

# Corrections and additions to Catalogue of Neotropical Diptera (Tabanidae) of Coscarón & Papavero (2009)

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**ABSTRACT.** Corrections and additions to Catalogue of Neotropical Diptera (Tabanidae) of Coscarón & Papavero (2009). Some corrections and omitted taxonomic information for the “Catalogue of Neotropical Diptera. Tabanidae” are presented. Fifteen recently described species are listed for the Neotropical region. Presently, the Neotropical region has 1,205 Tabanidae species, besides 35 unrecognized species and 29 *nomina nuda*.

**KEY WORDS.** Neotropical region, Tabanidae, taxonomic changes.

**RESUMO.** Correções e adições ao Catálogo de Diptera Neotropical (Tabanidae) de Coscarón & Papavero (2009). São apresentadas correções e informações taxonômicas omitidas no “Catalogue of Neotropical Diptera. Tabanidae”. Quinze espécies recentemente descritas para a região Neotropical são adicionadas. Atualmente a Região Neotropical possui 1.205 espécies de Tabanidae, além de 35 espécies não reconhecidas e 29 *nomina nuda*.

**PALAVRAS-CHAVE.** Mudanças taxonômicas, Região Neotropical, Tabanidae.

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Since the publication of the Catalogue of Neotropical Diptera (Tabanidae) of Coscarón & Papavero (2009), active works in Tabanidae has resulted in several recently described species. We catalog these here, and make some corrections of omission and typographical error.

The first part of this article (Part I) is a table with spelling corrections. Part II is an addendum to the Neotropical Catalogue of Tabanidae based on the following references cited by Coscarón & Papavero (2009), but from which some taxonomic information was excluded, without justification: Barros & Gorayeb (1995, cited erroneously as Gorayeb & Barros (1995)); Henriques & Rafael (1995); Burger (1999); Chainey *et al.* (1999); Limeira-de-Oliveira & Rafael (2005) and Gorayeb & Barros (2006). Part III is an additional list of recently described species. Finally, we summarize the number of species in each taxon (subfamily and tribe).

## MATERIAL AND METHODS

We addressed errors in the Coscarón & Papavero (2009) catalog and its incompatibilities with the previous catalog by Fairchild & Burger (1994), using the original papers for each case. Additionally, recently described species are catalogued here, and the number of species updated.

The acronyms of depository institutions from the additional type material cited here are: BMNH – The Natural History Museum, London, England; CAS – Department of Entomology, California Academy of Sciences, San Francisco, USA; CPAP – Centro de Pesquisa Agropecuária do Pantanal/EMBRAPA, Corumbá, Brazil; CZMA – Coleção Zoológica

da Universidade Estadual do Maranhão, Caxias, Brazil; CZPB – Coleção Zoológica Paulo Bührnheim, Universidade Federal do Amazonas, Manaus, Brazil; FSCA – Florida State Collection of Arthropods, Gainesville, USA; IEMUS – Instituto de Entomologia, Universidade Metropolitana, Santiago, Chile; INPA – Instituto Nacional de Pesquisas da Amazônia, Manaus, Brazil; IOC – Instituto Oswaldo Cruz, Rio de Janeiro, Brazil; MIZA – Museo del Instituto de Zoología Agrícola Francisco Fernández Yépez, Maracay, Aragua, Venezuela; MNHN – Muséum National d’Histoire Naturelle, Paris, France; MNRJ – Museu Nacional do Rio de Janeiro, Brazil; MPEG – Museu Paraense Emílio Goeldi, Belém, Brazil; MZUSP – Museu de Zoologia da Universidade de São Paulo, Brazil. Abbreviations in the text: col. – collection, Distr. – distribution, HT – holotype, PT – paratype, Ref. – reference, rev. – revision.

## RESULTS

Part I. Typographical errors and corrections (see Table I).

Part II. Addendum with omission and corrections to taxonomic information.

Here we present nomenclatural corrections and omissions from the catalog. Each name is followed by corrections and references, if applicable.

*Acanthocera (A.) lutzi* (Enderlein, 1922). Synonymized under *Acanthocera (A.) coarctata* (Wiedemann, 1828) by Henriques & Rafael (1995), information omitted by Coscarón & Papavero (2009: 56).

*Acanthocera (Nothocanthocera) distincta* Henriques & Rafael, 1995: 425, figs. 23a-c, 49. Type-locality: Brazil, Ama-

Table I. Spelling and species number corrections of the “Catalogue of Neotropical Diptera. Tabanidae” published by Coscarón and Papavero (2009) and our corrections.

Page	Error as printed	Correction
1	includes 1,082 nominal species	includes around 1,190 nominal species
1	plus 34 unrecognized ones	plus 35 unrecognized ones
1	In Table, under Chrysopsini, number of species 93	84 (number of species)
2	In Table, under Diachlorini, number of species 562”	581
2	In Table, under <i>Fidena</i> ( <i>Fidena</i> ), number of species 83”	84
2	in Table, under <i>Fidena</i> ( <i>Neopangonia</i> ) number of species 2	1
2	in Table, under <i>Pityocera</i> number of species 6	5
2	in Table, under <i>Pityocera</i> ( <i>Pityocera</i> ) number of species 2	1
2	in Table, under <i>Psaeudelaphella</i>	<i>Pseudelaphella</i>
2	in Table, under <i>Scaptia</i> number of species 31	30
2	in Table, under <i>Scaptia</i> ( <i>Pseudoscione</i> ) number of species 17	16
2	in Table, under TABANINAE number of species 767	787
2	in Table, under Diachlorini number of species 562	581
3	in Table, under Dasybasis number of species 70	69
3	in Table, under <i>Stenotabanus</i> number of species 73	93
4	in Table, under Tabanini number of species 205	206
4	in Table, under <i>Atylotus</i> number of species 1	2
21	under <i>Brennania</i> Philip, 1935	<i>Brennania</i> Philip, 1941
112	<i>Stenotabanus</i> ( <i>Stenotabanus</i> ) <i>wilkersoni</i> Chainey, Hall & Gorayeb, 1999	<i>Stenotabanus</i> ( <i>Stenotabanus</i> ) <i>wilkersoni</i> Chainey in Chainey, Hall & Gorayeb, 1999
114	leucopleurale HT male [MZUSP]	HT female [IOC]. Ref. Turcatel et al. (2010)
115	<i>Stypommisa</i> Enderlein, 1914	<i>Stypommisa</i> Enderlein, 1923
119	<i>Atylotus</i> Osten Sacken, 1875	<i>Atylotus</i> Osten Sacken, 1876
146	<i>Tabanus</i> <i>weyrauchi</i> Barreto, 1949: 43, figs. 7, 9.	<i>Tabanus</i> <i>weyrauchi</i> (Barreto), 1949: 43 figs. 7, 9 ( <i>Chelommia</i> )

zonas, São Gabriel da Cachoeira, morro dos seis lagos. Distr. – same. HT female [INPA], 4 females PT [INPA, MPEG, MZUSP]. Ref. Henriques, 1995: 67 (col. INPA). This species was omitted by Coscarón & Papavero (2009).

**Catachlorops** (*Psarochlorops*) *lineatus* Burger, 1999: 52 (as *C. (Amphichlorops)* Burger, 1999, in error). Coscarón & Papavero (2009: 61, 188) keeps the error. Abstract, discussion and figures in Burger (1999: 51, 53 and 67 respectively) treat the species as *Catachlorops* (*Psarochlorops*).

**Dichelacera** (*Dichelacera*) *corumbaensis* Barros & Gorayeb, 1995: 483, figs. 1–5. Type-locality: Brazil, Mato Grosso do Sul, Corumbá. Distr. – same. HT female [MPEG], female PT [MPEG]. Was included in the references of Coscarón & Papavero (2009: 161 cited as “Gorayeb, I. de S. & A. T. M. de Barros”, in error), but is absent in the text of *Dichelacera* (pages 81–88).

**Dichelacera melanoptera** Hine, 1920. Classified as *incertae sedis* by Henriques & Rafael (1995). Treated as (*Nothocanthocera*) Fairchild by Coscarón & Papavero (2009: 88).

**Dicladocera** Lutz, 1913. Presently with no subgeneric division because *Nubilooides* Coscarón & Philip (1967) was elevated to generic status by González (1999). The subgenus (*Dicladocera*) cited in error by Coscarón & Papavero (2009: 89).

**Mimodynerus** Enderlein, 1922 (including *Lutziella* Enderlein, 1922). Synonymized under *Acanthocera* (*Acanthocera*) by Henriques & Rafael (1995). In error, treated as valid subgenus of *Acanthocera* Macquart by Coscarón & Papavero (2009: 56–57).

**Nothocanthocera** Fairchild, 1969. Considered a subge-

nus of *Acanthocera* by Henriques & Rafael (1995). In error, treated by Coscarón & Papavero (2009: 87–88) as a subgenus of *Dichelacera* Macquart.

**Rhabdotylus** Lutz, 1913. Turcatel et al. (2010) followed the classification proposed by Trojan (1998), in which *Rhabdotylus* Lutz was restored to generic status separate from *Stibasoma* Schiner. In error, treated by Coscarón & Papavero (2009: 112–113) as a valid subgenus.

**Stibasoma bella** Limeira-de-Oliveira & Rafael, 2005: 639, figs. 1–6. Type locality: Brazil, Maranhão, Carolina, balneário Urupuxete, 07°23'54"S; 47°15'00"W. Distr. – Maranhão. HT female [INPA]. Ref. Turcatel et al. 2010: 7, figs. 10–12 (rev.). Was included in the references of Coscarón & Papavero (2009: 168), but is absent in the text (pages 113–115).

**Tabanus pseudonebulosus** Gorayeb & Barros, 2006: 213, figs. 1–14. Type-locality: Brazil, Santana do Araguaia. Distr. – Venezuela, Brazil (Amazonas, Pará, Mato Grosso do Sul). HT female [MPEG], 216 females and 5 males PT [BMNH, CPAP, INPA, IOC, MIZA, MPEG, MZUSP]. Was included in the references of Coscarón & Papavero (2009: 161), but is absent in the text (page 140).

#### Nomen nudum

**Tabanus bibanda** cited in Bassi et al. (2000: 108–110) as new species, but not described therein. Considered here a **nomen nudum**. Absent in Coscarón & Papavero (2009).

#### Part III. Recently described species

New taxa described after the submission of “Catalogue

of Neotropical Diptera. Tabanidae" (Coscarón & Papavero, 2009) for editing in 2007 are listed below, along with their type-locality and museums where types are deposited.

**Pangoniinae**  
**Pangoniini**

*Esenbeckia (Esenbeckia) rafaeli* Limeira-de-Oliveira, 2008: 426, figs. 1–6. Type-locality: Brazil, Maranhão, Carolina, rio Itapecuru, 07°23'54"S; 47°15'00"W. Distr.: Brazil (Maranhão). HT female [INPA], 8 females PT [CZMA, INPA, MPEG].

**Tabaninae**  
**Diachlorini**

*Agelanius chiloensis* González, 2009: 13, figs. 1a–h. Type-locality: Chile, Chiloé Province, Isla Surgidero, Archipiélago Guapíquian. Distr. – same. HT female [IEMUS], 3 females PT [IEMUS].

*Catachlorops (Rhamphidommia) dubius* Henriques & Krolow, 2009: 02, figs. 1a–d. Type-locality: Brazil, Amazonas, Lábrea, ramal Apaeral, km 09, Sítio São Raimundo, 07°19'10"S; 64°40'07"W. Distr. – Brazil (Amazonas). HT female [INPA], 12 females PT [CAS; FSCA; INPA; MPEG; MZUSP].

*Chlorotabanus falsiflagellatus* Krolow & Henriques, 2010: 11, figs. 3a–e. Type-locality: Brazil, Amazonas, Barcelos, Serra do Aracá, 1,100m, 0°54'35"N, 63°26'01"W. Distr. – same. HT female [INPA], 12 females PT [BMNH, CAS, INPA, MPEG, MZUSP].

*Chlorotabanus flagellatus* Krolow & Henriques, 2009: 204, figs. 1–14. Type-locality: Brazil, Amazonas, Manaus. Distr. – Brazil (Amazonas, Pará). HT female [INPA], 39 females and 13 males PT [CAS, CZPB, FSCA, INPA, MPEG, MZUSP]. Ref. Krolow & Henriques, 2010: 12, figs. 4a–i (rev.).

*Chlorotabanus leuconotus* Krolow & Henriques, 2010: 21, figs. 8a–i. Type locality: Brazil, Amazonas, Manaus. Distr. – Colombia, Guyana, French Guiana, Brazil (Roraima, Amazonas, Pará, Maranhão, Rondônia); Peru (Madre de Dios). HT female [INPA], 35 females PT [BMNH, CZMA, INPA, MNHN, MPEG].

*Chlorotabanus microceratus* Krolow & Henriques, 2010: 28, figs. 10a–i. Type-Locality: Brazil, Maranhão, Mirador. Distr.– Brazil (Maranhão). HT female [INPA], 35 females PT [BMNH, CAS, CZMA, FSCA, INPA, MPEG].

*Dichelacera (Dichelacera) gemmae* Limeira-de-Oliveira, Gorayeb & Henriques, 2009: 104, figs. 1–7. Type-locality: Brazil, Maranhão, Carolina, Fazenda Marajá, 07°15'40"S/47°22'48"W. Distr. – Brazil (Maranhão). HT female [MPEG], 27 females PT [CZMA, FSCA, INPA, MNRJ, MPEG, MZUSP].

*Philipotabanus (Mimotabanus) henriquesi* Limeira-de-Oliveira, Gorayeb & Rafael, 2009: 504, figs. 1–16. Type-locality: Brazil, Maranhão, Carolina, Balneário Urupuxete, 07°23'54"S; 47° 15'00"W. Distr. – Brazil (Maranhão). HT female [INPA], 29 females and 2 males PT [CZMA, INPA, MNRJ, MPEG, MZUSP].

*Stibasoma manauensis* Turcatel, Rafael & Carvalho in Turcatel, Carvalho & Rafael, 2010: 30, figs. 65–68. Type-locality: Brazil, Amazonas, Manaus, Reserva Ducke. Distr. – same. HT female [INPA], female PT [INPA].

*Stibasoma ruthae* Turcatel, Rafael & Carvalho in Turcatel, Carvalho & Rafael, 2010: 33, figs. 72–77. Type-locality: Brazil, Amazonas, Manaus, Reserva 1501, Km 41, ZF3. Distr. – Brazil (Amazonas). HT female [INPA], male PT [INPA].

Comments. Presently, with the amendments noted here, the total number of nominal species in the Neotropical region is 1,205 (Table II), with 35 unrecognized species, and 29 *nomina nuda*.

Table II. Species numbers for Neotropical Tabanidae by subfamily and tribe.

Subfamily	Tribe	Number of species
Chrysopsinae		88
	Bouvieromyiini	3
	Chrysopsini	84
	Rhinomyzini	1
Pangoniinae		316
	Mycteromyiini	16
	Pangoniini	130
	Scepsini	1
	Scionini	169
Tabaninae		801
	Diachlorini	594
	Tabanini	207
Total		1205

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