which is spelled otherwise.

Enderlein's types of *C. fibulata* came from Colombia: Guayabal (Valle del Cauca); Cartago (Valle del Cauca); and Alto do Muelas (error for Alto de las Mulas; not located). — Not seen by us.


Krober (1931c) records this species from Colombia, without more definite locality. — Not seen by us.

**Dasychela Enderlein, 1922**

(*Dicladocera* Enderlein, 1922; not of Ad. Lutz, 1912)

The generic name *Dicladocera* was first proposed on p. 29 of an anonymous pamphlet published at Rio de Janeiro in 1909, with the title: "Instituto Oswaldo Cruz em Manguinhos, Rio de Janeiro." 1 The author of the name was certainly Ad. Lutz, as he repeated this and other generic names proposed in the pamphlet in his later publications. No characters were mentioned in 1909, but the following seven described species were included: "*D. immaculata* Macquart, *D. furcata* Wiedemann

1 Krober's (1940) statement that "Dr. Lutz established this genus in 1900, in Mem. Inst. Osw. Cruz, p. 29" is erroneous. Krober's method of determining the genotype by elimination is no longer the accepted procedure.
Tabanidae of Colombia

(macrodonta Macquart), D. potator Wiedemann, D. guttipennis Wiedemann, D. macula (scutellata) Macquart, D. luctuosa Macquart, D. rufipennis Macquart." As the genus was not defined in 1909, the rules of nomenclature might be interpreted so as to make the 1909 name a nomen nudum, notwithstanding the citation of several described species. The first valid use of Dicladocera, according to the prevailing rules, appears to be by Ad. Lutz in 1912 (Comm. Linhas Telegr. Estrat. Matto Grosso Amazonas, Annexo No. 5, Hist. Nat., Zool., Tabanideos, p. 4), when he described the new species Dicladocera unicolor. The correct genotype would then be D. unicolor, by monotypy, as Bequaert stated in 1924 (Psyche, XXXI, p. 28).

Enderlein in 1922 (Mitt. Zool. Mus. Berlin, X, pt. 2, p. 346) selected as genotype "D. guttipennis (Wiedemann, 1828)" = Tabanus guttipennis Wiedemann, 1828. Although this species was included by Ad. Lutz in 1909, it was not mentioned by him in 1912, when the generic name was first validly proposed. Unfortunately, from Lutz' description and figure his D. unicolor does not appear to be congeneric with T. guttipennis, as the eyes are presumably bare and the tooth of the third antennal segment is only moderately long. For this reason we feel impelled to discard Dicladocera for the group thus called by Enderlein, Kröber and Fairchild, and to use instead the name Dasychela Enderlein, 1922 (Mitt. Zool. Mus. Berlin, X, pt. 2, p. 380; monotypic for D. limbativena Enderlein, 1922). This name was dropped by Enderlein in 1925, as he then described limbativena as a species of Dicladocera.

Dasychela includes here all Neotropical Tabaninae with normal tibiae, a bare or almost bare subepaulet (sometimes with a narrow patch of a few macrotrichia near the middle), a long and often finger-shaped upper process near the base of the third antennal segment, and hairy or pubescent eyes (hairs sometimes short, scattered and easily overlooked). Enderlein at first (1922) placed his Dicladocera in the key as if the eyes were bare; but he corrected this error later (1925). The eyes are distinctly pubescent in D. guttipennis.

Stypochela Enderlein, 1922. This genus was originally proposed for a single species, Stypochela bogotana Enderlein, 1922, on the strength of the slender, narrow body and the presence of an appendix to the fork of the third longitudinal vein. These characters are scarcely of even subgeneric value. We should
have united Stypochela with Dicladocera, were it not that Kröber found the type of S. bogotana to have only three, instead of four, terminal annuli to the third antennal segment. The eyes are pubescent.


This species was originally described from Colombia, without more definite locality. Kröber (1940) redescribed the type. — Not seen by us.

*64. Dasychela macula (Macquart). Synonyms: Tabanus macula Macquart, 1845; Tabanus auribarbis Macquart, 1848; Tabanus argyrophorus Schiner, 1868; Tabanus submacula Walker, 1850.

Magdalena: northwestern Sierra Nevada de Santa Marta (P. Darlington); San Lorenzo Mts. (reported by Kröber, 1940). — Valle del Cauca: La Cumbre (Collector?). — T. submacula Walker was originally described from Colombia, without definite locality. Surcouf (1919) recorded T. auribarbis from the Valley of the Magdalena River.

Kröber (1940) includes also Tabanus scutellatus Macquart (1838) among the synonyms of D. macula. Specimens from southern Brazil, before us, agree perfectly with Macquart’s description, but are very distinct from D. macula. Among other points, the eyes are completely bare, which places the species in the subgenus Psalidia. Moreover, what Ad. Lutz reported from southern Brazil as D. macula, appears to have been mostly, if not always, D. scutellata (Macquart).

65. Dasychela acheronitens (Kröber). Synonym: Dicladocera acheronitens Kröber, 1931g.

The original description was made partly on specimens from Colombia, without more definite locality. — Not seen by us from Colombia.


The type locality of this species is given as “Colombia: Bogotá, Guayabal.” This Guayabal is most probably in Valle del Cauca. Bogotá appears to be in this case merely the locality from which the specimen was shipped to Europe. — Not seen by us from Colombia; but we studied a female from Ecuador.

The type locality of this species is given as “Colombia: Bogotá, Quindín.” This was evidently a misspelling of Quindio, a district in the northeastern corner of Valle del Cauca and the adjoining sections of Caldas and Tolima. — Not seen by us.

*68. Dasychela basirufa (Walker). Synonyms: Tabanus basirufus Walker, 1850; Dicladocera pallidetibia Kröber, 1940.

Cundinamarca: Guasca (E. A. Chapin). — Originally described from Colombia, without more definite locality. The hairy eyes and long antennal tooth, curved downward, refer the species to Dasychela.


Magdalena: Cincinnati, Santa Marta (W. M. Mann). — Kröber (1940) recorded this species from Colombia, without definite locality.

70. Dasychela (Stypochela) bogotana (Enderlein). Synonym: Stypochela bogotana Enderlein, 1922 and 1925.

This species was originally described with the following localities: “Columbien, Bogotá, Cartago und Las Pavas — Piodsaa Molar.” Both Cartago and Las Pavas are in Valle del Cauca; the locality Bogotá is probably erroneous, being merely the place from which the specimens were shipped to Europe. — Not seen by us.

Alliomma Borgmeier, 1934

Alliomma was proposed by Borgmeier (1934, Rev. de Entomología, IV, pt. 2, pp. 222, footnote, and 269), with Ommallia thiemeanæ Enderlein as type, for Kröber’s Ommallia of 1931 (Rev. de Entomología, I, pt. 3, p. 293). The type of Enderlein’s genus Ommallia (1923) is Ommallia viridis Enderlein, a species not congeneric with O. thiemeanæ and now placed in Cryptotylus. The name Alliomma should be used for a group of species more closely related to the subgenus Tabanus, proper, than to Dichelacera. While these species agree with Dichelacera and Dasychela (= Dicladocera of most authors) in the long, finger-shaped extension of the base of the first antennal segment, they differ by the subepaulet completely covered with macrotrichia. The eyes are bare.


The complicated synonymy of this species appears to be as follows: (1) Schiner described his T. macquarti from a female said to have come from Colombia and his description fits our specimens. He gave both T. apicalis Macquart and T. rubidus Macquart as doubtful synonyms; but neither of these species were Schiner's macquarti in our opinion. (2) Macquart gave Mexico as the locality of his T. ruber; but Surcouf (1919) states that the specimen at the Paris Museum, presumably the type of ruber, bears two labels one in Macquart's hand "Colombie"; the other "Brésil, Guérin-Ménéville." Surcouf redescribed ruber from this specimen, for which he also found and published the manuscript name infuscatipennis. Our Colombian specimens agree with Surcouf's description. (3) Kröber described "Gymnochela bigoti" evidently from Schiner's type of T. macquarti, although he says that the specimen came from Venezuela. His description and figures fit the Colombian specimens which we call macquarti. Kröber was mistaken, we believe, in referring his specimen to T. bigoti Bellardi, which was a substitute name for Tabanus apicalis Macquart, 1847 (not of Wiedemann, 1828), Bellardi's description being based on Macquart's type. The true bigoti is a Tabanus with a short tooth on the third antennal segment, as described by Osten Sacken for the female in 1886 (Biol. Centr. Amer., Dipt., I, p. 48). Osten Sacken was in error, however, when he cited as a synonym of his bigoti, T. macquarti Schiner, which has a very long antennal tooth. The true T. bigoti was correctly recognized by Fairchild (1943a, p. 442, figs. 4 and 5). (4) Tabanus indescriptus "Schiner" is a manuscript name which Kröber (1931e) found with the type of T. macquarti.

Valle del Cauca: Cali (B. Losada. — U. S. N. M.). — Both *O. thiemeana* and *O. interrupta* were originally described from Colombia, without definite locality ("Cordillera, tierra caliente").


Originally described from Colombia, without definite locality ("Cordillera, tierra caliente"). Not seen by us.

*74. Chlorotabanus inanis* (Fabricius). Synonym: *Tabanus inanis* Fabricius, 1787.

Meta: El Caibe (reported by Antunes, 1937); Villavicencio (M. Bates. — Determined by G. Fairchild); Restrepo (J. Bequaert). — Putumayo: Mocoa (S. Renjifo); Río Putumayo, between Itiquilla and Puerto Arana (S. Renjifo); La Tagua (Rómulo Patiño).


Antioquia: Murindó (reported by Dunn, 1929); Providencia (F. L. Gallego). — Cauca: Río Micay (S. Renjifo). — Chocó: along the Atrato River (reported by Dunn, 1929); Arquía (reported by Dunn, 1929); Andagoya (D. Augustine). — Reported from the Magdalena River by Kröber (1931f) and also taken there by M. Hertig.


Meta: Villavicencio (M. Bates. — Determined by G. Fairchild). — *O. viridis* was originally described from Colombia, without definite locality ("Cordillera, tierra caliente"). — Not seen by us from Colombia.


Boyacá: Guaguaquí (S. Renjifo). — Meta: El Caibe (re-


Boyacá: Muzo (J. Bequaert).

80. Leucotabanus canithorax Fairchild, 1941. Synonym: Tabanus albicans Macquart, 1845, not of Macquart, 1834 or 1838.

Magdalena: Sevilla (reported by Curran, 1928).

Macquart’s T. albicans of 1845 was based on a male from Colombia, without more definite locality. Kröber (1929) described what he assumed to be the female, also from Colombia, without more definite locality. Fairchild (1941) doubts whether this female was actually conspecific with Macquart’s male. — Not seen by us from Colombia.


*81b. Hybomitra quadripunctata var. amabilis Walker. Synonyms: Tabanus amabilis Walker, 1848; Tabanus maculipennis Macquart, 1834 and 1845, not of Wiedemann, 1828; Hypopelma quadripunctata aberr. dasyphyrtina Enderlein, 1925.

Meta: Restrepo (J. Bequaert; also reported by Antunes, 1937). — Enderlein (1925) reported the var. amabilis under the name Dasyphyrta maculipennis, from Colombia, without definite locality (“Cordillera, tierra templada”).

82. Hybomitra (?) bogotana (Enderlein). Synonym: Dasyomia bogotana Enderlein, 1925.

Cundinamarca: Bogotá (Steinheil), the type locality of the species. As the type lacked the third antennal segment, the correct place of this species remains obscure. — Not seen by us.
1946] 

**Tabanidae of Colombia** 75


Santander: Paramo del Almorzadero, 14,000 ft., one male (A. Gast).

The male which we refer to *H. minos* agrees with Schiner’s (1868) and Kröber’s (1940) descriptions of the female, except for purely sexual differences.

*84. *Hybomitra indiorum*, new name. Synonym: *Tabanus rufiventris* Macquart, 1845; not of Fabricius, 1805, nor of Macquart, 1838.

Caquetá: Florencia (Rómulo Patiño).

This species was originally described as from Santé Fé de Bogotá. We believe we have recognized it in a series of females from Florencia, which agree well with the description. There are a few short hairs on the eyes and the frontal callus is of the elongate, broad type found in the other species of *Hybomitra*.


Meta: Restrepo (J. Bequaert). — *H. rubiginipennis* was originally described from the temperate regions of “New Grenada,” which may have meant Colombia. *T. adustus* was described from Colombia, without more definite locality. Kröber (1940), who synonymized these two species, included *rubiginipennis* in *Dicladocera*; but both he and Macquart figure the third antennal segment correctly with a short, though strong tooth. The eyes bear a few scattered short hairs, easily overlooked, which explains why neither Macquart nor Walker mentioned them.


Meta: Villavicencio, on a sandy river beach (G. Fairchild).

According to Dr. Fairchild, the eyes of the female are in life purple with two green cross-bands. The median purple streak is darker than the upper and lower corners.

The species seems to fit best in *Aegialomyia* Philip, a group which appears to be only subgenerically distinct from *Phaëotabanus*.


*88. Stenotabanus obscurus Kröber, 1930a.

Putumayo: Urcusique (S. Renjifo).

In life the eyes of the female are dark purple with two green cross-bands.


Meta: Restrepo (reported by Antunes, 1937); Río Caney near Restrepo (J. Bequaert); Villavicencio (M. Bates. — Determined by G. Fairchild). — Also taken by E. Osorno on the Upper Magdalena River, exact locality unknown.

*90. Stenotabanus cajennensis (Fabricius). Synonym: Tabanus cajennensis Fabricius, 1787.

Meta: region of Río Negro, south of Villavicencio (J. Bequaert). — Tolima: between Mediación and Ibagué, 1500 to 2500 m. (reported by Therese von Bayern, 1903. — The occurrence of this lowland species at such high altitude appears somewhat open to question).

*91. Stenotabanus pequeniensis Fairchild, 1942e.

Meta: Restrepo (J. Bequaert), locality of some of the paratypes.


Originally described from Colombia, without more definite locality. Kröber (1930e) redescribed the type, but could not decide whether to place it in Stenotabanus or in Macrocormus. — Not seen by us.


Cundinamarca: Monserrate near Bogotá, 3,000 m. (E. Osorno), male and female. — A female at the U. S. Nat. Mus. is merely labelled “Colombia.” — Originally described from Colombia, without definite locality: “Cordillera, tierra templada.”

*94. Agelanius osornoi J. Bequaert, 1947. (See appendix to this paper).

Cundinamarca: Monserrate near Bogotá, 3,000 m. (Hernando Osorno), type locality of the species.
Tabanidae of Colombia

Tabanus Linnaeus

KEY TO SUBGENERA

1. Abdomen with one, two, or three pale longitudinal stripes or rows of contiguous or nearly contiguous spots. Wings hyaline or smoky, or faintly clouded along the veins. Eyes of female bare, green with two or three dark cross-bands in life; of male bare or hairy, with or without an area of larger facets. Subgenus Neotabanus.
Abdomen usually without longitudinal stripes or rows of spots; if with rows of spots, the eyes of female unbanded or with only one band in life ................................. 2.

2. Disk of scutellum with a conspicuous spot of black pubescence, more or less surrounded by a ring of white hairs. Eyes of female unbanded. Subgenus Lophotabanus.
No spot of black pubescence on scutellum; sometimes a small prescutellar patch of black hairs ................................. 3.

3. Wings prominently clouded or spotted with brown, seldom mostly black, as a rule with hyaline areas about the cross-veins. Frons usually very narrow, with ridge-like callus. Eyes of female unbanded ................................
Wings hyaline, smoky, entirely black, or spotted at the cross-veins; in doubtful cases frons otherwise ......................... 4.

4. Relatively slender species. Third antennal segment not crescent-shaped, only slightly angular near the upper base. Upper branch of third longitudinal vein with a very long appendix .......................... Subgenus Macrocormus.
Stout species. Third antennal segment crescent-shaped, with a strong tooth near the upper base. Upper branch of third longitudinal vein normally without appendix ........................................ Subgenus Tabanus, proper.


Amazonas: Caucaýa (S. Renjifo); Tarapacá (S. Renjifo). — Antioquia: near Porcecito, Río Porce (N. Weber); El Dos, Turbo (S. Renjifo); Micuro, Río Leon (S. Renjifo); Puerto Berrio (reported by Dunn, 1929). — Atlántico: Puerto Colombia (J. Bequaert); Calamar (J. Bequaert); Barranquilla (reported by Kröber, 1933b); Sabanilla (reported by Kröber,
1933b). — Boyacá: Muzo (J. Bequaert). — Chocó: Andagoya (D. Augustine); Sautatá (S. Renjifo). — Magdalena: Sevilla (G. Salt); Río Frío (G. Salt). — Meta: Restrepo (J. Bequaert); Villavicencio (J. Bequaert; M. Bates). — Putumayo: La Tagua (Rómulo Patiño). — Santander Sur: Bocas del Rosario (J. Bequaert); Puerto Wilches (reported by Dunn, 1929); Barrancá (reported by Dunn, 1929); Barrancabermeja (J. Bequaert; also reported by Dunn, 1929). — Valle del Cauca: Hacienda La Brisa, Ginebra (S. Renjifo); Ginebra (S. Renjifo); Hacienda El Tablazo, Tuluá (S. Renjifo); Tres Esquinas, Habana, Buga (S. Renjifo); Guayabal, Río Cajambre (S. Renjifo); Hacienda La Carmelita, Río Frío (S. Renjifo); Hormiguero (H. F. Schwarz).

Meta: Villavicencio (M. Bates).


*96. Tabanus (Neotabanus) hookeri Knab, 1915.

*97. Tabanus (Neotabanus) fumatipennis Kröber, 1933b.

*98. Tabanus (Neotabanus) restrepoensis Fairchild, 1942.
Meta: Restrepo (J. Bequaert), the type locality of the species; Villavicencio (M. Batés. — Determined by G. Fairchild).
   Meta: Restrepo (determined by G. Fairchild). — Not seen by us from Colombia.

*100. *Tabanus (Neotabanus) cicur* Fairchild, 1942.
   Meta: Restrepo (J. Bequaert; P. C. A. Antunes), the type locality of the species; La Unión, 12 Kilom. east of Restrepo (J. Bequaert).


   Meta: La Unión, 12 Kilom. east of Restrepo (J. Bequaert).
   The foregoing two species are very poorly defined and we are inclined to regard them as one and the same. Our specimens were compared with the types.

   Meta: Villavicencio (M. Bates. — Determined by G. Fairchild); Restrepo (J. Bequaert, reported by G. Fairchild, 1942). — Valle del Cauca: Hacienda San José, Bugalagrande (S. Renjifo). — This species was reported from Colombia as *T. truquii* by J. Bequaert, 1940.

   Meta: Restrepo (J. Bequaert).

   This species was originally described from Colombia, without definite locality. The abdomen was said to have two longitudinal yellowish-white stripes. — Not seen by us.¹

   Amazonas: Leticia (S. Renjifo). — Boyacá: Muzo (J. Be-

¹The *Tabanus trilinatus*, recorded by Curran (1928) from Sevilla (Magdalena) was no doubt one of the species of *Neotabanus* listed in this paper; but it is impossible to decide which species, without seeing the specimen.
quaer). — Meta: Villavicencio (M. Bates); Restrepo (J. Bequaert).

*108. Tabanus (Tabanus) alboater Walker, 1850.
   Vaupés: Mitú (P. Allen); between San José del Guaviare and Calamar (A. Gast).

*109. Tabanus (Tabanus) discus Wiedemann, 1828.
   Vaupés: Mitú (P. Allen).

*110. Tabanus (Tabanus) olivaceiventris Macquart, 1847. Synonyms: Tabanus imponens Walker, 1857; Atylotus pulverulentus Bigot, 1892; Tabanus coriarius "Schiner" Kröber, 1929.
   Magdalena: Río Frío (G. Salt). — We have seen a male of this species taken in Colombia, unfortunately without more definite locality. It is almost exactly like the female.

*111. Tabanus (Tabanus) importunus Wiedemann, 1828; not of Macquart, 1847.
   Magdalena: Aracataca (P. J. Darlington). — Meta: Restrepo (J. Bequaert); El Caibe, near Restrepo (reported by Antunes, 1937).

*112. Tabanus (Tabanus) ferrifer Walker, 1850. Synonym: Tabanus druyvesteijni Szilády, 1926.

*113. Tabanus (? Tabanus) hirtitibia Walker, 1850.
   Caquetá: Florencia (Rómulo Patiño). — Originally described from Colombia, without definite locality.
   Although our specimen agrees well with Walker’s description, it lacks the antennae, which were also broken off in the type. It is possible that the third segment has a long, finger-shaped tooth, in which case the species may have to be transferred to Alliommia.

114. Tabanus (? Tabanus) flavifacies Macquart, 1845.
   Originally described from Colombia, without more definite locality. The abdomen is described as black, with three rows of white triangular spots. The size (10½ French lines = 23.7 mm.) is rather large for a Neotabanus, and it was more likely a true Tabanus. — Not seen by us.
115. Tabanus (Lophotabanus) pseudoculus Fairchild, 1942.

Chocó: Andagoya (A. Gast). — Meta: Restrepo (J. Bequaert; also reported by Antunes, 1937); Villavicencio (M. Bates).

Santander Sur: Jazmín, between Puerto Wilches and Bucaramanga (reported by Dunn, 1929). — T. oculus was originally described in part from Colombia without more definite locality. — Not seen by us from Colombia.

After studying many specimens of this group from Yucatan, Honduras, Guatemala, Panama, Colombia, Venezuela, Trinidad, and Brazil, we have come to the conclusion that T. albocirculus Hine and T. xipe Kröber will eventually be synonymized with T. oculus. T. oculus is used at present for specimens with the first posterior cell closed and stalked before the margin, a character which is not always of specific value in Tabanus.1 Of the others, with open first posterior cell, the larger specimens are placed in xipe, while the smaller ones become albocirculus, a procedure which leaves the medium-sized ones in doubt. Specimens with the first posterior cell closed just at or near the margin, or barely open, must also be placed arbitrarily.

*118. Tabanus (Lophotabanus) pruinicorpus Kröber, 1934. Synonym: Lophotabanus pruinosus Kröber, 1929; not Tabanus pruinosus Bigot, 1892.
Magdalena: Río Frío (G. Salt); Sevilla (G. Salt). — Kröber originally described his L. pruinosus from Bolivia and Colombia (supposedly from Bogotá, a locality which is perhaps open to question).

1 In the present paper the subgenus Lophotabanus Szilády (1926) includes Bellardia Rondani (1864) (not of Robineau-Desvoidy, 1863), a name later changed to Bellaria Strand (1928).


121. Tabanus (Philipotabanus) fascipennis Macquart, 1845. Originally described from Brazil and "New Grenada," the latter possibly meaning Colombia. Kröber (1930f) reported it from Bogotá, but it seems rather doubtful that it was actually taken there. — Not seen by us.

122. Tabanus (Philipotabanus) multiguttatus Kröber, 1930f. Cundinamarca: Bogotá, the type locality. — Magdalena: Sierra Lorenzo, at 8,500 ft. (H. Viereck). — Kröber gave also "New Grenada" and Ecuador as additional localities and placed the species in Phæotabanus.

123. Tabanus (Philipotabanus) magnificus Kröber, 1934. Synonym: Phæotabanus formosus Kröber, 1930f; not Tabanus formosus Walker, 1848. Cauca: Río Micay (S. Renjifo). — Chocó: Istmina (S. Renjifo); Andagoya (D. Augustine); Río Cabí near Quibdó (S. Renjifo). — Valle del Cauca: Kilom. 87 on road from Cali to Buenaventura, at Río Anchicayá (S. Renjifo); Veneral, Río Yurumangui (S. Renjifo); Puerto Merizalde, Río Naya (S. Renjifo); Quebrada San Joaquín near Buenaventura (S. Renjifo); Condoto (reported by Kröber, 1930f, as one of the type localities of his P. formosus); Utría (J. Boshell. — Determined by G. Fairchild); Río Nimiquiá (J. Boshell. — Determined by G. Fairchild).


125. Tabanus (?subgenus) simplex Walker, 1850. This species was originally described from Colombia, without definite locality. Kröber (1934) placed it doubtfully as a synonym of Tabanus (Lophotabanus) bifloccus Hine, of Cuba. This
appears improbable, particularly as Walker did not mention a black spot on the scutellum. — Not seen by us.

Walker (1848) referred doubtfully to the North American Tabanus lasiophthalmus Macquart, a specimen collected in Colombia by Goudot. This identification was certainly erroneous and probably based on a specimen of T. quadripunctatus Fabricius.


Boyacá: Muzo (J. Bequaert; reported by Bequaert, 1944). — Valle del Cauca: Veneral, Río Yurumanguí (S. Renjifo).

Kröber (1928) reports Diachlorus ferrugatus (Fabricius) from Colombia, without definite locality; but this is certainly due to some error.


Chocó: Condoto, the type locality. — Not seen by us.

*128. Acanthocera formosa Kröber, 1930.

Meta: Restrepo (J. Bequaert. — Reported also by G. Fairchild, 1939).

*129. Acanthocera trigonifera Schiner, 1868.

Cundinamarca: Bogotá (reported by Kröber, 1928). — Magdalena: Santa Marta (F. L. Gallego). — The occurrence of this species near Bogotá needs to be confirmed.

REFERENCES


1946. Descriptions of three new Neotropical species of Chrysops. Psyche, LIII, pp. 6-12, Pl. I.


1942b. Notes on Tabanidae from Panama. V. The genus Tabanus, subgenus Bellardia Rondani. Psyche, XLIX, pp. 8–16, Pl. I.


Catalogo dos Tabanidae da America do Sul e Central, incluindo o Mexico e as Antilhas. Rev. de Entomologia, IV, pp. 222–276, 291–333.


BY JOSEPH C. BEQUAERT

Agelanius osornoi, new species

*Female.* — Medium-sized, black. Frons of medium width, with a large dirty-yellowish basal callus and a velvety-black median spot. Dorsum of thorax with grayish-white longitudinal stripes, of abdomen with a median row of white triangles and lateral transverse white markings. Legs black with mostly pale tibiae. Wing with a characteristic pattern of blackish spots.

Head transverse, about twice as wide as high in front view, black, mostly covered with grayish-white pollinosity, which is more brownish at level of antennae. Lower half of face, jowls and outer orbits with long white hairs, forming a conspicuous beard; upper part of face and subcallus with shorter hairs, mixed black and white. Frons about two and one-half times as long as wide at the subcallus, slightly narrowed toward vertex;
basal callus shiny, dirty-yellowish, touching the inner orbits, nearly twice as wide as high, rather abruptly extended upward into a median broad line, which is triangularly widened at the base and reaches to about mid-length of frons; middle third of frons with a large, dull, cordiform spot of velvety-black pollinosity, the broader lower end notched and divided by the smooth extension of the basal callus, the narrowed upper end jagged; remainder of frons and vertex gray pollinose, the velvety spot broadly separated from inner orbits; vertex flat, with a small brownish-pollinose median area; frons with many erect, black hairs, even on the shiny callus. Proboscis short, thick, with large, soft labella. (Antennae and palpi broken off.) Eyes densely covered with erect grayish hairs. Thorax black, mostly covered with ashy-gray pollinosity, except dorsally over four broad, blackish, longitudinal stripes; of the five grayish-white stripes thus produced, one on each side is very broad and divided posteriorly (above the wing base) by a short blackish streak; three in the middle are much narrower; the median one linear, slightly widened behind where it stops at the posterior third; the two admedian ones reaching the scutellum where they unite with the lateral stripe on each side, but broadly interrupted beyond mid-length of the dorsum; scutellum mostly with blackish pollinosity, the hind margin broadly gray pollinose. Hairs of thorax long, dense and white beneath, dorsally long, sparse, mostly black with a mixture of white particularly near the sides and at the hind margin of the scutellum. Abdomen: integument black, with indefinite slightly brownish areas at the sides of the first tergite; ventrally almost wholly grayish pollinose, dorsally with dull, velvety-black pollinosity on which stand out conspicuous white pollinose markings as follows: a median triangle on the hind margin of tergites 2 to 6, largest on 3 and 4 where they are about as high as wide and reach the anterior margin of the tergite, slightly smaller on 2 and 5 where they occupy half or less of the length of the tergite (triangle of tergite 2 wider than long), very small on 6; a narrow streak at hind margin on each side of tergites 2 to 6 (widest on 2) extending to near the median triangle, from which it is, however, sharply divided; in addition a similar, but broader streak on each side at anterior margin of tergite 2, leaving about the median third free and not connected on the sides with the streak of the hind margin; venter with long, white hairs; tergites with shorter, mostly black hairs,
except on the pale areas where some of the hairs are silvery-
white, particularly on the median triangles. Legs black, grayish
pollinose, with long, grayish-white hairs except over the dark
portions of tibiae and on tarsi, where they are black; tibiae of
normal shape, pale dirty-yellowish over basal two-thirds to
three-fourths, which bear silvery-white hairs. Wing without
appendix at fork of third longitudinal vein; all posterior cells
open at margin; nearly hyaline with conspicuous blackish spots
as follows: medium-sized spot at base of first submarginal cell,
extending over base of first posterior cell, extreme apex of first
basal cell and slightly into discal cell; spot at lower apex of
second basal cell, more extended over base of fourth and fifth
posterior cells and less so into discal cell; fairly large area
around cross-vein at apex of discal cell, from the first to the
fourth posterior cells; spot below stigma on second longitudinal
vein; small cloudy blotches before the tips of all longitudinal
veins, some weaker than others; stigma blackish; squamae
clouded; veins black; halteres blackish; subepaulet bare.

Length, 11.5 mm.; of wing, 9 mm.

COLOMBIA: Monserrate near Bogotá, Dept. Cundinamarca,
at about 3,000 m. above sea-level (Hernando Osorno Collec-
tor); holotype at Mus. Comp. Zool. (No. 27634).

A. osornoi is related to several species of Agelanus from the
Andes of South America, such as A. excelsus (Surcouf), A. mon-
tium (Surcouf) and A. colombianus (Enderlein). It is, how-
ever, readily separated from these and other species known to
me by the conspicuous pattern of white markings on the ab-
domen, the arrangement of spots and clouds in the wing, as well
as the large velvety-pollinose spot on the middle of the frons.
For this reason I am describing it as new, notwithstanding the
lack of antennae.