Papéis Avulsos de Zoologia
Museu de Zoologia da Universidade de São Paulo

ARTICLE

Checklist of the dipterofauna (Insecta) from Roraima, Brazil, with special reference to the Brazilian Ecological Station of Maracá

Paula Raile Riccardi[1,17]; Diego Aguilar Fachin[1,18]; Rosaly Ale-Rocha[2,19]; Edna Maria Amaral[3,20]; Dalton de Souza Amorim[1,21]; Leonardo Henrique Gil-Azevedo[4,22]; Renato Soares Capellari[5,23]; Daniel Dias Dornelas do Carmo[1,24]; Claudio José Barros de Carvalho[6,25]; Gustavo Borges Ferro[7,26]; Heloísa Fernandes Flores[1,27]; Lucas Roberto Pereira Gomes[6,28]; Marco Silva Gottschalk[8,29]; Carlos José Einicker Lamas[9,30]; Silvana Lampert[10,31]; Marco Antonio Tonus Marinho[8,32]; Dayse Willkenia Almeida Marques[2,33]; Ramon Luciano Mello[11,34]; Cátia Antunes de Mello-Patiu[4,35]; Marco Antônio Menezes[4,36]; Mírian Nunes Morales[12,37]; Sarah Siqueira de Oliveira[13,38]; Thalles Platiny Lavinscky Pereira[14,39]; Alessandre Pereira-Colavite[7,40]; Gabriela Pirani[1,41]; José Albertino Rafael[2,42]; Josenilson Rodrigues dos Santos[4,43]; Marcoandre Savaris[10,44]; Daniel de Castro Schelesky-Prado[15,45]; Vera Cristina Silva[1,46]; Viviane Rodrigues de Sousa[4,47]; Maria Virginia Urso-Guimarães[16,48]; Laura Viana Vargas[8,49]; Carolina Yamaguchi[9,50] & Rafaela Lopes Falaschi[3,51]

[1] Universidade de São Paulo (USP), Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto (FFCLRP), Departamento de Biologia (DB). Ribeirão Preto, SP, Brasil.
[2] Instituto Nacional de Pesquisas da Amazônia (INPA). Manaus, AM, Brasil.
[3] Universidade Estadual de Ponta Grossa (UEPG), Departamento de Biologia Estrutural, Molecular e Genética (DEBIOGEN), Programa de Pós-Graduação em Biologia Evolutiva (PPGBIOEVOL). Ponta Grossa, PR, Brasil.
[4] Universidade Federal do Rio de Janeiro (UFRJ), Museu Nacional (MN), Departamento de Entomologia. Rio de Janeiro, RJ, Brasil.
[5] Instituto Federal de Educação, Ciência e Tecnologia do Triângulo Mineiro (IFTM). Uberaba, MG, Brasil.
[6] Universidade Federal do Paraná (UFPR), Setor de Ciências Biológicas, Departamento de Zoologia (DZOO). Curitiba, PR, Brasil.
[7] Universidade Federal da Paraíba (UFPB), Centro de Ciências Exatas e da Natureza (CCEN), Departamento de Sistemática e Ecologia (DSE). João Pessoa, PB, Brasil.
[8] Universidade Federal de Pelotas (UFPEL), Instituto de Biologia (IB), Departamento de Ecologia, Zoologia e Genética (DEZG). Pelotas, RS, Brasil.
[9] Universidade de São Paulo (USP), Museu de Zoologia (MZUSP). São Paulo, SP, Brasil.
[10] Universidade de São Paulo (USP), Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ), Departamento de Entomologia e Acarologia (LEA). Piracicaba, SP, Brasil.
[11] Universidade Federal de Mato Grosso do Sul (UFMS), Instituto de Biociências (INBIO), Setor de Zoologia. Campo Grande, MS, Brasil.
[12] Universidade Federal de Lavras (UFLA), Departamento de Entomologia. Lavras, MG, Brasil.
[13] Universidade Federal de Goiás (UFG), Instituto de Ciências Biológicas (ICB), Departamento de Ecologia (DECOL). Goiânia, GO, Brasil.
[14] University of Alaska Fairbanks (UAF), Institute of Arctic Biology, Museum of the North. Fairbanks, AK, United States.
[15] Universidade Tecnológica Federal do Paraná (UTFPR). Ponta Grossa, PR, Brasil.
[16] Universidade Federal de São Carlos (UFSCAR), Centro de Ciências Humanas e Biológicas (CCHB), Departamento de Biologia (DBIO), Laboratório de Sistemática de Diptera. Sorocaba, SP, Brasil.
[17] ORCID: https://orcid.org/0000-0003-4850-7524. E-mail: paularriccardi@gmail.com (corresponding author)
[18] ORCID: https://orcid.org/0000-0001-6018-9886. E-mail: diegoafachin@gmail.com
[19] ORCID: https://orcid.org/0000-0001-9874-9770. E-mail: alerocha@inpa.gov.br
[20] ORCID: https://orcid.org/0000-0002-3981-2693. E-mail: ednmaral@gmail.com
[21] ORCID: https://orcid.org/0000-0001-5224-8276. E-mail: ddsamorim@gmail.com
[22] ORCID: https://orcid.org/0000-0002-0389-2185. E-mail: lhgazevedo@gmail.com
[23] ORCID: https://orcid.org/0000-0002-8410-9235. E-mail: rscapellari@gmail.com
[24] ORCID: https://orcid.org/0000-0002-0616-5856. E-mail: dandorndias@gmail.com
[25] ORCID: https://orcid.org/0000-0002-3533-6853. E-mail: cjbcarva@gmail.com
[26] ORCID: https://orcid.org/0000-0003-2091-0872. E-mail: bferrog@gmail.com
[27] ORCID: https://orcid.org/0000-0003-1246-6660. E-mail: helo.flores@hotmail.com
[28] ORCID: https://orcid.org/0000-0002-4782-2015. E-mail: lucaspergos@gmail.com
[29] ORCID: https://orcid.org/0000-0002-9453-4331. E-mail: gotts007@yahoo.com
[30] ORCID: https://orcid.org/0000-0002-7750-590X. E-mail: einicker@usp.br
[31] ORCID: https://orcid.org/0000-0002-7930-0289. E-mail: lampert.silvana@gmail.com
[32] ORCID: https://orcid.org/0000-0003-4220-7598. E-mail: marco.marinho@gmail.com

Pap. Avulsos Zool., 2022; v.62: e202262014
http://doi.org/10.11606/1807-0205/2022.62.014
http://www.revistas.usp.br/paz
http://www.scielo.br/paz
Edited by: Kirstern Lica Follmann Haseyama
Received: 24/05/2021
Accepted: 06/01/2022
Published: 10/03/2022

ISSN On-Line: 1807-0205
ISSN Printed: 0031-1049
ISNI: 0000-0004-0384-1825

[33] ORCID: https://orcid.org/0000-0001-7260-5760. E-mail: willkenia@gmail.com
[34] ORCID: https://orcid.org/0000-0002-1914-5766. E-mail: ramonlmello@gmail.com
[35] ORCID: https://orcid.org/0000-0002-0162-0952. E-mail: camello@acd.ufrj.br
[36] ORCID: https://orcid.org/0000-0002-4056-0286. E-mail: menezes.marcof@gmail.com
[37] ORCID: https://orcid.org/0000-0003-2114-8656. E-mail: mirianmorales@gmail.com
[38] ORCID: https://orcid.org/0000-0002-9453-4569. E-mail: oliveira.sarahcv@gmail.com
[39] ORCID: https://orcid.org/0000-0003-2075-3643. E-mail: thallesplp@gmail.com
[40] ORCID: https://orcid.org/0000-0002-7660-8384. E-mail: alepercol@gmail.com
[41] ORCID: https://orcid.org/0000-0002-3384-9866. E-mail: gabi.pirani3107@gmail.com
[42] ORCID: https://orcid.org/0000-0002-0170-0514. E-mail: jarafael@inpa.gov.br
[43] ORCID: https://orcid.org/0000-0002-5491-8541. E-mail: josenilsonrs@yahoo.com.br
[44] ORCID: https://orcid.org/0000-0002-9145-6059. E-mail: savaris@usp.br
[45] ORCID: https://orcid.org/0000-0002-8752-3749. E-mail: danielscheleskyprado@gmail.com
[46] ORCID: https://orcid.org/0000-0003-4219-3325. E-mail: silva.vera8@gmail.com
[47] ORCID: https://orcid.org/0000-0002-9292-773X. E-mail: sousavrodrigues@gmail.com
[48] ORCID: https://orcid.org/0000-0003-3657-9379. E-mail: mvirginiaurso@gmail.com
[49] ORCID: https://orcid.org/0000-0003-0389-1606. E-mail: lauravviana94@gmail.com
[50] ORCID: https://orcid.org/0000-0003-1864-6013. E-mail: carolguchi@gmail.com
[51] ORCID: https://orcid.org/0000-0002-3046-5744. E-mail: rlfalaschi@gmail.com (corresponding author)

Abstract. Roraima is a Brazilian state located in the northern portion of the Amazon basin, with few studies regarding its biodiversity. The Ecological Station of Maracá (Brazil, state of Roraima) harbors the third largest Brazilian pluvial island and is composed of a transitional landscape of savanna and Amazon rainforest components. Despite its ecological importance and strategic localization, few studies covered the dipterofauna of this locality. An updated checklist addressing 41 families of true flies (Diptera) occurring in Roraima is presented based on the literature and the specimens collected during a field expedition that occurred in 2015. This checklist brings several improvements such as new records of 165 taxa to the state of Roraima, 29 taxa to Brazil, and 259 morphotypes, mostly likely representing undescribed species.

Keywords. Biodiversity; Inventory; Diptera; Flies; Amazon Forest; Transitional area.

INTRODUCTION

Roraima is one of the seven states of Brazil composing its Northern region. It is located in the north of the Brazilian Amazon. Roraima shares borders with Guyana and Venezuela, as well as with the Brazilian states of Amazonas and Pará. The Ecological Station of Maracá (Estação Ecológica de Maracá, ESEC Maracá) was the first Brazilian ecological station, created on July 2nd, 1981, by the federal decree n. 86.061. The Conservation Unit is located in the northwestern portion of Roraima, and it comprises the third major pluvial island of Brazil, integrating an archipelago located in a transitional area between forest and savanna (referred to as *'lavrado'*) landscapes. This forms a particular environment with endemic elements (ICMBio, 2021; Barbosa *et al.,* 2007). The ESEC Maracá has a total area of 103,976.48 ha, formed by a pluvial archipelago composed of more than 200 islands. The main island is named 'Ilha de Maracá'. It is a transitional lowland area, has 830 km^2 and its altitude is about 200 m.a.s.l. (ICMBio, 2021). The region is part of the Guyana Shield, and it deviates the flow of the Uraricoera river, which is a tributary of the Branco River (McGregor & Eden, 1991). In the ESEC Maracá, the following ecosystems are found: tropical humid forest, semideciduous forest, and three categories of *lavrado,* containing transitional lagoons (Barbosa *et al.,* 2007). The vegetational mosaic with gradually east-west change configures an indispensable area to comprehend the subjacent biodiversity associated with the transitional Amazonian areas (Barbosa *et al.,* 2007).

Diptera is one of the most abundant groups of terrestrial invertebrates (Borkent *et al.,* 2018; Brown *et al.,* 2018), being extremely relevant to the biogeographic patterns of associated ecosystems. A great part of the information available on the fly diversity of Roraima refers to Ilha de Maracá. A set of publications regarding this locality was based on material collected in several field expeditions of the Maracá Rainforest Project by different researchers and technicians (Hemming, 1989). These publications substantially improved the knowledge of the Amazonian dipterofauna. Results from these expeditions were published after 1989 (Rafael & Rosa, 1989, 1991; Albuquerque, 1991; Castellón *et al.,* 1991; Lopes & Tibana, 1991; Rafael, 1991; Rafael *et al.,* 1991; Silva, 1991; de Carvalho & Couri, 1992), including data of 23 families of Diptera.

After 1989, the next expedition was only in 2015 and there is an urgent need for an updated checklist based on this additional material. The present study provides a list of all references known to us from the taxonomic literature related to the dipterous diversity of Roraima, with an emphasis on the fauna of Ilha de Maracá. We present here a complete checklist of the 41 families of Diptera collected in Ilha de Maracá in the 2015 expedition. The updated checklist provides means for further studies on taxonomy, biogeography, evolution, and other aspects of flies from the Amazon basin.

MATERIAL AND METHODS

Acronyms used for the depositories

CEUFLA: .....Coleção Entomológica da Universidade Federal de Lavras, Lavras, Minas Gerais;
DEZG/UFPEL: .....Coleção de Diptera do Departamento de Ecologia, Zoologia e Genética, Instituto de Biologia, Universidade Federal de Pelotas, Capão do Leão, Rio Grande do Sul;
DSEC: .....Coleção Entomológica do Departamento de Sistemática e Ecologia da Universidade Federal da Paraíba, João Pessoa, Paraíba;
DZUP: .....Coleção Entomológica Padre Jesus Santiago Moure, Curitiba, Paraná;
INPA: .....Instituto Nacional de Pesquisas da Amazônia, Manaus, Amazonas;
MELQ: .....Museu de Entomologia Luiz de Queiroz, Piracicaba, São Paulo;
MNRJ: .....Museu Nacional, Rio de Janeiro, Rio de Janeiro;
MZUSP: .....Museu de Zoologia da Universidade de São Paulo, São Paulo, São Paulo;
ZUFG: .....Coleção Zoológica da Universidade Federal de Goiás, Goiânia, Goiás;
ZUFMS: .....Coleção Zoológica da Universidade Federal de Mato Grosso do Sul, Campo Grande, Mato Grosso do Sul.

Fieldwork and collecting methods

The fieldwork for insect collecting at ESEC Maracá was performed in two steps. The first one was carried out from 18th to 24th of May, 2015, when a team of entomologists (Gabriel Biffi, Rafaela Falaschi, Marco Marinho, Lívia Pinheiro, and Paula Riccardi) chose nine collecting sites (Fig. 1). Site 1 (03°21.718'N, 61°26.063'W, 125 m.a.s.l.) is situated on the border of a forested area adjacent to the lodgings (Fig. 2A-B). Specimens were collected through sweeping, yellow, and blue pan traps, Van Someren-Rydon (half of the baits consisting of fermented bananas and the other half of chicken entrails), and light traps. Sites 2, 3, and 5 were on the Santa Rosa trail (Fig. 2C). On site 2 (03°22.330'N, 61°26.196'W, 140 m.a.s.l.), the specimens were collected with a Shannon trap; on sites 3 (03°22.430'N, 61°26.154'W, 136 m.a.s.l.) and 5 (03°22.623'N, 61°26.136'W, 101 m.a.s.l.), through sweeping and a Malaise trap, Townes model (Townes, 1962). Site 4 (03°23.413'N, 61°26.036'W, 104 m.a.s.l.) is the only area located in the *lavrado* physiognomy (Fig. 2D). There, specimens were collected with a Malaise trap, yellow pan traps, and sweeping. On site 6 (03°22.066'N, 61°26.339'W, 119 m.a.s.l.), the only trap used was a Van Someren-Rydon trap. Site 7 is located on the main trail of the Ecological Station (03°22.229'N, 61°26.648'W, 143 m.a.s.l.), where the collecting methods used were a Malaise trap, sweeping, yellow pan traps, and a Van Someren-Rydon trap. On sites 8 (03°21.722'N, 61°26.063'W, 100 m.a.s.l.), on the Apuí trail, and 9 (03°21.146'N, 61°25.376'W, 105 m.a.s.l.), on the margin of the Uraricoera River (Fig. 2E), sweeping nets were used.

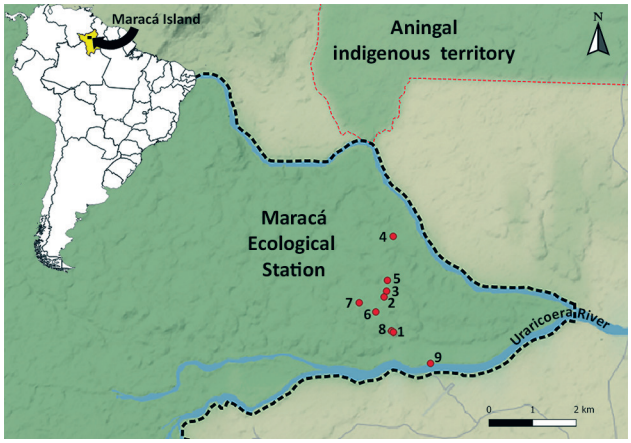


Figure 1. Map of the ESEC Maracá, including the collecting sites (numbered red dots). In small scale, the state of Roraima is represented in yellow on the map of South America.

Material

The specimens of Diptera were sorted into families, then sent to the specialists listed in Table 1 for further identification. Most of the material is deposited at the MZUSP and in nine other Brazilian institutions (CEUFLA; DEZG/UFPEL; DSEC; DZUP; INPA; MELQ; MNRJ; MZUSP; ZUFG; ZUFMS) (see Table 2 for details).

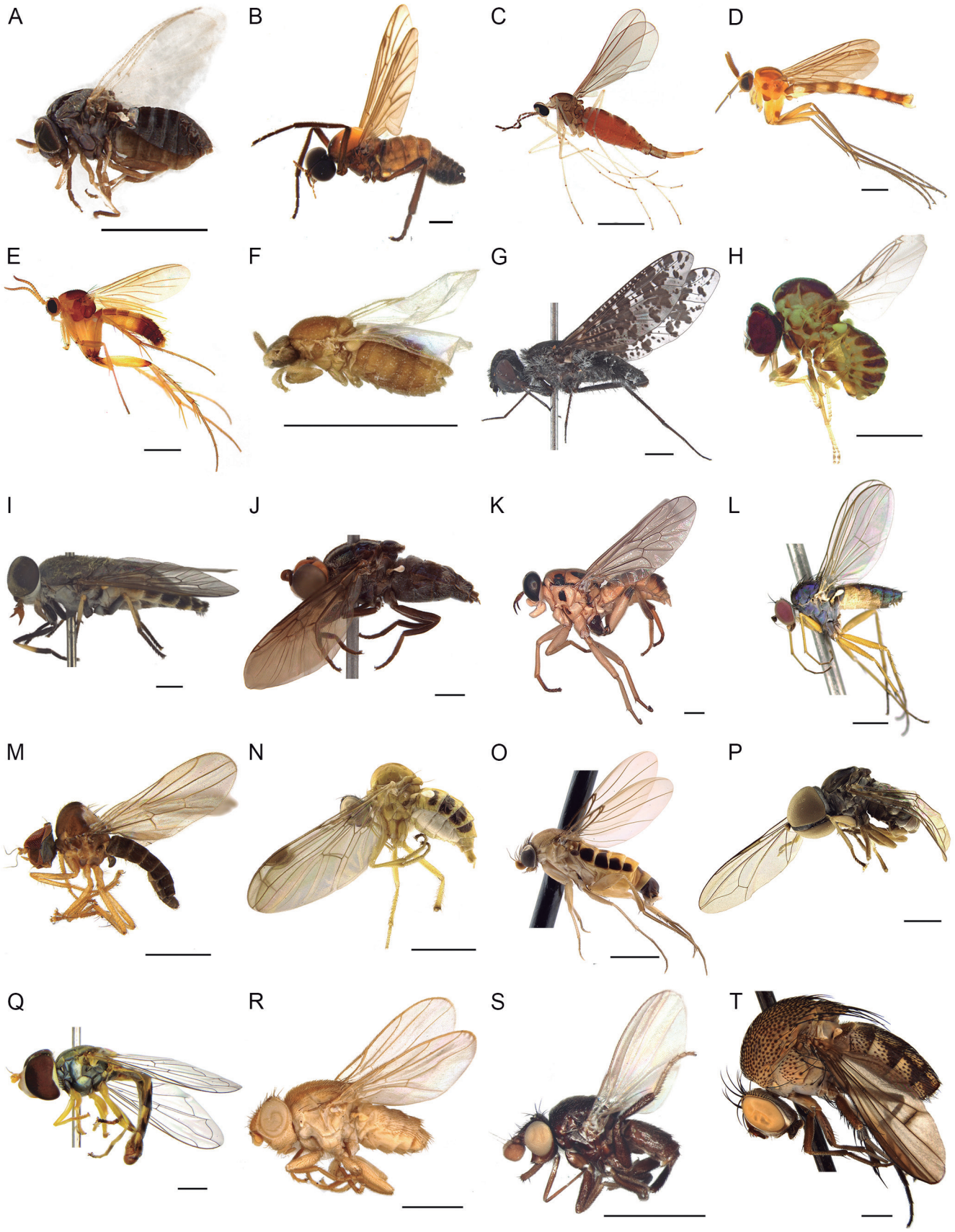
Checklist structure and presentation

The updated checklist of 41 the fly families known to Roraima is organized according to taxonomic rank (Pape *et al.,* 2011). An introduction to these families is followed by a list of valid species and morphospecies recorded from Roraima. The list contains the type locality and geographic distribution of each species, with the records for the Brazilian states between parentheses. Both the family introduction and the species list, as well as Tables 1-2 and Figs. 3-4, follow the systematic position within Diptera according to Pape *et al.* (2011). Within each family, the taxa are arranged in alphabetical order. The abbreviation cf. (= confer) means that the identified specimens may be identical to the following specific epithet but there is no certainty.

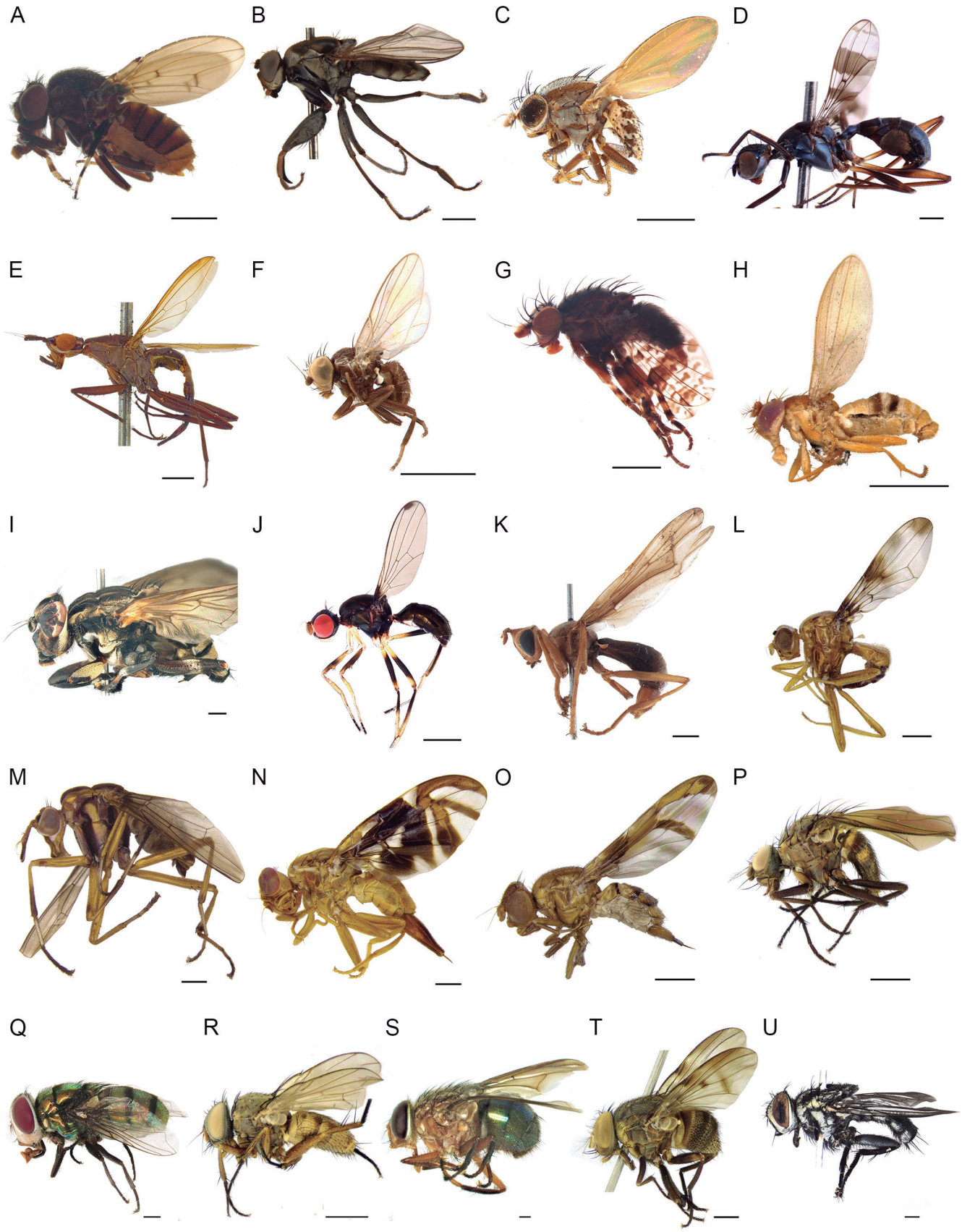
RESULTS

The identified material of ESEC Maracá resulted in 259 morphotypes/cf. and 174 nominal species belonging to 41 families of Diptera. Our results show that, at least, nine of the 41 families have new taxa for Brazil (to be described somewhere else). And of the total of families found, 10 are reported for the first time to state of

Figures 2A-E. Collecting sites. (A) site 1 (lodge); (B) trail connecting sites 1 and 9; (C) Santa Rosa trail. (D) site 4 *(lavrado);* (E) Uraricoera River, margin of the site 9.



Figures 3A-T. Diptera of Ilha de Maracá, *habitus* (lateral views). (A) *Simulium (Psaroniocompsa) oyapockense/roraimense* (Simuliidae); (B) *Plecia* sp. (Bibionidae); (C) *Neolasioptera* sp. (Cecidomyiidae); (D) *Placoceratias* sp. (Keroplatidae); (E) *Leia* sp. (Mycetophilidae); (F) *Efcookella* sp. (Scatopsidae); (G) *Anthrax oedipus* (Bombyliidae); (H) *Glabellula* sp. (Mythicomyiidae); (I) *Tabanus callosus* (Tabanidae); (J) *Chordonota* sp. (Stratiomyidae); (K) *Arthropeina lindneri* (Xylomyidae); (L) *Lyroneurus suavis* (Dolichopodidae); (M) *Syneches moraballi* (Empididae); (N) *Opeatocerata* sp. (Hybotidae); (O) *Eibesfeldtphora declinata* (Phoridae); (P) *Elmohardyia* sp. (Pipunculidae); (Q) *Toxomerus lacrymosus* (Syrphidae); (R) *Medeventor* sp. (Chloropidae); (S) *Paramyia* sp. (Milichiidae); (T) *Curtonotum abrelatas* (Curtonotidae). Scale bar 1 mm.



Figures 4A-U. Diptera of Ilha de Maracá, *habitus* (lateral views). (A) *Drosophila ararama* (Drosophilidae); (B) *Ochthera* sp. (Ephydridae); (C) *Marmarodeceia marmorata* (Lauxaniidae); (D) *Cardiacephala brevipennis* (Micropezidae); (E) *Nerius pilifer* (Neriidae); (F) *Calycomyza* sp. (Agromyzidae); (G) *Odinia* sp. (Odiniidae); (H) *Stenomicra* sp. (Periscelididae); (I) *Lenkokroeberia chryserea* (Ropalomeridae); (J) *Archisepsis diversiformis* (Sepsidae) [modified from sepsidnet.com]; (K) *Pyrgota longipes* (Pyrgotidae), (L) *Coilometopia trimaculata* (Richardiidae); (M) *Thecomyia lateralis* (Sciomyzidae); (N) *Anastrepha rafaeli* (Tephritidae); (O) *Xanthacrona bipustulata* (Ulidiidae); (P) *Phaonantho benevola* (Anthomyiidae); (Q) *Chrysomya albiceps* (Calliphoridae); (R) *Fannia euchaetophora* (Fanniidae); (S) *Mesembrinella bicolor* (Mesembrinellidae); (T) *Cyrtoneuropsis protosetosa* (Muscidae); (U) *Lepidodexia (Notochaeta)* sp. (Sarcophagidae). Scale bar 1 mm.

Table 1. Summary of the total number of taxa in the checklist, per family. The acronym of the specialists of each dipterous family is given in the last column. **Abbreviations:** BR = Brazil; cf. = confer species; col. = collected material in the 2015's expedition; m. = morphotype; n.a. = not applicable; n.r. = new records for; RR = Roraima.

Family	genera				species				m. or cf. col.	specialist
	RR	col.	n.r. RR	n.r. BR	RR	col.	n.r. RR	n.r. BR		
Simuliidae	1	1	0	0	27	1	0	0	1	L.H.G.-A.
Bibionidae	1	1	1	0	0	0	n.a.	n.a.	1	D.S.-P., R.L.F.
Cecidomyiidae	5	5	4	1	0	0	n.a.	n.a.	8	M.V.U.-G.
Keroplatidae	12	11	9	2	0	0	n.a.	n.a.	11	R.L.F., E.M.A.
Mycetophilidae	14	13	12	0	3	1	1	0	48	S.S.O.
Scatopsidae	1	1	0	1	0	0	n.a.	n.a.	1	D.S.A.
Bombyliidae	11	10	2	0	13	8	1	0	7	C.Y., C.J.E.L.
Mythicomyiidae	1	1	0	1	0	0	n.a.	n.a.	1	C.J.E.L., C.Y.
Tabanidae	19	5	0	0	49	18	2	0	0	D.D.D.C.
Stratiomyidae	22	14	3	0	36	24	8	2	10	D.A.F.
Xylomyidae	2	2	1	0	2	2	1	0	2	D.A.F.
Dolichopodidae	14	9	3	1	19	12	2	3	14	R.S.C.
Empididae	3	1	0	0	10	0	n.a.	n.a.	1	J.A.R.
Hybotidae	6	6	4	1	1	1	0	0	8	R.A.-R.
Phoridae	12	9	5	0	27	5	3	2	10	T.P.L.P.
Pipunculidae	7	3	0	0	19	0	n.a.	n.a.	3	J.A.R., R.A.-R., D.W.A.M.
Syrphidae	31	6	1	0	53	6	1	0	4	M.N.M.
Chloropidae	20	20	11	5	9	6	3	0	31	P.R.R.
Milichiidae	6	5	0	2	0	0	n.a.	n.a.	23	H.F.F.
Curtonotidae	1	1	1	0	1	1	0	1	0	P.R.R., R.M.
Drosophilidae	12	12	11	0	16	12	10	0	18	M.S.G., G.P.
Ephydridae	10	10	7	3	0	0	n.a.	n.a.	11	G.P., P.R.R.
Lauxaniidae	10	8	7	0	13	10	6	2	10	V.C.S.
Micropezidae	9	4	0	0	28	1	0	0	5	A.P.-C., G.B.F.
Neriidae	2	1	1	0	3	1	1	0	0	A.P.-C.
Agromyzidae	3	3	3	0	0	0	n.a.	n.a.	4	V.C.S.
Odiniidae	1	1	0	0	1	0	n.a.	n.a.	1	H.F.F.
Periscelididae	2	2	2	0	1	1	1	0	1	P.R.R.
Ropalomeridae	2	2	1	0	2	1	1	0	1	R.A.-R.
Sepsidae	4	3	1	0	11	4	2	0	0	V.C.S.
Pyrgotidae	1	1	1	0	1	1	1	0	0	R.M.
Richardiidae	5	3	0	0	4	3	1	0	1	M.S., S.L.
Sciomyzidae	1	1	0	0	2	1	0	0	0	M.S., S.L.
Tephritidae	5	1	0	0	30	6	1	0	0	M.S., S.L.
Ulidiidae	9	7	2	0	12	7	3	0	7	M.S., S.L.
Anthomyiidae	2	2	2	0	2	2	2	0	0	C.J.B.C., L.R.P.G.
Calliphoridae	7	3	0	0	11	3	0	0	0	M.A.T.M., L.V.V.
Fanniidae	1	1	0	0	4	1	0	0	1	C.J.B.C., L.R.P.G.
Mesembrinellidae	1	1	0	0	4	1	0	0	0	M.A.T.M.
Muscidae	21	9	2	0	25	6	3	0	8	C.J.B.C., L.R.P.G.
Sarcophagidae	15	12	2	0	50	28	12	2	7	C.A.M.-P., J.R.S., M.A.M.

Roraima. There are new records of 99 genera and 66 species for the state and 17 genera and 12 species for Brazil (details on Tables 1-2). The updated checklist of Diptera from Roraima is below:

Simuliidae (Fig. 3A). The female black fly is hematophagous and its habits harm human populations, affecting public health, tourism, agriculture, and livestock. Also, some species act as vectors of human onchocerciasis. Black fly larvae are filter-feeding in lotic environments and important support in the food chain (Adler *et al.,* 2004). The family currently comprises 2,331 species in the world, distributed in 31 genera (Adler, 2021). The Neotropical region has 10 genera and more than 300 species, 95 species and three genera of which are known from Brazil (Gil-Azevedo, 2021). The Roraima fauna is relatively well known, and it has records of 27 black fly species, all belonging to the genus *Simulium* Latreille, 1802 (Adler, 2021). There are no new records in the present work and the identification of two of the species collected in the 2015 expedition is dubious (Table 2). The data used for this section follows Adler (2021).

Table 2. Checklist of the Diptera collected exclusively in the 2015's expedition. The underlined taxa represent previous records of the same locality (Albuquerque, 1991; de Carvalho & Couri, 1992; Lopes & Tibana, 1991; Rafael, 1991). The species (on the right) and genera (on the left) with a single asterisk (*) depict the first record to the state of Roraima, and taxa marked with a double asterisk (**) represent the first record to Brazil. The specific epithets separated by a forward slash (/) mean a dubious identification between the species mentioned.

	Family	Taxon	Sampling sites									Depository
			1	2	3	4	5	6	6	8	9	
Culicomorpha	Simuliidae	*Simulium (Psaroniocompsa) oyapockense/roraimense*	■	■		■						MNRJ
		Simulium sp. 1				■	■					MNRJ
Bibionomorpha	Bibionidae*	* *Plecia* sp. 1				■			■			MZUSP
	Cecidomyiidae*	** *Enallodiplosis* sp. 1					■					MZUSP
		* *Lopesia* sp. 1					■					MZUSP
		Lopesia sp. 2					■					MZUSP
		Lopesia sp. 3				■						MZUSP
		* *Stomatosema* sp. 1					■					MZUSP
		Stomatosema sp. 2					■					MZUSP
		* *Dasineura* sp. 1					■					MZUSP
		* *Neolasioptera* sp. 1					■					MZUSP
	Keroplatidae*	* *Heteropterna* sp. 1				■	■					MZUSP
		* *Keroplatus* sp. 1					■					MZUSP
		* *Neoceroplatus* sp. 1					■					MZUSP
		* *Neoditomyia* sp. 1				■						MZUSP
		* *Neoplatyura* sp. 1			■		■					MZUSP
		* *Placoceratias* sp. 1					■					MZUSP
		* *Proceroplatus* sp. 1				■	■					MZUSP
		* *Taulyrpa* sp. 1				■						MZUSP
		** Undescribed genus 1				■	■					MZUSP
		** Undescribed genus 2				■						MZUSP
		* *Xenoplatyura* sp. 1					■		■			MZUSP
	Mycetophilidae	* *Boraceomyia* sp. 1				■						ZUFG
		Boraceomyia sp. 2					■		■			ZUFG
		Cluzobra sp. 1							■			ZUFG
		* *Dziedzickia oiampensis**							■			ZUFG
		Dziedzickia sp. 1	■		■							ZUFG
		Dziedzickia sp. 2			■							ZUFG
		Dziedzickia sp. 3							■			ZUFG
		Dziedzickia sp. 4							■			ZUFG
		* *Epicypta* sp. 1			■							ZUFG
		Epicypta sp. 2			■							ZUFG
		Epicypta sp. 3			■							ZUFG
		Epicypta sp. 4			■							ZUFG
		Epicypta sp. 5	■			■	■					ZUFG
		Epicypta sp. 6	■			■						ZUFG
		Epicypta sp. 7	■			■	■		■			ZUFG
		Epicypta sp. 8		■		■	■		■			ZUFG
		Epicypta sp. 9				■	■		■			ZUFG
		Epicypta sp. 10					■		■			ZUFG
		Epicypta sp. 11					■		■			ZUFG
		Epicypta sp. 12					■		■			ZUFG
		Epicypta sp. 13							■			ZUFG
		Epicypta sp. 14							■			ZUFG
		Epicypta sp. 15							■			ZUFG
		Epicypta sp. 16							■			ZUFG
		* *Leia* sp. 1	■	■								ZUFG
		Leia sp. 2	■									ZUFG
		Leia sp. 3							■			ZUFG
		Leia sp. 4							■			ZUFG
		Leia sp. 5							■			ZUFG
		Leia sp. 6							■			ZUFG
		* *Leiella* sp. 1					■		■			ZUFG
		* *Manota* sp. 1							■			ZUFG
		* *Monoclona* sp. 1			■							ZUFG
		Monoclona sp. 2					■					ZUFG
		* *Mycetophila* sp. 1			■							ZUFG
		Mycetophila sp. 2			■							ZUFG

Table 2. Continued.

	Family	Taxon	Sampling sites									Depository
			1	2	3	4	5	6	6	8	9	
		Mycetophila sp. 3			■							ZUFG
		Mycetophila sp. 4	■	■								ZUFG
		Mycetophila sp. 5	■									ZUFG
		Mycetophila sp. 6							■			ZUFG
		* *Mycomya* sp. 1				■						ZUFG
		* *Neallodia* sp. 1	■						■			ZUFG
		Neallodia sp. 2					■		■			ZUFG
		* *Neoempheria* sp. 1	■									ZUFG
		Neoempheria sp. 2				■						ZUFG
		Neoempheria sp. 3				■						ZUFG
		Neoempheria sp. 4					■					ZUFG
		* *Sceptonia* sp. 1			■							ZUFG
		Sceptonia sp. 2							■			ZUFG
	Scatopsidae*	** *Efcookella* sp. 1					■					MZUSP
Asiloidea	Bombyliidae	*Anthrax angustiopennis*					■					MZUSP
		Anthrax georgicus					■					MZUSP
		Anthrax luctuosus				■	■					MZUSP
		Anthrax oedipus					■					MZUSP
		* *Chrysanthrax* sp. 1					■		■			MZUSP
		* *Exoprosopa* sp. 1					■					MZUSP
		Geron albicus	■				■					MZUSP
		Nya maracaensis				■	■					MZUSP
		Nya proserpina				■	■					MZUSP
		Poecilognathus sp. 1	■				■					MZUSP
		Poecilognathus sp. 2	■						■			MZUSP
		Poecilognathus sp. 3	■			■						MZUSP
		Poecilognathus sp. 4			■		■					MZUSP
		*Toxophora leucon**					■					MZUSP
		Villa sp. 1				■	■					MZUSP
	Mythicomyiidae*	** *Glabellula* sp. 1					■					MZUSP
Tabanomorpha	Tabanidae	*Chrysops variegatus*					■					MZUSP
		Dichelacera marginata				■						MZUSP
		Esenbeckia prasiniventris					■					MZUSP
		Selasoma tibiale					■					MZUSP
		Tabanus angustifrons					■					MZUSP
		Tabanus antarcticus					■					MZUSP
		Tabanus callosus			■	■			■			MZUSP
		Tabanus claripennis				■						MZUSP
		*Tabanus guyanensis**					■					MZUSP
		Tabanus importunus				■	■					MZUSP
		Tabanus lineifrons	■				■					MZUSP
		Tabanus nebulosus					■					MZUSP
		Tabanus nematocallus							■			MZUSP
		Tabanus occidentalis	■			■	■					MZUSP
		Tabanus pellucidus							■			MZUSP
		Tabanus piceiventris					■					MZUSP
		Tabanus trivittatus							■			MZUSP
		*Tabanus kwatta**				■						MZUSP
Stratiomyomorpha	Stratiomyidae	* *Acrochaeta stigmata**							■			MZUSP
		Chaetohermetia apicalis		■								MZUSP
		Chordonota sp. 1					■					MZUSP
		Chrysochlorina castanea							■			MZUSP
		Chrysochlorina varia			■				■			MZUSP
		*Cyphomyia pulchella**				■			■			MZUSP
		Cyphomyia wiedemanni				■						MZUSP
		Hermetia albitarsis				■	■		■			MZUSP
		Hermetia flavipes		■	■	■	■		■			MZUSP
		Hermetia illucens		■			■					MZUSP
		Hermetia pulchra							■			MZUSP
		Hermetia sp. 1					■		■			MZUSP
		* *Heteracanthia ruficornis**							■			MZUSP
		* *Lyprotemyia* sp. 1							■			MZUSP

Table 2. Continued.

	Family	Taxon	Sampling sites									Depository
			1	2	3	4	5	6	6	8	9	
		*Merosargus cingulatus**										MZUSP
		*Merosargus c-nigrum***										MZUSP
		Merosargus gracilis										MZUSP
		Merosargus nebulifer										MZUSP
		*Merosargus stamineus**										MZUSP
		*Merosargus vertebratus***										MZUSP
		Merosargus sp. 1										MZUSP
		Merosargus sp. 2										MZUSP
		Merosargus sp. 3										MZUSP
		Microchrysa bicolor										MZUSP
		*Popanomyia femoralis**										MZUSP
		Promeranisa nasuta										MZUSP
		Ptecticus testaceus										MZUSP
		Ptecticus sp. 1										MZUSP
		Ptecticus sp. 2										MZUSP
		*Sargus brasiliensis**										MZUSP
		Sargus fasciatus										MZUSP
		*Sargus thoracicus**										MZUSP
		Sargus sp. 1										MZUSP
		Sargus sp. 2										MZUSP
	Xylomyidae	*Arthropeina diadelothorax**										MZUSP
		Arthropeina lindneri										MZUSP
		* *Solva* sp. 1										MZUSP
		Solva sp. 2										MZUSP
Empidoidea	Dolichopodidae	* *Achradocera apicalis**										MZUSP
		Chrysotus brevicornis										MZUSP
		*Chrysotus crosbyi**										MZUSP
		*Chrysotus flavipes***										MZUSP
		*Chrysotus mundus***										MZUSP
		Chrysotus spectabilis										MZUSP
		Chrysotus sp. 1										MZUSP
		Chrysotus sp. 2										MZUSP
		Chrysotus sp. 3										MZUSP
		Chrysotus sp. 4										MZUSP
		Chrysotus sp. 5										MZUSP
		Condylostylus longicornis										MZUSP
		Condylostylus sp. 1										MZUSP
		Condylostylus sp. 2										MZUSP
		Lyroneurus suavis										MZUSP
		Paraclius parvulus										MZUSP
		Paraclius sagittatus										MZUSP
		Paraclius sp. 1										MZUSP
		Paraclius sp. 2										MZUSP
		Paraclius sp. 3										MZUSP
		Paraclius sp. 4										MZUSP
		Paraclius sp. 5										MZUSP
		Pelastoneurus argentiferus										MZUSP
		* *Thrypticus* sp. 1										MZUSP
		* *Viridigona albisigna***										MZUSP
		** *Xanthina* sp. 1										MZUSP
	Empididae	*Opeatocerata* sp. 1										INPA
	Hybotidae	** *Baeodromia* sp. 1										INPA
		* *Drapetis* sp. 1										INPA
		Drapetis sp. 2										INPA
		* *Elaphropeza* sp. 1										INPA
		Elaphropeza sp. 2										INPA
		* *Euhybus* sp. 1										INPA
		* *Micrempis* sp. 1										INPA
		Micrempis sp. 2										INPA
		Syneches moraballi										INPA
Phoroidea	Phoridae	*Apocephalus* sp. 1										MZUSP
		Apocephalus sp. 2										MZUSP

Table 2. Continued.

	Family	Taxon	Sampling sites									Depository
			1	2	3	4	5	6	6	8	9	
		Apocephalus sp. 3					■					MZUSP
		Apocephalus sp. 4							■			MZUSP
		Apocephalus sp. 5				■						MZUSP
		* *Chaetocnemistoptera* sp. 1					■					MZUSP
		* *Cremersia* sp. 1		■		■	■					MZUSP
		*Coniceromyia auristriata***					■					MZUSP
		*Coniceromyia pilipleura***					■					MZUSP
		Dohrniphora sp. 1		■		■	■					MZUSP
		*Eibesfeldtphora declinata**					■					MZUSP
		* *Megaselia scalaris**		■								MZUSP
		* *Myrmosicarius grandicornis**					■					MZUSP
		* *Pseudacteon* sp. 1					■					MZUSP
		Pseudacteon sp. 2					■					MZUSP
Syrphoidea	Pipunculidae	*Elmohardyia* sp. 1					■					INPA
		Tomosvaryella sp. 1					■					INPA
		Tomosvaryella sp. 2					■					INPA
	Syrphidae	*Copestylum* sp. 1					■					CEUFLA
		Microdon (Chymophila) sp. 1					■					CEUFLA
		Ocyptamus antiphates					■					CEUFLA
		Ocyptamus dimidiatus	■									CEUFLA
		Palpada scutellaris					■					CEUFLA
		* *Stipomorpha* sp. 1					■					CEUFLA
		Toxomerus lacrymosus				■						CEUFLA
		Toxomerus pictus					■					CEUFLA
		Toxomerus pulchellus				■	■					CEUFLA
		Toxomerus sp. 1					■					CEUFLA
		*Toxomerus virgulatus**					■					CEUFLA
Carnoidea	Chloropidae	*Apallates* sp. 1		■		■	■		■			MZUSP
		Apallates sp. 2				■	■					MZUSP
		* *Apotropina* sp. 1									■	MZUSP
		** *Cadrema* sp. 1									■	MZUSP
		* *Conioscinella* sp. 1		■			■		■			MZUSP
		Conioscinella sp. 2		■								MZUSP
		Conioscinella sp. 3	■				■					MZUSP
		* *Ectecephala* sp. 1				■	■					MZUSP
		Ectecephala sp. 2					■					MZUSP
		* *Eugaurax* sp. 1				■						MZUSP
		* *Fiebrigella* sp. 1				■			■			MZUSP
		Goniaspis subequalis							■			MZUSP
		* *Hippelates pseudodorsalis**				■	■				■	MZUSP
		** *Incertella* sp. 1		■		■						MZUSP
		* *Liohippelates currani**				■				■		MZUSP
		** *Malloewia* sp. 1			■							MZUSP
		* *Medeventor* sp. 1				■					■	MZUSP
		* *Notaulacella* sp. 1							■			MZUSP
		Notaulacella sp. 2							■			MZUSP
		* *Olcella* sp. 1		■			■		■			MZUSP
		Olcella sp. 2		■			■		■			MZUSP
		Olcella sp. 3		■			■		■			MZUSP
		Olcella sp. 4							■			MZUSP
		Olcella sp. 5							■			MZUSP
		* *Onychaspidium* sp. 1							■			MZUSP
		** *Oscinella* sp. 1	■									MZUSP
		** *Pseudeurina* sp. 1					■					MZUSP
		Pseudeurina sp. 2					■					MZUSP
		Pseudeurina sp. 3				■						MZUSP
		Pseudogaurax cingulatus					■					MZUSP
		Pseudogaurax cf. *higginsi*					■					MZUSP
		*Pseudogaurax longilineatus**					■					MZUSP
		Pseudogaurax sp. 1			■							MZUSP
		Pseudogaurax sp. 2							■			MZUSP

Table 2. Continued.

	Family	Taxon	Sampling sites									Depository
			1	2	3	4	5	6	6	8	9	
		Tricimba sp. 1		■								MZUSP
		Tricimba sp. 2							■			MZUSP
	Milichiidae	** *Milichia* sp. 1					■					MZUSP
		Milichia sp. 2							■			MZUSP
		Milichiella sp. 1					■					MZUSP
		Milichiella sp. 2					■		■			MZUSP
		Milichiella sp. 3	■				■					MZUSP
		Milichiella sp. 4				■						MZUSP
		Paramyia sp. 1				■	■					MZUSP
		Paramyia sp. 2				■	■		■			MZUSP
		Paramyia sp. 3					■					MZUSP
		Paramyia sp. 4			■	■						MZUSP
		Paramyia sp. 5				■						MZUSP
		Paramyia sp. 6				■						MZUSP
		Paramyia sp. 7				■						MZUSP
		Pholeomyia sp. 1		■			■					MZUSP
		Pholeomyia sp. 2		■								MZUSP
		Pholeomyia sp. 3				■	■		■			MZUSP
		Pholeomyia sp. 4				■						MZUSP
		Pholeomyia sp. 5					■					MZUSP
		Pholeomyia sp. 6					■					MZUSP
		Pholeomyia sp. 7					■		■			MZUSP
		Pholeomyia sp. 8					■					MZUSP
		** *Phyllomyza* sp. 1				■	■					MZUSP
		Phyllomyza sp. 2					■					MZUSP
Ephydroidea	Curtonotidae*	* *Curtonotum abrelatas***		■			■		■			MZUSP & ZUFMS
	Drosophilidae	* *Cladochaeta* sp. 1							■			MZUSP
		*Drosophila araicas**		■					■			MZUSP
		*Drosophila ararama**	■	■					■			MZUSP
		*Drosophila fulvimacula**		■					■			MZUSP
		*Drosophila malerkotliana**		■					■			MZUSP
		Drosophila nebulosa		■		■						MZUSP
		Drosophila polymorpha		■								MZUSP
		Drosophila sp. 1 (*saltans* group)					■					MZUSP
		Drosophila sp. 2 (*saltans* group)		■			■					MZUSP
		Drosophila sp. 3 (*repleta* group)		■			■					MZUSP
		Drosophila sp. 4 (*willistoni* subgroup)	■	■								MZUSP
		Drosophila sp. 5 (*bromeliae* group)		■								MZUSP
		* *Hirtodrosophila* sp. 1					■					MZUSP
		Hirtodrosophila sp. 2		■								MZUSP
		* *Leucophenga* sp. 1		■			■		■			MZUSP
		Leucophenga sp. 2		■								MZUSP
		* *Microdrosophila* sp. 1							■			MZUSP
		* *Paramycodrosophila* sp. 1		■								MZUSP
		* *Pseudiastata pseudococcivora**					■					MZUSP
		* *Rhinoleucophenga lopesi**				■	■					MZUSP
		*Rhinoleucophenga punctuata**		■								MZUSP
		Rhinoleucophenga sp. 1					■					MZUSP
		* *Scaptomyza* sp. 1		■					■			MZUSP
		* *Stegana* sp. 1							■			MZUSP
		* *Zaprionus indianus**				■						MZUSP
		* *Zygothrica bilineata**		■								MZUSP
		*Zygothrica prodispar**		■								MZUSP
		Zygothrica sp. 1	■	■				■				MZUSP
		Zygothrica sp. 2		■								MZUSP
		Zygothrica sp. 3		■								MZUSP
	Ephydridae*	* *Athyroglossa* sp. 1					■					MZUSP
		Athyroglossa sp. 2							■			MZUSP
		** *Atissa* sp. 1		■								MZUSP
		* *Lamproclasiopa* cf. *equadoriensis*		■			■					MZUSP
		* *Leptopsilopa* sp. 1					■					MZUSP

Table 2. Continued.

	Family	Taxon	Sampling sites									Depository
			1	2	3	4	5	6	6	8	9	
		** *Lytogaster* sp. 1					■					MZUSP
		** *Mosillus* sp. 1					■					MZUSP
		* *Nostima* cf. *cinnamea*					■					MZUSP
		* *Ochthera* sp. 1									■	MZUSP
		* *Paralimma (Paralimma)* sp. 1					■		■			MZUSP
		* *Zeros* sp. 1				■						MZUSP
Lauxanioidea	Lauxaniidae	* *Allominettia geniseta***		■								MZUSP
		Allominettia sp. 1		■								MZUSP
		Allominettia sp. 2					■					MZUSP
		* *Chaetominettia corollae**							■			MZUSP
		*Chaetominettia spinitibia***					■					MZUSP
		* *Marmarodeceia marmorata**							■			MZUSP
		Marmarodeceia sp. 1					■					MZUSP
		*Neogriphoneura striatifrons**							■			MZUSP
		Neogriphoneura tertia							■			MZUSP
		Neogriphoneura timida							■			MZUSP
		* *Physegenua* sp. 1					■					MZUSP
		* *Poecilominettia* sp. 1 (*effosa* group)*					■					MZUSP
		Poecilominettia sp. 2		■			■		■			MZUSP
		Poecilominettia sp. 3		■								MZUSP
		*Poecilominettia zebroides**		■								MZUSP
		* *Setulina geminata**							■			MZUSP
		* *Xenochaetina flavipennis**		■								MZUSP
		Xenochaetina sp. 1		■	■				■			MZUSP
		Xenochaetina sp. 2		■								MZUSP
		Xenochaetina sp. 3							■			MZUSP
Nerioidea	Micropezidae	*Poecilotylus* sp. 1		■								DSEC
		Ptilosphen sp. 1					■					DSEC
		Rainieria sp. 1					■					DSEC
		Rainieria sp. 2		■								DSEC
		Taeniaptera lasciva					■					DSEC
		Taeniaptera sp. 1					■					DSEC
	Neriidae	* *Nerius pilifer**		■					■			DSEC
Opomyzoidea	Agromyzidae*	* *Agromyza* sp. 1					■					MNRJ
		* *Calycomyza* sp. 1					■					MNRJ
		* *Liriomyza* sp. 1				■	■					MNRJ
		Liriomyza sp. 2									■	MNRJ
	Odiniidae	*Odinia* sp. 1					■					MZUSP
	Periscelididae	* *Neoscutops cariri**							■			MZUSP & INPA
		* *Stenomicra* sp. 1							■			MZUSP
Sciomyzoidea	Ropalomeridae	* *Lenkokroeberia chryserea**					■					INPA
		Willistoniella cf. *ulyssesi*		■								INPA
	Sepsidae	*Archisepsis discolor*		■								MZUSP
		*Archisepsis diversiformis**		■								MZUSP
		* *Meropliosepsis sexsetosa**		■					■			MZUSP
		Microsepsis furcata		■			■		■			MZUSP
Tephritoidea	Pyrgotidae*	* *Pyrgota longipes**	■									MZUSP
	Richardiidae	*Coilometopia trimaculata*		■		■	■					MELQ
		Odontomera sp. 1					■					MELQ
		*Richardia podagrica**		■			■		■			MELQ
	Sciomyzidae	*Thecomyia lateralis*		■								MELQ
	Tephritidae	*Anastrepha bahiensis*		■					■			MELQ
		Anastrepha fraterculus		■								MELQ
		Anastrepha leptozona		■								MELQ
		*Anastrepha pickeli**		■								MELQ
		Anastrepha rafaeli		■								MELQ
		Anastrepha serpentina		■								MELQ
	Ulidiidae	*Acrosticta* sp. 1		■			■	■				MELQ
		Acrosticta sp. 2		■			■	■				MELQ
		Acrosticta sp. 3		■								MELQ
		Acrosticta sp. 4		■			■					MELQ

Table 2. Continued.

	Family	Taxon	Sampling sites									Depository
			1	2	3	4	5	6	6	8	9	
		Axiologina ferrumequinum		■			■	■				MELQ
		Euxesta sp. 1				■						MELQ
		Euxesta sp. 2					■					MELQ
		Euxesta sp. 3					■					MELQ
		Notogramma cimiciforme					■					MELQ
		* *Paragorgopis euryale**		■				■	■			MELQ
		* *Rhyparella decempunctata**		■					■			MELQ
		Xanthacrona bipustulata	■	■				■	■			MELQ
		Xanthacrona phyllochaeta		■		■	■					MELQ
		*Xanthacrona tuberosa**		■								MELQ
Calyptratae	Anthomyiidae*	* *Coenosopsia michelseni**					■					DZUP
		* *Phaonantho benevola**					■					DZUP
	Calliphoridae	*Chloroprocta idioidea*		■								DEZG
		Lucilia eximia		■								DEZG
		Paralucilia paraensis		■								DEZG
	Fanniidae	*Fannia euchaetophora*			■		■		■			DZUP
		Fannia sp. 1		■		■						DZUP
	Mesembrinellidae	*Mesembrinella bicolor*	■	■	■			■	■			DEZG
	Muscidae	* *Atherigona orientalis**		■								DZUP
		Bithoracochaeta flavicoxa					■					DZUP
		Bithoracochaeta sp. 1							■	■		DZUP
		Cyrtoneurina sp. 1			■							DZUP
		Cyrtoneuropsis dubia					■					DZUP
		*Cyrtoneuropsis flaviantennata**					■					DZUP
		Cyrtoneuropsis protosetosa			■	■	■		■			DZUP
		Cyrtoneuropsis sp. 1			■	■	■		■			DZUP
		Cyrtoneuropsis sp. 2				■	■					DZUP
		* *Gymnodia debilis**					■					DZUP
		Limnophora sp. 1							■			DZUP
		* *Neodexiopsis* sp. 1							■			DZUP
		Neomuscina sp. 1					■		■			DZUP
		Philornis sp. 1				■	■					DZUP
	Sarcophagidae	*Argoravinia alvarengai*					■					MNRJ
		*Dexosarcophaga ampullula**					■					MNRJ
		*Dexosarcophaga globulosa**				■	■					MNRJ
		*Helicobia aurescens**					■					MNRJ
		*Helicobia morionella**					■					MNRJ
		Helicobia sp. 1					■					MNRJ
		Helicobia sp. 2					■					MNRJ
		Lepidodexia (Notochaeta) sp. 1					■		■			MNRJ
		Lepidodexia (Notochaeta) sp. 2							■			MNRJ
		Lepidodexia (Notochaeta) carvalhoi					■					MNRJ
		* *Metopia* sp. 1					■					MNRJ
		Metopia sp. 2					■					MNRJ
		Metopia sp. 3										MNRJ
		*Oxysarcodexia adunca**					■					MNRJ
		*Oxysarcodexia avuncula**					■					MNRJ
		*Oxysarcodexia carvalhoi**					■					MNRJ
		*Oxysarcodexia nitida**					■					MNRJ
		Oxysarcodexia thornax					■					MNRJ
		Peckia (Euboettcheria) anguilla	■									MNRJ
		Peckia (Peckia) pexata					■					MNRJ
		Peckia (Sarcodexia) lambens					■		■			MNRJ
		Ravinia belforti					■					MNRJ
		*Ravinia effrenata**					■					MNRJ
		Retrocitomyia retrocita				■	■					MNRJ
		* *Sarcofahrtiopsis cuneata**					■					MNRJ
		Titanogrypa (Cucullomyia) alvarengai					■					MNRJ
		*Tricharaea (Sarcophagula) apicata***					■					MNRJ
		*Tricharaea (Sarcophagula) ramirezi**					■					MNRJ

SIMULIIDAE Newman, 1834
Subfamily SIMULIINAE Newman, 1834
Genus SIMULIUM Latreille, 1802

Simulium amazonicum Goeldi, 1905 = *S. tallaferroae* Ramírez-Pérez, 1971. **Type locality:** Brazil (Amazonas). **Distribution:** Brazil (Acre, Amazonas, Rondônia, Roraima), Colombia, Venezuela.

Simulium cauchense Floch & Abonnenc, 1946 = *S. sextobecium* Nunes de Mello, 1974 = *S. rangeli* Ramírez-Pérez, Rassi & Ramírez, 1977. **Type locality:** French Guiana. **Distribution:** Brazil (Amapá, Amazonas, Pará, Roraima), French Guiana, Guyana, Suriname, Venezuela.

Simulium covagarciai Ramírez-Pérez, Yarzábal, Takaoka, Tada & Ramírez, 1984. **Type locality:** Venezuela. **Distribution:** Brazil (Roraima), Venezuela.

Simulium cristalinum Coscarón & Py-Daniel, 1989. **Type locality:** Brazil (Roraima). **Distribution:** Brazil (Roraima).

Simulium exiguum Roubaud, 1906 = *S. glaucophthalmum* Knab, 1914 = *S. delpontei* Paterson & Shannon, 1927 = *S. urubambanum* Enderlein, 1934. **Type locality:** Venezuela. **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Bahia, Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Rio de Janeiro, Roraima, São Paulo, Tocantins), Colombia, Ecuador, Guatemala, Guyana, Mexico, Panama, Peru, Venezuela.

Simulium goeldii Cerqueira & Nunes de Mello, 1967 = *S. scorzai* Ramírez-Pérez, 1980. **Type locality:** Brazil (Amazonas). **Distribution:** Brazil (Amapá, Amazonas, Pará, Rondônia, Roraima), French Guiana, Venezuela.

Simulium guianense Wise, 1911 = *S. pintoi* d'Andretta & d'Andretta, 1945 = *S. ortizi* Ramírez-Pérez, 1971. **Type locality:** Guyana. **Distribution:** Brazil (Amapá, Amazonas, Espírito Santo, Goiás, Maranhão, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Roraima, Santa Catarina, São Paulo, Tocantins), French Guiana, Guyana, Suriname, Venezuela.

Simulium inaequale (Paterson & Shannon, 1927) = *Simulium baiense* Pinto, 1932 = *S. manicatum* (Enderlein, 1934) = *S. argentatum* (Enderlein, 1936) = *S. clarki* Fairchild, 1940 = *S. jundiaiense* d'Andretta & Dolores González, 1964 = *S. pseudoexiguum* Nunes de Mello & Barbosa de Almeida, 1974. **Type locality:** Argentina. **Distribution:** Argentina, Bolivia, Brazil (Amapá, Bahia, Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Paraíba, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo, Tocantins), Costa Rica, Ecuador, Guyana, Panama, Paraguay, Peru, Venezuela.

Simulium incrustatum Lutz, 1910 = *S. aequifurcatum* Lutz, 1910 = *S. angrense* Pinto, 1932 = *S. opalinifrons* (Enderlein, 1934) = *S. yarzabali* Ramírez-Pérez, 1980. **Type locality:** Brazil (Minas Gerais). **Distribution:** Argentina, Brazil (Amapá, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraíba, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Ecuador, Panama, Paraguay, Trinidad and Tobago, Venezuela.

Simulium iracouboense Floch & Abonnenc, 1946 = *S. sucamense* Nunes de Mello, 1974 = *S. santaelenae* Ramírez-Pérez & Peterson, 1981. **Type locality:** French Guiana. **Distribution:** Brazil (Amapá, Amazonas, Pará, Roraima), French Guiana, Suriname, Venezuela.

Simulium limbatum Knab, 1915 = *S. machadoi* Ramírez-Pérez, 1971 = *S. meruoca* Nunes de Mello, Barbosa de Almeida & Dellome-Filho, 1973 = *S. machadoallisoni* Vulcano, 1981. **Type locality:** Guyana. **Distribution:** Brazil (Amapá, Bahia, Espírito Santo, Mato Grosso, Pará, Paraíba, Pernambuco, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Guyana, Venezuela.

Simulium lutzianum Pinto, 1932 = *S. lewisi* Ramírez-Pérez, 1971 = *S. alirioi* Ramírez-Pérez & Vulcano, 1973 = *S. iguazuense* Coscarón, 1976. **Type locality:** Venezuela. **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Espírito Santo, Goiás, Paraná, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, Guyana, Panama, Peru, Venezuela.

Simulium maroniense Floch & Abonnenc, 1946 = *S. wuayaraka* Ortiz, 1957. **Type locality:** French Guiana. **Distribution:** Brazil (Amapá, Amazonas, Mato Grosso, Pará, Roraima), French Guiana, Guyana, Venezuela.

Simulium metallicum Bellardi, 1859 = *S. riveti* Roubaud, 1906 = *S. nitidum* Malloch, 1912 = *S. versicolor* Lutz & Nuñes Továr *in* Lutz, 1928 = *S. avidum* Hoffmann, 1930 = *S. violacescens* Enderlein, 1934. **Type locality:** Mexico. **Distribution:** Brazil (Paraná, Roraima, São Paulo), Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Peru, Trinidad and Tobago, Venezuela.

Simulium minusculum Lutz, 1910. **Type locality:** Brazil (Minas Gerais). **Distribution:** Argentina, Brazil (Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Minas Gerais, Pará, Piauí, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Guyana, Venezuela.

Simulium ochraceum Walker, 1861 = *S. bipunctatum* Malloch, 1912 = *S. antillarum* Jennings, 1915 = *S. scutellatum* Lane & Porto *in* Porto, 1940 = *S. wolcotti* Fox, 1953 = *S. pseudoantillarum* Ramírez-Pérez & Vulcano, 1973. **Type locality:** Mexico (Chiapas). **Distribution:** Belize, Brazil (Amazonas, Espírito Santo, Rio de Janeiro, Roraima, São Paulo), Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, French Guiana, Guadalupe, Guatemala, Jamaica, Mexico, Montserrat, Panama, Peru, Puerto Rico, Trinidad and Tobago, Venezuela, United States Virgin Islands.

Simulium oyapockense Floch & Abonnenc, 1946 = *S. pseudosanguineum* Ramírez-Pérez & Peterson, 1981 = *S. pseudoamazonicum* Ramírez-Pérez & Peterson, 1981 = *S. cuasisanguineum* Ramírez-Pérez, Yarzábal & Peterson, 1982 = *S. sanchezi* Ramírez-Pérez, Yarzábal & Peterson, 1982 = *S. pydanieli* (Pessoa, Medeiros & Barbosa, 2008). **Type locality:** French Guiana. **Distribution:** Argentina, Bolivia, Brazil (Acre, Amapá, Amazonas, Espírito Santo, Mato Grosso, Mato

Grosso do Sul, Minas Gerais, Pará, Paraná, Rio Grande do Sul, Rondônia, Roraima, São Paulo, Tocantins), Colombia, Ecuador, French Guiana, Guyana, Paraguay, Uruguay, Venezuela.

Simulium perflavum Roubaud, 1906 = *S. varians* Lutz, 1909 = *S. antunesi* Lane & Porto, 1940 = *S. mauense* Nunes de Mello, 1974. **Type locality:** Brazil (São Paulo). **Distribution:** Argentina, Brazil (Acre, Amapá, Amazonas, Bahia, Ceará, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo), Guyana, Paraguay, Venezuela.

Simulium pertinax Kollar, 1832 = *S. inexorabile* Schrottky, 1909 = *S. infuscatum* Lutz, 1909 = *S. flavifemur* (Enderlein, 1921) = *S. lutzianum* (Enderlein, 1934) = *S. septentrionale* Cerqueira & Barbosa de Almeida, 1970 = *S. cerqueirai* Barbosa de Almeida *in* Nunes de Mello & Barbosa de Almeida, 1974. **Type locality:** Brazil (São Paulo). **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Bahia, Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraíba, Paraná, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Paraguay.

Simulium quadrifidum Lutz, 1917 = *S. rassii* Ramírez-Pérez, 1980 = *S. torrealbai* Ramírez-Pérez, 1980. **Type locality:** Brazil (Rondônia). **Distribution:** Bolivia, Brazil (Acre, Amapá, Amazonas, Pará, Rondônia, Roraima), Colombia, Ecuador, French Guiana, Guyana, Suriname, Venezuela.

Simulium roraimense Nunes de Mello, 1974. **Type locality:** Brazil (Roraima). **Distribution:** Argentina, Brazil (Roraima), Ecuador, Venezuela.

Simulium rubrithorax Lutz, 1909 = *S. magnum* Lane & Porto *in* Porto, 1940 = *S. mutucuna* Nunes de Mello & Vieira da Silva, 1974. **Type locality:** Brazil (Minas Gerais). **Distribution:** Argentina, Bolivia, Brazil (Bahia, Ceará, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Colombia, Venezuela.

Simulium spinibranchium Lutz, 1910 = *S. striginotum* (Enderlein, 1934) = *S. pillosum* Lane & Porto *in* Porto, 1940 = *S. laneportoi* Vargas, 1941. **Type locality:** Brazil (São Paulo). **Distribution:** Bolivia, Brazil (Bahia, Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Pernambuco, Rio Grande do Sul, Rio de Janeiro, Roraima, Santa Catarina, São Paulo, Tocantins), Guyana, Venezuela.

Simulium suarezi Ramírez-Pérez, Rassi & Ramírez, 1977. **Type locality:** Venezuela. **Distribution:** Brazil (Amazonas, Roraima), Venezuela.

Simulium subnigrum Lutz, 1910 = *S. diversifurcatum* Lutz, 1910 = *S. subclavibranchium* Lutz, 1910 = *S. nogueirai* d'Andretta & Dolores González, 1964 = *S. mbarigui* Coscarón & Wygodzinsky, 1973 = *S. beaupertuyi* Ramírez-Pérez, Rassi & Ramírez, 1977 = *S. nahimi* Py-Daniel, 1984 = *S. leopoldense* (Strieder & Py-Daniel, 2000). **Type locality:** Brazil (Rio de Janeiro). **Distribution:** Argentina, Brazil (Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo), Colombia, Paraguay, Trinidad and Tobago, Venezuela.

Simulium subpallidum Lutz, 1910 = *S. guerreroi* Ramírez-Pérez, 1971 = *S. acarayense* Coscarón & Wygodzinsky, 1972 = *S. guarani* Coscarón & Wygodzinsky, 1972 = *S. nilesi* Rambajan, 1979. **Type locality:** Brazil (Minas Gerais). **Distribution:** Argentina, Brazil (Alagoas, Amapá, Bahia, Distrito Federal, Ceará, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo, Tocantins), Guyana, Paraguay, Uruguay, Venezuela.

Simulium trombetense Hamada, Py-Daniel & Adler, 1999. **Type locality:** Brazil (Amazonas). **Distribution:** Brazil (Amapá, Amazonas, Pará, Roraima), French Guiana.

***Simulium* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Bibionidae (Fig. 3B). This group, popularly known as march flies or love-bugs, encompasses eight genera with over 700 described species in the world (Fitzgerald, 2009), included in four subfamilies: Hesperininae, Plecinae, Penthetriinae, and Bibioninae (Fitzgerald, 2009; Pinto & Amorim, 2000). Six genera and 169 species are known from the Neotropical region (Hardy, 1959, 1966; Amorim *et al.,* 2002). The Brazilian fauna has six genera and about 40 species (Hardy, 1959, 1966; Falaschi *et al.,* 2016, 2018). However, the knowledge about the distributional patterns of march flies in Brazil is still incipient. Here, the family and the genus *Plecia* Wiedemann, 1828 are recorded for the first time to Roraima (Table 2).

BIBIONIDAE Fleming, 1821
Subfamily PLECIINAE Rohdendorf, 1946
Genus PLECIA Wiedemann, 1828

= *Protomyia* Heer, 1849 = *Rhinoplecia* Bellardi, 1859 = *Penthera* Philippi, 1865 = *Epiplecia* Giard, 1879 = *Heteroplecia* Hardy, 1950 = *Pleciodes* Hardy, 1952 = *Lacibibio* Hong *in* Hong *et al.,* 1980.

***Plecia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Cecidomyiidae (Fig. 3C). Gall midges represent an old lineage of Diptera among the Sciaroidea superfamily (Wood & Borkent, 1989). The family is considered monophyletic in phylogenies using morphological and molecular data (Amorim & Rindal, 2007; Ševčík *et al.,* 2016). The mycophagous habit is prevalent in the five subfamilies considered basal among the cecidomyiids (Catotrichinae, Lestremiinae, Micromyiinae, Winnertziinae, and Porricondylinae) and in two of the four supertribes of Cecidomyiinae (Brachineneuridi and Stomatosematidi). In the other two supertribes (Lasiopteridi and Cecidomyiidi), the galling habit is predominant. Currently, the cecidomyiids comprise more than 6,600 species worldwide, distributed in 832 genera classified into six subfamilies

(Gagné & Jaschhof, 2021). The Neotropical region has about 600 species in 170 genera, of which 159 species and 75 genera have records from Brazil (Maia & Urso-Guimarães, *submitted*). Cecidomyiidae is being recorded for the first time in Roraima. The identified material includes eight species of five genera: three morphospecies of *Lopesia* Rübsaamen, 1908, two of *Stomatosema* Kieffer, 1904, and one morphospecies of each of the following genera: *Dasineura* Rondani, 1840, *Neolasioptera* Felt, 1908, and *Enallodiplosis* Gagné, 1994. Besides, this is the first record to Brazil of *Enallodiplosis,* a monotypic genus previously recorded only from Chile and Argentina.

CECIDOMYIIDAE Newman, 1865
Subfamily CECIDOMYIINAE Rondani, 1840
Genus ENALLODIPLOSIS Gagné, 1994

***Enallodiplosis* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Tribe ALYCAULINI Rübsaamen & Hedicke, 1926
Genus NEOLASIOPTERA Felt, 1908

= *Neolasioptera* Felt, 1908 = *Luisieria* Tavares, 1922 = *Dilasioptera* Möhn, 1964 = *Neurolasioptera* Brèthes, 1922 = *Physalidicola* Brèthes, 1917.

***Neolasioptera* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Tribe DASINEURINI Rübsaamen & Hedicke, 1926
Genus DASINEURA Rondani, 1840

= *Dasineura* Rondani, 1840 = *Dasyneura* Anonymous, 1844 = *Perrisia* Rondani, 1846 = *Dasyneura* Agassiz & Loew, 1846 = *Dasynevra* Agassiz, 1847 = *Neocerata* Coquillett, 1900 = *Gioliella* Del Guercio, 1918 = *Dasynewca* Shinji, 1938 = *Dassyneura* Shinji, 1944 = *Gioriella* Shinji, 1944.

***Dasineura* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Tribe LOPESIINI Gagné, 1994
Genus LOPESIA Rübsaamen, 1908

= *Lopesia* Rübsaamen, 1908 = *Lopesla* Shinji, 1944.

***Lopesia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Lopesia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Lopesia* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Tribe STOMATOSEMATINI Mamamev, 1968
Genus STOMATOSEMA Kieffer, 1904

= *Stomatosema* Kieffer, 1904 = *Jeannellomyia* Kieffer, 1913 = *Baeomyza* Kieffer, 1913 = *Vanchidiplosis* Nayar, 1949 = *Neohaplusia* Rao, 1951 = *Haplusiella* Rao, 1952.

***Stomatosema* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Stomatosema* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Keroplatidae (Fig. 3D). These gnats inhabit mainly moist tropical forests and are usually associated with fungi. Adults can be collected in dark and humid places like stream banks and wet caves by sweeping in low vegetation, under hanging rocks, or decaying logs. Larvae are also present in moist and dark places and have a variety of feeding habits (Osawa *et al.,* 2014; Falaschi *et al.,* 2019a, b). Predaceous larvae are seen in all subfamilies (Mansbridge, 1933), whereas mycophagy characterizes Keroplatinae (Matile, 1997; Evenhuis, 2006). The family comprises about 950 species in at least 92 genera (Papavero, 1978; Matile, 1990; Evenhuis, 1994, 2006; Papp, 2008; Ševčík, 2009; Ševčík & Papp, 2009; Pape *et al.,* 2011; Oliveira *et al.,* 2017), distributed in all biogeographic regions. In the Neotropical region, there are more than 200 species in 32 genera, 40 of which are known from Brazil, mainly from the South and Southeast regions (Evenhuis, 2006; Falaschi, 2012; Oliveira *et al.,* 2017). This study reports the family for the first time to Roraima. A total of 11 morphotypes belonging to 11 genera of Keroplatidae were collected at the ESEC Maracá during this survey (Tables 1-2), considerably increasing the knowledge about the distributional patterns of this family of flies. These records also include two undescribed genera. To the following list we have incorporated specimens collected in 2011, in Caracaraí, Roraima, by Dr. Gabriel Biffi and Dr. Laura Rocha Prado. The 2011 survey includes the first record of the genus *Orfelia* Costa, 1857 to Roraima.

KEROPLATIDAE Rondani, 1856
Subfamily KEROPLATINAE Rondani, 1856
Genus HETEROPTERNA Skuse, 1888

***Heteropterna* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus KEROPLATUS Bosc, 1792

= *Ceroplatus* Fabricius, 1798.

***Keroplatus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus NEOCEROPLATUS Edwards, 1941

***Neoceroplatus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus NEODITOMYIA Lane & Sturm, 1958

***Neoditomyia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus NEOPLATYURA Malloch, 1928

***Neoplatyura* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus ORFELIA Costa, 1857

= *Zelmira* Meigen, 1800.

***Orfelia* sp. 1, Locality:** Brazil (Roraima, Caracaraí).

Genus PLACOCERATIAS Enderlein, 1910

***Placoceratias* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PROCEROPLATUS Edwards, 1925

= *Calliplatyura* Malloch, 1928.

***Proceroplatus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus TAULYRPA Edwards, 1929

***Taulyrpa* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus UNDESCRIBED GENUS 1

Undescribed genus 1, Locality: Brazil (Roraima, Ilha de Maracá and Caracaraí).

Genus UNDESCRIBED GENUS 2

Undescribed genus 2, Locality: Brazil (Roraima, Ilha de Maracá and Caracaraí).

Genus XENOPLATYURA Malloch, 1928

= *Afrorfelia* Matile, 1970.

***Xenoplatyura* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Mycetophilidae (Fig. 3E). Popularly known as fungus gnats, the mycetophilids are cosmopolite with 4,525 known species in 233 genera worldwide (Pape *et al.,* 2011), but the group is certainly more diverse than this outdated compilation in view of the solid group of researchers working with the taxonomy of the family worldwide. There are more studies with the fauna of temperate regions, despite the fact that mycetophilids are more diverse in tropical areas, especially in the Neotropical region, where there are especially in the Neotropical region, where there are 1,202 species and 55 genera (Oliveira & Amorim, 2014; Amaral *et al.,* 2022). Currently, the Mycetophilidae are divided into six subfamilies (Oliveira & Amorim, 2021), only two of which (Sciophilinae and Gnoristinae) had species known from Roraima: one of each subfamily (*Cluzobra aitikeni* Lane, 1956 and *Tetragoneura rara* Duret, 1980, respectively) (Oliveira & Amorim, 2014). Both species were sampled and *Dziedzickia oiampensis* Lane, 1961 is recorded for the first time to Roraima along with another 46 morphotypes of 11 genera (Table 2). The catalog information that follows was previously published in Oliveira & Amorim (2014).

MYCETOPHILIDAE Newman, 1834
Subfamily GNORISTINAE Edwards, 1925
Genus DZIEDZICKIA Johannsen, 1907

= *Hertwigia* Dziedzickia, 1885 = *Dziedzickia* Johannsen, 1909 = *Syntemna,* authors, not Winnertz.

Dziedzickia oiampensis Lane, 1961. **Type locality:** Brazil (Amapá). **Distribution:** Brazil (Amapá, Bahia, Minas Gerais, Paraíba, Paraná, Pernambuco, Rio de Janeiro, São Paulo).

***Dziedzickia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Dziedzickia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Dziedzickia* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Dziedzickia* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily LEIINAE Edwards, 1925
Genus LEIA Meigen, 1818

= *Glaphyroptera* Winnertz, 1863 = *Neoglaphyroptera* Osten Sacken, 1878.

***Leia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Leia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Leia* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Leia* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).
***Leia* sp. 5, Locality:** Brazil (Roraima, Ilha de Maracá).
***Leia* sp. 6, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus LEIELLA Enderlein, 1910

= *Metaleia* Baxter *in* Baxter & Poinar, 1994.

***Leiella* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus TETRAGONEURA Winnertz, 1846

Tetragoneura rara Duret, 1980. **Type locality:** Brazil (Roraima). **Distribution:** Brazil (Roraima).

Subfamily MANOTINAE Edwards, 1925
Genus MANOTA Williston, 1896

= *Aphanizophleps* Enderlein, 1910.

***Manota* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily MYCETOPHILINAE Newman, 1834
Genus BORACEOMYIA Lane, 1948

= *Exechia,* authors, not Winnertz.

***Boraceomyia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Boraceomyia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus EPICYPTA Winnertz, 1863

= *Delopsis* Skuse, 1890 = *Plastacephala* Enderlein, 1910.

***Epicypta* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 5, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 6, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 7, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 8, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 9, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 10, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 11, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 12, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 13, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 14, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 15, Locality:** Brazil (Roraima, Ilha de Maracá).
***Epicypta* sp. 16, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus MYCETOPHILA Meigen, 1803

= *Fungivora* Meigen, 1800.

***Mycetophila* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Mycetophila* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Mycetophila* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Mycetophila* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).
***Mycetophila* sp. 5, Locality:** Brazil (Roraima, Ilha de Maracá).
***Mycetophila* sp. 6, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus NEALLODIA Edwards, 1932

***Neallodia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Neallodia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus SCEPTONIA Winnertz, 1863

***Sceptonia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Sceptonia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily MYCOMYINAE Edwards, 1925
Genus MYCOMYA Rondani, 1856

= *Cnephaeophila* Philippi, 1865 = *Sciophila,* authors, not Meigen.

***Mycomya* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus NEOEMPHERIA Osten Sacken, 1878

= *Empheria* Winnertz, 1863 = *Pleonazoneura* Enderlein, 1910 = *Neurocompsa* Enderlein, 1910.

***Neoempheria* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Neoempheria* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Neoempheria* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Neoempheria* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily SCIOPHILINAE Rondani, 1840
Genus CLUZOBRA Edwards, 1940

Cluzobra aitkeni Lane, 1956. **Type locality:** Trinidad (Arena Forest). **Distribution:** Brazil (Amapá, Roraima), French Guiana, Peru, Trinidad and Tobago.

***Cluzobra* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus MONOCLONA Mik, 1886

= *Staegeria* van der Wulp, 1876.

***Monoclona* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Monoclona* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Scatopsidae (Fig. 3F). The minute black scavengers or dung midges compose a small family of flies. Not much is known about the biology of the Scatopsidae. Larvae are possibly saprophagous, but they develop in a wide variety of substrates, on decaying plant and animal material, and also in water. A review of the knowledge on the immature stages was published by Haenni & Vaillant (1994). Adults are small and can be found in many different habitats. Adults of some genera sometimes are found feeding on flowers and may act as pollinators (Heiduk *et al.,* 2021). Occasionally, populations can be observed in large numbers aggregated over the substrate (Amorim, 2009b; Haenni & Amorim, 2017). There are 69 species of Scatopsidae reported from the Neotropical region (Amorim, 2009a), three of which have been recorded to Brazil – two of the genus *Anapausis* Enderlein, 1912 and one of the genus *Efcookella* Haenni, 1998 –, in addition to the cosmopolitan species *Scatopse notata* (Linnaeus, 1758), *Holoplagia guamensis* (Johannsen, 1946), and *Colbodia fuscipes* (Meigen, 1830) (Amorim, 2009a). There are records of *Holoplagia guamensis* in bamboo phytotelmata (see Amorim & Brown, 2020). There are over 150 undescribed Neotropical species in entomological collections (Amorim, *unpublished data*). Intensive collecting and describing efforts certainly would raise this number to well above 300. No species has been formally described to the Amazon region. A study of flies in the ZF2 Biological Reserve close to Manaus (state of Amazonas) has found two species of *Neorhegmoclemina* Cook, 1955, one species of

Thripomorpha Enderlein, 1905, one species of *Brahemyia* Amorim, 2007, and one species of *Aztecatopse* Haenni & Huerta, 2014 (Amorim *et al.,* 2022).

SCATOPSIDAE Newman, 1834
Subfamily SCATOPSINAE Newman, 1834
Genus EFCOOKELLA Haenni, 1998

***Efcookella* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Bombyliidae (Fig. 3G). The bombyliids, commonly known as bee flies, belong to one of the largest families of Diptera. The family includes more than 5,000 described species in over 250 genera (Li *et al.,* 2020), which are classified into 17 subfamilies and 18 tribes (Evenhuis & Greathead, 2015; Yamaguchi *et al.,* 2017). The Neotropical fauna counts with 63 genera and about 471 species, 109 of which occur in Brazil, mostly in the North and Southeast regions (Evenhuis & Greathead, 1999, 2015). Up till now, Roraima had eight genera, 11 known species (Evenhuis & Greathead, 2015; Rafael, 1991), and three morphospecies (Rafael, 1991). This study raised to 11 the number of genera known to the state (*Chrysanthrax* Osten Sacken, 1886, *Exoprosopa* Macquart, 1840, and *Geron* Meigen, 1820 were recorded for the first time). Moreover, there are now 21 species or morphospecies assigned to this state. The examined material of the present study counts with seven species/morphospecies that are recorded for the first time to Ilha de Maracá, five of which are new to science.

BOMBYLIIDAE Latreille, 1802
Subfamily ANTHRACINAE Latreille, 1804
Genus ANTHRAX Scopoli, 1763

= *Leucamoeba* Sack, 1909 = *Chalcamoeba* Sack, 1909.

Anthrax angustipennis Macquart, 1840 = *Anthrax binotata* Macquart, 1846. **Type locality:** French Guiana. **Distribution:** Bolivia, Brazil (Acre, Amazonas, Maranhão, Pará, Rio de Janeiro, Roraima), Colombia, French Guiana, Guyana, Panama, Peru, Trinidad and Tobago, Venezuela.

Anthrax georgicus Macquart, 1834 = *Anthrax analis* Say, 1823 = *Anthrax georgica* Macquart, 1834 = *Anthrax cedens* Walker, 1852 = *Hemipenthes latelimbatus* Bigot, 1892 = *Spongostylum grossbecki* Johnson, 1913: 55 = *Spongostylum occidentalis* Johnson, 1913. **Type locality:** 'De la Géorgie' = United States (Georgia). **Distribution:** Brazil (Roraima), Canada, Costa Rica, Cuba, Mexico, Nicaragua, United States.

Anthrax luctuosus Macquart, 1840. **Type locality:** French Guiana. **Distribution:** Brazil (Acre, Roraima), Colombia, Costa Rica, French Guiana, Mexico, Panama, Venezuela.

Anthrax oedipus Fabricius, 1805 = *Anthrax irrorata* Macquart, 1840 = *Exoprosopa punctata* Macquart, 1850 = *Anthrax punctum* Walker, 1849 = *Anthrax aequa* Walker, 1852 = *Argyromoeba caloptera* Schiner, 1868. **Type locality:** *"Americae meridionalis Insulis"* = United States (Virgin Islands). **Distribution:** Argentina, Brazil (Acre, Goiás, Minas Gerais, Paraná, Rio de Janeiro, Roraima), Chile, Costa Rica, Cuba, Jamaica, Mexico, Paraguay, Peru, Puerto Rico, Uruguay, United States, United States Virgin Islands, Venezuela.

Comments: All these four *Anthrax* Scopoli, 1763 firstly recorded to Ilha de Maracá, Roraima, Brazil by Rafael (1991) were found in the samples collected in 2015 (Table 2).

Tribe EXOPROSOPINI Becker, 1913
Genus EXOPROSOPA Macquart, 1840

= *Litorhynchus* Macquart, 1840 = *Trinaria* Mulsant, 1852 = *Argyrospila* Rondani, 1856 = *Litorrhynchus* Verrall *in* Scudder, 1882 = *Exoptata* Coquillett, 1887 = *Cladodisca* Bezzi, 1922 = *Litomyza* Hull, 1973.

***Exoprosopa* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: The series of *Exoprosopa* specimens collected in 2015 probably represents a new species and are now being studied by C.J.E.L. research team.

Genus NYIA Márquez-Acero, Lambkin & Lamas, 2020

Nyia klugii (Wiedemann, 1830). **Type locality:** Brazil (Rio Grande do Sul). **Distribution:** Argentina, Brazil (Pará, Rio Grande do Sul, Roraima), Mexico, Paraguay, Uruguay.

Nyia maracaensis (Lamas & Couri, 1995). **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Nyia proserpina (Wiedemann, 1828) = *Anthrax rufescens* Walker, 1849. **Type locality:** Brazil, Uruguay. **Distribution:** Brazil (Goiás, Pará, Roraima), Costa Rica, Cuba, Guatemala, Jamaica, Mexico, Paraguay, Peru.

Comments: All these three species of *Nyia* were already recorded to Roraima, Brazil. Additional specimens of all species, except *N. klugii,* were collected in the present study.

Tribe VILLINI Hull, 1973
Genus CHRYSANTHRAX Osten Sacken, 1886

***Chrysanthrax* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: A revisionary study of the genus *Chrysanthrax* in the Neotropical region should be implemented to allow species identification.

Genus VILLA Lioy, 1864

= *Hyalanthrax* Osten Sacken, 1886 = *Aspiloptera* Künckel d'Herculais, 1905 = *Protepacmus*† Cockerell, 1916.

Villa lineata Walker, 1857. **Type locality:** 'Valley of the Amazon' = Brazil. **Distribution:** Brazil (Acre, Amazonas, Pará, Roraima).

***Villa* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: Despite the presence of a record for *Villa lineata* Walker, 1857 in Ilha de Maracá (Rafael, 1991), we would rather keep the new collected series of *Villa* as undetermined until a revisionary study of the genus in the Neotropical region is implemented to allow species identification.

Subfamily ECLIMINAE Hall, 1969
Genus LEPIDOPHORA Westwood, 1835

Lepidophora secutor Walker, 1857. **Type locality:** 'Valley of the Amazon' = Brazil. **Distribution:** Brazil (Acre, Amazonas, Espírito Santo, Mato Grosso, Pará, Rondônia, Roraima), Colombia, Guyana, Peru, Venezuela.

Comments: This species was already recorded to Ilha de Maracá, Roraima, Brazil by Rafael (1991). Additional specimens were not collected.

Subfamily LOMATIINAE Schiner, 1868
Tribe LOMATIINI Schiner, 1868
Genus OGCODOCERA Macquart, 1840

= *Oncodeocera* Agassiz, 1846 = *Oncodocera* Verrall *in* Scudder, 1882 = *Oncodocera* Bigot, 1892.

***Ogcodocera* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: An unidentified species of *Ogcodocera* was already recorded to Ilha de Maracá, Roraima, Brazil by Rafael (1991). Additional specimens were not collected.

Subfamily TOXOPHORINAE Schiner, 1868
Tribe GERONTINI Hesse, 1938
Genus GERON Meigen, 1820

= *Amictogeron* Hesse, 1938.

Geron albidus Walker, 1857. **Type locality:** 'Valley of the Amazon', Brazil. **Distribution:** Brazil (Amazonas or Pará, Roraima).

Tribe TOXOPHORINI Schiner, 1868
Genus TOXOPHORA Meigen, 1803

= *Eniconevra* Macquart, 1840 = *Heniconevra* Agassiz, 1846 = *Heniconeura* Bezzi, 1903 = *Toxomyia* Hull, 1973.

Toxophora aurea Macquart, 1848 = *Toxophora aurifera* Rondani, 1848 = *Toxophora dryitis* Séguy, 1930 = *Toxophora verona* Curran, 1934. **Type locality:** Brazil (Paraná). **Distribution:** (Acre, Amapá, Amazonas, Distrito Federal, Mato Grosso, Pará, Paraná, Rio de Janeiro, Roraima, São Paulo), French Guiana.

Toxophora leucon Séguy, 1930. **Type locality:** Argentina. **Distribution:** Argentina, Bolivia, Brazil, (Mato Grosso, Pará, São Paulo, Roraima), Paraguay.

Comments: The series of *Toxophora leucon* Séguy, 1930 collected in the present study represents the first record of the species to Roraima.

Subfamily PHTHIRIINAE Becker, 1913
Genus MUSCATHERES Evenhuis, 1986

Muscatheres luridus (Walker, 1857). **Type locality:** Brazil (Pará). **Distribution:** Brazil (Amazonas, Pará, Roraima).

Comments: This species was already recorded to Ilha de Maracá, Roraima, Brazil by Rafael (1991). Additional specimens were not collected.

Tribe POECILOGNATHINI Hall & Evenhuis, 1987
Genus POECILOGNATHUS Jaennicke, 1867

= *Agenosia* Hull, 1973 = *Geronites*† Cockerell, 1915.

***Poecilognathus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Poecilognathus* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Poecilognathus* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Poecilognathus* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: Two different morphospecies of *Poecilognathus* Jaennicke, 1867 were already recorded to Ilha de Maracá by Rafael (1991). Now, based on the collections of 2015, four undescribed species of this genus are recognized and are being studied and described by C.Y. and C.J.E.L. We decided to record only four different *Poecilognathus* species to Roraima, because we believe the two previous morphospecies recorded by Rafael (1991), which are not examined in this study, are probably among the four undescribed species recognized herein.

Mythicomyiidae (Fig. 3H). The mythicomyiids are minute flies, with body length between 0.5-5 mm. This family is found in nearly all terrestrial environments, except in higher altitudes and latitudes (Greathead & Evenhuis, 2001). Mythicomyiidae has approximately 400 species distributed in 23 genera (Evenhuis, 2002; Lamas *et al.,* 2015; Mendes *et al.,* 2019) and is classified into six subfamilies (Evenhuis, 2002). Up to date, the Neotropical region has 28 described species in seven genera. The Brazilian fauna comprises 12 species, but previous to this study no records of the family were known for the Amazon basin.

MYTHICOMYIIDAE Melander, 1902
Subfamily GLABELLULINAE Cockerell, 1914
Genus GLABELLULA Bezzi, 1902

= *Platygaster* Zetterstedt, 1838 = *Sphaerogaster* Zetterstedt, 1842 = *Glabella* Loew, 1873 = *Pachyneres* Greene, 1924 = *Proglabellula*† Hennig, 1966.

***Glabellula* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: The single specimen of *Glabellula* Bezzi, which is being studied and described by the C.J.E.L. research team, represents the first record of the genus in South America and the first record of Mythicomyiidae in the state of Roraima (Tables 1-2).

Tabanidae (Fig. 3I). Commonly known as horse flies and deer flies, this family is composed by insects of medium to large size (4-25 mm), distributed in all biogeographic regions. Tabanidae has about 4,500 valid species in over 125 genera (Moucha, 1976; Pape & Thompson, 2019). They are traditionally divided in four subfamilies – Scepsidinae, Pangoniinae, Chrysopsinae, and Tabaninae (Mackerras, 1954). The Neotropical region counts with over 1,000 species in 70 genera, 486 species of which are known to Brazil (Coscarón & Papavero, 2009; Henriques & Krolow, 2021). Several tabanids are broadly distributed throughout the Neotropical region, some of them ranging from Mexico to Argentina. Up to now, Roraima has 49 valid species divided in 19 genera (Rafael *et al.,* 1991; Coscarón & Papavero, 2009). Of the 18 species collected in the 2015 expedition (Table 2), *Tabanus guyanensis* Macquart, 1846 and *T. kwatta* Fairchild, 1983 were already known from other localities of the Amazon basin but are new records to Roraima.

TABANIDAE Latreille, 1802
Subfamily CHRYSOPSINAE Blanchard, 1840
Genus CHRYSOPS Meigen, 1803

= *Chrysops (Heterochrysops)* Kröeber, 1920 = *Chrisops* Fraga, 1936.

Chrysops formosus Kröeber, 1926 = *C. tuxeni* Philip, 1955. **Type locality:** Brazil (Pará). **Distribution:** Brazil (Acre, Amapá, Amazonas, Bahia, Maranhão, Pará, Rondônia, Roraima), French Guiana, Trinidad and Tobago.

Chrysops laetus Fabricius, 1805 = *C. laetus* var. *tenuistria* Kröeber, 1926. **Type locality:** Guyana. **Distribution:** Brazil (Amapá, Amazonas, Pará, Rio Grande do Sul, Rondônia, Roraima), Colombia, Suriname.

Chrysops variegatus (De Geer, 1776) = *Tabanus costatus* Fabricius, 1794 = *Chrysops molestus* Guérin-Méneville, 1835 = *C. vulneratus* Rondani, 1848 = *C. subfascipennis* Macquart, 1855 = *C. amazonius* Rondani, 1863 = *C. costatus* var. *crucians* Jaennicke, 1867 = *C. peruviensis* Kröeber, 1925 = *C. peruvianus* Fairchild & Burger, 1994. **Type locality:** Suriname. **Distribution:** Antilles, Argentina, Belize, Bolivia, Brazil (Acre, Goiás, Mato Grosso, Mato Grosso do Sul, Roraima), Colombia, Costa Rica, Cuba, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru, Mexico, Suriname, Venezuela.

Subfamily PANGONIINAE Rondani, 1856
Genus ESENBECKIA Rondani, 1863

= *Dyspangonia* Lutz, 1905 = *Esenbackia* Surcouf, 1909.

Esenbeckia prasiniventris (Macquart, 1846) = *E. semiviridis* Ricardo, 1900 = *E. prasiventris* Hunter, 1901. **Type locality:** Colombia. **Distribution:** Brazil (Roraima), Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Panama, Trinidad and Tobago, Venezuela.

Esenbeckia suturalis (Rondani, 1848). **Type locality:** Brazil (Pará). **Distribution:** Brazil (Roraima, Pará) Peru, Trinidad and Tobago.

Genus FIDENA Walker, 1850

= *Pangonia* subgen. *Fidena* Walker, 1850 = *Pangonia* subgen. *Melpia* Walker, 1850 = *Erephopsis* Rondani, 1863 = *Sackenimyia* Bigot, 1879 = *Erephosis* Bigot, 1891 = *Erephrosis* Ricardo, 1900 = *Phaeoneura* Lutz, 1909 = *Epipsila* Lutz, 1909 = *Ionopis* Lutz, 1909 = *Ionopsis* Lutz, 1909 = *Bombylopsis* Lutz, 1909 = *Bombylomyia* Lutz, 1911 = *Phaeomyia* Lutz, 1911 = *Bombylomorpha* Lutz, 1911 = *Jonopsis* Enderlein, 1925 = *Erephrosis* Ricardo, 1931 = *Chrysochiton* Lutz & Castro, 1936.

Fidena schildi (Hine, 1925) = *F. nigricans* Kröeber, 1930 = *F. nigricorpus* Kröeber, 1934. **Type locality:** Costa Rica. **Distribution:** Brazil (Roraima), Colombia, Costa Rica, French Guiana, Panama.

Subfamily TABANINAE Latreille, 1802
Genus ACANTHOCERA Macquart, 1834

= *Spheciogaster* Enderlein, 1922.

Acanthocera marginalis Walker, 1854 = *A. formosa* Kröeber, 1930. **Type locality:** Brazil (Pará). **Distribution:** Brazil (Amapá, Amazonas, Mato Grosso, Pará, Roraima), Colombia, Ecuador, Guyana, Peru, Suriname.

Genus BOLBODIMYIA Bigot, 1892

= *Snowielius* Hine, 1904.

Bolbodimyia brunneipennis Stone, 1954. **Type locality:** Brazil (Pará). **Distribution:** Brazil (Amapá, Pará, Roraima), Guyana.

Genus CATACHLOROPS Lutz, 1913b

Catachlorops bindai Rafael, Gorayeb, Rosa & Henriques, 1991. **Type locality:** Brazil (Roraima). **Distribution:** Brazil (Roraima).

Catachlorops halteratus Kröeber, 1931. **Type locality:** Guyana. **Distribution:** Brazil (Amazonas, Maranhão, Mato Grosso, Pará, Rondônia, Roraima), French Guiana, Guyana, Peru, Suriname.

Catachlorops rufescens (Fabricius, 1805) = *C. ruficeps* Kertész, 1900 = *C. scutellatus* Kröeber, 1931. **Type locality:** Guyana. **Distribution:** Brazil (Amazonas, Maranhão, Mato Grosso, Pará, Rondônia, Roraima), French Guiana, Guyana.

Genus CHLOROTABANUS Lutz, 1913b

Chlorotabanus inanis (Fabricius, 1787) = *Tabanus ochroleucus* Meigen, 1804 = *T. sulphureus* Palisot de Beauvois, 1819 = *T. sulphureus* Macquart, 1847 = *T. inconspicuus* Walker, 1848 = *T. viridiflavus* Walker, 1850. **Type locality:** French Guiana. **Distribution:** Belize, Brazil (Paraná, Roraima, São Paulo), Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Honduras, Nicaragua, Panama, Peru, Mexico, Suriname, Venezuela.

Genus CRYPTOTYLUS Lutz, 1913

= *Ommalia* Enderlein, 1923.

Cryptotylus unicolor (Wiedemann, 1828) = *Tabanus ferrugineus* Thunberg, 1789 = *T. castaneus* Macquart, 1834 = *T. ochraceus* Macquart, 1838 = *T. sulphureus* Macquart, 1847 = *T. princeps* Brèthes, 1910 = *Ommalia viridis* Enderlein, 1925. **Type locality:** Brazil. **Distribution:** Argentina, Brazil (Mato Grosso, Roraima), French Guiana, Guyana, Panama, Paraguay, Suriname, Trinidad and Tobago.

Genus DIACHLORUS Osten Sacken, 1876

= *Diabasis* Macquart, 1834.

Diachlorus bicinctus (Fabricius, 1805) = *Diabasis diversipes* Macquart, 1848 = *Pseudoselasoma bicinctum* Enderlein, 1925. **Type locality:** Guyana. **Distribution:** Bolivia, Brazil (Acre, Amapá, Amazonas, Bahia, Maranhão, Mato Grosso, Pará, Paraíba, Rondônia, Roraima), Peru, Suriname, Trinidad and Tobago, Venezuela.

Diachlorus curvipes (Fabricius, 1805) = *Diabasis ataenia* Macquart, 1838 = *Chrysops varipes* Walker, 1854 = *C. terminalis* Macquart, 1855. **Type locality:** Guyana. **Distribution:** Bolivia, Brazil (Amapá, Mato Grosso, Pará, Rondônia, Roraima), Colombia, Costa Rica, French Guiana, Guyana, Panama, Peru, Suriname, Trinidad and Tobago.

Diachlorus fuscistigma Lutz, 1913 = *D. ochraceus* Macquart of Kröeber, 1928 = *D. angustifrons* Kröeber, 1930. **Type locality:** Brazil (Amazonas). **Distribution:** Brazil (Acre, Amapá, Amazonas, Bahia, Rondônia, Roraima), Colombia, Ecuador, Peru, Suriname.

Diachlorus xynus Fairchild, 1972. **Type locality:** Peru. **Distribution:** Brazil (Amazonas, Mato Grosso, Pará, Roraima), Colombia, Peru, Suriname.

Genus DICHELACERA Macquart, 1838

= *Acanthocerella* Brèthes, 1910 = *Dichelocera* Enderlein, 1922 = *Rhamphis* Enderlein, 1922 = *Linapha* Enderlein, 1923a = *Neorhamphis* Kröeber, 1931e = *Macropalpigera* Kröeber, 1931f = *Lanemyia* Barreto, 1949 = *Fairchildia* Barretto, 1960.

Dichelacera cervicornis (Fabricius, 1805) = *D. multifascia* Walker, 1850a = *D. multifasciata* Walker, 1850a. **Type locality:** Guyana. **Distribution:** Brazil (Amapá, Amazonas, Pará, Rondônia, Roraima), Guyana, Peru, Suriname.

Dichelacera marginata Macquart, 1847 = *D. hinnulus* Walker, 1850b = *D. emarginata* Hine, 1817. **Type locality:** French Guiana. **Distribution:** Brazil (Roraima), Colombia, Costa Rica, Peru, French Guiana, Guyana, Nicaragua, Panama, Suriname, Trinidad and Tobago, Venezuela.

Genus LEPISELAGA Macquart, 1838

= *Hadrus* Perty, 1833 = *Lepidoselaga* Agassiz, 1847.

Lepiselaga crassipes (Fabricius, 1805) = *Tabanus lepidotus* Wiedemann, 1828 = *Lepidoselaga recta* Loew, 1869 = *Lepiselaga major* Szilády, 1926 = *L. crassipes* var. *fenestrata* Hack, 1953. **Type locality:** Guyana. **Distribution:** Antilles, Argentina, Belize, Bolivia, Brazil (Amazonas, Bahia, Ceará, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, São Paulo), Colombia, Costa Rica, Cuba, Ecuador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

Genus LEUCOTABANUS Lutz, 1913b

Leucotabanus albovarius (Walker, 1854) = *Tabanus unicinctus* Walker, 1857 = *Leucotabanus leuconotum* Fairchild, 1941b. **Type locality:** Brazil (Amazonas). **Distribution:** Bolivia, Brazil (Acre, Amapá, Amazonas, Pará, Rondônia, Roraima), Ecuador, French Guiana, Guyana, Peru, Suriname.

Leucotabanus exaestuans (Linnaeus, 1758) = *Tabanus leucaspis* Wiedemann, 1828 = *T. albicans* Macquart, 1846 = *T. albiscutellatus* Macquart, 1850 = *T. cingulifer* Walker,

1857 = *T. melanopterus* Brèthes, 1910 = *Leucotabanus exoestuans* Barreto, 1957. **Type locality:** 'America'. **Distribution:** Argentina, Belize, Bolivia, Brazil (Amazonas, Mato Grosso, Mato Grosso do Sul, Pará, Paraná, Rio de Janeiro, Roraima, São Paulo, Tocantins), Colombia, Costa Rica, French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

Genus PHAEOTABANUS Lutz, 1913b

Phaeotabanus cajennensis (Fabricius, 1787) = *Tabanus caiennensis* Kertész, 1908 = *Phaeotabanus caiennensis* Lutz, 1928 = *Tabanus decoloratus* Kröeber, 1931a. **Type locality:** French Guyana. **Distribution:** Brazil (Amazonas, Mato Grosso do Sul, Minas Gerais, Paraná, Rio de Janeiro, Roraima, São Paulo), Colombia, Trinidad and Tobago, Venezuela.

Phaeotabanus fervens (Linnaeus, 1758). **Type locality:** 'South America'. **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Mato Grosso do Sul, Roraima), Trinidad and Tobago, Venezuela.

Phaeotabanus nigriflavus (Kröeber, 1930b) = *Tabanus (Phaeotabanus) obscurehirtus* Kröeber, 1930b = *T. (Phaeotabanus) obscuripilis* Kröeber, 1930b = *Phaeotabanus obscuripilus* Philip, 1960a = *P. obscurepilis* Moucha, 1976 = *P. obscurepilus* Fairchild & Burger, 1994. **Type locality:** French Guiana. **Distribution:** Brazil (Amapá, Roraima), Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, Trinidad and Tobago, Venezuela.

Genus PHILIPOTABANUS Fairchild, 1943

Philipotabanus stigmaticalis (Kröeber, 1931a). **Type locality:** Brazil (Pará). **Distribution:** Brazil (Acre, Amapá, Amazonas, Pará, Roraima), Guyana.

Genus POECILODERAS Lutz, 1921

= *Poecilosoma* Lutz, 1909b = *Poecilochlamys* Lutz, 1922 = *Dasyprhyrta* Enderlein, 1922 = *Hybopelma* Enderlein, 1922 = *Poesilochlamys* Lutz, 1928 = *Hypopelma* Kröeber, 1929d.

Poeciloderas quadripunctatus (Fabricius, 1805) = *Tabanus elegans* Thunberg, 1827 = *T. punctipennis* Macquart, 1838 = *T. maculipennis* Macquart, 1846 = *T. amabilis* Walker, 1848 = *T. nigropunctatus* Bellardi, 1859 = *T. habilis* Brèthes, 1910 = *Poeciloderas dasyphyrtina* Enderlein, 1925 = *Tabanus platyventris* Kröeber, 1931b = *Poeciloderas quadripunctatus* var. *amabilinus* Philip, 1960a. **Type locality:** Guyana. **Distribution:** Argentina, Bolivia, Brazil (Acre, Amazonas, Espírito Santo, Maranhão, Mato Grosso do Sul, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Costa Rica, Ecuador, French Guiana, Guatemala, Guyana, Mexico, Panama, Paraguay, Peru, Suriname, Uruguay, Venezuela.

Genus SELASOMA Macquart, 1838

Selasoma tibiale (Fabricius, 1805) = *Hadrus chalybeus* Perty, 1833 = *H. cyaneum* Walker, 1848. **Type locality:** Guyana. **Distribution:** Argentina, Brazil (Amazonas, Bahia, Ceará, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Rio de Janeiro, Roraima, São Paulo), Colombia, Guyana, Mexico, Panama, Trinidad and Tobago, Venezuela.

Genus STIBASOMA Schiner, 1867

Stibasoma fulvohirtum (Wiedemann, 1828) = *Tabanus compactus* Walker, 1854 = *Stibasoma dives* Walker of Lutz, 1915 = *S. fulvihirtum* Pechuman, 1942. **Type locality:** Brazil. **Distribution:** Brazil (Amazonas, Pará, Rondônia, Roraima), Colombia, Costa Rica, Ecuador, Guyana, Panama, Trinidad and Tobago, Venezuela.

Genus STYPOMMISA Enderlein, 1914

= *Stictotabanus* Lutz & Neiva, 1914 = *Therioplectes* Enderlein, 1925 = *Stypommia* Enderlein of Kröeber, 1929 = *Sziladya* Enderlein of Kröeber, 1929c = *Scladynus* Kröeber, 1930a = *Enderleiniella* Kröeber, 1932 = *Dudaelia* Strand, 1932.

Stypommisa captiroptera (Kröeber, 1930b) = *Stenotabanus xenium* Fairchild, 1947 = *Stypommisa flavescens* Kröeber of Barreto, 1957. **Type locality:** Venezuela. **Distribution:** Belize, Brazil (Amazonas, Pará, Rondônia, Roraima), Colombia, Costa Rica, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Venezuela.

Stypommisa vidali Rafael, Gorayeb, Rosa & Henriques, 1991. **Type locality:** Brazil (Roraima). **Distribution:** Brazil (Roraima).

Genus TABANUS Linnaeus, 1758

= *Bellardia* Rondani, 1863 = *Macrocormus* Lutz, 1909b = *Neotabanus* Lutz, 1909b = *Macrocormus* Lutz, 1911b = *Chelotabanus* Lutz, 1913a = *Macrocormus* Lutz, 1913a = *Neotabanus* Lutz, 1913a = *Odontotabanus* Lutz, 1918 = *Brachypsalidia* Enderlein, 1922 = *Chelommia* Enderlein, 1922 = *Hybostraba* Enderlein, 1923 = *Straba* Enderlein, 1923 = *Lophotabanus* Szilády, 1926 = *Bellaria* Strand, 1928 = *Taeniotabanus* Kröeber, 1930e = *Taeniotabanus* Kröeber, 1931b = *Astigmatophtalmus* Kröeber, 1931d = *Aliomma* Borgmeier, 1934.

Tabanus angustifrons Macquart, 1848 = *T. alboater* Walker, 1850b = *T. atricornis* Bigot, 1892a. **Type locali-**

ty: French Guiana. **Distribution:** Brazil (Amapá, Amazonas, Mato Grosso, Pará, Rondônia, Roraima), Colombia, French Guiana, Peru, Venezuela.

Tabanus antarcticus Linnaeus, 1758 = *T. surinamensis* Kröeber, 1929c = *T. xipe* Kröeber, 1934. **Type locality:** Suriname. **Distribution:** Brazil (Amapá, Amazonas, Bahia, Pará, Rondônia, Roraima), Colombia, Ecuador, Guyana, Peru, Suriname, Trinidad and Tobago, Venezuela.

Tabanus callosus Macquart, 1848. **Type locality:** Brazil. **Distribution:** Brazil (Amapá, Amazonas, Pará, Rondônia, Roraima), Colombia, Guyana, Peru.

Tabanus claripennis (Bigot, 1892a) = *T. filiolus* Williston of Johnson, 1919 = *T. ameghionoi* Brèthes, 1910 = *T. hookeri* Knab, 1915 = *Hybostraba ovalipalpus* Enderlein, 1925 = *Archiplatius pygmaeus* Enderlein, 1925 = *Tabanus flavifrons* Szilády, 1926 = *T. (Agelanius) frontosus* Kröeber, 1931a = *T. ?venezuelensis* Kröeber, 1931a = *T. (Hybostraba) pulchella* Kröeber, 1931b = *T. (Hydrostaba) pulcher* Kröeber, 1934 = *T. (Agelanius) pusio* Kröeber, 1934. **Type locality:** 'Australia' (error). **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Pará, Rio Grande do Sul, Roraima), Colombia, Costa Rica, Ecuador, Panama, Paraguay, Peru, Venezuela, West Indies.

Tabanus crassicornis Wiedemann, 1821. **Type locality:** 'America'. **Distribution:** Brazil (Acre, Amapá, Amazonas, Mato Grosso, Pará, Rondônia, Roraima), Colombia, French Guiana, Suriname, Venezuela.

Tabanus discus Wiedemann, 1828 = *T. infuscatipennis* Surcouf, 1919 = *T. cervinus* Kröeber, 1929e = *T. (Lophotabanus) communis* Kröeber, 1930d = *Chelommia ?melanocnemis* Barreto, 1957. **Type locality:** Brazil. **Distribution:** Brazil (Acre, Amapá, Amazonas, Mato Grosso, Pará, Rondônia, Roraima), Ecuador, French Guiana, Guyana, Suriname, Trinidad and Tobago.

Tabanus guyanensis Macquart, 1846. **Type locality:** French Guiana. **Distribution:** Brazil (Amapá, Roraima), Ecuador, French Guiana, Peru.

Tabanus importunus Wiedemann, 1828 = *T. monogramma* Wiedemann, 1828 = *T. valterii* Macquart, 1828b = *T. lividus* Walker, 1848 = *T. albidicollis* Macquart, 1850 = *T. semisordidus* Walker, 1854 = *T. albicollis* Hunter, 1901. **Type locality:** Brazil. **Distribution:** Bolivia, Brazil (Amazonas, Mato Grosso do Sul, Mato Grosso, Minas Gerais, Pará, Rio Grande do Sul, Roraima, São Paulo, Tocantins), French Guiana, Guyana, Panama, Peru, Trinidad and Tobago.

Tabanus kwatta Fairchild, 1983. **Type locality:** Suriname. **Distribution:** Brazil (Pará, Roraima), Suriname.

Tabanus lineifrons Lutz, 1912. **Type locality:** Brazil (Mato Grosso). **Distribution:** Brazil (Amazonas, Mato Grosso, Rondônia, Roraima).

Tabanus nebulosus De Geer, 1776 = *T. ?surinamensis* Macquart, 1838 = *T. incertus* Macquart, 1838 = *T. ferrifer* Walker, 1850a = *T. interpunctus* Lutz, 1918 = *T. erythraeus* Bigot of Brèthes, 1921 = *T. druyvesteijni* Szilády, 1926 = *T. ornativentris* Kröeber, 1929c = *T. transversalifuscatus* Kröeber, 1930a = *T. nubeculipennis* Kröeber, 1931g. **Type locality:** Suriname. **Distribution:** Argentina, Belize, Brazil (Acre, Amapá, Amazonas, Mato Grosso, Pará, Rondônia, Roraima, Tocantins), French Guiana, Guyana, Suriname, Trinidad and Tobago, Venezuela.

Tabanus nematocallus Fairchild, 1984. **Type locality:** Brazil (Amazonas). **Distribution:** Bolivia, Brazil (Amazonas, Rondônia, Roraima), Colombia, Guyana, Peru, Venezuela.

Tabanus occidentalis Linnaeus, 1758 = *T. dorsiger* Wiedemann, 1821 = *T. occidentalis* var. *modestus* Wiedemann, 1828 = *T. importunus* Macquart, 1847 = *T. occidentalis* var. *consequa* Walker, 1850b = *T. plangens* Walker, 1854 = *T. occidentalis* var. *dorsovittatus* Macquart, 1855 = *T. carneus* Bellardi, 1859 = *T. appendiculatus* Hine, 1906a = *T. trilineatus* Latreille of Hine, 1906a = *T. ochrophilus* Lutz, 1914b = *T. pallidefemoratus* Kröeber, 1919e = *T. globulicallosus* Kröeber, 1931a = *T. lineola* Fabricius of Brèthes, 1907 = *T. stuppeus* Fairchild, 1942c = *T. columbus* Fairchild, 1942c. **Type locality:** 'America meridionalis' **Distribution:** Argentina, Bolivia, Brazil (Acre, Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso do Sul, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Costa Rica, Cuba, Ecuador, French Guiana, Guatemala, Guyana, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Venezuela.

Comments: A species widespread in the Neotropical region and with great morphological variation. Several varieties have been proposed based on small morphological traits, three of which have records for Maracá: *Tabanus occidentalis* var. *consequa* Walker, 1850, *T. occidentalis* var. *dorsovittatus,* Macquart, 1855 and *T. occidentalis* var. *modestus* Wiedemann, 1828 (Rafael *et al.,* 1991). In the present study, only *T. occidentalis* var. *consequa* and *T. occidentalis* var. *dorsovittatus* were collected. Further studies are necessary to determine if those morphotypes are all conspecific with *Tabanus occidentalis* Linnaeus, 1758 or should be described as separate species.

Tabanus pellucidus Fabricius, 1805 = *T. albibarbis* Wiedemann, 1824 = *T. ?flavifacies* Macquart, 1846 = *T. rufoniger* Walker, 1850a = *T. senior* Walker, 1850a = *T. melanocnemis* Barreto, 1957a = *T. crassicornis* Wiedemann of Fairchild, 1967a = *T. pellucidis* Crontreras-Liochtenberg, 2002. **Type locality:** Guyana. **Distribution:** Brazil (Amapá, Amazonas, Pará, Roraima), Colombia, Peru, Ecuador, Guyana, Suriname, Venezuela.

Tabanus piceiventris Rondani, 1848 = *T. basivitta* Walker, 1850b = *T. viduus* Walker, 1850b = *T. marginenevris* Macquart, 1855 = *T. bicinctus* Walker, 1857 = *T. marginenrvis*

Hunter, 1901. **Type locality:** Brazil (Pará). **Distribution:** Brazil (Acre, Amapá, Maranhão, Pará, Rondônia, Roraima, Tocantins), Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, Trinidad and Tobago, Venezuela.

Tabanus sannio Fairchild, 1956 = *T. austeni* Kröeber, 1930b. **Type locality:** Brazil (Amazonas). **Distribution:** Brazil (Acre, Amazonas, Pará, Rondônia, Roraima), Ecuador, Peru.

Tabanus trivittatus Fabricius, 1805 = *T. fumatipennis* Kröeber, 1933a = *T. brunniventris* Kröeber, 1933a = *Taeniotabanus bruniventris* Barreto, 1957. **Type locality:** Guyana. **Distribution:** Brazil (Amapá, Amazonas, Maranhão, Pará, Rondônia, Roraima, Tocantins), Colombia, Guyana, Suriname.

Tabanus unimacula Kröeber, 1934 = *T. (Phaeotabanus) unimaculatus* Kröeber, 1930b. **Type locality:** Suriname. **Distribution:** Brazil (Roraima), Ecuador, Suriname.

Stratiomyidae (Fig. 3J). The family, popularly known as soldier flies, has a worldwide distribution with over 2,800 known species in nearly 367 genera (Woodley, 2001; Hauser *et al.,* 2017). The most recent classification divides the family into 12 subfamilies (Woodley, 2001), all with representatives in the Neotropical region, although Parhadrestiinae is only known from Chile. Approximately 1,000 species are known from the Neotropics (Woodley, 2001). Of these, 347 have been reported to Brazil (Fachin, 2021). The knowledge on stratiomyids in Brazil, however, is unequal, as most species and their records have been historically concentrated in a few regions; one example is the state of Santa Catarina, which counts with 135 species records alone. Considering the Brazilian fauna, the entire northern region counts with 95 species in 30 genera, while the majority of these records are from the states of Amazonas (34) and Pará (54), only 29 species had been recorded to the state of Roraima (Fachin, 2021) before the present study.

Chrysochlorina castanea (Macquart, 1838) was the first, and for a long time, the only species reported to Roraima (Iide, 1966). Nearly all stratiomyid records for the state were published in Rafael (1991). In this work, the soldier flies were identified by Dr Wilford J. Hanson, who studied 149 specimens, assigning 142 of them to 26 species, with six others remained as morphospecies, and one could be assigned to subfamily level only. Most of the material identified by Dr. Hanson was reexamined either by photos or by the original specimens at hand and, therefore, some adjustments and corrections are herein provided. Three species are removed from the fauna of Roraima and Brazil: *Artemita hieroglyphica* (Wiedemann, 1830), *Merosargus citrinus* James, 1971, and *Ptecticus trivittatus* Say, 1829. Only *A. hieroglyphica* is known from other Brazilian states, while *M. citrinus* is only known from Peru and *P. trivitattus* is only found in the United States (Woodley, 2001) and Canada, and likely in northern Mexico (https://www.inaturalist.org/taxa/320499-Ptecticus-trivittatus). The examination of Rafael's (1991) material still allowed other adjustments concerning the number of specimens of each species (see list below). The present survey yielded a total of 34 species in 15 genera distributed in seven subfamilies. Only 13 of them had been previously reported by Rafael (1991) and another one by Iide (1966). In total, 24 of the 34 species were assigned to known species and ten were kept as morphospecies. The genera *Heteracanthia* Macquart, 1850, *Lyprotemyia* Kertész, 1909, and *Acrochaeta* Wiedemann, 1830 are new records to Roraima. This study has also revealed 10 new records of species for Roraima and three for Brazil (see Table 2). Given the corrections and the inclusion of the new material, the current list of Stratiomyidae from Roraima includes 49 species in 22 genera, 36 of which are assigned to known species. The distribution records for Brazilian states follow the references used by Fachin (2021). For the entire Neotropical region, the world catalog of the family (Woodley, 2001, 2011a) was used, in addition to Pujol-Luz & Pujol-Luz (2014) and Fachin & Assis-Pujol (2016a).

STRATIOMYIDAE Latreille, 1802
Subfamily BERIDINAE Westwood, 1838
Genus HETERACANTHIA Macquart, 1850

Heteracanthia ruficornis Macquart, 1850 = *Clitellaria scutellaris* Walker, 1854. **Type locality:** Venezuela (Caracas). **Distribution:** Argentina, Bolivia, Brazil (Pará, Roraima, São Paulo), Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Honduras, Mexico, Panama, Peru, Suriname, Trinidad and Tobago.

Genus OPLACHANTHA Rondani, 1863

Oplachantha **sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: A single female was reported by Rafael (1991). The most recent key for species is in James (1977), but the specific limits in this genus are poorly understood.

Subfamily CHRYSOCHLORININAE Woodley, 2001
Genus CHRYSOCHLORINA James, 1939

Chrysochlorina castanea (Macquart, 1838). **Type locality:** 'Guyane'. **Distribution:** Brazil (Pará, Rio de Janeiro, Rondônia, Roraima), Guyana, Panama.

Chrysochlorina varia (Curran, 1929). **Type locality:** Guyana. **Distribution:** Bolivia, Brazil (Amazonas, Mato Grosso, Roraima), Colombia, Guyana, Honduras, Panama, Suriname.

Subfamily CLITELLARIINAE Brauer, 1882
Genus CHORDONOTA Gerstaecker, 1857

Chordonota **sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: This species resembles the females of *Chordonota inermis* (Wiedemann, 1830), but its wing is homogenously infuscate of dark brown, while it is only dark anteriorly in *C. inermis*. *Chordonota* Gerstaecker, 1857 was firstly mentioned by Rafael (1991: 331, as *Chordonota* sp.), but the specimen was not found in the INPA collection.

Genus CYPHOMYIA Wiedemann, 1819

Cyphomyia albitarsis (Fabricius, 1805) = *C. fenestrata* Macquart, 1846. **Type locality:** 'America meridionali'. **Distribution:** Bolivia, Brazil (Amazonas, Pará, Roraima), Colombia, Costa Rica, Ecuador, Guyana, Honduras, Mexico, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

Cyphomyia fascipes Walker, 1854. **Type locality:** Brazil (Santarém). **Distribution:** Brazil (Amazonas, Pará, Roraima), Panama, Peru.

Cyphomyia pulchella Gerstaecker, 1857. **Type locality:** Brazil. **Distribution:** Brazil (Amazonas, Roraima), Costa Rica, Guyana, Panama, Peru, Trinidad and Tobago, Venezuela.

Cyphomyia wiedemanni Gerstaecker, 1857 = *C. flavispinis* Macquart, 1855 = *C. cyanispis* Bigot, 1876 = *C. peruana* Lindner, 1933 = *C. burmeisteri* Lindner, 1949. **Type locality:** Brazil (Pará, 'South Brazil'), French Guiana (Cayenne), Suriname, Venezuela. **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Goiás, Mato Grosso do Sul, Minas Gerais, Pará, Roraima), Colombia, Costa Rica, Ecuador, French Guiana, Guyana, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Venezuela.

Genus DIAPHOROSTYLUS Kertész, 1908

Diaphorostylus nasica (Williston, 1888). **Type locality:** Brazil (Mato Grosso). **Distribution:** Brazil (Mato Grosso, Roraima).

Comments: The specimen mentioned by Rafael (1991: 330) was not found in the INPA collection.

Genus EURYNEURA Schiner, 1868

Euryneura elegans Williston, 1888. **Type locality:** Brazil. **Distribution:** Argentina, Belize, Brazil (Minas Gerais, Rio de Janeiro, Roraima), Costa Rica, Ecuador, Guatemala, Mexico, Nicaragua, Panama, Peru, Trinidad and Tobago, Venezuela.

Comments: The specimen mentioned by Rafael (1991: 330) was not found in the INPA collection.

Subfamily HERMETIINAE Loew, 1862

Genus CHAETOHERMETIA Lindner, 1929

Chaetohermetia apicalis Lindner, 1929. **Type locality:** Brazil (Pará, Taperinha near Santarém). **Distribution:** Brazil (Pará, Roraima).

Genus HERMETIA Latreille, 1804

Hermetia albitarsis Fabricius, 1805 = *H. apicalis* Wiedemann, 1830 = *H. bimaculata* Wiedemann, 1834 = *H. planifrons* Macquart, 1846 = *H. varipennis* Bigot, 1879 = *Acrodesmia luederwaldti* Enderlein, 1914. **Type locality:** 'South America'. **Distribution:** Bolivia, Brazil (Amazonas, Mato Grosso do Sul, Pará, Rio de Janeiro, Roraima, Santa Catarina), Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

Hermetia flavipes Wiedemann, 1830 = *Sargus andreas* Walker, 1849 = *Hermetia setigera* James, 1938 = *Chaetohermetia aenea* Lindner, 1949. **Type locality:** Brazil. **Distribution:** Bolivia, Brazil (Pará, Rondônia, Roraima), Costa Rica, Ecuador, Guyana, Honduras, Panama, Peru, Venezuela.

Hermetia illucens (Linnaeus, 1758) = *Musca leucopa* Linnaeus, 1767 = *Hermetia rufiventris* Fabricius, 1805 = *H. nigrifacies* Bigot, 1879 = *H. nigritibia* Enderlein, 1914. **Type locality:** 'South America'. **Distribution:** worldwide; in Brazil (Amazonas, Bahia, Espírito Santo, Distrito Federal, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo).

Comments: It is known to be widespread in Brazil. However, the taxon still lacks records in at least 10 Brazilian states (Fachin, 2021).

Hermetia goncalvensi Albuquerque, 1955. **Type locality:** Brazil (Bahia: Salvador, "Engenho Velho"). **Distribution:** Brazil (Bahia, Maranhão, Pará, Piauí, Rondônia, Roraima).

Hermetia pulchra Wiedemann, 1830. **Type locality:** Suriname. **Distribution:** Brazil (Bahia, Distrito Federal, Roraima), Guyana, Suriname.

***Hermetia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: It is an undescribed species.

Subfamily PACHYGASTRINAE Loew, 1856

Genus ACANTHINOMYIA Hunter, 1900

Acanthinomyia elongata (Wiedemann, 1824) = *Beris flavispinosa* Macquart, 1855. **Type locality:** 'America meridionali'. **Distribution:** Brazil (Pará, Roraima, São Paulo), Costa Rica, Guyana, Mexico, Panama, Peru, Trinidad and Tobago, Venezuela.

Comments: The two specimens mentioned in Rafael (1991: 330) were not found in the INPA collection.

Genus ARTEMITA Walker, 1854

Artemita amenides (Walker, 1849). **Type locality:** Unknown. **Distribution:** Bolivia, Brazil (Amazonas, Mato Grosso, Roraima, Santa Catarina), Costa Rica, Ecuador, Guyana, Panama, Peru, Venezuela.

Artemita podexargenteus Enderlein, 1914 = *A. bicolor* Kertész, 1914. **Type locality:** Brazil (Santa Catarina). **Distribution:** Argentina, Bolivia, Brazil (Amapá, Amazonas, Espírito Santo, Mato Grosso, Mato Grosso do Sul, Pará, Paraná, Rio de Janeiro, Rondônia, Roraima, Santa Catarina, São Paulo), El Salvador, Mexico, Nicaragua, Panama, Paraguay, Suriname, Trinidad and Tobago, Venezuela.

Comments: The two specimens of *Artemita hieroglyphica* determined by Dr. Hanson (Rafael, 1991) were examined and are here assigned to *A. podexargenteus* Enderlein, 1914. These two are very close species and a revision is needed to clarify their limits. Regarding the two specimens determined as *A. podexargenteus* in Rafael (1991), one is provisionally identified as *Artemita* sp. 1.

***Artemita* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus CHALCIDOMORPHINA Enderlein, 1914

Chalcidomorphina aurata Enderlein, 1914 = *C. crewi* Johnson, 1920. **Type locality:** Colombia (Hacienda Pehlke). **Distribution:** Brazil (Rio de Janeiro, Roraima, Santa Catarina), Colombia, Costa Rica, Ecuador, Guyana, Mexico, Panama, Peru, Venezuela.

Comments: Eight specimens of *Chalcidomorphina aurata* Enderlein, 1914 were reported by Rafael (1991), but nine, all with the same locality labels, are deposited in the INPA collection.

Genus LYPROTEMYIA Kertész, 1909

***Lyprotemyia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: The genus has only five known species of small, black, and inconspicuous pachygastrines. It needs revision because most of the diagnostic features used by James *et al.* (1980) could be applied to many other obscure genera of Pachygastrinae.

Genus MANOTES Kertész, 1916

***Manotes* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: A single specimen was reported by Rafael (1991). The examination of photographs of this specimen, which is deposited at INPA, allowed to confirm the generic identification only.

Genus PANACRIS Gerstaecker, 1857

Panacris lucida Gerstaecker, 1857 = *P. proxima* Kertész, 1908. **Type locality:** French Guiana (Cayenne). **Distribution:** Brazil (Amapá, Amazonas, Mato Grosso, Pará, Roraima), Costa Rica, French Guiana, Guyana, Nicaragua, Panama, Peru.

Genus POPANOMYIA Kertész, 1909

Popanomyia femoralis Kertész, 1909. **Type locality:** Peru (Meshagua, Urubamba River). **Distribution:** Brazil (Rio de Janeiro, Roraima, Santa Catarina), Panama, Peru.

Popanomyia kerteszi James & Woodley *in* James *et al.,* 1980. **Type locality:** Peru (Madre de Dios, Avispas, 400 m). **Distribution:** Brazil (Roraima), Panama, Peru.

Comments: This species and *Popanomyia femoralis* are very similar, differing mostly in the color of the legs and wings (see James *et al.,* 1980: 24), thus the limits between them need to be better evaluated when more material is available.

Subfamily SARGINAE Walker, 1834
Genus ACROCHAETA Wiedemann, 1830

Acrochaeta stigmata Fachin & Amorim, 2015. **Type locality:** Bolivia (Cochabamba Province, Villa Tunari, 16°54′55″S, 65°22′06″W). **Distribution:** Bolivia, Brazil (Roraima), Peru.

Genus MEROSARGUS Loew, 1855

Merosargus azureus (Enderlein, 1914). **Type locality:** Brazil (Santa Catarina). **Distribution:** Brazil (Minas Gerais, Pará, Roraima, Santa Catarina, São Paulo), Ecuador, Guyana, Panama, Peru, Venezuela.

Comments: Only one of the four specimens mentioned by Rafael (1991) was found in the INPA collection.

Merosargus c-nigrum (Lindner, 1951). **Type locality:** Peru (Tingo Maria). **Distribution:** Brazil (Roraima), Ecuador, Peru.

Merosargus cingulatus Schiner, 1868. **Type locality:** 'South America'. **Distribution:** Argentina, Brazil (Minas Gerais, Paraná, Roraima, São Paulo), Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Trinidad and Tobago, Venezuela.

Merosargus gracilis Williston, 1888. **Type locality:** Brazil (Mato Grosso, Chapada). **Distribution:** Brazil (Mato Grosso, Minas Gerais, Roraima, Santa Catarina, São Paulo), Colombia, Ecuador, Peru, Venezuela.

Comments: Only nine of the 12 specimens mentioned by Rafael (1991) were found in the INPA collection.

Merosargus nebulifer James *in* James & McFadden, 1971. **Type locality:** Peru (Madre de Dios, Avispas). **Distribution:** Brazil (Rio de Janeiro, Rondônia, Roraima), Ecuador, Panama, Peru.

Comments: This species is widespread in South America. Only nine of the ten specimens mentioned by Rafael (1991) were found in the INPA collection.

Merosargus stamineus (Fabricius, 1805). **Type locality:** 'America meridionali'. **Distribution:** Argentina, Belize, Brazil (Minas Gerais, Pará, Roraima), Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Peru.

Merosargus vertebratus James *in* James & McFadden, 1971. **Type locality:** Peru (Madre de Dios, Avispas, 400 m). **Distribution:** Brazil (Roraima), Panama, Peru.

***Merosargus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: This morphospecies might correspond to a new taxon.

***Merosargus* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: This morphospecies might correspond to a new taxon.

***Merosargus* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: This morphospecies might correspond to a new taxon.

***Merosargus* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: This morphospecies comprises the single specimen identified by Dr. Hanson (Rafael, 1991) as *Merosargus citrinus*. This species is herein excluded from the Brazilian fauna until more specimens can be examined and compared with the type from Peru.

Genus MICROCHRYSA Loew, 1855

Microchrysa bicolor (Wiedemann, 1830) = *Chrysomyia rufiventris* Macquart, 1834 = *Microchrysa bruesi* Johnson, 1919 = *M. abdominalis* James, 1936 = *M. maculata* Lindner, 1949. **Type locality:** 'Crab Island' near Puerto Rico. **Distribution:** Argentina, Belize, Brazil (Minas Gerais, Pernambuco, Rio de Janeiro, Rio Grande do Norte, Roraima, Santa Catarina), Colombia, Costa Rica, Dominica, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Puerto Rico, Uruguay.

Comments: Two of the three specimens mentioned by Rafael (1991) were found in the INPA collection.

Genus PTECTICUS Loew, 1855

Ptecticus testaceus (Fabricius, 1805) = *Musca elongata* Fabricius, 1794. **Type locality:** 'America meridionali'. **Distribution:** Argentina, Belize, Brazil (Amapá, Amazonas, Bahia, Espírito Santo, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Norte, Roraima, Santa Catarina, São Paulo), Costa Rica, Honduras, Mexico, Panama.

Comments: Twelve of the 15 specimens mentioned by Rafael (1991) were found in the INPA collection.

***Ptecticus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Ptecticus* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Ptecticus* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: This morphospecies includes the single specimen identified by Dr. Hanson (Rafael, 1991) as *Ptecticus trivittatus.* As commented, *P. trivittatus* is mainly a Nearctic species, at most reaching the northern portion of Mexico.

Genus SARGUS Fabricius, 1798

Sargus brasiliensis Wiedemann, 1830. **Type locality:** Brazil. **Distribution:** Brazil (Rio de Janeiro, Roraima), Panama.

Sargus fasciatus Fabricius, 1850 = *S. notatus* Wiedemann, 1830 = *S. coarctatus* Macquart, 1838 = *S. debilis* Walker, 1851 = *S. sallei* Bellardi, 1859 = *S. versicolor* Bellardi, 1862 = *S. lucens* Loew, 1866 = *S. tricolor* Loew, 1866 = *Macrosargus clavis* Williston, 1885 = *Pedicella schwarzi* Curran, 1928. **Type locality:** 'America meridionali'. **Distribution:** Nearctic; Neotropical: Bahamas, Brazil (Mato Grosso do Sul, Minas Gerais, Paraná, Roraima, São Paulo), Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Honduras, Jamaica, Mexico, Panama, Puerto Rico.

Comments: The specimen of this species mentioned by Rafael (1991) was not found in the INPA collection.

Sargus thoracicus Macquart, 1834 = *S. concinnus* Osten Sacken, 1886. **Type locality:** 'Amérique méridionale'. **Distribution:** Argentina, Brazil (Espírito Santo, Mato Grosso, Pará, Paraná, Rio Grande do Norte, Santa Catarina, São Paulo), Costa Rica, Guatemala, Honduras, Mexico, Panama.

***Sargus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: This morphospecies is widespread in Brazil and it likely corresponds to an undescribed taxon. Rafael (1991) mentioned one morphospecies (*Sargus* sp.), but it was not found in the INPA collection.

***Sargus* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: This morphospecies is widespread in Brazil and it likely corresponds to an undescribed taxon.

Subfamily STRATIOMYINAE Latreille, 1802
Genus PROMERANISA Walker, 1854

Promeranisa nasuta (Macquart, 1850). **Type locality:** Bolivia (Chiquitos) (see Fachin *et al.,* 2021 for correction of the type locality). **Distribution:** Argentina, Bolivia, Brazil (Roraima), Costa Rica, Panama.

Comments: Ten of the 13 specimens mentioned by Rafael (1991) were found in the INPA collection. These specimens (five of each sex) fit well the syntypes photographs (https://science.mnhn.fr/institution/mnhn/collection/ed/item/ed7750?listIndex=1&listCount=5). The limits between *Promeranisa nasuta* and *P. vittata* Walker, 1854 from Pará, Brazil, however, are not well understood. *Promeranisa vittata* is based on a single female and it can be a junior synonym of *P. nasuta*.

Xylomyidae (Fig. 3K). There are approximately 140 known species of xylomyids in the world. They are classified into four genera, but the diversity is more concentrated in the Palearctic and Oriental regions, with 46 and 50 species, respectively (Woodley, 2011b). Specimens of this family – mostly females – are often captured in Malaise traps, and this collecting technique has yielded lots of new material of the family. *Solva* Walker, 1859 is the most diverse genus, with 101 described species (Woodley, 2011b; Krivosheina *et al.,* 2015). The family is still poorly studied in the Neotropical region, and many undescribed species are awaiting description (Woodley, 2009, 2011b). Currently, 16 xylomyids species in three genera have been reported for the Neotropics, of which six species belong to *Arthropeina* Lindner, 1949, seven to *Solva,* and three are assigned to *Xylomya* Rondani, 1861 (Fachin & Assis-Pujol, 2016b). Five species of *Arthropeina* and two of *Solva* are known to Brazil, but *A. lindneri* Fachin & Amorim, 2014 was the only species reported to Roraima so far (Fachin & Amorim, 2014). In the present survey, four species of two genera were collected (see Table 2). This represents the first record of *A. diadelothorax* Fachin & Amorim, 2014, and of *Solva* to Roraima. The checklist of the Xylomyidae of Roraima now includes two species of *Arthropeina* and two morphospecies of *Solva*.

XYLOMYIDAE Verrall, 1901
Genus ARTHROPEINA Lindner, 1949

Arthropeina lindneri Fachin & Amorim, 2014. **Type locality:** Brazil (Rondônia, Porto Velho, Área Mutum, M5P4, 09°35′29.5″S, 65°02′57.6″W). **Distribution:** Brazil (Acre, Rondônia, Roraima), Guyana.

Arthropeina diadelothorax Fachin & Amorim, 2014. **Type locality:** Brazil (Rondônia, Cacaulândia, Trilha da Cachoeira Jamari, 10°13′28.8″S, 63°13′49.0″W). **Distribution:** Brazil (Rondônia, Roraima).

Genus SOLVA Walker, 1859

***Solva* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Solva* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Dolichopodidae (Fig. 3L). The long-legged flies comprise one of the most speciose Dipteran families, with some 8,000 described species (Pape *et al.,* 2011; Grichanov, 2018) in over 260 genera. The Brazilian fauna counts with 212 species in 30 genera, 14 of which had been recorded to the Brazilian state of Roraima before this study (Capellari, 2021). Most of the dolichopodid records for Roraima in the literature are based on the material collected during the 1989 insect survey on Ilha de Maracá (see Introduction) and identified by the late Dr. Harold Robinson (Rafael, 1991). Examination of photos of the original material identified by Robinson (currently in the INPA collection) enabled the exclusion of three species from the fauna of Roraima and Brazil, since identifications were based on female specimens, which do not allow confident determination: *Dactylomyia coruscans* (Parent, 1928) (listed as *Neurigona* Rondani, 1856), *Mesorhaga laeta* Becker, 1922, and *M. tristis* Schiner, 1868. The remaining specimens identified by Robinson as morphotypes could not be reexamined and hence they were not taken into account in this work. As a summary, 26 species (six subfamilies and nine genera) were found during the present study, of which only five had been previously reported by Rafael (1991). All 20 named species known from Roraima are listed below, from which seven are new records for the state and five species, including the genus *Xantina* Aldrich, 1902, are new to Brazil. Some species records listed below did not appear in the Neotropical (Robinson, 1970) and/or World catalog (Yang *et al.,* 2006). Literature data came from the following references: Brooks *et al.* (2010, 2018), Capellari (2015, 2018), Evenhuis (2015), Harterreiten-Souza *et al.* (2020), Naglis (2000, 2003a, b), Pollet *et al.* (2004), Rafael (1991), Rafael *et al.* (2020), Robinson (1975), Runyon (2020), and Soares & Capellari (2020).

DOLICHOPODIDAE Latreille, 1809
Subfamily ACHALCINAE Grootaert & Meuffels, 1997
Genus XANTHINA Aldrich, 1902

***Xanthina* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily DIAPHORINAE Schiner, 1864
Genus ACHRADOCERA Becker, 1922

Achradocera apicalis (Aldrich, 1896) = *A. angustifacies* Becker, 1922. **Type locality:** St. Vincent Island. **Distribution:** Brazil (Distrito Federal, Roraima), Chile, Dominica, French Polynesia, Montserrat, Saint Lucia, Saint Vincent and the Grenadines, Tonga.

Genus CHRYSOTUS Meigen, 1824

Chrysotus brevicornis Van Duzee, 1933 = *C. brevispina* Van Duzee, 1933 = *C. latifacies* Van Duzee, 1933 = *C. mexicanus* Robinson, 1967b. **Type locality:** Galapagos Islands. **Distribution:** Brazil (Pernambuco, Roraima), Costa Rica, Dominica, Galápagos Islands, Mexico, Montserrat.

Comments: Bickel & Sinclair (1997) redescribed *Chrysotus brevicornis* Van Duzee, 1933 and R.S.C. suspects this species is a synonym of *C. ochropus* Thomson, 1869 (see also Bickel, 1998).

Chrysotus crosbyi Van Duzee, 1924 = *C. magnipalpus* Van Duzee, 1927. **Type locality:** Columbus, United States. **Distribution:** Bermuda, Brazil (Bahia, Espírito Santo, Pernambuco, Rondônia, Roraima), Cuba, French Guiana, French Polynesia, Guam, Hawaiian Islands, Northern Mariana Islands, Puerto Rico, United States.

Chrysotus flavipes (Aldrich, 1896). **Type locality:** St. Vincent Island. **Distribution:** Lesser Antilles, Brazil (Roraima), 'South America'.

Comments: A single male collected, which matches Robinson's (1975) overall description of the species, but it has yellow antennae, abdominal terga 1-4 entirely yellow, and hind coxae also entirely yellow. The species has a large distribution range throughout 'South America' (Robinson 1970, 1975).

Chrysotus mundus (Loew, 1861). **Type locality:** Pennsylvania, United States. **Distribution:** Bolivia, Brazil (Roraima), Canada, Suriname, United States, West Indies.

Comments: R.S.C. uses Aldrich's concept of the species instead of Robinson's (1975), as clarified by Runyon (2020). Females have fore coxae entirely yellow, while the males have brownish yellow coxae.

Chrysotus proximus Aldrich, 1896. **Type locality:** Saint Vincent Island. **Distribution:** Brazil (Roraima), Dominica, "Lesser Antilles".

Chrysotus spectabilis (Loew, 1861) = *Diaphorus exunguis* Thomson, 1869 = *D. approximatus* Aldrich, 1896. **Type locality:** Columbia, United States. **Distribution:** Argentina, Bolivia, Brazil (Paraná, Pernambuco, Roraima), Costa Rica, Honduras, Mexico, Panama, Paraguay, Peru, United States, West Indies.

***Chrysotus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Chrysotus* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Chrysotus* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Chrysotus* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).
***Chrysotus* sp. 5, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus LYRONEURUS Loew, 1857b

Lyroneurus suavis Loew, 1857. **Type locality:** 'Suriname'. **Distribution:** Argentina, Bolivia, Brazil (Pernambuco, Roraima), Costa Rica, Guyana, Panama, Suriname.

Comments: Robinson (in Rafael, 1991) listed this species as *Diaphorus* Meigen, 1824.

Subfamily DOLICHOPODINAE Latreille, 1809
Genus CHEIROMYIA Dyte, 1980

= *Cheirocerus* Parent, 1930.

Cheiromyia brevitarsis Brooks *in* Brooks *et al.,* 2010. **Type locality:** French Sinnamary, Guiana. **Distribution:** Brazil (Roraima), Colombia, French Guiana, Guyana.

Cheiromyia palmaticornis (Parent, 1930). **Type locality:** Santarém, Pará, Brazil. **Distribution:** Brazil (Amapá, Amazonas, Pará, Roraima), Ecuador, French Guiana, Suriname.

Genus PARACLIUS Loew, 1864

= *Leptocorypha* Aldrich, 1896.

Paraclius parvulus Parent, 1930. **Type locality:** Brazil (Pará). **Distribution:** Santarém, Pará, Brazil.

Paraclius sagittatus Capellari & Amorim, 2009. **Type locality:** Recife, Pernambuco, Brazil. **Distribution:** Brazil (Recife, Roraima).

***Paraclius* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Paraclius* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Paraclius* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Paraclius* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).
***Paraclius* sp. 5, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PELASTONEURUS Loew, 1861

= *Paracleius* Bigot, 1859.

Pelastoneurus argentiferus Aldrich, 1896. **Type locality:** Saint Vincent Island. **Distribution:** Brazil (Roraima), Costa Rica, Mexico, West Indies.

Subfamily MEDETERINAE Lioy, 1863-1864
Genus SYSTENUS Loew, 1857a

Systenus amazonicus Naglis, 2000. **Type locality:** Manaus, Amazonas Brazil. **Distribution:** Brazil (Amazonas, Roraima).

Genus THRYPTICUS Gerstaecker, 1864

= *Aphantotimus* Wheeler, 1890 = *Xanthotricha* Aldrich, 1896 = *Submedeterus* Becker, 1917-1918.

***Thrypticus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily NEURIGONINAE Aldrich, 1905
Genus NEURIGONA Rondani, 1856

= *Saucropus* Loew, 1857a.

Neurigona banksi Naglis, 2003b. **Type locality:** Barro Colorado, Panama. **Distribution:** Bolivia, Brazil (Amapá, Pará, Rio de Janeiro, Rondônia, Roraima, Santa Catarina, São Paulo), Costa Rica, Ecuador, Guyana, Panama, Peru, Venezuela.

Neurigona fuscicosta Robinson, 1975. **Type locality:** Clarke Hall, Dominica. **Distribution:** Brazil (Roraima), Dominica.

Genus VIRIDIGONA Naglis, 2003a

Viridigona albisigna Naglis, 2003a. **Type locality:** Quincemil, Cuzco, Peru. **Distribution:** Brazil (Roraima), Peru, Venezuela.

Subfamily SCIAPODINAE Becker, 1917-1918
Genus CONDYLOSTYLUS Bigot, 1859

= *Dasypsilopus* Bigot, 1859 = *Eurostomerus* Bigot, 1859 = *Oedipsilopus* Bigot, 1859 = *Tylochaetus* Bigot, 1888 = *Laxina* Curran, 1934.

Condylostylus depressus (Aldrich, 1901) = *Sciopus longiseta* Coquillett, 1902. **Type locality:** Teapa and Frontera in Tabasco, Mexico. **Distribution:** Brazil (Roraima), Mexico.

Comments: This species is listed as *Condylostylus similis* (Aldrich, 1901) in Rafael (1991).

Condylostylus longicornis (Fabricius, 1775) = *Psilopus radians* Macquart, 1834 = *P. nigripes* Macquart, 1842 = *P. flavimanus* Macquart, 1842 = *P. chrysoprasi* Walker, 1848-1849 = *P. metallifer* Walker, 1848-1849 = *P. zonatulus* Thomson, 1869 = *P. trichosoma* Bigot, 1890 = *P. ciliipes* Aldrich, 1901 = *P. dentaticauda* Van Duzee, 1933b. **Type locality:** 'America'. **Distribution:** a tramp species known from Oriental, Australasian, Nearctic, and Neotropical regions; Bolivia, Brazil (Pernambuco, Roraima), Dominica, Ecuador, Mexico, Panama, Peru Mexico.

Comments: This species is listed as *Condylostylus chrysoprassius* (Walker, 1849) in Rafael (1991).

***Condylostylus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Condylostylus* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily STOLIDOSOMATINAE Becker, 1922
Genus PSEUDOSYMPYCNUS Robinson, 1967a

Pseudosympycnus bickeli Soares & Capellari, 2020. **Type locality:** Brazil, Roraima, Caracaraí. **Distribution:** Brazil (Roraima, Pará).

Empididae (Fig. 3M). It is a cosmopolitan family of flies, comprising about 70 genera (Yang *et al.,* 2007) and 3,000 species in the world (Rafael & Chagas, 2014). Empididae is classified in four subfamilies: Clinocerinae, Empidinae, Hemerodromiinae, and Ragadinae. The latter was erected as another family by Wahlberg & Johanson (2018). However, this status has not received much support in the literature. Currently, the Neotropical region has 32 genera and more than 700 species, most of them recorded from the southern portion of South America, comprising Argentina, Brazil, and Chile (Collin, 1933; Smith, 1967). In Brazil, there are 165 species recorded (Rafael & Câmara, 2021). The current knowledge of Amazonian empidids is far below the actual number living there. There are several undescribed species still being identified to be published shortly. Unfortunately, the only genus identified from 2015's expedition was *Opeatocerata* Melander, 1928 based on two specimens. The Empididae information below came from the online Taxonomic Catalog of the Brazilian Fauna (Rafael & Câmara, 2021).

EMPIDIDAE Latreille, 1804
Subfamily EMPIDINAE Schiner, 1862
Genus MACROSTOMUS Wiedemann, 1817

Macrostomus albicaudatus Rafael & Cumming, 2015. **Type locality:** Brazil (Amazonas). **Distribution:** Brazil (Amazonas, Pará, Roraima).

Macrostomus amazonensis Rafael & Cumming, 2015. **Type locality:** Brazil. **Distribution:** Brazil (Amazonas, Mato Grosso, Pará, Rondônia, Roraima).

Macrostomus cervicicauda Smith, 1963. **Type locality:** British Guyana. **Distribution:** Guyana, Brazil (Amazonas, Pará, Roraima).

Macrostomus cysticercus Smith, 1963. **Type locality:** British Guyana. **Distribution:** Brazil (Amazonas, Roraima), Guyana, Trinidad and Tobago.

Macrostomus ferrugineus (Fabricius, 1805). **Type locality:** 'America meridionalis'. **Distribution:** Brazil (Amapá, Amazonas, Pará, Roraima), Guyana.

Macrostomus flavus Rafael & Cumming, 2009. **Type locality:** Brazil (Amazonas). **Distribution:** Brazil (Amazonas, Roraima).

Macrostomus pacaraima Rafael & Cumming, 2010. **Type locality:** Brazil (Roraima). **Distribution:** Brazil (Amazonas, Pará, Roraima).

Macrostomus smithi Rafael & Cumming, 2010. **Type locality:** British Guyana. **Distribution:** Brazil (Roraima), Guyana.

Genus PORPHYROCHROA Melander, 1928

Porphyrochroa vidali Mendonça, Rafael & Ale-Rocha, 2007. **Type locality:** Brazil (Roraima). **Distribution:** Brazil (Amazonas, Roraima).

Genus OPEATOCERATA Melander, 1928

Opeatocerata melanderi Câmara & Rafael, 2011. **Type locality:** Brazil (Amazonas). **Distribution:** Brazil (Amazonas, Roraima).

***Opeatocerata* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Hybotidae (Fig. 3N). Cosmopolitan, this family comprises approximately 2,000 species distributed in 68 genera (Cumming, 2006; Sinclair & Cumming, 2007; Yang *et al.,* 2007). In the Neotropical Region, 284 species are known (Yang *et al.,* 2007; Ale-Rocha & Freitas-Silva, 2021). They are predominantly predatory flies, small- to medium-sized, varied in color but never metallic. Hybotidae is currently divided into five subfamilies (Sinclair & Cumming, 2006), of which Hybotinae, Ocydromiinae, and Tachydromiinae occur in the Neotropical region (Yang *et al.,* 2007). In Brazil, 163 species and 20 genera are known (Ale-Rocha & Freitas-Silva, 2021). Except for *Syneches* Walker, 1852, the other genera found on Ilha de Maracá (*Baeodromia* Cumming, 2006, *Drapetis* Meigen, 1822, *Micrempis* Melander, 1928, *Elaphropeza* Macquart, 1828, and *Euhybus* Coquillett, 1895) are recorded for the first time for the state of Roraima, and the morphotypes obtained for each genus except those of *Euhybus* represent new species (Table 2). The genus *Baeodromia* Cumming, 2006 currently includes only one Nearctic species, *B. pleuritica* (Melander, 1918), but Cumming (2006) pointed out the existence of several undescribed Neotropical species, including in Brazil. *Syneches moraballi* Smith, 1963 is a widespread species in Brazil, with previous records for the entire Amazon basin, including Ilha de Maracá (Menezes & Ale-Rocha, 2016). This is the only species of *Syneches* registered to the island.

HYBOTIDAE Meigen, 1820
Subfamily TACHYDROMIINAE Schiner, 1862
Genus BAEODROMIA Cumming, 2006

***Baeodromia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus DRAPETIS Meigen, 1822

= *Caecula* Gistel, 1848 = *Arbicola* Gistel, 1848.

***Drapetis* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Drapetis* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus ELAPHROPEZA Macquart, 1827

= *Drapetis,* subgen. *Elaphropeza* Melander, 1910 = *Drapetis,* subgen. *Ctenodrapetis* Bezzi, 1904.

***Elaphropeza* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Elaphropeza* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus MICREMPIS Melander, 1928

***Micrempis* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Micrempis* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily HYBOTINAE Meigen, 1928
Genus EUHYBUS Coquillett, 1895

***Euhybus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus SYNECHES Walker, 1852

= *Pterospilus* Rondani, 1856 = *Harpamerus* Bigot, 1859 = *Epiceia* Walker, 1860 = *Parahybos* Kertész, 1899.

Syneches moraballi Smith, 1963. **Type locality:** British Guiana, Essequebo River, Moraballi Creek. **Distribution:** Brazil (Amazonas, Goiás, Maranhão, Mato Grosso, Pará, Paraná, Piauí, Rio Grande do Sul, Rondônia, Roraima), Guyana, Peru, Venezuela.

Phoridae (Fig. 3O). These are popularly known as scuttle flies and the smallest Diptera in the world. The family is highly diverse, with 4,380 species distributed worldwide in 270 genera (Brown, 2020). Among its genera and species, the family has one of the most varied roles in ecosystems, with most members acting as parasitoids, herbivores, decomposers, and pollinators (Disney, 1994; Brown, 2010, 2018). Phorids are classified into five subfamilies: Sciadocerinae, Chonocephalinae, Termitoxeniinae, Metopininae, and Phorinae (Brown *et al.,* 2015; Ament, 2017b). Currently, the Neotropical region counts with 134 genera and over 1,700 species (Brown, 2020). About 850 of the Neotropical species occur in Brazil, which makes it the most

speciose family of flies in the country (Ament & Pereira, 2021). So far, Roraima has records of seven genera (Brown, 2020). This survey brings additions to the knowledge of phorid fauna, with new records of five genera and five species to the state of Roraima (Table 2). Literature data came from the following references: Ament (2014, 2017a, b), Ament & Amorim (2016), Ament *et al.* (2020), Brown (2000, 2001, 2002, 2005, 2020). Brown & Kung (2007, 2010), Disney (1996), Duarte *et al.* (2018), Hash & Brown (2015), Kung & Brown (2000, 2005), and Souza *et al.* (2019).

PHORIDAE Curtis, 1833
Subfamily PHORINAE Curtis, 1833
Genus CHAETOCNEMISTOPTERA Borgmeier, 1923

***Chaetocnemistoptera* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus CONICEROMYIA Borgmeier, 1923

Coniceromyia auristriata Borgmeier, 1963. **Type locality:** Mexico (Jalapa, Vera Cruz). **Distribution:** Brazil (Roraima), Colombia, Costa Rica, Honduras, Mexico, Panama.

Coniceromyia brachypoda Ament *et al.,* 2020. **Type locality:** Colombia (Amazonas, PNN Amacayacu, San Martín). **Distribution:** Bolivia, Brazil (Amapá, Amazonas, Pará, Rondônia, Roraima), Colombia, Ecuador, French Guiana, Panama, Peru.

Coniceromyia brevivena Kung & Brown, 2000. **Type locality:** Peru (Madre de Dios, Rio Tambopata Reserve). **Distribution:** Brazil (Roraima), French Guiana, Peru.

Coniceromyia costaricana Borgmeier, 1950. **Type locality:** Costa Rica (San José). **Distribution:** Brazil (Amazonas, Pará, Roraima), Colombia, Costa Rica, Guyana, Panama, Trinidad and Tobago, Venezuela.

Coniceromyia pilipleura Borgmeier, 1962. **Type locality:** United States (Florida, Sebring). **Distribution:** Brazil (Roraima), Costa Rica, Honduras, Panama, United States.

Genus DOHRNIPHORA Dahl, 1898

Dohrniphora alvarengai Prado, 1976. **Type locality:** Brazil (Mato Grosso, Sinop). **Distribution:** Brazil (Amazonas, Mato Grosso, Rondônia, Roraima), Colombia, Costa Rica, Ecuador, French Guiana, Panama.

Dohrniphora bicostula Kung & Brown, 2005. **Type locality:** Colombia (Amazonas, Matamata). **Distribution:** Brazil (Amazonas, Rondônia, Roraima), Colombia, Peru.

Dohrniphora cerdai Brown & Kung, 2007. **Type locality:** French Guiana (Regina, Patawa). **Distribution:** Brazil (Roraima), French Guiana.

Dohrniphora cognata Borgmeier, 1960. **Type locality:** Brazil (Santa Catarina, Nova Teutônia). **Distribution:** Brazil (Amazonas, Roraima, Santa Catarina), Colombia, French Guiana, Panama.

Dohrniphora dispar (Enderlein, 1912) = *Phora dispar* Enderlein, 1912. **Type locality:** Brazil (Santa Catarina, Hammonia [now Ibirama]). **Distribution:** Argentina, Bolivia, Brazil (Amapá, Amazonas, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina), Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, French Guiana, Jamaica, Montserrat, Panama, Peru, Puerto Rico.

Dohrniphora paraguayana (Brues, 1907) = *Phora paraguayana* Brues, 1907. **Type locality:** Paraguay (Asunción). **Distribution:** Argentina, Bolivia, Brazil (Amapá, Amazonas, Espírito Santo, Maranhão, Mato Grosso, Minas Gerais, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, São Paulo), Colombia, Costa Rica, Ecuador, French Guiana, Guyana, Panama, Paraguay, Trinidad and Tobago, Venezuela.

Dohrniphora procera Borgmeier, 1960. **Type locality:** Brazil (Santa Catarina, Blumenau). **Distribution:** Brazil (Amazonas, Roraima, Santa Catarina), Colombia, Costa Rica, Ecuador, French Guiana, Guyana, Panama.

Dohrniphora rafaeli Brown & Kung 2007, **Locality:** Brazil (Roraima, Pacaraima). **Distribution:** Brazil (Roraima).

***Dohrniphora* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily METOPININAE Rondani, 1956
Genus APOCEPHALUS Coquillett, 1901

Apocephalus asyndetus Brown, 2000. **Type locality:** Costa Rica (Heredia). **Distribution:** Brazil (Pará, Roraima), Costa Rica, Ecuador, Panama, Peru.

Apocephalus conformalis Brown, 2000. **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Apocephalus cyathus Brown, 2002. **Type locality:** Costa Rica (Heredia). **Distribution:** Brazil (Amazonas, Pará, Roraima), Colombia, Costa Rica, Guatemala, Mexico, Nicaragua, Panama, Trinidad and Tobago.

Apocephalus densepilosus Borgmeier, 1971. **Type locality:** Brazil (Pará, Utinga). **Distribution:** Brazil (Pará, Roraima), Colombia, Ecuador, Peru.

Apocephalus funditus Brown, 2000. **Type locality:** Costa Rica (Puntarenas). **Distribution:** Brazil (Roraima), Costa Rica, Ecuador, Peru.

Apocephalus medius Brown, 2002. **Type locality:** Costa Rica (Puntarenas). **Distribution:** Brazil (Amazonas, Roraima), Colombia, Costa Rica, Panama.

Apocephalus trifidus Brown, 2000. **Type locality:** Peru (Madre de Dios). **Distribution:** Brazil (Amazonas, Pará, Rondônia), Colombia, Ecuador, Guyana, Peru.

***Apocephalus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Apocephalus* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Apocephalus* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Apocephalus* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).
***Apocephalus* sp. 5, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus CREMERSIA Schmitz, 1924

***Cremersia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus ECTOCHAETA Borgmeier, 1958

Ectochaeta spinulosa Borgmeier, 1958. **Type locality:** Brazil (Mato Grosso do Sul). **Distribution:** Brazil (Mato Grosso do Sul, Roraima).

Genus EIBESFELDTPHORA Disney, 2009

= *Neodohrniphora* Malloch (1914), in part.

Eibesfeldtphora attae (Disney, 1996) = *Neodohrniphora attae* Disney, 1996. **Type locality:** Trinidad (Simla Valley). **Distribution:** Brazil (Pará, Roraima), Colombia, Costa Rica, Guyana, Peru, Trinidad and Tobago.

Eibesfeldtphora declinata (Borgmeier, 1925) = *Neodohrniphora declinata* Borgmeier, 1925. **Type locality:** Brazil (Rio de Janeiro, Petrópolis). **Distribution:** Brazil (Minas Gerais, Rio de Janeiro, Roraima, São Paulo), Colombia, Guyana.

Genus MELALONCHA Brues, 1904

Melaloncha catervula Brown, 2005. **Type locality:** Brazil (Roraima, Serra Grande). **Distribution:** Brazil (Roraima).

Genus MEGASELIA Schmitz, 1856
Subgenus MEGASELIA Schmitz, 1856

Megaselia (Megaselia) scalaris (Loew, 1866) = *Phora scalaris* Loew, 1866 = *Aphiochaeta xanthina* Speiser, 1908 = *Aphiochaeta fissa* Becker, 1908 = *Aphiochaeta conjuncta* Becker, 1908 = *Aphiochaeta banksi* Brues, 1909 = *Aphiochaeta circumsetosa* Meijere, 1911 = *Aphiochaeta ferruginea* Brunetti, 1912 = *Aphiochaeta repicta* Schmitz, 1915 = *Obelosia plusiivorax* Enderlein, 1919 = *Megaselia forticapilla* Beyer, 1959. **Type locality:** Cuba. **Distribution:** cosmopolitan; Brazil (Rio de Janeiro, Roraima, Tocantins).

Genus MYRIOPHORA Brown, 1992

Myriophora luteizona Borgmeier, 1925. **Type locality:** Brazil (Rio de Janeiro, Petrópolis). **Distribution:** Argentina, Bolivia, Brazil (Rio de Janeiro, Roraima, São Paulo), Colombia, French Guiana.

Genus MYRMOSICARIUS Borgmeier, 1928

Myrmosicarius grandicornis Borgmeier, 1928. **Type locality:** Brazil (Rio de Janeiro, Raiz da Serra). **Distribution:** Brazil (Minas Gerais, Rio de Janeiro, Roraima, Tocantins), Paraguay.

Genus PSEUDACTEON Coquillett, 1907

***Pseudacteon* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pseudacteon* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Pipunculidae (Fig. 3P). It is a cosmopolitan family of flies, comprising over 1,400 species in the world (De Meyer & Skevington, 2000). Twenty-one extant genera are currently recognized in four subfamilies: Chalarinae, Nephrocerinae, Protonephrocerinae, and Pipunculinae (Rafael & De Meyer, 1992; De Meyer & Skevington, 2000; Skevington & Yeates, 2000). Currently, the Neotropical region has 18 genera and around 300 species (Rodriguez & Rafael, 2012), with most of them (171) occurring in Brazil (Marques & Rafael, 2021). The genera recorded in this study are *Elmohardyia* Rafael, 1987, *Eudorylas* Aczél, 1940, and *Tomosvaryella* Aczél, 1939 (Table 2), with no previous new records to Roraima. Four females of *Eudorylas* from the 2015's expedition could not be identified. The Pipunculidae information below came from the online Taxonomic Catalog of the Brazilian Fauna (Marques & Rafael, 2021) and the following references: De Meyer (1996) and De Meyer & Skevington (2000).

PIPUNCULIDAE Walker, 1834
Subfamily CHALARINAE Aczél, 1939
Genus CHALARUS Walker, 1834

Chalarus connexus Rafael, 1988. **Type locality:** Brazil (Amazonas). **Distribution:** Brazil (Amazonas, Roraima), Trinidad and Tobago.

Subfamily PIPUNCULINAE Walker, 1834
Genus AMAZUNCULUS Rafael, 1986

Amazunculus besti Rafael, 1986. **Type locality:** Brazil (Amazonas). **Distribution:** Brazil (Amazonas, Roraima).

Amazunculus claripennis Rafael & Rosa, 1991. **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Genus BASILEUNCULUS Rafael, 1987

Basileunculus interruptus (Malloch, 1912). **Type locality:** Panama. **Distribution:** Brazil (Roraima), El Salvador, Panama.

Basileunculus rex (Curran, 1934). **Type locality:** British Guyana. **Distribution:** Brazil (Amazonas, Mato Grosso, Minas Gerais, Pará, Rio de Janeiro, Roraima), Guyana.

Genus CEPHALOSPHAERA Enderlein, 1936

Cephalosphaera pacaraima Rafael & Rosa, 1991. **Type locality:** Brazil (Roraima). **Distribution:** Brazil (Roraima).

Cephalosphaera semispiralis Rafael & Rosa, 1991. **Type locality:** Brazil (Roraima). **Distribution:** Brazil (Roraima).

Genus ELMOHARDYIA Rafael, 1987

Elmohardyia papaveroi Rafael, 1988. **Type locality:** Brazil (Pará). **Distribution:** Brazil (Amazonas, Mato Grosso, Pará, Roraima), Peru.

Elmohardyia praecipua Rafael & Rosa, 1991. **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Elmohardyia roraimensis Rafael & Rosa, 1991. **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

***Elmohardyia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus EUDORYLAS Aczél, 1940

Eudorylas aquinoi Rafael & Rosa, 1989. **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Eudorylas bentoni Rafael & Rosa, 1989. **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Eudorylas caccabatus Rafael & Rosa, 1989. **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Eudorylas dorsispinosus (Hardy, 1965). **Type locality:** Argentina. **Distribution:** Argentina, Brazil (Minas Gerais, Paraná, Rio de Janeiro, Roraima, Rondônia, São Paulo).

Eudorylas megasurstylus Rafael & Rosa, 1989. **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Eudorylas souzalopesi Rafael & Rosa, 1989. **Type locality:** Brazil (Roraima). **Distribution:** Brazil (Roraima).

Genus TOMOSVARYELLA Aczél, 1939

Tomosvaryella diffusa Ale-Rocha, 1996. **Type locality:** Brazil (Paraná). **Distribution:** Argentina, Brazil (Amazonas, Paraná, Roraima), Guyana.

Tomosvaryella lynchi (Shannon, 1927) = *Tomosvaryella tumida* Hardy, 1940. **Type locality:** Argentina. **Distribution:** Argentina, Bahamas, Brazil (Amazonas, Espírito Santo, Mato Grosso, Paraná, Rio de Janeiro, Roraima, São Paulo), Costa Rica, Cuba, Dominican Republic, Haiti, Jamaica, Mexico, Peru, United States.

Tomosvaryella scopulata Hardy, 1963. **Type locality:** Colombia. **Distribution:** Argentina, Brazil (Roraima), Colombia, Cuba, Dominica, Mexico.

***Tomosvaryella* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Tomosvaryella* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Syrphidae (Fig. 3Q). It comprises more than 6,000 species distributed worldwide in 202 valid genera (Thompson *et al.,* 2010), classified into four subfamilies: Syrphinae, Eristalinae, Microdontinae, and Pipizinae (Mengual *et al.,* 2015). Larvae and adults of flower flies (or hoverflies) have distinct biology and ecological importance, performing ecosystem services such as control of agricultural pests and decomposition of organic matter (animal and vegetal) during the larval stage, and pollination of plants during adulthood (Rotheray & Gilbert, 2011). Due to habitat heterogeneity and wide distribution, syrphids are an important group for ecological and evolutionary studies. The syrphid fauna of Brazil counts with 592 species placed in 79 genera (Morales & Marinoni, 2021). Before this study, Roraima had already recorded 30 genera and at least 64 species, and about half of those numbers are from Ilha de Maracá (17 genera and at least 32 species) (Morales, *unpublished data*). Records of Ilha de Maracá are mainly from collections made in 1987 by researchers from INPA [GBIF.org (17 June 2020) GBIF Occurrence Download https://doi.org/10.15468/dl.u75um8]. This survey brings the first record of *Stipomorpha* (Hull, 1945) and *Toxomerus virgulatus* (Macquart, 1850) to Roraima, in addition to the first record of *Microdon* (*Chymophila* Macquart, 1834), *Ocyptamus antiphates* (Walker, 1849), and *Palpada scutellaris* (Fabricius, 1805) to Ilha de Maracá (Table 2). Therefore, 31 genera and 66 species of Syrphidae are currently recorded to Roraima.

SYRPHIDAE Latreille, 1802
Subfamily ERISTALINAE Newman, 1834
Genus ALIPUMILIO Shannon, 1927

***Alipumilio* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: Data from GBIF, specimen code number INPA-DIP 000336.

Genus CHALCOSYRPHUS Curran, 1925

= Subg. *Xylotomina* Shannon, 1926 = *Planes* Rondani, 1863 = *Xylotodes* Shannon, 1926 = *Neplas* Porter, 1927 = *Cheiroxylota* Hull, 1949.

Subgenus NEPLAS Porter, 1927

***Chalcosyrphus (Neplas)* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá, Serra Pacaraima, and Tepequém).

Comments: Data from GBIF, specimen code number INPA-DIP 000337 to 000344.

Genus COPESTYLUM Macquart, 1846

Copestylum chalybescens (Wiedemann, 1830). **Type locality:** 'Brazil'. **Distribution:** Brazil (Amazonas, Pernambuco [= Archipelago of Fernando de Noronha], Roraima), Colombia, Cuba, Panama, Paraguay, Trinidad and Tobago.

Copestylum fumosum (Hull, 1943). **Type locality:** Brazil (Roraima, Monte Roraima). **Distribution:** Brazil (Roraima).

Copestylum inconsistens (Curran, 1939). **Type locality:** Brazil (Roraima, Monte Roraima). **Distribution:** Brazil (Roraima), Colombia, Costa Rica.

Copestylum meretricias (Williston, 1888). **Type locality:** Brazil (Mato Grosso, Chapada). **Distribution:** Argentina, Brazil (Amazonas, Mato Grosso, Rio de Janeiro, Santa Catarina, Roraima), Colombia.

Copestylum pallens (Wiedemann, 1830) = *Syrphus sexmaculatum* Palisot de Beauvois, 1819 = *Volucella testaceum* Rondani, 1848 = *V. sexpunctatum* Loew, 1861 = *Copestylum pallens* var. *quadripunctata* Doesburg, 1962. **Type locality:** 'Brazil'. **Distribution:** Argentina, Brazil (Amazonas, Roraima), Colombia, Cuba, Dominican Republic, Puerto Rico, Suriname, United States.

Copestylum roraima (Curran, 1939). **Type locality:** Brazil (Monte Roraima). **Distribution:** Brazil (Roraima), Colombia.

Copestylum tympanitis (Fabricius, 1805) = *Volucella ardua* Wiedemann, 1830. **Type locality:** 'America meridionali'. **Distribution:** Brazil (Espírito Santo, Roraima), Colombia, Costa Rica, Guatemala, Mexico, Panama, Peru, Suriname, Venezuela.

Copestylum viride (Williston, 1888). **Type locality:** Brazil (Mato Grosso, Chapada). **Distribution:** Bolivia, Brazil (Amazonas, Mato Grosso, Roraima), Colombia, Costa Rica, Peru.

***Copestylum* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus MEROMACRUS Rondani, 1848

= *Plagiocera* Macquart, 1842 = *Pteroptila* Loew, 1866 = *Promilesia* Lynch Arribálzaga, 1892 = *Metameromacrus* Hull, 1942 = *Thalamopales* Hull, 1949.

Meromacrus ghilianii Rondani, 1848. **Type locality:** Brazil (Pará, Belém). **Distribution:** Brazil (Pará, Roraima).

Meromacrus laconicus (Walker, 1852). **Type locality:** 'Brazil'. **Distribution:** Brazil (Bahia, Espírito Santo, Minas Gerais, Paraná, Rio Grande do Sul, Roraima, Santa Catarina), Colombia, Costa Rica, Ecuador, Guyana, Panama, Paraguay, Suriname, United States, Venezuela.

Genus ORNIDIA Le Peletier & Serville, 1828

Ornidia obesa (Fabricius, 1775) = *Volucella violacea* Macquart, 1842 = *V. obesoides* Giglio-Tos, 1892. **Type locality:** 'America'. **Distribution:** Argentina, Bolivia, Brazil (Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco [including Archipelago of Fernando de Noronha], Piauí, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Sergipe, Tocantins), Caribbean Netherlands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Haiti, Honduras, Lesser Antilles, Nicaragua, Nigeria, Panama, Paraguay, Peru, Puerto Rico, Suriname, United States (including Hawaii), Uruguay, Venezuela. Introduced to Afrotropical (including Madagascar), Oriental and Oceania Regions.

Genus ORTHONEVRA Macquart, 1829

= *Cryptineura* Bigot, 1859.

***Orthonevra* spp., Locality:** Brazil (Amazonas, Maranhão, Pará, Paraná, Rondônia, Roraima, São Paulo, Tocantins).

Comments: Records from Roraima: Data from GBIF, specimen code number INPA-DIP 004059, 004060.

Genus PALPADA Macquart, 1834

= *Doliosyrphus* Bigot, 1882.

Palpada aemula (Williston, 1891). **Type locality:** Mexico (Guerrero, Venta de Zopilote). **Distribution:** Brazil (Pará, Roraima), Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Mexico, Nicaragua, Panama, United States, Venezuela.

Palpada agrorum (Fabricius, 1787) = *Eristalis cubensis* Macquart, 1842 = *E. sallei* Giglio-Tos, 1892. **Type locality:**

'America insulis'. **Distribution:** Argentina, Brazil (Amazonas, Espírito Santo, Goiás, Mato Grosso do Sul, Mato Grosso, Distrito Federal, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Cuba, Guadeloupe, Honduras, Mexico, Netherlands Antilles, Panama, Peru, Puerto Rico, Paraguay, Suriname, United States, Venezuela.

Palpada claudia (Curran, 1930). **Type locality:** Panama (Canal Zone, Barro Colorado Island). **Distribution:** Bolivia, Brazil (Amazonas, Roraima), Costa Rica, Panama.

Palpada conica (Fabricius, 1805). **Type locality:** 'America meridionali'. **Distribution:** Bolivia, Brazil (Amapá, Bahia, Distrito Federal, Espírito Santo, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, French Guiana, Guatemala, Guyana, Panama, Paraguay, Peru.

Palpada erratica (Curran, 1930). **Type locality:** Panama (Canal Zone, Colorado Island). **Distribution:** Bolivia, Brazil (Acre, Amapá, Amazonas, Espírito Santo, Maranhão, Mato Grosso, Mato Grosso do Sul, Pará, Paraná, Rio de Janeiro, Rondônia, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, Guyana, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

Palpada precipua (Williston, 1888). **Type locality:** Brazil (São Paulo and Mato Grosso, Chapada). **Distribution:** Argentina, Bolivia, Brazil (Amapá, Distrito Federal, Espírito Santo, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Nicaragua, Panama, Paraguay.

Palpada pusio (Wiedemann, 1830). **Type locality:** 'Brazil'. **Distribution:** Argentina, Brazil (Amazonas, Roraima), Colombia, Ecuador, Mexico, Puerto Rico, Suriname, Venezuela.

Palpada pygolampa (Wiedemann, 1830). **Type locality:** 'Brazil'. **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Espírito Santo, Goiás, Mato Grosso do Sul, Mato Grosso, Distrito Federal, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo), Guyana, Paraguay.

Palpada scutellaris (Fabricius, 1805) = *Eristalis cognatus* Rondani, 1848 = *E. angustatus* Rondani, 1848 = *E. cyaneifer* Walker, 1849 = *Eristalis limbatinevris* Macquart, 1850 = *E. fascithorax* Macquart, 1850 = *Doliosyrphus scutellatus* Bigot, 1883 = *D. rileyi* Williston, 1887. **Type locality:** 'America meridionali'. **Distribution:** Argentina, Bolivia, Brazil (Acre, Amapá, Amazonas, Bahia, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, São Paulo), Costa Rica, Ecuador, Guyana, Mexico, Panama, Peru, Suriname, Trinidad and Tobago, United States, Venezuela.

Comments: New record for Ilha de Maracá.

Palpada solennis (Walker, 1852) = *Eristalis mus* Curran, 1930. **Type locality:** 'Brazil'. **Distribution:** Argentina, Brazil (Amazonas, Bahia, Ceará, Mato Grosso, Roraima, São Paulo), Mexico, Suriname, Venezuela.

Palpada urotaenia (Curran, 1930). **Type locality:** Brazil (Mato Grosso, Chapada). **Distribution:** Brazil (Amazonas, Bahia, Espírito Santo, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Ecuador, Paraguai, Peru, Suriname.

Genus QUICHUANA Knab, 1913

Quichuana angustiventris (Macquart, 1855) = *Helophilus auratus* Walker, 1857. **Type locality:** 'Valley of the Amazon'. **Distribution:** Brazil (Amazonas, Mato Grosso, Roraima), Colombia, Costa Rica, Peru, Suriname, Trinidad and Tobago, Venezuela.

Genus SPHIXIMORPHA Rondani, 1850

= *Cerioides* Rondani, 1850 = *Cerioides*, subg. *Polistoceria* Hull, 1949.

Sphiximorpha bigotii (Williston, 1888). **Type locality:** Brazil (Mato Grosso, Chapada). **Distribution:** Brazil (Mato Grosso, Rio de Janeiro, Roraima, São Paulo).

Genus SPILOMYIA Meigen, 1803

Spilomyia gratiosa Wulp, 1888. **Type locality:** Argentina (prov. Tucuman). **Distribution:** Argentina, Brazil (Minas Gerais, Paraná, Roraima, São Paulo), Colombia.

Genus STERPHUS Philippi, 1865
Subgenus CERIOGASTER Williston, 1888

= *Zonemyia* Shannon, 1925.

Sterphus (Ceriogaster) **sp., Locality:** Brazil (Roraima, Ilha de Maracá and Serra Pacaraima).

Comments: Record from Ilha de Maracá: Data from GBIF, specimen code number INPA-DIP 003687.

Subgenus CREPIDOMYIA Shannon, 1926

Sterphus (Crepidomyia) coarctatus (Wiedemann, 1830) = *Senoceria spinifemoratus* Hull, 1930. **Type locality:** 'Brazil'. **Distribution:** Bolivia, Brazil (Amazonas, Roraima), Colombia, Costa Rica, Panama.

Sterphus (Crepidomyia) plagiatus (Wiedemann, 1830). **Type locality:** 'Brazil'. **Distribution:** Bolivia, Brazil (Amapá, Amazonas, Roraima), Colombia, Guyana, Peru.

Subfamily MICRODONTINAE Rondani, 1845
Genus CERIOMICRODON Hull, 1937

Ceriomicrodon petiolatus Hull, 1937. **Type locality:** Brazil (Mato Grosso). **Distribution:** Brazil (Amazonas, Maranhão, Mato Grosso, Rondônia, Roraima), Peru.

Genus CHRYSIDIMYIA Hull, 1937

***Chrysidimyia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: Data from GBIF, specimen code number INPA-DIP 000304, 000305.

Genus HYPSELOSYRPHUS Hull, 1937

Hypselosyrphus helvus Reemer, 2013. **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Genus MICRODON Meigen, 1803

= *Aphritis* Latreille, 1804 = *Colacis* Gistel, 1848 = *Scutelligera* Spix, 1824 = *Parmula* Heyden, 1825 = *Scutigerella* Haas, 1924.

***Microdon* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: Data from GBIF, specimen code number INPA-DIP 000301.

Subgenus CHYMOPHILA Macquart, 1834

= *Eumicrodon* Curran, 1925.

Microdon (Chymophila) barbiellinii Curran, 1936. **Type locality:** Brazil (São Paulo). **Distribution:** Brazil (Roraima, São Paulo).

Microdon (Chymophila) stramineus Hull, 1943. **Type locality:** Brazil (Pará). **Distribution:** Brazil (Amazonas, Pará, Roraima).

***Microdon (Chymophila)* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PSEUDOMICRODON Hull, 1937

Pseudomicrodon corona (Curran, 1940). **Type locality:** Brazil (Santa Catarina, Nova Teutônia). **Distribution:** Brazil (Roraima, Santa Catarina).

***Pseudomicrodon* sp., Locality:** Brazil (Roraima, Amajari, and Ilha de Maracá).

Comments: Data from GBIF, specimen code number INPA-DIP 000307 to 000309.

Genus RHOGA Walker, 1857

= *Papiliomyia* Hull, 1937.

***Rhoga* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá, and Amajari).

Comments: Data from GBIF, specimen code number INPA-DIP 000276 to 000280, 001483.

Genus STIPOMORPHA Hull, 1945

***Stipomorpha* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: New record from Ilha de Maracá.

Genus UBRISTES Walker, 1852

Ubristes rex Reemer, 2017. **Type locality:** Brazil (Roraima, Serra Pacaraima). **Distribution:** Brazil (Roraima).

Subfamily PIPIZINAE Williston, 1885
Genus TRICHOPSOMYIA Williston, 1888

= *Halictomyia* Shannon, 1927 = *Parapenium* Collin, 1952.

Trichopsomyia polita Williston, 1888. **Type locality:** Brazil (Mato Grosso, Chapada). **Distribution:** Brazil (Mato Grosso, Paraná, Roraima).

Subfamily SYRPHINAE Latreille, 1802
Genus ARGENTINOMYIA Lynch Arribálzaga, 1891

= *Rhysops* Williston, 1907 = *Braziliana* Curran, 1925 = *Allograptina* Enderlein, 1938.

Argentinomyia thiemei (Enderlein, 1938). **Type locality:** Colombia (Cordillera). **Distribution:** Brazil (Roraima), Colombia.

Genus ALLOGRAPTA Osten Sacken, 1875

= *Neoscaeva* Frey, 1946 = *Microsphaerophoria* Frey, 1946 = *Miogramma* Frey, 1946 = *Helenomyia* Bankowska, 1962 = *Paraxanthogramma* Tao & Chiu, 1971.

Allograpta neotropica Curran, 1936. **Type locality:** Colombia (Popayan). **Distribution:** Argentina, Brazil (Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Ro-

raima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, Hispaniola, Jamaica, Panama, Venezuela.

Genus DIOPROSOPA Hull, 1949

= *Pseudodoros* auct. nec Becker, 1903.

Dioprosopa clavata (Fabricius, 1794) = *Paragus scutellaris* Walker, 1836 = *Baccha varia* Walker, 1849 = *B. facialis* Thomson, 1869 = *Mixogaster scutellata* Williston, 1886 [incorrect original spelling of *scutellaris* Walker]. **Type locality:** 'America meridionalis insulis'. **Distribution:** Argentina, Bahamas, Bolivia, Brazil (Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco [including Archipelago of Fernando de Noronha], Piauí, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Sergipe, Tocantins), Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Haiti, Hispaniola, Jamaica, Lesser Antilles, Mexico, Nicaragua, Paraguay, Peru, Puerto Rico, Suriname, United States, Uruguay, Venezuela.

Genus HYBOBATHUS Enderlein, 1938

= *Callisyrphus* Frey, 1946 = *Calliscaeva* Frey, 1946.

***Hybobathus* sp. 1, Locality:** Brazil (Roraima, Caracaraí).

Comments: Data from GBIF, specimen code number INPA-DIP 001264.

Genus MAIANA Miranda, 2020

Maiana callidus (Hine, 1914). **Type locality:** Guatemala (Puerto Barrios). **Distribution:** Brazil (Amazonas, Paraná, Rio Grande do Sul, Roraima, Santa Catarina), Costa Rica, Guatemala.

Genus OCYPTAMUS Macquart, 1834

= *Cryptamus* Stahl, 1882 = *Baccha (Ocyptamus)* Hull, 1949.

Ocyptamus antiphates (Walker, 1849). **Type locality:** 'Jamaica'. **Distribution:** Belize, Brazil (Amazonas, Distrito Federal, Espírito Santo, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Cuba, Ecuador, Honduras, Jamaica, Mexico, Panama, Peru, Puerto Rico, Paraguay, Trinidad and Tobago, United States.

Comments: New record from Ilha de Maracá.

Ocyptamus dimidiatus (Fabricius, 1781) = *Pipiza divisa* Walker, 1857 = *P. dolosa* Walker, 1857 = *Baccha imidiatus* var. *rufifacies* Doesburg, 1966. **Type locality:** 'America meridionalis insulis'. **Distribution:** Brazil (Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Lesser Antilles, Mexico, Nicaragua, Peru, Puerto Rico, United States, Venezuela.

***Ocyptamus* sp. 1,** '*lineatus* species group', **Locality:** Brazil (Roraima, Ilha de Maracá).
***Ocyptamus* sp. 2,** '*lineatus* species group', **Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PELECINOBACCHA Shannon, 1927

= *Baccha tristis* species group, in part. Hull, 1949 = *Ocyptamus tristis* species group, in part. Mengual *et al.*, 2012.

Pelecinobaccha adspersa (Fabricius, 1805) = *Baccha punctata* Shannon, 1927 = *B. signifera* Austen, 1893. **Type locality:** 'America meridionali'. **Distribution:** Bolivia, Brazil (Amazonas, Goiás, Mato Grosso, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, Guyana, Mexico, Panama, Peru, Suriname.

Pelecinobaccha ovipositoria (Hull, 1943) = *Baccha amabilis* Hull, 1943 = *B. cordelia* Hull, 1949. **Type locality:** Colombia. **Distribution:** Bolivia, Brazil (Amazonas, Mato Grosso, Pará, Rondônia, Roraima), Colombia, Ecuador, Peru, Suriname.

Pelecinobaccha pilipes Schiner, 1868 = *Baccha hirta* Shannon, 1927 = *B. nigrocilia* Hull, 1943 (including: var. *hirtipes* and var. *inclusa*). **Type locality:** 'South America'. **Distribution:** Bolivia, Brazil (Goiás, Mato Grosso, Roraima), Colombia, Ecuador, Paraguay, Peru, Venezuela.

Genus RELICTANUM Miranda, 2014

Relictanum crassum (Walker, 1852) = *Baccha zeteki* Curran, 1930. **Type locality:** 'Brazil'. **Distribution:** Brazil (Amapá, Amazonas, Bahia, Distrito Federal, Maranhão, Pará, Roraima, São Paulo), Colombia, Ecuador, Guyana, Panama, Peru, Suriname, Trinidad and Tobago.

Genus SALPINGOGASTER Schiner, 1868

= *Amathia* Walker, 1852 (preocc. Lamouroux, 1812) = *Flexineura* Bezzi, 1908.

Salpingogaster nigra Schiner, 1868 = *S. anchoratus* Bigot, 1884. **Type locality:** 'South America'. **Distribution:** Argentina, Brazil (Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul,

Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Costa Rica, Guatemala, Guyana, Mexico, Panama, Peru, Suriname, Venezuela.

Genus TOXOMERUS Macquart, 1855

= *Mesogramma* Loew, 1866 = *Mesograpta* Loew, 1872 = *Mitrosphen* Enderlein, 1938 = *Antiops* Enderlein, 1938.

Toxomerus floralis (Fabricius, 1798) = *Syrphus floralis* Fabricius, 1798 = *Scaeva floralis* Fabricius, 1805 = *Syrphus quadrifasciatus* Bigot, 1857 = *Mesogramma subannulata* Loew, 1866 = *M. flamminea* Hull, 1941. **Type locality:** 'Cajennae' = French Guiana. **Distribution:** Argentina, Bahamas, Benin, Brazil (Amazonas, Bahia, Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Cameroon, Chile, Costa Rica, Cuba, Ecuador, Guadeloupe, Guatemala, Jamaica, Mexico, Nigeria, Nicaragua, Puerto Rico, Paraguay, Suriname, El Salvador, Togo, United States, Venezuela.

Toxomerus lacrymosus (Bigot, 1884) = *Mesograpta lacrymosa* Bigot, 1884. **Type locality:** 'Brazil and Mexico'. **Distribution:** Brazil (Amazonas, Bahia, Distrito Federal, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Jamaica, Mexico, Nicaragua, Suriname, Venezuela.

Toxomerus papaveroi Borges & Couri, 2003. **Type locality:** Brazil (Santa Catarina, Nova Teutônia). **Distribution:** Argentina, Brazil (Roraima, Santa Catarina), Peru.

Toxomerus pictus (Macquart, 1842) = *Syrphus pictus* Macquart, 1842 = *Mesogramma poecilogastra* Loew, 1866 = *Mesograpta jaguarinus* Bigot, 1884 = *M. maculata* Bigot, 1884 = *M. ?cuprina* Bigot, 1884 = *Mesogramma pictus* var. *melleoguttata* Hull, 1941 = *M. extrapolata* Hull, 1943. **Type locality:** 'Guyane' = French Guiana. **Distribution:** Argentina, Brazil (Amazonas, Bahia, Espírito Santo, Goiás, Distrito Federal, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Costa Rica, Cuba, Dominican Republic, Ecuador, Ecuador, El Salvador, French Guiana, Guatemala, Haiti, Honduras, Jamaica, Lesser Antilles, Mexico, Nicaragua, Panama, Panama, Puerto Rico, Suriname, Venezuela.

Toxomerus pulchellus (Macquart, 1846) = *Syrphus pulchellus* Macquart, 1846 = *Mesogramma laciniosa* Loew, 1866 = *Toxomerus punctatus* Sack, 1921. **Type locality:** Mexico (Guadeloupe, San Domingo as 'Saint-Domingue'). **Distribution:** Brazil (Amazonas, Bahia, Goiás, Distrito Federal, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Costa Rica, Cuba, Dominican Republic, El Salvador, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Puerto Rico, Suriname, Venezuela.

Toxomerus teliger (Fluke, 1953) = *Mesograpta teligera* Fluke, 1953. **Type locality:** Mexico, (Guadeloupe, San Domingo as 'Saint-Domingue'). **Distribution:** Brazil (Amazonas, Goiás, Maranhão, Mato Grosso, Minas Gerais, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, São Paulo), Canada, Costa Rica, Mexico, United States, Venezuela.

Toxomerus virgulatus (Macquart, 1850) = *Syrphus virgulatus* Macquart, 1850 = *Mesogramma confusa* Schiner, 1868 = *Mesograpta maculipes* Bigot, 1884 = *Mesogramma alphabetica* Hull, 1942. **Type locality:** 'Brazil' (as 'Patrie inconnue, probablement le Bresil'). **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Bahia, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, Guatemala, Lesser Antilles, Mexico, Nicaragua, Panama, Paraguay, Suriname, Venezuela.

Comments: New record for Ilha de Maracá.

Toxomerus watsoni (Curran, 1930) = *Mesogramma watsoni* Curran, 1930 = *M. lanei* Hull, 1942. **Type locality:** Haiti (Aux Cayes). **Distribution:** Belize, Bolivia, Brazil (Amapá, Amazonas, Bahia, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso do Sul, Mato Grosso, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Haiti, Hispaniola, Jamaica, Lesser Antilles, Mexico, Peru, Puerto Rico, Suriname, Venezuela.

***Toxomerus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Genus XANTHANDRUS Verrall, 1901

Xanthandrus plaumanni Fluke, 1937. **Type locality:** Brazil, (Santa Catarina, Nova Teutônia). **Distribution:** Colombia, Brazil (Amazonas, Minas Gerais, Paraná, Roraima, Santa Catarina).

Chloropidae (Fig. 3R). Grass flies are considered one of the most diverse families of flies. With about 3,000 described species worldwide, Chloropidae comprises 204 genera classified into four subfamilies (Marshall, 2012; Nartshuk, 2012; Riccardi *et al.,* 2018; Riccardi & Amorim, 2020). Several chloropids are associated with grasses, including some agricultural pests; but their feeding habits are varied, since they can be found in nearly all terrestrial biomes. The chloropid fauna of Brazil has 136 species (Riccardi, 2021) and several

genera are endemic to the Neotropical region. Most of the Brazilian species are from the Atlantic Forest, with scarce records in the Amazon basin. There are only four genera and four species previously recorded for the state of Roraima (Rafael, 1991; Riccardi, 2021; Riccardi & Pádua, 2021). This survey brings several additions to the knowledge of the Brazilian chloropid fauna. There are new records of five genera to Brazil and 10 genera to Roraima. The species *Hippelates pseudodorsalis* Paganelli & Sabrosky, 1993, *Liohippelates currani* (Aldrich, 1931), and *Pseudogaurax longilineatus* Sabrosky, 1949 are also first recorded to this state (Table 2). Despite extensive sorting of the collected material, the morphotypes *Eugaurax* sp. 1 and *Pseudeurina* sp. 3 were found only on the savanna site (Table 2). Another intriguing result is the occurrence of *Medeventor* Wheeler, 2007 species. This taxon was very abundant on the *lavrado* site. However, few specimens were collected in the remaining forested areas, leading us to interpret that the savanna must have an important role in the biology of this particular species. Except for *Pseudogaurax testaceus* (Enderlein, 1911) and *P. trilineatus* (Duda, 1930), the chloropid species listed in Rafael (1991) were disregarded in this checklist, since the remaining three genera identified by C.W. Sabrosky were composed of morphotypes, and the material could not be reexamined.

CHLOROPIDAE Rondani, 1856
Subfamily CHLOROPINAE Rondani, 1856
Genus ECTECEPHALA Macquart, 1851

***Ectecephala* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Ectecephala* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily OSCINELLINAE Becker, 1910
Genus APALLATES Sabrosky, 1980

***Apallates* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Apallates* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus CADREMA Walker, 1859

= *Prohippelates* Malloch, 1913 = *Palaeogaurax* Duda, 1930.

***Cadrema* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus CONIOSCINELLA Duda, 1929

***Conioscinella* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Conioscinella* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Conioscinella* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus EUGAURAX Malloch, 1913

***Eugarax* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus FIEBRIGELLA Duda, 1921

***Fiebrigella* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus GONIASPIS Duda, 1930

= *Palaeoenderleiniella* Duda, 1930.

Goniaspis subequalis (Malloch, 1913). **Type locality:** West Indies. **Distribution:** Belize, Brazil (Rio de Janeiro, Rondônia, Roraima), Colombia, Costa Rica, Honduras, Panama, Trinidad and Tobago, Venezuela, West Indies.

Genus HIPPELATES Loew, 1863

= *Olcanabates* Enderlein, 1911 = *Hippelatinus* Enderlein, 1911 = *Palaeoconioscinella* Duda, 1930.

Hippelates pseudodorsalis Paganelli & Sabrosky, 1993. **Type locality:** Brazil (Rio de Janeiro). **Distribution:** Brazil (Mato Grosso, Rio de Janeiro, Roraima, São Paulo).

Genus INCERTELLA Sabrosky, 1980

***Incertella* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus LIOHIPPELATES Duda, 1929

= *Stenoprosopon* Duda, 1930 = *Stratiomicroneurum* Duda, 1933.

Liohippelates currani (Aldrich, 1931) = *L. colusor* Curran, 1926. **Type locality:** United States Virgin Islands. **Distribution:** Brazil (Espírito Santo, Mato Grosso, Pará, Paraíba, Rio de Janeiro, Roraima), Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Honduras, Jamaica, Mexico, Panama, Puerto Rico, Saint Vincent and the Grenadines, Trinidad and Tobago, Venezuela, United States Virgin Islands.

Genus MALLOEWIA Sabrosky, 1980

***Malloewia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus MEDEVENTOR Wheeler, 2007

***Medeventor* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus NOTAULACELLA Enderlein, 1911

= *Baseoneura* Duda, 1930.

***Notaulacella* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Notaulacella* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus OLCELLA Enderlein, 1911

***Olcella* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Olcella* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Olcella* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Olcella* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).
***Olcella* sp. 5, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus OSCINELLA Becker, 1909

= *Melanochaeta* Bezzi, 1906 = *Pachychaetina* Hendel, 1907.

***Oscinella* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PSEUDEURINA de Meijere, 1904

= *Gallomyia* Nartshuk, 1965.

***Pseudeurina* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pseudeurina* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pseudeurina* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PSEUDOGAURAX Malloch, 1915

= *Mimogaurax* Hall, 1937.

Pseudogaurax cingulatus Sabrosky, 1966. **Type locality:** Brazil (Rio Grande do Sul). **Distribution:** Brazil (Rio Grande do Sul, Roraima, São Paulo).

Pseudogaurax higginsi Sabrosky, 1992. **Type locality:** Mexico. **Distribution:** Mexico, cf. Brazil (Roraima).

Comments: The specimens from Roraima differ from the species illustration provided by Barnes *et al.* (1992) mainly in the length of scutellum.

Pseudogaurax longilineatus Sabrosky, 1949. **Type locality:** Brazil (Rio de Janeiro). **Distribution:** Brazil (Rio de Janeiro, Roraima).

Pseudogaurax testaceus (Enderlein, 1911). **Type locality:** Brazil (Santa Catarina). **Distribution:** Brazil (Santa Catarina, cf. Roraima).

Comments: The scutellum length of the specimens from Roraima is shorter than the representation of Sabrosky (1966).

Pseudogaurax trilineatus (Duda, 1930). **Type locality:** 'Brazil'. **Distribution:** Brazil (Maranhão, Mato Grosso do Sul, Roraima), Nicaragua, Paraguay.

Comments: The only specimens found of the type series with Duda's label as new species are from Paraguay, San Bernardino (Sabrosky & Paganelli, 1984).

***Pseudogaurax* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pseudogaurax* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus TRICIMBA Lioy, 1864

= *Notonaulax* Becker, 1903 = *Pentanotaulax* Enderlein, 1911 = *Euhippelates* Malloch, 1925 = *Gauracisoma* Duda, 1930 = *Hammaspis* Duda, 1930 = *Microchaetaspis* Duda, 1930 = *Apteroscinis* Malloch, 1931 = *Eutricimba* Malloch, 1931 = *Syphonerina* Séguy, 1938.

***Tricimba* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Tricimba* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily SIPHONELLOPSINAE Duda, 1932
Genus APOTROPINA Hendel, 1907

= *Ectropa* Schiner, 1868 = *Lasiopleura* Becker, 1910 = *Parahippelates* Becker, 1911 = *Pseudohippelates* Malloch, 1913 = *Emmalochaeta* Becker, 1916 = *Ephydroscinis* Malloch, 1924 = *Omochaeta* Duda, 1930 = *Hopkinsella* Malloch, 1930 = *Neoborborus* Rayment, 1931 = *Liomochaeta* Duda, 1934 = *Oscinelloides* Malloch, 1940.

***Apotropina* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Milichiidae (Fig. 3S). Jackal flies have approximately 400 described species in the world, placed in 20 genera (Brake, 2000; Swann, 2010). The family is considered monophyletic and is divided into three subfamilies: Madizinae, Milichiinae, and Phyllomyzinae (Brake, 2000; Swann, 2010). There are records of 124 species in 13 genera for the Neotropical region. Approximately 24 species in five genera are known to Brazil (Brake, 2000; Brake & Freidberg, 2003; Sabrosky, 1959, 1973; Swann, 2010, 2016). The previous survey of flies from Ilha de Maracá included morphotypes of four genera of milichiids identified by Dr C.W. Sabrosky (Rafael, 1991) and this is the only record of the family to Roraima. The material of Rafael (1991) was categorized in morphotypes and could be not reexamined. Therefore, it was disregarded in the following list of species. The only exception is the genus *Desmometopa* Loew, 1866, which was not collected in the 2015's expedition. The samples collected from this survey yielded 23 morphospecies belonging to five genera, of which *Milichia* Meigen, 1830 and *Phyllomyza* Fallén, 1810 are firstly recorded in Brazil (Table 2).

MILICHIIDAE Meigen, 1830
Subfamily MADIZINAE Czerny, 1909
Genus DESMOMETOPA Loew, 1866

***Desmometopa* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily MILICHIINAE Schiner, 1862
Genus MILICHIA Meigen, 1830

***Milichia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Milichia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus MILICHIELLA Giglio-Tos, 1895

***Milichiella* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Milichiella* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Milichiella* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Milichiella* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PHOLEOMYIA Bilimek, 1867

***Pholeomyia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pholeomyia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pholeomyia* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pholeomyia* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pholeomyia* sp. 5, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pholeomyia* sp. 6, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pholeomyia* sp. 7, Locality:** Brazil (Roraima, Ilha de Maracá).
***Pholeomyia* sp. 8, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily PHYLLOMYZINAE Brake, 2000
Genus PARAMYIA Williston, 1897

***Paramyia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Paramyia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Paramyia* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Paramyia* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).
***Paramyia* sp. 5, Locality:** Brazil (Roraima, Ilha de Maracá).
***Paramyia* sp. 6, Locality:** Brazil (Roraima, Ilha de Maracá).
***Paramyia* sp. 7, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PHYLLOMYZA Fallén, 1810

***Phyllomyza* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Phyllomyza* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Curtonotidae (Fig. 3T). This cosmopolitan family is commonly found in tropical and subtropical areas of the globe, and it currently comprises only four extant genera, two of them present in the New World: *Diplocentra* Loew, 1862 and *Curtonotum* Macquart, 1843. *Curtonotum* has 76 described species worldwide and 20 species occurring in the Neotropical region (Mello & Pereira-Colavite, 2018; Mello, 2021a). The adults are hunchbacked, greyish to brown and vary between 4 and 12 mm in length. Some Neotropical species occur on dung baits and in association with fallen trees (Mello & Pereira-Colavite, 2018), but the larval habits remain unknown. Six species of the genus *Curtonotum* occur in the Amazon basin (Mello, 2021a), but the identified material is the first formal record of the genus in Roraima (Table 2). *Curtonotum abrelatas* Lindsay, 2019 is recorded for the first time to Brazil (Lindsay *et al.,* 2019) in the present survey. The species *C. tumidum* Enderlein, 1917 is recorded to Caracaraí (Roraima) and *C. pantherinum* (Walker, 1849) to Ilha de Maracá (Lima, 2018). However, none of these records are formally published. Given that the material was not examined, they are not included on this checklist.

CURTONOTIDAE Duda, 1934
Genus CURTONOTUM Macquart, 1843

Curtonotum abrelatas Lindsay, 2019. **Type locality:** Costa Rica. **Distribution:** Brazil (Roraima), Costa Rica, Venezuela.

Drosophilidae (Fig. 4A). It currently comprises about 4,500 species in the world, distributed in 73 genera and two subfamilies, Drosophilinae and Steganinae (Brake & Bächli, 2008). Revision of the biology and distribution of the Neotropical species has been done by Val *et al.* (1981) and more recently by Brake & Bächli (2008), who listed 910 species in 32 genera in the region. These numbers are certainly outdated since several new species were described in the last decade (*e.g.,* Pirani & Amorim, 2016; Carvalho-Filho *et al.,* 2018; 2019; Poppe, *et al.,* 2019; Vilela & Bächli, 2019). According to Tidon *et al.* (2021), there are 305 drosophilid species in Brazil. So far, only six species of *Drosophila* Fallén, 1823 have been recorded from Roraima, specifically from Rio Branco and Mucajaí (Pavan, 1959). Among these, there was more unidentified *Drosophila* material from the *melanogaster, repleta, tripunctata,* and *willistoni* groups. The examined material brings new records of 10 species and 12 genera to Roraima (Table 2).

DROSOPHILIDAE Rondani, 1856
Subfamily DROSOPHILINAE Rondani, 1856
Genus CLADOCHAETA Coquillett, 1900

= *Clastopteromyia* Malloch *in* Malloch & McAtee, 1924.

***Cladochaeta* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus DROSOPHILA Fallén, 1823

Drosophila araicas Pavan & Nacrur, 1950. **Type locality:** Belém (Pará, Brazil). **Distribution:** Brazil (Amazonas, Pará, Roraima, São Paulo), Ecuador, Venezuela.

Drosophila ararama Pavan & Cunha, 1947. **Type locality:** Bertioga (São Paulo, Brazil). **Distribution:** Argentina, Brazil (Bahia, Mato Grosso do Sul, Minas Gerais, Pará, Roraima, Santa Catarina, São Paulo), Panama.

Drosophila cardinoides Dobzhansky & Pavan, 1943. **Type locality:** Iporanga, state of São Paulo (Brazil). **Distribution:** Antilles, Argentina, Bolivia, Brazil (Acre, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio

Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo), Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Panama, Peru, Venezuela.

Comments: This species was registered by Pavan (1959) to the state of Roraima, but it was not collected in our study.

Drosophila fulvimacula Patterson & Mainland, 1944. **Type locality:** Sedeño Cañon near Jalapa (Mexico). **Distribution:** Brazil (Amazonas, Pará, Roraima), Colombia, El Salvador, Guatemala, Honduras, Mexico, Panama, Peru, Venezuela.

Drosophila fumipennis Duda, 1925. **Type locality:** Costa-Rica, Suiza de Turrialba. **Distribution:** Antilles, Brazil (Acre, Amazonas, Bahia, Espírito Santo, Maranhão, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, El Salvador, Nicaragua, Panama, Peru.

Comments: This species was registered by Pavan (1959) to the state of Roraima, but it was not collected in our study.

Drosophila malerkotliana Parshad & Paika, 1965. **Type locality:** Chandigarh, Pinjore and Malerkotla (India). **Distribution:** widespread in Oriental, Afrotropical, and Neotropical regions.

Comments: This is an exotic species from Oriental region introduced in the Neotropical region.

Drosophila mediostriata Duda, 1925 = *D. crocina* Patterson & Mainland, 1944 = *D. campestris* Burla *in* Pavan, 1950. **Type locality:** Costa-Rica, Suiza de Turrialba. **Distribution:** Antilles, Argentina, Bolivia, Brazil (Acre, Amazonas, Bahia, Goiás, Maranhão, Mato Grosso, Minas Gerais, Rio de Janeiro, Rio Grande do Sul, Paraná, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Costa Rica, El Salvador, Jamaica, Mexico, Panama, Peru, Puerto Rico, Venezuela.

Comments: This species was registered by Pavan (1959) to the state of Roraima, but it was not collected in our study.

Drosophila nebulosa Sturtevant, 1916 = *D. limbata* Williston, 1896. **Type locality:** St. Vincent. **Distribution:** Antilles, Argentina, Bahamas, Brazil (Acre, Amazonas, Bahia, Espirito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Haiti, Panama, Peru, Puerto Rico, Uruguay, Venezuela.

Comments: This species was registered by Pavan (1959) to the state of Roraima, also being collected in our study.

Drosophila polymorpha Dobzhansky & Pavan, 1943. **Type locality:** Bertioga, state of São Paulo, (Brazil). **Distribution:** Antilles, Argentina, Bolivia, Brazil (Acre, Amazonas, Bahia, Espirito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Colombia, Ecuador, Peru, Uruguay, Venezuela.

Comments: This species was registered by Pavan (1959) to the state of Roraima, also being collected in our survey.

Drosophila sturtevanti Duda, 1927 = *D. earlei* Sturtevant, 1916 = *D. pilifacies* Malloch, 1926 = *D. biopaca* Sturtevant, 1942 = *D. earliei* Sturtevant, 1942 misspelled. **Type locality:** Bolivia (Mapiri). **Distribution:** Bolivia, Brazil (Acre, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo).

Comments: This species was registered by Pavan (1959) to the state of Roraima, but it was not collected in our study. This species belongs to a complex of cryptic species with difficult determination, which makes this record uncertain.

***Drosophila* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: The morphotype belongs to the *saltans* group.

***Drosophila* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: The morphotype belongs to the *saltans* group.

***Drosophila* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: The morphotype belongs to the *repleta* group.

***Drosophila* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: The morphotype belongs to the *willistoni* group and subgroup.

***Drosophila* sp. 5, Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: The morphotype belongs to the *bromeliae* group.

Genus HIRTODROSOPHILA Duda, 1923

= *Dasydrosophila* Duda, 1925.

***Hirtodrosophila* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Hirtodrosophila* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus MICRODROSOPHILA Malloch, 1921

***Microdrosophila* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PARAMYCODROSOPHILA Duda, 1924

= *Upolumyia* Malloch, 1934.

***Paramycodrosophila* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus SCAPTOMYZA Hardy, 1849

***Scaptomyza* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus ZAPRIONUS Coquillett, 1902

Zaprionus indianus Gupta, 1970 = *Z. indiana* Gupta, 1970 = *Z. paravittiger* Godbole & Vaidya, 1972 = *Z. collarti* Tsacas, 1980 = *Z. inermis* Séguy, 1938. **Type locality:** Allahpur, Badaun District of U.P. (India). **Distribution:** India, Pakistan, Saudi Arabia; widespread in Afrotropical and Neotropical regions.

Comments: This is an exotic species from Afrotropical region introduced in the Neotropical region.

Genus ZYGOTHRICA Wiedemann, 1830

= *Drosophilura* Hendel, 1913 = *Tanyglossa* Duda, 1925.

Zygothrica bilineata (Williston, 1896) = *Z. gemma* Burla, 1956. **Type locality:** St. Vincent (West Indies). **Distribution:** Antilles, Bolivia, Brazil (Mato Grosso, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Cuba, Jamaica, Panama, Peru, Puerto Rico, Saint Vincent and the Grenadines.

Zygothrica prodispar Duda, 1925. **Type locality:** Peru (Pinipini). **Distribution:** Antilles, Belize, Bolivia, Brazil (Bahia, Mato Grosso, Pará, Piauí, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, El Salvador, Guyana, Honduras, Mexico, Nicaragua, Panama, Peru, Suriname.

***Zygothrica* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Zygothrica* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Zygothrica* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily STEGANINAE Hendel, 1917
Genus LEUCOPHENGA Mik, 1886

= *Oxyleucophenga* Hendel, 1913 = *Drosomyiella* Hendel, 1914 = *Paraleucophenga* Oldenberg, 1914 = *Pavaleucophenga* Oldenberg, 1914 = *Neoleucophenga* Oldenberg, 1915 = *Ptyelusimyia* Séguy, 1932 = *Drosophilopsis* Séguy, 1951 = *Argyrolampa* Strobl, 1893.

***Leucophenga* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Leucophenga* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PSEUDIASTATA Coquillett, 1908

Pseudiastata pseudococcivora Sabrosky, 1951. **Type locality:** Panama (Canal Zone). **Distribution:** Brazil (Bahia, Pernambuco, Roraima), Guatemala, Mexico, Panama.

Genus RHINOLEUCOPHENGA Hendel, 1917

Rhinoleucophenga lopesi Malogolowkin, 1946 = *R. capixabensis* Culik & Ventura, 2009. **Type locality:** Rio de Janeiro (Brazil). **Distribution:** Brazil (Bahia, Espírito Santo, Mato Grosso, Pernambuco, Piauí, Rio de Janeiro, Roraima).

Rhinoleucophenga punctulata Duda, 1929. **Type locality:** 60 km N San José de Chiquitos, Bolivia. **Distribution:** Argentina, Bolivia, Brazil (Bahia, Goiás, Minas Gerais, Pará, Pernambuco, Piauí, Rio Grande do Sul, Roraima), Colombia.

***Rhinoleucophenga* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus STEGANA Meigen, 1830

= *Pyrgometopa* Kertész, 1901.

***Stegana* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Ephydridae (Fig. 4B). The adults of shore flies are small- to medium-sized dipterous, usually dull, dark-colored, and with great variability in the body structures. Aquatic and semiaquatic environments are typical of this family, although several species are found in other habitats (Mathis, 2010). Ephydridae has a worldwide distribution, with about 1,900 valid species, 146 of which occur in Brazil (Mathis & Zatwarnicki, 1995; Marinoni *et al.,* 2021). This is the first time that this family is being documented to Ilha de Maracá, as well as to the state of Roraima. The genera *Atissa* Haliday, 1837, *Lytogaster* Becker, 1896, and *Mosillus* Latreille, 1804 are firstly recorded from Brazil, and seven other genera are new records to Roraima (Table 2).

EPHYDRIDAE Zetterstedt, 1837
Subfamily DISCOMYZINAE Acloque, 1897
Genus LEPTOPSILOPA Cresson, 1922

***Leptopsilopa* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily GYMNOMYZINAE Latreille, 1829
Genus ATHYROGLOSSA Loew, 1860

***Athyrogloss* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Athyrogloss* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus LAMPROCLASIOPA Hendel, 1933

Lamproclasiopa ecuadoriensis Costa, Mathis & Marinoni, 2016. **Type locality:** Ecuador. **Distribution:** Ecuador, cf. Brazil (Roraima).

Comments: A detailed study should be done to confirm this species identity.

Genus MOSILLUS Latreille, 1804

***Mosillus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus OCHTHERA Latreille, 1802

***Ochthera* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily HYDRELIINAE Robineau-Desvoidy, 1830
Genus ATISSA Haliday, 1837

***Athyrogloss* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PARALIMNA Loew, 1862

***Paralimna* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily ILYTHEIINAE Cresson, 1943
Genus LYTOGASTER Becker, 1896

***Lytogaster* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus NOSTIMA Coquillett, 1900

Nostima cinnamea Edmiston & Mathis, 2005. **Type locality:** Bahamas. **Distribution:** Bahamas, cf. Brazil (Roraima).

Comments: A detailed study should be done to confirm this species identity.

Genus ZEROS Cresson, 1943

***Zeros* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Lauxaniidae (Fig. 4C). It currently comprises about 2,100 species worldwide, distributed in nearly 200 genera (Gaimari & Silva, 2010a, b; Pape *et al.,* 2011; Pape & Thompson, 2019; Gaimari & Silva, 2020) and three subfamilies, Lauxaniinae, Homoneurinae, and Eurychoromyiinae (Stuckenberg, 1971; Shewell, 1977; Gaimari & Silva, 2010a, b). The Neotropical region has 77 genera and 391 lauxaniid species, of which 106 species and 39 genera occur in Brazil (Silva, 2017, 2021a; Gaimari & Silva, 2020). There are reports of only five species in four genera in the state of Roraima (Mello *et al.,* 2017; Silva, 2021a). The species *Allominettia geniseta* (Malloch, 1926) and *Chaetominettia spinitibia* Malloch, 1926 are first recorded to Brazil. Five other genera and six additional species of Lauxaniidae have their first occurrence registered to Roraima (Table 2). At least nine undescribed species of lauxaniids have been discovered in the material from this study, as shown below.

LAUXANIIDAE Macquart, 1835
Subfamily LAUXANIINAE Macquart, 1935
Genus ALLOMINETTIA Hendel, 1925

= *Tibiominettia* Hendel, 1932 = *Tibiominettia* Hendel, 1936 (as subgenus of *Deutominettia* Hendel, 1925) = *Homoeominettia* Broadhead, 1989.

Allominettia geniseta (Malloch, 1926). **Type locality:** Costa Rica (San Mateo, Higuito). **Distribution:** Brazil (Ceará, Maranhão, Piauí, Roraima), Colombia, Costa Rica, Guatemala, Mexico, Panama, United States.

***Allominettia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Allominettia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus CHAETOMINETTIA Malloch, 1926

Chaetominettia corollae (Fabricius, 1805) = *Sapromyza brasiliensis* Walker, 1853 = *Sapromyza latelimbata* Macquart, 1855a. **Type locality:** "America meridionalis" (Brazil, cf. Wiedemann 1830: 452). **Distribution:** Argentina, Brazil (Mato Grosso do Sul, Roraima), Peru.

Chaetominettia spinitibia Malloch, 1926. **Type locality:** Costa Rica (San Mateo, Higuito). **Distribution:** Brazil (Mato Grosso do Sul, Roraima), Colombia, Costa Rica, Guyana.

Genus MARMARODECEIA Shewell, 1986

Marmarodeceia marmorata (Malloch, 1926). **Type locality:** Costa Rica (San Mateo, Higuito). **Distribution:** Bolivia, Brazil (Amazonas, Maranhão, Pará, Roraima), Colombia, Costa Rica, Ecuador, Panama, Paraguay, Peru, Venezuela.

***Marmarodeceia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus NEOGRIPHONEURA Malloch, 1924

= *Rhabdolauxania* Hendel, 1925.

Neogriphoneura striatifrons Hendel, 1932. **Type locality:** Bolivia (San José de Chiquitos). **Distribution:** Bolivia, Brazil (Pará, Roraima), Costa Rica, United States.

Neogriphoneura tertia Curran, 1942. **Type locality:** Panama (Patilla Point). **Distribution:** Bolivia, Brazil (Amazonas, Maranhão, Paraná, Roraima, São Paulo), Colombia, Costa Rica, Panama, Paraguay.

Neogriphoneura timida Curran, 1942. **Type locality:** Panama (Patilla Point). **Distribution:** Belize, Brazil (Amazonas, Ceará, Maranhão, Roraima), Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Panama, Trinidad and Tobago.

Genus PACHYOPELLA Shewell, 1986

= *Pachycerina, sensu* Melander, 1913, nec Macquart, 1835.

Pachyopella flavida (Wiedemann, 1824). **Type locality:** South America. **Distribution:** widespread in the New World; Brazil (Rondônia, Roraima).

Genus PHYSEGENUA Macquart, 1848

***Physegenua* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus POECILOMINETTIA Hendel, 1932

Poecilominettia effossa Broadhead, 1989. **Type locality:** Panama (Barro Colorado Island). **Distribution:** Panama, cf. Brazil (Roraima).

Comments: A detailed study should be done to confirm this species identity.

Poecilominettia zebroides Hendel, 1925. **Type locality:** Peru (Pichis, Porto Bermúdez). **Distribution:** Brazil (Roraima, São Paulo), Peru.

***Poecilominettia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Poecilominettia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus SETULINA Malloch, 1926

= *Calominettia* Frey, 1927 = *Zeugominettia* Hendel, 1932.

Setulina geminata (Fabricius, 1805). **Type locality:** 'America meridionalis'. **Distribution:** widespread in the Neotropical region; Brazil (Roraima).

Genus STENOLAUXANIA Malloch, 1926

= *Bacilloflagellomera* Papp & Silva, 1995.

Stenolauxania longicornus (Silva, 1999). **Type locality:** Brazil (Amapá, Serra do Navio). **Distribution:** Brazil (Amapá, Roraima), Peru.

Genus *XENOCHAETINA* Malloch, 1923

= *Allogriphoneura* Hendel, 1925 = *Haakonia* Curran, 1942.

Xenochaetina flavipennis Fabricius, 1805. **Type locality:** 'America meridionalis'. **Distribution:** widespread in the New World; Brazil (Bahia, Roraima, São Paulo).

***Xenochaetina* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Xenochaetina* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Xenochaetina* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Micropezidae (Fig. 4D). The group comprises flies of medium size and global distribution, with most species occurring in tropical areas (Steyskal, 1968a; Marshall *et al.,* 2016). The family is currently divided into five subfamilies: Calycopteryginae, Calobatinae, Eurybatinae, Micropezinae, and Taeniapterinae (McAlpine, 1975; Marshall, 2012), of which only the last two are recorded to Brazil. Little is known about the biology of Micropezinae (Jackson, 2019), but adults of Taeniapterinae are saprophagous, resemble ants or wasps and can be usually found on the top of leaves in primary forests (Marshall, 2012; Ferro & Marshall, 2018). There are at least 700 species of Micropezidae in the world (Marshall, 2012), 105 of which are recorded to Brazil (Ferro & de Carvalho, 2021). Twenty-eight species in seven genera are known to the state of Roraima (Albuquerque, 1991). Although significant progress has been made in the taxonomy of the Neotropical Micropezidae over the last years, there are still several poorly defined genera, and results of subsequent revisions and phylogenies suggest that the number of species can be significantly underestimated (Ferro & Marshall, 2018, 2020; Ferro *et al.,* 2021; Marshall, 2016, 2019).

Records of Micropezidae from Roraima were obtained from Steyskal (1968a), Albuquerque (1980a, b, 1991), Ferro & de Carvalho (2014), and Marshall *et al.* (2016), with the addition of the identified material from the 2015 expedition (Table 2). *Grallipeza* Rondani, 1850, *Poecilotylus* Hennig, 1934, and *Rainieria* Rondani, 1843 are currently paraphyletic groups that will suffer major changes in the upcoming years (Marshall, 2013; Ferro, *unpublished data*), so these particular species records may be not as accurate as the others.

MICROPEZIDAE Blanchard, 1840
Subfamily TAENIAPTERINAE Cresson, 1930
Genus CARDIACEPHALA Macquart, 1843

= *Plocoscelus* Enderlein, 1922 = *Rhoecius* Enderlein, 1922.

Cardiacephala brevipennis (Walker, 1852). **Type locality:** 'Brazil'. **Distribution:** Bolivia, Brazil (Amapá, Amazo-

nas, Maranhão, Mato Grosso, Minas Gerais, Pará, Paraná, Rondônia, Roraima, São Paulo), Colombia, Ecuador, Guyana, French Guiana, Paraguay, Peru, Suriname, Venezuela.

Cardiacephala conifera Hendel, 1933 = *Plocoscelus haedulus* Hennig, 1935. **Type locality:** Paraguay (Areguá). **Distribution:** Brazil (Amazonas, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Rondônia, Roraima, São Paulo), Colombia, Guyana, Paraguay.

Cardiacephala nigra Schiner, 1868. **Type locality:** 'South America'. **Distribution:** Bolivia, Brazil (Acre, Amapá, Amazonas, Espírito Santo, Mato Grosso, Pará, Rio de Janeiro, Rondônia, Roraima, São Paulo), Colombia, Costa Rica, Ecuador, Guyana, Honduras, Mexico, Panama, Peru, Trinidad and Tobago, Venezuela.

Genus GRALLIPEZA Rondani, 1850

= *Systephalla* Enderlein, 1922.

Grallipeza affinis Hennig, 1934. **Type locality:** Bolivia (Mapiri, San Carlos). **Distribution:** Bolivia, Brazil (Amazonas, Maranhão, Mato Grosso, Pará, Rondônia, Roraima), Colombia, Ecuador.

Grallipeza amazonica (Enderlein, 1922). **Type locality:** Brazil (Alto Amazonas). **Distribution:** Brazil (Amazonas, Roraima).

Grallipeza cantata (Cresson, 1926). **Type locality:** Brazil (Amazonas, Rio Tefé, Boa Vista do Jaquiri). **Distribution:** Brazil (Amazonas, Mato Grosso, Roraima).

Grallipeza ecuadoriensis (Enderlein, 1922). **Type locality:** Ecuador (Guayaquil). **Distribution:** Brazil (Amazonas, Pará, Roraima, São Paulo), Ecuador, Guyana, Peru, Trinidad and Tobago, Venezuela.

Grallipeza placida (Loew, 1866). **Type locality:** Cuba. **Distribution:** Brazil (Roraima), Cuba.

Grallipeza placidoides (Cresson, 1926). **Type locality:** Saint Lucia (Castries). **Distribution:** Brazil (Amazonas, Goiás, Maranhão, Roraima), Saint Lucia.

Grallipeza pseudosimplex Hennig, 1934. **Type locality:** Bolivia (Mapiri, San Carlos). **Distribution:** Bolivia, Brazil (Roraima), Colombia, Panama, Peru.

Genus PARAGRALLOMYIA Hendel, 1933

Paragrallomyia teresacristinae (Albuquerque, 1981). **Type locality:** Brazil (Amazonas, Manaus, Reserva Florestal Ducke). **Distribution:** Brazil (Amazonas, Roraima).

Paragrallomyia vulgata (Hennig, 1934). **Type locality:** Brazil (Pará). **Distribution:** Bolivia, Brazil (Amazonas, Pará, Paraná, Roraima), Colombia, Ecuador, Guyana.

Genus POECILOTYLUS Hennig, 1934

= *Poecilomyia* Hennig, 1934.

Poecilotylus aliceae (Albuquerque, 1980b). **Type locality:** Brazil (Amazonas, Manaus, Reserva Florestal Ducke). **Distribution:** Brazil (Amazonas, Paraná, Roraima).

Poecilotylus egregius (Hennig, 1934). **Type locality:** Bolivia (Mapiri, San Antonio). **Distribution:** Bolivia, Brazil (Amazonas, Rondônia, Roraima).

Poecilotylus pictus Hennig, 1937. **Type locality:** Bolivia (Yungas de la Paz). **Distribution:** Bolivia, Brazil (Amapá, Amazonas, Mato Grosso, Pará, Roraima, São Paulo), Ecuador, Peru.

Poecilotylus tibialis (Macquart, 1843) = *Taeniaptera latitibia* Enderlein, 1922 = *T. dilator* Cresson, 1926. **Type locality:** 'Guyana'. **Distribution:** Bolivia, Brazil (Amazonas, Bahia, Espírito Santo, Mato Grosso, Mato Grosso do Sul, Pará, Paraná, Rondônia, Roraima, Santa Catarina, São Paulo), Grenada, Guyana, Honduras, Paraguay, Peru, Trinidad and Tobago.

***Poecilotylus* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PTILOSPHEN Enderlein, 1922

Ptilosphen comis Cresson, 1930 = *P. subgentilis* Hendel, 1936. **Type locality:** Guyana (Kamakusa). **Distribution:** Bolivia, Brazil (Amazonas, Mato Grosso, Pará, Pernambuco, Roraima), Colombia, Ecuador, Guyana, Peru.

Ptilosphen dubius Hennig, 1934. **Type locality:** Bolivia (Mapiri, Sarampiuní, San Ernesto, San Carlos, San Antonio); Peru (Chanchamayo, Urubamba River, Umuhuankiali). **Distribution:** Bolivia, Brazil (Amazonas, Pará, Roraima), Peru.

Ptilosphen gentilis Cresson, 1930. **Type locality:** Costa Rica (San Carlos). **Distribution:** Brazil (Roraima), Colombia, Costa Rica, Ecuador, Panama, Peru.

Ptilosphen insignis (Wiedemann, 1830). **Type locality:** 'Brazil'. **Distribution:** Bolivia, Brazil (Acre, Amazonas, Pará, Rondônia, Roraima), Colombia, Guyana, Peru, Trinidad and Tobago.

***Ptilosphen* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus RAINIERIA Rondani, 1843

= *Tanypoda* Rondani, 1856.

Subgenus RAINIERIA Rondani, 1843

Rainieria (Rainieria) alternata Cresson, 1926. **Type locality:** Panama (Portobelo). **Distribution:** Brazil (Roraima), Panama.

Rainieria (Rainieria) paraffinis Hennig, 1935. **Type locality:** Guyana (Essequibo River, Moraballi Creek). **Distribution:** Brazil (Roraima), Guyana.

Rainieria (Rainieria) uda Cresson, 1930. **Type locality:** Honduras (Sangrelaya). **Distribution:** Brazil (Roraima), Colombia, Honduras, Peru.

Rainieria (Rainieria) uniformis Hennig, 1935. **Type locality:** Brazil (Santa Catarina, Blumenau). **Distribution:** Brazil (Roraima, Santa Catarina).

***Rainieria (Rainieria)* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Rainieria (Rainieria)* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Subgenus RAINIERIELLA Hennig, 1935

Rainieria (Rainieriella) andorum Hennig, 1935. **Type locality:** Bolivia (Mapiri, San Carlos). **Distribution:** Bolivia, Brazil (Roraima).

Genus SCIPOPUS Enderlein, 1922

Scipopus diversus (Schiner, 1868) = *S. ruficeps* Hendel, 1936. **Type locality:** 'South America'. **Distribution:** Bolivia, Brazil (Amapá, Amazonas, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Rondônia, Roraima, São Paulo), Colombia, Guyana, Paraguay, Peru, Venezuela.

Genus TAENIAPTERA Macquart, 1835

Taeniaptera lasciva (Fabricius, 1798) = *Calobata ruficeps* Guérin-Menéville, 1844 = *C. aloa* Walker, 1849 = *C. lunulata* Wulp, 1897 = *Taeniaptera obliterata* Cresson, 1930. **Type locality:** French Guiana (Caiena). **Distribution:** Argentina, Brazil (Amapá, Amazonas, Bahia, Distrito Federal, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Cuba, Ecuador, French Guiana, Jamaica, Mexico, Paraguay, United States.

Comments: Records of *T. lasciva* for the United States are certainly erroneous and this name seems to represent a complex of one or more undescribed species, apparently restricted to the Neotropical region.

***Taeniaptera* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Neriidae (Fig. 4E). The family has about 120 species with a mostly circumtropical distribution (Marshall, 2012). The neriids are saprophagous, commonly found in rotting vegetation. Historically, the family has been classified into two subfamilies, Neriinae and Telostylinae (Enderlein, 1922; Hennig, 1937). However, more recent classification systems do not use any suprageneric rank (Koch *et al.,* 2015). There are eight genera and 39 species in the Neotropical region (Aczél, 1961; Steyskal, 1968b; Buck & Marshall, 2004; Sepúlveda *et al.,* 2013a, 2013b, 2014, 2019), of which six genera and 17 species occur in Brazil (Sepúlveda, 2021). Only two species have previous records for the state of Roraima, *Glyphidops filosus* (Fabricius, 1805) and *Glyphidops limbatus* Enderlein, 1922 (Rafael, 1991). The species *Nerius pilifer* Fabricius, 1805 is a new record to Ilha de Maracá, as well as to Roraima. This species occurs from Mexico to Argentina and its delimitation based exclusively on morphology is still difficult. A more comprehensive study including molecular data is desirable of *N. pilifer* to reveal possible cryptic species, as already reported in other Neriidae species (Mangan & Baldwin, 1986). Distribution records are based on Pereira-Colavite (2013).

NERIIDAE Westwood, 1840
Genus GLYPHIDOPS Enderlein, 1922

= *Chaetomeristes* Enderlein, 1922 = *Dictyonerius* Enderlein, 1922 = *Odontoscelia* Enderlein, 1922 = *Oncopsia* Enderlein, 1922 = *Brachycrotaphus* Czerny, 1932.

Glyphidops filosus (Fabricius, 1805) = *Telostylus vittatus* Cresson, 1912. **Type locality:** 'America meridionali'. **Distribution:** Bolivia, Brazil (Acre, Alagoas, Amazonas, Bahia, Ceará, Espírito Santo, Maranhão, Mato Grosso, Minas Gerais, Pará, Paraíba, Piauí, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Honduras, Montserrat, Panama, Suriname, Trinidad and Tobago, Venezuela.

Glyphidops limbatus Enderlein, 1922 = *Odontoscelia striativentris* Czerny, 1932 (Odontoscelia). **Type locality:** Süd-Brasilien, Santa Catharina (= Brazil, Santa Catarina). **Distribution:** Brazil (Acre, Amapá, Amazonas, Minas Gerais, Pará, Roraima, Rio de Janeiro, Santa Catarina, São Paulo).

Genus NERIUS Fabricius, 1805

= *Brachantichir* Enderlein, 1922.

Nerius pilifer Fabricius, 1805 = *N. brunneus* Macquart, 1835 = *N. rubescens* Macquart, 1843 = *N. terebratus* Enderlein, 1922. **Type locality:** 'America meridionali'. **Distribution:** Argentina, Bolivia, Brazil (Acre, Amazonas, Bahia, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Piauí, Rio de Janeiro, Rondônia, Roraima, São Paulo, Tocantins), Colombia, Costa Rica, Ecuador, Guyana, Haiti, Mexico, Nicaragua, Panama, Peru, Suriname, Venezuela.

Agromyzidae (Fig. 4F). Currently, there are 3,000 agromyzid species in the world (ITIS, 2016) distributed in 30 genera (Benavent-Corai *et al.,* 2005). The family is classi-

fied into two subfamilies: Agromyzinae and Phytomyzinae, which are recognized by the wing venation and larval cephalopharingeal skeleton (Spencer, 1987). They are well known as leaf-mining flies due to the feeding habits of most species, including some important agricultural pests (Boucher, 2010). The Neotropical region has about 760 described species (Pape *et al.,* 2009), of which only 131 species of 14 genera have been registered to Brazil, with most of the Brazilian fauna known from the Southeast region (Sousa, *unpublished data*). All the leaf-mining flies collected on Ilha de Maracá represent new records to the state of Roraima. The Agromyzidae diversity from the Brazilian Amazon Forest is poorly known, although new records and new species have been recently published from Rondônia, with 12 species (Sousa & Couri, 2017a, 2017b, 2018), and Pará, with 36 species (Monteiro *et al.,* 2015; Carvalho-Filho *et al.,* 2016; Monteiro & Esposito, 2017; Monteiro *et al.,* 2019). These numbers reveal that the lack of knowledge about agromyzids from the Brazilian Amazon is due to insufficient studies in this region.

AGROMYZIDAE Fallén, 1823
Subfamily AGROMYZINAE Hendel, 1931
Genus AGROMYZA Fallén, 1810

= *Agromyza* Fallén, 1810 = *Calyptomyza* Hardy, 1850 = *Adromyza* Meigen, 1830 = *Domomyza* Rondani, 1856 = *Mesonevra* Lioy, 1864 = *Cecidomyiaceltis* Patton, 1897 = *Stomacrypolus* Enderlein, 1936a = *Stomacrypolus* Enderlein, 1936b.

***Agromyza* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily PHYTOMYZINAE Hendel, 1931
Genus CALYCOMYZA Hendel, 1931

= *Dizygomyza (Calycomyza)* Hendel, 1931 = *Phytobia (Calycomyza)* Frick, 1952a = *Calycomyza* Nowakowski, 1962.

***Calycomyza* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus LIRIOMYZA Mik, 1894

= *Agrophila* Lioy, 1864 = *Liriomyza* Mik, 1894 = *Antineura* Melander, 1913 = *Haplomyza* Hendel, 1914 = *Praspedomyza* Hendel, 1931 = *Craspedomyza* Enderlein, 1936a = *Triticomyza* Blanchard, 1938 = *Galiomyza* Spencer, 1981.

***Liriomyza* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Liriomyza* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Odiniidae (Fig. 4G). Odiniidae has 81 described species distributed in 18 genera (Torres *et al.,* 2021). Although it counts with few species, the group is present in all biogeographic regions and there are estimates of a large number of undescribed species (Gaimari & Mathis, 2011). The family is considered monophyletic and is divided into two subfamilies, Odiniinae and Traginopinae (Hennig, 1965; Gaimari & Mathis, 2011). There are records of 39 species in 11 genera for the Neotropical region. Of these, 24 species of nine genera are known to Brazil (Prado, 1973; Gaimari & Mathis, 2011; Limeira-de-Oliveira *et al.,* 2017; Limeira-de-Oliveira *et al.,* 2020; Torres *et al.,* 2021; Flores *et al.,* 2021). Only one species was previously known from Roraima: *Odinia surumuana* Prado, 1973. This survey reports an undescribed species belonging to the genus *Odinia* Robineau-Desvoidy, 1830 (Table 2).

ODINIIDAE Hendel, 1920
Subfamily ODINIINAE Hendel, 1920
Genus ODINIA Robineau-Desvoidy, 1830

= *Alticomerus* Rondani, 1856.

Odinia surumuana Prado, 1973. **Type locality:** Brazil (Roraima). **Distribution:** Brazil (Roraima).

***Odinia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Periscelididae (Fig. 4H). It is a small cosmopolitan family, which is more diverse in the Neotropical region. Representatives of this family are associated with sap exuding from deciduous trees or with phytotelmata in the axils of monocotyledons, thus information about the immature stages is very scarce and comes largely from temperate regions (Gomes *et al.,* 2018). There are 25 valid species from Brazil, with the greatest diversity recorded from the Amazon basin. The species *Neoscutops cariri* Amorim & Vasconcelos, 1990 is firstly recorded from Roraima (Amorim & Vasconcelos, 1989) and the Brazilian distribution of the genus *Stenomicra* Coquillett, 1900, previously restricted to the state of Amazonas (Freitas & Ale-Rocha, 2011; Gomes *et al.,* 2018), now is reported to Roraima as well.

PERISCELIDIDAE Stackelberg, 1933
Subfamily PERISCELIDINAE Oldenberg, 1914
Genus NEOSCUTOPS Malloch, 1926

Neoscutops cariri Amorim & Vasconcelos, 1989. **Type locality:** Brazil (Paraíba). **Distribution:** Brazil (Alagoas, Paraíba, Roraima).

Subfamily STENOMICRINAE Papp, 1984
Genus STENOMICRA Coquillett, 1900

***Stenomicra* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Ropalomeridae (Fig. 4I). It is a small family of robust, medium- to large-sized, brown to dark brown flies, with flattened and enlarged palps, and strongly enlarged femora. Its representatives are exclusively distributed in the tropical and subtropical regions of the American continent,

ranging from Argentina to southwestern United States (Steyskal, 1987a). The family currently comprises 35 species distributed in nine genera (Ibáñez-Bernal & Hernández-Ortiz, 2012; Kirst & Ale-Rocha, 2012; Alvim & Ale-Rocha, 2016). In Brazil, there are 30 species distributed in all eight genera, except *Rhytidops* Lindner, 1930 (Alvim & Ale-Rocha, 2016, 2021). There are three known species from Roraima. Of these, *Willistoniella pleuropunctata* (Wiedemann, 1824) and *Willistoniella ulyssesi* Marques & Ale-Rocha, 2005 were both previously recorded for Ilha de Maracá (Marques & Ale-Rocha, 2005), and *Lenkokroeberia chryserea* Prado, 1966 is recorded for the first time for the state of Roraima.

ROPALOMERIDAE Schiner, 1868
Genus LENKOKROEBERIA Prado, 1966

Lenkokroeberia chryserea Prado, 1966. **Type locality:** Brazil, Mato Grosso, Salobra. **Distribution:** Brasil (Mato Grosso, Roraima, São Paulo), Mexico, Venezuela.

Genus WILLISTONIELLA Mick, 1895

= *Rhopalomyia* Williston, 1895.

Willistoniella ulyssesi Marques & Ale-Rocha, 2005. **Type locality:** Brazil (Amazonas). **Distribution:** widespread in the Neotropical Region; Brazil (Acre, Amapá, Amazonas, Espírito Santo, Goiás, Pará, Paraná, Rio de Janeiro, Rondônia, Roraima), cf. Brazil (Roraima).

Comments: A detailed study should be done to confirm this species identity.

Willistoniella pleuropunctata (Wiedemann, 1824) = *Ropalomera pleuropunctata* Wiedemann, 1824 = *Rhopalomera vittifrons* [sic] Rondani, 1848 = *Ropalomera substituta* [sic] Walker, 1858 = *Rhopalomyia pleuropunctata* Williston, 1895. **Type locality:** 'South America'. **Distribution:** widespread in the Neotropical Region; Brazil (Amazonas, Bahia, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Minas Gerais, Pará, Rio de Janeiro, Rondônia, Roraima, Santa Catarina, São Paulo, Sergipe, Tocantins).

Sepsidae (Fig. 4J). It currently comprises about 350 species in the world. These are distributed in 38 genera (Ozerov, 2005; Pape *et al.,* 2011) categorized in two subfamilies, Orygmatinae and Sepsinae (Zuska, 1977, 1980; Steyskal, 1987b). The Neotropical region has 10 genera and 46 species of Sepsinae, seven genera and 24 species of which are known to Brazil (Silva, 2010, 2021b). Previously, Roraima counted with three genera and nine species reported from Ilha de Maracá (Silva, 1991). The newly identified material raised this number to four genera and 11 species, with new records of *Archisepsis diversiformis* (Ozerov, 1993) (as new record for the species) and *Meropliosepsis sexsetosa* Duda, 1926 (as new record for the genus and species) for the state (Tables 1-2).

SEPSIDAE Walker, 1833
Subfamily SEPSINAE Walker, 1833
Genus ARCHISEPSIS Silva, 1993

Archisepsis armata (Schiner, 1868). **Type locality:** 'Brazil' (Rio de Janeiro according to Silva, 1993). **Distribution:** Argentina, Belize, Bolivia, Brazil (Bahia, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Uruguay, Venezuela.

Archisepsis discolor (Bigot, 1857). **Type locality:** Cuba. **Distribution:** Argentina, Azores Islands, Belize, Bolivia, Brazil (Amapá, Amazonas, Bahia, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Venezuela.

Archisepsis diversiformis (Ozerov, 1993). **Type locality:** Costa Rica (Puntarenas, Monte Verde). **Distribution:** Argentina, Brazil (Mato Grosso, Roraima), Costa Rica, Ecuador, Jamaica, Mexico, Panama, Peru, Venezuela.

Archisepsis ecalcarata (Thomson, 1869). **Type locality:** 'California' (United States). **Distribution:** Argentina, Belize, Bolivia, Brazil (Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Mato Grosso do Sul, Pará, Paraná, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint Lucia, Saint Vincent and the Grenadines, United States, Venezuela.

Archisepsis excavata (Duda, 1926). **Type locality:** Ecuador (Cuenca). **Distribution:** Belize, Brazil (Amapá, Amazonas, Bahia, Goiás, Maranhão, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Nicaragua, Panama, Peru, Venezuela.

Archisepsis pusio (Schiner, 1868). **Type locality:** Venezuela. **Distribution:** Antigua and Barbuda, Argentina, Bolivia, Brazil (Amazonas, Bahia, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Montserrat, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint Lucia, Saint Vincent and the Grenadines, Uruguay, United States, Venezuela.

Genus MEROPLIOSEPSIS Duda, 1926

Meropliosepsis sexsetosa Duda, 1926. **Type locality:** Costa Rica (Suiza di Turrialba). **Distribution:** Bolivia, Brazil (Mato Grosso, Mato Grosso do Sul, Rio de Janeiro, Roraima), Costa Rica, Dominican Republic, Ecuador, Guyana, Panama, Peru, Venezuela.

Genus MICROSEPSIS Silva, 1993

Microsepsis armillata (Melander & Spuler, 1917). **Type locality:** Haiti. **Distribution:** Argentina, Bahamas, Brazil (Amapá, Bahia, Espírito Santo, Minas Gerais, Pará, Paraná, Pernambuco, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Trinidad and Tobago, British Virgin Islands, United States, Venezuela.

Microsepsis furcata (Melander & Spuler, 1917). **Type locality:** Jamaica. **Distribution:** Argentina, Belize, Bolivia, Brazil (Amapá, Bahia, Mato Grosso, Pará, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint Vincent and the Grenadines, United States, Venezuela.

Microsepsis mitis (Curran, 1927). **Type locality:** Colombia (Vista Nieve, San Lorenzo Mountain). **Distribution:** Argentina, Belize, Bolivia, Brazil (Bahia, Rio de Janeiro, Roraima), Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Venezuela.

Genus PALAEOSEPSIOIDES Ozerov, 1992

Palaeosepsioides erythromyrmus (Silva, 1991). **Type locality:** Brazil (Pará, Estrada Belém-Bragança). **Distribution:** Brazil (Amapá, Pará, Rio de Janeiro, Roraima), Venezuela.

Pyrgotidae (Fig. 4K). The family is composed of about 360 species in 55 genera in the world. However, the majority of this diversity is in tropical areas (Korneyev, 2012). Pyrgotids are flies of nocturnal habits, which larvae are endoparasitoids of adult beetles of the family Scarabaeidae. Usually, the adults are captured in light traps in synchronized periods with the life cycle of its hosts. Malloch (1929) highlighted the scarcity of Pyrgotidae in scientific collections due to specific life habits of its members. The Neotropical region has 58 species in 12 genera (Mello & Lamas, 2014). Of these, only 36 species and five genera are known to Brazil (Mello, 2021b). The family is currently composed of the following subfamilies and tribes: Pyrgotinae (Prodalmanniini, Pyrgotini, Toxopyrgotini, and Toxurini) and Teretrurinae (McAlpine, 1990; Korneyev, 2016). The present study presents the first record of this family to Roraima (Table 2), providing a significant improvement to the knowledge of the pyrgotid Brazilian fauna.

PYRGOTIDAE Schiner, 1868
Subfamily PYRGOTINAE Schiner, 1868
Genus PYRGOTA Wiedemann, 1830

Pyrgota longipes Hendel, 1908. **Type locality:** Brazil (Rio Grande do Sul). **Distribution:** Brazil (Bahia, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, São Paulo), Colombia, Costa Rica, Guatemala.

Richardiidae (Fig. 4L). Currently, the family comprises about 200 species distributed in 32 valid genera allocated in the subfamilies Richardiinae and Epiplateinae (Steyskal, 1987c; Hancock, 2010; Wendt & Ale-Rocha, 2012). The distribution of Richardiidae is restricted to the Americas, especially the Neotropical region (Steyskal, 1968c; Hancock, 2010; Wendt & Ale-Rocha, 2014, 2016). They are small- to medium-sized flies and most species are saprophagous (Hancock, 2010; Wendt & Ale-Rocha, 2016). There are records of 15 genera and 62 species to Brazil (Ale-Rocha & Wendt, 2021). The fauna previously known to Roraima included the genera *Coilometopia* Macquart, 1847; *Epiplatea* Loew, 1868; *Odontomera* Macquart, 1843; *Ozaenina* Enderlein, 1912; *Poecilomyia* Hendel, 1911; *Richardia* Robineau-Desvoidy, 1830 (Rafael, 1991; Wendt, 2012), and the species *Coilometopia trimaculata* (Fabricius, 1805); *Epiplatea arcuata* Hendel, 1911; *Ozaenina diversa* Lopes, 1936 (Rafael, 1991). Among the species collected in this study (Table 2), *Richardia podagrica* (Fabricius, 1805) and *Odontomera* Macquart, 1843 are new records for Roraima. The species list follows Hendel (1911), Curran (1934), Lopes (1936), Aczél (1950), Steyskal (1958), Rafael (1991), Wendt & Ale-Rocha (2013, 2016), and Ale-Rocha & Wendt (2021).

RICHARDIIDAE Loew, 1868
Subfamily EPIPLATEINAE Steyskal, 1987
Genus EPIPLATEA Loew, 1867

Epiplatea arcuata Hendel, 1911. **Type locality:** Peru. **Distribution:** Bolivia, Brazil (Amazonas, Pará, Roraima), Guyana, Peru.

Subfamily RICHARDIINAE Loew, 1868
Genus COILOMETOPIA Macquart, 1847

Coilometopia trimaculata (Fabricius, 1805) = *Scatophaga trimaculata* Fabricius, 1805. **Type locality:** 'South America'. **Distribution:** Bolivia, Brazil (Amazonas, Espírito Santo, Goiás, Mato Grosso, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, Rondônia), Colombia, Costa Rica, Ecuador, Guyana, Panama, Peru, Trinidad and Tobago, Venezuela.

Genus RICHARDIA Robineau-Desvoidy, 1830

Richardia podagrica (Fabricius, 1805) = *Dacus podagrica* Fabricius, 1805. **Type locality:** 'America meridionali'. **Distribution:** Bolivia, Brazil (Roraima), Colombia, Costa Rica, Guyana, Mexico, Peru, Suriname, Trinidad and Tobago, Venezuela.

Genus ODONTOMERA Macquart, 1843

***Odontomera* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus OZAENINA Enderlein, 1912

Ozaenina diversa Lopes, 1936. **Type locality:** Brazil (Rio de Janeiro). **Distribution:** Brazil (Rio de Janeiro, Roraima).

Sciomyzidae (Fig. 4M). It is a worldwide group comprising more than 600 species in 63 genera (Marinoni & Knutson, 1992; Vala *et al.,* 1999, 2012, 2013; Marinoni *et al.,* 2003; Marinoni & Knutson, 2010; Marinoni & Murphy, 2016) and classified in three subfamilies: Phaeomyiinae, Salticellinae, and Sciomyzinae (Marinoni & Mathis, 2000; Barker *et al.,* 2004; Tóthová *et al.,* 2013). The Neotropical Region has 103 species in 25 genera (Berg & Knutson, 1978; Knutson, 1987; Marinoni & Mathis, 2000; Marinoni & Murphy, 2016). Of these, seven genera and 28 species have been recorded to Brazil (Marinoni, 2021). The diversity of sciomyzids in the state of Roraima is poorly known, with records of only two species, *Thecomyia abercrombiei* Marinoni & Steyskal, 2003 and *T. lateralis* (Walker, 1858) (Pires & Marinoni, 2011). In the 2015 survey, we collected one female of *T. lateralis*. The following list is based on Knutson *et al.* (1976), Marinoni *et al.* (2003), and Pires & Marinoni (2011).

SCIOMYZIDAE Macquart, 1846
Subfamily SCIOMYZINAE Schiner, 1862
Genus THECOMYIA Perty, 1833

Thecomyia abercrombiei Marinoni & Steyskal, 2003. **Type locality:** Guyana. **Distribution:** Brazil (Roraima), Guyana, Peru.

Thecomyia lateralis (Walker, 1858) = *Tetanocera lateralis* Walker, 1858. **Type locality:** 'Valley of the Amazon'. **Distribution:** Bolivia, Brazil (Amazonas, Bahia, Goiás, Mato Grosso, Minas Gerais, Paraná, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Guyana, Peru, Suriname, Venezuela.

Tephritidae (Fig. 4N). The family currently comprises 4,963 species described in approximately 500 genera (Norrbom *et al.,* 1999; Norrbom, 2010; Savaris *et al.,* 2016; Brown *et al.,* 2018; Borkent *et al.,* 2018; Martinez *et al.,* 2020), allocated in six subfamilies: Tachiniscinae, Blepharoneurinae, Phytalmiinae, Trypetinae, Dacinae, and Tephritinae (Korneyev, 1999; Norrbom, 2010). Also known as fruit flies, tephritids are distributed in all biogeographic regions, except in desert and polar areas, where their hosts are scarce or absent (Foote *et al.,* 1993; Thompson, 1999). Adults are of small- to medium-sized (Norrbom, 2010; Savaris *et al.,* 2016) and most species are phytophagous, except Tachiniscinae, which parasitize larvae or pupae of lepidopterans (Saturniidae), and some species of Phytalmiinae, which are saprophagous (Foote *et al.,* 1993; Norrbom, 2010). The number of taxa described to the Neotropical region is 916 species in 71 genera (Norrbom, 2010; Borkent *et al.,* 2018). There are records of 50 genera and 302 species to Brazil (Norrbom *et al.,* 1999; Savaris *et al.,* 2019; Uchoa, 2021; Savaris *et al., in press*). Thus, the fauna of Roraima is relatively well known, with records of 29 species of fruit flies, belonging to the genera *Anastrepha* Schiner, 1868, *Bactrocera* Macquart, 1835, *Ceratitis* MecLeay, 1829, *Cecidochares* Bezzi, 1910, and *Tetreuaresta* Hendel, 1928 (Rafael, 1991; Norrbom *et al.,* 1999; Zucchi & Moraes, 2021; Brasil, 2013; Marsaro-Jr. *et al.,* 2017). In the 2015 survey, we collected six species of *Anastrepha,* of which *A. pickeli* Lima, 1934 is a new record for Roraima (Table 2). The list of species follows Rafael (1991), Norrbom *et al.* (1999), Silva *et al.* (2004), Zucchi & Moraes (2021), Norrbom & Korytkowski (2009), Godoy *et al.* (2011), Brasil (2013), Savaris *et al.* (2016), and Marsaro-Jr. *et al.* (2017).

TEPHRITIDAE Newman, 1834
Subfamily DACINAE Loew, 1862
Genus CERATITIS MacLeay, 1829

Ceratitis capitata (Wiedemann, 1824) = *Tephritis capitata* Wiedemann, 1824. **Type locality:** 'East India, *mare indico*'. **Distribution:** widespread in tropical and subtropical regions; Brazil (Acre, Alagoas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Piauí, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins).

Comments: This species was introduced to Madagascar, Mauritius, Réunion, North Africa, Seychelles, southern Europe, Middle East, Neotropics, western Australia, and Hawaii.

Genus BACTROCERA Macquart, 1835

Bactrocera carambolae Drew & Hancock, 1994. **Type locality:** Malaysia (Perak, Kuala Kangsar). **Distribution:** Brazil (Amapá, Roraima), French Guiana, Guyana, India, Indonesia, Malaysia, Suriname, Thailand.

Comments: This species was introduced to French Guiana, Guyana, and Suriname. In Brazil, this species was recorded in the extreme north of the country (state of Amapá, Oiapoque). In 1996, the Ministério da Agricultura, Pecuária e Abastecimento (MAPA) started an eradication program, using the male annihilation technique

(Silva *et al.,* 2004). Despite the actions, this fly continues to occur in Amapá and Roraima (Norrbom *et al.,* 1999; Godoy *et al.,* 2011; Brasil, 2013; Malavasi, 2015).

Subfamily TRYPETINAE Loew, 1862
Genus ANASTREPHA Schiner, 1868

Anastrepha amita Zucchi, 1979. **Type locality:** Brazil (Bahia, Cruz das Almas). **Distribution:** Brazil (Amapá, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso do Sul, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo, Tocantins), Trinidad and Tobago.

Anastrepha antunesi Lima, 1938. **Type locality:** Brazil (Bahia, Piraja). **Distribution:** Brazil (Amapá, Amazonas, Bahia, Espírito Santo, Pará, Paraíba, Roraima), Colombia, Guatemala, Panama, Peru, Trinidad and Tobago, Venezuela.

Anastrepha atrigona Hendel, 1914. **Type locality:** Suriname. **Distribution:** Brazil (Amapá, Amazonas, Pará, Rondônia, Roraima), Guyana, Suriname, Venezuela.

Anastrepha bahiensis Lima, 1937. **Type locality:** Brazil (Bahia). **Distribution:** Belize, Brazil (Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Minas Gerais, Pará, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Peru, Suriname, Trinidad and Tobago, Venezuela.

Anastrepha coronilli Carrejo & González, 1993. **Type locality:** Colombia (Valle del Cauca, Anchicaya, Buenaventura). **Distribution:** Brazil (Acre, Amapá, Amazonas, Mato Grosso, Rondônia, Roraima, Tocantins), Colombia, Costa Rica, Guatemala, Mexico, Panama, Suriname.

Anastrepha distincta Greene, 1934. **Type locality:** Peru (Lambayeque, Chiclaya, Hacienda Ouefe). **Distribution:** Brazil (Acre, Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Pernambuco, Piauí, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Mexico, Panama, Peru, Trinidad and Tobago, United States.

Anastrepha ethalea (Walker, 1849) = *Trypeta ethalea* Walker, 1849. **Type locality:** Brazil (Pará). **Distribution:** Brazil (Maranhão, Pará, Piauí, Roraima), Guyana, Suriname, Trinidad and Tobago.

Anastrepha flavipennis Greene, 1934. **Type locality:** Brazil (Pará, Boa Vista, Rio Tapajós). **Distribution:** Argentina, Brazil (Amapá, Amazonas, Maranhão, Minas Gerais, Pará, Piauí, Roraima), Colombia, Panama, Venezuela.

Anastrepha fractura Stone, 1942. **Type locality:** Guyana (Kutari Sources). **Distribution:** Brazil (Amazonas, Mato Grosso, Roraima), Guyana.

Anastrepha fraterculus (Wiedemann, 1830) = *Dacus fraterculus* Wiedemann, 1830. **Type locality:** Brazil (São Paulo). **Distribution:** Argentina, Belize, Bolivia, Brazil (Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Piauí, Rio Grande do Norte, Rio Grande do Sul, Rio de Janeiro, Rondônia, Roraima, Santa Catarina, São Paulo, Sergipe, Tocantins), Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Dominican Republic, Suriname, Trinidad and Tobago, United States, Uruguay, Venezuela.

Anastrepha hamata (Loew, 1873) = *Trypeta hamata* Loew, 1873. **Type locality:** Brazil. **Distribution:** Brazil (Amazonas, Roraima), Costa Rica, Guatemala, Mexico, Peru.

Anastrepha leptozona Hendel, 1914. **Type locality:** Bolivia. **Distribution:** Bolivia, Brazil (Acre, Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Piauí, Rio de Janeiro, Rondônia, Roraima, São Paulo, Tocantins), Colombia, Guatemala, Guyana, Mexico, Trinidad and Tobago.

Anastrepha longicauda Lima, 1934. **Type locality:** Brazil (Amazonas, Rio Negro, São Gabriel). **Distribution:** Brazil (Amazonas, Roraima).

Anastrepha manihoti Lima, 1934. **Type locality:** Brazil (Minas Gerais, Viçosa). **Distribution:** Brazil (Amazonas, Bahia, Espírito Santo, Goiás, Minas Gerais, Pernambuco, Rio Grande do Norte, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, Panama, Peru, Venezuela.

Anastrepha montei Lima, 1934. **Type locality:** Brazil (Minas Gerais and Rio de Janeiro). **Distribution:** Argentina, Bolivia, Brazil (Bahia, Espírito Santo, Goiás, Mato Grosso do Sul, Minas Gerais, Paraná, Piauí, Rio Grande do Norte, Rio de Janeiro, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Costa Rica, Ecuador, Mexico, Panama, Paraguay, Venezuela.

Anastrepha obliqua (Macquart, 1835) = *Tephritis obliqua* Macquart, 1835. **Type locality:** Cuba. **Distribution:** Antilles, Argentina, Belize, Bolivia, Brazil (Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Piauí, Rio Grande do Norte, Rio Grande do Sul, Rio de Janeiro, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Dominican Republic, Suriname, Venezuela.

Anastrepha parishi Stone, 1942. **Type locality:** Guyana (Bartica). **Distribution:** Brazil (Amapá, Roraima), Colombia, Costa Rica, Guyana, Venezuela.

Anastrepha pickeli Lima, 1934. **Type locality:** Brazil (Pernambuco and Rio de Janeiro). **Distribution:** Argentina, Brazil (Alagoas, Amapá, Amazonas, Bahia, Espírito Santo, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraná, Pernambuco, Piauí, Rio de Janeiro, Rio Grande do Norte, Roraima, São Paulo, Santa Catarina, Sergipe, Tocantins), Colombia, Costa Rica, Guyana, Panama, Trinidad and Tobago, Venezuela.

Anastrepha rafaeli Norrbom & Korytkowski, 2009. **Type locality:** Brazil (Roraima, Rio Uraricoera, Ilha de Maracá). **Distribution:** Brazil (Amapá, Roraima, Tocantins), Peru, Venezuela.

Anastrepha serpentina (Wiedemann, 1830) = *Dacus serpentinus* Wiedemann, 1830. **Type locality:** Brazil. **Distribution:** Argentina, Belize, Bolivia, Brazil (Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Piauí, Rio Grande do Norte, Rio de Janeiro, Rondônia, Roraima, Santa Catarina, São Paulo), Costa Rica, Colombia, Ecuador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Peru, Suriname, Trinidad and Tobago, United States, Venezuela.

Anastrepha sororcula Zucchi, 1979. **Type locality:** Brazil (São Paulo, Ribeirão Preto). **Distribution:** Brazil (Alagoas, Amapá, Bahia, Ceará, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Piauí, Rio Grande do Norte, Rio de Janeiro, Roraima, Santa Catarina, São Paulo, Tocantins), Colombia, Ecuador, Paraguay.

Anastrepha striata Schiner, 1868. **Type locality:** South America (Venezuela). **Distribution:** Bolivia, Brazil (Acre, Amapá, Amazonas, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Pará, Piauí, Rondônia, Roraima, São Paulo, Tocantins), Colombia, Costa Rica, Ecuador, Guyana, Honduras, Mexico, Panama, Peru, Trinidad and Tobago, Suriname, Venezuela.

Anastrepha turpiniae Stone, 1942. **Type locality:** Panama (Canal Zone, Barro Colorado). **Distribution:** Brazil (Amapá, Amazonas, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, São Paulo, Tocantins), Panama.

Anastrepha zenildae Zucchi, 1979. **Type locality:** Brazil (Ceará, Pacajus). **Distribution:** Argentina, Brazil (Amapá, Bahia, Ceará, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Pernambuco, Piauí, Rio de Janeiro, Rio Grande do Norte, Roraima, São Paulo, Tocantins).

Anastrepha zernyi Lima, 1934. **Type locality:** Brazil. **Distribution:** Brazil (Amazonas, Bahia, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Roraima, São Paulo).

Anastrepha zucchii Norrbom, 1998. **Type locality:** Brazil (Roraima, Rio Uraricoera, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Subfamily TEPHRITINAE Newman, 1834
Genus CECIDOCHARES Bezzi, 1910

Cecidochares fluminensis (Lima, 1934) = *Procecidochares fluminensis* Lima, 1934. **Type locality:** Brazil (Rio de Janeiro, Angra dos Reis). **Distribution:** Brazil (Amapá, Roraima, Rio de Janeiro, São Paulo), Costa Rica, Guatemala, Guyana, Mexico, Panama, Trinidad and Tobago, Venezuela.

Genus TETREUARESTA Hendel, 1928

Tetreuaresta bartica Bates, 1933. **Type locality:** Guyana (Bartica). **Distribution:** Brazil (Bahia, Pará, Roraima), French Guiana, Guyana, Trinidad and Tobago, Venezuela.

Ulidiidae (Fig. 4O). Popularly known as pictured-wing flies, the adults are medium-sized, with a moderately elongate body, and the larvae of most species are saprophagous (Kameneva & Korneyev, 2010). The family is divided into two subfamilies Ulidiinae and Otitinae, and it comprises 875 species occurring mainly in the New World (Kameneva & Korneyev, 2010; Kameneva *et al.,* 2017; Soares *et al.,* 2018). Brazilian ulidiids are classified into 29 genera and 58 species (Vieira, 2021). In Roraima, there are records of *Acrosticta* sp., *Axiologina ferrumequinum* Hendel, 1909, *Bothrometopa determinata* (Walker, 1858), *Euxesta* sp., *Dasymetopa* sp., *Notogramma cimiciformis* Loew, 1868, *Plagiocephalus latifrons* (Hendel, 1909), *Pseudopterocalla obscura* (Wiedemann, 1830), *Pterocalla ocellata* (Fabricius, 1805), *Pterocalla scutellata* (Schiner, 1868), *Xanthacrona bipustulata* Wulp, 1899, and *Xanthacrona phyllochaeta* Hendel, 1909 (Rafael, 1991; Soares *et al.,* 2018; Vasconcelos *et al.,* 2018). In the 2015 survey, we collected 14 species of ulidiids (Table 2), of which *Pagagorgopis euryale* Kameneva, 2004, *Rhyparella decempunctata* Hendel, 1909, and *Xanthacrona tuberosa* Cresson, 1908 are firstly recorded in Roraima. The list of species follows Hendel (1909), Steyskal (1968d, 1973), Rafael (1991), Kameneva (2004a, b), Kameneva *et al.* (2017), Soares *et al.* (2018), Soares *et al.* (2020), Vasconcelos *et al.* (2018), and Vieira (2021).

ULIDIIDAE Macquart, 1835
Subfamily ULIDIINAE Macquart, 1835
Genus ACROSTICTA Loew, 1868

***Acrosticta* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Acrosticta* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Acrosticta* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).
***Acrosticta* sp. 4, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus AXIOLOGINA Hendel, 1909

Axiologina ferrumequinum Hendel, 1909. **Type locality:** Peru (Meshagua). **Distribution:** Bolivia, Brazil (Roraima), Costa Rica, Guatemala, Guyana, Mexico, Panama, Peru.

Genus BOTHROMETOPA Hendel, 1909

Bothrometopa determinata (Walker, 1858) = *Herina determinata* Walker, 1858. **Type locality:** 'Amazon'. **Distribution:** Bolivia, Brazil (Acre, Amapá, Amazonas, Pará, Rondônia, Roraima, Tocantins), Peru.

Genus EUXESTA Loew, 1868

***Euxesta* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Euxesta* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Euxesta* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus NOTOGRAMMA Loew, 1868

Notogramma cimiciformis Loew, 1868. **Type locality:** Cuba. **Distribution:** Brazil (Roraima), Colombia, Cuba, Ecuador, Guyana, Jamaica, Mexico, Panama, Peru, United States, Venezuela.

Genus PARAGORGOPIS Giglio-Tos, 1893

Paragorgopis euryale Kameneva, 2004a. **Type locality:** Costa Rica (Limon, Cerro Cocori). **Distribution:** Bolivia, Brazil (Roraima), Colombia, Costa Rica, Panama, Peru.

Genus PLAGIOCEPHALUS Wiedemann, 1830

= *Terpnomyia* Hendel, 1909.

Plagiocephalus latifrons (Hendel, 1909) = *Terpnomyia latifrons* Hendel, 1909. **Type locality:** Bolivia (Mapiri) and Peru (Urubambaflufs). **Distribution:** Belize, Bolivia, Brazil (Acre, Amapá, Amazonas, Espírito Santo, Maranhão, Pará, Rondônia, Roraima), Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Trinidad and Tobago, Venezuela.

Genus PSEUDOPTEROCALLA Hendel, 1909

Pseudopterocalla obscura (Wiedemann, 1830) = *Trypeta obscura* Wiedemann, 1830. **Type locality:** 'Brazil' **Distribution:** Bolivia, Brazil (Roraima), Costa Rica, Guyana, Peru.

Pseudopterocalla scutellata (Schiner, 1868) = *Pterocalla scutellata* Schiner, 1868. **Type locality:** 'South America'. **Distribution:** Bolivia, Brazil (Roraima), Costa Rica, Panama, Peru.

Genus PTEROCALLA Rondani, 1848

Pterocalla ocellata (Fabricius, 1805) = *Dictya ocellata* Fabricius, 1805. **Type locality:** 'South America'. **Distribution:** Argentina, Bolivia, Brazil (Roraima), Colombia, Costa Rica, Guyana, Mexico, Panama, Peru.

Genus RHYPARELLA Hendel, 1909

Rhyparella decempunctata Hendel, 1909. **Type locality:** Bolivia (Mapiri). **Distribution:** Bolivia, Brazil (Rio de Janeiro).

Genus XANTHACRONA Wulp, 1899

Xanthacrona bipustulata Wulp, 1899. **Type locality:** Mexico (Mazatlán). **Distribution:** Argentina, Belize, Bolivia, Brazil (Acre, Amazonas, Espírito Santo, Maranhão, Mato Grosso do Sul, Pará, Pernambuco, Rio de Janeiro, Roraima, São Paulo), Colombia, Costa Rica, Cuba, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, United States.

Xanthacrona phyllochaeta Hendel 1909. **Type locality:** Paraguay. **Distribution:** Bolivia, Brazil (Amazonas, Maranhão, Para, Roraima), Colombia, Paraguay, Peru.

Xanthacrona tuberosa Cresson, 1908. Suriname (Paramaribo). **Distribution:** Bolivia, Brazil (Amazonas, Pará, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, French Guiana, Mexico, Suriname, Trinidad and Tobago.

Anthomyiidae (Fig. 4P). This is a family of Calyptratae flies with about 2,000 species in 40 genera distributed worldwide (Michelsen, 2010). There are 108 neotropical species in 19 genera (Pont, 1972, 1974). Anthomyiidae is found in all biogeographical regions, although mainly distributed in areas with temperate and arctic climates (Michelsen, 1991). Most genera are scarce or absent in the warm lowlands forest of the Americas (Michelsen, 1996). Remarkably, the closely related genera *Coenosopsia* Malloch, 1924 and *Phaonantho* Albuquerque, 1957 have an exceptional distribution in tropical areas of Central and South America (Michelsen, 1996; Gomes *et al.,* 2021). Most adults are anthophilous, whereas larvae are highly varied in their feeding habits, including some phytophagous species which are agricultural pests (Michelsen, 2010; Savage *et al.,* 2016). The main diagnostic characters occur in the male genitalia and tend to be inaccessible without dissection (Michelsen, 2010). For identification keys to Neotropical Anthomyiidae, see Michelsen (2010) and Gomes *et al.* (2019). In the present survey, two species of two different genera were collected (Table 2). This represents the first record of anthomyiids in Roraima. Distribution data came from the following references: Couri (1979) and Nihei & de Carvalho (2004).

ANTHOMYIIDAE Meade, 1875
Genus COENOSOPSIA Malloch, 1924

Coenosopsia michelseni Nihei & Carvalho, 2004. **Type locality:** Brazil (Distrito Federal, Brasília). **Distribution:** Brazil (Distrito Federal, Pará, Roraima).

Genus PHAONANTHO Albuquerque, 1957

Phaonantho benevola Couri, 1979. **Type locality:** Brazil (Mato Grosso, Sinop). **Distribution:** Brazil (Mato Grosso, Rio de Janeiro, Roraima), Peru.

Calliphoridae (Fig. 4Q). The calliphorids are commonly known as blowflies and they comprise a para/polyphyletic group of lineages of calyptrate flies included in the superfamily Oestroidea. The phylogenetic relationships among them are not yet fully understood (Rognes, 1997; Cerretti *et al.,* 2017; Kutty *et al.,* 2010, 2019) and, depending on the adopted classification scheme, up to eleven lineages with subfamily status can be recognized: Ameniinae, Aphyssurinae, Auchmeromyiinae, Bengaliinae, Calliphorinae, Chrysomyinae, Helicoboscinae, Luciliinae, Melanomyinae, Phumosiinae, and Toxotarsinae. The subfamilies Mesembrinellinae, Polleniinae, and Rhiniinae, historically included in the Calliphoridae, are currently generally treated with family status, namely Mesembrinellidae (Guimarães, 1977; Marinho *et al.,* 2017; Whitworth & Yusseff-Vanegas, 2019), Polleniidae (Cerretti *et al.,* 2019), and Rhiniidae (Kutty *et al.,* 2010). The calliphorids have a worldwide distribution, occurring in all continents and biogeographical regions, except in Antarctica. The world fauna is currently estimated in circa 1,500 species (Pape *et al.,* 2011). However, this number includes species comprised in the lineages currently treated as distinct Oestroidea families, such as Mesembrinellidae (53 species – Marinho *et al.,* 2017; Whitworth & Yousseff-Vanegas, 2019) and Polleniidae (145 species – Cerretti *et al.,* 2019). Sixty-six species are known to occur in the Neotropical region (Kosmann *et al.,* 2013), 29 of them with records in the Brazilian territory (Barbosa, 2021a). The Brazilian fauna of blowflies includes species from the subfamilies Calliphorinae, Chrysomyinae, Luciliinae, and Toxotarsinae. The calliphorid fauna of Ilha de Maracá had been previously assessed by de Carvalho & Couri (1992), with nine species distributed in six genera reported for this locality; no new records were found in this study. The following list is based on Kosmann *et al.* (2013) and Whitworth (2014) and it counts with a detailed distributional pattern for the Neotropical region.

CALLIPHORIDAE Brauer & Bergenstamm, 1889
Subfamily CHRYSOMYINAE Shannon, 1923
Genus CHLOROPROCTA Wulp, 1896

= *Parapyrellia* Townsend, 1915 = *Callitrogopsis* Townsend, 1935.

Chloroprocta idioidea (Robineau-Desvoidy, 1830) = *Musca violacea* Fabricius, 1805 = *Chrysomya idioidea* Robineau-Desvoidy, 1830 = *Lucilia fuscanipennis* Macquart, 1851 = *Musca purpurea* Walker, 1853 = *Chloroprocta semiviridis* Wulp, 1896 = *Strongyloneura flavifacies* Engel, 1931 = *Callitrogopsis costalis* Townsend, 1935. **Type locality:** 'Brazil'. **Distribution:** widespread, from southern of the United States to Argentina; Argentina, Bahamas, Brazil (Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, São Paulo), Colombia, Costa Rica, Cuba, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

Genus CHRYSOMYA Robineau-Desvoidy, 1830

= *Compsomyia* Rondani, 1875 = *Pycnosoma* Brauer & Bergenstamm, 1894 = *Paracompsomyia* Hough, 1898 = *Microcalliphora* Townsend, 1916 = *Psilostoma* Surcouf, 1919 = *Hemichrysomyia* Séguy, 1926: 304 = *Achoetandrus* Bezzi, 1927 = *Eucompsomyia* Malloch, 1927 = *Cyaneosomyia* Séguy, 1928 = *Pycnosomops* Townsend, 1934 = *Ceylonomyia* Fan, 1965.

Chrysomya albiceps (Wiedemann, 1819) = *Musca albiceps* Wiedemann, 1819 = *Musca elara* Walker, 1849 = *Musca emoda* Walker, 1849 = *Musca himella* Walker, 1849 = *Musca felix* Walker, 1853 = *Lucilia arcuata* Macquart, 1851 = *Lucilia testaceifacies* Macquart, 1851 = *Somomyia nubiana* Bigot, 1877 = *Somomyia arussica* Corti, 1895 = *Paracompsomyia verticalis* Adams, 1905 = *Compsomyia flaviceps* Séguy, 1927 = *Compsomyia mascarenhasi* Séguy, 1927 = *Chrysomyia albiceps* var. *indica* Patton & Cushing, 1934. **Type locality:** South Africa. **Distribution:** widespread in Africa, southern Europe (Mediterranean region), Asia and America; Argentina, Bolivia, Brazil (Acre, Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Sergipe), Colombia, Dominica, Guatemala, Nicaragua, Paraguay, Peru, Puerto Rico, Uruguay, Venezuela.

Comments: This species is thought to be introduced in the Neotropics from the Afrotropical region in the 1970's (Guimarães *et al.,* 1978; Baumgartner & Greenberg, 1984).

Chrysomya putoria (Wiedemann, 1830) = *Musca putoria* Wiedemann, 1830 = *Chrysomyia ethiopyga* Lehrer, 2007. **Type locality:** Sierra Leone. **Distribution:** widespread in the Afrotropical and Neotropical regions; Argentina, Bolivia, Brazil (Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Sergipe), Colombia, Panama, Paraguay, Peru.

Comments: As for *Chrysomya albiceps* Wiedemann, 1819, this species is thought to be introduced in the Americas from the Afrotropical region in the 1970's (Guimarães *et al.,* 1978; Baumgartner & Greenberg, 1984).

Genus COCHLIOMYIA Townsend, 1915

= *Protochrysomyia* Pierce, 1945 = *Callitroga* Hall, 1948.

Cochliomyia macellaria (Fabricius, 1775) = *Musca macellaria* Fabricius, 1775 = *Musca erythrocephala* De Geer, 1776 = *Chrysomya affinis* Robineau-Desvoidy, 1830 = *Chrysomya alia* Robineau-Desvoidy, 1830 = *Chrysomya coerulescens* Robineau-Desvoidy, 1830 = *Chrysomya decora* Robineau-Desvoidy, 1830 = *Chrysomya lepida* Robineau-Desvoidy, 1830 = *Chrysomya lherminieri* Robineau-Desvoidy, 1830 = *Chrysomya plaei* Robineau-Desvoidy, 1830 = *Chrysomya socia* Robineau-Desvoidy, 1830 = *Chrysomya tibialis* Robineau-Desvoidy, 1830 = *Chrysomya viridula* Robineau-Desvoidy, 1830 = *Musca laniaria* Wiedemann, 1830 = *Musca taniaria* Wiedemann, 1830 = *Calliphora violacea* Macquart, 1844 = *Lucilia durvillei* Macquart, 1844 = *Lucilia vittata* Macquart, 1844 = *Musca certima* Walker, 1849 = *Musca phauda* Walker, 1849 = *Calliphora tristriata* Verhuell, 1850 = *Calliphora tibialis* Macquart, 1851 = *Lucilia rubrifrons* Macquart, 1851 = *Musca fasciata* Walker, 1853 = *Musca turbida* Walker, 1853 = *Lucilia curvipes* Thomson, 1869 = *Lucilia picicrus* Thomson, 1869 = *Lucilia porticola* Thomson, 1869 = *Lucilia quadrisignata* Thomson, 1869 = *Somomya aztequina* Bigot, 1877 = *Somomya flavigena* Bigot, 1877 = *Somomyia iridicolor* Bigot, 1888 = *Chrysomyia lynchi* Lahille, 1915 = *Protochrysomyia howardae* Pierce, 1945 = *Cochliomyia fontanai* García, 1952. **Type locality:** 'West Indies'. **Distribution:** widespread, from United States to Argentina; Argentina, Bahamas, Belize, Bermudas, Bolivia, Brazil (Acre, Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minhas Gerais, Pará, Paraíba, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Sergipe), Caribbean, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Greater Antilles, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, Venezuela.

Genus HEMILUCILIA Brauer, 1895

= *Mya* Rondani, 1850.

Hemilucilia benoisti Séguy, 1925 = *Hemilucilia parva* Shannon, 1926. **Type locality:** 'French Guiana'. **Distribution:** Brazil (Amazonas, Goiás, Maranhão, Minas Gerais, Paraná, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, French Guiana, Guyana, Peru, Venezuela.

Hemilucilia semidiaphana (Rondani, 1850) = *Mya semidiaphana* Rondani, 1850 = *Hemilucilia hermanlenti* Mello, 1972 = *Hemilucilia segmentaria* ssp. *pacifiencis* Mariluis, 1980. **Type locality:** São Paulo, Brazil. **Distribution:** widespread in the Neotropical region; Argentina, Bolivia, Brazil (Acre, Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Sergipe), Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Panama, Paraguay, Peru, Trinidad and Tobago, Venezuela.

Hemilucilia segmentaria (Fabricius, 1805) = *Musca segmentaria* Fabricius, 1805 = *Chrysomya hyacinthina* Robineau-Desvoidy, 1830 = *Lucilia nubipennis* Rondani, 1848: 77 = *Calliphora femorata* Walker, 1861 = *Hemilucilia nubipennis* ssp. *occidentalis* Mariluis, 1979. **Type locality:** 'America meridionalis'. **Distribution:** widespread in the Neotropical region; Argentina, Bolivia, Brazil (Acre, Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo), Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Mexico, Panama, Paraguay, Peru, Trinidad and Tobago.

Genus PARALUCILIA Brauer & Bergenstamm, 1891

Paralucilia paraensis (Mello, 1969) = *Myiolucilia paraensis* Mello, 1969 = *Paralucilia adespota* Dear, 1985 = *Paralucilia desantisi* Mariluis, 1989. **Type locality:** Brazil (Pará, Belém). **Distribution:** Brazil (Amapá, Amazonas, Pará, Rondônia, Roraima), Colombia, Costa Rica, Guatemala, Guyana, Panama, Paraguay, Peru, Suriname, Venezuela.

Comments: de Carvalho & Couri (1992) reported this species from the Ilha de Maracá as *Paralucilia adespota* Dear, 1985, currently a synonym of *P. paraensis* (Mello, 1969).

Subfamily LUCILIINAE Shannon, 1923
Genus LUCILIA Robineau-Desvoidy, 1830

= *Phaenicia* Robineau-Desvoidy, 1863 = *Phumonesia* Villeneuve, 1914 = *Phumosesia* Villeneuve, 1914 = *Bufolucilia* Townsend, 1919 = *Francilia* Shannon, 1924 = *Agoracrites* Séguy, 1925 = *Roubaudiella* Séguy, 1925 = *Caesariceps* Rohdendorf, 1926 = *Dasylucilia* Rohdendorf, 1926 = *Luciliella* Malloch, 1926 = *Viridinsula* Shannon, 1926 = *Chaetophaenicia* Enderlein, 1936 = *Acrophagella* Ringdahl, 1942 = *Sinolucilia* Fan, 1965.

Lucilia albofusca Whitworth, 2014. **Type locality:** Barro Colorado Island, Canal Zone, Panama. **Distribution:** Brazil (Acre, Amazonas, Pará, Roraima), Colombia, Ecuador, French Guiana, Guyana, Panama, Peru, Suriname, Venezuela.

Comments: The record from Roraima (Serra Pacaraima) was provided by Amat (2017).

Lucilia eximia (Wiedemann, 1819) = *Musca eximia* Wiedemann, 1819 = *Lucilia smaragdula* Robineau-Desvoi-

dy, 1830 = *Lucilia parensis* Macquart, 1844 = *Lucilia ruficornis* Macquart, 1846 = *Lucilia punctipennis* Macquart, 1848 = *Lucilia subrectineuris* Macquart, 1851 = *Musca insularis* Walker, 1853 = *Somomya amazona* Bigot, 1877 = *Somomya mutabilis* Bigot, 1877 = *Somomya orenoquina* Bigot, 1877 = *Somomya pueblensis* Bigot, 1877 = *Somomyia sylphida* Bigot, 1877 = *Lucilia hirtiforceps* Shannon, 1926 = *Lucilia mera* Shannon & Del Ponte, 1926 = *Lucilia primaveris* Shannon & Del Ponte, 1926. **Type locality:** 'Brazil'. **Distribution:** widespread, from southern United States to Argentina; Argentina, Belize, Bolivia, Brazil (Acre, Amapá, Amazonas, Bahia, Ceará, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Roraima, Santa Catarina, São Paulo, Tocantins), Chile, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Honduras, Guatemala, Guyana, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay, Venezuela, West Indies.

Comments: de Carvalho & Couri (1992) reported this species from Ilha de Maracá under the genus *Phaenicia* Robineau-Desvoidy, 1863, which is currently considered a synonym of *Lucilia* Robineau-Desvoidy, 1830.

Subfamily TOXOTARSINAE Shannon, 1926
Genus SARCONESIA Bigot, 1857

= *Chlorobrachycoma* Townsend, 1918 = *Sarconesiopsis* Townsend, 1918 = *Roraimomusca* Townsend, 1935 = *Sarconesiomima* Lopes & Albuquerque, 1955 = *Sarconesisca* Lopes & Albuquerque, 1982.

Sarconesia roraima (Townsend, 1935) = *Roraimomusca roraima* Townsend, 1935. **Type locality:** Venezuela (Mount Roraima). **Distribution:** Bolivia, Brazil (Roraima), Colombia, Ecuador, Venezuela.

Comments: This species' record from Roraima, Brazil, was provided by Mariluis & Peris (1984). The collection site refers to Mount Roraima, which is located on the triple border of Brazil, Venezuela, and Guyana.

Fanniidae (Fig. 4R). Members of this family occur in all biogeographic regions, mostly in forested areas (de Carvalho *et al.,* 2003). Fanniidae is a small Calyptrate family with five known genera, two of which, *Euryomma* Stein, 1899 and *Fannia* Robineau-Desvoidy, 1830, are found in the Neotropical region. There are about 110 species in the Neotropics, occurring from sea level up to the highlands of Central America and North and Central Andes, with some species flying at up to 4,150 m.a.s.l. (Grisales & de Carvalho, 2019). Adults are small- to medium-sized flies and most species are gray or blackish (Albuquerque *et al.,* 1981). Forty-nine species of *Fannia* and *Euryomma* occur in Brazil (de Carvalho & Couri, 2021a), but only *Fannia* has been found at ESEC Maracá (de Carvalho, 1991; de Carvalho & Couri, 1992). Males hover in aerials swarms, while females are found on the vegetation (de Carvalho *et al.,* 2003). Most larval stages of *Fannia* species are saprophagous, associated mainly with decaying vegetable material. Some species are synanthropic (Almeida *et al.,* 1985). *Fannia canicularis* (Linnaeus, 1761) (the little house fly) and *F. scalaris* (Fabricius, 1794) (the latrine fly) are the best known synanthropic species, but some other species also visit human feces and carrion. For identification, see Grisales & de Carvalho (2019) for a key for males of *Fannia* species from Central and North Andes and Central America. Some species of *Euryomma* and *Fannia* may be important to forensic studies, including in estimating post-mortem intervals (Grisales *et al.,* 2016). The list of species from Roraima follows de Carvalho (1991) and de Carvalho & Couri (1992).

FANNIIDAE Schnabl, 1911
Genus FANNIA Robineau-Desvoidy, 1830

= *Homalomyia* Bouché, 1834 = *Dasyphyma* Bigot, 1882 = *Profannia* Séguy, 1937 = *Mesazelia* Blanchard, 1942.

Fannia bella Albuquerque, 1957. **Type locality:** Brazil (Minas Gerais). **Distribution:** Brazil (Mato Grosso, Minas Gerais, Roraima).

Fannia euchaetophora de Carvalho, 1991. **Type locality:** Brazil (Roraima, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Fannia obscurinervis (Stein, 1900). **Type locality:** Bolivia. **Distribution:** Bolivia, Brazil (Bahia, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Paraná, Pernambuco, Rio de Janeiro, São Paulo, Roraima), Colombia, Guyana, Mexico, Paraguay, Peru, Venezuela.

Fannia trimaculata (Stein, 1898). **Type locality:** North America and Jamaica. **Distribution:** Argentina, Brazil (Bahia, Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, São Paulo), Dominican Republic, Ecuador, Honduras, Jamaica, Panama, Peru, Puerto Rico, Venezuela, Uruguay.

***Fannia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Fannia* sp. 2,** *heydenii* group, **Locality:** Brazil (Roraima, Ilha de Maracá).
***Fannia* sp. 3,** *pusio* group, **Locality:** Brazil (Roraima, Ilha de Maracá).

Comments: The morphospecies *Fannia* sp. 2 and *Fannia* sp. 3 were not collected in this survey. The available data is from de Carvalho & Couri (1991).

Mesembrinellidae (Fig. 4S). This family comprises a small group of calyptrate flies occurring exclusively in the Neotropical region. This lineage has been historically considered a subfamily of Calliphoridae. However, the family status for this group, originally proposed by Guimarães (1977) and later supported by molecular

phylogenetic analyses (Marinho *et al.,* 2017; Cerretti *et al.,* 2017), is currently widely accepted (Whitworth & Yousseff-Vanegas, 2019). The diversity of Mesembrinellidae extents to 53 extant species and one fossil – *Mesembrinella caenozoica* Cerretti *et al.,* 2017. The mesembrinelids are asynanthropic, occurring in areas of primary forest with lower disturbance rates. This particular attribute led to the proposition of using the species of this family as bioindicators of environmental quality (Cabrini *et al.,* 2013). Seventeen species are known to Brazil (Whitworth & Yusseff-Vanegas, 2019; Barbosa, 2021b), four of which have been recorded to the state of Roraima (Bonatto, 2001). Particularly for Ilha de Maracá, two species are registered: *Mesembrinella bicolor* (Fabricius, 1805) and *M. quadrilineata* (Fabricius, 1805) (Bonatto, 2001). The latter, however, was not found in this survey. The species *M. quadrilineata* and *M. benoisti* (Séguy, 1925b), with known occurrence for Roraima, were previously placed in the genus *Eumesembrinella* Townsend, 1931, which is now considered a synonym of *Mesembrinella* Giglio-Tos, 1893 (Whitworth & Yusseff-Vanegas, 2019).

MESEMBRINELLIDAE Shannon, 1926
Subfamily MESEMBRINELLINAE Shannon, 1926
Genus MESEMBRINELLA Giglio-Tos, 1893

= *Huascaromusca* Townsend, 1918 = *Mesembolia* Aldrich, 1922 = *Eumesembrinella* Townsend, 1931 = *Promesembrinella* Hall, 1948 = *Albuquerquea* Mello, 1967 = *Thompsoniella* Guimarães, 1977 = *Giovanella* Bonatto, 2005 = *Henriquella* Bonatto, 2005.

Mesembrinella batesi Aldrich, 1922. **Type locality:** Brazil (Amazonas, Amazon River). **Distribution:** Brazil (Acre, Amazonas, Bahia, Espírito Santo, Mato Grosso, Pará, Pernambuco, Rio de Janeiro, Rondônia, Roraima), Colombia, Ecuador, Peru.

Comments: The record from Roraima (Pacaraima) was provided by Bonatto (2001).

Mesembrinella bicolor (Fabricius, 1805) = *Musca bicolor* Fabricius, 1805. **Type locality:** 'America meridionalis'. **Distribution:** widespread in the Neotropical region; Brazil (Amazonas, Bahia, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Pernambuco, Rio de Janeiro, Rondônia, Roraima, São Paulo, Tocantins).

Mesembrinella benoisti (Séguy, 1925) = *Ochromyia benoisti* Séguy, 1925. **Type locality:** French Guiana. **Distribution:** Brazil (Amapá, Amazonas, Pará, Roraima), French Guiana, Guyana, Peru, Venezuela.

Comments: The record from Roraima (Pacaraima) was provided by Bonatto (2001).

Mesembrinella quadrilineata (Fabricius, 1805) = *Musca quadrilineata* Fabricius, 1805. **Type locality:** 'America meridionalis'. **Distribution:** Bolivia, Brazil (Acre, Amazonas, Maranhão, Mato Grosso, Pará, Rondônia, Roraima), Colombia, Ecuador, French Guiana, Guyana, Peru, Venezuela.

Muscidae (Fig. 4T). Cosmopolitan, Muscidae is a large family of Calyptratae flies, with 5,218 species in 187 genera distributed worldwide (Pape *et al.,* 2011). There are 846 valid species in the Neotropical region, occurring from coastal shores and beaches to the Andean highlands (de Carvalho *et al.,* 2019). In Brazil, there are 390 recorded species, 18 of which from the state of Roraima (Löwenberg-Neto & de Carvalho, 2013; de Carvalho & Couri, 2021b). Muscidae is a monophyletic group. The phylogeny of the family was investigated using morphological (de Carvalho, 1989) and molecular data (Kutty *et al.,* 2014; Haseyama *et al.,* 2015). Adults occur in most habitats, except for extremely arid regions. Although the adults of most species feed on organic material in decomposition, plant feeders, hematophagous and predator species are common (de Carvalho *et al.,* 2005). Few species are in contact with humans, but *Musca domestica* Linnaeus, 1758, *Stomoxys calcitrans* (Linnaeus, 1758), and *Haematobia irritans* (Linnaeus, 1758) are well known for their medical and veterinary importance. Muscid larvae are saprophagous and coprophagous, but most species are facultative or truly carnivores (Skidmore, 1985). Few species are pests of agricultural systems, such as *Atherigona reversura* Villeneuve, 1936, recently found in southern Brazil feeding on bermudagrass, *Cynodon dactylon* cv. Jiggs, an important food source for cattle in the semi-intensive milk production systems (Ribeiro *et al.,* 2016). For identification keys to Neotropical Muscidae genera and most of their species, see de Carvalho & Couri (2002) and Couri & de Carvalho (2002). The species list follows de Carvalho & Couri (1992), de Carvalho *et al.* (2005), and Löwenberg-Neto & de Carvalho (2013).

MUSCIDAE Latreille, 1802
Subfamily ATHERIGONINAE Fan, 1965
Genus ATHERIGONA Rondani, 1856

Atherigona orientalis Schiner, 1968. **Type locality:** "Tellnschong", Nicobar Is. **Distribution:** Argentina, Barbados, Brazil (Ceará, Bahia, Goiás, Mato Grosso do Sul, Minas Gerais, Paraná, Pernambuco, Rio de Janeiro, Roraima, São Paulo), Colombia, Cuba, Dominica, Dominican Republic, Easter Island, Ecuador, El Salvador, Galápagos Islands, Guyana, Jamaica, Mexico, Panama, Paraguay, Peru, Puerto Rica, Saint Kitts, Saint Lucia, Trinidad and Tobago, Venezuela, United States Virgin Islands.

Subfamily AZELIINAE Robineau-Desvoidy, 1830
Genus HYDROTAEA Robineau-Desvoidy, 1830

Hydrotaea aenescens (Wiedemann, 1830). **Type locality:** 'Neu-Orleans', USA. **Distribution:** Nearctic

Region, western Palearctic Region, eastern Pacific; Argentina, Bolivia, Brazil (Bahia, Goiás, Mato Grosso, Minas Gerais, Parana, Rio de Janeiro, Rio Grande do Sul, Roraima, São Paulo), Chile, Cuba, Ecuador, Easter Island, Galápagos Islands, Guyana, Jamaica, Mexico, Nicaragua, Peru, Puerto Rico, Saint Vincent and the Grenadines, Trinidad and Tobago, Uruguay, Venezuela.

Genus MICROPOTAMIA Carvalho, 1993

Micropotamia amazonica (Albuquerque & Lopes, 1982). **Type locality:** Brazil (Amazonas, Manaus). **Distribution:** Brazil (Amazonas, Roraima).

Genus PHILORNIS Meinert, 1890

= *Neomusca* Malloch, 1921 = *Mesembrinellopsis* Townsend, 1927.

Philornis aitkeni Dodge, 1963. **Type locality:** Trinidad and Tobago (Fort Read). **Distribution:** Brazil (Rondônia, Roraima), Mexico, Trinidad and Tobago.

***Philornis* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus POTAMIA Robineau-Desvoidy, 1830

= *Dendrophaonia* Malloch, 1923.

***Potamia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily COENOSIINAE Verrall, 1888
Genus BITHORACOCHAETA Stein, 1911

Bithoracochaeta flavicoxa Malloch, 1934. **Type locality:** Costa Rica (Farm la Caja, 8 km west of San José). **Distribution:** Brazil (Paraná, Roraima), Colombia, Costa Rica, El Salvador, Guyana.

***Bithoracochaeta* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus LIMNOPHORA Robineau-Desvoidy, 1830

= *Microchylum* Macquart, 1851 = *Leucomelina* Macquart, 1851 = *Bucephalomyia* Malloch, 1918.

***Limnophora* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus PLUMISPINA Albuquerque, 1954

Plumispina longipilis (Albuquerque, 1954). **Type locality:** Brazil (Guanabara, Rio de Janeiro, Grajaú). **Distribution:** Brazil (Rio de Janeiro, Roraima).

Subfamily CYRTONEURININAE Snyder, 1954
Genus CHARADRELLA Wulp, 1896

Charadrella malacophaga Lopes, 1938. **Type locality:** Brazil (Rio de Janeiro). **Distribution:** Brazil (Bahia, Espírito Santo, Mato Grosso, Minas Gerais, Rio de Janeiro, Roraima).

Genus CYRTONEURINA Giglio-Tos, 1893

= *Clinopera* Wulp, 1896.

Cyrtoneurina confusa Snyder, 1954. **Type locality:** Panama (Patilla Point). **Distribution:** Brazil (Bahia, Mato Grosso, Rio de Janeiro, Roraima), Costa Rica, Panama.

***Cyrtoneurina* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus CYRTONEUROPSIS Malloch, 1925

= *Mallocharia* Curran, 1943 = *Dyadimyia* Séguy, 1937 = *Paracyrtoneurina* Pamplona & Couri, 1998 = *Paracyrtoneurina* Pamplona, 1999.

Cyrtoneuropsis conspersa (Stein, 1911). **Type locality:** Peru (Pto. Bermúdez). **Distribution:** Brazil (Amapá, Amazonas, Mato Grosso, Pará, Tocantins, Roraima), Colombia, Costa Rica, French Guiana, Guyana, Peru.

Cyrtoneuropsis dubia (Snyder, 1954). **Type locality:** Peru (Junin, Chanchamayo). **Distribution:** Belize, Brazil (Amapá, Amazonas, Espírito Santo, Pará, Rio de Janeiro, Roraima), Costa Rica, Guatemala, Guyana, Honduras, Panama, Peru.

Cyrtoneuropsis flaviantennata (Couri, 1982). **Type locality:** Brazil (Mato Grosso, Sinop). **Distribution:** Brazil (Mato Grosso, Roraima).

Cyrtoneuropsis protosetosa (Snyder, 1954). **Type locality:** Brazil (Natal). **Distribution:** Brazil (Amazonas, Distrito Federal, Espírito Santo, Mato Grosso, Minas Gerais, Pará, Rio de Janeiro, Rio Grande do Norte, Rondônia, Roraima, São Paulo).

Cyrtoneuropsis veniseta (Stein, 1904). **Type locality:** Brazil (Pará). **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Bahia, Espírito Santo, Goiás, Pará, Paraná, Rio de Janeiro, Roraima, Santa Catarina), Colombia, Costa Rica, El Salvador, Guyana, Mexico, Nicaragua, Panama, Peru, Trinidad and Tobago, Venezuela.

***Cyrtoneuropsis* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus NEOMUSCINA Townsend, 1919

= *Spilopteromyia* Malloch, 1921.

***Neomuscina* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Neomuscina* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Neomuscina* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily MUSCINAE Townsend, 1802
Genus BIOPYRELLIA Townsend, 1932

Biopyrellia bipuncta (Wiedemann, 1830). **Type locality:** 'Brasilien'. **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Mato Grosso do Sul, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Costa Rica, Mexico, Panama, Paraguay, Venezuela, Trinidad and Tobago.

Genus HAEMATOBIA Le Peletier & Serville in Latreille *et al.*, 1828

= *Siphona* Meigen, 1803 = *Lyperosia* Rondani, 1856.

Haematobia irritans (Linnaeus, 1758). **Type locality:** Sweden. **Distribution:** Nearctic and Palearctic regions, Hawaii; Argentina, Brazil (Paraná, Rio Grande do Sul, São Paulo, Roraima), Chile, Colombia, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Guyana, Haiti, Jamaica, Mexico, Nicaragua, Panama, Puerto Rico, United States Virgin Islands, Venezuela.

Genus MORELLIA Robineau-Desvoidy, 1830

= *Cyrtoneuropsis* Malloch, 1925 = *Cyacyrtoneura* Townsend, 1931 = *Chaetopyrellia* Townsend, 1932 = *Neopyrellia* Enderlein, 1935.

Morellia basalis (Walker, 1853). **Type locality:** 'Jamaica'. **Distribution:** Nearctic and Neotropical regions; Brazil (Roraima), Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Haiti, Jamaica, Mexico, Puerto Rico, United States, Venezuela.

Morellia hirtitibia Pamplona, 1986. **Type locality:** Brazil (Mato Grosso, Sinop). **Distribution:** Brazil (Mato Grosso, Roraima).

Morellia maculipennis (Macquart, 1846). **Type locality:** 'Colombie … Brésil'. **Distribution:** Bolivia, Brazil (Amapá, Amazonas, Bahia, Salvador, Ceará, Espírito Santo, Goiás, Mato Grosso do Sul, Mato Grosso, Minas Gerais, Paraná, Pernambuco, Rio de Janeiro, Roraima, São Paulo), Colombia, Cuba, Dominica, Guadalupe, Guyana, Jamaica, Mexico, Paraguay, Peru, Puerto Rico, Trinidad and Tobago, Venezuela.

Morellia nigricosta Hough, 1900 = *M. nitida* Wiedemann, 1830. **Type locality:** Brazil (Mato Grosso, Chapada [dos Guimarães]). **Distribution:** Brazil (Amapá, Amazonas, Bahia, Espírito Santo, Goiás, Mato Grosso, Mato Grosso do Sul, Pará, Paraná, Rio de Janeiro, Roraima, São Paulo), Costa Rica, Guyana, Paraguay, Peru.

Genus MUSCA Linnaeus, 1758

= *Promusca* Townsend, 1915.

Musca domestica Linnaeus, 1758. **Type locality:** 'In Europae domibus, etiam America'. **Distribution:** cosmopolitan; Brazil (Amazonas, Bahia, Goiás, Minas Gerais, Paraná, Paraíba, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, São Paulo, Santa Catarina).

Genus NEORYPELLIA Pont, 1972

= *Neopyrellia* Townsend, 1939.

Neopyrellia neglecta (Townsend, 1939). **Type locality:** Brazil (São Paulo, Juquiá). **Distribution:** Brazil (Amazonas, Bahia, Maranhão, Minas Gerais, Rio de Janeiro, Roraima, São Paulo), Paraguay.

Genus POLIETINA Schnabl & Dziedzicki, 1911

= *Poecilophaonia* Malloch, 1921 = *Smithomyia* Malloch, 1921 = *Chaetypopleura* Enderlein, 1927 = *Lasiomala* Enderlein, 1927.

Polietina flavithorax (Stein, 1904). **Type locality:** Peru (Callanga). **Distribution:** Bolivia, Brazil (Amazonas, Mato Grosso do Sul, Mato Grosso, Paraná, Rio de Janeiro, Roraima), Paraguay, Peru, Venezuela.

Polietina prima (Couri & Machado), 1990. **Type locality:** Brazil (Rio de Janeiro, Parque Nacional da Tijuca). **Distribution:** Brazil (Amazonas, Bahia, Maranhão, Pará, Paraná, Pernambuco, Rio de Janeiro, Roraima), Costa Rica, Panama, Trinidad and Tobago.

***Polietina* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Subfamily MYDAEINAE Verrall, 1888
Genus GYMNODIA Robineau-Desvoidy, 1863

= *Brontaea* Kowarz, 1873.

Gymnodia debilis (Williston, 1896). **Type locality:** St. Vincent. **Distribution:** Nearctic region; Argentina, Brazil (Bahia, Mato Grosso, Mato Grosso do Sul, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Cayman Islands, Dominican Republic, Ecuador, Galápagos Islands, Haiti, Honduras, Jamaica, Mexico, Peru, Puerto Rico, Venezuela.

***Gymnodia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus MYOSPILA Rondani, 1856

= *Phasiophana* Brauer & Bergenstamm, 1891.

Myospila pallidicornis Bigot, 1887 = *Phasiophana obsoleta* Brauer & Bergenstamm, 1891. **Type locality:** 'Mexique'. **Distribution:** Bolivia, Brazil (Amazonas, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Costa Rica, Cuba, Dominican Republic, Guyana, Haiti, Jamaica, Mexico, Panama, Peru, Puerto Rico, Venezuela.

Sarcophagidae (Fig. 4U). This family comprises about 3,100 species in the world, distributed in *ca.* 170 genera (Pape, 1996; Pape *et al.,* 2011; Buenaventura & Pape, 2018), included in the subfamilies Miltogramminae, Paramacronychiinae, and Sarcophaginae (Pape, 1996). The Sarcophaginae are much more diverse in the Neotropical region, with more than 850 species recorded, while Miltogramminae has about 40 species and only one species belongs to Paramacronychiinae (Pape, 1996; Mello-Patiu, 2016; Mello-Patiu & Santos, 2021). The Brazilian fauna counts with more than 350 species in about 40 genera (Pape, 1996; Mello-Patiu & Santos, 2021). Among them, only 31 species had been previously recorded to the state of Roraima, 25 of which to Ilha de Maracá (Mello, 1989; Tibana & Lopes, 1990; Lopes & Tibana, 1991). The identified sarcophagids in the present study belong to 12 genera and 28 species. Of these, one species is the first record to Brazil, and two genera and 12 species are new to Roraima. Seven species, however, could not be assigned to any described species (Table 2) and are still subject to ongoing morphological and taxonomic studies. The updated checklist has a total of 50 species recorded from Roraima, including the seven morphospecies.

SARCOPHAGIDAE Macquart, 1834
Subfamily MILTOGRAMMINAE
Brauer & Bergenstamm, 1889
Genus METOPIA Meigen, 1803

= *Ophelia* Robineau-Desvoidy, 1830 = *Araba* Robineau-Desvoidy, 1830 = *Argyria* Robineau-Desvoidy, 1863 = *Argyrella* Robineau-Desvoidy, 1863 = *Arabella* Robineau-Desvoidy, 1863 = *Anicia* Robineau-Desvoidy, 1863 = *Parametopia* Townsend, 1916 = *Chaetanicia* Townsend, 1933 = *Juquianicia* Townsend, 1934 = *Allenanicia* Townsend, 1935 = *Rupununia* Townsend, 1935 = *Nepalometopia* Rohdendorf, 1966 = *Udamomitra* Enderlein, 1934 = *Udamomitra* Enderlein, 1936 = *Fanestria* Venturi, 1960 = *Opheliella* Rohdendorf, 1955 = *Australoanicia* Verves, 1979.

***Metopia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Metopia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).
***Metopia* sp. 3, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus SENOTAINIA Macquart, 1844

= *Megaera* Robineau-Desvoidy, 1830 = *Sphixapata* Rondani, 1859 = *Arrenopus* Brauer & Bergenstamm, 1891 = *Sphecapata* Bezzi, 1906 = *Stenotaenia* Bezzi, 1906 = *Arrhenopus* Bezzi & Stein, 1907 = *Euselenomyia* Townsend, 1912 = *Eusenotainia* Townsend, 1915 = *Microsenotainia* Townsend, 1916 = *Nyctella* Zimin, 1928 = *Myiapis* Séguy, 1930 = *Chaetometopia* Malloch, 1930 = *Nannosetulia* Enderlein, 1934 = *Pariogymnia* Enderlein, 1934 = *Poecilonychia* Enderlein, 1934 = *Afrosenotainia* Rohdendorf, 1935 = *Pariogymnia* Enderlein, 1936 = *Plionychia* Enderlein, 1936 = *Noditermitomyia* Séguy, 1953.

Senotainia flavicornis (Townsend, 1891) = *Miltogramma flavicornis* Townsend, 1891 = *M. similis* Townsend, 1891. **Type locality:** United States (Illinois). **Distribution:** Brazil (Roraima), Canada, Cuba, El Salvador, Mexico, United States.

Subfamily SARCOPHAGINAE Macquart, 1835
Genus ARGORAVINIA Townsend, 1917

= *Raviniopsis* Townsend, 1918 = *Sarcophagina* Curran, 1928 = *Pachygraphomyia* Hall, 1933.

Argoravinia alvarengai Lopes, 1976. **Type locality:** Brazil (Roraima, Suruma). **Distribution:** Brazil (Amapá, Pará, Roraima), Colombia, Trinidad and Tobago, Venezuela.

Argoravinia aurea (Townsend, 1918) = *Raviniopsis aurea* Townsend, 1918 = *Pachygraphomyia spinosa* Hall, 1933. **Type locality:** Peru (Piura). **Distribution:** Belize, Brazil (Amazonas, Espírito Santo, Goiás, Pará, Paraná, Rio de Janeiro, Roraima, São Paulo), Colombia, Costa Rica, Dominican Republic, French Guiana, Guyana, Marshall Islands, Mexico, Panama, Peru, Suriname, Trinidad and Tobago, Venezuela.

Genus CHRYSAGRIA Townsend, 1935

= *Sarcofahrtiamyia* Hall, 1937.

Chrysagria duodecimpunctata Townsend, 1935 = *Sarcofahrtiamyia tenta* Hall, 1937. **Type locality:** Brazil (Pernambuco, Tapéra). **Distribution:** Argentina, Brazil (Minas Gerais, Goiás, Pernambuco, Rio de Janeiro, Roraima), Colombia, Dominica, Guatemala, Jamaica, Mexico, Peru, United States.

Genus DEXOSARCOPHAGA Townsend, 1917

= *Sarcomyia* Roback, 1954 = *Farrimyia* Dodge, 1965 = *Ectomyia* Dodge, 1968 = *Varcophaga* Dodge, 1968 = *Bezzisca* Lopes, 1975.

Dexosarcophaga ampullula (Engel, 1931) = *Bercaea ampullula* Engel, 1931. **Type locality:** Argentina ([prob-

ably Formosa], Lapango). **Distribution:** Argentina, Brazil (Goiás, Mato Grosso, Minas Gerais, Rio de Janeiro, Roraima, São Paulo).

Dexosarcophaga bidentata Dodge, 1966. **Type locality:** Trinidad and Tobago (Trinidad, Santa Cruz). **Distribution:** Brazil (Roraima), Trinidad and Tobago, Venezuela.

Dexosarcophaga globulosa Lopes, 1946. **Type locality:** Brazil (Rio de Janeiro, Grajaú). **Distribution:** Brazil (Bahia, Ceará, Espírito Santo, Mato Grosso do Sul, Pará, Rio de Janeiro, Roraima), Ecuador, Guyana, Panama.

Dexosarcophaga hugoi Pape, 1996 = *Farrimyia lopesi* Mello, 1990. **Type locality:** Brazil (Roraima, Rio Uraricoera, Ilha de Maracá). **Distribution:** Brazil (Maranhão, Roraima).

Dexosarcophaga rafaeli (Tibana & Lopes, 1990) = *Bezzisca rafaeli* Tibana & Lopes, 1990. **Type locality:** Brazil (Roraima, Rio Uraricoera, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Genus HELICOBIA Coquillett, 1895

= *Punaphyto* Townsend, 1915 = *Helicobiopsis* Townsend, 1927 = *Notochaetophyto* Hall, 1933 = *Anaravinia* Townsend, 1934 = *Oxyhelicobia* Blanchard, 1942 = *Helicobiomima* Tibana & Lopes, 1985.

Helicobia aurescens (Townsend, 1927) = *Sarcophaga parvula* Lahille, 1907 = *Helicobiopsis aurescens* Townsend, 1927 = *Opsophyto lahillei* Blanchard, 1939. **Type locality:** Brazil (São Paulo, Itaquaquecetuba). **Distribution:** Argentina, Brazil (Distrito Federal, Maranhão, Minas Gerais, Rio de Janeiro, Paraná, Roraima, São Paulo).

Helicobia chapadensis (Tibana & Lopes, 1985) = *Helicobiomima chapadensis* Tibana & Lopes, 1985. **Type locality:** Brazil (Mato Grosso, Chapada dos Guimarães). **Distribution:** Brazil (Mato Grosso, Roraima).

Helicobia morionella (Aldrich, 1930) = *Sarcophaga morionella* Aldrich, 1930 = *Oxyhelicobia chacoana* Blanchard, 1942. **Type locality:** Cuba (Habana). **Distribution:** Argentina, Bahamas, Bermuda, Brazil (Maranhão, Mato Grosso, Minas Gerais, Rio de Janeiro, Roraima, São Paulo), Colombia, Costa Rica, Cuba, Dominica, El Salvador, Guatemala, Haiti, Hawaii, Jamaica, Puerto Rico, Mexico, United States, United States Virgin Islands.

***Helicobia* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Helicobia* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus LEPIDODEXIA Brauer & Bergenstamm, 1891
Subgenus HARPAGOPYGA Aldrich, 1925

= *Pachygraphiops* Townsend, 1934.

Lepidodexia (Harpagopyga) pacta (Townsend, 1934) = *Pachygraphiops pacta* Townsend, 1934 = *Harpagopyga divergens* Curran & Walley, 1934. **Type locality:** Brazil (Pará, Rio Tapajós, Boa Vista). **Distribution:** Brazil (Pará, Roraima), Guyana, Trinidad and Tobago.

Subgenus NOTOCHAETA Aldrich, 1916

= *Micronotochaeta* Townsend, 1927 = *Discomyophora* Townsend, 1927 = *Actenella* Enderlein, 1928 = *Udamoctis* Enderlein, 1928 = *Sisasarcophaga* Townsend, 1928 = *Eunotochaeta* Townsend, 1934 = *Mononotochaeta* Townsend, 1935 = *Sarcophodexiopsis* Kreibohm, 1940 = *Sarcophodexiopsis* Blanchard, 1942 = *Anolisimyia* Dodge, 1955.

Lepidodexia (Notochaeta) carvalhoi (Lopes, 1984). **Type locality:** Brazil (Pará, Rio Parú). **Distribution:** Brazil (Pará, Roraima).

***Lepidodexia (Notochaeta)* sp. 1, Locality:** Brazil (Roraima, Ilha de Maracá).
***Lepidodexia (Notochaeta)* sp. 2, Locality:** Brazil (Roraima, Ilha de Maracá).

Genus OROSARCOPHAGA Townsend, 1927

= *Oxyvinia* Dodge, 1966.

Orosarcophaga uraricoera (Tibana & Lopes, 1990) = *Oxyvinia uraricoera* Tibana & Lopes, 1990. **Type locality:** Brazil (Roraima, Rio Uraricoera, Ilha de Maracá). **Distribution:** Brazil (Roraima).

Genus OXYSARCODEXIA Townsend, 1917

= *Dasyproctia* Enderlein, 1928 = *Hybopygia* Enderlein, 1928 = *Amesothyrsus* Enderlein, 1928 = *Apelophyla* Hall, 1938 = *Xarcophaga* Dodge, 1968 = *Asioboettcheria* Verves, 2001.

Oxysarcodexia adunca Lopes, 1975. **Type locality:** Brazil (Espírito Santo, Conceição da Barra). **Distribution:** Brazil (Espírito Santo, Rio de Janeiro, Roraima).

Oxysarcodexia amorosa (Schiner, 1868) = *Sarcophaga amorosa* Schiner, 1868. **Type locality:** Brazil. **Distribution:** Brazil (Amapá, Amazonas, Bahia, Ceará, Maranhão, Mato Grosso do Sul, Minas Gerais, Rio de Janeiro, Roraima, Santa Catarina), Colombia, Costa Rica, Ecuador, Guyana, Mexico, Panama, Peru.

Oxysarcodexia angrensis (Lopes, 1933) = *Sarcophaga angrensis* Lopes, 1933 = *S. articulata* Hall, 1933 = *S. kartabo* Curran & Walley, 1934. **Type locality:** Brazil (Rio de Janeiro, Angra dos Reis). **Distribution:** Brazil (Goiás, Mato Grosso do Sul, Pará, Rio de Janeiro, Roraima, São Paulo),

Costa Rica, Ecuador, Guyana, Panama, Peru, Trinidad and Tobago, Venezuela.

Oxysarcodexia augusta Lopes, 1946. **Type locality:** Brazil (Rio de Janeiro, Guanabara, Méier). **Distribution:** Argentina, Brazil (Minas Gerais, Rio de Janeiro, Roraima, Santa Catarina).

Oxysarcodexia avuncula (Lopes, 1933) = *Sarcophaga avuncula* Lopes, 1933. **Type locality:** Brazil (Rio de Janeiro, Guanabara, Manguinhos). **Distribution:** Argentina, Bolivia, Brazil (Ceará, Espírito Santo, Distrito Federal, Goiás, Maranhão, Mato Grosso do Sul, Minas Gerais, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Ecuador, Mexico, Paraguay, Peru, Trinidad and Tobago.

Oxysarcodexia carvalhoi Lopes, 1946. **Type locality:** Brazil (Minas Gerais, Cordisburgo). **Distribution:** Brazil (Amapá, Ceará, Mato Grosso, Minas Gerais, Pará, Rio de Janeiro, Roraima, São Paulo), Ecuador, Guyana.

Oxysarcodexia diana (Lopes, 1933) = *Sarcophaga diana* Lopes, 1933. **Type locality:** Brazil (Rio de Janeiro, Angra dos Reis). **Distribution:** Argentina, Brazil (Ceará, Mato Grosso, Minas Gerais, Paraná, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Ecuador, El Salvador, Mexico, Paraguay, Trinidad and Tobago.

Oxysarcodexia major Lopes, 1946. **Type locality:** Brazil (Rio de Janeiro, Guanabara, Grajaú). **Distribution:** Brazil (Amapá, Mato Grosso, Rio de Janeiro, Roraima), Colombia, Ecuador, El Salvador, Mexico, Peru, Trinidad and Tobago.

Oxysarcodexia nitida Soares & Mello-Patiu, 2010. **Type locality:** Peru (Madre de Dios, Avispas). **Distribution:** Brazil (Amazonas, Roraima), Peru.

Oxysarcodexia occulta Lopes, 1946. **Type locality:** Brazil (Rio de Janeiro, Guanabara, Corcovado). **Distribution:** Brazil (Ceará, Rio de Janeiro, Roraima), Colombia, Ecuador, Panama.

Oxysarcodexia thornax (Walker, 1849) = *Musca auriflua* Wiedemann, 1830 = *Sarcophaga thornax* Walker, 1849 = *S. pudica* Rondani, 1850 = *S. aurifinis* Walker, 1853 = *Hybopygia auricauda* Enderlein, 1928 = *Oxysarcodexia neotropicale* Prado & Fonseca, 1932 = *Stackelbergeola papei* Nandi, 1994. **Type locality:** Unknown. **Distribution:** Argentina, Bolivia, Brazil (Amapá, Amazonas, Ceará, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Rio de Janeiro, Rio Grande do Sul, Roraima, Santa Catarina, São Paulo), Ecuador, Guyana, Paraguay, Peru.

Oxysarcodexia xanthosoma (Aldrich, 1916) = *Sarcophaga xanthosoma* Aldrich, 1916. **Type locality:** Guatemala (Los Amates). **Distribution:** Argentina, Brazil (Amazonas, Ceará, Espírito Santo, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Roraima, São Paulo), Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Mexico, Panama, Peru.

Genus PECKIA Robineau-Desvoidy, 1830
Subgenus EUBOETTCHERIA Townsend, 1927

= *Ctenolioproctia* Enderlein, 1928 = *Ctenoprosballia* Enderlein, 1928 = *Neosarcodexia* Kreibohm, 1940 = *Neosarcodexia* Blanchard, 1942.

Peckia (Euboettcheria) anguilla (Curran & Walley, 1934) = *Sarcophaga anguilla* Curran & Walley, 1934. **Type locality:** Guyana (Kartabo). **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Ceará, Distrito Federal, Goiás, Maranhão, Mato Grosso, Minas Gerais, Rio de Janeiro, Roraima, São Paulo), Colombia, Costa Rica, Ecuador, Guyana, Mexico, Nicaragua, Panama, Peru, Trinidad and Tobago.

Peckia (Euboettcheria) collusor (Curran & Walley, 1934) = *Sarcophaga collusor* Curran & Walley, 1934. **Type locality:** Guyana (Kartabo). **Distribution:** Argentina, Bolivia, Brazil (Amazonas, Bahia, Ceará, Espírito Santo, Distrito Federal, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Pernambuco, Rio de Janeiro, Roraima, Santa Catarina), Colombia, Costa Rica, Ecuador, Guyana, Honduras, Panama, Peru, Trinidad and Tobago, Venezuela.

Subgenus PATTONELLA Enderlein, 1928

Peckia (Pattonella) intermutans (Walker, 1861) = *Sarcophaga intermutans* Walker, 1861 = *S. occipitalis* Thomson, 1869 = *S. cotyledonea* Aldrich, 1916 = *Pattonella magnifica* Enderlein, 1928. **Type locality:** Mexico. **Distribution:** Belize, Brazil (Amazonas, Ceará, Distrito Federal, Goiás, Maranhão, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Trinidad and Tobago, Venezuela.

Subgenus PECKIA Robineau-Desvoidy, 1830

= *Phrissopodia* Macquart, 1835 = *Paraphrissopoda* Townsend, 1915 = *Chrysostomomyia* Townsend, 1931 = *Paradiscochaeta* Blanchard, 1939.

Peckia (Peckia) chrysostoma (Wiedemann, 1830) = *Sarcophaga chrysostoma* Wiedemann, 1830 = *Musca chrysops* Wiedemann, 1830 = *Phrissopodia maculata* Macquart, 1843 = *Stephanostoma townsendi* Prado & Fonseca, 1932 = *Sarcophaga clotho* Curran & Walley, 1934 = *S. clotho* var. *impura* Curran & Walley, 1934 = *Chrysostomomyia bergi* Blanchard, 1939 = *Paraphrissopoda alvesia* Lehrer, 2006 = *P. hugolopesiana* Lehrer, 2006. **Type locality:** Virgin Islands (St. Thomas). **Distribution:** Argentina, Bahamas, Belize, Bolivia, Brazil (Amapá, Amazonas, Ceará,

Espírito Santo, Distrito Federal, Goiás, Maranhão, Minas Gerais, Pernambuco, Rio de Janeiro, Roraima, Santa Catarina, São Paulo), Chile, Cook Islands, Colombia, Costa Rica, Dominica, Ecuador, French Polynesia, Galápagos Islands, Guatemala, Guyana, Jamaica, Mexico, Nicaragua, Panama, Peru, Suriname, Trinidad and Tobago, Venezuela, United States, United States Virgin Islands.

Peckia (Peckia) pexata (Wulp, 1895) = *Sarcophaga pexata* Wulp, 1895 = *S. concinnata* Williston, 1896 = *S. otiosa* Williston, 1896 = *Paraphrissopoda catiae* Lehrer, 2006. **Type locality:** Mexico (Yucatán). **Distribution:** Barbados, Bolivia, Brazil (Amapá, Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Maranhão, Minas Gerais, Piauí, Rio de Janeiro, Rondônia, Roraima), Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, United States, Venezuela.

Subgenus SARCODEXIA Townsend, 1892

= *Cricobrachia* Enderlein, 1928.

Peckia (Sarcodexia) lambens (Wiedemann, 1830) = *Sarcophaga lambens* Wiedemann, 1830 = *S. amata* Wiedemann, 1830 = *S. innota* Walker, 1861 = *Sarcodexia sternodontis* Townsend, 1892 = *Sarcophaga pyophila* Neiva & Faria, 1913 = *S. freirei* Mattos, 1919 = *Cricobrachia anisitsiana* Enderlein, 1928 = *Liopygia tesselata* Enderlein, 1928 = *Ctenoprosballia butantani* Prado & Fonseca, 1932 = *Sarcodexia anisitsiana* var. *minuta* Kreibohm, 1940 = *S. anisitsiana* var. *diminuta* Blanchard, 1942. **Type locality:** West Indies. **Distribution:** Argentina, Bahamas, Bolivia, Brazil (Amapá, Amazonas, Ceará, Distrito Federal, Goiás, Maranhão, Mato Grosso, Minas Gerais, Rio de Janeiro, Paraná, Roraima, Santa Catarina, São Paulo), Cayman Islands, Chile, Colombia, Cook Islands, Costa Rica, Cuba, Ecuador, El Salvador, French Polynesia, Galápagos Islands, Guadeloupe, Guyana, Haiti, Honduras, Jamaica, Mexico, Panama, Paraguay, Peru, Puerto Rico, Saint Vincent and the Grenadines, Trinidad and Tobago, United States, Venezuela.

Peckia (Sarcodexia) tridentata (Hall, 1937) = *Sarcophaga tridentata* Hall, 1937 = *Euboettcheria alvarengai* Lopes & Tibana, 1982. **Type locality:** Brazil (Obrilonys [unidentified place]). **Distribution:** Brazil (Amazonas, Mato Grosso, Minas Gerais, Roraima), Colombia, Ecuador.

Subgenus SQUAMATODES Curran, 1927

= *Squamata* Curran, 1928 = *Adiscochaeta* Enderlein, 1928 = *Guanoxipha* Lehrer, 2012.

Peckia (Squamatodes) ingens (Walker, 1849) = *Sarcophaga ingens* Walker, 1849 = *Adiscochaeta abnormis* Enderlein, 1928 = *Squamata bicapitata* Townsend, 1931. **Type locality:** Unknown. **Distribution:** Argentina, Belize, Brazil (Amapá, Amazonas, Bahia, Ceará, Distrito Federal, Maranhão, Mato Grosso, Minas Gerais, Pará, Rio de Janeiro, Rio Grande do Sul, Roraima, São Paulo), Colombia, Costa Rica, Ecuador, Guyana, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Venezuela.

Genus RAVINIA Robineau-Desvoidy, 1863

= *Punasarcophaga* Townsend, 1915 = *Andinoravinia* Townsend, 1917 = *Chaetoravinia* Townsend, 1917 = *Euravinia* Townsend, 1917 = *Miltoravinia* Townsend, 1917 = *Trixosarcophaga* Townsend, 1917 = *Catasarcophaga* Townsend, 1927 = *Engelina* Enderlein, 1928.

Ravinia belforti (Prado & Fonseca, 1932) = *Euravinia belforti* Prado & Fonseca, 1932 = *Dienchaeta auriceps* Enderlein, 1928. **Type locality:** Brazil (São Paulo, São Paulo). **Distribution:** Argentina, Brazil (Ceará, Distrito Federal, Goiás, Maranhão, Mato Grosso, Minas Gerais, Pará, Paraná, Rio de Janeiro, Roraima, São Paulo), Colombia, Paraguay, Trinidad and Tobago.

Ravinia effrenata (Walker, 1861) = *Sarcophaga effrenata* Walker, 1861 = *S. xanthopyga* Wulp, 1895 = *S. conjungens* Wulp, 1895 = *S. adamsii* Hall, 1928. **Type locality:** Mexico. **Distribution:** Bahamas, Brazil (Maranhão, Roraima), Colombia, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Jamaica, Mexico, Panama, Peru, United States.

Genus RETROCITOMYIA Lopes, 1982

Retrocitomyia retrocita (Hall, 1933) = *Sarcophaga retrocita* Hall, 1933 = *Paraphrissopoda setifacies* Lopes, 1945 = *Peckia irwini* Dodge, 1966. **Type locality:** Panama (Corazal). **Distribution:** Brazil (Espírito Santo, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Rio de Janeiro, Rio Grande do Norte, Roraima), Colombia, El Salvador, Guyana, Panama, Peru.

Genus SARCOFAHRTIOPSIS Hall, 1930

= *Cataphyto* Townsend, 1935.

Sarcofahrtiopsis cuneata (Townsend, 1935) = *Cataphyto cuneata* Townsend, 1935. **Type locality:** Brazil (Pernambuco, Tapéra). **Distribution:** Argentina, Brazil (Amazonas, Ceará, Maranhão, Pará, Pernambuco, Rio de Janeiro, Roraima), Colombia, Costa Rica, Dominica, Ecuador, Trinidad and Tobago, Venezuela.

Genus TITANOGRYPA Townsend, 1860
Subgenus CUCULLOMYIA Roback, 1954

Titanogrypa (Cucullomyia) alvarengai (Lopes, 1976) = *Cuculomyia alvarengai* Lopes, 1976. **Type locality:** Brazil (Roraima, Surumu). **Distribution:** Brazil (Roraima).

Genus TRICHARAEA Thomson, 1869
Subgenus SARCOPHAGULA Wulp, 1887

= *Sarcophilodes* Brauer & Bergenstamm, 1889 = *Pseudosarcophagula* Townsend, 1927 = *Desvoidyella* Enderlein, 1928 = *Anapunaphyto* Dodge, 1968.

Tricharaea (Sarcophagula) apicata (Dodge, 1968) = *Anapunaphyto apicata* Dodge, 1968. **Type locality:** Panama (Canal Zone, Barro Colorado Island). **Distribution:** Brazil (Roraima), Panama.

Tricharaea (Sarcophagula) occidua (Fabricius, 1794) = *Musca occidua* Fabricius, 1794 = *Tachina pusilla* Wiedemann, 1830 = *Sarcophaga sugens* Wiedemann, 1830 = *S. parvula* Wiedemann, 1830 = *S. parva* Walker, 1853 = *S. despecta* Thomson, 1869 = *Sarcophagula imbecilla* Wulp, 1896. **Type locality:** West Indies ['Americae meridionalis']. **Distribution:** Argentina, Australia, Bolivia, Brazil (Amazonas, Ceará, Distrito Federal, Goiás, Maranhão, Mato Grosso do Sul, Minas Gerais, Pará, Pernambuco, Rio de Janeiro, Roraima, São Paulo), Chile, Colombia, Cuba, Dominica, Ecuador, El Salvador, French Polynesia, Galápagos Islands, Guyana, Haiti, Hawaii, Mexico, Panama, Paraguay, Peru, Puerto Rico, United States, Venezuela.

Tricharaea (Sarcophagula) ramirezi (Lopes, 1990) = *Anapunaphyto ramirezi* Lopes, 1990. **Type locality:** Venezuela (Los Lanos). **Distribution:** Brazil (Minas Gerais, Roraima), Venezuela.

DISCUSSION

This study brings several advances to the comprehension of Amazon biodiversity. They are summarized in Table 1. Besides the studies covering the dipterofauna in the early 1990s, there are checklists of the arachnids (ICMBio, 2021; Aguiar & Bührnheim, 1991; Linardi *et al.,* 1991), annelids (Righi, 1990), bryophytes (Yano, 1992), fungi (Cavalcanti *et al.,* 1999), and vertebrates (ICMBio, 2021; Taddei & Reis, 1980; Linardi *et al.,* 1991). Hence, this study updates the Diptera information, but the gap of knowledge is still large and awaits additional studies.

The main difference between this study and the one performed by Rafael (1991) is the addition of 24 families distributed on Ilha de Maracá. The total diversity considering the studies of 1991 and 2015 is of 47 families of Diptera with records to the ESEC Maracá. All genera sampled in the 2015's expedition of 10 families – Bibionidae, Cecidomyiidae, Keroplatidae, Scatopsidae, Mythicomyiidae, Curtonotidae, Ephydridae, Agromyzidae, Pyrgotidae, and Anthomyiidae – are firstly recorded to the state of Roraima or to Brazil (see Table 1), which is a great advance in the taxonomy of the Brazilian flies. Also, only three families – Sciomyzidae, Calliphoridae, and Mesembrinelidae – have neither new records nor species assigned to a specific epithet.

The role of the *lavrado* physiognomy in the Amazonian ecosystem is still poorly understood in terms of its endemic fauna. Only half of the identified families of flies (22) were sampled in the savanna (site 4); about 6.9% of

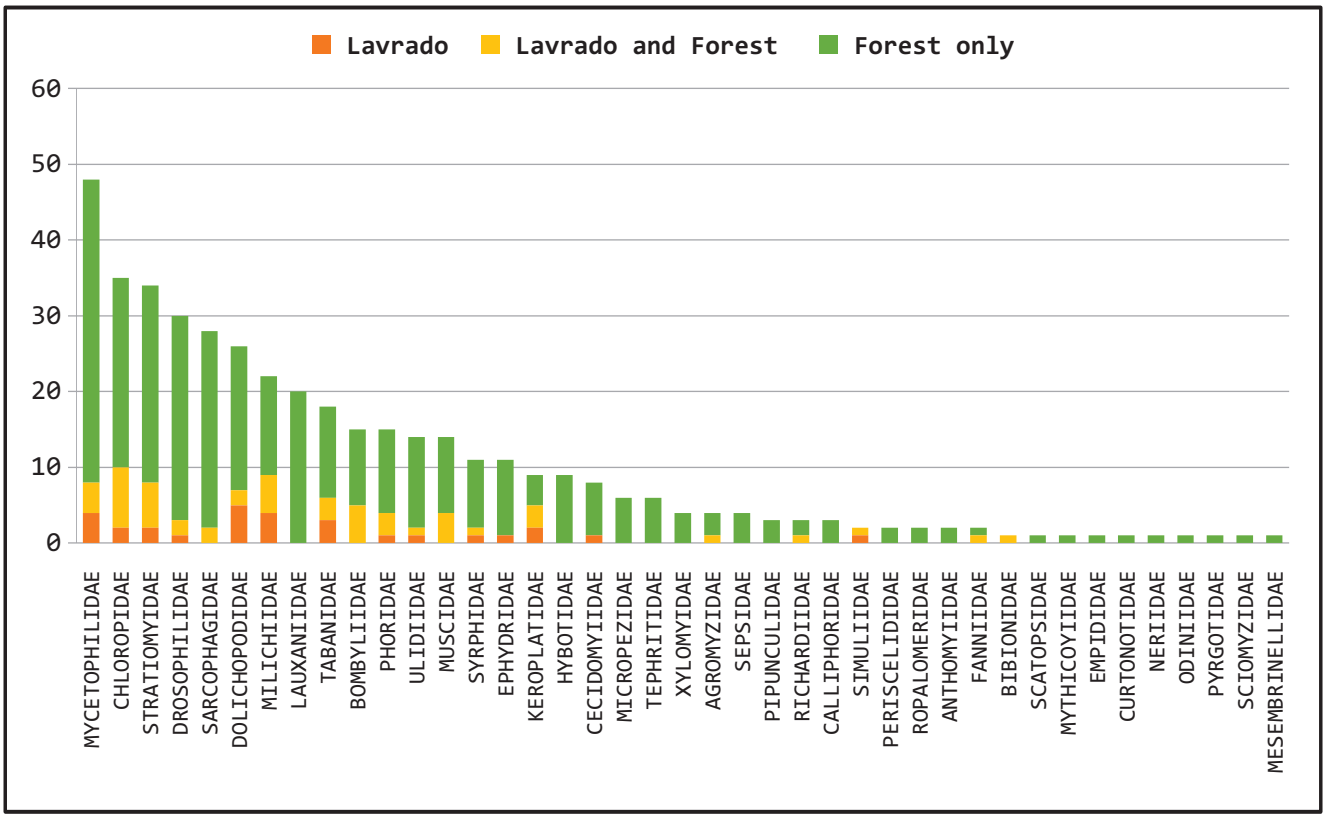


Figure 5. Graph of species distribution by physiognomy and abundance of each family of Diptera based on the 2015's ESEC Maracá expedition. The orange bar represents the diversity present only in the *lavrado* (site 4); the yellow bar represents the diversity present both in the *lavrado* and in the forest; the green bar represents the diversity present only in the forest (remaining sites).

the species (29) were restricted to *lavrado,* and 12.8% of the taxa (54) were also found in forested areas (Fig. 5). These numbers could indicate that, although the forested areas of Ilha de Maracá harbor the majority of flies (337), the low number of shared fauna denotes that the savanna physiognomy might play an important role in the maintenance of part of the Roraima diversity. However, further studies to compare the Diptera diversity of the two physiognomies are needed to confirm this assumption, as the methodology used to sample the Diptera fauna did not aimed it. Examining the ESEC map (Fig. 1), it is possible to realize that the forested areas (collecting sites: 1-3; 4-9) were much more prospected with Malaises traps than the *lavrado* (only collecting site 4) and consequently there were different collecting efforts between them. As a result, for example, the greatest diversity of bee flies (Bombyliidae) identified in the forested areas of the ESEC, although this family is known to be more abundant in open and arid areas of the world, should be herein interpreted as an artefact of the sampling method.

Efforts in knowing the diversity associated with natural landscapes are always needed since habitat loss is becoming inevitable. Monitoring biodiversity through continued inventories is an important task because, as our study shows, it substantially increases the diversity knowledge and provides means for defining priority areas for conservation.

AUTHORS' CONTRIBUTIONS: P.R.R., M.A.T.M., R.L.F.: field work, field methodology, sorting samples; **P.R.R., R.L.F.:** conceptualization, methodology, writing (original draft, visualization, investigation); **P.R.R.:** plates' layout, tables, graphics editing; **P.R.R., D.A.F., R.L.F.:** final revision. **P.R.R., D.A.F., R.A.-R., E.M.A., D.S.A., L.H.G.-A., R.S.C., D.D.D.C., C.J.B.C., G.B.F., H.F.F., L.R.P.G., M.S.G., C.J.E.L., S.L., M.A.T.M., D.W.A.M, R.L.M., C.A.M.-P., M.A.M., M.N.M., S.S.O., T.P.L.P., A.P.-C., G.P., J.A.R., J.R.S., MS., D.C.S.-P., V.C.S., V.R.S., M.V.U.-G., L.V.V., C.Y., R.L.F. :** identification (see Table 1), writing of family content (see Table 1), review and editing; read and approved the final version of the manuscript.

CONFLICTS OF INTEREST: The authors declare that they have no conflicts of interest.

FUNDING INFORMATION: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (C.A.M.P., grant #308951/2018-2; C.J.B.C., grant #309873/2016-9; C.J.E.L., grant #302751/2019-0; D.D.D.C., grant #151205/2021-3; D.A.F., grants #444338/2018-7 and #300707/2019-3; D.S.A., grant #440549/2015-9; M.S.G., grants #163876/2017-7 and #314120/2018-1; R.S.C., grant #429984/2016-2; S.S.O., grant #428471/2016-1), Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) (D.A.F. postdoctoral scholarship grant #88887.473150/2020-00; J.R.S. and M.A.M. PhD scholarship; P.R.R. postdoctoral fellowship from the Program Acordo CAPES/CNPQ – PROTAX II – grants #440482/2015-1, #176040/2018-00, and #333912/2019-00; R.L.F. CAPES – Finance Code 001), the Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro (FAPERJ) (L.H.G.-A., grant #E-26/200.083/2019; C.A.M.P., grant #E-26/200.078/2019), and Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) (D.A.F., grant #2014/05793-1; D.S.A., grants #2016/50369-9 and #2021/08713-2; G.P., grant #2016/02475-4; H.F.F., grant #2018/14504-4; M.A.T.M., grant #2012/23200-2; P.R.R., grant #2012/12843-0; R.L.F., grant #2013/16524-9).

ACKNOWLEDGEMENTS: We are grateful to Mateus Henrique Santos (UEPG) for providing the map of Fig. 1 and the remaining collecting members of the survey – Lívia Pinheiro (MZUSP), Gabriel Biffi (MZUSP), and Iran Mandulão, along with Luciana Pacca and the ICMBio team. R.L.F. is grateful to Laura Rocha Prado (Arizona University) for the keroplatid specimens from Caracaraí (Roraima, Brazil). D.D.D.C. is grateful to the Laboratory of Systematic and Diversity from UFABC and T.P.L.P. is grateful to the Institute of Biosciences of the University of São Paulo and Silvio Nihei (USP) for giving conditions and structure for the identification of specimens. M.S. and S.L. thank the Postgraduate Program in Entomology ESALQ/USP. R.S.C. thanks Márcio Oliveira and Matheus Soares (Manaus, Brazil), who kindly provided photos of specimens identified for the 1991 paper on the insects of Ilha de Maracá. L.H.G.-A. and V.R.S. thank Caio C.D. Corrêa (MNRJ), C.J.B.C. thanks João M. Fogaça (UFPR), and S.S.O. thanks Welinton R. Lopes (UFG) for the photos of the specimens. We also thank the anonymous reviewers and the academic editor for improving the manuscript.

REFERENCES

Aczél, M.L. 1950. Catalogo de la subfamilia americana "Richardiinae" (Dipt. Acalypt. Otitidae). *Acta Zoologica Lilloana,* 9: 5-47.

Aczél, M.L. 1961. A revision of American Neriidae (Diptera, Acalyptratae). *Studia Entomologica,* 4: 257-346.

Adler, P.H. 2021. *World blackflies (Diptera: Simuliidae): a comprehensive revision of the taxonomic and geographical inventory.* Available: https://biomia.sites.clemson.edu/pdfs/blackflyinventory.pdf. Access: 01/06/2021.

Adler, P.H.; Currie, D.C. & Wood, D.M. 2004. *The Black Flies (Simuliidae) of North America.* New York, Cornell University Press,.

Aguiar, N.O. & Bührnheim, P.F. 1991. Pseudoscorpiões foréticos de *Stenodontes spinibarbis* (Lin., 1758) (Coleoptera) e redescrição de *Lechytia chthoniiformis* (Balzan, 1890) (Pseudoscorpiones, Chthoniidae) da Ilha de Maracá – Roraima. *Acta Amazonica,* 21: 425-433. https://doi.org/10.1590/1809-43921991211433.

Albuquerque, D.O.; Pamplona, D.M. & de Carvalho, C.J.B. 1981. Contribuição ao conhecimento dos *Fannia* R.-D. 1830 da Região Neotropical (Diptera, Fanniidae). *Arquivos do Museu Nacional,* 56: 9-34.

Albuquerque, L.P. 1980a. Estudos dos Micropezídeos da Bacia Amazônica. I – Contribuição à Sistemática de Micropezidae e estudo do gênero *Taeniaptera* Macquart, 1835 (Diptera – Acalyptratae). *Acta Amazonica,* 10(3): 659-670. https://doi.org/10.1590/1809-43921980103659.

Albuquerque, L.P. 1980b. Estudo dos Micropezídeos da Bacia Amazônica. II – Redescrição de três espécies e conhecimento de duas espécies novas para a ciência de *Taeniaptera* Macquart, 1835 (Diptera – Micropezidae). *Acta Amazonica,* 10(4): 863-881. https://doi.org/10.1590/1809-43921980104863.

Albuquerque, L.P. 1991. Taeniapterinae (Diptera, Micropezidae) da Ilha de Maracá e da localidade de Pacaraima, Roraima, Brazil. *Acta Amazonica,* 21: 3-13. https://doi.org/10.1590/1809-43921991211013.

Ale-Rocha, R. & Freitas-Silva, R.A.P. 2021. Hybotidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/15092. Access: 18/06/2021.

Ale-Rocha, R. & Wendt, L.D. 2021. Richardiidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/694. Access: 25/01/2021.

Almeida, J.R.; de Carvalho, C.J.B. & Malkowski, S.R. 1985. Dípteros sinantrópicos de Curitiba e arredores (Paraná, Brasil). II. Fanniidae e Anthomyiidae. *Anais da Sociedade Entomológica do Brasil,* 14(2): 277-288.

Alvim, E. & Ale-Rocha, R. 2016. Two new species of *Acrocephalomyia* Ibáñez-Bernal & Hernández-Ortiz, 2012 from Brazil (Diptera, Ropalomeridae) and a key to known species. *Zootaxa,* 4067(1): 57-64.

Alvim, E. & Ale-Rocha, R. 2021. Ropalomeridae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/15092. Access: 20/10/2021.

Amaral, E.M.; Oliveira, S.S. & Falaschi, R.L. 2022. An unknown world in the Neotropical region: a complete life cycle of a new species of *Monoclona* Mik, 1886 (Diptera: Mycetophilidae: Sciophilinae). *Zootaxa,* 5091: 107-130. https://doi.org/10.11646/zootaxa.5091.1.4.

Amat, E. 2017. Calliphoridae (Diptera) do noroeste da América do Sul: diversidade, distribuição e código de barras genético. (Doctoral Thesis). Instituto Nacional de Pesquisas da Amazônia, Manaus, AM, Brazil. https://bdtd.inpa.gov.br/handle/tede/2608.

Ament, D.C. 2014. Taxonomic revision of the genus *Chaetocnemistoptera* Borgmeier (Diptera: Phoridae), with the description of five new species. *Zootaxa,* 3753(4): 301-322. https://doi.org/10.11646/zootaxa.3753.4.1.

Ament, D.C. 2017a. Lista das espécies de Phoridae (Insecta, Diptera) do Estado do Mato Grosso do Sul. *Iheringia, Série Zoologia,* 107: 01-02. https://doi.org/10.1590/1678-4766e2017136.

Ament, D.C. 2017b. Phylogeny of Phorinae *sensu latu* (Diptera: Phoridae) inferred from a morphological analysis with comprehensive taxon sampling and an uncommon method of character coding. *Zoological Journal of the Linnean Society,* 181(1): 151-188. https://doi.org/10.1093/zoolinnean/zlx038.

Ament, D.C. & Amorim, S.D. 2016. Taxonomic revision of *Coniceromyia* Borgmeier (Diptera: Phoridae), with the description of three new species from Brazil. *Zootaxa,* 4086(1): 1-87. https://doi.org/10.11646/zootaxa.4086.1.1.

Ament, D.C. & Pereira T.P.L. 2021. Phoridae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/183530. Access: 26/09/2021.

Ament, D.C.; Kung, G.A. & Brown, B.V. 2020. Forty-one new species of *Coniceromyia* Borgmeier (Diptera: Phoridae), an identification key, and new distributional records for the species of the genus. *Zootaxa,* 4830(1): 1-61. https://doi.org/10.11646/zootaxa.4830.1.1.

Amorim, D.S. 2009a. Catalogue of Neotropical Scatopsidae (Diptera: Psychodomorpha). *Neotropical Diptera,* 4: 1-17.

Amorim, D.S. 2009b. Scatopsidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.* Ottawa, NRC-CNRC. v. 1, p. 347-355.

Amorim, D.S. & Brown, B.V. 2020. Urban Scatopsidae (Diptera) of Los Angeles, California, United States. *Insect Systematics and Diversity,* 4(1): 1-41, https://doi.org/10.1093/isd/ixaa001.

Amorim, D.S. & Rindal, E. 2007. Phylogeny of the Mycetophiliformia, with proposal of the subfamilies Heterotrichinae, Ohakuneinae, and Chiletrichinae for the Rangomaramidae (Diptera, Bibionomorpha). *Zootaxa,* 1535: 1-92. https://doi.org/10.11646/zootaxa.1535.1.1.

Amorim, D.S. & Vasconcelos, C.M. 1989. First known Brazilian species of the genera *Scutops* and *Neoscutops* (Diptera, Periscelididae), with comments on the relationships among the species in each genus. *Memórias do Instituto Oswaldo Cruz,* 84(4): 37-44. https://doi.org/10.1590/S0074-02761989000800012.

Amorim, D.S.; Brown; B.V., Boscolo, D.; Ale-Rocha, R.; Alvarez-Garcia, D.M.; Balbi, M.I.P.A.; Barbosa, A.M.; Capellari, R.S.; de Carvalho, C.J.B.; Couri, M.S.; Dios, R.V.P.; Fachin, D.A.; Ferro, G.B.; Flores, H.F.; Frare, L.M.; Gudin, F.M.; Hauser, M.; Lamas, C.J.E.; Lindsay, K.G.; Marinho, M.A.T.; Marques, D.W.A.; Marshall, S.A.; Mello-Patiu, C.A.; Menezes, M.A.; Morales, M.N.; Nihei, S.S.; Oliveira, S.S.; Pirani, G.; Ribeiro, G.C.; Riccardi, P.R.; Santis, M.D.; Santos, D.; Santos, J.R.; Silva, V.C.; Wood, E.M. & Rafael, J.A. 2022. Vertical stratification of insect abundance and species richness in an Amazonian tropical forest. *Scientific Reports,* 12: 1734. https://doi.org/10.1038/s41598-022-05677-y.

Amorim, D.S.; Silva, V.C. & Balbi, M.I.P.A. 2002. Estado do Conhecimento dos Diptera Neotropicais. *In:* Costa, C.; Vanin, S.A.; Lobo, J.M. & Melic, A. (Orgs.). *Proyecto de Red Iberoamericana de Biogeografía y Entomología Sistemática (PRIBES)*. Zaragoza, Sociedad Entomológica Aragoneza, v. 2, p. 29-36.

Barbosa, L. 2021a. Calliphoridae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/732. Access: 20/01/2021.

Barbosa, L. 2021b. Mesembrinellidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/732. Access: 20/01/2021.

Barbosa, R.I.; Campos, C.; Pinto, F. & Fearnside, P.M. 2007. The "Lavrados" of Roraima: Biodiversity and conservation of Brazil's amazonian savannas. *Functional Ecosystems and Communities,* 1(1): 29-41.

Barker, G.M.; Knutson, L; Vala, J.C.; Coupland, J.B. & Barnes, J.K. 2004. Overview of the biology of marsh flies (Diptera: Sciomyzidae), with special reference to predators and parasitoids of terrestrial gastropods. *In:* Barker, G.M. (Ed.). *Natural enemies of terrestrial molluscs.* Wallingford, CABI Publishing. p. 159-225.

Barnes, J.K.; Higgins, L.E. & Sabrosky, C.W. 1992. Life histories of *Pseudogaurax* species (Diptera: Chloropidae), descriptions of two new species, and ecology of *Nephila clavipes* (Linnaeus) (Araneae: Tetragnathidae) egg predation. *Journal of Natural History,* 26(4): 823-834. https://doi.org/10.1080/00222939200770501.

Baumgartner, D.L. & Greenberg, B. 1984. The genus *Chrysomya* (Diptera: Calliphoridae) in the New World. *Journal of Medical Entomology,* 21(1): 105-113. https://doi.org/10.1093/jmedent/21.1.105.

Benavent-Corai, J.; Martinez, M. & Jiménez Peydró, R. 2005. Catalogue of the host plants of the world Agromyzidae (Diptera). *Bollettino di Zoologica Agraria e di Bachicoltura,* 37(Suppl): 1-97.

Berg, C.O. & Knutson, L.V. 1978. Biology and systematics of the Sciomyzidae. *Annual Review of Entomology,* 23: 239-258. https://doi.org/10.1146/annurev.en.23.010178.001323.

Bickel, D.J. 1998. Synonymic notes on some of Thomson's New World Dolichopodidae (Diptera). *Entomological News,* 109(1): 61-65.

Bickel, D.J. & Sinclair, B.J. 1997. The Dolichopodidae (Diptera) of the Galápagos Islands, with notes on the New World fauna. *Entomologica Scandinavica,* 28: 241-270. https://doi.org/10.1163/187631297X00079.

Bonatto, S. 2001. *Revisão e análise cladística de Mesembrinellidae stat. restaur. (Diptera: Oestroidea).* (Doctoral Thesis). Universidade Federal do Paraná, Curitiba.

Borkent, A.; Brown, B.V.; Adler, P.H.; Amorim, D.S.; Barber, K.; Bickel, D.; Boucher, S.; Brooks, S.E.; Burger, J.; Burington, Z.L.; Capellari, R.S.; Costa, D.N.R.; Cumming, J.M.; Curler, G.; Dick, C.W.; Epler, J.H.; Fisher, E.; Gaimari, S.D.; Gelhaus, J.; Grimaldi, D.A.; Hash, J.; Hauser, M.; Hippa,

H.; Ibáñez-Bernal, S.; Jaschhof, M.; Kameneva, E.P.; Kerr, P.H.; Korneyev, V.; Korytkowski, C.A.; Kung, G.; Kvifte, G.M.; Lonsdale, O.; Marshall, S.A.; Mathis, W.N.; Michelsen, V.; Naglis, S.; Norrbom, A.L.; Paiero, S.; Pape, T; Pereira-Colavite, A.; Pollet, M.; Rochefort, S.; Rung, A.; Runyon, J.B.; Savage, J.; Silva, V.C.; Sinclair, B.J.; Skevington, J.H.; Stireman III, J.O.; Swann, J.; Vilkamaa, P.; Wheeler, T.; Whitworth, T.; Wong, M.; Wood, M.D.; Woodley, N.; Yau, T.; Zavortink, T.J. & Zumbado, M.A. 2018. Remarkable fly (Diptera) diversity in a patch of Costa Rican cloud forest: Why inventory is a vital science. *Zootaxa,* 4402: 53-90. https://doi.org/10.11646/zootaxa.4402.1.3.

Boucher, S. 2010. Agromyzidae (leaf-mining flies). *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America,* NRC-CNRC, Ottawa, 2: 1057-1071. https://doi.org/10.1139/9780660199580.

Brake, I. 2000. Phylogenetic systematics of the Milichiidae (Diptera, Schizophora). *Entomologica scandinavica,* 57(Suppl): 1-120.

Brake, I. & Bächli, G. 2008. Drosophilidae (Diptera). *In: World Catalogue of Insects.* Stenstrup, Apollo Books., v. 9, 412p.

Brake, I. & Freidberg, A. 2003. Revision of *Desmometopa* Loew (*Litometopa* Sabrosky) (Diptera: Milichiidae), with descriptions of six new species. *Proceedings of the Entomological Society of Washington,* 105: 265-282.

Brasil, 2013. Instrução Normativa Nº 59, de 18 de dezembro de 2013. *Ementa: exclui da lista de pragas quaternárias ausentes... Diário Oficial da República Federativa do Brasil,* Brasília, DF, 19/12/2013, Seção 1, 91-92. https://www.defesa.agricultura.sp.gov.br/legislacoes/instrucao-normativa-mapa-59-de-18-12-2013,984.html.

Brooks, S.E.; Cumming, J.F.; Limeira-de-Oliveira, F. & Pollet, M. 2018. New species and records of *Cheiromyia* Dyte from Brazil and French Guiana (Diptera: Dolichopodidae). *Zootaxa,* 4444(3): 267-282. https://doi.org/10.11646/zootaxa.4444.3.3.

Brooks, S.E.; Cumming, J.M. & Pollet, M.A.A. 2010. Revision of the Neotropical genus *Cheiromyia* Dyte (Diptera: Dolichopodidae). *Zootaxa,* 2333: 41-58. https://doi.org/10.11646/zootaxa.2333.1.3.

Brown, B.V. 2000. Revision of the "*Apocephalus* miricauda-Group" of ant-parasitizing flies (Diptera: Phoridae). *Contributions in Science (Los Angeles),* 482: 1-62. https://www.biodiversitylibrary.org/part/241289.

Brown, B.V. 2001. Taxonomic revision of *Neodohrniphora,* subgenus *Eibesfeldtphora* (Diptera: Phoridae). *Insect Systematics & Evolution,* 32(4): 393-409. https://doi.org/10.1163/187631201x00272.

Brown, B.V. 2002. Revision of the *Apocephalus pergandei*-group of ant-decapitating flies (Diptera: Phoridae). *Contributions in Science (Los Angeles),* 496: 1-58. https://www.biodiversitylibrary.org/itemdetails/215105.

Brown, B.V. 2005. Revision of the *Melaloncha (M.) furcata*-group of bee-killing flies (Diptera: Phoridae). *Insect Systematics & Evolution,* 36(3): 241-258. https://doi.org/10.1163/187631205788838384.

Brown, B.V. 2010. Phoridae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.* Ottawa, NRC-CNRC. v. 2, p. 725-762.

Brown, B.V. 2018. A second contender for "world's smallest fly" (Diptera: Phoridae). *Biodiversity Data Journal,* 6: e22396. https://doi.org/10.3897/BDJ.6.e22396.

Brown, B.V. 2020. *Update of Borgmeier's 1968 catalog of world phorids.* Available: https://www.phorid.net/pcat. Access: 01/04/2021.

Brown, B.V. & Kung, G. 2007. Revision of the New World *Dohrniphora* Dahl species with hind tibial setae (Diptera: Phoridae). *Arthropod Systematics & Phylogeny,* 65(2): 157-237. https://doi.org/10.11646/zootaxa.2699.1.1.

Brown, B.V. & Kung, G.A. 2010. Revision of the New World *Dohrniphora* Dahl species lacking large hind tibial setae (Diptera: Phoridae). *Zootaxa,* 2699(1): 1-142. https://doi.org/10.11646/zootaxa.2699.1.1.

Brown, B.V.; Amorim, D.S. & Kung, G.A. 2015. New morphological characters for classifying Phoridae (Diptera) from the structure of the thorax. *Zoological Journal of the Linnean Society,* 173(2): 424-485. https://doi.org/10.1111/zoj.12208.

Brown, B.V; Borkent, A.; Adler, P.H.; Amorim, D.S.; Barber, K.; Bickel, D.; Boucher, S.; Brooks, S.E.; Burger, J.; Burington, Z.L.; Capellari, R.S.; Costa, D.N.R.; Cumming, J.M.; Curler, G.; Dick, C.W.; Epler, J.H.; Fisher, E.; Gaimari, S.D.; Gelhaus, J.; Grimaldi, D.A.; Hash, J.; Hauser, M.; Hippa, H.; Ibáñez-Bernal, S.; Jaschhof, M.; Kameneva, E.P.; Kerr, P.H.; Korneyev, V.; Korytkowski, C.A.; Kun, G.; Kvifte, G.M.; Lonsdale, O.; Marshall, S.A.; Mathis, W.; Michelsen, V.; Naglis, S.; Norrbom, A.L.; Paiero, S.; Pape, T.; Pereira-Colavite, A.; Pollet, M.; Rochefort, S.; Rung, A.; Runyon, J.B.; Savage, J.; Silva, V.C.; Sinclair, B.J.; Skevington, J.H.; Stireman, J.O.; Swann, J.; Thompson, C.F.; Vilkamaa, P.; Wheeler, T.; Whitworth, T.; Wong, M.; Wood, D.M.; Woodley, N.; Yau, T.; Zavortink, T.J. & Zumbado, M.A. 2018. Comprehensive inventory of true flies (Diptera) at a tropical site. *Communications Biology,* 21: 1-8. https://doi.org/10.1038/s42003-018-0022-x.

Buck, M. & Marshall, S.A. 2004. A review of the genus *Longina* Wiedemann, with descriptions of two new species (Diptera, Neriidae). *Studia Dipterologica,* 11: 23-32. https://doi.org/10.11646/zootaxa.3785.2.2.

Buenaventura, E. & Pape, T. 2018. Phylogeny, evolution and male terminalia functionality of Sarcophaginae (Diptera: Sarcophagidae). *Zoological Journal of the Linnean Society,* 183(4): 808-906. https://doi.org/10.1093/zoolinnean/zlx070.

Cabrini, I.; Grella, M.D.; Andrade, C.F.S. & Thyssen, P.J. 2013. Richness and composition of Calliphoridae in an Atlantic Forest fragment: implication for the use of dipteran species as bioindicators. *Biodiversity and Conservation,* 22(11): 2635-2643. https://doi.org/10.1007/s10531-013-0545-x.

Capellari, R.S. 2015. Review of the *longipalpus*-group of *Chrysotus* Meigen (Diptera: Dolichopodidae), with description of four new species. *Neotropical Entomology,* 44: 47-58. https://doi.org/10.1007/s13744-014-0254-5.

Capellari, R.S. 2018. Gynandromorphs in *Chrysotus spectabilis* (Diptera: Dolichopodidae) and considerations for sclerite homology for the Diptera terminalia. *Journal of Insect Biodiversity,* 7(3): 51-57. https://doi.org/10.12976/jib/2018.07.3.2.

Capellari, R.S. 2021. Dolichopodidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/839. Access: 25/09/2021.

de Carvalho, C.J.B. 1989. Classificação de Muscidae (Diptera): uma proposta através da análise cladística. *Revista Brasileira de Zoologia,* 6: 627-648. https://doi.org/10.1590/S0101-81751989000400009.

de Carvalho, C.J.B. 1991. Descrição de *Fannia euchaetophora,* sp. n. (Diptera, Fanniidae) da Ilha de Maracá, Roraima, Brasil. *Revista Brasileira de Entomologia,* 35: 35-38.

de Carvalho, C.J.B. & Couri, M.S. 1991. Muscidae, Fanniidae e Calliphoridae (Diptera) do Projeto Maracá, Roraima, Brasil. *Acta Amazonica,* 21: 35-43. https://doi.org/10.1590/1809-43921991211043.

de Carvalho, C.J.B. & Couri, M.S. 2002. Part I. Basal groups. *In:* de Carvalho, C.J.B. (Ed.). *Muscidae (Diptera) of the Neotropical Region: Taxonomy.* Curitiba, Editora Universidade Federal do Paraná. p. 17-132.

de Carvalho, C.J.B. & Couri, M.S. 2021a. Fanniidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/1746. Access: 10/08/2021.

de Carvalho, C.J.B. & Couri, M.S. 2021b. Muscidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/1506. Access: 10/08/2021.

de Carvalho, C.J.B.; Couri, M.S.; Pont, A.C.; Pamplona, D. & Lopes, S.M. 2005. A catalogue of the Muscidae (Diptera) of the Neotropical Region. *Zootaxa,* 860: 1-282. https://doi.org/10.11646/zootaxa.860.1.1.

de Carvalho, C.J.B.; Haseyama, K.L.F.; Gomes, L.R.P. & Zafalon-Silva, Â. 2019. New genus and new species of Muscidae (Diptera) from the Andes highlands and discussion of its phylogenetic position based on morphological evidence. *Austral Entomology,* 58: 484-497. https://doi.org/10.1111/aen.12400.

de Carvalho, C.J.B.; Pont, A.C.; Couri, M.S. & Pamplona, D. 2003. A catalogue of the Fanniidae (Diptera) of the Neotropical Region. *Zootaxa,* 219: 1-32. https://doi.org/10.11646/zootaxa.219.1.1.

Carvalho-Filho, F.S.; Almeida, F.R. de A. & Esposito, M.C. 2016. Description of a nomen nudum species of *Liriomyza* Mik and first record of *Liriomyza blechi* Spencer from Brazil (Insecta: Diptera: Agromyzidae). *Zootaxa,* 4088(3): 445-450. https://doi.org/10.11646/zootaxa.4088.3.10.

Carvalho-Filho, F.S.; Duarte, L.B. & Gottschalk, M.S. 2019. A new species of *Rhinoleucophenga* (Diptera: Drosophilidae), parasite of the scale insect pest *Praelongorthezia praelonga* (Sternorrhyncha: Ortheziidae) from the Brazilian Amazon. *Zootaxa,* 4551: 583-592. https://doi.org/10.11646/zootaxa.4551.5.6.

Carvalho-Filho, F.S.; Pirani, G. & Kloss, T.G. 2018. A new species and notes on unusual natural history of *Cladochaeta* Coquillett, 1900 (Diptera: Drosophilidae). *Zootaxa,* 4410: 483-496. https://doi.org/10.11646/zootaxa.4410.3.3.

Castellón, E.G.; Araújo Fillho, N.A.; Fé, N.F. & Alves, J.M.C. 1991. Flebotomíneos (Diptera: Psychodidae) no estado de Roraima. III. Listagem das espécies no estado. *Acta Amazonica,* 21: 51-54. https://doi.org/10.1590/1809-43921991211054.

Cavalcanti, L.H.; Santo, E.J. & Gomes, N.A. 1999. Myxomycetes do Estado de Roraima, com especial referência para a Estação Ecológica de Maracá (Amajari-RR, Brasil). *Acta Amazonica,* 29(2): 195-200. https://doi.org/10.1590/1809-43921999292200.

Cerretti, P.; Stireman III, J.O.; Badano, D.; Gisondi, S.; Rognes, K.; Giudice, G.L. & Pape, T. 2019. Reclustering the cluster flies (Diptera: Oestroidea, Polleniidae). *Systematic Entomology,* 44(4): 957-972. https://doi.org/10.1111/syen.12369.

Cerretti, P.; Stireman III, J.O.; Pape, T.; O'Hara, J.E.; Marinho, M.A.T.; Rognes, K. & Grimaldi, D.A. 2017. First fossil of an oestroid fly (Diptera: Calyptratae: Oestroidea) and the dating of oestroid divergences. *PLoS ONE,* 12(8): e0182101. https://doi.org/10.1371/journal.pone.0182101.

Collin, J.E. 1933. *Diptera of Patagonia and South Chile. Part IV. Empididae.* London, British Museum of Natural History.

Coscarón, S. & Papavero, N. 2009. Catalogue of Neotropical Diptera. Tabanidae. *Neotropical Diptera,* 16: 1-199.

Couri, M.S. 1979. Sôbre o gênero *Phaonantho* Albuquerque, 1957 com descrição de uma espécie nova e notas sinonímicas (Diptera, Anthomyiidae). *Revista Brasileira de Biologia,* 39: 525-528.

Couri, M.S. & de Carvalho, C.J.B. 2002. Part II. Apical Groups. *In:* de Carvalho, C.J.B. (Ed.). *Muscidae (Diptera) of the Neotropical Region: Taxonomy.* Curitiba, Editora Universidade Federal do Paraná. p. 133-262.

Cumming, J.M. 2006. *Baeodromia,* a new genus of Tachydromiine fly from the New World (Diptera: Empidoidea; Hybotidae). *Journal of the Entomological Society of Ontario,* 137: 41-49. https://www.biodiversitylibrary.org/part/144453.

Curran, C.H. 1934. *The families and genera o North American Diptera.* New York, American Museum Natural History. https://www.biodiversitylibrary.org/bibliography/6825.

Disney, R.H.L. 1994. *Scuttle flies: the Phoridae.* London, Chapman and Hall.

Disney, R.H.L. 1996. A key to *Neodohrniphora* (Diptera: Phoridae), parasites of leaf-cutter ants (Hymenoptera: Formicidae). *Journal of Natural History,* 30(9): 1377-1389. https://doi.org/10.1080/00222939600771281.

Duarte, L.P.; Vaz, D.B. & Krüger, R.F. 2018. New records of phorid flies (Diptera, Phoridae) from Rio Grande do Sul, with five new records to Brazil. *Check List,* 14(1): 125-139. https://doi.org/10.15560/14.1.125.

Enderlein, G. 1922. Klassifikation der Micropeziden. *Archiv für Naturgeschichte,* 88: 140-229. https://www.biodiversitylibrary.org/page/45506103.

Evenhuis, N.L. 1994. *Catalogue of the fossil flies of the world (Insecta: Diptera).* Leiden, Backhuys Press.

Evenhuis, N.L. 2002. *Catalog of the Mythicomyiidae of the World (Insecta: Diptera). Bishop Museum Bulletins in Entomology,* 10: 1-85.

Evenhuis, N.L. 2006. Catalog of the Keroplatidae of the World (Insecta: Diptera). *Bishop Museum Bulletins in Entomology,* 13: 1-178.

Evenhuis, N.L. 2015. Two new records of Diptera (Insecta) from the Hawaiian Islands. *Bishop Museum Occasional Papers,* 116: 27-29.

Evenhuis, N.L. & Greathead, D.J. 1999. *World catalog of bee flies (Diptera: Bombyliidae).* Leiden, Backhuys Publishers.

Evenhuis, N.L. & Greathead, D.J. 2015. *World catalog of bee flies (Diptera: Bombyliidae).* Leiden, Backhuys Publishers.

Fachin, D.A. 2021. Stratiomyidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/1954. Access: 23/03/2021.

Fachin, D.A. & Amorim, D.S. 2014. Taxonomic revision of the Neotropical genus *Arthropeina* Lindner, 1949 (Diptera: Xylomyidae). *Zootaxa,* 3827(2), 231-257. https://doi.org/10.11646/zootaxa.3827.2.6.

Fachin, D.A. & Assis-Pujol, C.V. 2016a. Family Stratiomyidae. *Zootaxa,* 4122(1): 312-341. https://doi.org/10.11646/zootaxa.4122.1.26.

Fachin, D.A. & Assis-Pujol, C.V. 2016b. Family Xylomyidae. *Zootaxa,* 4122: 342-345. https://doi.org/10.11646/zootaxa.4122.1.27.

Falaschi, R.L. 2012. *Relações filogenéticas entre os Keroplatinae: posição de Orfeliini e relação entre seus gêneros (Diptera: Keroplatidae).* (Doctoral Thesis). Universidade de São Paulo, Ribeirão Preto.

Falaschi, R.L.; Amaral, D.T.; Santos, I.; Domingos, A.H.R.; Johnson, G.A.; Martins, A.G.S.; Viroomal, I.B.; Pompéia, S.L.; Mirza, J.D.; Oliveira, A.G.; Bechara, E.J.H.; Viviani, V.R. & Stevani, C.V. 2019a. *Neoceroplatus betaryiensis* nov. sp. (Diptera: Keroplatidae) is the first record of a bioluminescent fungus-gnat in South America. *Scientific Reports,* 9(11291): 1-9. https://doi.org/10.1038/s41598-019-47753-w.

Falaschi, R.L.; Johnson, GA. & Stevani, C.V. 2019b. The new species *Neoceroplatus betaryiensis* nov. sp. (Diptera: Keroplatidae) from Neotropical Region. *Papéis Avulsos de Zoologia,* 59(44): e20195944. https://doi.org/10.11606/1807-0205/2019.59.44.

Falaschi, R.L.; Oliveira, S.S. & Amorim, D.S. 2016. Family Bibionidae. *Zootaxa,* 4122: 20-25. https://doi.org/10.11646/zootaxa.4122.1.5.

Falaschi, R.L.; Oliveira, S.S. & Lamas, C.J.E. 2018. Catalogue of Bibionidae (Diptera: Bibionomorpha) types housed in the collection of the Museu de Zoologia da Universidade de São Paulo, Brazil. *Papéis Avulsos de Zoologia,* 58(27): e20185827. https://doi.org/10.11606/1807-0205/2018.58.27.

Ferro, G.B. & de Carvalho, C.J.B. 2014. A pictorial key and diagnosis of the Brazilian genera of Micropezidae (Diptera, Nerioidea). *Revista Brasileira de Entomologia,* 58(1): 52-62. https://doi.org/10.1590/S0085-56262014000100009.

Ferro, G.B. & de Carvalho, C.J.B. 2021. Micropezidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/34746. Access: 08/09/2021.

Ferro, G.B. & Marshall, S.A. 2018. A revision of the Neotropical ant-like genus *Cardiacephala* Macquart, including *Plocoscelus* Enderlein syn. nov. (Diptera: Micropezidae, Taeniapterinae). *Zootaxa,* 4429(3): 401-458. https://doi.org/10.11646/zootaxa.4429.3.1.

Ferro, G.B. & Marshall, S.A. 2020. A redefinition of *Paragrallomyia* Hendel (Diptera: Micropezidae, Taeniapterinae) and a revision of the *P. albibasis* complex. *Zootaxa,* 4822(1): 39-70. https://doi.org/10.11646/zootaxa.4822.1.2.

Ferro, G.B.; Skevington, J.H.; Marshall, S.A. & Kelso, S. 2021. Systematic relationships of the Taeniapterini (Diptera: Micropezidae, Taeniapterinae). *Zootaxa,* 5004(2): 370-384. https://doi.org/10.11646/zootaxa.5004.2.6.

Fitzgerald, S.J. 2009. Bibionidae (March flies, Love-bugs). *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America,* Ottawa, NRC-CNRC. v. 1, p. 245-251.

Flores, H.F; Pirani, G.; Gaimari, S.D. & Amorim, D.S. 2021. Two new species of *Neotraginops* Prado (Diptera: Odiniidae: Traginopinae) from Costa Rica and Brazil. *Zootaxa,* 5048: 176-190. https://doi.org/10.11646/zootaxa.5048.2.2.

Foote, R.H.; Blanc, F.L. & Norrbom, A.L. 1993. *Handbook of the fruit flies (Diptera: Tephritidae) of America and North of Mexico.* Ithaca, Comstock.

Freitas, G. & Ale-Rocha, R. 2011. Description of two new species of *Stenomicra* Coquillett (Diptera, Periscelididae) from the Neotropics. *Revista Brasileira de Entomologia,* 55(3): 348-354. https://doi.org/10.1590/S0085-56262011005000044.

Gagné, R.J. & Jaschhof, M. 2021. *A Catalog of the Cecidomyiidae (Diptera) of the World.* 5. ed. Digital. Available: https://www.ars.usda.gov/ARSUserFiles/80420580/Gagne_Jaschhof_2021_World_Cat_5th_Ed.pdf. Access: 24/09/2021.

Gaimari, S.D. & Mathis, W.N. 2011. World catalog and conspectus on the family Odiniidae (Diptera: Schizophora). *Myia,* 12: 291-339. http://hdl.handle.net/10088/18930.

Gaimari, S.D. & Silva, V.C. 2010a. Lauxaniidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America*. Ottawa, NRC-CNRC. v. 2, p. 717-1442.

Gaimari, S.D. & Silva, V.C. 2010b. Revision of the Neotropical subfamily Eurychoromyiinae (Diptera: Lauxaniidae). *Zootaxa,* 2342: 1-64. https://doi.org/10.11646/zootaxa.2342.1.

Gaimari, S.D. & Silva, V.C. 2020. A conspectus of Neotropical Lauxaniidae (Diptera: Lauxanioidea). *Zootaxa,* 4862: 1-217. https://doi.org/10.11646/zootaxa.4862.1.1.

Gil-Azevedo, L.H. 2021. Simuliidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/2528. Access: 16/06/2021.

Godoy, M.J.S.; Pacheco, W.S.P. & Malavasi, A. 2011. Moscas-das-frutas quarentenárias para o Brasil. p. 111-132. *In:* Silva; R.A.; Lemos, W.P. & Zucchi, A. (Eds.). *Moscas-das-frutas na Amazônia Brasileira: diversidade, hospedeiros e inimigos naturais.* Macapá, Embrapa Amapá. p. 111-132.

Gomes, E.S.; Ale-Rocha, R. & Keppler, R.L.F. 2018. A new species of *Stenomicra* Coquillett (Diptera: Periscelididae) from the Brazilian Amazon and its life history. *Zootaxa,* 4407(4): 591-599. https://doi.org/10.11646/zootaxa.4407.4.11.

Gomes, L.R.P.; Fogaça, J.M.; Bortolanza, M. & Pereira, A.C. 2019. New records of the Brazilian Anthomyiidae (Diptera) and a checklist of species from Palmas Grasslands Wildlife Refuge. *Check List,* 15: 93-103. https://doi.org/10.15560/15.1.93.

Gomes, L.R.P.; Souza, D.S. & de Carvalho, C.J.B. 2021. First insights into the evolution of neotropical anthomyiid flies (Diptera: Anthomyiidae). *Systematics and Biodiversity,* 19: 1-14. https://doi.org/10.1080/14772000.2021.1914765.

Greathead, D.J. & Evenhuis, N.L. 2001. Annotated keys to the genera of African Bombylioidea (Diptera: Bombyliidae; Mythicomyiidae). *African Invertebrates,* 42: 105-224. http://hdl.handle.net/10520/EJC84477.

Grichanov, I. Ya. 2018. An annotated catalogue of Afrotropical Dolichopodoidae (Diptera). *Plant Protection News,* 25(Suppl): 1-152. https://doi.org/10.5281/zenodo.1187006.

Grisales, D. & de Carvalho, C.J.B. 2019. Highland biodiversity of Fanniidae (Insecta, Diptera): fourteen new species from the Andes and Central America. *Zootaxa,* 4551: 330-360. https://doi.org/10.11646/zootaxa.4551.3.4.

Grisales, D.; Lecheta, M.C.; Aballay, F.H. & de Carvalho, C.J.B. 2016. A key and checklist to the Neotropical forensically important "Little House Flies" (Diptera: Fanniidae). *Zoologia,* 33(6): e20160054. https://doi.org/10.1590/s1984-4689zool-20160054.

Guimarães, J.H. 1977. A Systematic Revision of the Mesembrinellidae, stat. nov. (Diptera, Cyclorrhapha). *Arquivos de Zoologia,* 29(1): 1-109. https://doi.org/10.11606/issn.2176-7793.v29i1p1-109.

Guimarães, J.H.; Prado, A.P. & Linhares A.X. 1978. Three newly introduced blowfly species in Southern Brazil (Diptera, Calliphoridae). *Revista Brasileira de Entomologia,* 22(1): 53-60.

Haenni, J.P. & Amorim, D.S. 2017. Scatopsidae. *In:* Kirk-Spriggs, A.H. & Sinclair, B.J. (Eds.). *Manual of Afrotropical Diptera. Volume 2. Nematocerous Diptera and lower Brachycera.* Suricata 5. Pretoria, South African National Biodiversity Institute, p. 641-651. https://www.nhm.ac.uk/content/dam/nhmwww/our-science/our-work/biodiversity/manual-afrotropical-diptera/manual-afrotropical-diptera-volume-two.

Haenni, J.P. & Vaillant, F. 1994. Description of dendrolimnobiontic larvae of Scatopsidae (Diptera) with a review of our knowledge of the preimaginal stages of the family. *Mittheilungen der Schweizerischen Entomologischen Gesellschaft,* 67(1): 43-59. https://doi.org/10.5169/seals-402544.

Hancock, E.G. 2010. Richardiidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.* Ottawa, NRC-CNRC. v. 2, p. 871-879.

Hardy, D.E. 1959. Catalogue of the Neotropical Bibionidae (Diptera, Nematocera). *Acta Zoologica Lilloana,* 17(1959): 437-476.

Hardy, D.E. 1966. Family Bibionidae. *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. p. 1-20. https://www.biodiversitylibrary.org/page/49070535.

Harterreiten-Souza, E.S.; Pujol-Luz, J.R.; Capellari R.S.; Bickel, D. & Sujii, E.R. 2020. Diversity and spatial distribution of predacious Dolichopodidae (Insecta: Diptera) on organic vegetable fields and adjacent habitats in Brazil. *Florida Entomologist,* 103(2): 197-205. https://doi.org/10.1653/024.103.0207.

Haseyama, K.L.F.; Wiegmann, B.M.; Almeida, E.A.B. & de Carvalho, C.J.B. 2015. Say goodbye to tribes in the new house fly classification: a new molecular phylogenetic analysis and an updated biogeographical narrative for the Muscidae (Diptera). *Molecular Phylogenetics and Evolution,* 89: 1-12. https://doi.org/10.1016/j.ympev.2015.04.006.

Hash, J.M. & Brown, B.V. 2015. Revision of the New World species of the millipede-parasitic genus *Myriophora* Brown (Diptera: Phoridae). *Zootaxa,* 4035(1): 1-79. https://doi.org/10.11646/zootaxa.4035.1.1.

Hauser, M.; Woodley, N.E. & Fachin, D.A. 2017. Stratiomyidae. *In:* Kirk-Spriggs, A.H. & Sinclair, B.J. (Eds.). *Manual of Afrotropical Diptera. Volume 2. Nematocerous Diptera and lower Brachycera.* Suricata 5. Pretoria, South African National Biodiversity Institute. p. 919-979. https://www.nhm.ac.uk/content/dam/nhmwww/our-science/our-work/biodiversity/manual-afrotropical-diptera/manual-afrotropical-diptera-volume-two.

Heiduk, A.; Meve, U.; Menzel, F.; Haenni, J.-P.; Tschirnhaus, M.v.; Dötterl, S. & Johnson, S.D. 2021. Fly Pollination of Kettle Trap Flowers of *Riocreuxia torulosa* (Ceropegieae-Anisotominae): A Generalized System of Floral Deception. *Plants,* 10: 1564. https://doi.org/10.3390/plants10081564.

Hemming, J. 1989. The Society's Maracá Rainforest Project, Roraima, Brazil. *The Geographical Journal,* 155(1): 1-12.

Hendel, F. 1909. Übersicht der bisher bekannten Arten der Pterocalliden (Dipt.). *Deutsche Entomologische Zeitschrift,* 1909: 1-84.

Hendel, F. 1911. Diptera. Fam. Muscaridae, Subfam. Richardiinae. *Genera Insectorum,* 113: 1-56.

Hennig, W. 1937. Übersicht über die Arten der Neriiden und über die Zoogeographie dieser Acalyptraten-Gruppe (Diptera). *Stettiner Entomologische Zeitung,* 98: 240-280.

Hennig, W. 1965. Die Acalyptratae des Baltischen Bernsteins und ihre Bedeutung für die Erforschung der phylogenetischen Entwicklung

dieser Dipteren-Gruppe. *Stuttgarter Beiträge zur Naturkunde,* 145: 1-215. https://www.biodiversitylibrary.org/part/241980.

Henriques, A.L. & Krolow, T.K. 2021. Tabanidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/30175. Access: 25/01/2021.

Ibáñez-Bernal, S. & Hernández-Ortiz, V. 2012. The new genus *Acrocephalomyia,* and a new species of *Ropalomera* from Costa Rica, with additional records for other Mesoamerican species (Diptera: Ropalomeridae). *Zootaxa,* 3478: 553-569. https://doi.org/10.11646/zootaxa.3478.1.44.

Iide, P. 1966. Estudo sobre as espécies brasileiras do gênero *Chrysochlorina* James, 1939 (Diptera, Stratiomyidae). *Arquivos de Zoologia do Estado de São Paulo,* 14(2): 69-113.

Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio). 2021. *Website of the Estação Ecológica de Maracá.* Available: https://www.icmbio.gov.br/portal/esec-de-maraca. Access: 25/09/2021.

Integrated Taxonomic Information System (ITIS). 2016. *Catalogue of Life, Annual Checklist. Integrated Taxonomic Information System.* Available: http://www.catalogueoflife.org/annual-checklist/2016/search/all/key/Liriomyza/fossil/0/match/1. Access: 10/08/2021.

Jackson, M.D. 2019. *Placement of Micropezinae (Micropezidae) on the Diptera tree of life: a molecular phylogenetic approach.* (Doctoral Thesis). University of Guelph, Guelph. http://hdl.handle.net/10214/15240.

James, M.T. 1977. The South American species of *Oplachantha* (Diptera: Stratiomyidae). *The Canadian Entomologist,* 109(2): 305-315. https://doi.org/10.4039/Ent109305-2.

James, M.T.; McFadden, M.W. & Woodley, N.E. 1980. The Pachygastrinae (Diptera, Stratiomyidae) of Middle America. *Melanderia,* 34(2): 1-36.

Kameneva, E.P. 2004a. New records of picture-winged flies (Diptera: Ulidiidae) of Central America. *Studia Dipterologica,* 10: 609-652, 2003.

Kameneva, E.P. 2004b. A new species of the genus *Plagiocephalus* (Diptera, Ulidiidae) from Central America. *Vestnik Zoologii,* 38(4): 15-22. http://dspace.nbuv.gov.ua/handle/123456789/3347.

Kameneva, E.P. & Korneyev, V.A. 2010. Ulidiidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.* Ottawa, NRC-CNRC., v. 2: 883-904. https://doi.org/10.1139/9780660199580.

Kameneva, E.P.; Korneyev, V.A. & Ramos-Pastrana, Y. 2017. A new genus, new species and new records of Ulidiidae (Diptera, Tephritoidea) from Colombia. *Vestnik Zoologii,* 51(2): 125-136. https://doi.org/10.1515/vzoo-2017-0018.

Kirst, F.D. & Ale-Rocha, R. 2012. Taxonomic revision of the Amazonian species of *Ropalomera* Wiedemann, 1824 (Diptera: Ropalomeridae). *Zootaxa,* 3151: 1-27. https://doi.org/10.11646/zootaxa.3151.1.1.

Knutson, L.V. 1987. Sciomyzidae. *In:* McAlpine, J.F. (Ed.). *Manual of Neartic Diptera.* Ottawa, Biosystematics Research Centre., v. 2, p. 927-940. https://publications.gc.ca/collections/collection_2016/aac-aafc/A54-3-28-eng.pdf.

Knutson, L.V.; Steyskal, G.C.; Zuska, J. & Abercrombie, J. 1976. Family Sciomyzidae. *In:* Papavero, N. (Ed.). *A Catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. p. 1-24. https://www.biodiversitylibrary.org/item/205612#page/836/mode/1up.

Koch, N.M.; Soto, I.M. & Ramírez, M.J. 2015. First phylogenetic analysis of the family Neriidae (Diptera), with a study on the issue of scaling continuous characters. *Cladistics,* 31(2): 142-165. https://doi.org/10.1111/cla.12084.

Korneyev, V.A. 1999. Phylogenenetic relationships among higher groups of Tephritidae. *In:* Aluja, M. & Norrbom, A.L. (Eds.). *Fruit Flies (Tephritidae): Phylogeny and Evolution of Behavior.* CRC Press, Boca Raton, London, New York, Washington DC, p. 73-113. https://doi.org/10.1201/9781420074468.

Korneyev, V.A. 2012. Revision of the genus *Pyrgotomyia* Hendel (Diptera: Pyrgotidae). *African Invertebrates,* 53: 187-203. https://doi.org/10.5733/afin.053.0112.

Korneyev, V.A. 2016. New taxa and synonymy in the family Pyrgotidae (Diptera, Tephritoidea). I. Tribes Prodalmanniini and Toxopyrgotini. *Vestnik Zoologii,* 50: 39-48. https://doi.org/10.1515/vzoo-2016-0024.

Kosmann, C.; Mello, R.P.; Harterreiten-Souza, E.S. & Pujol-Luz, J.R. 2013. A list of current valid blowflies names (Diptera: Calliphoridae) in the Americas South of Mexico with key to the Brazilian species. *EntomoBrasilis,* 6: pp. 74-85. https://doi.org/10.12741/ebrasilis.v6i1.266.

Krivosheina, N.P.; Krivosheina, M.G. & Kompantzev, A.V. 2015. A new oriental species of the genus *Solva* Walker, 1859 (Diptera, Xylomyidae) with data on the larval morphology. *Entomologicheskoe Obozrenie,* 94(4): 894-901. https://doi.org/10.1134%2FS001387381509016X.

Kung, G.A. & Brown, B.V. 2000. The patterned-wing species of *Coniceromyia* (Diptera: Phoridae). *Contributions in Science,* 484: 1-10. https://doi.org/10.5962/p.208108.

Kung, G.A. & Brown, B.V. 2005. New species of *Dohrniphora* related to *D. longirostrata* (Diptera: Phoridae). *Annals of the Entomological Society of America,* 98(1): 55-62. https://doi.org/10.1603/0013-8746(2005)098[0055:NSODRT]2.0.CO;2.

Kutty, S.N.; Meusemann, K.; Bayless, K.M.; Marinho, M.A.T.; Pont, A.C.; Zhou, X.; Misof, B.; Wiegmann, B.M.; Yeates, D.; Cerretti, P.; Meier, R. & Pape, T. 2019. Phylogenomic analysis of Calyptratae: resolving the phylogenetic relationships within a major radiation of Diptera. *Cladistics,* 35(6): 605-622. https://doi.org/10.1111/cla.12375.

Kutty, S.N.; Pape, T.; Wiegmann, B.M. & Meier, R. 2010. Molecular phylogeny of the Calyptratae (Diptera: Cyclorrhapha) with an emphasis on the superfamily Oestroidea and the position of Mystacinobiidae and McAlpine's fly. *Systematic Entomology,* 35(4): 614-635. https://doi.org/10.1111/j.1365-3113.2010.00536.x.

Kutty, S.N.; Pont, A.C.; Meier, R. & Pape, T. 2014. Complete tribal sampling reveals basal split in Muscidae (Diptera), confirms saprophagy as ancestral feeding mode, and reveals an evolutionary correlation between instar numbers and carnivory. *Molecular Phylogenetics and Evolution,* 78: 349-364. https://doi.org/10.1016/j.ympev.2014.05.027.

Lamas, C.J.E.; Falaschi R.L. & Evenhuis, N.L. 2015. A new genus and species of micro bee flies from Brazil (Diptera: Mythicomyiidae: Psiloderoidinae). *Zootaxa,* 3955(3): 403-416. https://doi.org/10.11646/zootaxa.3955.3.7.

Li, X.; Teasdale, L.C.; Bayless, K.M.; Ellis, A.G.; Wiegmann, B.M.; Lamas, C.J.E.; Lambkin, C.L.; Evenhuis, N.L.; Nicholls, J.A.; Hartley, D.; Shin, S.; Trautwein, M.; Zwick, A.; Lessard, B.D. & Yeates, D.K. 2020. Phylogenomics reveals accelerated late Cretaceous diversification of bee flies (Diptera: Bombyliidae). *Cladistics,* 37(3): 276-297. https://doi.org/10.1111/cla.12436.

Lima, S.P. 2018. *Estudo taxonômico de Curtonotidae Duda, 1934 (Diptera, Ephydroidea), do Brasil.* Masters Dissertation. Instituto Nacional de Pesquisas da Amazônia. https://repositorio.inpa.gov.br/handle/1/12480.

Limeira-de-Oliveira, F.; Marques, D.W.A.; Gaimari, S.D. & Rafael, J.A. 2020. A new genus and species of odiniids (Diptera: Odiniidae) from the canopy of the Brazilian Amazon rainforest. *Zootaxa,* 4801(1): 164-170. https://doi.org/10.11646/zootaxa.4801.1.8.

Limeira-de-Oliveira, F.; Marques, D.W.A.; Reis, G.A. & Rafael, J.A. 2017. *Inpauema,* a new genus of Odiniidae (Diptera) from Brazil, with description of five new species. *Zootaxa,* 4362(4): 517-534. https://doi.org/10.11646/zootaxa.4362.4.3.

Linardi, P.M.; Botelho, J.R.; Rafael, J.A.; Valle, C.M.C.; Cunha, A. & Machado, P.A.R. 1991. Ectoparasitos de pequenos mamíferos da Ilha de Maracá, Roraima, Brasil. I. Ectoparasitofauna, registros geográficos e de hospedeiros. *Acta Amazonica,* 21: 131-140. https://doi.org/10.1590/1809-43921991211140.

Lindsay, K.G.; Klymko, J. & Marshall, S.A. 2019. Revision of the Central American and Mexican species of the *Curtonotum murinum* species complex (Diptera: Curtonotidae). *Zootaxa,* 4651(3): 531-554. https://doi.org/10.11646/zootaxa.4651.3.7.

Lopes, H.S. 1936. Sobre três espécies novas de Richardiidae do Brasil (Dipt.). *Revista de Entomologia,* 6(3-4): 475-480.

Lopes, H.S. & Tibana, R. 1991. Sarcophagidae (Diptera) de Roraima, Brasil. *Acta Amazonica,* 21: 151-157. https://doi.org/10.1590/1809-43921991211157.

Löwenberg-Neto, P. & de Carvalho, C.J.B. 2013. Muscidae (Insecta: Diptera) of Latin America and the Caribbean: geographic distribution and checklist by country. *Zootaxa,* 3650: 1-147. https://doi.org/10.11646/zootaxa.3650.1.1.

Mackerras, I.M. 1954. The classification and distribution of Tabanidae (Diptera). I. General review. *Australian Journal of Zoology,* 2: 431-454.

Maia, V.C. & Urso-Guimarães, M.V. *submitted.* Chapter 7. Cecidomyiidae. *In:* Couri, M. *et al., in prep. Manual of the South American Diptera.*

Malavasi, A. 2015. Mosca-da-carambola, *Bactrocera carambolae* Drew & Hancock. *In:* Vilela, E.F. & Zucchi, R.A. (Eds.). *Pragas introduzidas no Brasil, insetos e ácaros.* São Paulo, FEALQ. p. 173-184.

Malloch, J.R. 1929. Exotic Muscaridae (Diptera), XXIV, Family Pyrgotidae. *Annals and Magazine of Natural History,* Serie 9(20): 249-261.

Mangan, R.L. & Baldwin, D. 1986. A new cryptic species of *Odontoloxozus* (Neriidae: Diptera) from the Cape Region of Baja California Sur (Mexico). *Proceedings of the Entomological Society of Washington,* 88: 110-121. https://www.biodiversitylibrary.org/page/16264811.

Mansbridge, G.H. 1933. On the biology of some Ceroplatinae and Macrocerinae (Diptera, Mycetophilidae). *Transactions of the Entomological Society of London,* 81: 75-92. https://doi.org/10.1111/j.1365-2311.1933.tb00400.x.

Mariluis, J.C. & Peris, S.V. 1984. Datos para la sinopsis de los Calliphoridae neotropicales *Revista Española de Entomologia EOS,* 50: 67-86.

Marinho, M.A.T.; Wolff, M.; Ramos-Pastrana, Y.; Azeredo-Espin, A.M.L. & Amorim, D.S. 2017. The first phylogenetic study of Mesembrinellidae (Diptera: Oestroidea) based on molecular data: clades and congruence with morphological characters. *Cladistics,* 33(2): 134-152. https://doi.org/10.1111/cla.12157.

Marinoni, L. 2021. Sciomyzidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/43063. Access: 25/01/2021.

Marinoni, L. & Knutson, L.V. 1992. Revisão do gênero Neotropical *Protodictya* Malloch, 1933 (Diptera, Sciomyzidae). *Revista Brasileira de Entomologia,* 36: 25-45.

Marinoni, L. & Knutson, L.V. 2010. Sciomyzidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.* Ottawa, NRC-CNRC. v. 2, p. 1017-1024. https://doi.org/10.1139/9780660199580.

Marinoni, L. & Mathis, W.N. 2000. A cladistic analysis of Sciomyzidae Fallén (Diptera). *Proceedings of Biological Society of Washington,* 113: 162-209.

Marinoni, L. & Murphy, W.L. 2016. Family Sciomyzidae. *In:* Wolff, M.; Nihei, S.S. & de Carvalho, C.J.B. (Eds.). Catalogue of Diptera of Colombia. *Zootaxa,* 4122(1): 642-647. https://doi.org/10.11646/zootaxa.4122.1.53.

Marinoni, L.; Ale-Rocha, R. & Robalo, D.N. 2021. Ephydridae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/179211. Access: 25/01/2021.

Marinoni, L.; Steyskal, G.C. & Knutson, L.V. 2003. Revision and cladistic analysis of the Neotropical genus *Thecomyia* Perty (Diptera: Sciomyzidae). *Zootaxa,* 191: 1-36. https://doi.org/10.11646/zootaxa.191.1.1.

Marques, A.P.C. & Ale-Rocha, R. 2005. Revisão do gênero *Willistoniella* Mik, 1895 (Diptera, Ropalomeridae) da região neotropical. *Revista Brasileira de Entomologia,* 49(2): 210-227. https://doi.org/10.1590/S0085-56262005000200004.

Marques, D.W.A. & Rafael, J.A. 2021. Pipunculidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/1338. Access: 08/09/2021.

Marsaro-Jr., A.L.; Adaime, R.; Ronchi-Teles, B.; Souza-Filho, M.F.; Pereira, P.R.V.S.; Moraes, E.G.F.; Silva-Jr., R.J. & Silva, E.S. 2017. *Anastrepha* species (Diptera: Tephritidae), their host plants and parasitoids (Hymenoptera) in the State of Roraima, Brazil: state of the art. *Biotemas,* 30(1): 13-23. https://doi.org/10.5007/2175-7925.2017v30n1p13.

Marshall, S.A. 2012. *Flies: the Natural History and Diversity of Diptera.* Ontario, Firefly Books.

Marshall, S.A. 2013. *Grallipeza* Rondani (Diptera: Micropezidae: Taeniapterinae) of the Caribbean and North America. *Zootaxa,* 3682(1): 45-84. https://doi.org/10.11646/zootaxa.3682.1.2.

Marshall, S.A. 2016. Revision of the genus *Pseudeurybata* Hennig (Diptera, Micropezidae, Taeniapterinae). *Zootaxa,* 4132(2): 254-268. https://doi.org/10.11646/zootaxa.4132.2.5.

Marshall, S.A. 2019. A revision of the genus *Mesoconius* Enderlein (Diptera, Micropezidae, Taeniapterinae). *European Journal of Taxonomy,* 548: 1-126. https://doi.org/10.5852/ejt.2019.548.

Marshall, S.A.; Cardona, A. & Wolff, M.I. 2016. Family Micropezidae. *In:* Wolff, M.; Nihei, S.S. & de Carvalho, C.J.B. (Eds.). Catalogue of Diptera of Colombia. *Zootaxa,* 4122(1): 538-548. https://doi.org/10.11646/zootaxa.4122.1.40.

Martinez, F.J.; Norrbom, A.L.; Schliserman, P. & Campanella, M.V. 2020. Tephritidae flies associated with *Chuquiraga avellanedae* (Asteraceae). *Anais da Academia Brasileira de Ciências,* 92(2): 1-6. https://doi.org/10.1590/0001-3765202020191524.

Mathis, W.N. 2010. Ephydridae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.,* Ottawa, NRC-CNRC, v. 2, p. 1211-1234. https://doi.org/10.1139/9780660199580.

Mathis, W.N. & Zatwarnicki, T. 1995. *World catalog of shore flies (Diptera: Ephydridae)*. Associated Publishers.

Matile, L. 1990. Recherches sur la systématique et l'évolution des Keroplatidae (Diptera, Mycetophiloidea). *Memóires du Muséum National d'Histoire Naturelle,* Serie A, Zoologie, 148: 1-682. https://www.biodiversitylibrary.org/part/282901.

Matile, L. 1997. Phylogeny and evolution of the larval diet in the Sciaroidea (Diptera, Bibionomorpha) since the Mesozoic. *In:* Grandcolas, P. (Ed.). *The Origin and Biodiversity in Insects: Phylogenetic Tests of Evolutionary Scenarios. Memóires du Muséum National d'Histoire Naturelle,* 173: 273-303.

McAlpine, D.K. 1975. The subfamily classification of the Micropezidae and the genera of Eurybatinae (Diptera: Schizophora). *Systematic Entomology,* 43(2): 231-245. https://doi.org/10.1111/j.1365-3113.1975.tb00133.x.

McAlpine, D.K. 1990. The taxonomic position of the Ctenostylidae (=Lochmostyliinae; Diptera: Schizophora). *Memórias do Instituto Oswaldo Cruz,* 84: 365-371. https://doi.org/10.1590/S0074-02761989000800065.

McGregor, D.F.M. & Eden, M.J. 1991. Geomorphology and land development in the Maraca area of northern Roraima, Brazil. *Acta Amazonica,* 21: 391-407. https://doi.org/10.1590/1809-43921991211407.

Mello, C.A. 1989. Uma nova espécie de *Farrimyia* Dodge, 1965 (Diptera, Sarcophagidae). *Memórias do Instituto Oswaldo Cruz,* 84: 373-376. https://doi.org/10.1590/S0074-02761989000800066.

Mello, R.L. 2021a. Curtonotidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/1614. Access: 08/09/2021.

Mello, R.L. 2021b. Pyrgotidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/83626. Access: 08/09/2021.

Mello, R.L. & Lamas, C.J.E. 2014. Review of the genera *Stenopyrgota* Malloch and *Tropidothrinax* Enderlein (Diptera, Pyrgotidae). *Revista Brasileira de Entomologia,* 58: 1-6. https://doi.org/10.1590/S0085-56262014000100001.

Mello, R.L. & Pereira-Colavite, A. 2018. Catalogue of Neotropical Curtonotidae (Diptera, Ephydroidea). *Papéis Avulsos de Zoologia,* 58: e20185848. https://doi.org/10.11606/1807-0205/2018.58.48.

Mello, R.L.; Mahlmann, T. & Silva, V.C. 2017. Redescription and first record in South America of *Neogriphoneura timida* Curran (Diptera, Lauxaniidae). *Revista Brasileira de Entomologia,* 61: 1-5. https://doi.org/10.1016/j.rbe.2016.10.001.

Mello-Patiu, C.A. 2016. Family Sarcophagidae. *In:* Wolff, M.; Nihei, S.S. & de Carvalho, C.J.B. (Eds.). Catalogue of Diptera of Colombia. *Zootaxa,* 4122(1): 884-903. https://doi.org/10.11646/zootaxa.4122.1.75.

Mello-Patiu, C.A. & Santos, J.R. 2021. Sarcophagidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/1151. Access: 08/09/2021.

Mendes, L.L.; Lamas, C.J.E.; Evenhuis, N.L. & Limeira-De-Oliveira, F. 2019. New *Pieza* Evenhuis (Diptera, Mythicomyiidae, Mythicomyiinae) from Northeast Brazil. *Zootaxa,* 4629(1): 1-25. https://doi.org/10.11646/zootaxa.4629.1.1.

Menezes, I.S. & Ale-Rocha, R. 2016. Revision of the Amazonian species of *Syneches* Walker (Diptera, Hybotidae, Hybotinae). *Zootaxa,* 4103: 401-442. https://doi.org/10.11646/zootaxa.4103.5.1.

Mengual, X.; Ståhls, G. & Rojo, S. 2015. Phylogenetic relationships and taxonomic ranking of pipizine flower flies (Diptera: Syrphidae) with implications for the evolution of aphidophagy. *Cladistics,* 31(5): 491-508. https://doi.org/10.1111/cla.12105.

De Meyer, M. 1996. World catalogue of Pipunculidae (Diptera). *Documents de Travail de l'Institut Royal des Sciences Naturelles de Belgique,* 86: 1-127.

De Meyer, M. & Skevington, J.H. 2000. First addition to the world catalogue of Pipunculidae. *Bulletin de l'Institut royal des sciences naturelles de Belgique, Entomologie,* 70: 5-11.

Michelsen, V. 1991. Revision of the aberrant New World genus *Coenosopsia* (Diptera: Anthomyiidae), with a discussion of anthomyiid relationships. *Systematic Entomology,* 16: 85-104. https://doi.org/10.1111/j.1365-3113.1991.tb00574.x.

Michelsen, V. 1996. First reliable record of a fossil species of Anthomyiidae (Diptera), with comments on the definition of recent and fossil clades in phylogenetic classification. *Biology Journal of the Linnean Society,* 58(4): 441-451. https://doi.org/10.1111/j.1095-8312.1996.tb01445.x.

Michelsen, V. 2010. Anthomyiidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America*. Ottawa, NRC-CNRC, v. 2, p. 1271-1276. https://doi.org/10.1139/9780660199580.

Monteiro, N. & Esposito, M.C. 2017. New species of *Calycomyza* Hendel (Diptera: Agromyzidae) in Brazil. *Zootaxa,* 4338(3): 574-586. https://doi.org/10.11646/zootaxa.4338.3.11.

Monteiro, N.; Carvalho-Filho, F. da S. & Esposito, M.C. 2015. A new species of *Japanagromyza* Sasakawa (Diptera: Agromyzidae) from the Brazilian Amazon with notes on biology. *Zootaxa,* 3919(3): 493-500. https://doi.org/10.11646/zootaxa.3919.3.4.

Monteiro, N.J.S.; Barbosa, R.R. & Esposito, M.C. 2019. Agromyzidae (Diptera: Schizophora) in the State of Pará: new species and new records in Brazil. *Zootaxa,* 4624(2): 151-182. https://doi.org/10.11646/zootaxa.4624.2.1.

Morales, M.N. & Marinoni, L. 2021. Syrphidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/827. Access: 12/12/2021.

Moucha, J. 1976. Horseflies (Diptera: Tabanidae) of the World. Synoptic Catalogue. *Acta Entomologica Museis Nationalis Prague,* 7(Suppl): 1-319.

Naglis, S.M. 2000. Six new species of *Systenus* (Diptera: Dolichopodidae) from Brazil, with a key to the Neotropical species. *Studia dipterologica,* 7(1): 59-68.

Naglis, S.M. 2003a. Revision of the Neotropical Neurigoninae (Diptera: Dolichopodidae) IV: *Viridigona* gen. nov. *Studia Dipterologica,* 9(2): 561-604.

Naglis, S.M. 2003b. Revision of the Neotropical Neurigoninae (Diptera: Dolichopodidae) V: *Neurigona* Rondani. *Studia Dipterologica,* 10(1): 267-314.

Nartshuk, E.P. 2012. A check list of the world genera of the family Chloropidae (Diptera, Cyclorrhapha, Muscomorpha). *Zootaxa,* 3267: 1-43. https://doi.org/10.11646/zootaxa.3267.1.1.

Nihei, S.S. & de Carvalho, C.J.B. 2004. Taxonomy, cladistics and biogeography of *Coenosopsia* Malloch (Diptera, Anthomyiidae) and its significance to the evolution of anthomyiids in the Neotropics. *Systematic Entomology,* 29(2): 260-275. https://doi.org/10.1111/j.0307-6970.2004.00247.x.

Norrbom, A.L. 2010. Tephritidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.* Ottawa, NRC-CNRC. v. 2, p. 909-954. https://doi.org/10.1139/9780660199580.

Norrbom, A.L. & Korytkowski, C.A. 2009. A revision of the *Anastrepha robusta* species group (Diptera: Tephritidae). *Zootaxa,* 2182: 1-91. https://doi.org/10.11646/zootaxa.2182.1.1.

Norrbom, A.L.; Carroll, L.E.; Thompson, F.C.; White, I.M.; Freidberg A. 1999. Systematic Database of Names. *In:* Thompson, F.C. (Ed.). Fruit Fly Expert Identification System and Systematic Information Database. *Myia,* 9: 65-251.

Oliveira, S.S. & Amorim, D.S. 2014. Catalogue of Neotropical Diptera. Mycetophilidae. *Neotropical Diptera,* 25: 1-87.

Oliveira, S.S. & Amorim, D.S. 2021. Phylogeny, classification, mesozoic fossils, and biogeography of the leiinae (Diptera: Mycetophilidae). *Bulletin of the American Museum of Natural History,* 446: 1-108. http://digitallibrary.amnh.org/handle/2246/7256.

Oliveira, S.S.; Falaschi R.L.; Urso-Guimarães, M.V. & Amorim, D.S. 2017. Lista das espécies de Bibionomorpha (Diptera) do Estado do Mato Grosso do Sul, Brasil. *Iheringia, Série Zoologia,* 107(Suppl): 1-8. https://doi.org/10.1590/1678-4766e2017127.

Osawa, K.; Sasaki, T. & Meyer-Rochow, V.B. 2014. New observations on the biology of *Keroplatus nipponicus* Okada 1938 (Diptera; Mycetophiloidea; Keroplatidae), a bioluminescent fungivorous insect. *Entomologie Heute,* 26: 139-149. https://www.zobodat.at/publikation_articles.php?id=445445.

Ozerov, A.L. 2005. World Catalogue of the family Sepsidae (Insecta: Diptera). *Zoologicheskie issledovania,* 8: 1-74.

Papavero, N. 1978. Family Keroplatidae (Ceroplatidae, incl. Macroceridae). *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. p. 1-22. https://www.biodiversitylibrary.org/page/49070535.

Pape, T. 1996. Catalogue of the Sarcophagidae of the world (Insecta: Diptera). *Memoirs on Entomology International,* 8: 1-558.

Pape, T. & Thompson, F.C. 2019. *Systema Dipterorum* (version 2.0, Jan 2011). *In:* Roskov, Y.; Ower, G.; Orrell, T.; Nicolson, D.; Bailly, N.; Kirk, P.M.; Bourgoin, T.; DeWalt, R.E.; Decock, W.; Nieukerken, E. van; Zarucchi, J. & Penev, L. (Eds.). *Species 200 & ITIS Catalogue of Life, 2019 Annual Checklist.* Available: http://www.catalogueoflife.org/annual-checklist/2019. Access: 21/02/2021.

Pape, T.; Bickel, D. & Meier, R. 2009. *Diptera diversity: Status, challenges and tools.* Leiden, Brill Academic Publishers.

Pape, T.; Blagoderov, V. & Mostovski, M.B. 2011. Order DIPTERA Linnaeus, 1758. *In:* Zhang, Z-Q. (Ed.). Animal biodivesity: An outline of higher-level

classification and survey of taxonomic richness. *Zootaxa,* 3148: 222-229. https://doi.org/10.11646/zootaxa.3148.1.42.

Papp, L. 2008. *Micromacrocera* gen. n., the smallest macrocerine fly (Diptera: Keroplatidae, Macrocerinae). *Acta Zoologica Academiae Scientiarum Hungaricae,* 54(1): 13-21.

Pavan, C. 1959. Relações entre populações naturais de *Drosophila* e o meio ambiente. *Boletim da Faculdade de Filosofia, Ciências e Letras, Universidade de São Paulo,* 221: 1-81.

Pereira-Colavite, A. 2013. *Neriidae (Diptera, Schizophora) do mundo: análise cladística e taxonomia.* (Doctoral Thesis). Universidade Federal do Paraná, Curitiba.

Pinto, L.G. & Amorim, D.S. 2000. *Bibionidae (Diptera: Bibionomorpha). Morfologia, e análise filogenética.* Ribeirão Preto, Holos Editora. (Série Teses, Dissertações e Monografias 2).

Pirani, G.I. & Amorim, D.S. 2016. Going beyond the tip of the Drosophilidae iceberg: New *Cladochaeta* Coquillett, 1900 (Diptera: Drosophilidae) from Brazil. *Zootaxa,* 4139: 301-344. https://doi.org/10.11646/zootaxa.4139.3.1.

Pires, A.C. & Marinoni, L. 2011. Distributional patterns of the Neotropical genus *Thecomyia* Perty (Diptera, Sciomyzidae) and phylogenetic support. *Revista Brasileira de Entomologia,* 55(1): 6-14. https://doi.org/10.1590/S0085-56262011000100002.

Pollet, M.A.A.; Brooks, S.E. & Cumming, J.M. 2004. Catalog of the Dolichopodidae (Diptera) of America North of Mexico. *Bulletin of the American Museum of Natural History,* 283: 1-114. http://hdl.handle.net/2246/451.

Pont, A.C. 1972. Family Muscidae. *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. 111p.

Pont, A.C. 1974. Family Anthomyiidae *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. 21p. https://www.biodiversitylibrary.org/page/49070535.

Poppe, J.L.; Gottschalk, M.S.; Deprá, M.; Schmitz, H.J. & Valente, V.L.S. 2019. The identity of some specimens previously (mis)identified as *Rhinoleucophenga obesa* (Loew) (Diptera: Drosophilidae) in Brazil, based on morphological and molecular data, with implications on distribution. *Zootaxa,* 4656: 310-334. https://doi.org/10.11646/zootaxa.4656.2.6.

Prado, A.P. do. 1973. Contribuição ao conhecimento da família Odiniidae (Diptera, Acalyptratae). *Studia Entomologica,* 16: 481-510.

Pujol-Luz, J.R & Pujol-Luz, C.V.A. 2014. Stratiomyidae. *In:* Roig-Juñent, S.; Claps, L.E. & Morrone, J.J. (Eds.). *Biodiversidad de Artrópodos Argentinos.* San Miguel de Tucumán, Editorial INSUE – UNT. v. 4, p. 399-406.

Rafael, J.A. 1991. Insetos coletados durante o Projeto Maracá, Roraima, Brasil: lista complementar. *Acta Amazonica,* 21: 325-336. https://doi.org/10.1590/1809-43921991211336.

Rafael, J.A. & Câmara, J.T. 2021. Empididae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/2379. Access: 16/09/2021.

Rafael, J.A. & Chagas, C.B. 2014. Empididae y Brachystomatidae. *In:* Roig-Juñent, S.; Claps, L.E. & Morrone, J.J. (Eds.). *Biodiversidad de Artrópodos Argentinos.* San Miguel de Tucumán, Editorial INSUE – UNT. v. 4, p. 431-438.

Rafael, J.A. & De Meyer, M. 1992. Generic classification of the family Pipunculidae (Diptera): a cladistic analysis. *Journal of Natural History,* 26(3): 637-658. https://doi.org/10.1080/00222939200770391.

Rafael, J.A. & Rosa, M.S.S. 1989. Novas espécies de *Eudorylas* Aczél da Estação Ecológica de Maracá, Roraima, Brasil (Diptera, Pipunculidae). *Memórias do Instituto Oswaldo Cruz,* 84(4): 449-454. https://doi.org/10.1590/S0074-02761989000800079.

Rafael, J.A. & Rosa, M.S.S. 1991. Pipunculidae (Diptera) da Estação Ecológica de Maracá e da localidade de Pacaraima, Roraima, Brasil. *Acta Amazonica,* 21: 337-350. https://doi.org/10.1590/1809-43921991211350.

Rafael, J.A.; Gorayeb, I.S.; Rosa, M.S.S. & Henriques, A.L. 1991. Tabanidae (Diptera) da Ilha de Maracá e Serra Pacaraima, Roraima, Brasil, com descrição de duas espécies novas. *Acta Amazonica,* 21: 351-367. https://doi.org/10.1590/1809-43921991211367.

Rafael, J.A.; Limeira-de-Oliveira, F.; Hutchings, R.W.; Miranda, G.F.G.; Silva-Neto, A.M.; Somavilla, A.; Camargo, A.; Asenjo, A.; Pinto; Â.P.; Bello, A.M.; Dalmorra, C.; Mello-Patiu, C.A.; de Carvalho, C.J.B.; Takiya, D.M.; Parizotto, D.R.; Marques, D.W.A.; Cavalheiro, D.O.; Mendes, D.M.M.; Zeppelini, D.; Carneiro, E.; Lima, E.F.B.; Lima, E.C.A.; Godoi, F.S.P.; Pessoa, F.A.C.; Vaz-de-Mello, F.Z.; Sosa-Duque, F.J.; Flores, H.F.; Fernandes, I.O.; Silva-Jr., J.O.; Gomes, L.R.P.; Monné, M.L.; Castro, M.C.M.; Silva, M.P.G.; Couri, M.S.; Gottschalk, M.S.; Soares, M.M.M.; Monné, M.A.; Rafael, M.S.; Casagrande, M.M.; Mielke, O.H.H.; Grossi, P.C.; Pinto, P.J.C.; Bartholomay, P.R.; Sobral, R.; Heleodoro, R.A.; Machado, R.J.P.; Corrêa, R.C.; Hutchings, R.S.G.; Ale-Rocha, R.; Santos, S.D.; Lima, S.P.; Mahlmann, T.; Silva, V.C. & Fernandes, D.R.R. 2020. Insect (Hexapoda) diversity in the oceanic archipelago of Fernando de Noronha, Brazil: updated taxonomic checklist and new records. *Revista Brasileira de Entomologia,* 64(3): e20200052. https://doi.org/10.1590/1806-9665-RBENT-2020-0052.

Ribeiro, L. do P.; Menezes Netto, A.C.; Jochims, F.; Haseyama, K.L.F. & de Carvalho, C.J.B. 2016. First record of *Atherigona reversura* Villeneuve (Diptera: Muscidae) feeding on Bermudagrass (Cynodon dactylon cv. Jiggs, Poaceae) in Brazil: morphological and molecular tools for identification. *Revista Brasileira de Entomologia,* 60: 270-274. https://doi.org/10.1016/j.rbe.2016.04.001.

Riccardi, P.R. 2021. Chloropidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/140248. Access: 16/02/2021.

Riccardi, P.R. & Amorim, D.S. 2020. Phylogenetic relationships and classification of the Chloropinae of the world (Diptera: Chloropidae). *Zoological Journal of the Linnean Society,* 190(3): 889-941. https://doi.org/10.1093/zoolinnean/zlaa007.

Riccardi, P.R. & Pádua, D.G. 2021. First record of egg sac predation of the fly *Pseudogaurax cingulatus* Sabrosky (Diptera, Chloropidae) upon spider *Tetragnatha* sp. (Araneae, Tetragnathidae) in northern Brazil. *Papéis Avulsos de Zoologia,* 61(4): e20216104. https://doi.org/10.11606/1807-0205/2021.61.04.

Riccardi, P.R.; Bazyar, Z. & Lamas, C.E. 2018. New genus of the subfamily Oscinellinae from Brazil (Diptera: Chloropidae). *Zootaxa,* 4438(2): 394-400. https://doi.org/10.11646/zootaxa.4438.2.13.

Righi, G. 1990. Oligochaeta da Estação Ecológica de Maracá, Roraima, Brasil. *Acta Amazonica,* 21: 391-398. https://doi.org/10.1590/1809-43921990201398.

Robinson, H. 1970. Family Dolichopodidae (Dolichopidae). *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. p. 1-92. https://www.biodiversitylibrary.org/page/49070535.

Robinson, H. 1975. Bredin-Archibold-Smithsonian biological survey of Dominica, the family Dolichopodidae with some related Antillean and Panamanian species (Diptera). *Smithsonian Contributions to Zoology,* 185: 1-141. https://doi.org/10.5479/si.00810282.185.

Rodriguez, H.C. & Rafael, J.A. 2012. *Pipunculidae (Diptera) of Latin America and the Caribbean: a catalogue of species with notes on biology and pipunculid-hosts associations.* Lambert Academic Publishing. https://doi.org/10.1111/j.1096-0031.1997.tb00240.x.

Rognes, K. 1997. The Calliphoridae (blowflies) (Diptera. Oestroidea) are not a monophyletic group. *Cladistics,* 13: 27-66. https://doi.org/10.1111/j.1096-0031.1997.tb00240.x.

Rotheray, G.E. & Gilbert, F. 2011. *The Natural History of Hoverflies.* London, Forrest Text, Blissett Group.

Runyon, J.B. 2020. The Dolichopodidae (Diptera) of Montserrat, West Indies. *Zookeys,* 966: 57-151. https://doi.org/10.3897/zookeys.966.55192.

Sabrosky, C.W. 1959. A revision of the genus *Pholeomyia* in North America (Diptera, Milichiidae). *Annals of the Entomological Society of America,* 52: 316-331. https://doi.org/10.1093/aesa/52.3.316.

Sabrosky, C.W. 1966. Three new Brazilian species of *Pseudogaurax* with a synopsis of the genus in the western hemisphere (Diptera, Chloropidae). *Papéis Avulsos do Departamento de Zoologia,* Secretaria da Agricultura, São Paulo, 19(9): 117-127.

Sabrosky, C.W. 1973. Family Milichiidae. *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. 12p. https://www.biodiversitylibrary.org/page/49070535.

Sabrosky, C.W. & Paganelli, C.H. 1984. Family Chloropidae. *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. 63p.

Savage, J.; Fortier, A.; Fournier, F. & Bellavance, V. 2016. Identification of *Delia* pest species (Diptera: Anthomyiidae) in cultivated crucifers and over other vegetable crops in Canada. *Canadian Journal of Arthropod Identification,* 29: 1-40. https://doi.org/10.3752/cjai.2016.29.

Savaris, M.; Marinoni, L. & Norrbom, A.L. 2016. Family Tephritidae. *In:* Wolff, M.; Nihei, S.S. & de Carvalho, C.J.B. (Eds.). Catalogue of Diptera of Colombia. *Zootaxa,* 4122(1): 596-621. https://doi.org/10.11646/zootaxa.4122.1.50.

Savaris, M.; Norrbom, A.L.; Marinoni, L. & Lampert, S. 2019. Revision of the genus *Euarestoides* Benjamin (Diptera: Tephritidae). *Zootaxa,* 4551(3): 299-329. https://doi.org/10.11646/zootaxa.4551.3.3.

Savaris, M.; Norrbom, A.L.; Marinoni, L. & Lampert, S. *in press.* Revision of the genus *Plaumannimyia* Hering (Diptera: Tephritidae). *Zootaxa.*

Sepúlveda, T.A. 2021. Neriidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/2287. Access: 18/06/2021.

Sepúlveda, T.A.; de Carvalho, C.J.B. & Pereira-Colavite, A. 2019. Systematics of the Neotropical genus *Loxozus* (Diptera: Neriidae), with notes on distribution and sexual dimorphism. *Zoologia,* 36: 1-6. https://doi.org/10.3897/zoologia.36.e26928.

Sepúlveda, T.A.; Pereira-Colavite, A. & de Carvalho, C.J.B. 2013a. Revision of the neotropical genus *Cerantichir* (Diptera: Neriidae) with new records and a key to species. *Revista Colombiana de Entomología,* 39: 125-131.

Sepúlveda, T.A.; Wolff, M.I. & de Carvalho, C.J.B. 2013b. Revision of the Neotropical genus *Eoneria* Aczél (Diptera: Neriidae) with description of a new species from Colombia. *Zootaxa,* 3636: 245-256. https://doi.org/10.11646/zootaxa.3636.2.2.

Sepúlveda, T.A.; Wolff, M.I. & de Carvalho, C.J.B. 2014. Revision of the New World genus *Glyphidops* Enderlein (Diptera: Neriidae). *Zootaxa,* 3785: 139-174. https://doi.org/10.11646/zootaxa.3785.2.2.

Ševčík, J. 2009. *Langkawiana maculata* gen. et sp. n. from Malaysia and its systematic position in the tribe Robsonomyiini (Diptera: Keroplatidae). *Zootaxa,* 2221: 58-66. https://doi.org/10.11646/zootaxa.2221.1.4.

Ševčík, J. & Papp, L. 2009. *Microkeroplatus,* a new genus of Keroplatidae (Diptera) from the oriental region. *Acta Zoologica Academiae Scientiarum Hungaricae,* 55(4): 339-347.

Ševčík, J.; Kaspřák, D.; Mantič, M.; Fitzgerald, S.; Ševčíková, T.; Tóthová, A. & Jaschhof, M. 2016. Molecular phylogeny of the megadiverse insect infraorder Bibionomorpha sensu lato (Diptera). *PeerJ,* 4: e2563. https://doi.org/10.7717/peerj.2563.

Shewell, G.E. 1977. Family Lauxaniidae. *In:* Delfinado, M.D. & Hardy, D.E. (Eds.). *A catalog of the Diptera of the Oriental Region,* Volume III. Honolulu, University Press of Hawaii. p. 183-214. https://doi.org/10.1515/9780824886585.

Silva, R.A.; Jordão, A.L.; Sá, L.A.N. & Oliveira, M.R.V. 2004. *Mosca-da-carambola: uma ameaça à fruticultura Brasileira.* Macapá, Embrapa Amapá.

Silva, V.C. 1991. Levantamento preliminar de Sepsidae (Diptera, Schizophora) em Roraima, Projeto Maracá, com descrição de uma espécie nova. *Acta Amazonica,* 21:369-374.https://doi.org/10.1590/1809-43921991211374.

Silva, V.C. 1993. Revisão da família Sepsidae na região Neotropical. III. Os gêneros *Palaeosepsis* Duda, 1926, *Archisepsis,* gen. n.: Chave para os gêneros neotropicais (Diptera, Schizophora). *Iheringia, Série Zoologia,* 75: 117-170.

Silva, V.C. 2010. Sepsidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.* Ottawa, NRC-CNRC, v. 2, p. 103-1039. https://doi.org/10.1139/9780660199580.

Silva, V.C. 2017. Checklist of the species of Lauxaniidae (Insecta, Diptera) from the state of Mato Grosso do Sul. *Iheringia, Série Zoologia,* 107(Suppl): 1-2. https://doi.org/10.1590/1678-4766e2017146.

Silva, V.C. 2021a. Lauxaniidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/1225. Access: 04/09/2021.

Silva, V.C. 2021b. Sepsidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/1931. Access: 04/09/2021.

Sinclair, B.J. & Cumming, J.M. 2006. The morphology, higher-level phylogeny and classification of the Empidoidea (Diptera). *Zootaxa,* 1180: 1-172. https://doi.org/10.11646/zootaxa.1180.1.1.

Sinclair, B.J. & Cumming, J.M. 2007. *Leptopezella,* a new Southern Hemisphere genus of Ocydromiinae (Diptera: Empidoidea: Hybotidae). *Zootaxa,* 1629: 27-37. https://doi.org/10.11646/zootaxa.1629.1.2.

Skevington, J.H. & Yeates, D.K. 2000. Phylogenetic classification of Eudorylini (Diptera: Pipunculidae). *Systematic Entomology,* 26: 421-452. https://doi.org/10.1046/j.0307-6970.2001.00160.x.

Skidmore, P. 1985. The biology of the Muscidae of the world. Dordrecht, W. Junk. 550p. (Series Entomologica, 29)

Smith, K.G.V. 1967. *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. 67p. https://www.biodiversitylibrary.org/page/49070535.

Soares, M.M.M. & Capellari, R.S. 2020. Review of the Neotropical genus *Pseudosympycnus* (Diptera: Dolichopodidae), with description of six new species from Brazil and Peru. *Zootaxa,* 4881: 231-256. https://doi.org/10.11646/zootaxa.4881.2.2.

Soares, M.M.M.; Santiago A.S. & Ale-Rocha R. 2018. New records of *Xanthacrona* Wulp, 1899 (Diptera, Ulidiidae) from Brazil. *Check List,* 14(5): 771-778. https://doi.org/10.15560/14.5.771.

Soares, N.S.; Paranhos B.A.G.; Ribeiro J.G.G.; Lampert, S. & Savaris, M. 2020. Primeiro registro de *Xanthacrona bipustulata* Wulp, 1899 (Diptera, Ulidiidae) para o estado de Pernambuco. *In:* Congresso Brasileiro de Zoologia, 33º. *Resumos.* Águas de Lindóia, São Paulo, Sociedade Brasileira de Zoologia.p. 364.

Sousa, V.R. & Couri M.S. 2017a. Two new *Japanagromyza* Sasakawa (Diptera: Agromyzidae) from Brazil. *Iheringia, Série Zoologia,* 107: e2017032. https://doi.org/10.1590/1678-4766e2017032.

Sousa, V.R. & Couri, M.S. 2017b. *Phytobia* (Diptera: Agromyzidae) from Brazil: new species, new record and a key to the Neotropical species. *Zoologia,* 34: e12308. https://doi.org/10.3897/zoologia.34.e12308.

Sousa, V.R. & Couri, M.S. 2018. A new species of *Liriomyza* Mik (Diptera, Agromyzidae) on okra in Brazil. *Zootaxa,* 4410(3): 551-558.

Souza, T.S.D.; Aguiar-Menezes; E.D.L.; Resende, A.L.S.; Pereira, T.P.L. & Gazal, V.S. 2019. *Megaselia* Rondani (Diptera: Phoridae) larvae as a Sphingidae (Lepidoptera) parasitoid. *Arquivos do Instituto Biológico,* 86: 1-3 e0812018. https://doi.org/10.1590/1808-1657000812018.

Spencer, K.A. 1987. Agromyzidae. *In:* McAlpine, J.F. (Ed.). *Manual of Neartic Diptera*. 2. Biosystematics Research Centre, Ottawa, p. 869-879. https://publications.gc.ca/collections/collection_2016/aac-aafc/A54-3-28-eng.pdf.

Steyskal, G.C. 1958. Notes on the Richardiidae, with a review of the species known to occur in the United States (Diptera, Acalyptratae). *Annals of the Entomological Society of America,* 51: 302-310. https://doi.org/10.1093/aesa/51.3.302.

Steyskal, G.C. 1968a. Family Micropezidae. *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo, p. 1-33. https://www.biodiversitylibrary.org/page/50660619.

Steyskal, G.C. 1968b. Family Neriidae. *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. 7p. https://www.biodiversitylibrary.org/page/50660653.

Steyskal, G.C. 1968c. Family Richardiidae. *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo. 20p. https://www.biodiversitylibrary.org/page/49070535.

Steyskal, G.C. 1968d. Family Otitidae (Ortalidae; including Pterocallidae, Ulidiidae). *In:* Papavero, N. (Ed.). *A catalogue of the Diptera of the Americas south of the United States.* São Paulo, Departamento de Zoologia da Secretaria da Agricultura do Estado de São Paulo, p. 1-31. https://www.biodiversitylibrary.org/page/49070535.

Steyskal, G.C. 1973. The Genus *Axiologina* Hendel (Diptera: Otitidae). *The Florida Entomologist,* 56(2): 132-134. https://doi.org/10.2307/3493239.

Steyskal, G.C. 1987a. Ropalomeridae. *In:* McAlpine, J.F. (Ed.). *Manual of Neartic Diptera*. Ottawa, Res. Branch, Agriculture Canada. v. 2, p. 941-944. https://publications.gc.ca/collections/collection_2016/aac-aafc/A54-3-28-eng.pdf.

Steyskal, G.C. 1987b. Family Sepsidae, *In:* McAlpine, J.F. (Ed.). *Manual of Neartic Diptera.* Ottawa, Biosystematics Research Centre. v. 2, p. 945-950. https://publications.gc.ca/collections/collection_2016/aac-aafc/A54-3-28-eng.pdf.

Steyskal, G.C. 1987c. Family Richardiidae. *In:* McAlpine, J.F. (Ed.). *Manual of Neartic Diptera.* 2. Biosystematics Research Centre, Ottawa, p. 833-837. https://publications.gc.ca/collections/collection_2016/aac-aafc/A54-3-28-eng.pdf.

Stuckenberg, B.R. 1971. A review of the Old World genera of Lauxaniidae (Diptera). *Annals of the Natal Museum,* 20: 499-610. http://hdl.handle.net/10413/11549.

Swann, J.E. 2010. Milichiidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.* Ottawa, NRC-CNRC. v. 2: 1125-1113. https://doi.org/10.1139/9780660199580.

Swann, J.E. 2016. Family Milichiidae. *Zootaxa,* 4122(1): 708-715. *In:* Wolff, M.; Nihei, S.S. & de Carvalho, C.J.B. (Eds.). Catalogue of Diptera of Colombia. *Zootaxa,* 4122(1): 642-647. https://doi.org/10.11646/zootaxa.4122.1.53.

Taddei, V.A. & Reis, N.R. 1980. Notas sobre alguns morcegos da ilha de Maracá, Território Federal de Roraima (Mammalia, Chiroptera). *Acta Amazonica,* 8: 363-368. https://doi.org/10.1590/1809-43921980102363.

Thompson, F.C. 1999. Introduction. *In:* Thompson, F.C. (Ed.). Fruit fly expert identification system and systematic information database. *Myia* (1998): 9: 1.

Thompson, F.C.; Rotheray, G.E. & Zumbado, M.A. 2010. Syrphidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.* Ottawa, NRC-CNRC. v. 2, p. 763-792. https://doi.org/10.1139/9780660199580.

Tibana, R. & Lopes, H.S. 1990. New and old Sarcophagidae (Diptera) from Roraima, Brazil. *Revista Brasileira de Biologia,* 50: 669-674. https://doi.org/10.1590/1809-43921991211157.

Tidon, R.; Schmitz, H.J.; Martins, M.B. & Gottschalk, M.S. 2021. Drosophilidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/183186. Access: 03/06/2021.

Torres, A.; Rafael, J.A.; Gaimari, S.D. & Limeira-de-Oliveira, F. 2021. Revision of the genus *Lopesiodinia* Prado, 1973 (Diptera: Odiniidae) with description of three new species, and a key to the extant Neotropical genera and species of Traginopinae. *Zootaxa,* 5052: 332-352. https://doi.org/10.11646/zootaxa.5052.3.2.

Tóthová, A.; Rozkosny, R.; Knutson, L.; Kutty, S.N.; Wiegmann, B.M. & Meier, R. 2013. A phylogenetic analysis of Sciomyzidae (Diptera) and some related genera. *Cladistics,* 29(4): 404-415. https://doi.org/10.1111/cla.12002.

Townes, H.K. 1962. Design for a Malaise trap. *Proceedings of the Entomological Society of Washington,* 64: 253-262. https://www.biodiversitylibrary.org/part/57159.

Uchoa, M.A. 2021. Tephritidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadoBrasil/753. Access: 25/06/2021.

Val, F.C.; Vilela, C.R. & Marques, M.D. 1981. Drosophilidae of the Neotropical Region. *In:* Ashburner, M.; Carson, H.L. & Thompson-Jr., J.N. (Eds.). *The Genetics and biology of Drosophila.* London, Academic Press, p. 123-168.

Vala, J.C.; Knutson, L.V. & Gasc, C. 1999. Stereoscan studies with descriptions of new characters of the egg and larval instars of *Salticella fasciata* (Meigen) (Diptera: Sciomyzidae). *Journal of Zoology,* 247(4): 531-536. https://doi.org/10.1111/j.1469-7998.1999.tb01014.x.

Vala, J.C.; Murphy, W.L.; Knutson, L.V. & Rozkošný, R. 2012. A cornucopia for Sciomyzidae (Diptera). *Studia Dipterologica,* 19(1-2): 67-137.

Vala, J.C.; Murphy, W.L.; Knutson, L.V. & Rozkošný, R. 2013. Corrigenda for the publication "A cornucopia for Sciomyzidae (Diptera)". *Studia Dipterologica,* 20(2): 183-188.

Vasconcelos, A.C.; Wendt, L.D. & de Carvalho, C.J.B. 2018. Taxonomic revision of the Neotropical stalk-eyed fly *Plagiocephalus* Wiedemann (Diptera, Ulidiidae, Ulidiinae). *Revista Brasileira de Entomologia,* 63(2019): 80-90. https://doi.org/10.1016/j.rbe.2018.12.002.

Vieira, R.M. 2021. Ulidiidae. *In: Catálogo Taxonômico da Fauna do Brasil.* PNUD. Available: http://fauna.jbrj.gov.br/fauna/faunadobrasil/931. Access: 27/06/2021.

Vilela, C.R. & Bächli, G. 2019. On the identities of *Rhinoleucophenga pallida* Hendel and *Rhinoleucophenga obesa* (Loew) (Diptera, Drosophilidae), with description of a new sibling species from Brazil. *Revista Brasileira de Entomologia,* 63: 149-182. https://doi.org/10.1016/j.rbe.2019.01.001.

Wahlberg, E. & Johanson, K.A. 2018. Molecular phylogenetics reveals novel relationships within Empidoidea (Diptera). *Systematic Entomology,* 43(4): 619-636. https://doi.org/10.1111/syen.12297.

Wendt, L.D. 2012. *Estudo taxonômico dos gêneros de Richardiidae e análise filogenética de Richardiinae (Diptera: Tephritoidea)*. (Doctoral Thesis). Instituto Nacional de Pesquisas da Amazônia, Manaus, AM, Brazil. https://repositorio.inpa.gov.br/handle/1/12321.

Wendt, L.D. & Ale-Rocha, R. 2012. Redescription of the genus *Coniceps* Loew, 1873 (Diptera, Richardiidae). *Zootaxa,* 3238: 49-56. https://doi.org/10.11646/zootaxa.3238.1.4.

Wendt, L.D. & Ale-Rocha, R. 2013. Geographic distribution of Epiplateinae Steyskal (Diptera: Richardiidae): New records and distribution maps. *Check List,* 9(5): 1091-1097. https://doi.org/10.15560/9.5.1091.

Wendt, L.D. & Ale-Rocha, R. 2014. Taxonomic notes of *Hemixantha* (Diptera: Richardiidae) with description of a new species from the Amazon Region. *Zoologia,* 31(1): 88-96. https://doi.org/10.1590/S1984-46702014000100010.

Wendt, L.D. & Ale-Rocha, R. 2016. Family Richardiidae. *In:* Wolff, M.; Nihei, S.S. & de Carvalho, C.J.B. (Eds.). Catalogue of Diptera of Colombia. *Zootaxa,* 4122(1): 585-595. https://doi.org/10.11646/zootaxa.4122.1.53.

Whitworth, T.L. 2014. A revision of the neotropical species of *Lucilia* Robineau-Desvoidy (Diptera: Calliphoridae). *Zootaxa,* 3810: 1-76. https://doi.org/10.11646/zootaxa.3810.1.1.

Whitworth, T.L. & Yusseff-Vanegas, S. 2019. A revision of the genera and species of the Neotropical family Mesembrinellidae (Diptera: Oestroidea). *Zootaxa,* 4659: 1-146. https://doi.org/10.11646/zootaxa.4659.1.1.

Wood, D.M. & Borkent, A. 1989. Phylogeny and Classification of the Nematocera. *In:* McAlpine, J.F.; Peterson, B.V.; Shewell, G.E.; Teskey, H.J.; Vockeroth, J.R. & Wood D.M. (Eds.). *Manual of Neartic Diptera.* 3. Ottawa, Biosystematics Research Centre. p. 1333-1370. https://publications.gc.ca/collections/collection_2016/aac-aafc/A54-3-32-eng.pdf.

Woodley, N.E. 2001. A world catalog of the Stratiomyidae (Insecta: Diptera). *Myia,* 11: 1-475.

Woodley, N.E. 2009. Xylomyidae. *In:* Brown, B.; Borkent, A.; Cumming, J.M.; Wood, D.M. & Zumbado, M.A. (Eds.). *Diptera of Central America.* Ottawa, NRC-CNRC. v. 1, p. 517-519. https://doi.org/10.1139/9780660198330.

Woodley, N.E. 2011a. A world catalog of the Stratiomyidae (Insecta: Diptera): a supplement with revisionary notes and errata, *In:* Thompson F.C.; Brake, I. & Lonsdale O. (Eds.). *Contributions to the Biosystematic Database of World Diptera. Myia,* 12: 379-415.

Woodley, N.E. 2011b. A World Catalog of the Xylomyidae (Insecta: Diptera). *In:* Thompson F.C.; Brake, I. & Lonsdale O. (Eds.). *Contributions to the Biosystematic Database of World Diptera. Myia,* 12: 417-453.

Yamaguchi, C.; Lamas, C.J.E. & Evenhuis, N.L. 2017. A new Neotropical genus of bee flies (Diptera, Bombyliidae, Phthiriinae). *Zootaxa,* 4363(4): 521-534. https://doi.org/10.11646/zootaxa.4363.4.4.

Yang, D.; Zhang, K.; Yao, G. & Zhang, J. 2007. *World Catalog of Empididae (Insecta: Diptera).* Beijing, China Agricultural University Press.

Yang, D.; Zhu, Y.; Wang, M. & Zhang, L. 2006. *World Catalog of Dolichopodidae (Insecta: Diptera).* Beijing, China Agricultural University Press.

Yano, O. 1992. Briófitas da Ilha de Maracá, Roraima, Brasil. *Acta Amazonica,* 22(4): 535-539. https://doi.org/10.1590/1809-43921992224539.

Zucchi, R.A. & Moraes, R.C.B. 2021. *Fruit flies in Brazil – Anastrepha species their host plants and parasitoids.* Available: http://www.lea.esalq.usp.br/anastrepha. Access: 10/06/2021.

Zuska, J. 1977. A revision of the genus *Parapalaeosepsis* (Diptera, Sepsidae). *Acta Entomologica Bohemoslovaca,* 74: 50-61.

Zuska, J. 1980. Family Sepsidae. *In:* Crosskey, R.W. (Ed.). *Catalogue of the Diptera of the Afrotropical Region.* London, British Museum (Natural History). p. 591-596.

Published with the financial support of the "Programa de Apoio às Publicações Científicas Periódicas da USP"