First records of two genera and thirteen species of Tabanidae (Diptera) from Honduras

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Abstract
This work presents information on the diversity of the Tabanidae of Honduras as a product of the examination of 386 specimens and a literature review. Thirteen species and two genera (Bolbodimyia and Dasychela) are recorded from the country for the first time. Eighty-five species distributed in 22 genera, five tribes, and three subfamilies are now known from Honduras. A key to the subfamilies, tribes, and genera of the known Honduran species is also included. All new records are mapped and illustrated to aid in the identification of the species.

Keywords
Central America, diversity, horse flies, tabanids, taxonomy

Introduction
Tabanidae is a family of Diptera that includes flies considered of medical and veterinary importance due to the blood sucking habits of the adults. Currently the group contains around 4,400 species worldwide (Pape et al. 2011). The Neotropical region has the highest diversity, with approximately 1,205 species and about 28% of the global fauna (Henriques et al. 2012), but many of its areas continue to be unexplored.
The best known tabanid faunas in Central America are those of Costa Rica and Panama thanks in big part to the works of Fairchild (1961), Hogue and Fairchild (1974), Fairchild (1986), and Burger (2002). Currently, 146 species of tabanids are known from Costa Rica (Borkent et al. 2018) and 152 from Panama (Fairchild 1986).

For Honduras, few works deal with the diversity of horseflies in the country, i.e., Bequaert (1925), Root (1925), and James (1950). Coscarón and Papavero (2009), in their catalog for the neotropics, listed 70 species of Tabanidae from Honduras. Henriques (2016) added two additional species, Scione maculipennis (Schiner) and Philipotabanus ebrius (Osten Sacken), for a total of 72 species.

Honduran species diversity is poorly known for many groups. Linares and Orozco (2017) estimated that at least half of the insects in the country are known unknowns, species already described that are not recorded. This poor understanding of the diversity makes conducting ecological and conservation studies very difficult in the country.

This work presents for the first time an overview of the tabanids of Honduras. By nature, this is vastly incomplete as there are many more habitats to sample and collections to revise. In comparison, Costa Rica with less than half the size of Honduras has more than twice the number of known species of tabanids. The aims of this article are: 1) to present the new findings regarding the species diversity in the country, 2) to integrate the records on the tabanid fauna of Honduras scattered in the literature, 3) to provide an updated list of the species, and 4) to create a key for the genera of tabanids known in the country.

**Methods**

Material of Tabanidae deposited at the Insect Collection at Zamorano University (EAPZ) (Zamorano, Honduras) was examined. Fieldwork was done using H-traps (Egri et al. 2013), light traps, and an aerial net in several locations in Honduras. Specimens were studied under a Leica EZ4 stereo microscope using the keys provided by Bequaert (1931), Philip (1954), Fairchild and Philip (1960), Fairchild (1976), Wilkerson (1979), Fairchild (1983, 1986), Fairchild and Wilkerson (1986), Coscarón and González (1991), Burger (1996), Henriques (2006), Krolow et al. (2007), Burger (2009), Krolow and Henriques (2010), Turcatel et al. (2010), Carmo and Henriques (2019), and Turcatel (2019).

Distributional records were obtained from label data and from the literature.

A species distribution map was made for the new records using SimpleMappr (https://www.simplemappr.net/) and Microsoft Power Point v. 2112.

Photographs were taken using a Canon 100 mm lens mounted on a Canon Rebel T5i attached to a macro rail. Composite images were obtained using PICOLAY v. 2020–02–06 (http://www.picolay.de). Individual images were organized in plates in GIMP v. 2.10.24 (http://www.gimp.org).
Results and discussion

Eighteen genera and 47 species were found in the 386 specimens examined. Thirteen species and two genera are recorded for the first time (Fig. 1).

With these new records Honduras has now a diversity of 85 species of horseflies (Table 1). This represents an increase of 15.3% compared to the previously known taxa (72 species) but it’s still a low number, and many more species are expected to be discovered in the future. Two additional species, *Tabanus femoralis* Kröber from Escuela Agrícola Panamericana Zamorano, Francisco Morazan, and *Stypommisa lerida* (Fairchild) from 15 km west of La Ceiba, Atlántida, are recorded in GBIF (https://www.gbif.org/es/occurrence/3048772282 and https://www.gbif.org/es/occurrence/3385753663). Since this material was not examined, it is not included in the list, but the records are probably valid.

Table 1. Species of Tabanidae from Honduras. Distributions according to Coscarón and Papavero (2009), except where indicated.

| Taxon                        | Distribution                                                                 |
|------------------------------|------------------------------------------------------------------------------|
| **CHRYSOPSINAE**             |                                                                              |
| **CHRYSOPSINI**              |                                                                              |
| *Chrysops soror* Kröber, 1925| Guatemala, Belize, Honduras, Costa Rica, Panama, Colombia, Venezuela         |
| *Chrysops auroguttatus* Kröber, 1930 | Mexico to Colombia             |
| *Chrysops latifasciatus* Bellardi, 1859 | Mexico to Nicaragua           |
| *Chrysops melanenus* Hine, 1925 | Honduras (new record), Nicaragua, Costa Rica to Venezuela                    |
| *Chrysops mexicanus* Kröber, 1926 | Mexico to Colombia             |
| *Chrysops pacchycnemius* Hine, 1905 | Mexico to Honduras             |
| *Chrysops scalaratus* Bellardi, 1859 | Mexico to Panama               |
| *Chrysops variegatus* (De Geer, 1776) | Mexico to Argentina            |
| *Chrysops willistoni* Hine, 1925 | Mexico to Honduras             |
| *Silvius melanopterus* (Hine, 1905) | Mexico to Honduras             |
| **PANGONINI**                |                                                                              |
| **PANGONININI**              |                                                                              |
| *Esenbeckia illota* (Williston, 1901) | Mexico to Honduras             |
| *Esenbeckia mejiai* Fairchild, 1942 | Guatemala to Costa Rica        |
| *Esenbeckia prasiniventris* (Kröber, 1929) | Guatemala to Ecuador and Trinidad, Brazil                                    |
| *Esenbeckia transilucens* (Macquart, 1846) | Mexico to Peru and Brazil       |
| *Esenbeckia wiedemannii* (Bellardi, 1859) | Mexico, Honduras (new record)      |
| **SCIONINI**                 |                                                                              |
| *Fidena flavipennis* Kröber, 1931 | Mexico to Venezuela            |
| *Fidena rhizophora* (Bellardi, 1859) | Mexico to Venezuela and Peru   |
| *Scione aurulans* (Wiedemann, 1830) | Mexico to Costa Rica           |
| *Scione maculipennis* (Schiner, 1868) | Honduras, Costa Rica to Venezuela, Ecuador*                                 |
| **TABANINAE**                |                                                                              |
| **DIACHLORINI**              |                                                                              |
| *Bolbodimyia atrata* (Hine, 1904) | USA, Mexico, Honduras (new record)                                           |
| *Bolbodimyia erythrocephala* (Bigot, 1892) | Honduras (new record), Costa Rica, Panama, Ecuador                           |
| *Bolbodimyia galindoi* Fairchild, 1964 | Honduras (new record), Costa Rica to Colombia                              |
| *Bolbodimyia philipi* Stone, 1954 | Guatemala, El Salvador, Honduras (new record), Costa Rica, Panama, Colombia |
| *Catachlorops halioterus* Gorayeb, L. Bermúdez, E.M. Bermúdez & Villalba, 1989 | Mexico, Honduras, Costa Rica       |
| Taxon                                | Distribution                                      |
|--------------------------------------|---------------------------------------------------|
| *Catachlorops fulmineus* (Hine, 1920) | Honduras to Panama, Colombia, Ecuador              |
| *Catachlorops scurrus* (Fairchild, 1958) | Mexico to Panama                                   |
| *Chlorotabanus inanii* (Fabricius, 1787) | Mexico to Peru and Brazil                          |
| *Chlorotabanus mexicanus* (Linnaeus, 1758) | Mexico to Ecuador, Brazil, Trinidad               |
| *Dasychela badia* (Kröber, 1931)      | Honduras (new record), Costa Rica, Panama          |
| *Diachlorus ferrugatus* (Fabricius, 1805) | USA to Costa Rica, Bahamas Islands                |
| *Dichelacera costaricana* (Fairchild, 1941) | Honduras, Costa Rica                              |
| *Dichelacera grandis* Philip, 1943   | Guatemala, Belize, Honduras                        |
| *Dichelacera marginata* Macquart, 1847 | Honduras (New record), Nicaragua to Brazil and Peru |
| *Dichelacera pulchrida* Fairchild & Philip, 1960 | Mexico, Honduras                                  |
| *Dichelacera regina* Fairchild, 1940 | Honduras to Ecuador                               |
| *Dichelacera scapularis* Lutz, 1915  | Mexico to Panama                                  |
| *Lepiselaga transversa* (Fabricius, 1805) | Honduras to Venezuela, Peru, Bolivia              |
| *Leucotabanus nigriventris* Kröber, 1931 | Mexico to Argentina                              |
| *Lepisolaga crassipes* (Fabricius, 1805) | Mexico to Bolivia, Argentina, and Trinidad        |
| *Selasoma tibiale* (Fabricius, 1805)  | Mexico to Panama                                  |
| *Sotenotabanus fulvistriatus* (Hine, 1912) | Honduras, Costa Rica, Panama*                     |
| *Sotenotabanus littoreus* (Hine, 1907) | Honduras to Venezuela and Ecuador                 |
| *Sotenotabanus panamense* Curran, 1934 | Honduras, Costa Rica, Panama, Colombia, Ecuador   |
| *Stibasoma chionogaster* Osten Sacken, 1886 | Guatemala to Colombia                           |
| *Stibasoma flaviventris* (Macquart, 1848) | Guatemala to Ecuador                             |
| *Stibasoma panamense* Curran, 1934   | Mexico to Argentina                               |
| *Stenotabanus fulvistriatus* (Hine, 1912) | Mexico to Panama                                  |
| *Steinomma capitoportus* Kröber, 1930 | Honduras to Ecuador                               |
| *Steinomma chungena* Fairchild, 1986 | Mexico to Brazil                                  |
| *Steinomma u-nigrum* Philip, 1977    | Honduras to Ecuador                               |

**TABANINI**

| Taxon                                | Distribution                                      |
|--------------------------------------|---------------------------------------------------|
| *Poeziolus quadripunctatus* (Fabricius, 1805) | Mexico to Argentina                              |
| *Tabanus abattenuis* Philip, 1969      | Mexico, Guatemala, El Salvador, Honduras, Nicaragua |
| *Tabanus bigotii* Bellardi, 1859       | Mexico to Colombia and Venezuela                  |
| *Tabanus claripennis* (Bigot, 1892)   | Honduras (new record), West Indies, Costa Rica to Paraguay, Brazil, Argentina, and Chile |
| *Tabanus colombensis* Macquart, 1846  | USA to Trinidad, Venezuela, Ecuador, Brazil       |
| *Tabanus commixtus* Walker, 1860      | Mexico to Venezuela, Hispaniola, Trinidad, Martinique |
| *Tabanus defilippii* Bellardi, 1859   | Mexico to Panama                                  |
| *Tabanus dorifer* Walker, 1860        | USA, Mexico, Honduras                             |
| *Tabanus erebus* Osten Sacken, 1886   | Honduras, Nicaragua, Costa Rica, Panama           |
| *Tabanus jilamensis* Hine, 1925       | USA to Panama                                     |
| *Tabanus morbus* Stone, 1938          | Belize, Honduras (New record), Costa Rica, Trinidad, Barbados to Brazil and Argentina |
| *Tabanus nebulus* De Geer, 1776       | Mexico to Argentina, Trinidad                      |
| *Tabanus occidentali* Linnaeus, 1758  | Mexico to Panama                                  |
| *Tabanus oculus* Walker, 1848         | Mexico, Belize, Honduras                          |
| *Tabanus picturatus* Kröber, 1931     | Mexico to Colombia                                |
| *Tabanus polyphemus* Fairchild, 1958  | USA to Panama                                     |
| *Tabanus pruinicolor* Bigot, 1892     | Guatemala to Colombia, Venezuela, Ecuador, and Trinidad |
| *Tabanus pseudoculus* Fairchild, 1942 |                                                   |
**Tabanidae of Honduras**

**New Tabanidae from Honduras**

**CHRYSOPSINAЕ**

**CHRYSOPSINI**

*Chrysops melaenus* Hine, 1925

Figure 2A

**Distribution.** Previously known from Nicaragua to Venezuela (Coscarón and Papavero 2009).

**Material examined.** Honduras: 1♂, Atlántida, RVS Cuero y Salado, Salado Barra, 15°46'02"N, 86°59'51"W, 2 m, 25.i.2000, R. Cave, R. Cordero and J. Torres leg.; EAPZ22.445. 1♂, El Paraíso, 5.3 km N Cifuentes, 14°05'48"N, 86°06'57"W, 13.vi.1999, R. Cave and J. Torres leg.; EAPZ69.749. 1♀, El Paraíso, Danlí, Cerro

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| Taxon                        | Distribution                                                                 |
|------------------------------|------------------------------------------------------------------------------|
| *Tabanus pungens* Wiedemann, 1828 | USA, Neotropics (except West Indies and Chile), Trinidad                     |
| *Tabanus quinquemaculatus* Hine, 1925 | Guatemala, Belize, Honduras, Costa Rica, Panama                             |
| *Tabanus secundus* Walker, 1848 | Guatemala to Peru, Surinam, and Paraguay                                      |
| *Tabanus subruber* Bellardi, 1859 | Mexico, Guatemala, Honduras                                                  |
| *Tabanus unipunctatus* (Bigot, 1892) | Mexico to Colombia                                                          |
| *Tabanus unistratus* Hine, 1906 | Guatemala to Ecuador                                                        |
| *Tabanus vitiger ssp. guatemalanus* Hine, 1906 | USA, Bahamas, West Indies, Mexico to Surinam, French Guiana, and Brazil     |
| *Tabanus xenorrhynchus* Fairchild, 1947 | Guatemala to Panama                                                        |
| *Tabanus yucatanus* Townsend, 1897 | Mexico, Guatemala, El Salvador, Honduras, Nicaragua                        |

* Distribution according to Henriques (2016).

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**Figure 1.** Distribution map of new records of Tabanidae from Honduras.
Apaguiz 14°00'27"N, 86°32'26"W, 20.ii.1988, R. Cordero leg.; EAPZ42.723. 1♀, Francisco Morazán, 32 km Tegucigalpa, El Zamorano, 14°01’N, 87°00’W, J. Cabezas leg.; EAPZ42.698.

PANGONIINAE
PANGONIINI

_Esenbeckia wiedemanni_ (Bellardi, 1859)
Figure 2B, C

**Distribution.** Previously known exclusively from Mexico (Coscarón and Papavero 2009).

**Material examined.** Honduras: 1♂, 1♀, Francisco Morazán, Masicarán, Uyúca, 14°01’00”N, 87°05’00”W, 10–15.xi.2016, E. van den Berghe leg.; EAPZ42.764.

TABANINAE
DIACHLORINI

_Bolbodimyia atrata_ (Hine, 1904)
Figure 2D

**Distribution.** Previously known from U.S.A. and Mexico (Coscarón and Papavero 2009).

**Material examined.** Honduras: 2♂♂, Olancho, El Murmullo, Sierra de Agalta, 15°01’00”N, 85°47’00”W, 28.vi.1997, R. Cave leg.; EAPZ69.815.

_Bolbodimyia erythrocephala_ (Bigot, 1892)
Figure 2E

**Distribution.** Previously known from Costa Rica, Panama, Ecuador (Coscarón and Papavero 2009), and Colombia (Wolff and Miranda-Esquivel 2016).

**Material examined.** Honduras: 1♀, Yoro, Par. Nac. Pico Pijol, 15°13’00”N, 87°33’00”W, 22–23.vi.1998, R. Cave leg.; EAPZ42.652.

_Bolbodimyia galindoi_ Fairchild, 1964
Figure 3A, B

**Distribution.** Previously known from Costa Rica to Colombia (Coscarón and Papavero 2009).

**Material examined.** Honduras: 1♂, 1♀, Atlántida, Par. Nac. Pico Bonito, Rio Zacate, 15°41’35”N, 86°55’58”W, 35 m, 5.iii.2000, R. Cave, R. Cordero and J. Torres leg.; EAPZ27.180.
**Bolbodimyia philipi** Stone, 1954
Figure 3C

**Distribution.** Previously known from Guatemala, El Salvador, Costa Rica, Panama, and Colombia (Coscarón and Papavero 2009).
**Material examined.** Honduras: 1♂, Atlántida, Cuero y Salado, Salado Barra, 15°46'02"N, 86°59'51"W, 2 m, 25.i.2000, R. Cave, R. Cordero and J. Torres leg.; EAPZ22.452.

*Dasychela badia* (Kröber, 1931)

Figure 3D

**Distribution.** Previously known from Costa Rica and Panama (Coscarón and Papavero 2009).

**Material examined.** Honduras: 23♀♀, Gracias a Dios, Ciudad Blanca, 15°14'47"N, 84°58'2"W, 250 m, 15–26.ii.2017, E. van den Berghe leg., light trap; EAPZ43.577.

* Dichelacera marginata* Macquart, 1847

Figure 3E

**Distribution.** Previously known from Nicaragua to Brazil and Peru (Coscarón and Papavero 2009).

**Material examined.** Honduras: 1♀, Olancho, El Murmullo, Sierra de Agalta, 15°01'00"N, 85°47'00"W, 28.vi.1997, R. Cave leg.; EAPZ44.214.

* Dichelacera submarginata* Lutz, 1915

Figure 4A, B

**Distribution.** Previously known from Costa Rica to Venezuela, Peru, and Bolivia (Coscarón and Papavero 2009).

**Material examined.** Honduras: 1♀, Olancho, La Muralla, 15°04'56"N, 86°45'24"W, 26–30.iii.2013, O. Schlein leg.; EAPZ42.549. 1♂, Lempira, Par. Nac. Celaque, 14°28'46"N, 88°38'35"W, 1400 m, 27.iv.2018, E. van den Berghe leg.; EAPZ69.831. 1♂, Yoro, Par. Nac. Pico Pijol, Linda Vista, 15°10'35"N, 87°35'10"W, 1450 m, 21.iv.1999, R. Cave and J. Torres leg.; EAPZ42.829.

*Philopotabanus elviae* (Fairchild, 1943)

Figure 4C

**Distribution.** Previously known from Costa Rica and Panama (Coscarón and Papavero 2009).

**Material examined.** Honduras: 12♀♀, Atlántida, Par. Nac. Pico Bonito, Rio Zacate, 15°41'35"N, 86°55'58"W, 35 m, 5.v.2000, R. Cave leg.; EAPZ29.665.
**Stypommisa changena** Fairchild, 1986

*Figure 4D*

**Distribution.** Previously known from Costa Rica and Panama (Coscarón and Papa-vero 2009).
Figure 4. New records of Tabanidae from Honduras A, B Dichelacera submarginata Lutz (♀, ♂) C Philippotabanus elviae (Fairchild) (♀) D Stypommisa changena Fairchild (♂) E Tabanus claripennis (Bigot) (♀) F T. nebulosus De Geer (♀). Scale bars: 2 mm.
Material examined. HONDURAS: 1 ♂, Santa Bárbara, El Volcán, Trinidad, 15°08’02″N, 88°18’01″W, 1320 m, 26.vi.2000. R. Cordero and J. Torres leg.; EAPZ35.149.

TABANINI

Tabanus claripennis (Bigot, 1892)
Figure 4E

Distribution. Previously known from the West Indies, Costa Rica to Paraguay, Brazil, Argentina, and Chile (Coscarón and Papavero 2009).

Material examined. HONDURAS: 7 ♀♂, Francisco Morazán, El Zamorano, EAP, 14°01’N, 87°00’W, 5–29.vii.2020, H-trap, R. Argueta leg.; EAPZ43.572. 1 ♂, Choluteca, 6.7 km SE Santa Ana de Yusguare, 13°15’37″N, 87°04’40″W, 8.ix.1999, R. Cave and J. Torres leg.; EAPZ43.570.

Tabanus nebulosus De Geer, 1776
Figure 4F

Distribution. Previously known from Belize (Coscarón and Papavero 2009), Costa Rica (Fairchild 1961), Colombia, Venezuela, Trinidad, Surinam, Brazil, Bolivia, Paraguay, Barbados, and Argentina (Coscarón and Papavero 2009; Henriques 2016).

Material examined. HONDURAS: 2 ♀♂, Francisco Morazán, El Zamorano EAP, 14°01’N, 87°00’W, 850 m, v–vii, Estudiante EAPZ leg.; EAPZ75.022. 1 ♀, Francisco Morazán, El Zamorano EAP, 14°01’N, 87°00’W, 850 m, 31.v.2019, L. Moreno leg.; EAPZ75.023.

Key to the subfamilies, tribes, and genera of Tabanidae from Honduras

Modified from Fairchild (1969) and Burger (2009).

1 Hind tibiae without paired terminal spurs or spines; TABANINAE ............6
   – Hind tibiae with paired terminal spurs or spines, spines rarely absent or difficult to see .................................................................2

2 Third antennal segment with 7 or 8 distinct flagellomeres; tergite 9 undivided; PANGONIINAE .................................................................3
   – Third antennal segment with no more than 5 distinct flagellomeres; tergite 9 divided; CHRYSOPSINAE .................................................5

3 Eyes bare; frons with ridge-like callus, which may be bare or tomentose; PANGONIINI .................................................................Esenbeckia Rondani
   – Eyes pilose; frons flat, without any sort of callus; SCIONINII ..................4

4 Cell m₃ closed at wing margin .......................................................... Scione Walker
   – Cell m₃ open at wing margin .................................................. Fidena Walker
Wings with dark crossband (Fig. 2A), crossband absent at times; eyes in life with pattern of dots and bars .................................................. *Chrysops* Meigen

– Wings hyaline or cloudy on cross veins or elsewhere, without distinct crossband; eye pattern in life irregularly speckled .................................. *Silvius* Meigen

5 Basicosta without strong setae, if setae present usually less dense than those on adjoining costa; if setae on basicosta as dense as on costa, then vestiges of ocelli present; **DIACHLORININ** ............................................. 7

– Basicosta with numerous strong setae, setae equal in size and density to those on adjoining costa, if setae sparse, then without vestiges of ocelli; **TABANINI** ........................................................................... 22

6 Third antennal segment with strong dorso-basal tooth or forward-pointing spine that often reaches to or beyond end of first flagellomere............... 8

– Third antennal segment usually at most with acute dorso-basal angle ..... 12

8 Eyes densely pilose; antennal tooth reaching beyond apex of first flagellomere; proboscis longer than maxillary palpi; maxillary palpi slender, generally exceeding antennae; labella short, membranous; callus club shaped, much narrower than frons; wings with diffuse dark discal marking .......................................................... *Dasychela* Enderlein

– Eyes bare; other characters variable ........................................................................ 9

9 Stout species; body sometimes hairy and beelike; foretibiae usually inflated; long hair fringes on at least hind tibiae; maxillary palpi inflated; antennae short, stout, with dorsal tooth extending beyond apex of first flagellomere; labella shiny and sclerotized ............................................................ *Rhabdotylus* Lutz

– Slender species; all tibiae slender; rest of characters not as above ............... 11

10 Abdomen green or greenish, sparsely covered with hairs; hind tibial fringe moderate in length; all tibiae slender; wings hyaline, sometimes yellowish; not resembling bees .................................................. *Stibasoma* Schiner

– Abdomen not greenish, densely hirsute; hind tibial fringe long; at least foretibia inflated; wings variable, never entirely hyaline or uniformly tinted, generally with black or contrasting pattern; body often resembling bees (see Turcatel et al. 2010) .................................................. *Catachlorops* Lutz

11 Basal callus thin, ridge-like, narrower than frons; eyes unicolored, bright green in life, rarely bicolored or with faint median line; mesoscutum unicolored or weakly striped, not transversely banded .......................................................... *Dichelacera* Macquart

– Basal callus as wide as frons; eyes banded or unicolorous blackish in life; mesoscutum often transversely banded .................................. *Bolbodimyia* Bigot

12 Subcallus, and usually first antennal segment, greatly inflated and shiny; third antennal segment long and slender, with obtuse dorso-basal angle; tibiae slender or slightly incrassate; wings black or partly so, with apex sharply hyaline, apical half of vein R₄ bent sharply forward; maxillary palpi moderately slender, tomentose; clypeus tomentose .......................................................... *Bolbodimyia* Bigot

– Without above combination of characters .......................................................... 13
Tibiae, especially first two pairs, greatly inflated; subcallus, clypeus, and gena bare; maxillary palpi shiny and flattened; wings black at base, at least to ends of cells br and bm; labella membranous ....................................................14
– Tibiae not or but slightly inflated; without above combination of characters...15
14 Large, shiny bluish-black species; wings black from base to middle of cell d.. ................................................................. **Selasoma Macquart**
– Small species, mesoscutum, and often abdomen, with metallic brassy or greenish scale-like hairs; wings black from base to beyond end of cell d, with hyaline triangle in cells m_3_ and cua_1_ ....................... **Lepiselaga Macquart**
15 Mesopleura shiny or pearly tomentose in contrast to rest of pleura; wings usually with dark subapical marking......................... **Diachlorus Osten Sacken**
– Mesopleura not shiny or pearly tomentose, not contrasting with other pleural sclerites; wings without dark subapical marking..............................................16
16 Basal callus absent.............................................................. **Chlorotabanus Lutz**
– Basal callus present, reduced at times ....................................................17
17 Labella sclerotized; frons narrow, generally over 5 times as long as its basal width; eyes in life unicolored, unbanded; dorsal angle on third antennal segment strong ................................................................. **Phaeotabanus Lutz**
– Labella membranous; frons generally less than 4 times as long as its basal width; eyes in life usually banded; dorsal angle of third antennal segment variable....18
18 Eyes bare, with at least 2 transverse bands in life; mostly small species with moderately broad frons often with median dark-haired patch; callus rounded or square, generally as wide as frons ................................. **Stenotabanus Lutz**
– Eyes pilose or bare, with at most 1 dark median, generally unicolored, rarely bicolored; rest of characters not as above.......................................................19
19 Vertex with well-marked tubercle and/or with clear vestiges of ocelli; eyes bare; frons narrow; basal callus club-shaped or ridge-like .........................20
– Vertex without tubercle or clear vestiges of ocelli, slightly raised shiny or discolored tubercle rarely present; if tubercle present, then eyes pilose, or frons broad, or basal callus rounded..................................................22
20 Wings with extensive dark pattern not consisting of spots on cross veins; if wings apparently unmarked, then thorax prominently striped, or frons exceedingly narrow and callus thread-like ................ **Philopotabanus Fairchild**
– Wings hyaline, tinted, or with dark pattern consisting primarily of dark spots around cross veins .................................................................21
21 Wings hyaline or evenly tinted, with costal cell often darker, but never with apical clouds or spots on cross veins; frontal callus clavate or ridge-like; abdomen black or brown, nearly always with transverse bands at least on fourth segment, rarely otherwise; appendix on fork of vein R_4_ absent ........ **Leucotabanus Lutz**
– Wing with clouds on at least discal cross veins, often with apical infuscation, if entirely hyaline or tinted, then abdomen and thorax not as above; frontal callus variable; wings often with appendix on fork of vein R_4_ .......................... **Stypommisa Enderlein**
22 Vertex with small, rounded, sometimes indistinct, tubercle; eyes of female usually pilose, densely so on males; wings with all cross veins prominently spotted .............................................................................. **Poeciloderas Lutz**
– Vertex rarely with tubercle; without above combination of characters ...........
........................................................................................................... **Tabanus Lutz**

**Acknowledgements**

We are grateful to the reviewers, Daniel Carmo and Mauren Turcatel, as well as the editor, Torsten Dikow, for critically reading the manuscript and contributing to improve the quality of this paper. We thank Milena Agila for taking the photographs and arranging the plates for publication. We also thank Ronel Argueta for his help constructing and maintaining the traps at Zamorano.

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