



A catalogue of the types of Limoniidae and Tipulidae (Diptera: Tipulomorpha) in the collection of the Museu de Zoologia da Universidade de São Paulo, Brazil

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Abstract

Following a recommendation of the International Code of Zoological Nomenclature, a catalogue of the type-specimens of Tipulomorpha (Diptera) held in the collection of the Museu de Zoologia da Universidade de São Paulo, state of São Paulo, Brazil (MZSP), is provided, with information on 118 types (including 72 primary types) of 89 Neotropical (mostly Brazilian) taxa of the families Limoniidae and Tipulidae.

Key words: Limoniidae, Tipulidae, taxonomy, nomenclature, scientific collections

Introduction

The Tipulomorpha *sensu stricto* (Wood & Borkent 1989) are one of the largest subgroups of lower Diptera. Including over 15,000 extant species in *ca.* 500 genera and subgenera in four families, the taxon received the status of suborder in the latest classification of the Diptera (Amorim & Yeates 2006). Tipulidae and Limoniidae are widely distributed families, including *ca.* 4,000 and 11,000 species, respectively. Pediciidae, with little more than 400 species, is lacking only in the Afrotropical Region. Cyndrotomidae, with 71 described species, occurs mainly in the Nearctic, Palearctic, Oriental and Australasian regions. This family is also lacking in the Afrotropical Region, and is represented in the Neotropics by a single species, from Chile (Oosterbroek 2005).

In the Neotropics, the Tipulomorpha is also one of the largest groups of Diptera, with *ca.* 3,000 nominal species (Alexander & Alexander 1970), most of which described by Charles Paul Alexander. However, although including a relatively large number of described taxa, the Neotropical fauna of Tipulomorpha remains largely unknown. Many species are known exclusively from their type series and little information is found in the literature other than the data provided in their original descriptions which, by their turn, are in general short and superficial. The study of the biology of Neotropical species of Tipulomorpha has been a virtually untouched field of research, and the taxonomy of many groups at different levels is in need of review. The most recent attempts to taxonomically revise and study elements of the Neotropical fauna in a phylogenetic context are the works of De Jong (1989), Ribeiro and Amorim (2002), and Ribeiro (2003, 2005).

Following a recommendation of the International Code of Zoological Nomenclature (ICZN 1999: 72F.4), a catalogue of the type-specimens of Tipulomorpha held in the collection of the Museu de Zoologia da Uni-

versidade de São Paulo, state of São Paulo, Brazil (MZSP) is provided. The Diptera collection at this institution is the largest and most representative in Brazil (Carvalho *et al.* 2002), but the Tipulomorpha collection is relatively small. The Tipulomorpha types of the collection are from the families Tipulidae (23 holotypes, 3 allotypes and 11 paratypes) and Limoniidae (49 holotypes, 7 allotypes and 25 paratypes) and represent 89 taxa (species and subspecies) exclusively from the Neotropical Region, mostly Brazil. Except for two *Elephantomyia* (Limoniidae) types designated by Ribeiro & Amorim (2002), all of these types were designated by Charles Paul Alexander, based on specimens collected and sent to him mostly by professional Brazilian entomologists working at different institutions (see Appendix).

The list given below is in alphabetical order of genus, subgenus, and species epithet. Name combinations and spellings follow the Catalogue of the Crane Flies of the World (Oosterbroek 2005). For each species section, the first line provides the name and authorship, but in the subgeneric combination as provided in Oosterbroek (2005); the following lines give the data on the name's original publication (including figure citations), relevant citations from publications other than the original description and type locality. When necessary, the original genus in which the species was described is indicated within brackets. Finally, in the remaining lines the information on the type specimens held in the collection are given. Label data are quoted in double quotation marks. Each line in the text of each label is separated by a vertical line. In case of handwriting on printed labels, the handwritten text is reproduced in italics; completely handwritten and completely printed labels are reproduced in regular font. This standard for reproducing the information of the labels followed Abadjiev (2005) and was adopted due to the facility it provides for the recognition of each specimen. For the sake of clarity, additions to some of the original information of labels, such as abbreviated collecting dates and incomplete locality and collector's names, are included within square brackets. Details on the mode and condition of preservation of the specimens are given, including a list of the missing structures. For some type specimens designated by C. P. Alexander, it is possible that some parts treated here as "missing" (*e.g.*, antenna, wing and male terminalia) were dissected, mounted in microscope slides, and retained by that author. These parts may be housed at the Alexander Collection of Crane Flies, United States National Museum, Smithsonian Institution, Washington DC, USA. Informing the cases to which this situation applies to is beyond the scope of this paper.

Family Limoniidae

Atarba (*Atarba*) *almeidai* Alexander, 1946

Alexander, 1946: 2–4 (original description); 9, figure 2 (wing). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype female with labels: (1) handwritten on white paper: "Brazil | S. Paulo | Boracea | 900m. IV. 13. 42 [1942] | Almeida & | Travassos"; (2) printed with handwritten inscriptions on red paper: "HOLOTYPE ♀ | *Atarba* | *almeidai* | C. P. Alexander".

Preservation: mounted at the tip of a pinned paper triangle; three undetermined legs detached, glued on the paper triangle. Missing parts: right wing and three undetermined legs.

Atarba (*Ischnothrix*) *seticornis* Alexander, 1946

Alexander, 1946: 1–2 (original description); 9, figure 1 (wing). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype male with labels: (1) handwritten on white paper: "Brazil | S. Paulo | Boracea | 900met. IV – 13. 42 [1942] | Almeida & | Travassos"; (2) printed with handwritten inscriptions on red paper: "HOLOTYPE ♂ | *Atarba* | (*Ischnothrix*) | *seticornis* | C. P. Alexander".

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on plastic slide pinned with the specimen. Missing parts: right antenna, right wing, right legs and left hind leg.

***Austrolimnophila (Austrolimnophila) bifidaria* Alexander, 1942**

Alexander, 1942: 56–57 (original description); 75, figures 23 (wing) and 30 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 900m; XII. 40 [1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Austrolimnophila* | *bifidaria* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: entire body except for the wings and some leg fragments. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Austrolimnophila (Austrolimnophila) comantis* Alexander, 1948**

Alexander, 1948: 161–163 (original description). Type locality: Brazil, Rio de Janeiro, Teresópolis.

Allotype female with labels: (1) handwritten on white paper: “Brazil | Rio | Teresopolis | 1000m. | X-1942 | Travassos”; (2) printed with handwritten inscriptions on red paper: “ALLOTYPE ♀ | *Austrolimnophila* | *comantis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: right antenna, right front leg and left middle leg.

***Austrolimnophila (Austrolimnophila) pallidistyla pallidistyla* Alexander, 1942**

Alexander, 1942: 57–59 (original description); 75, figures 24 (wing) and 32 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “S. Brazil | Sao Paulo | Serra | Cantareira | 900m. Dez. [December] | 40 [1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Austrolimnophila* | *pallidistyla* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen detached, glued on the paper triangle; terminalia mounted on plastic slide pinned with the specimen. Missing parts: flagella, right wing, right front leg, left middle leg and left hind leg. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Austrolimnophila (Austrolimnophila) pallidistyla perlimbata* Alexander, 1942**

Alexander, 1942: 59 (original description). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype female with labels: (1) handwritten on white paper: S. Brazil | Sao Paulo | Serra Cant- | areira | 900m XII-40 [1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Austrolimnophila* | *pallidistyla* | *perlimbata* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: right antenna, left wing, right legs and left hind leg. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Austrolimnophila (Austrolimnophila) subpacifera* Alexander, 1942**

Alexander, 1942: 61–62 (original description); 75, figures 26 (wing) and 33 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brasil, Sao Paulo | S. Cantareira | 900m. XII. 40 [1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Austrolimnophila* | *subpacifera* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: flagella, left front leg, right middle leg and hind legs. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Austrolimnophila (Austrolimnophila) tenuilobata* Alexander, 1942**

Alexander, 1942: 59–61 (original description), 75, figures 25 (wing) and 31 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil, Sao Paulo | S. Cantareira | 900m; XII. 40 [1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Austrolimnophila* | *tenuilobata* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on plastic slide pinned with the specimen; part of abdomen and part of one undetermined leg glued on piece of paper pinned with the specimen. Missing parts: antenna, palpi, wings and most legs. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Austrolimnophila (Mediophragma) delectissima* Alexander, 1954**

Alexander, 1954a: 37–38 (original description). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype female with labels: (1) handwritten on white paper: “Boracea | S Paulo | Brazil | Aug.-22, 49 [August 22, 1949] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Austrolimnophila* | *delectissima* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: right antenna, right wing and right legs.

***Cryptolabis (Cryptolabis) pallidivena* Alexander, 1969**

Alexander, 1969: 372–373 (original description); 369, figure 35 (wing). Type locality: Panama, Chiriqui, Volcan.

Paratypes. 4 males with labels: (1) handwritten on white paper: “Panama | Volcan | V- 22. 54 [1954] | Field”; (2) printed with handwritten inscriptions on blue paper: “PARATYPES | *Cryptolabis* | *pallidivena* | C. P. Alexander”.

Preservation: all specimens mounted at the tips of paper triangles pinned together; all specimens intact with undissected terminalia.

***Cryptolabis (Cryptolabis) travassosi* Alexander, 1945**

Alexander, 1945a: 275–276 (original description); 282, figures 16 (wing) and 22 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | S. Cantareira | 900m; XII. 40 [1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Cryptolabis* | *travassosi* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen with terminalia mounted on plastic slide pinned with the specimen. Missing parts: right wing, front legs and middle legs. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Ctenolimnophila (Campbellomyia) neolimnophiloides* Alexander, 1942**

Alexander, 1942: 64–65 (original description); 75, figure 28 (wing). Type locality: Brazil, São Paulo, Juquiá.

Holotype female with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m. [Nov. 40 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE | *Ctenolimnophila* | *neolimnophiloides* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: flagella, right wing, right legs and left hind leg.

***Dicranomyia (Caenoglochina) capitonius* (Alexander, 1945)**

Alexander, 1945a: 259–261 (original description); 281, figures 8 (wing) and 11 (male terminalia); (as *Limonia*). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m XI-40 [1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Limonia* | *capitonius* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on plastic slide pinned with the specimen. Missing parts: flagella, wings and legs.

Allotype female with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | Juquiá | 400m. | Nov. 40 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “ALOTYPE ♀ | *Limonia* | *capitonius* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; entire body missing except for one undetermined wing.

***Dicranomyia (Dicranomyia) extranea* (Alexander, 1944)**

Alexander, 1944a: 25–27 (original description); 25, figures 2 (wing) and 5 (male terminalia); (as *Limonia*). Type locality: Brazil, Minas Gerais, Alto Caparaó.

Paratype female with labels: (1) handwritten on white paper: “Brazil | M. Gerais | A. Caparaó | 2500m. | Nov. 41 [November, 1941] | L. Gomes”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE | *Limonia* | *extranea* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: flagella and left middle leg.

***Dicranomyia (Dicranomyia) itatiayana* (Alexander, 1944)**

Alexander, 1944b: 308–310 (original description); 295, figure 7 (male terminalia); (as *Limonia*). Type locality: Brazil, Rio de Janeiro, Itatiaia.

Paratype male with labels: (1) handwritten on white paper: “Brazil | M. Gerais | A. Caparaó | 2600m. | Dec. 41 [December, 1941] | L. Gomes”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE | *Limonia* | *itatiayana* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: right flagellum, left middle leg and right hind leg.

***Dicranomyia (Dicranomyia) microsoma* (Alexander, 1944)**

Alexander, 1944a: 23–25 (original description); 25, figures 1 (wing) and 4 (male terminalia); (as *Limonia*). Type locality: Brazil, Minas Gerais, Alto Caparaó.

Paratype female with labels: (1) handwritten on white paper: “Brazil | M. Gerais | Alto | Caparaó | 2500m. | Nov. 41 [November, 1941] | L. Gomes”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE | *Limonia* | *microsoma* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing part: right flagellum.

***Dicranomyia (Dicranomyia) miseranda* (Alexander, 1945)**

Alexander, 1945a: 258–259 (original description); 281, figure 7 (wing); (as *Limonia*). Type locality: Brazil, São Paulo, Juquiá.

Holotype female with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | Juquia | 400m | Nov. [November] 1940 | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Limonia* | *miseranda* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: entire body missing except one undetermined wing and fragments of legs.

***Dicranomyia (Dicranomyia) mistura* (Alexander, 1942)**

Alexander, 1942: 52–54 (original description); 73, figures 18 (wing) and 21 (male terminalia); (as *Limonia*). Type locality: Brazil, São Paulo, Embu-Guaçu.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cabeceiras | M’Boy Guassu | Campos | Dec.18.40 [December 18, 1940] | J. D’Amico”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Limonia* | *mistura* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: head, left wing and all legs.

***Dicranomyia (Dicranomyia) palliditerga* (Alexander, 1942)**

Alexander, 1942: 51–52 (original description); 73, figures 17 (wing) and 22 (male terminalia); (as *Limonia*). Type locality: Brazil, São Paulo, Embu-Guaçu.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | S. Cabeceiras | M’Boy Guassu | Campos | Dec.18.’40 [December 18, 1940] | J. D’Amico”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Limonia* | *palliditerga* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right flagellum, right wing and most legs except left front leg.

***Elephantomyia (Elephantomyia) corniculata* Ribeiro & Amorim, 2002**

Ribeiro & Amorim, 2002: 8–10 (original description); 9, figures 13 (head), 14 (antenna), 15 (maxillary palpi), 16 (thorax) and 17 (wing); 10, figures 18 and 19 (male terminalia). Type locality: Brazil, São Paulo, Cajuru.

Holotype male with labels: (1) printed on white paper: “Brazil, São Paulo, Cajuru | Faz. Rio Grande | 21°12’S, 47°09’W | 02–18/xii/1999 | G. Melo & F. Nascimento | White malaise trap”; (2) printed with red font on white paper: “*Elephantomyia corniculata* | Ribeiro & Amorim, 2002. | Male Holotype”.

Preservation: Slide mounted specimen. Missing parts: most legs except left front leg.

***Elephantomyia (Elephantomyia) juquiensis* Alexander, 1945**

Alexander, 1945b: 27–29 (original description); 42, figure 11 (male terminalia). Ribeiro & Amorim, 2002: 5 (redescription), figure 4 (male terminalia); 4, figures 1 (head), 2 (thorax) and 3 (wing). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m Nov. 40 [November, 1940] | Travassos; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Elephantomyia* | *juquiensis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: flagella, right wing, right legs, left front leg and left middle leg.

***Elephantomyia (Elephantomyia) vesca* Ribeiro & Amorim, 2002**

Ribeiro & Amorim, 2002: 10–12 (original description); 11, figures 20 (antenna), 21 (maxillary palpi) and 22 (thorax); 12, figure 24 (male terminalia); 13, figure 25 (male terminalia). Type locality: Brazil, São Paulo, Ribeirão Grande, Parque Estadual de Intervales.

Holotype male with labels: (1) printed on white paper: “Brazil, São Paulo | Parque Estadual de Intervales | Near Research Base | 30 / X / 2000. G. C. Ribeiro | At light”; (2) printed with red font on white paper: “*Elephantomyia vesca* | Ribeiro & Amorim, 2002. | Male. Holotype”.

Preservation: Slide mounted specimen.

***Ellipteroides (Progonomyia) nigroluteus* (Alexander 1971)**

Alexander 1971: 258–259 (original description); 266, figure 38 (wing); (as *Gonomyia*). Type locality: Brazil, São Paulo, Juquiá.

Holotype female with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Juquiá | 300m. | Feb. 22. 41 [February 22, 1941] | Travassos; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Gonomyia* | *nigrolutea* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: antennae, right wing and legs.

***Ellipteroides (Progonomyia) subsaturatus* (Alexander, 1942)**

Alexander, 1942: 67–68 (original description); 77, figures 36 (wing) and 37 (male terminalia); (as *Gonomyia*). Type locality: Brazil, São Paulo, Embu-Guaçu.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | S. Cabeceiras | M’Boy Guassu | Campos | XII - 18. 40 [December 18, 1940] | J. D’Amico”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Gonomyia* | *subsaturata* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: flagella, right wing and all legs.

***Epiphragma (Epiphragma) juquicola* Alexander, 1945**

Alexander, 1945a: 266–268 (original description). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m. | Nov. 1940 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Epiphragma* | *juquicola* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: right flagellum and front legs.

***Epiphragma (Epiphragma) nigripleuralis* Alexander, 1945**

Alexander, 1945b: 17–19 (original description); 42, figure 8 (male terminalia). Type locality: Brazil, Santa Catarina, Nova Teutônia.

Paratype of unknown sex with labels: (1) printed on white paper: “Brazil - S. Paulo | Boracea 900ms. | 13.IV.1942 | Almeida & Trav. F^o [Travassos Filho]”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE | *Epiphragma* | *nigripleuralis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: hind legs, abdomen and terminalia. Additional note: the sex of this specimen is considered as unknown in the original description.

***Epiphragma (Epiphragma) serristyla* Alexander, 1945**

Alexander, 1945b: 19–22 (original description); 42, figure 9 (male terminalia). Type locality: Brazil, Rio de Janeiro, Teresópolis.

Allotype female with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | Juquiá | 300m. | II. 22 – 41 [February 22, 1941] | Travassos”; (2) printed with handwritten inscriptions on red paper: “ALLOTYPE ♀ | *Epiphragma* | *serristyla* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; abdomen detached, glued on the paper triangle. Missing parts: right flagellum, right wing and all legs.

***Erioptera (Mesocyphona) aglaia* Alexander, 1945**

Alexander, 1945b: 30–32 (original description); 43, figure 12 (wing). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype female with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Boracea | 900m. | IV-13.42 [April 13, 1942] | Almeida - | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Erioptera* | *aglaia* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: antennae, right wing and right legs.

***Erioptera (Mesocyphona) euphrosyne* Alexander, 1945**

Alexander, 1945b: 32–34 (original description); 43, figure 15 (male terminalia). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m. | X – 5. 40 [October 5, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Erioptera* | *euphrosyne* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle together with Allotype; part of abdomen with terminalia mounted on plastic slide pinned with the specimen. Missing parts: right antenna, wings, front legs, left middle leg and hind legs.

Allotype female with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m. | X – 5. 40 [October 5, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “ALLOTYPE ♀ | *Erioptera* | *euphrosyne* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle together with Holotype. Missing parts: left flagellum, left wing and all legs.

***Erioptera (Mesocyphona) triangularis* Alexander, 1945**

Alexander, 1945b: 35–37 (original description); 43, figure 13 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil - | S. Paulo | S. Cantareira | 900m. | Dec. 1940 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Erioptera triangularis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; one undetermined wing detached and glued on the paper triangle; part of abdomen with terminalia mounted on a plastic slide pinned with the specimen; pinned together with another specimen identified by C. P. Alexander as *Erioptera fuscirena* Alexander. Missing parts: head, one undetermined wing and all legs. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Geranomyia damicoi* (Alexander, 1942)**

Alexander, 1942: 54–55 (original description); 73, figures 19 (wing) and 20 (male terminalia); (as *Limonia*). Type locality: Brazil, São Paulo, Embu-Guaçu.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | S. Cabeceiras | M’Boy Guassu | Campos | Dec.18.’40 [December 18, 1940] | D’Amico”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Limonia* | (*Geranomyia*) | *damicoi* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: most legs except left front leg.

Allotype with labels: (1) handwritten on white paper: “Brazil | São Paulo | S. Cabeceiras | M’Boy Guassu | Campos | Dec.18.’40 [December 18, 1940] | D’Amico”; (2) printed with handwritten inscriptions on red paper: “ALLOTYPE ♀ | *Limonia* | (*Geranomyia*) | *damicoi* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: left flagellum and all legs. Additional note: the original description and label (2) indicate the specimen as female, but it actually belongs to the male sex.

Paratypes: 3 females with labels: (1) handwritten on white paper: “Brazil | São Paulo | S. Cabeceiras | M’Boy Guassu | Campos | Dec.18.’40 [December 18, 1940] | D’Amico”; (2) printed with handwritten inscriptions on blue paper: “PARATYPES ♀ | *Limonia* | (*Geranomyia*) | *damicoi* | C. P. Alexander”.

Preservation: all specimens mounted at the tips of paper triangles pinned together; all specimens intact.

***Geranomyia propera* (Alexander, 1949)**

Alexander, 1949: 476–477 (original description); 471, figures 9 (wing) and 13 (male terminalia); (as *Limonia*). Type locality: Brazil, São Paulo, Campos do Jordão.

Holotype male with labels: (1) printed on white paper: “São Paulo | Campos do Jordão | 14. XII. 1944 | F. Lane col.”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Limonia* | *propera* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: left antenna, left wing, right front leg, right middle leg, abdomen and terminalia.

***Gonomyia (Gonomyia) gemula* Alexander, 1946**

Alexander, 1946: 4–5 (original description), 9, figures 4 (wing) and 6 (male terminalia). Type Locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Juquiá | 300m. | Feb. 22 ‘41 [February 22, 1941] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Gonomyia* | *gemula* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: flagella, right wing, and most legs except right hind leg.

***Gonomyia (Gonomyia) subappendiculata* Alexander, 1954**

Alexander, 1954a: 39–40 (original description); 45, figure 5 (male terminalia). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Boracea | X – 11. 48 [October 11, 1948] | Travassos”; (2) handwritten on white paper: “Hypopyg. | on | slide; (3) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Gonomyia* | *subappendiculata* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: left antenna, wings, right front leg and terminalia.

***Gonomyia (Gonomyina) durabilis* Alexander, 1946**

Alexander, 1946: 6–7 (original description); 9, figures 3 (wing) and 7 (male terminalia). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Juquiá | 300m. | Feb. 22 ‘41 [February 22, 1941] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Gonomyia* | *durabilis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: left antenna, right wing, and most legs except left middle leg.

***Gonomyia (Leiponeura) cantareirae* Alexander, 1945**

Alexander, 1945a: 270–271 (original description); 282, figure 17 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 400m | Dec. 1940 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Gonomyia* | *cantareirae* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right flagellum, right wing and all legs. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Gonomyia (Leiponeura) juquiana* Alexander, 1945**

Alexander, 1945a: 273–274 (original description); 282, figures 15 (wing) and 20 (male terminalia). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | Juquiá | 400m. | Nov. 1940 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Gonomyia* | *juquiana* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: left antenna, right wing, and hind legs.

***Gonomyia (Neolipophleps) extenuata* Alexander, 1945**

Alexander, 1945a: 271–273 (original description); 282, figure 18 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 900m. | Dec. 1940 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Gonomyia* | *extenuata* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; pinned together with the Allotype; part of abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right wing and right legs. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

Allotype female with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 900m. | Dec. 1940 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “ALLOTYPE ♀ | *Gonomyia* | *extenuata* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; pinned together with the Holotype. Missing parts: most legs except hind legs. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

Paratype female with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | Juquiá | 400m | Nov. 40 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♀ | *Gonomyia* | *extenuata* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: head, right wing, most legs except left middle leg and left hind leg.

***Hexatoma (Eriocera) cabralensis* Alexander, 1945**

Alexander, 1945b: 24–25 (original description); 42, figure 6 (wing). Type locality: Brazil, São Paulo, Porto Cabral.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | P. Cabral | Mar. 44 [March, 1944] | Travassos | Carrera”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Hexatoma* | (*Eriocera*) | *cabralensis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: right antenna, right wing, apical 1/3 of left wing, right front leg and left hind leg.

***Hexatoma (Eriocera) carrerai* Alexander, 1942**

Alexander, 1942: 65–66 (original description); 75, figure 29 (wing). Type locality: Brazil, São Paulo, Guarujá.

Paratype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Guarujá | 50m. | Jan. 30. '41 [January 30, 1941] | Carrera”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♂ | *Hexatoma* | (*Eriocera*) | *carrerai* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: antennae, left wing and left legs.

***Limnophila (Limnophila) jordanica* Alexander, 1949**

Alexander, 1949: 477–478 (original description); 471, figure 10 (wing). Type locality: Brazil, São Paulo, Campos do Jordão.

Holotype female with labels: (1) printed on white paper: “São Paulo | Campos do Jordão | 14. XII. 1944 | F. Lane col.”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Limnophila* | *jordanica* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: left antenna, right wing, most legs except left middle leg and one undetermined leg glued on the paper triangle.

***Molophilus (Molophilus) cautus* Alexander, 1947**

Alexander, 1947: 345–347 (original description); 339, figure 21 (male terminalia). Type locality: Brazil, São Paulo, Ferraz de Vasconcelos.

Paratype female with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Ferraz | Vascon- | celos | Aug. 46 [August, 1946] | J. Lane”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE | *molophilus* | *cautus* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: antennae and most legs except middle legs.

Paratype of unknown sex with labels: (1) printed with handwritten inscriptions on white paper: “Brazil – Rio [Rio de Janeiro] | Angra dos Reis | Alt. 50mets. | VII – 9 1945 [July 9, 1945] | Lauro Travassos”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE | *Malophilus* | *cautus* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: head, right wing, most legs except left front leg and right middle leg and abdomen.

***Molophilus (Molophilus) dirhabdus* Alexander, 1949**

Alexander, 1949: 496–497 (original description); 489, figure 26 (male terminalia). Type locality: Brazil, São Paulo, Campos do Jordão.

Holotype male with labels: (1) printed on white paper: “São Paulo | Campos do Jordão | 14. XII. 1944 | F. Lane col.”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Molophilus* | *dirhabda* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right antenna, right wing, most legs except left hind leg and two undetermined legs glued on the paper triangle.

***Molophilus (Molophilus) integristylus* Alexander, 1945**

Alexander, 1945b: 37–38 (original description); 43, figure 16 (male terminalia). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype male with labels: (1) printed on white paper: “Brazil – S. Paulo | Boracéia 900ms. | 13. IV. 1942 | Almeida &

Trav. F^o[Travassos Filho]”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Molophilus* | *integristylus* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen with terminalia mounted on plastic slide pinned with the specimen. Missing parts: antennae, right wing, right front leg and right hind leg.

***Molophilus (Molophilus) lanei* Alexander, 1945**

Alexander, 1945a: 276–278 (original description); 282, figure 21 (male terminalia). Type locality: Brazil, São Paulo, Amparo.

Holotype male with labels: (1) printed on white paper: “São Paulo | Amparo | Faz. S. Bento [Fazenda São Bento] | 8. III. 1943 | F. Lane col.”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Molophilus* | *lanei* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen with terminalia mounted on plastic slide pinned with the specimen. Missing parts: antennae, right wing, right front leg and left hind leg.

***Molophilus (Molophilus) lauri* Alexander, 1945**

Alexander, 1945b: 39–40 (original description); 43, figure 17 (male terminalia). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype male with labels: (1) printed on white paper: “BRAZIL – S. Paulo | Boraceia 900ms. | 13. IV. 1942 | Almeida & Trav. F^o[Travassos Filho]”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE | *Molophilus* | *lauri* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen with terminalia mounted on plastic slide pinned with the specimen. Missing parts: antennae, left wing and most legs except left middle leg.

***Molophilus (Molophilus) oligotrichus* Alexander, 1954**

Alexander, 1954a: 43–44 (original description); 45, figure 9 (male terminalia). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Boraceia | IX -1. 48 [September 1, 1948] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Molophilus* | *oligotrichus* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: head, left wing and abdomen.

***Molophilus (Molophilus) scabricornis* Alexander, 1942**

Alexander, 1942: 69–70 (original description); 77, figure 38 (male terminalia). Type locality: Brazil, São Paulo, Embu-Guaçu.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | S. Cabeceiras | M’Boy Guassu | Campos | XII - 18’40 [December 18, 1940] | J. D’Amico”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Molophilus* | *scabricornis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen and terminalia mounted on separate slide. Missing parts: head, left wing and all legs.

***Molophilus (Molophilus) trifibra* Alexander, 1954**

Alexander, 1954a: 42–43 (original description); 45, figure 8 (male terminalia). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Boraceia | Mar. 27. 49 [March 27, 1949] | Travassos”; (2) handwritten on white paper: ♂ hyp. [hypopygium] | in | slide; (3) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Molophilus* | *trifibra* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: head, right wing, left front leg, hind legs and abdomen.

***Orimarga (Orimarga) chionomera* Alexander, 1945**

Alexander, 1945a: 263–264 (original description); 281, figure 9 (wing). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 900m; XII - 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Orimarga* | *chionomera* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: left wing, all legs and abdomen.

Allotype female with labels: (1) handwritten on white paper: “Brazil | São Paulo | S. Cantareira | 900m. | Dec. 1940 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “ALLOTYPE ♀ | *Orimarga* | *chionomera* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: right middle leg and right hind leg. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

Paratypes: 2 females with labels: (1) handwritten on white paper: “Brazil | S. Paulo | S. Cantareira | 900m. | Dec. 1940 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on blue paper: “PARATYPES | *Orimarga* | *chionomera* | C. P. Alexander”.

Preservation: all specimens mounted at the tips of paper triangles pinned together; all specimens intact with undissected terminalia.

***Orimarga (Orimarga) neogaudens* Alexander, 1945**

Alexander, 1945a: 264–266 (original description); 281, figure 10 (wing). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | Juquiá | 400m. | Nov. 1940 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Orimarga* | *neogaudens* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: right flagellum and most legs except right hind leg.

***Orimarga (Orimarga) transversalis* Alexander, 1971**

Alexander, 1971: 240 (original description); 262, figure 12 (wing). Type locality: Brazil, Rio de Janeiro, Rio de Janeiro (Grajaú).

Paratype of unknown sex with labels: (1) printed on white paper: “Grajaú | 20 – IV - 940 [April 20, 1940] | Lopes & Oliveira”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE | *Orimarga* | *transversalis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: antennae, right wing, most legs except hind legs and terminalia. Additional note: the sex of this specimen is considered as unknown in the original description.

***Pseudolimnophila (Pseudolimnophila) supplementa* Alexander, 1945**

Alexander, 1945b: 22–24 (original description); 42, figure 5 (wing). Type locality: Brazil, São Paulo, Ribeirão Pires.

Holotype female with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Ribeirão | Pires | Barreira | das Camélias | XII - 1941 [December, 1941] | D. Amico”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Pseudolimnophila* | *supplementa* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: flagella and all legs.

***Rhipidia (Rhipidia) cassandra* (Alexander, 1945)**

Alexander, 1945a: 261–263 (original description); 281, figure 12 (male terminalia); (as *Limonia*). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m; XI - 40 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Limonia* | *cassandra* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen glued at the paper triangle; part of abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: left antenna, right wing and all legs except right middle leg.

***Shannonomyia (Shannonomyia) dilatistyla* Alexander, 1971**

Alexander, 1971: 241–242 (original description); 263, figures 18 (wing) and 20 (male terminalia). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Paratype of unknown sex with labels: (1) printed on white paper: “BR. S.P.: Salesópolis | (Boracea) 22 – VII - 1947 | E. Rabello & Trav. F. [Travassos Filho] | & E. Dante”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE | *Shannonomyia* | *dilatistyla* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: antennae, rostrum, all legs and terminalia. Additional note: the sex of this specimen is considered as unknown in the original description.

***Styringomyia paulista* Alexander, 1946**

Alexander, 1946: 7–8 (original description); 9, figures 5 (wing) and 8 (male terminalia). Ribeiro, 2003: 19–20 (redescription); 6, figures 5 and 6 (thorax); 7, figures 7 (wing) and 8 (ovipositor); 9, figure 13 (gonostylus); 14, figure 21 (male tenth tergite); 19, figure 30 (gonocoxite). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Juquiá | 300m | Feb. 22 [February 22]. 1941 | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Styringomyia* | *paulista* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: most legs except left front leg and left middle leg.

***Tasiocera (Dasymolophilus) boraceae* Alexander, 1954**

Alexander, 1954a: 41–42 (original description); 45, figures 2 (wing) and 7 (male terminalia). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Boracea | Aug. 5. 1948 [August 5, 1948] | Travassos”; (2) handwritten on white paper: “hypopyg. | on | slide”; (3) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Tasiocera* | *boraceae* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: head, left wing, most legs except right hind leg and abdomen.

***Teucholabis (Euparatropesa) amatrix* Alexander, 1945**

Alexander, 1945a: 268–270 (original description); 281, figures 13 (wing) and 14 (male terminalia). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m | Nov. 1940 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Teucholabis* | (*Paratropesa*) | *amatrix* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: antennae, right middle leg and left hind leg.

Paratypes: 3 males with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | Juquiá | 400m XII - 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on blue paper: “PARATYPES | *Teucholabis* | *amatrix* | C. P. Alexander”.

Preservation: all specimens mounted at the tips of paper triangles pinned together; all specimens intact with undissected terminalia.

Paratypes: 2 males with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | Juquiá | 400m XII - 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on blue paper: “PARATYPES | *Teucholabis* | *amatrix* | C. P. Alexander”.

Preservation: all specimens mounted at the tips of paper triangles pinned together; all specimens intact with undissected terminalia.

***Teucholabis (Teucholabis) biacifera* Alexander, 1949**

Alexander, 1949: 486–448 (original description); 483, figures 17 (wing) and 21 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Paratype male with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Jaraguá | VIII – ‘45 [August, 1945] | J.

Lane”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE | *Teucholabis* | *biacifera* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: head, wings and most legs except hind legs.

***Trentepohlia (Neomongoma) mesonotalis* Alexander, 1949**

Alexander, 1949: 482–484 (original description). Type locality: Brazil, São Paulo, Guarujá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Guarujá | 50m. | Jan. 21. 42 [January 21, 1942] | Carrera”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Trentepohlia* | *mesonotalis* | C. P. Alexander”.

Preservation: slide mounted specimen. Missing parts: one undetermined wing and all legs.

***Trentepohlia (Paramongoma) concumbens* Alexander, 1942**

Alexander, 1942: 66–67 (original description); 77, figure 35 (wing). Type locality: Brazil, São Paulo, Juquiá.

Holotype female with labels: (1) handwritten on white paper: “Brazil | São Paulo | 400m. | Juquiá | Nov. 1940 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Trentepohlia* | *concumbens* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: entire body except for a broken wing and fragments of legs.

Family Tipulidae

***Brachypremna brevigenua* Alexander, 1945**

Alexander, 1945b: 2–3 (original description). Type locality: Brazil, São Paulo, Ribeirão Pires.

Holotype male with labels: (1) printed on white paper: “Brazil, São Paulo, Ribeirão | Pires, Barreira das Camélias, | XII – 1941. D’Amico col”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE | *Brachypremna* | *brevigenua* | C. P. Alexander”.

Preservation: mounted at the tip of pinned paper triangle; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right antenna and wings.

***Ischnotoma (Icriomastax) antinympha* (Alexander, 1942)**

Alexander, 1942: 48–49 (original description); 72, figure 13 (wing); (as *Holorusia*). Type locality: Brazil, São Paulo, Juquiá.

Holotype female with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m; XI - 1940 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Holorusia* | *antinympha* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: antennae, right wing and right legs.

***Ischnotoma (Icriomastax) helios* (Alexander, 1949)**

Alexander, 1949: 467–469 (original description); 465, figure 7 (male terminalia); (as *Holorusia*). Type locality: Brazil, Paraná, Curitiba.

Allotype female with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Ipiranga | 800m | V - 22. 41 [May 22, 1941] | D’Amico | on banana”; (2) printed with handwritten inscriptions on red paper: “ALLOTYPE ♀ | *Holorusia* | *helios* | C. P. Alexander”.

Preservation: pinned. Missing parts: flagella, palpi, right front leg, left legs and apical half of abdomen.

Paratype female with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Ribeira Pires [Ribeirão Pires] | Barreira | das Camélias | XI - 1941 [November, 1941] | D’Amico”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♀ | *Holorusia* | *helios* | C. P. Alexander”.

Preservation: pinned. Missing parts: head and most legs except left hind leg.

***Ischnotoma (Icriomastax) phaeton* Alexander, 1945**

Alexander, 1945b: 10–12 (original description); 41, figure 3 (male terminalia); (as *Holorusia*). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Serra Cantareira | 900m; Dec. 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Holorusia* / *phaeton* | C. P. Alexander”.

Preservation: mounted at the tip of two pinned paper triangles; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: antennae, left wing and all legs. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Leptotarsus (Longurio) guimaraesi* (Alexander, 1942)**

Alexander, 1942: 46–47 (original description); 73, figures 12 (wing) and 16 (male terminalia); (as *Macromastix*). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m, XI - 40 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Macromastix* | *guimaraesi* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: left antenna, right wing and most legs except left front leg and left hind leg.

***Leptotarsus (Longurio) insidiosus* (Alexander, 1949)**

Alexander, 1949: 463–464 (original description); 465, figures 3 (wing) and 5 (ovipositor); (as *Macromastix*). Type locality: Brazil, São Paulo, Campos do Jordão.

Holotype female with labels: (1) printed on white paper: “São Paulo | Campos do Jordão | 28. XII. 1944 | F. Lane col.”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Macromastix* | *insidiosa* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: left flagellum, left wing and abdomen.

***Leptotarsus (Longurio) ixion* (Alexander, 1949)**

Alexander, 1949: 464–466 (original description); 465, figures 2 (wing) and 6 (male terminalia); (as *Macromastix*). Type locality: Brazil, São Paulo, Campos do Jordão.

Holotype male with labels: (1) printed on white paper: “São Paulo | Campos do Jordão | 28. XII. 1944 | F. Lane col.”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Macromastix* | *ixion* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: left antenna, right wing, right front leg, hind legs and terminalia.

***Leptotarsus (Longurio) perglabratus* (Alexander, 1954)**

Alexander, 1954b: 614–615 (original description); 601, figure 8 (male terminalia); (as *Longurio*). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype male with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Boracea | IX - 15. 47 [September 15, 1947] | Travassos | etc”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Macromastix* | *perglabrata* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle together with Paratype. Missing parts: left flagellum, right wing, right front leg, right middle leg and abdomen.

Additional note: the original description indicates as collectors “Travassos Filho and Rabello”. This differs from the specimen label which indicates only “Travassos” as the collector.

Paratype male with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Boracea | IX - 15. 47 [September 15, 1947] | Travassos | etc”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♂ | *Macromastix* | *perglabrata* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle together with Holotype; terminalia undissected. Missing parts: flagella and front legs. Additional note: the original description indicates as collectors “Travassos Filho and Rabello”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Leptotarsus (Longurio) phaedrus* (Alexander, 1949)**

Alexander, 1949: 461–463 (original description); 465, figures 1 (wing) and 4 (male terminalia); (as *Macromastix*). Type locality: Brazil, São Paulo, Campos do Jordão.

Holotype male with labels: (1) printed on white paper: “São Paulo | Campos do Jordão | 28. XII. 1944 | F. Lane col.”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Macromastix* | *phaedra* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; part of abdomen with terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right antenna, right wing, front legs and right hind leg.

***Leptotarsus (Longurio) styx* (Alexander, 1954)**

Alexander, 1954b: 31–32 (original description); 45, figures 1 (wing) and 3 (male terminalia); (as *Longurio*). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype male with labels: (1) handwritten on white paper: “Brazil | Boracéia | Feb. 10 - 50 [February 10, 1950] | Rabello & | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Longurio* | *styx* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: right antenna, right wing, most legs except left front leg, left hind leg and one undetermined leg glued on the paper triangle and terminalia.

***Leptotarsus (Longurio) travassosanus* (Alexander, 1942)**

Alexander, 1942: 45–46 (original description); 73, figures 11 (wing) and 15 (male terminalia); (as *Macromastix*). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m. | Nov. [November] 1940 | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Macromastix* | *travassosana* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: left flagellum, left middle leg and left hind leg.

Paratype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m. | Nov. 40 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♂ | *Macromastix* | *travassosanus* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: right wing, most legs except right middle leg and terminalia.

***Leptotarsus (Tanypremna) calliope* (Alexander, 1945)**

Alexander, 1945a: 243–245 (original description); (as *Tanypremna*). Type locality: Brazil, São Paulo, Juquiá.

Holotype female with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m. | Nov. [November] 1940 | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Tanypremna* | *calliope* | C. P. Alexander”.

Preservation: pinned. Missing parts: right antenna, left wing, left middle leg and hind legs.

***Leptotarsus (Tanypremna) porterianus limai* (Alexander, 1945)**

Alexander, 1945a: 245–247 (original description); (as *Tanypremna*). Type locality: Brazil, São Paulo, São Paulo (Sacomã).

Holotype female with labels: (1) handwritten on white paper: “Brazil, | São Paulo | Sacomã | 750m. | May 8. - 42 [1942] | J. Lima”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Tanypremna* | *porteriana* | *limai* | C. P. Alexander”.

Preservation: pinned. Missing parts: flagella, right wing and most legs except two undetermined legs glued on a sheet of paper pinned with the specimen.

***Leptotarsus (Tanypremna) salome* (Alexander, 1945)**

Alexander, 1945b: 6–8 (original description); 41, figure 1 (male terminalia); (as *Tanypremna*). Type locality: Brazil, São Paulo, Guarujá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Guarujá | 50met. | Jan. 28. 42 [January 28, 1942] | Carrera | (on foliage)”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Tanypremna* | *salome* | C. P. Alexander”.

Preservation: pinned; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right antenna and left wing.

***Ozodicera (Dihexaclonus) lanei* Alexander, 1942**

Alexander, 1942: 44–45 (original description); 71, figures 3 (wing), 5 (antenna) and 10 (male terminalia). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | Juquiá | 400m; XI - 40 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Ozodicera* | *lanei* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: antennae, right wing, right front leg and right middle leg.

***Ozodicera (Dihexaclonus) terrifica* Alexander, 1942**

Alexander, 1942: 40–42 (original description); 71, figures 1 (wing), 4 (antenna) and 8 (male terminalia). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “S. Brazil | Sao Paulo | Juquiá | 400m; XI - 40 [November, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Ozodicera* | *terrifica* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper rectangle; part of abdomen and terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right antenna, right wing and right legs.

***Ozodicera (Dihexaclonus) tripallens* Alexander, 1942**

Alexander, 1942: 42–44 (original description); 71, figures 2 (wing), 6 (antenna) and 9 (male terminalia). Type locality: Brazil, São Paulo, Juquiá.

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | 400m; XI - 40 [November, 1940] | Travassos | Juquiá”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Ozodicera* | *tripallens* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper rectangle; part of abdomen and terminalia mounted on a plastic slide pinned with the specimen. Missing parts: antennae and right hind leg.

***Ozodicera (Ozodicera) caudifera* Alexander, 1945**

Alexander, 1945b: 12–14 (original description); 41, figure 4 (male terminalia). Type locality: Brazil, São Paulo, Salesópolis, Estação Biológica de Boracéia.

Holotype male with labels: (1) printed on white paper: “Brazil – S. Paulo | Boracea 900ms. | 13. IV. 1942 | Almeida & Trav. F^o [Travassos Filho]”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Ozodicera* | *caudifera* | C. P. Alexander”.

Preservation: pinned. Missing parts: antennae, right wing and most legs except two undetermined legs glued on a sheet of paper pinned with the specimen.

***Tipula (Eumicrotipula) atroscapa* Alexander, 1949**

Alexander, 1949: 470–473 (original description). Type locality: Brazil, São Paulo, São Paulo (Ipiranga).

Allotype female with labels: (1) handwritten on white paper: “Brazil | S. Paulo | Ipiranga | Mar. 10. ‘44 [March 10, 1944] | F. Lane”; (2) printed with handwritten inscriptions on red paper: “ALLOTYPE ♀ | *Tipula* | *atroscapa* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: right antenna, right wing and right legs.

***Tipula (Eumicrotipula) callisto* Alexander, 1944**

Alexander, 1944c: 297–299 (original description); 289, figure 4 (male terminalia). Type locality: Peru, Ayacucho, Lamar, Yanamonte.

Paratype female with labels: (1) printed with handwritten inscriptions on white paper: “Peru | Ayacucho | Yanamonte. La | Mar, IX – 10, 41 [September 10, 1941] | 3000 – 4100met. | F. Woytkowski”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♀ | *Tipula* | *callisto* | C. P. Alexander”.

Preservation: pinned. Missing parts: left front leg, right middle leg and hind legs.

***Tipula (Eumicrotipula) itatiayensis* Alexander, 1944**

Alexander, 1944b: 302–304 (original description). Type locality: Brazil, Rio de Janeiro, Itatiaia.

Paratype female with labels: (1) handwritten on white paper: “Brazil | Alto | Itatiaya | Mar. 41 [March, 1941 | L. Gomes]”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♀ | *Tipula* | *itatiayensis* | C. P. Alexander”.

Preservation: mounted at the tips of two pinned paper triangles. Missing parts: most legs except left hind leg.

***Tipula (Eumicrotipula) mordax* Alexander, 1945**

Alexander, 1945a: 256–258 (original description); 280, figure 6 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil | S. Paulo | S. Cantareira | 900m. | Dec. 1940 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Tipula* | *mordax* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right antenna, right wing and right legs. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

Allotype female with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 900m, XII. 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “ALLOTYPE ♀ | *Tipula* | *mordax* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: flagella and all legs.

Paratype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | S. Cantareira | 900m; XII. 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♂ | *Tipula* | *mordax* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: right flagellum, left wing and most legs except left hind leg.

Paratype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 900m, XII. 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♂ | *Tipula* | *mordax* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: most legs except fore legs.

Paratype male with labels: (1) handwritten on white paper: “Brazil | S. Paulo | S. Cantareira | 900m. | Dec. 1940 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♂ | *Tipula* | *mordax* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: left flagellum, one undetermined wing, most legs except left hind leg and one undetermined leg glued on a second paper triangle pinned with the specimen and abdomen.

***Tipula (Microtipula) affabilis* Alexander, 1945**

Alexander, 1945a: 247–248 (original description); 279, figure 1 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil | São Paulo | S. Cantareira | 900m; Dec. 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Tipula* | *affabilis* | C. P. Alexander”.

Preservation: mounted at the tip of two pinned paper triangles; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right antenna, right wing and most legs except right front leg and right middle leg. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Tipula (Microtipula) efferox* Alexander, 1945**

Alexander, 1945a: 249–250 (original description); 279, figure 2 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Cidade Jardim).

Paratype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 900m; XII. 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♂ | *Tipula* | *efferox* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right flagellum, right wing and most legs except for left hind leg. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Tipula (Microtipula) eurymera eurymera* Alexander, 1945**

Alexander, 1945a: 250–252 (original description); 279, figure 3 (male terminalia). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 900m; XII. 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Tipula* | *eurymera* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: right antenna, left wing and left legs. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Tipula (Microtipula) felicianae* Alexander, 1945**

Alexander, 1945a: 253–255 (original description). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype male with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 900m, XII. 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Tipula* | *felicianae* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia mounted on a plastic slide pinned with the specimen. Missing parts: left antenna, right wing and most legs except left front leg. Additional note: the original description indicates as collectors “Guimarães & Travassos”. This differs from the specimen label which indicates only “Travassos” as the collector.

***Tipula (Microtipula) jordanensis* Alexander, 1949**

Alexander, 1949: 469–470 (original description); 471, figure 8 (male terminalia). Type locality: Brazil, São Paulo, Campos do Jordão.

Holotype male with labels: (1) printed on white paper: “São Paulo | Campos do Jordão | 14. XII. 1944 | F. Lane col.”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♂ | *Tipula* | *jordanensis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: right wing and middle legs.

Paratype male with labels: (1) printed on white paper: “São Paulo | Campos do Jordão | 29. XII. 1944 | F. Lane col.”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♂ | *Tipula* | *jordanensis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: left front leg and middle legs.

Paratype male with labels: (1) printed on white paper: “São Paulo | Campos do Jordão | 14. XII. 1944 | F. Lane col.”; (2) printed with handwritten inscriptions on blue paper: “PARATYPE ♂ | *Tipula* | *jordanensis* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle; terminalia undissected. Missing parts: right front leg, right middle leg and hind legs.

***Tipula (Microtipula) sexcincta* Alexander, 1942**

Alexander, 1942: 50–51 (original description); 73, figure 14 (wing). Type locality: Brazil, São Paulo, São Paulo (Serra da Cantareira).

Holotype female with labels: (1) handwritten on white paper: “Brazil | Sao Paulo | S. Cantareira | 900m; XII. 40 [December, 1940] | Travassos”; (2) printed with handwritten inscriptions on red paper: “HOLOTYPE ♀ | *Tipula* | *sexcincta* | C. P. Alexander”.

Preservation: mounted at the tip of a pinned paper triangle. Missing parts: antennae, right wing and right legs.

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References

- Abadjiev, S.P. (2005) An annotated catalog of types of Neotropical Pierinae (Lepidoptera, Pieridae) in the collection of the National Museum of Natural History, Smithsonian Institution, Washington DC. *Zootaxa*, 1022, 1–35.
- Alexander, C.P. (1942) New or little-known Tipulidae (Diptera) from São Paulo, Brasil. Part I. *Papeis Avulsos do Departamento de Zoologia*, 2, 39–77.
- Alexander, C.P. (1944a) Records and descriptions of Brazilian Tipulidae (Dipt.). Part X. *Revista de Entomologia*, 15, 19–34.
- Alexander, C.P. (1944b) Records and descriptions of Brazilian Tipulidae (Dipt.). Part XI. *Revista de Entomologia*, 15, 292–312.
- Alexander, C.P. (1944c) New or little-known Tipulidae (Diptera). LXX. Neotropical species. *Annals and Magazine of Natural History*, 11, 284–311.
- Alexander, C.P. (1945a) New or little-known Tipulidae (Diptera) from São Paulo, Brasil. Part II. *Papeis Avulsos do Departamento de Zoologia*, 6, 241–282.
- Alexander, C.P. (1945b) New or little-known Tipulidae (Diptera) from São Paulo, Brasil. Part III. *Papeis Avulsos do Departamento de Zoologia*, 7, 1–44.
- Alexander, C.P. (1946) Undescribed species of Tipulidae from the state of São Paulo, Brasil (Diptera). *Livro de Homenagem a R. F. d’Almeida*, 1, 1–10.
- Alexander, C.P. (1947) Notes on the tropical American species of Tipulidae (Diptera). III. The specialized Eriopterini: *Rhabdomastix*, *Cryptolabis*, *Erioptera*, *Molophilus*, *Styringomyia*, *Toxorhina*, and allies. *Revista de Entomologia*, 18, 317–360.
- Alexander, C.P. (1948) Notes on the tropical American species of Tipulidae (Diptera). IV. The primitive Hexatomini: *Paradelphomyia*, *Austrolimnophila*, *Epiphragma*, *Lecteria*, *Polymera*, and allies. *Revista de Entomologia*, 19, 149–190.
- Alexander, C.P. (1949) New or little-known Tipulidae (Diptera) from São Paulo, Brasil. Part IV. *Revista de Entomologia*, 20, 461–497.
- Alexander, C.P. (1954a) Records and descriptions of Brazilian crane-flies (Diptera, Tipulidae). *Revista Brasileira de Entomologia*, 1, 31–46.
- Alexander, C.P. (1954b) New species of crane-flies from South America. Part XV. (Diptera: Tipulidae). *Annals of the Entomological Society of America*, 46, 599–617.
- Alexander, C.P. (1969) Undescribed Neotropical Trichoceridae and Tipulidae (Diptera). *Studia Entomologica*, 12, 341–382.
- Alexander, C.P. (1971) Undescribed or little-known tropical American Tipulidae (Diptera). Part IV. *Studia Entomologica*, 14, 225–266.
- Alexander, C.P. & Alexander, M. M. (1970) Family Tipulidae. *A Catalogue of the Diptera of the Americas South of the United States*, 4, 4.1–4.259.
- Amorim, D.S. & Yeates, D. (2006) Pesky gnats: ridding dipteran classification of the Nematocera. *Studia dipterologica*, 13(1), 3–9.

- Carvalho, C.J.B. de, Couri, M.S., Toma, R., Rafael, J.A., Harada, A.Y., Bonatto, S.R., Henriques, A.L., & Gastal, H.A.O. (2002) Principais coleções brasileiras de Díptera: histórico e situação atual. *In*: Costa, C., Vanin, S.A., Lobo, J.M. & Melic, A. (Eds.), *Proyecto de Red Iberoamericana de Biogeografía y Entomología Sistemática PRIBES 2002*. Zaragoza, S.E.A. & CYTED. pp. 37–52.
- De Jong, D. (1989) A revision of the South American taxa *Elnoretta* Alexander, *Euvaldiviana* Alexander and *Valdiviana* Alexander (Diptera: Tipulidae), with a discussion on their phylogeny. *Systematic Entomology*, 14, 243–257.
- ICZN (International Commission of Zoological Nomenclature) (1999) *International Code of Zoological Nomenclature. Fourth edition, adopted by the International Union of Biological Sciences*. International Trust for Zoological Nomenclature. The Natural History Museum, London, xxx + 306 pp.
- Oosterbroek, P. (2005) *Catalogue of the Craneflies of the World (Insecta, Diptera, Nematocera, Tipuloidea)*. Available from <http://ip30.eti.uva.nl/ccw/> (accessed April 2007).
- Ribeiro, G.C. (2003) Systematics of the Neotropical species of *Styringomyia* Loew (Diptera: Tipulomorpha: Limoniidae). *Zootaxa*, 253, 1–35.
- Ribeiro, G.C. (2005) A review of the subgenus *Cladolipes* Loew in the Neotropics (Diptera: Limoniidae: Limnophilinae: *Hexatoma*). *Studia Dipterologica*, 12(1), 79–85.
- Ribeiro, G.C. & Amorim, D.S. (2002) A review of the genus *Elephantomyia* Osten Sacken in Brazil, with description of two new species (Diptera: Tipulomorpha, Limoniidae). *Zootaxa*, 46, 1–16.
- Wood, D.M. & Borkent, A. (1989) Phylogeny and classification of the Nematocera. *In*: McAlpine, J. F. & Wood, D.M. (Coordinators), *Manual of Nearctic Diptera. Vol. 3*. Research Branch, Agriculture Canada, Monograph 32, pp. 1333–1370.

Appendix

Alphabetical list of the professional entomologists (including the institutions in which they were employed) whose names appear as collectors in the labels of the types designated by Charles Paul Alexander

Ernesto Rabello. Departamento de Zoologia da Secretaria da Agricultura, São Paulo, São Paulo, Brazil.

Frederico Lane. Departamento de Zoologia da Secretaria da Agricultura, São Paulo, São Paulo, Brazil.

Hugo de Souza Lopes. Instituto Oswaldo Cruz, Rio de Janeiro, Rio de Janeiro, Brazil.

John Lane. Faculdade de Higiene, São Paulo, São Paulo, Brazil.

Lauro Pereira Travassos Filho. Departamento de Zoologia da Secretaria da Agricultura, São Paulo, São Paulo, Brazil.

Lindolfo Rocha Guimarães. Departamento de Zoologia da Secretaria da Agricultura, São Paulo, São Paulo, Brazil.

Messias Carrera. Departamento de Zoologia da Secretaria da Agricultura, São Paulo, São Paulo, Brazil.

Romualdo Ferreira d'Almeida. Museu Nacional, Rio de Janeiro, Rio de Janeiro, Brazil.

Sebastião José de Oliveira. Instituto Oswaldo Cruz, Rio de Janeiro, Rio de Janeiro, Brazil.