



Systematics, Morphology and Biogeography

Catalogue of Anisopodidae (Diptera, Bibionomorpha) types housed 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, this paper provides a catalogue of the type specimens of Anisopodidae (Diptera: Bibionomorpha) held in the collection of the Museu de Zoologia da Universidade de São Paulo, Brazil (MZUSP). Information on labels and type conditions, on 54 type specimens (including 21 primary types) of 24 Neotropical species are provided.

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Introduction

The Museu de Zoologia da Universidade de São Paulo (MZUSP), São Paulo, Brazil, is one of the most important research institutions holding scientific zoological collections in South America. The collection is the largest and most important depository of Neotropical Diptera in Brazil and in South America, with more than 8000 species and six hundred million mounted specimens.

The family Anisopodidae encompasses seven genera in the world, with over 120 described species (Amorim and Tozoni, 1994; Hancock and Amorim, 2009). Five genera and 65 species are known from Neotropical region (Amorim et al., 2002; Hancock and Amorim, 2009). The Neotropical fauna of Anisopodidae is composed of six genera – *Carreraia* Corrêa, 1947; *Sylvicola* Harris, 1776; *Olibogaster* Osten-Sacken, 1886; *Lobogaster* Philippi, 1865; and *Mycetobia* Meigen, 1818, of which *Carreraia* (1 species), *Olibogaster* (13), and *Sylvicola* (7), in Anisopodinae, and *Mycetobia* (1, undescribed), in Mycetobiinae, are recorded from Brazil (Papavero, 1967; Amorim et al., in press).

Following a recommendation of the International Code of Zoological Nomenclature (ICZN, 1999: 72F.4), the present paper

provides a catalogue with information on 54 type specimens (including 21 holotypes and 33 paratypes) of 24 Neotropical species of the family Anisopodidae held in the collection of the MZUSP (Table 1).

The list given below is in alphabetical order of subfamily, genus and epithet. Names, combinations and spellings follow the catalogue of Anisopodidae of the Americas south of the United States (Papavero, 1967). For each species section, the first line provides the name, author and publication date. The next lines provide the taxon's original name (including figure citations), relevant citations from publications other than original description, type locality, as well as information regarding the specimen's preservation, including a list of the missing structures. Label data are quoted in double quotation marks. A vertical line separates each line in the text of each label. In case of handwriting on printed labels, the handwritten text is reproduced in italics; completely handwritten and printed labels are reproduced in regular font. Within square brackets are included additions to some of the original information on labels, such as abbreviated collecting dates, incomplete localities and names of collectors. Furthermore, when necessary, the original combination of the species was indicated within brackets. This standard for reproducing the information on the labels follows previous catalogues of Diptera housed at the MZUSP, i.e. Ribeiro et al. (2007), Yamaguchi and Lamas (2009), Mello and Lamas (2011), and Fachin and Lamas (2015).

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Table 1

Type specimens of Anisopodidae held in the MZUSP, in alphabetical order of subfamily, genus and species epithet, with reference to the number of specimens, males and females, for each type category.

Species list	Holotype	Paratype
<i>Subfamily Anisopodinae</i>		
<i>Carreraia edwardsi</i> Carrera, 1941	1♂	
<i>Olbiogaster aequinoctialis</i> Tozoni, 1993	1♂	
<i>Olbiogaster almeidai</i> Corrêa, 1946	1♂	
<i>Olbiogaster alvarengai</i> Tozoni, 1993	1♂	1♀
<i>Olbiogaster carioca</i> Lane and d'Andretta, 1958	1♂	
<i>Olbiogaster catarrhactes</i> Tozoni, 1993	1♀	
<i>Olbiogaster chavantesi</i> Lane and d'Andretta, 1958	1♂	3♂, 1♀
<i>Olbiogaster erythrohydrus</i> Tozoni, 1993	1♀	
<i>Olbiogaster hallucinata</i> Tozoni, 1993	1♀	
<i>Olbiogaster marinonii</i> Tozoni, 1993	1♀	2♀
<i>Olbiogaster midas</i> Tozoni, 1993	1♀	
<i>Olbiogaster papaveroi</i> Tozoni, 1993	1♀	2♀
<i>Olbiogaster paractius</i> Tozoni, 1993	1♂	
<i>Olbiogaster pirapo</i> Tozoni, 1993	1♂	4♂, 1♀
<i>Olbiogaster similans</i> Lane and d'Andretta, 1958		2♂
<i>Olbiogaster tamoioi</i> Lane and d'Andretta, 1958	1♂	2♂
<i>Olbiogaster xanthonota</i> Tozoni, 1993	1♀	
<i>Sylvicola albiapex</i> Lane and d'Andretta, 1958	1♀	3♀
<i>Sylvicola boraceae</i> Lane and d'Andretta, 1958	1♀	
<i>Sylvicola caiuasi</i> Lane and d'Andretta, 1958	1♀	3♀
<i>Sylvicola fluminensis</i> Lane and d'Andretta, 1958	1♂	1♂, 1♀
<i>Sylvicola grandis</i> Lane and d'Andretta, 1958	1♀	1♂, 4♀
<i>Sylvicola wygodzinskyi</i> Lane and d'Andretta, 1958		1♂
<i>Subfamily Mycetobiinae</i>		
<i>Mycetobia stonei</i> Lane and d'Andretta, 1958		1♀

High resolution photographs will be subsequently provided for most primary types at MZUSP's homepage (<http://www.mz.usp.br/>).

Subfamily Anisopodinae

Carreraia edwardsi ([Carrera, 1941](#))

[Carrera, 1941](#): 196 (*Olbiogaster*) (original description), figs. 1 (right wing), 2 (first abdominal segments, dorsal view), 3 (male genitalia, ventral view), 4 (male anal segment, ventral view). Ref.: Côrrea, 1947: fig. 1 (wing), 3 and 7 (male genitalia), 4 and 8 (male genitalia from [Carrera, 1941](#)).

Type locality: Brazil, Paraná, Curitiba.

Holotype ♂ with labels: (1) printed on pink paper: "holotipo"; (2) handwritten on white paper: "CARRERAIA | EDWARDSI | ([CARRERA, 1941](#))"; (3) printed with handwritten inscriptions on white paper: "CURITYBA-PARANÁ [Curitiba – Paraná] | (Parolin) [Neighborhood of Curitiba] | 7.X.937 | Coll. Claretiano"; (4) printed on white paper: "JL"; (5) handwritten on white paper: "Olbiogaster | edwardsi | [Carrera, 1941](#)".

On slide: Wing. (1) Handwritten on white paper: "Curityba-Panama [Curitiba – Paraná] | II-1941 | coll. Claretiano | Olbiogaster edwardsi | [Carrera, 1941](#)/M. | Carrera det. 1942 | Carreraia edwardsi | 791022-142/MZBrasil | 142"; (2) handwritten on white paper: "Carreraia | Correa, 1946 | AD. – 108 443". Terminalia. (1) Printed with handwritten inscriptions on white paper: "DEP. DE ZOOLOGIA | CARRERAIA | EDWARDSI | ([CARRERA, 1941](#)) | GENÓTIPO"; (2) handwritten on white paper: "Carreraia | Correa, 1946 | AD. – 108 443".

Condition of type. Pinned, right wing and terminalia on separated permanent slides. Missing parts: antennae, right wing and right legs.

Olbiogaster aequinoctialis ([Tozoni, 1993](#))

[Tozoni, 1993](#): 124 (original description); figs. 40 (male thorax and abdomen coloration), 60 (male gonostyle), 77 (male sternite X), 87 and 96 (male aedeagal guide and gonocoxal mesal projection).

Type locality: Ecuador, La Toma.

Holotype ♂ with label: (1) handwritten on white paper: "Olbiogaster heleatilis Tozoni | Ecuador, La Toma | W. de Loja, 1.500 m | 18–19.xi.1980 – LE. Peña col.".

Condition of type. In vial with alcohol. Missing parts. All legs.

Olbiogaster almeidai ([Corrêa, 1946](#))

[Corrêa, 1946](#): 142 (original description); figs. 2 (wing), 6 (male genitalia), 10 (male genitalia, dorsal piece branches) Ref.: [Tozoni, 1993](#): 125 (distribution); figs. 58 (male gonostyle), 76 (male sternite X), 94 (male aedeagal complex and gonocoxal mesal projection). Côrrea, 1947: figs. 2 (wing), 6 and 10 (male genitalia).

Type locality: Brazil, São Paulo, Itanhaém, Praia Grande.

Holotype ♂ with labels: (1) printed on red paper: "HOLOTIPO"; (2) printed on white paper: "São Paulo | Praia Grande | Faz. Rondonia | Fev. – 1945 | M. Carrera col."; (3) handwritten on white paper: "Olbiogaster | almeidai Correa, 1946"; (4) printed on white paper: "108.382".

On slide: Terminalia. (1) Printed with handwritten inscription on white paper: "DEP. DE ZOOLOGIA | OLBIOGASTER | ALMEIDAI | CORRÊA, 1946 | HOLÓTIPO"; (2) handwritten on white paper: "GENITALIA | CORRÊA MONT. [Mounted by Côrrea] | AD: 108382".

Condition of type. Pinned, right fore and mid legs and abdomen glued on rectangular paper; terminalia on permanent slide. Missing parts: antennae, right wing.

Olbiogaster alvarengai ([Tozoni, 1993](#))

[Tozoni, 1993](#): 122 (original description); figs. 2 (male thorax, lateral view), 4 (male genitalia, ventral view), 16 (female thorax and abdomen coloration), 27 (male thorax and abdomen coloration), 55 (male gonostyle), 70 (male sternite X), 95 (male aedeagal complex and gonocoxal mesal projection).

Type locality: Brazil, São Paulo, Teodoro Sampaio.

Holotype ♂ with labels: (1) printed on white paper: "BRASIL, State of São Paulo, | Teodoro Sampaio | Malaise trap | xi.1977 | M. Alvarenga col."; (2) printed on white paper: "Olbiogaster alvarengai Tozoni | HOLOTYPE | S.H.S. Tozoni det."; (3) printed on red paper: "HOLOTYPE".

Condition of type. On permanent slide. Missing parts. Antennae, undetermined wing with radial sector damaged, forelegs and right mid and hind legs without trochanters, tibiae and tarsi, left mid and hind legs without tarsi.

Paratype ♀ with labels: (1) printed on white paper: "BRASIL, SP, TEODORO | SAMPAIO | XI.1977 | M. ALVARENGA COL.>"; (2) handwritten on white paper: "Olbiogaster alvarengai | Tozoni"; (3) printed on yellow paper: "Paratype".

Condition of type. On permanent slide.

Olbiogaster carioca ([Lane and d'Andretta, 1958](#))

[Lane and d'Andretta, 1958](#): 516 (original description); fig. 22 (male genitalia, dorso-ventral position).

Type locality: Brazil, Rio de Janeiro, Teresópolis.

Holotype ♂ with labels: (1) printed on pink paper: "HOLÓTIPO"; (2) printed on white paper: "PARQUE NACIONAL | DA SERRA DOS ORGAOS [ÓRGÃOS] | TERESOPOLIS [TERESÓPOLIS] 1500–1700 M | 14–22.4.1947 WYGOD. COL.>"; (3) printed with handwritten inscriptions on white paper: "Olbiogaster | carioca | Andretta | det. John Lane 1956"; (4) handwritten on white paper: "820515-1".

On slide: Terminalia. (1) Handwritten on white paper: "TER820515-1 | HOLOTIPO | Parque Nacional da Serra dos Orgaos [Órgãos], Terezópolis [Teresópolis] | 1500–1700 M. | 14–22.4.1947 | Wygod. Coll."; (2) handwritten on white paper: "Holotipo | Olbiogaster | carioca | Andretta | det. John Lane | 1956".

Condition of type. Pinned, undetermined wing, undetermined legs and abdomen glued on a triangle paper; terminalia on permanent slide. Missing parts: right antenna, undetermined wing.

Olbiogaster catarrhactes Tozoni, 1993

Tozoni, 1993: 123 (original description); fig. 10 (female thorax and abdomen coloration).

Type locality: Paraguay, Salto del Guayra.

Holotype ♀ with labels: (1) handwritten on white paper: "Paraguay | Salto del Guayra | 28–30.xi.1971 | L.E. Peña col.; (2) printed on white paper: "HOLOTYPE"

Condition of type. In vial with alcohol, very damaged, abdomen, all legs and wings broken. Missing parts: antennae.

Olbiogaster chavantesi Lane and d'Andretta, 1958

Lane and d'Andretta, 1958: 518 (original description); fig. 20 (male genitalia dorso-ventral position).

Type locality: Brazil, Minas Gerais, Sapucaí-Mirim, Cidade Azul.

Holotype ♂ with labels: (1) printed on pink paper: "HOLÓTIPO"; (2) printed on white paper: "M.G. Sapucaí-mirim | Cidade Azul – 1400 m. | 7 Nov 1953 | L.Trav F. & M. Kunimann | C. Gans & S. Medeiros"; (3) printed on white paper: "60.282"; (4) printed with handwritten inscriptions on white paper: "Olbiogaster | chavantesi | Andretta | det. John Lane 1956"; (5) handwritten on white paper: "820515-2".

On slide: Terminalia. (1) Handwritten on white paper: "TER820515-2 | Holotipo | M.G. Sapucaí – mirim, Cidade | Azul 1400 m | 1 Nov 1953. F&M | Kunimann, C. Gans S. Medeiros"; (2) handwritten on white paper: "Holotipo | Olbiogaster | chavantesi".

Condition of type. Pinned, terminalia on permanent slide.

Paratype ♀ with labels: (1) printed on pink paper: "ALOTIPO"; (2) printed on white paper: "M.G. Sapucaí-mirim | Cidade Azul – 1400 m. | 7 Nov 1953 | L.Trav F. & M. Kunimann | C. Gans & S. Medeiros"; (3) printed on white paper: "60.278"; (4) printed with handwritten inscriptions on white paper: "Olbiogaster | chavantesi | Andretta | det. John Lane 1956".

Condition of type. Pinned, right wing glued on second label. Missing parts: right midleg.

Paratype ♂ with labels: (1) printed on pink paper: "PARATIPO"; (2) printed on white paper: "M.G. Sapucaí-mirim | Cidade Azul – 1400 m. | 7 Nov 1953 | L.Trav F. & M. Kunimann | C. Gans & S. Medeiros"; (3) printed with handwritten inscriptions on white paper: "Olbiogaster | chavantesi | Andretta | det. John Lane 1956".

Condition of type. Pinned.

Paratype ♂ with labels: (1) printed on pink paper: "PARATIPO"; (2) printed on white paper: "M.G. Sapucaí-mirim | Cidade Azul – 1400 m. | 7 Nov 1953 | L.Trav F. & M. Kunimann | C. Gans & S. Medeiros"; (3) printed on white paper: "60.301"; (4) printed with handwritten inscriptions on white paper: "Olbiogaster | chavantesi | Andretta | det. John Lane 1956".

Condition of type. Pinned.

Paratype ♂ with labels: (1) printed on pink paper: "PARATIPO"; (2) printed on white paper: "M.G. Sapucaí-mirim | Cidade Azul – 1400 m. | 7 Nov 1953 | L.Trav F. & M. Kunimann | C. Gans & S. Medeiros"; (3) printed on white paper: "Gen. | des."; (4) printed with handwritten inscriptions on white paper: "Olbiogaster | chavantesi | Andretta | det. John Lane 1956"; (5) handwritten on white paper: "791022-168".

On slide: Terminalia. (1) Handwritten on white paper: "791022-168 | Paratipo | M.G. Sapucaí-mirim | Cidade Azul 1400 m. | 2 Nov 1953 | L.Trav. & M. Kunimann | Olbiogaster | chavantesi | Andretta | det. John Lane 1956".

Condition of type. Pinned, terminalia on permanent slide.

Olbiogaster erythrohydrus Tozoni, 1993

Tozoni, 1993: 121 (original description); figs. 3 (female wing), 13 (female thorax and abdomen coloration).

Type locality: Brazil, Minas Gerais, Águas Vermelhas.

Holotype ♀ with labels: (1) printed on white paper: "BRASIL, MG, ÁGUAS VERME- | LHAS | 800 M | XII.1983 | M. ALVARENGA COL.>"; (2) handwritten on white paper: "Olbiogaster | erythrohydrus | Tozoni"; (3) printed on red paper: "Holotype".

Condition of type. On permanent slide.

Olbiogaster hallucinata Tozoni, 1993

Tozoni, 1993: 124 (original description); fig. 7 (female thorax and abdomen coloration).

Type locality: Brazil, Mato Grosso, Chapada do Guimarães.

Holotype ♀ with labels: (1) printed on red paper: "Holotype"; (2) handwritten on white paper: "Chapada dos | Guimarães | Buriti – MT | 29-4/XII/83 [1983] | Polo Noroeste – PR"; (3) handwritten on white paper: "Brasil, Chapada dos | Guimarães – Buriti – | MT – 29-4.XII.1983 | Polo Noroeste – PR"; (4) handwritten on white paper: "Olbiogaster | hallucinata Tozoni".

Condition of type. Missing parts: Antennae, right foreleg, midlegs and left hindleg.

Olbiogaster marinonii Tozoni, 1993

Tozoni, 1993: 122 (original description); fig. 15 (female thorax and abdomen coloration).

Type locality: Brazil, Paraná, Jundiaí do Sul.

Holotype ♀ with labels: (1) handwritten on white paper: "Jundiaí do Sul | 20.iv.87 [1987] | Malaise"; (2) handwritten on white paper: "Olbiogaster | marinonii Tozoni | HOLOTYPE".

Condition of type. In vial with alcohol.

Paratype ♀ with labels: (1) handwritten on white paper: "Jundiaí do Sul | 13.iv.87 | Malaise"; (2) handwritten on white paper: "Olbiogaster | marinonii Tozoni | PARATYPE".

Condition of type. In vial with alcohol.

Paratype ♀ with labels: (1) printed on white paper: "FÊNIX – PARANÁ | Reserva Est. [Estadual] – ITCF [Instituto de Terras, Cartografia e Florestas] | BRASIL 06.X.1986 | Lev. Ent. [entomological survey] PROFAUPAR | MALAISE"; (2) handwritten on white paper: "Olbiogaster | marinonii | Tozoni"; (3) printed in yellow paper: "Paratype"; (4) printed on white paper: "Olbiogaster marinonii Tozoni | PARATYPE | S.H.S. Tozoni det.".

Condition of type. On permanent slide. Missing parts: Antennae.

Olbiogaster midas Tozoni, 1993

Tozoni, 1993: 121 (original description); fig. 18 (female thorax and abdomen coloration).

Type locality: Brazil, Mato Grosso do Sul, Dourados.

Holotype ♀ with labels: (1) printed on white paper: "BRASIL, MS, DOURADOS | (ITAUM) [Municipality of Dourados] | .III.1974 | ROPPA & ALVARENGA COL.>"; (2) handwritten on white paper: "Olbiogaster midas Tozoni"; (3) printed on red paper: "Holotype".

Condition of type. On permanent slide, very clarified.

Olbiogaster papaveroi Tozoni, 1993

Tozoni, 1993: 120 (original description); fig. 22 (female thorax and abdomen coloration).

Type locality: Brazil, Paraíba, João Pessoa.

Holotype ♀ with labels: (1) printed on white paper: "BRASIL, PB, JOÃO PESSOA | (CAMPUS UNIVERSITÁRIO) | MATO | MALAISE | 01-31.X.1987 | D.S. AMORIM & S.H.S. TOZONI"; (2) handwritten on white paper: "Olbiogaster | papaveroi | Tozoni"; (3) printed on red paper: "Holotype"; (4) printed on white paper: "Olbiogaster papaveroi Tozoni | HOLOTYPE | S.H.S. Tozoni det.".

Condition of type. On permanent slide. Missing parts: Antennae.

Two Paratypes ♀ with labels: (1) handwritten on white paper: "BRASIL, PB, João Pessoa | (Campus Universitário) | Malaise – Mata | 01-31.x.1987 | D.S. Amorim col."; (2) handwritten on white paper: "Olbiogaster | papaveroi Tozoni | Paratype".

Condition of type. Both at the same vial with alcohol. Missing parts: forelegs in one specimen, and mid and hindlegs in the second specimen.

Olbiogaster paractius Tozoni, 1993

Tozoni, 1993: 125 (original description); figs. 39 (male thorax and abdomen coloration), 47 (male gonostyle), 66 (male sternite X), 83 (male aedeagal complex and gonocoxal mesal projection). Ref.: Côrrea 1947 (as *Olbiogaster cincta* Kertész): figs. 5 and 9 (male genitalia).

Type locality: Brazil, Paraná, Morretes.

Holotype ♂ with labels: (1) printed on red paper: "Holotype"; (2) handwritten on white paper: "Olbiogaster | paraktios Tozoni"; (3) printed on white paper: "DPTO ZOOL [Department of Zoology] | UF – PARANÁ [UFPR]"; (4) printed on white paper: "Morretes – PR Brasil | (IAPAR) [Instituto Agronômico do Paraná] | 24–25.XI.1984 | C.I.I.F. [Centro de Identificação de Insetos Fitófagos] (Luminosa)".

Condition of type. Pinned. Missing parts: right antenna, left wing, left fore and mid legs, right legs and abdomen.

Olbiogaster pirapo Tozoni, 1993

Tozoni, 1993: 123 (original description); figs. 19 (female thorax and abdomen coloration), 37 (male thorax and abdomen coloration), 61 (male gonostyle), 67 (male sternite X), 82 (male aedeagal guide).

Type locality: Paraguay, Pirapó.

Holotype ♂ with labels: (1) handwritten on white paper: "PARAGUAY ♂ | PIRAPÓ | 29–31-xii.1971 | L.E. Pena col."; (2) handwritten on white paper: "Olbiogaster pirapo"; (3) printed on white paper: "HOLOTYPE".

Condition of type. In vial with alcohol, very clarified.

Four Paratypes ♂ and one ♀ with labels: (1) handwritten on white paper: "PARAGUAY ♂ | PIRAPÓ | 29–31-xii.1971 | L.E. Pena col."; (2) handwritten on white paper: "Olbiogaster pirapo"; (3) printed on white paper: "PARATYPE".

Condition of type. In vial with alcohol, very clarified.

Olbiogaster similans Lane and d'Andretta, 1958

Lane and d'Andretta, 1958: 523 (original description); fig. 26 (male genitalia dorso-ventral position).

Type locality: Panama, Bocas del Toro, Almirante.

Paratype ♂ with labels: (1) printed on pink paper: "PARATIPO"; (2) printed with handwritten inscriptions on white paper: "Cerro Campana | Pan Pr Panama [Panamá, Región de Panama] | 24. iv 1951"; (3) printed with on white paper: "FS Blanton | Collector"; (4) printed on white paper: "Gen. | des."; (5) printed with handwritten

inscriptions on white paper: "Olbiogaster | similans| Andretta | det. John Lane 1956"; (6) handwritten on white paper: "791022-166".

On slide: Terminalia. (1) Handwritten on white paper: "791022-166 | Paratipo | Cerro Campana | Pan Pr Panama | 24-iv-1951 | F.S. Blanton col. | Gen. Des. Olbiogaster | similans Andretta | det. John Lane 1956".

Condition of type. Pinned, terminalia on permanent slide. Missing Parts. Antennae, left wing and fore and mid legs.

Paratype ♂ with labels: (1) printed on pink paper: "PARATIPO"; (2) printed with handwritten inscriptions on white paper: "Turrialba | Costa Rica | 22 June 1951 | OL Cartwright"; (3) printed with handwritten inscriptions on white paper: "Olbiogaster | similans | Andretta | det. John Lane 1956"; (4) handwritten on white paper: "791022-165".

On slide: Terminalia. (1) Handwritten on white paper: "791022-165 | Paratipo | Turrialba | Costa Rica | 22 June 1951 | OL Cartwright | Olbiogaster similans | Andretta | det. John Lane 1956".

Condition of type. Pinned, terminalia on permanent slide. Missing Parts. Antennae.

Olbiogaster tamoioi Lane and d'Andretta, 1958

Lane and d'Andretta, 1958: 524 (original description).

Type locality: Brazil, Rio de Janeiro, Guanabara [actually Municipality of Rio de Janeiro].

Holotype ♂ with labels: (1) printed on pink paper: "HOLOTIPO"; (2) printed on white paper (front): "Rio de Janeiro | D. Mendes", and handwritten on white paper (back): "18-2-1937"; (3) printed with handwritten inscriptions on white paper: "Olbiogaster | tamoioi | Andretta | det. John Lane 1956".

Condition of type. Pinned.

Paratype ♂ with labels: (1) printed on pink paper: "PARATIPO"; (2) handwritten on white paper: "Deodoro | XII.36 | A. Ronna"; (3) printed with handwritten inscriptions on white paper: "Olbiogaster | tamoioi | Andretta | det. John Lane 1956".

Condition of type. Pinned. Missing parts: right foreleg, left mid-leg and hindlegs.

Paratype ♂ with labels: (1) printed on pink paper: "PARATIPO"; (2) printed with handwritten inscriptions on white paper: "EST.RIO-S.PAULO [Rio de Janeiro–São Paulo Road] | KM 47 | 3 Nov 1943 | O. BRAGALEG"; (3) printed with handwritten inscriptions on white paper: "Olbiogaster | tamoioi | Andretta | det. John Lane 1956".

Condition of type. Pinned, left antenna broken.

Olbiogaster xanthonota Tozoni, 1993

Tozoni, 1993: 124 (original description); fig. 20 (female thorax and abdomen coloration).

Type locality: Brazil, Espírito Santo, Itarana.

Holotype ♀ with labels: (1) printed on red paper: "Holotype"; (2) handwritten on white paper: "Olbiogaster | xanthonota Tozoni"; (3) printed on white paper: "DPTO ZOOL [Department of Zoology] | UF-PARANÁ [UFPR]"; (4) printed on white paper: "ITARANA – BRASIL | ES – 12/2/1966 | C.I.I.F. [Centro de Identificação de Insetos Fitófagos] C. Elias leg."

Condition of type. Pinned. Missing parts: Antennae, right wing and legs.

Sylvicola albiapex (Lane and d'Andretta, 1958)

Lane and d'Andretta, 1958: 499 (*Anisopus*) (original description); figs. 6 (male genitalia dorso-ventral position), 15 (female wing).

Type locality: Brazil, São Paulo, Salesópolis.

Holotype ♀ with labels: (1) printed on pink paper: "HOLOTIPO"; (2) printed with handwritten inscriptions on white paper:

"BR – S.P.: Salesópolis | (Boracea) IV.48.1947 | E. Rabello & Trav. F. | & J. Lane"; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *albapex*, n.sp.| Andretta | det. John Lane 1956".

Condition of type. Pinned, left wing on permanent slide.

Paratype ♀ with labels: (1) printed on pink paper: "PARATIPO"; (2) handwritten on white paper: "VI-48 | S.Paulo | Boracéia | J. Lane col."; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *albapex*, n.sp.| Andretta | det. John Lane 1956".

Condition of type. Pinned.

Paratype ♀ with labels: (1) printed on pink paper: "PARATIPO"; (2) printed on white paper: "Rio de Janeiro | Dist. Federal [at the time, Brazil's Capital] | Brasil"; (3) printed with handwritten inscriptions on white paper: "Outubro | 1937"; (4) printed with handwritten inscriptions on white paper: "*Anisopus* | *albapex*, n.sp.| Andretta | det. John Lane 1956".

Condition of type. Pinned.

Paratype ♀ with labels: (1) printed on pink paper: "PARATIPO"; (2) handwritten on white paper: "VII – 49 | S. PAULO | Boracea | Lane, Coher. col."; (3) printed with handwritten inscriptions on white paper: "Outubro | 1937"; (4) printed with handwritten inscriptions on white paper: "*Anisopus* | *albapex*, n.sp.| Andretta | det. John Lane 1956".

Condition of type. Pinned.

Sylvicola boraceae (*Lane and d'Andretta, 1958*)

Lane and d'Andretta, 1958: 501 (*Anisopus*) (original description); fig. 9 (female wing).

Type locality: Brazil, São Paulo, Salesópolis.

Holotype ♀ with labels: (1) printed on pink paper: "HOLOTIPO"; (2) printed on white paper: "Salesópolis (Boracéia), S. P. | Travassos, Travassos F.° & | Vanzolini col. 22-V-947 [1947]"; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *boraceae*, n.sp.| Andretta | det. John Lane 1956".

Condition of type. Pinned, right wing on permanent slide.

Sylvicola caiuasi (*Lane and d'Andretta, 1958*)

Lane and d'Andretta, 1958: 502 (*Anisopus*) (original description); fig. 16 (female wing).

Type locality: Brazil, São Paulo, Campos do Jordão.

Holotype ♀ with labels: (1) printed on pink paper: "HOLOTIPO"; (2) printed with handwritten inscriptions on white paper: "S. Paulo XII.45 [1945] | C. Jordão | J. Lane coll."; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *caiuasi*, n. sp.| Andretta | det. John Lane 1956".

Condition of type. Pinned.

Paratype ♀ with labels: (1) printed on pink paper: "PARATIPO"; (2) printed on white paper: "M. G. Sapucaí-mirim | Cidade Azul – 1400 m. | 7 Nov 1953 | L.Trav F. & M. Kunimann | C. Gans & S. Medeiros"; (3) printed on white paper: "60.327"; (4) printed with handwritten inscriptions on white paper: "*Anisopus* | *caiuasi*, n.sp.| Andretta | det. John Lane 1956".

Condition of type. Pinned. Missing parts: Right antenna.

Paratype ♀ with labels: (1) printed on pink paper: "PARATIPO"; (2) handwritten on white paper: "VII-49 [1949] | S. Paulo | Boracea [Boracéia] | Rabelo Trav."; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *caiuasi*, n.sp.| Andretta | det. John Lane 1956".

Condition of type. Pinned.

Paratype ♀ with labels: (1) printed on pink paper: "PARATIPO"; (2) handwritten on white paper: "XI-47 [1947] | S. Paulo | Boracéia [Boracéia] | Lane, Coher col."; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *caiuasi*, n.sp.| Andretta | det. John Lane 1956".

Condition of type. Pinned, right wing on permanent slide. Missing parts: Left antenna.

Sylvicola fluminensis (*Lane and d'Andretta, 1958*)

Lane and d'Andretta, 1958: 504 (*Anisopus*) (original description); figs. 4 (male genitalia dorso-ventral position), 10 (male wing).

Type locality: Brazil, Rio de Janeiro, Teresópolis.

Holotype ♂ with labels: (1) printed on pink paper: "HOLOTIPO"; (2) handwritten on white paper: "Terezopolis [Teresópolis] | Travassos | X.42 [1942]"; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *fluminensis* n. sp. | Andretta | det. John Lane 1956".

Condition of type. Pinned, terminalia on permanent slide.

Paratype ♀ with labels: (1) printed on pink paper: "ALOTIPO"; (2) handwritten on white paper: "Terezopolis [Teresópolis] | Travassos | X.42 [1942]"; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *fluminensis* n. sp. | Andretta | det. John Lane 1956".

Condition of type. Pinned.

Paratype ♂ with labels: (1) printed on pink paper: "PARATIPO"; (2) handwritten on white paper: "Terezopolis [Teresópolis] | Travassos | X.42 [1942]"; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *fluminensis* n. sp. | Andretta | det. John Lane 1956".

Condition of type. Pinned, right wing on permanent terminalia.

Sylvicola grandis (*Lane and d'Andretta, 1958*)

Lane and d'Andretta, 1958: 505 (*Oligogaster*) (original description); figs. 8 (male genitalia dorso-ventral position), 14 (female wing).

Type locality: Brazil, Rio de Janeiro, Itatiaia.

Holotype ♀ with labels: (1) printed on pink paper: "HOLOTIPO"; (2) handwritten on white paper: "X – 48 [1948] | Rio Janeiro | Itatiaia | C. Andretta e | C. Nogueira"; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *grandis*, n.sp. | Andretta | det. John Lane 1956".

Condition of type. Pinned.

Paratype ♂ with labels: (1) printed on pink paper: "ALOTIPO"; (2) handwritten on white paper: "Terezopolis [Teresópolis] | Travassos | X. 42 [1942]"; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *grandis*, n.sp. | Andretta | det. John Lane 1956".

Condition of type. Pinned, terminalia on permanent slide.

Paratype ♀ with labels: (1) printed on pink paper: "PARATIPO"; (2) printed with handwritten inscriptions on white paper: "xi. 47 [1947] | S. Paulo | Boracea [Boracéia] | Rabelo.Travassos"; (3) printed with handwritten inscriptions on white paper: "*Anisopus* | *grandis* | Andretta | det. John Lane 1956".

Condition of type. Pinned.

Paratype ♀ with labels: (1) printed on pink paper: "PARATIPO"; (2) printed with handwritten inscriptions on white paper: "J.F. Zikán | Virgínia – 1500 m | S. Minas-Gerais [State of Minas Gerais] | Faz. [Farm] Campos | XII.-1919"; (3) printed with handwritten inscriptions on white paper: "No. | 41 | J.F. Zikán"; (4) printed with handwritten inscriptions on white paper: "*Anisopus* | *grandis*, n.sp. | Andretta | det. John Lane 1956".

Condition of type. Pinned, right wing on permanent slide.

Paratype ♀ with labels: (1) printed on pink paper: "PARATIPO"; (2) handwritten on white paper: "V. [Vargem] Grande [State of Minas Gerais] | IX.44 [1944] | B. Hertel"; (3) printed on white paper: "60.252"; (4) printed with handwritten inscriptions on white paper: "*Anisopus* | *grandis*, n.sp. | Andretta | det. John Lane 1956".

Condition of type. Pinned. Missing parts: Left antenna.

Paratype ♀ with labels: (1) printed on pink paper: "PARATIPO"; "M.G. Sapucaí-mirim | Cidade Azul – 1400 m. | 7 Nov 1953 | L.Trav

F.& M. Kunimann | C. Gans & S. Medeiros"; (3) printed on white paper: "60.300";(4) printed with handwritten inscriptions on white paper: "*Anisopus | grandis, n.sp. | Andretta | det. John Lane 1956*".

Condition of type. Pinned.

Sylvicola wygodzinskyi (*Lane and d'Andretta, 1958*)

Lane and d'Andretta, 1958: 512 (*Anisopus*) (original description); figs. 2 (male genitalia dorso-ventral position), 12 (male wing).

Type locality: Argentina, Tucumán, Cerro de San Javier.

Paratype ♂ with labels: (1) printed on pink paper: "ALOTIPO"; (2) handwritten on white paper: "Cerro de S. Janvier [Cerro de San Javier] | 1000 M. Tucuman, | Arg. 8.V.53 [1953] | Wygodzinsky"; (3) handwritten on white paper: "raised in | laboratory"; (4) printed with handwritten inscriptions on white paper: "*Anisopus | wygodzinskyi | Andretta | det. John Lane 1956*".

Condition of type. Pinned, exuvia glued on triangle paper.

Subfamily Mycetobiinae

Mycetobia stonei (*Lane and d'Andretta, 1958*)

Lane and d'Andretta, 1958: 527 (original description).

Type locality: Costa Rica, San Pedro de los Montes de Oca.

Paratype ♀ with labels: (1) printed on pink paper: "PARÁTIPO"; (2) handwritten on white paper: "C.R.229"; (3) printed with handwritten inscriptions on white paper: "San Pedro de | Montes de Oca | C.R. 4-28-82 [28 April 1982] | C.H. Ballon"; (4) printed with handwritten inscriptions on white paper: "*Mycetobia | stonei | andretta et | det. John Lane 1956*".

Condition of type. Pinned, left wing on permanent slide, exuvia glued in triangle paper. Missing parts: Antennae.

Conflicts of interest

The authors declare no conflicts of interest.

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