

New distributional data on aquatic and semiaquatic bugs (Hemiptera: Heteroptera: Gerromorpha & Nepomorpha) from South America

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Academic editor: Laurence Livermore

Abstract

Background

Water bugs in general play an important role in freshwater ecosystems, and knowledge about them is essential for the study of water biology and the proper management of aquatic habitats. The Neotropical fauna is relatively well known, but the existence of large under-collected areas makes taxonomic and faunistic studies concerning the aquatic and semiaquatic bugs from tropical America urgent.

New information

Distributional information is presented for thirty-eight species of Gerromorpha and five Nepomorpha, including first records from the Brazilian states of Bahia (*Mesovelvia amoena*), Ceará (*Limnogonus profugus* and *Rhagovelia whitei*), Espírito Santo (*R. lucida*), Goiás (*Halobatopsis platensis* and *R. zela*), Mato Grosso (*Rheumatobates bonariensis*), Pará (*Nerthra terrestris*), Paraná (*H. spiniventris*, *Hydrometra fruhstorferi* and *R. janeira*), Piauí (*Microvelia ayacuchana*, *M. pulchella*, *Neogerris lubricus* and *Platyvelia brachialis*), Rio de Janeiro (*Martarega bentoi*) and São Paulo (*Rheumatobates minutus flavidus*); and the Peruvian region of Madre de Dios (*Rhagovelia fontanalís*).

Keywords

Aquatic insects, new records, Neotropical Region, Brazil, Peru.

Introduction

Heteroptera (Insecta: Hemiptera), or true bugs, is the most diverse group of insects with incomplete metamorphosis, with about 38,000 described species (Ribeiro et al. 2014). This suborder comprises seven infraorders, of which Gerromorpha, Nepomorpha and Leptopodomorpha are associated with aquatic habitats (Rafael et al. 2012).

Aquatic Heteroptera can be found in all continents, except Antarctica, and are more diverse in tropical climates. The Neotropical region is the richest in terms of described species, with more than 1,200 distributed in 18 families (Polhemus and Polhemus 2008). Six families, 43 genera and 380 species of Gerromorpha, and ten families, 39 genera and 510 species of Nepomorpha are known from South America, according to the latest published information (Mazzucconi et al. 2009).

The current study presents new data concerning the geographical distribution of Gerromorpha and Nepomorpha from South America, including first species records from several Brazilian states and a Peruvian region.

Materials and methods

The new information provided is based on material deposited in the Coleção Entomológica Professor José Alfredo Pinheiro Dutra, Departamento de Zoologia, Instituto de Biologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil (DZRJ) and the Laboratório de Estudos Subterrâneos, Universidade Federal de São Carlos, São Carlos, Brazil (LES). The known geographical distribution of each species is provided according to Moreira (2015). New records are followed by an exclamation mark. Abbreviations of Brazilian states follow the official standard (IBGE 2015).

Taxon treatments

Brachymetra albinervis albinervis

Materials

- a. genus: *Brachymetra*; specificEpithet: *albinervis*; infraspecificEpithet: *albinervis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Manuel Justino; decimalLatitude: -22.9365; decimalLongitude: -43.4447; year: 2013; month: 5; day: 26; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 3; sex: 1 apterous male, 2 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 066DCD11-055A-5424-81CA-3A75076EB779

- b. genus: *Brachymetra*; specificEpithet: *albinervis*; infraspecificEpithet: *albinervis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.438; year: 2013; month: 6; day: 8; eventRemarks: Cordeiro, F.A.C. Silva, F.F. Silva & L. Chaves col.; individualCount: 2; sex: 1 apterous male, 1 apterous female; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 2C173814-64A4-5F83-A530-9A1BB063DAB4
- c. genus: *Brachymetra*; specificEpithet: *albinervis*; infraspecificEpithet: *albinervis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio do Quilombo; decimalLatitude: -22.9323; decimalLongitude: -43.4358; year: 2013; month: 6; day: 16; eventRemarks: I.R.S. Cordeiro & F.A.C. Silva col.; individualCount: 12; sex: 2 apterous males, 10 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 7FB50C26-1AE7-5000-BED2-60465A66C821

Distribution

Guatemala, Honduras, Dominica, Martinique, St. Lucia, St. Vincent & Grenadines, Colombia, Grenada, Venezuela, Trinidad & Tobago, Panama, Suriname, Brazil, Ecuador, Peru, Paraguay.

Distribution in Brazil: PA, AM, CE, MT, BA, MG, SP, RJ.

Brachymetra furva

Materials

- a. genus: *Brachymetra*; specificEpithet: *furva*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Manuel Justino; decimalLatitude: -22.9365; decimalLongitude: -43.4447; year: 2012; month: 11; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva & L.Chaves col.; individualCount: 2; sex: 1 apterous male, 1 apterous female; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 3ED3FC89-7C00-536E-9BD8-15EDE4BB5D97
- b. genus: *Brachymetra*; specificEpithet: *furva*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Manuel Justino; decimalLatitude: -22.9365; decimalLongitude: -43.4447; year: 2013; month: 9; day: 7; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F.Silva, L.Chaves & A. Ferreira col.; individualCount: 14; sex: 7 apterous males, 7 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: ACBA0B02-891E-5A83-AAF6-F27F80E00F76
- c. genus: *Brachymetra*; specificEpithet: *furva*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.4380; year: 2013; month: 8; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F.Silva, L.Chaves & A. Ferreira col.;

- individualCount: 6; sex: 4 apterous males, 2 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: A728FF8B-9D88-5A27-9E99-105421C9CECA
- d. genus: *Brachymetra*; specificEpithet: *furva*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio do Quilombo; decimalLatitude: -22.9323; decimalLongitude: -43.4358; year: 2013; month: 8; day: 24; eventRemarks: I.R.S. Cordeiro & F.A.C. Silva col.; individualCount: 27; sex: 10 apterous males, 17 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: A7447BDB-438A-5B5C-B519-FCA5775886FC
- e. genus: *Brachymetra*; specificEpithet: *furva*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2014; month: 4; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F.Silva, L.Chaves, A. Ferreira, L.S. Barbosa, D.M.C. Santos & L.B. Pena Forte col.; individualCount: 9; sex: 5 apterous males, 2 macropterous males, 2 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 30E04442-2AAD-59EC-A195-FC40FB581030

Distribution

Brazil, Argentina.

Distribution in Brazil: MA, PI, RN, MT, BA, MG, MS, RJ, PR.

Halobatopsis platensis

Materials

- a. genus: *Halobatopsis*; specificEpithet: *platensis*; continent: South America; country: Brazil; stateProvince: Goiás; municipality: Cristalina; decimalLatitude: -16.730222; decimalLongitude: -47.569056; year: 2013; month: 3; day: 19; eventRemarks: D.M. Takiya & A.P.M. Santos col.; individualCount: 1; sex: 1 apterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: F4880C71-F19C-535B-A9A0-BA65CE5EAE53
- b. genus: *Halobatopsis*; specificEpithet: *platensis*; continent: South America; country: Brazil; stateProvince: Goiás; municipality: Alto Paraíso de Goiás; decimalLatitude: -14.160972; decimalLongitude: -47.594167; year: 2013; month: 3; day: 21; eventRemarks: D.M. Takiya & A.P.M. Santos col.; individualCount: 5; sex: 5 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 3725C0E0-BAE6-5771-8C65-F8B797C3F124
- c. genus: *Halobatopsis*; specificEpithet: *platensis*; continent: South America; country: Brazil; stateProvince: Goiás; municipality: Alto Paraíso de Goiás / São João da Aliança; decimalLatitude: -14.144194; decimalLongitude: -47.342667; year: 2013; month: 3; day: 22; eventRemarks: D.M. Takiya & A.P.M. Santos col.; individualCount: 2; sex: 1 apterous male, 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 606548E8-3229-537A-9303-08CEB667928B

Distribution

Brazil, Paraguay, Argentina, Uruguay.

Distribution in Brazil: PI, MT, BA, GO!, MG, DF, MS, SP, RJ, PR, RS.

Halobatopsis spiniventris

Materials

- a. genus: *Halobatopsis*; specificEpithet: *spiniventris*; continent: South America; country: Brazil; stateProvince: Paraná; municipality: Céu Azul; locality: Parque Nacional do Iguaçu, Rio Azul (3ª ordem); decimalLatitude: -25.1558; decimalLongitude: -53.7923; year: 2012; month: 9; day: 6; eventRemarks: F. Capistrano col.; individualCount: 10; sex: 7 apterous males, 3 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 808D85CC-4E57-5E28-8F5B-C611ADB5EFC6
- b. genus: *Halobatopsis*; specificEpithet: *spiniventris*; continent: South America; country: Brazil; stateProvince: Paraná; municipality: Céu Azul; locality: Parque Nacional do Iguaçu, Rio Azul (3ª ordem); decimalLatitude: -25.1558; decimalLongitude: -53.7923; year: 2012; month: 9; day: 6; eventRemarks: J. F. Barbosa col.; individualCount: 10; sex: 3 apterous males, 7 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: B2EDF5B6-96AD-5110-AE7B-97BE462E5903
- c. genus: *Halobatopsis*; specificEpithet: *spiniventris*; continent: South America; country: Brazil; stateProvince: Paraná; municipality: Céu Azul; locality: Parque Nacional do Iguaçu, Rio Manuel Gomes; decimalLatitude: -25.1586; decimalLongitude: -53.8331; year: 2012; month: 9; day: 7; eventRemarks: J. F. Barbosa col.; individualCount: 2; sex: 2 apterous males; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 0562F2E3-46DF-5924-A60C-1E861A35E2F3

Distribution

Brazil, Argentina.

Distribution in Brazil: SP, PR!, SC, RS.

Limnogonus profugus

Material

- a. genus: *Limnogonus*; specificEpithet: *profugus*; continent: South America; country: Brazil; stateProvince: Ceará; locality: Parque Nacional Ubajara, Rio das Minas, Trilha Araticum; year: 2013; month: 2; day: 14; eventRemarks: A.P.M. Santos col.; individualCount: 1; sex: 1 macropterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: AB5FF914-62BE-58AE-83F3-6C4951D4520C

Distribution

Brazil, Peru, Paraguay, Argentina.

Distribution in Brazil: CEI, PB, PE, MT, GO, MG, MS, SP, RJ.

Neogerris lubricus

Material

- a. genus: *Neogerris*; specificEpithet: *lubricus*; continent: South America; country: Brazil; stateProvince: Piauí; municipality: Piracuruca; locality: Parque Nacional de Sete Cidades, Cachoeira do Riachão; verbatimElevation: 171 m; decimalLatitude: -4.1078; decimalLongitude: -41.6736; year: 2013; month: 2; day: 12; eventRemarks: A.P.M. Santos & D.M. Takiya col.; individualCount: 1; sex: 1 macropterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 62475E27-E0A7-5898-B6D8-EB263E51EDBA

Distribution

Colombia, Trinidad & Tobago, Panama, Guyana, Suriname, Brazil, Ecuador, Peru, Bolivia, Paraguay, Argentina.

Distribution in Brazil: AP, PA, AM, PII, MT, RO, BA, MG, MS, SP, RJ.

Potamobates spiculus Polhemus & Polhemus, 1983

Material

- a. genus: *Potamobates*; specificEpithet: *spiculus*; continent: South America; country: Peru; stateProvince: Cusco; locality: 3 rd km E Quincemil; decimalLatitude: -13.2208; decimalLongitude: -70.7311; year: 2012; month: 8; day: 20; eventRemarks: D. Takiya & A.P.M. Santos col.; individualCount: 1; sex: 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 2079A368-DD58-5D14-925E-BAF738F2CB4D

Distribution

Peru.

Distribution in Peru: Cusco.

Rheumatobates bonariensis (Berg, 1898)

Material

- a. genus: *Rheumatobates*; specificEpithet: *bonariensis*; continent: South America; country: Brazil; stateProvince: Mato Grosso; municipality: Barra do Garças; locality: Papagaio, 4^a

ordem, superficie 20; year: 2007; month: 11; day: 6; eventRemarks: K. Dias-Silva col.; individualCount: 1; sex: 1 macropterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 13EE0683-ED45-5BD1-8C93-E8BA28639E0F

Distribution

Brazil, Peru, Bolivia, Paraguay, Argentina, Uruguay.

Distribution in Brazil: MT!, SP, SC, RS.

Rheumatobates minutus flavidus Drake & Harris, 1942

Material

- a. genus: *Rheumatobates*; specificEpithet: *minutus*; infraspecificEpithet: *flavidus*; continent: South America; country: Brazil; stateProvince: São Paulo; municipality: Ubatuba; locality: Parque Estadual da Serra do Mar, Núcleo Picinguaba, Riacho Paciência (caminho ao lado do camping); year: 2007; month: 10; day: 26; eventRemarks: V.P. Alecrim col.; individualCount: 4; sex: 4 apterous males; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 0F924058-6FA3-524A-933A-891D2F1E423E

Distribution

Costa Rica, Panama, Brazil, Peru, Bolivia, Argentina.

Distribution in Brazil: PA, AM, RO, MG, SP!.

Hydrometra fruhstorferi Hungerford & Evans, 1934

Material

- a. genus: *Hydrometra*; specificEpithet: *fruhstorferi*; continent: South America; country: Brazil; stateProvince: Paraná; municipality: Céu Azul; locality: Parque Nacional do Iguaçu, Rio Manoel Gomes; decimalLatitude: -25.1586; decimalLongitude: -53.8331; year: 2012; month: 9; day: 7; eventRemarks: B.H.L. Sampaio col.; individualCount: 1; sex: 1 apterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 797BCA6C-39C4-5D9C-B67F-7E46C5C40985

Distribution

Brazil, Bolivia, Paraguay, Argentina.

Distribution in Brazil: ES, RJ, PR!, SC.

Mesovelia amoena Uhler, 1894

Materials

- a. genus: *Mesovelia*; specificEpithet: *amoena*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Rio Preto da Eva; locality: Bacia do Rio Urubu, Igarapé de primeira ordem; decimalLatitude: -2.43056; decimalLongitude: -59.62250; eventRemarks: J.L. Nessimian col.; individualCount: 1; sex: 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 9E0B2ACF-386A-5F72-B3A8-1D87B48F4022
- b. genus: *Mesovelia*; specificEpithet: *amoena*; continent: South America; country: Brazil; stateProvince: Bahia; municipality: São Desidério; locality: Gruta do Juraci; decimalLatitude: -12.4102; decimalLongitude: -44.8505; year: 2011; month: 11; day: 3; eventRemarks: M.E. Bichuette, D.R. Pedroso, F.F. Pellegatti & T.L.C. Scatolini. col.; individualCount: 1; sex: 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: LES; basisOfRecord: PreservedSpecimen; occurrenceID: 610222B0-1C35-533B-B180-55223F9026FE

Distribution

Canada, United States, Mexico, Cuba, Dominican Republic, Puerto Rico, Jamaica, Belize, St. Eustatius, Martinique, St. Vincent & Grenadines, Colombia, Curaçao, Bonaire, Grenada, Costa Rica, Trinidad & Tobago, Panama, Brazil, Ecuador, Hawaiian Islands.

Distribution in Brazil: PA, AM, CE, MT, RO, BA!, MG, ES, SP, RJ.

Mesovelia mulsanti White, 1879

Materials

- a. genus: *Mesovelia*; specificEpithet: *mulsanti*; continent: South America; country: Brazil; stateProvince: Pará; municipality: Canaã dos Carajás; locality: Floresta Nacional de Carajás, Serra Sul, S11B-A; year: 2006; month: 10; day: 15; eventRemarks: L.L. Dumas col.; individualCount: 1; sex: 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 8739AED8-01B9-5409-B62C-4F52271BC03A
- b. genus: *Mesovelia*; specificEpithet: *mulsanti*; continent: South America; country: Brazil; stateProvince: Pará; municipality: Canaã dos Carajás; locality: Floresta Nacional de Carajás, Serra Sul, S11D-B; year: 2011; month: 4; individualCount: 1; sex: 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 25DC6ADF-16FB-5D4F-916C-C6482B12B460

Distribution

Canada, United States, Mexico, Cuba, Dominican Republic, Puerto Rico, U.S. Virgin Islands, Jamaica, Belize, Guatemala, Honduras, St. Martin, St. Kitts & Nevis, Antigua

& Barbuda, Guadeloupe, Nicaragua, Dominica, St. Lucia, St. Vincent & Grenadines, Barbados, Aruba, Colombia, Curaçao, Klein Curaçao, Bonaire, Grenada, Venezuela, Costa Rica, Trinidad & Tobago, Panama, Guyana, Brazil, Peru, Bolivia, Paraguay, Argentina, Hawaiian Islands.

Distribution in Brazil: AP, PA, AM, CE, PE, MT, RO, BA, GO, MG, MS, SP, RJ, PR, SC, RS.

***Euvelia lata* Polhemus & Polhemus, 1984**

Material

- a. genus: *Euvelia*; specificEpithet: *lata*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Rio Preto da Eva; locality: Bacia do Rio Preto da Eva, Igarapé de segunda ordem; decimalLatitude: -2.64444; decimalLongitude: -59.83528; year: 2004; month: 4; day: 22; eventRemarks: J.L. Nessimian col.; individualCount: 2; sex: 2 apterous males; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 8C7D2232-F090-5097-8073-D2A1FCCDB1CC

Distribution

Brazil.

Distribution in Brazil: PA, AM, MT.

***Microvelia ayacuchana* Drake & Maldonado-Capriles, 1952**

Material

- a. genus: *Microvelia*; specificEpithet: *ayacuchana*; continent: South America; country: Brazil; stateProvince: Piauí; municipality: Piracuruca; locality: Parque Nacional de Sete Cidades, Cachoeira do Riachão; verbatimElevation: 171 m; decimalLatitude: -4.1078; decimalLongitude: -41.6736; year: 2013; month: 2; day: 9; eventRemarks: A.P.M. Santos & D.M. Takiya col.; individualCount: 2; sex: 1 apterous male, 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 3A98CF40-3B7E-5261-82BF-0C20EE79993C

Distribution

Venezuela, Guyana, Suriname, Brazil.

Distribution in Brazil: PA, PI, ES.

***Microvelia longipes* Uhler, 1893**

Materials

- a. genus: *Microvelia*; specificEpithet: *longipes*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Rio Preto da Eva; locality: Bacia do Rio Preto da Eva, Igarapé de primeira ordem, armadilha U.V.; decimalLatitude: -2.76306; decimalLongitude: -59.70361; year: 2004; month: 4; day: 24; eventRemarks: J.L. Nessimian col.; individualCount: 1; sex: 1 macropterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 97CBAC3B-1251-5D75-BCCF-71351B1DE431
- b. genus: *Microvelia*; specificEpithet: *longipes*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Urubu, Igarapé de primeira ordem, armadilha U.V.; decimalLatitude: -2.39889; decimalLongitude: -60.06250; year: 2004; month: 5; day: 24; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 9; sex: 4 macropterous males, 5 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: DB0C2C92-8931-5FD3-A9A1-DE4B5B8F457C

Distribution

Cuba, Dominican Republic, Puerto Rico, U.S. Virgin Islands, Jamaica, St. Martin, St. Barthélemy, St. Eustatius, St. Kitts & Nevis, Aruba, Colombia, Barbados, Curaçao, Bonaire, Grenada, Venezuela, Trinidad & Tobago, Guyana, Brazil, Ecuador, Peru, Bolivia, Paraguay, Argentina.

Distribution in Brazil: RR, AM, BA, MG, MS, ES, SP, RJ, SC.

***Microvelia mimula* White, 1879**

Material

- a. genus: *Microvelia*; specificEpithet: *mimula*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Rio Preto da Eva; locality: Bacia do Rio Urubu, Igarapé Jangada, armadilha U.V.; decimalLatitude: -2.52361; decimalLongitude: -59.66167; year: 2004; month: 5; day: 28; eventRemarks: J.L. Nessimian col.; individualCount: 1; sex: 1 macropterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 015D2CDC-FF24-5AED-8FD8-4D4B8C3B7DAA

Distribution

Cuba, Puerto Rico, St. Vincent & Grenadines, Barbados, Grenada, Venezuela, Costa Rica, Trinidad & Tobago, Panama, Brazil, Ecuador, Peru, Paraguay, Argentina, Uruguay.

Distribution in Brazil: PA, AM, CE, MT, MG, MS, ES, SP, RJ, SC.

Microvelia pulchella Westwood, 1834

Materials

- a. genus: *Microvelia*; specificEpithet: *pulchella*; continent: South America; country: Brazil; stateProvince: Pará; municipality: Canaã dos Carajás; locality: Floresta Nacional dos Carajás, Serra Sul; year: 2012; month: 11; eventRemarks: Lab. de Limnologia col.; individualCount: 11; sex: 4 apterous males, 6 apterous females, 1 macropterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 98CDE03D-5F64-50C3-B443-17E2BBA9CFAE
- b. genus: *Microvelia*; specificEpithet: *pulchella*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Rio Preto da Eva; locality: Bacia do Rio Preto da Eva, Igarapé de primeira ordem, armadilha U.V.; decimalLatitude: -2.76306; decimalLongitude: -59.70361; year: 2004; month: 4; day: 24; eventRemarks: J.L. Nessimian col.; individualCount: 6; sex: 1 macropterous male, 5 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 2C06C2DB-360F-507C-A17E-3A37FE05FB12
- c. genus: *Microvelia*; specificEpithet: *pulchella*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Rio Preto da Eva; locality: Bacia do Rio Preto da Eva, Igarapé de terceira ordem, armadilha U.V.; decimalLatitude: -2.72639; decimalLongitude: -59.88083; year: 2004; month: 4; day: 23; eventRemarks: J.L. Nessimian col.; individualCount: 1; sex: 1 macropterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 2A732116-F650-56AC-B30F-A0CBF2FC94EF
- d. genus: *Microvelia*; specificEpithet: *pulchella*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Rio Preto da Eva; locality: Bacia do Rio Urubu, Igarapé Buriti, armadilha U.V.; decimalLatitude: -2.31028; decimalLongitude: -59.86639; year: 2004; month: 5; day: 25; eventRemarks: J.L. Nessimian col.; individualCount: 2; sex: 2 macropterous males; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 4DAD00DB-556B-564B-9028-5C73A0A358DC
- e. genus: *Microvelia*; specificEpithet: *pulchella*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Rio Preto da Eva; locality: Bacia do Rio Urubu, Igarapé Jangada, armadilha U.V.; decimalLatitude: -2.52361; decimalLongitude: -59.66167; year: 2004; month: 5; day: 28; eventRemarks: J.L. Nessimian col.; individualCount: 2; sex: 2 macropterous males; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 6C4443DF-53B7-5FA2-A76A-EABC7A3F123A
- f. genus: *Microvelia*; specificEpithet: *pulchella*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Urubu, Igarapé de primeira ordem, armadilha U.V.; decimalLatitude: -2.39889; decimalLongitude: -60.06250; year: 2004; month: 5; day: 24; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 4; sex: 2 macropterous males, 2 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 519D18F6-6975-590D-A4D9-E8C5A255D5E8
- g. genus: *Microvelia*; specificEpithet: *pulchella*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Igarapé Piranga, armadilha U.V.; decimalLatitude: -2.63907; decimalLongitude: -60.28022; year: 2004; month: 8; day: 21; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount:

- 2; sex: 1 macropterous male, 1 macropterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 83B4715A-92FD-575C-A6F2-2330BE7AEE8F
- h. genus: *Microvelia*; specificEpithet: *pulchella*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Igarapé tributário do Igarapé Lobisomem, armadilha U.V.; decimalLatitude: -2.56288; decimalLongitude: -60.31760; year: 2004; month: 8; day: 22; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 2; sex: 2 macropterous males; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 91FBAD28-C07E-5BA2-B3B5-A94B28C2D420
- i. genus: *Microvelia*; specificEpithet: *pulchella*; continent: South America; country: Brazil; stateProvince: Piauí; municipality: Piracuruca; locality: Parque Nacional de Sete Cidades, Rio da Bandeira; verbatimElevation: 189 m; decimalLatitude: -4.0964; decimalLongitude: -41.6833; year: 2013; month: 2; day: 8; eventRemarks: A.P.M. Santos & D.M. Takiya col.; individualCount: 7; sex: 2 apterous males, 3 macropterous males, 2 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: FF21C85C-297B-5E75-B638-3BFDB5352752

Distribution

Canada, United States, Mexico, Bahamas, Cuba, Dominican Republic, Puerto Rico, U.S. Virgin Islands, Guatemala, Cayman Islands, Jamaica, Anguilla, St. Martin, Saba, St. Kitts & Nevis, Guadeloupe, Martinique, Aruba, Colombia, St. Vincent & Grenadines, Barbados, Curaçao, Klein Curaçao, Bonaire, Klein Bonaire, Grenada, Venezuela, Costa Rica, Trinidad & Tobago, Panama, Brazil, Ecuador, Peru, Argentina.

Distribution in Brazil: PA, AM, MA, PI, PE, BA, AL, MG, MS, ES, SP, RJ, SC.

Microvelia summersi Drake & Harris, 1928

Materials

- a. genus: *Microvelia*; specificEpithet: *summersi*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Preto da Eva, Igarapé de terceira ordem, armadilha U.V.; decimalLatitude: -2.72639; decimalLongitude: -59.88083; year: 2004; month: 4; day: 23; eventRemarks: J.L. Nessimian col.; individualCount: 1; sex: 1 macropterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 1B4BE31F-18D2-5E16-B132-2E605C09E1E1
- b. genus: *Microvelia*; specificEpithet: *summersi*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, armadilha U.V.; decimalLatitude: -2.70696; decimalLongitude: -60.3745; year: 2004; month: 8; day: 19; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 1; sex: 1 macropterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: D3A40186-8AA1-5D22-943A-B4AF7D1653D5

- c. genus: *Microvelia*; specificEpithet: *summersi*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Igarapé de segunda ordem, armadilha U.V.; decimalLatitude: -2.53612; decimalLongitude: -60.31720; year: 2004; month: 8; day: 23; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 2; sex: 2 macropterous males; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 5215C4EA-6E68-5F20-8605-174508BCE5DC
- d. genus: *Microvelia*; specificEpithet: *summersi*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Igarapé Arumã, armadilha U.V.; decimalLatitude: -2.51532; decimalLongitude: -60.26233; year: 2004; month: 8; day: 23; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 60; sex: 12 macropterous males, 48 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 65430E88-5A09-5AEF-ABF8-F8AB960842F2

Distribution

Grenada, Trinidad & Tobago, Panama, Guyana, Brazil.

Distribution in Brazil: PA, AM.

Microvelia ubatuba Moreira & Barbosa, 2011

Materials

- a. genus: *Microvelia*; specificEpithet: *ubatuba*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Igarapé Arumã, armadilha U.V.; decimalLatitude: -2.51532; decimalLongitude: -60.26233; year: 2004; month: 8; day: 23; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 12; sex: 3 macropterous males, 9 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 9598AA51-36F3-56FD-80EB-2F154B6F6526
- b. genus: *Microvelia*; specificEpithet: *ubatuba*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, tributário do Rio Branquinho, armadilha U.V.; decimalLatitude: -2.52350; decimalLongitude: -60.33480; year: 2004; month: 8; day: 23; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 12; sex: 3 macropterous males, 9 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: FCAADB4C-5CFD-5383-AE42-4E11EBCC26FB

Distribution

Brazil.

Distribution in Brazil: AM, MT, SP.

Microvelia urucara

Materials

- a. genus: *Microvelia*; specificEpithet: *urucara*; continent: South America; country: Brazil; stateProvince: Pará; municipality: Parauapebas; locality: Flona de Carajás, Serra Norte, N4-B; year: 2012; month: 11; eventRemarks: Laboratório de Limnologia col.; individualCount: 4; sex: 2 apterous males, 1 apterous female, 1 macropterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 263709D1-203D-58E8-B660-A0CB9695FAC7
- b. genus: *Microvelia*; specificEpithet: *urucara*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Igarapé Arumã, armadilha U.V.; decimalLatitude: -2.51532; decimalLongitude: -60.26233; year: 2004; month: 8; day: 23; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 2; sex: 1 macropterous male, 1 macropterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: A53E2A0E-81D0-5439-9E9D-1160A895CEA3

Distribution

Brazil.

Distribution in Brazil: PA, AM.

***Microvelia venustatis* Drake & Harris, 1933**

Materials

- a. genus: *Microvelia*; specificEpithet: *venustatis*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Rio Preto da Eva; locality: Bacia do Rio Preto da Eva, Igarapé de primeira ordem, armadilha U.V.; decimalLatitude: -2.76306; decimalLongitude: -59.70361; year: 2004; month: 4; day: 24; eventRemarks: J.L. Nessimian col.; individualCount: 2; sex: 2 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 9574F0D7-4948-55E5-9158-6ED7372284AD
- b. genus: *Microvelia*; specificEpithet: *venustatis*; continent: South America; country: Brazil; stateProvince: São Paulo; municipality: Ubatuba; locality: Parque Estadual da Serra do Mar, Núcleo Picinguaba, Riacho Paciência (caminho ao lado do camping); year: 2007; month: 10; day: 26; eventRemarks: V.P. Alecrim col.; individualCount: 11; sex: 5 macropterous males, 6 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 387544F6-D499-51D0-841A-273069033089

Distribution

Brazil, Peru, Paraguay, Argentina.

Distribution in Brazil: PA, AM, MA, MT, MG, ES, SP, RJ, SC.

Platyvelia brachialis

Material

- a. genus: *Platyvelia*; specificEpithet: *brachialis*; continent: South America; country: Brazil; stateProvince: Piauí; municipality: Piracuruca; locality: Parque Nacional de Sete Cidades, Olho d'água dos milagres; verbatimElevation: 180 m; decimalLatitude: -4.0919; decimalLongitude: -41.6833; year: 2013; month: 2; day: 11; eventRemarks: A.P.M. Santos & D.M. Takiya col.; individualCount: 1; sex: 1 macropterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 8401B0AF-836C-52F5-84B0-E77565930D4F

Distribution

United States, Mexico, Cuba, Dominican Republic, Jamaica, Guatemala, Nicaragua, Grenada, Costa Rica, Trinidad & Tobago, Panama, Suriname, Brazil, Peru, Argentina.

Distribution in Brazil: PI, PE, MT, GO, MG, MS, ES, RJ, SC.

Rhagovelia accedens

Material

- a. genus: *Rhagovelia*; specificEpithet: *accedens*; continent: South America; country: Brazil; stateProvince: Espírito Santo; municipality: Dores do Rio Preto; locality: Parque Nacional do Caparaó, Pedra Menina, Rio Preto (ponte); year: 2013; month: 1; day: 7; eventRemarks: A.L.H. Oliveira col.; individualCount: 3; sex: 2 apterous males, 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 2C7713BB-EE3C-5A70-A469-3DEC9C4431FF

Distribution

Brazil.

Distribution in Brazil: MG, ES, SP, RJ.

Rhagovelia aiuruoca Moreira & Ribeiro, 2009

Material

- a. genus: *Rhagovelia*; specificEpithet: *aiuruoca*; continent: South America; country: Brazil; stateProvince: Minas Gerais; municipality: Alto Caparaó; locality: Parque Nacional do Caparaó, Rio José Pedro, Cachoeira Bonita; year: 2010; month: 10; day: 5; eventRemarks: J.L. Nessimian & L.L. Dumas col.; individualCount: 15; sex: 8 apterous males, 7 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 7830C83F-06F5-53EE-A36B-F82A951AC782

Distribution

Brazil

Distribution in Brazil: MG, SP, RJ.

Rhagovelia elegans Uhler, 1894

Materials

- a. genus: *Rhagovelia*; specificEpithet: *elegans*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Rio Preto da Eva; locality: Bacia do Rio Preto da Eva!, igarapé de primeira ordem; decimalLatitude: -2.76306; decimalLongitude: -59.70361; year: 2004; month: 4; day: 24; eventRemarks: J.L. Nessimian col.; individualCount: 1; sex: 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 649F3596-2CF8-510C-8D3D-0EF1762D8FD4
- b. genus: *Rhagovelia*; specificEpithet: *elegans*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Polícia Federal, igarapé de primeira ou segunda ordem; decimalLatitude: -2.70534; decimalLongitude: -60.38372; year: 2004; month: 8; day: 19; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 2; sex: 2 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 8B1B08CB-C70D-567E-91F9-8A7AFC8AC222
- c. genus: *Rhagovelia*; specificEpithet: *elegans*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Igarapé de primeira ordem; decimalLatitude: -2.70696; decimalLongitude: -60.37450; year: 2004; month: 8; day: 19; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 2; sex: 2 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: BFD4CEF9-7619-56FF-8D65-5F23B8C3BFDE
- d. genus: *Rhagovelia*; specificEpithet: *elegans*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Tributário do Igarapé da Cachoeira; decimalLatitude: -2.69593; decimalLongitude: -60.29520; year: 2004; month: 8; day: 20; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 1; sex: 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: D57FE60A-289B-552A-9C9A-06B6B0F6FB45
- e. genus: *Rhagovelia*; specificEpithet: *elegans*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Igarapé do Paliteiro, Tributário do Rio Branquinho; decimalLatitude: -2.45865; decimalLongitude: -60.34600; year: 2004; month: 8; day: 26; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 1; sex: 1 macropterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 9C57DF15-8547-51AC-976B-3A56C981A600
- f. genus: *Rhagovelia*; specificEpithet: *elegans*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Igarapé da Onça, tributário do Rio Branquinho; decimalLatitude: -2.49308; decimalLongitude: -60.33419; year: 2004; month: 8; day: 26; eventRemarks: J.L. Nessimian & L. Fidelis col.;

individualCount: 2; sex: 1 macropterous male, 1 macropterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: D925CF6E-9655-5F24-8913-F4136E9462AE

Distribution

Hispaniola, St. Kitts & Nevis, Dominica, Martinique, St. Lucia, St. Vincent & Grenadines, Colombia, Grenada, Venezuela, Costa Rica, Trinidad & Tobago, Panama, Brazil, Ecuador.

Distribution in Brazil: AP, PA, AM, MT, SE, ES, RJ.

Rhagovelia fontanalis

Material

- a. genus: *Rhagovelia*; specificEpithet: *fontanalis*; continent: South America; country: Peru; stateProvince: Madre de Dios; locality: 12 rd km E Mazuko, pte. Amanapu; decimalLatitude: -13.0442; decimalLongitude: -70.3128; year: 2012; month: 8; day: 18; eventRemarks: D. Takiya & A.P.M. Santos col.; individualCount: 21; sex: 9 apterous males, 12 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 3CABA6CB-B395-5874-9CC7-072CFE6FDA65

Distribution

Peru.

Distribution in Peru: Ucayali, Huánuco, *Madre de Dios!*, Junin, Ayacucho.

Rhagovelia itatiaiana Drake, 1953

Materials

- a. genus: *Rhagovelia*; specificEpithet: *itatiaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Manuel Justino; decimalLatitude: -22.9365; decimalLongitude: -43.4447; year: 2012; month: 11; day: 19; eventRemarks: I.R.S. Cordeiro & F.A.C. Silva col.; individualCount: 12; sex: 6 apterous males, 6 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 44D4ED16-A79F-5241-91AB-AB974ECBC35E
- b. genus: *Rhagovelia*; specificEpithet: *itatiaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Manuel Justino; decimalLatitude: -22.9365; decimalLongitude: -43.4447; year: 2013; month: 5; day: 26; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 14; sex: 8 apterous males, 6 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 027EEAFA-D44B-5493-AC65-98617AAA2B91

- c. genus: *Rhagovelia*; specificEpithet: *itaitaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Manuel Justino; decimalLatitude: -22.9365; decimalLongitude: -43.4447; year: 2013; month: 9; day: 7; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 5; sex: 5 apterous males; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 66AF9C06-ABDC-5F0D-A144-B5096BDCC92F
- d. genus: *Rhagovelia*; specificEpithet: *itaitaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.4380; year: 2012; month: 10; day: 15; eventRemarks: I.R.S. Cordeiro & F.A.C. Silva col.; individualCount: 19; sex: 7 apterous males, 12 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 7E745702-ABBE-58F4-9CE2-267909B8050E
- e. genus: *Rhagovelia*; specificEpithet: *itaitaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.4380; year: 2013; month: 6; day: 8; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 18; sex: 7 apterous males, 11 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: E51BB99E-1DD2-52A6-9242-2452B3846866
- f. genus: *Rhagovelia*; specificEpithet: *itaitaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.4380; year: 2013; month: 8; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 35; sex: 26 apterous males, 9 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 6A3FF7F5-5DC6-5D0B-8FC4-3436D9359A31
- g. genus: *Rhagovelia*; specificEpithet: *itaitaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio do Quilombo; decimalLatitude: -22.9323; decimalLongitude: -43.4358; year: 2013; month: 6; day: 16; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 37; sex: 22 apterous males, 15 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 486A7A4E-452F-5592-B156-02C5FCD88F78
- h. genus: *Rhagovelia*; specificEpithet: *itaitaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio do Quilombo; decimalLatitude: -22.9323; decimalLongitude: -43.4358; year: 2013; month: 8; day: 24; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 5; sex: 5 apterous males; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: DF13C3FB-9D7B-5A84-9978-4934F3043F81
- i. genus: *Rhagovelia*; specificEpithet: *itaitaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá,

- Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2012; month: 11; day: 19; eventRemarks: I.R.S. Cordeiro & F.A.C. Silva col.; individualCount: 9; sex: 3 apterous males, 6 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 47C2B627-3C9F-59DF-A329-A8C351A05071
- j. genus: *Rhagovelia*; specificEpithet: *itatiaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2013; month: 2; day: 23; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 2; sex: 1 apterous male, 1 apterous female; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 29F16A3B-DC10-56A5-B72A-2E8AFF0E56C5
- k. genus: *Rhagovelia*; specificEpithet: *itatiaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2013; month: 5; day: 26; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 9; sex: 7 apterous males, 2 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 145B85B5-0BB7-5CDD-A038-8A9DBB443E57
- l. genus: *Rhagovelia*; specificEpithet: *itatiaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2013; month: 9; day: 7; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 2; sex: 1 apterous male, 1 apterous female; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: E7FB290B-F066-5522-8AFA-96B6A2C6E3B8
- m. genus: *Rhagovelia*; specificEpithet: *itatiaiana*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2014; month: 4; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves, A. Ferreira, L.S. Barbosa, D.M.C. Santos & L.B. Pena Forte col.; individualCount: 12; sex: 10 apterous males, 2 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: DAAC0959-D480-5C09-9AD4-3652449E9E92

Distribution

Brazil.

Distribution in Brazil: ES, RJ.

Rhagovelia janeira Drake, 1953

Material

- a. genus: *Rhagovelia*; specificEpithet: *janeira*; continent: South America; country: Brazil; stateProvince: Paraná; municipality: Céu Azul; locality: Parque Nacional do Iguaçu, Rio Manoel Gomes; decimalLatitude: -25.15860; decimalLongitude: -53.83308; year: 2012; month: 9; day: 7; eventRemarks: J.F. Barbosa col.; individualCount: 17; sex: 14 apterous males, 3 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: B1C1D53B-EEE3-5854-B620-8DE9163F4FAC

Distribution

Brazil, Argentina.

Distribution in Brazil: MG, SP, RJ, PR!, SC, RS.

Rhagovelia lucida Gould, 1931

Materials

- a. genus: *Rhagovelia*; specificEpithet: *lucida*; continent: South America; country: Brazil; stateProvince: Espírito Santo; municipality: Dores do Rio Preto; locality: Parque Nacional Caparaó, Pedra Menina, Rio Preto (ponte); year: 2013; month: 1; day: 7; eventRemarks: A.L.H. Oliveira col.; individualCount: 1; sex: 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 4019F6DF-E646-5694-94AD-FD145C6C4371
- b. genus: *Rhagovelia*; specificEpithet: *lucida*; continent: South America; country: Brazil; stateProvince: Paraná; municipality: Céu Azul; locality: Parque Nacional do Iguaçu, Rio Azul (3ª ordem); decimalLatitude: -25.15581; decimalLongitude: -53.79230; year: 2012; month: 9; day: 6; eventRemarks: J.F. Barbosa col.; individualCount: 1; sex: 1 apterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: CF90F9F0-37E4-58D6-A0A5-0EDC31328B11
- c. genus: *Rhagovelia*; specificEpithet: *lucida*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.4380; year: 2013; month: 6; day: 8; eventRemarks: I.R.S. Cordeiro & F.A.C. Silva col.; individualCount: 3; sex: 1 apterous male, 2 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 345FBB8E-B1AE-5FA3-93A1-068AB6C55ADA
- d. genus: *Rhagovelia*; specificEpithet: *lucida*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.4380; year: 2013; month: 8; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 21; sex: 9 apterous males, 12 apterous females; identifiedBy: I.R.S.

- Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: D36D9146-F076-51E9-8A3A-15C5DF6DC81B
- e. genus: *Rhagovelia*; specificEpithet: *lucida*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2012; month: 11; day: 19; eventRemarks: I.R.S. Cordeiro & F.A.C. Silva col.; individualCount: 8; sex: 3 apterous males, 1 macropterous male, 2 apterous females, 2 macropterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 36D39C4A-CB09-581A-AC0D-2DF0C31C3526
- f. genus: *Rhagovelia*; specificEpithet: *lucida*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2013; month: 2; day: 23; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 6; sex: 6 apterous males; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 73FBE071-236F-562C-8AF8-7AB53B3E0ED6
- g. genus: *Rhagovelia*; specificEpithet: *lucida*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2013; month: 5; day: 26; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 7; sex: 3 macropterous males, 4 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: E63AA85F-4514-5875-933A-8785DBE938F5
- h. genus: *Rhagovelia*; specificEpithet: *lucida*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2013; month: 9; day: 7; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 78; sex: 36 apterous males, 5 macropterous males, 32 apterous females, 5 macropterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: D0B863A8-F5E1-5324-BA09-6E5E0CA4EA0F
- i. genus: *Rhagovelia*; specificEpithet: *lucida*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2014; month: 4; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves, A. Ferreira, L.S. Barbosa, D.M.S. Corrêa & L.B. Pena Forte col.; individualCount: 56; sex: 35 apterous males, 21 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 6CB173CA-5960-51FE-AB5B-CD806F204EDB

Distribution

Brazil, Argentina.

Distribution in Brazil: ES!, SP, RJ, PR, SC, RS.

Rhagovelia macta Drake & Carvalho, 1955

Materials

- a. genus: *Rhagovelia*; specificEpithet: *macta*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Manuel Justino; decimalLatitude: -22.9365; decimalLongitude: -43.4447; year: 2013; month: 9; day: 7; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 4; sex: 4 apterous males; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: EC414B6F-D8F1-539C-A9C8-30C91C625AC5
- b. genus: *Rhagovelia*; specificEpithet: *macta*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.4380; year: 2013; month: 8; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 85; sex: 20 apterous males, 65 apterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 293A36C7-B737-5A74-B027-6AFFAAF41B18
- c. genus: *Rhagovelia*; specificEpithet: *macta*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio do Quilombo; decimalLatitude: -22.9323; decimalLongitude: -43.4358; year: 2013; month: 8; day: 24; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 12; sex: 12 apterous males; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 5B5933A2-7CAF-5842-B5A9-9C5FC125B2F7
- d. genus: *Rhagovelia*; specificEpithet: *macta*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2014; month: 4; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves, A. Ferreira, L.S. Barbosa, D.M.S. Corrêa & L.B. Pena Forte col.; individualCount: 2; sex: 2 apterous males; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 465B594C-6BB4-5E65-8C2F-CC508BC15532

Distribution

Brazil.

Distribution in Brazil: MG, RJ.

Rhagovelia traili

Material

- a. genus: *Rhagovelia*; specificEpithet: *traili*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Igarapé Piranga; decimalLatitude: -2.63907; decimalLongitude: -60.28022; year: 2004; month: 8; day: 21; eventRemarks: J.L. Nessimian & L. Fidelis col.; individualCount: 1; sex: 1 apterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 53818CCA-3B80-52A4-94EA-050DA2225253

Distribution

Venezuela, Suriname, French Guiana, Brazil, Peru.

Distribution in Brazil: RR, PA, AM.

***Rhagovelia triangula* Drake, 1953**

Materials

- a. genus: *Rhagovelia*; specificEpithet: *triangula*; continent: South America; country: Brazil; stateProvince: Minas Gerais; municipality: Araponga; locality: Pico do Boné, cachoeira; year: 2011; month: 9; day: 24; eventRemarks: V. Sandoval; individualCount: 5; sex: 4 apterous males, 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 8432A9A0-F0D6-565A-AE52-E99B36CB6DFB
- b. genus: *Rhagovelia*; specificEpithet: *triangula*; continent: South America; country: Brazil; stateProvince: Minas Gerais; municipality: Alto Caparaó; locality: Parque Nacional Caparaó, Rio José Pedro, Cachoeira Bonita; year: 2010; month: 10; day: 5; eventRemarks: J.L. Nessimian & L.L. Dumas col.; individualCount: 1; sex: 1 apterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 43D4811D-1870-5424-BB9C-93BF62824950

Distribution

Brazil.

Distribution in Brazil: MG, ES, SP, RJ.

***Rhagovelia trianguloides* Nieser & Melo, 1997**

Material

- a. genus: *Rhagovelia*; specificEpithet: *trianguloides*; continent: South America; country: Brazil; stateProvince: Minas Gerais; municipality: Araponga; locality: Pico do Boné, cachoeira; year: 2011; month: 9; day: 24; eventRemarks: V. Sandoval; individualCount: 1;

sex: 1 apterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: F3FB1742-D572-5425-9E66-9662DDC914C5

Distribution

Brazil.

Distribution in Brazil: MG, ES, RJ.

Rhagovelia versuta Drake & Harris, 1935

Material

- a. genus: *Rhagovelia*; specificEpithet: *versuta*; continent: South America; country: Peru; stateProvince: Cusco; locality: 20 rd Km W Quincemil, Río Araza tributary; decimalLatitude: -13.33694; decimalLongitude: -70.85417; year: 2012; month: 8; day: 26; eventRemarks: D.M. Takiya & A.P.M. Santos col.; individualCount: 2; sex: 1 macropterous male, 1 macropterous male with broken wings; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 70A3BB33-FFEA-5276-A22C-317A5C9E3BE7

Distribution

Peru, Bolivia, Argentina.

Distribution in Peru: Junin, Cusco.

Rhagovelia whitei (Breddin, 1898)

Materials

- a. genus: *Rhagovelia*; specificEpithet: *whitei*; continent: South America; country: Brazil; stateProvince: Ceará; municipality: Ubajara; locality: Parque Nacional de Ubajara, Trilha Araticum, Rio das Minas; decimalLatitude: -3.83083; decimalLongitude: -40.90500; year: 2014; month: 4; day: 23; eventRemarks: D. Takiya col.; individualCount: 2; sex: 1 macropterous male, 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: AE7610CB-3B59-528C-99E5-88D92B500136
- b. genus: *Rhagovelia*; specificEpithet: *whitei*; continent: South America; country: Brazil; stateProvince: Goiás; municipality: Cristalina; decimalLatitude: -16.730222; decimalLongitude: -47.569056; year: 2013; month: 3; day: 19; eventRemarks: D.M. Takiya & A.P.M. Santos col.; individualCount: 12; sex: 5 apterous males, 1 macropterous male, 4 apterous females, 2 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 18110D99-DEFA-5632-A3FE-A04E6C081BAA
- c. genus: *Rhagovelia*; specificEpithet: *whitei*; continent: South America; country: Brazil; stateProvince: Goiás; municipality: Alto Paraíso de Goiás; decimalLatitude: -14.144500; decimalLongitude: -47.482833; year: 2013; month: 3; day: 23; eventRemarks: D.M. Takiya & A.P.M. Santos col.; individualCount: 7; sex: 1 apterous male, 6 apterous females;

- identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 9947B907-CB6D-541B-B436-A1C12E0E1016
- d. genus: *Rhagovelia*; specificEpithet: *whitei*; continent: South America; country: Brazil; stateProvince: Minas Gerais; municipality: Presidente Olegário; locality: Lapa da Fazenda São Bernardo; decimalLatitude: -18.28023; decimalLongitude: -46.11264; year: 2013; month: 9; day: 30; eventRemarks: T. Zepon & L. Resende col.; individualCount: 5; sex: 1 apterous male, 4 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: LES; basisOfRecord: PreservedSpecimen; occurrenceID: FC75CC18-8BAA-552F-B156-1DC571AAD408
- e. genus: *Rhagovelia*; specificEpithet: *whitei*; continent: South America; country: Brazil; stateProvince: Minas Gerais; municipality: Presidente Olegário; locality: Lapa da Fazenda São Bernardo; decimalLatitude: -18.28023; decimalLongitude: -46.11264; year: 2014; month: 4; day: 13; eventRemarks: T. Zepon & L. Resende col.; individualCount: 2; sex: 1 apterous male, 1 apterous female; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: LES; basisOfRecord: PreservedSpecimen; occurrenceID: A8853E16-1641-5608-9B04-1B05F7D2E688

Distribution

Brazil, Paraguay.

Distribution in Brazil: PA, MA, CE!, MT, GO, MG, MS, SP.

Rhagovelia zela Drake, 1959

Material

- a. genus: *Rhagovelia*; specificEpithet: *zela*; continent: South America; country: Brazil; stateProvince: Goiás; municipality: Alto Paraíso de Goiás; decimalLatitude: -14.160972; decimalLongitude: -47.594167; year: 2013; month: 3; day: 21; eventRemarks: D.M. Takiya & A.P.M. Santos col.; individualCount: 6; sex: 3 apterous males, 3 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: BD3DD2A7-8613-5CB8-8E48-728BBB5B0810

Distribution

Brazil.

Distribution in Brazil: MT, GOI, MG, MS, ES, SP, RJ, SC.

Stridulivelia strigosa (Hungerford, 1929)

Material

- a. genus: *Stridulivelia*; specificEpithet: *strigosa*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, Polícia Federal, igarapé de primeira ou segunda ordem; decimalLatitude: -2.70534; decimalLongitude: -60.38372; year: 2004; month: 8; day: 19; eventRemarks: J. L. Nessimian & L. Fidelis col.; individualCount: 1; sex: 1 brachypterous male; identifiedBy:

F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord:
PreservedSpecimen; occurrenceID: E8326182-0162-55FD-81BA-DB5C055710EA

Distribution

Venezuela, Guyana, Suriname, Brazil, Peru.

Distribution in Brazil: AP, PA, AM, MT.

Stridulivelia transversa (Hungerford, 1929)

Material

- a. genus: *Stridulivelia*; specificEpithet: *transversa*; continent: South America; country: Brazil; stateProvince: Amazonas; municipality: Manaus; locality: Bacia do Rio Cuieiras, tributário do Igarapé da Cachoeira; decimalLatitude: -2.69593; decimalLongitude: -60.29520; year: 2004; month: 8; day: 20; eventRemarks: J. L. Nessimian & L. Fidelis col.; individualCount: 9; sex: 1 apterous male, 8 apterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: C7BF8BD7-4DD0-5A6F-AE82-5858B719D3EC

Distribution

Suriname, Brazil.

Distribution in Brazil: AP, PA, AM.

Nerthra terrestris (Kevan, 1948)

Material

- a. genus: *Nerthra*; specificEpithet: *terrestris*; continent: South America; country: Brazil; stateProvince: Pará; municipality: Altamira; locality: Abrigo da Gravura; decimalLatitude: -3.26614; decimalLongitude: -52.22215; year: 2009; month: 7; day: 8; eventRemarks: M.E. Bichuette col.; individualCount: 1; sex: 1 macropterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: LES; basisOfRecord: PreservedSpecimen; occurrenceID: 0C722209-30C5-57D0-BB9A-F7AA41B37FED

Distribution

Colombia, Venezuela, Trinidad & Tobago, Guyana, Suriname, French Guiana, Brazil, Ecuador, Peru, Bolivia.

Distribution in Brazil: RR, PA!, AM, GO, MS, SP, RJ.

Ambrysus stali La Rivers, 1962

Materials

- a. genus: *Ambrysus*; specificEpithet: *stali*; continent: South America; country: Brazil; stateProvince: Pará; municipality: Altamira; locality: Carvena Kararaô; decimalLatitude: -3.13757; decimalLongitude: -51.82172; year: 2009; month: 4; day: 10; eventRemarks: M. E. Bichuette, D. R. Pedroso, F. F. Pellegatti & T. L. C. Scatolini col.; individualCount: 1; sex: 1 macropterous male; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: LES; basisOfRecord: PreservedSpecimen; occurrenceID: F7FBAB89-CF03-5B5C-B16C-A4F453BA1ABC
- b. genus: *Ambrysus*; specificEpithet: *stali*; continent: South America; country: Brazil; stateProvince: Pará; municipality: Altamira; locality: Caverna do Jacaré; decimalLatitude: -3.23346; decimalLongitude: -52.05397; year: 2011; month: 4; day: 5; eventRemarks: M. E. Bichuette, J. E. Gallão, D. R. Pedroso & D. Monteiro-Neto col.; individualCount: 3; sex: 1 macropterous male, 2 macropterous females; identifiedBy: F.F.F. Moreira; type: PhysicalObject; institutionCode: LES; basisOfRecord: PreservedSpecimen; occurrenceID: 65C2C76A-A3E2-5D33-94EA-E59FCEF943DC

Distribution

Venezuela, Trinidad & Tobago, Suriname, French Guiana, Brazil, Argentina.

Distribution in Brazil: PA, AM.

Limnocoris insignis Stål, 1860

Materials

- a. genus: *Limnocoris*; specificEpithet: *insignis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.4380; year: 2012; month: 10; day: 15; eventRemarks: I.R.S. Cordeiro & F.A.C. Silva col.; individualCount: 3; sex: 2 macropterous males, 1 macropterous female; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 91D7786C-211A-5FDF-89A6-5DC620524D59
- b. genus: *Limnocoris*; specificEpithet: *insignis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.4380; year: 2013; month: 6; day: 8; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 1; sex: 1 macropterous female; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: C10BD4AC-CC69-54C6-A5FC-61770E86E0B5
- c. genus: *Limnocoris*; specificEpithet: *insignis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Figueira; decimalLatitude: -22.9327; decimalLongitude: -43.4380; year: 2013; month: 8; day: 19;

- eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 5; sex: 4 macropterous males, 1 macropterous female; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 73C6F8FD-A742-5D6E-B777-E6AD14AFA336
- d. genus: *Limnocois*; specificEpithet: *insignis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2012; month: 11; day: 19; eventRemarks: I.R.S. Cordeiro & F.A.C. Silva col.; individualCount: 1; sex: 1 macropterous male; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 62E66190-0963-5F2B-9B51-D0CB67E71D09
- e. genus: *Limnocois*; specificEpithet: *insignis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2013; month: 2; day: 23; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 1; sex: 1 macropterous female; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 959DADB9-261D-589F-9EBE-CBB2247BC7DB
- f. genus: *Limnocois*; specificEpithet: *insignis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2013; month: 5; day: 23; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 5; sex: 3 macropterous males, 2 macropterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: A1BF83D2-6EC1-5030-9B79-37B8DB2E874F
- g. genus: *Limnocois*; specificEpithet: *insignis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2014; month: 4; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves, A. Ferreira, L.S. Barbosa, D.M.S. Corrêa & L.B. Pena Forte col.; individualCount: 28; sex: 8 macropterous males, 20 macropterous females; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 2313E7D8-64DE-529A-A5E7-54305D80A16B

Distribution

Brazil.

Distribution in Brazil: MG, SP, RJ, PR, SC, RS.

Enitharoides brasiliensis (Spinola, 1837)

Materials

- a. genus: *Enitharoides*; specificEpithet: *brasiliensis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá,

Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2013; month: 2; day: 23; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 1; sex: 1 coleopteroid female; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: D79B31CD-931E-52C3-9C51-70F5C068F5AC

- b. genus: *Enitharoides*; specificEpithet: *brasiliensis*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2013; month: 9; day: 7; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves & A. Ferreira col.; individualCount: 1; sex: 1 coleopteroid male; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 8826C125-8AB7-5F14-96E0-EA88058A7B27

Distribution

Brazil.

Distribution in Brazil: MG, ES, RJ.

Martarega bento Truxal, 1949

Material

- a. genus: *Martarega*; specificEpithet: *bento*; continent: South America; country: Brazil; stateProvince: Rio de Janeiro; municipality: Rio de Janeiro; locality: Jacarepaguá, Taquara, Estrada Pau da Fome, Parque Estadual da Pedra Branca, Rio Grande; decimalLatitude: -22.9320; decimalLongitude: -43.4452; year: 2014; month: 4; day: 19; eventRemarks: I.R.S. Cordeiro, F.A.C. Silva, F.F. Silva, L. Chaves, A. Ferreira; L.S. Barbosa, D.M.S. Corrêa & L.B. Pena Forte; individualCount: 1; sex: 1 brachypterous male; identifiedBy: I.R.S. Cordeiro; type: PhysicalObject; institutionCode: DZRJ; basisOfRecord: PreservedSpecimen; occurrenceID: 2C3B6B48-FD72-535C-A4ED-121F28D45383

Distribution

Brazil, Argentina.

Distribution in Brazil: PI, PE, MT, MG, RJ.

Discussion

Some of the records above form the first inventory of aquatic Heteroptera from Pedra Branca State Park, Rio de Janeiro, Brazil (Cordeiro 2015). No water bugs had been previously recorded from the area, and the following species have been collected in four rivers inside the park: *Brachymetra albinervis albinervis*, *B. furva*, *Rhagovelia itatiaiana*, *R. lucida*, *R. macta*, *Limnocoris insignis*, *Enitharoides brasiliensis*, and *Martarega bento*.

Among the records from this park, the occurrence of two species pairs is very interesting: *B. albinervis albinervis* / *B. furva* and *R. itatiaiana* / *R. macta*. Each pair of species are morphologically very similar, differing mainly in structures exclusive to males, which may lead to misidentifications (e.g. *R. macta* in Moreira and Ribeiro 2009), especially because they might co-occur in their geographical ranges.

Additional material collected in other Brazilian national or state parks was also examined and resulted in several first records of aquatic Heteroptera from each park. These include: *Halobatopsis platensis*, *Hydrometra fruhstorferi* and *Rhagovelia janeira* from Iguaçú National Park, *Limnogonus profugus* and *R. whitei* from Ubajara National Park, and *Neogerris lubricus*, *Microvelia ayacuchana*, *M. pulchella* and *Platyvelia brachialis* from Sete Cidades National Park. The exceptions are *Rheumatobates minutus flavidus* and *Microvelia venustatis* from Serra do Mar State Park, and *Rhagovelia accedens*, *R. aiuruoca* and *R. triangula* from Caparaó National Park, areas where other species of Gerromorpha and Nepomorpha had already been recorded (e.g. Moreira et al. 2010, Moreira and Barbosa 2011). Such efforts are useful to expand the parks' lists of species, which is important to reinforce their value as conservation areas.

Some of the records also serve to fill gaps on the known geographical distributions of species that occur throughout wide geographical ranges, but had never been collected in some areas within it. That is the case of *Halobatopsis platensis* and *Martarega bentoi*, known from northeastern Brazil to Argentina, but new respectively to Goiás and Rio de Janeiro; *Halobatopsis spiniventris*, *Hydrometra fruhstorferi* and *Rhagovelia janeira*, from southeastern Brazil to Argentina, but new to Paraná; *Neogerris lubricus*, common throughout South America, new to Piauí; *Rheumatobates minutus flavidus*, from Costa Rica to Argentina, new to São Paulo; *Mesovelvia amoena*, *Microvelia pulchella* and *Platyvelia brachialis*, from North America to Argentina, new to Bahia and Piauí; *Rhagovelia whitei*, from northern Brazil to Paraguay, new to Ceará; and *Nerthra terrestris*, from Colombia to southeastern Brazil, new to Pará. Finally, distribution expansions include northernmost records of *Limnogonus profugus*, *Rhagovelia lucida* and *R. zela* (Ceará/ Espírito Santo/ Goiás), the first record of *Rheumatobates bonariensis* from central-western Brazil (Mato Grosso), and the first record of *Microvelia ayacuchana* from northeastern Brazil (Piauí).

Acknowledgements

The manuscript of this article benefited from the suggestions provided by Drs. Maria A. Grandova, Attilio Carapezza and Laurence Livermore. IRSC benefited from a technician scholarship provided by the Foundation for the Scientific and Technological Development in Health (FIOTEC).

Author contributions

IRSC - identified specimens from Parque Estadual da Pedra Branca and wrote the manuscript.

FFFM - identified the remaining specimens and submitted the manuscript.

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