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## New records and extension of the known distribution of some freshwater shrimps in Brazil

### Registros nuevos y distribución conocida de algunos camarones de agua dulce en Brasil

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**Abstract.** Freshwater prawns are distributed in rivers and streams of inland and brackish waters throughout America. In Brazilian waters are registered 35 species into 4 families (Atyidae, Euryrhynchidae, Palaemonidae, and Sergestidae). Information about the geographic distribution of this fauna is scattered in the literature and frequently not founded on documented data in scientific collections. Here we examined a series of specimens and detected several new records and extension of the known distribution of some freshwater shrimps in Brazil.

Key words: freshwater prawns, taxonomy, Atyidae, Palaemonidae, Sergestidae.

**Resumen.** Los langostinos de agua dulce se distribuyen en los ríos y arroyos de aguas continentales y salobres en toda América. En aguas brasileñas se registran 35 especies pertenecientes a 4 familias (Atyidae, Euryrhynchidae, Palaemonidae y Sergestidae). La información bibliográfica sobre la distribución geográfica de esta fauna es dispersa y con frecuencia obtenida de las colecciones científicas. En este estudio se examinaron una serie de muestras en las cuales se presentan varios registros nuevos de la distribución reconocida para algunos camarones de agua dulce de Brasil.

Palabras clave: camarones de agua dulce, taxonomía, Atyidae, Palaemonidae, Sergestidae.

### Introduction

Freshwater prawns are distributed in rivers and streams of inland and brackish waters and constitute a diverse group of great ecological importance for the maintenance of these ecosystems. In total, 35 species in 4 families (Atyidae, Euryrhynchidae, Palaemonidae, and Sergestidae), are registered for Brazilian waters (Melo, 2003a; Pileggi and Mantelatto, 2012). The “Catalogue of Crustacea of Brazil” (Young, 1998) and the “Manual of Identification of the Freshwater Crustacea of Brazil” (Melo, 2003b) are usually among the most cited papers for referencing the general occurrence of these species in Brazil or in one of its states, despite that their topic on distribution was established based on literature compilations. Information about the geographic distribution of this fauna is scattered throughout several papers dealing with taxonomic, faunistic, or biological and ecological aspects, catalogues and checklists, as well as in academic dissertations/

theses, technical reports, and annals of scientific events. However, such information is quite often not founded on documented data derived from specimens deposited in a scientific collection, which in some cases might lead to misinterpretation of the real distributional area of the species. The distribution maps of some species of prawns in Melo (2003a), for instance, show records which are not consistent with the ones available in the respective literature and therefore that information should be taken with great care.

### Materials and methods

As part of a research project on the systematic of the Brazilian freshwater decapod crustaceans, we examined a series of specimens collected by us and also deposited in the crustacean collections of the following institutions: Departamento de Biologia, FFCLRP, Universidade de São Paulo (CCDB), Ribeirão Preto; Museu de Zoologia, Universidade de São Paulo (MZUSP), São Paulo; Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus; and Universidade Federal do Rio Grande do Sul (UFRGS), Porto

Alegre. During this study we detected several occurrence records not previously cited in the carcinological literature, some of which represent new records of a species in a particular state of Brazil, or sometimes in river basins in which the species had not yet been cited, although within the broader limits of its known distribution. The knowledge of such information is relevant either for conservation assessments or for biogeographic and taxonomic studies. This study is intended to report these new records.

Under "Distribution" we list all countries from which occurrences of the species have been recorded as well as the citations which reference them, although the reference list is not intended to be exhaustive. Records from Brazil are discriminated by states (a question mark occasionally present after the name of a Brazilian state indicates that occurrences mentioned in the literature to that state were not documented by material deposited in a scientific collection and cannot be confirmed).

## Results

### *Macrobrachium amazonicum* (Heller, 1862)

*Palaemon amazonicus* Heller, 1862: 418.

#### *Taxonomic summary*

**Material examined.** - **Brazil.** State of Roraima: 2 spec., INPA 199, Rio Branco, rio Branco, Marará, paraná Fachada, 09°58' S, 67°49' W, 28.x.1979, leg. M. Goulding. - State of Amapá: 5 males, 1 female, CCDB 1965, Igarapé Fortaleza, Santana, 03°11.5'05.07" S, 51°08'25.47" W, 04.v.2005, leg. F. L. Mantelatto; 1 male, 3 females, INPA 1059, rio Araguari, Vista Alegre, Reserva Biológica do Lago Piratuba, 15.viii.1992, leg. C. Magalhães. - State of Pará: 34 spec., INPA 202, Tucuruí, rio Tocantins, 03°45' S, 49°39' W, 28.i.1985, leg. O. O. Collart; 12 spec., INPA 401, lago Abui, Rio Trombetas, 11.iii.1986, leg. V. Py Daniel et al. - State of Amazonas: 4 spec., INPA 86, paraná do Amanã, lago Amanã, 02°44' S, 64°38' W, 30.ix.1979, leg. R. Barthem; 6 males, 5 females, CCDB 2085, rio Amazonas, próximo a Itacoatiara, 01.ix.2007, leg. G. Y. Hattori; 7 males, 3 females, CCDB 2312, Tapauá, rio Purús basin, 04°30'19" S, 62°03'19" W, leg. D. M. Pimpão. - State of Maranhão: 2 males, 5 females, MZUSP 9576, Igarapé da Bocaina, Vitória do Mearim, 09.viii.1988, leg. A. A. Rocha; 2 spec., INPA 1383, Caxias, rio Itapecuru, zona urbana, 25.v.2004, leg. J. S. Lopes; 1 spec., INPA 1436, Caxias, rio Itapecuru, 25.ix.204, leg. F. L. Oliveira. - State of Ceará: 14 males, 3 females, 1 ovig. female, CCDB 1973, Aquiraz, lagoa do Catu, 21.iii.2007, leg. unknown. - State of Tocantins: 4 males, UFRGS 4938, Parque Estadual do Cantão, Caseara, 09°17'14.9" S, 48°10'55.7" W, 04.vii.2007, leg. G. Bond-Buckup, H. Meinhardt, J. E. Anza, P.B. Araújo. - State of Rondônia: 55 spec., INPA

327, rio Guaporé, 12°27' S, 64°13' W, 25.ix.1985, leg. J. C. Malta. - State of Acre: 1 spec., INPA 82, Cruzeiro do Sul, lago São Francisco, Seringal Florianópolis, 07°38' S, 72°39' W; data and leg. unknown; 4 males, 5 females, 1 ovig. female, UFRGS 3180, lago Amapá (meandro do rio Acre), Rio Branco, 10°03'01.8" S, 67°50'52.8" W, 09.viii.2001, leg. L. R. Malabarba et al. - State of Bahia: 2 males, 4 females, 2 ovig. females, CCDB 2384, rio Paraguaçu, reservatório de Pedra do Cavalo, 12°30'33.9" S, 39°06'13.7" W, 12.vi.2008, leg. unknown; 6 males, 2 females, 2 ovig. females, MZUSP 13904, Jequié, barragem de Pedra, 08.vii.2001, leg. Almeida et al. - State of Mato Grosso: 12 spec., INPA 324, Pantanal do Mato Grosso, Poconé, Porto Jofre, 17°19' S, 56°47' W, 28.iv.1985, leg. V. A. Araújo; 67 spec., INPA 328, Pantanal do Mato Grosso, Poconé, rodovia Transpantaneira, baía do Pio, 16°28' S, 56°41' W, 28.iv.1985, leg. V. A. Araújo; 4 males, 1 female, 1 ovig. female, MZUSP 6408, Barão de Melgaço, 17.x.1984, leg. Lepipan; 4 males, 4 females, MZUSP 8092, rio Miranda, ix.1979, leg. J. C. Garavello. - State of Mato Grosso do Sul: 3 males, 2 females, 1 ovig. female, MZUSP 11535, rio Piquiri, pantanal do Taquari, Itiquira, 18.vii.1993, leg. unknown; 3 males, 10 females, CCDB 1970, Aquidauna, 24.iv.2007, leg. unknown. - State of Minas Gerais: 52 spec., INPA 1476, Planura, rio Grande, 21.xii.2005, leg. A. Fransozo.

**Type locality.** Rio Amazonas, Gurupá, state of Pará, Brazil.

**Distribution.** Inland and coastal waters of Venezuela, Colombia, Suriname, Guyana, Peru, Bolívia, Paraguai, Argentina, Brazil (Acre, Roraima, Rondônia, Amapá, Amazonas, Pará, Maranhão, Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Bahia, Tocantins, Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, São Paulo, Paraná) (other documented records in Holthuis, 1952, 1959, 1966; Rodríguez, 1980, 1982; Kensley and Walker, 1982; Ramos-Porto and Coelho, 1990; Arraes and Ramos-Porto, 1994; López and Pereira, 1996; Pettovello, 1996; Delgado et al., 1997; Magalhães, 2002; García-Dávila and Magalhães, 2003; Magalhães et al., 2005; Valencia and Campos, 2007; Almeida et al., 2008; Vergamini et al., 2011).

**Remarks.** The occurrence of this species in the Brazilian state of Paraná is referred to in a paper on a biological aspect of the species (Bialezki et al., 1997). However, no documented record was cited in that publication. Other occurrences from the states of Acre, Pará, Ceará, Paraíba, and Mato Grosso do Sul were mentioned in an academic thesis by Gomes-Corrêa (1977). The present data document and expand the occurrence of this species in several areas of its known distribution, in particular in sub-basins of the Amazon river basin and in the Pantanal Mato-grossense

area and Minas Gerais. The native distribution of *M. amazonicum* would encompass areas within the Orinoco, Amazon, Paraguay, and lower Paraná River basins, while its occurrence in states of the northeastern, southeastern, and southern Brazil is supposedly due to anthropogenic introduction (Magalhães et al., 2005; Vergamini et al., 2011)

***Macrobrachium brasiliense* (Heller, 1862)**

*Palaemon brasiliense* Heller, 1862: 419.

*Taxonomic summary*

**Material examined. Brazil.** State of Amapá: Amapá: 9 males, 17 females, 9 juveniles, INPA 1072, BR-156 road, furo do Henrique, município de Amapá, 27.viii.1992, leg. C. Magalhães; 3 females, INPA 1076, rio Amapá Grande, cachoeira Grande, município de Amapá, 26.viii.1992, leg. C. Magalhães; 6 males, 6 females, 15 juveniles, INPA 1074, rio Araguari, igarapé na cachoeira da Capivara, município de Amapá, 20.viii.1992, C. Magalhães et al. - State of Amazonas: 3 spec., INPA 124, Presidente Figueiredo, confluência do igarapé da Cachoeira com rio Urubu, 02°06' S, 59°59' W, 11-12.ix.1982, leg. N. Silva. - State of Pará: Pará: 21 males, 5 females, 1 ovig. female, INPA 252, confluência do igarapé Tramalhetinho com rio Trombetas, 01°05' S, 57°02' W, 02.ix.1985, leg. L. M. Reis; 7 males, 7 females, 1 ovig. female, INPA 334, igarapé do km 10 da estrada BR 163, próximo à Cachoeira Porteira, 00°59' S, 56°59' W, 07.x.1985, leg. C. Magalhães; 19 males, 20 females, 2 ovig. females, INPA 339, rio Trombetas, no Estirão da Fumaça, igarapé da Praia, 14.x.1985, leg. V. Py-Daniel et al.; 31 males, 38 females, 4 juveniles, INPA 341, igarapé s/ nome, afluente da margem esquerda do rio Coxi-Pacoré, bacia do rio Trombetas, 00°33' S, 56°45' W, 16-17.x.1985, leg. C. Magalhães; 1 male, 1 female, INPA 384, Itupitanga, rio Tocantins, 05°09' S, 49°21' W, 09.xi.1985, leg. O.O. Collart; 1 male, INPA 277, rio Tocantins, igarapé Arapari, Breu Branco, 13.vii.1982, leg. equipe de Ictiologia - INPA; 10 males, 8 females, INPA 1150, rio Xingu, igarapé do Ipixuna, 22.x.1992, leg. unknown; 2 males, 6 females, INPA 1152, rio Xingu, cachoeira Gorgulho do Espelho, 12.x.1992, leg. V. Py-Daniel et al.; 1 male, INPA 1153, rio Xingu, cachoeira do Quataquara, 15.x.1992, leg. V. Py-Daniel et al.; 2 males, 2 females, INPA 1182, rio Tapajós, alagado na margem esquerda, à juzante de Buburé, 22.x.1991, leg. C. Magalhães; 11 males, 3 females, 5 juveniles, INPA 1195, rio Tapajós, à juzante de Buburé, 22.x.1991, leg. C. Magalhães et al.; 5 males, 2 ovig. females, INPA 1237, rio Parauapebas, Canaã dos Carajás, 12.vi.2000, col. R. P. Ribeiro. - State of Maranhão: 3 spec., INPA 1434, Caxias, riacho Riachão, 30.vi.2004, leg. J. T. Camara and F. L. Oliveira. - State of Tocantins: 1 juvenile, UFRGS

4938, Parque Estadual do Cantão, Caseara, 9°17'14.9" S, 48°10'55.7" W, 04.vii.2007, leg. G. Bond-Buckup, H. Meinhardt, J. E. Anza, P. B. Araújo; 1 male, 4 females, 6 juveniles, UFRGS 4939, Parque do Jalapão, 10°34'12.6" S, 46°28'7.5" W, 07.vii.2007, leg. G. Bond-Buckup, H. Meinhardt, J. E. Anza, P. B. Araújo. - State of Rondônia: 4 males, 3 females, MZUSP 10286, igarapé unamed, rio Machado basin, Nova Esperança, 08.vii.1983, leg. Proj. MZ-Polo Noroeste. - State of Acre: 16 males, 6 females, UFRGS 3175, igarapé na BR 364 Km 48, Serra Madureira, 09°22'14.4" S, 68°27'21.2" W, 02.viii.2001, leg. L. R. Malabarba, W. M. Arache, L. Aranguren, E. Freitas, C. A. Costa; 4 males, 7 females, 2 juveniles, UFRGS 3171, arroio na BR 364, drenagem do rio Acre-Purus, Rio Branco, 10°00'48.2" S, 67°41'43.8" W, 06.viii.2001, leg. L. R. Malabarba and H. A. Monteiro. - State of Mato Grosso: 4 spec., INPA 132, Porto Estrela, Estação Ecológica da Serra das Araras, proximidades de Cuiabá, 15°36' S, 57°12' W, 13.xi.1983, leg. A. G. Arruda Filho; 6 spec., INPA 250, Cáceres, rio Salobra, Serra das Araras, 15°24' S, 57°13' W, 13.xi.1983, leg. A. Meves; 2 spec., INPA 251, Cáceres, rio Salobra, Serra das Araras, 15°24' S, 57°13' W, 10.vi.1983, leg. C. J. Silva and I. A. Silva; 11 males, 6 females, 2 ovig. females, 5 juveniles, CCDB 2298, rio Ribeirão Bonito, Ribeirão Cascalheira, 12°52'59" S, 51°53'96" W, 254 m altitude, 09.x.2007, leg. L. S. Torati; 3 males, 2 females, 1 ovig. female, CCDB 2299, córrego em Nova Xavantina, 14°44'43.9" S, 52°35'45.5" W, 270 m altitude, 15.x.2007, leg. L. S. Torati, L. S.; 9 males, 2 females, 2 juveniles, CCDB 2306, córrego Salgadinho, Nova Xavantina, 14°40'75.2" S, 52°21' 93.5" W, 254 m altitude, 13.x.2007, leg. L. S. Torati; 2 males, 1 female, 2 juveniles, CCDB 2301, Ribeirão Cascalheira, 12°55'59.9" S, 51°53'47.4" W, 329 m altitude, 07.x.2007, leg. L. S. Torati; 2 males, 2 females, CCDB 2307, rio Corgão, Ribeirão Cascalheira, 12°44'42.8" S, 52°05'69.4" W, 10.x.2007, leg. L. S. Torati; 5 males, 1 female, CCDB 2308, rio Suiaçu, Ribeirão Cascalheira, 12°48'59.1" S, 52°06'92.5" W, 330 m altitude, 10.x.2007, leg. L. S. Torati. - State of Mato Grosso do Sul: 1 male, INPA 487, rio Taquarussu, approximately 20 km from Anastácio/Aquidauana, 20°40' S, 55°50' W, xi.1988, leg. H. B. Ribeiro; 2 males, CCDB 1908, córrego Mutum, afluente do rio Miranda, Bonito, 21°15'48" S, 56°16'40" W, altitude 203 m, 01.viii.2006, leg. H. Santos; 2 males, CCDB 1910, rio Formoso, Bonito, 21°04'45" S, 56°20'21" W, altitude 223 m, 01.viii.2006, leg. H. Santos; 10 males, 6 females, CCDB 1911, córrego Genipapu, afluente do córrego Bacuri, Bonito, 20°59'07" S, 56°27'11" W, altitude 280 m, 01.viii.2006, leg. H. Santos; 3 females, 3 juveniles, CCDB 1912, córrego Curral de Arame, Dourados, 22°20'14.7" S, 54°50'45.7" W, 30.iii.2006, leg. J. M. Nakagaki. - State of Goiás: 1

male, INPA 489, Niquelândia, alto rio Tocantins, ix.1994, leg. L. A. C. Porto; 1 male, CCDB 2585, Niquelândia, alto rio Tocantins, viii.1990, leg. L. A. C. Porto; 1 male, 2 females, MZUSP 13958, arroio Moquéim, Colinas do Sul-Cavalcante road, 13°56'46" S, 47°42'52" W, 07.xi.1996, leg. W. R. Koch and K. M. Krosser. - State of Minas Gerais: 7 males, MZUSP 9605, Águas de Santa Bárbara, 05.x.1988, leg. unknown. - State of São Paulo: 13 spec., INPA 870, Penápolis, córrego Lageado, date unknown, leg. R. H. Castro; 4 males, 11 females, CCDB 726, Rio Claro, Serra Azul, 21°19' S, 47°37' W, 01.vii.1994, leg. F. L. Mantelatto and L. Barbosa; 3 males, 2 females, CCDB 1909, córrego Campo Novo, Bauru, 01.x.2005, leg. R. Costa, R.; 4 males, CCDB 2135, Rio Claro, Serra Azul, 21°19' S, 47°37' W, 25.iv.2006, leg. L. G. Pileggi, E. C. Mossolin and A. Costa.

*Type locality.* Pé da Serra do Jeronimo, near Cuiabá, state of Mato Grosso, Brazil.

*Distribution.* Inland waters of Venezuela, Colômbia, Guyana, Suriname, French Guiana, Equador, Peru, Brazil (Acre, Amapá, Pará, Amazonas, Maranhão, Bahia, Mato Grosso, Mato Grosso do Sul, Goiás, Bahia, Minas Gerais, São Paulo, Paraná) (other documented records in Holthuis, 1952, 1959; Rodríguez, 1982; Ramos-Porto and Coelho, 1990; Pereira, 1993; Arraes and Ramos-Porto, 1994; López and Pereira, 1996; Magalhães, 2002; García-Dávila and Magalhães, 2003; Valencia and Campos, 2007).

*Remarks.* The type locality described by Heller (1852) is in *einem Bache zu Camaroës, Brasilien* and probably was a misinterpretation of the word "camarões" (Holthuis, 1952). In addition, the holotype's original label (Naturhistorisches Museum, Vienna, Austria) mentioned that the type locality is "Pe da Serra (foothills) do Geronimo, near Cuiabá, Brazil" (L. Pileggi and F. Mantelatto, personal observation). Other occurrences of the present species were mentioned in an academic thesis by Gomes-Corrêa (1977), from the states of Amapá and Bahia, and by Vega-Perez (1984), from the state of Paraná. The present data clarify the type locality information, document and expand the occurrence of this species in several areas of its known distribution, and constitute its first records from the states of Amapá, Tocantins, and Mato Grosso do Sul.

***Macrobrachium depressimanum* Pereira, 1993**

*Macrobrachium depressimanum* Pereira, 1993: 339.

*Taxonomic summary*

*Material examined.* **Brazil.** State of Amazonas: 1 female, INPA 470, rio Amazonas, ilha do Careiro, costa da Terra Nova, near Manaus, 14.iii.1987, leg. O. Odinetz-Collart; 3 spec., INPA 496, rio Amazonas, ilha do Careiro, costa da Terra Nova, near Manaus, 26.iii.1987, leg. O. Odinetz-Collart; 1 spec., INPA 392, rio Tefé/rio

Solimões, 29.iii.1980, leg. L. Rose; 4 spec., INPA 495, idem; 5 males, INPA 393, rio Solimões, costa do Catalão, almost in front of ilha da Marchantaria, near Manaus, 19.i.1983, leg. C. Magalhães. - State of Acre: 58 spec., INPA 394, rio Tarauacá, praia Tarauacá, viii.1984, leg. M. Goulding; 2 males, MZUSP 13921, rio Acre, 20.x.1994, leg. IMAAC. - State of Rondônia: 28 spec., INPA 395, rio Madeira, Cachoeira do Teotônio, 5.viii.1984, leg. M. Goulding; 1 spec., INPA 396, rio Mamoré, near Guajará-Mirim, 26.xi.1983, leg. G. M. Santos; 3 spec., INPA 397, rio Mamoré, near Guajará-Mirim, 26.xi.1983, leg. J. C. Malta.

*Type locality.* Peru, Amazonas, rio Santiago, La Poza, 04°01' S, 77°47' W.

*Distribution.* Peru, Bolivia, Brazil (Amazonas, Acre, Rondônia) (other documented records in Pereira, 1993; Magalhães, 2002; García-Dávila and Magalhães, 2003).

*Remarks.* Should be: The occurrence of this species in Brazil was mentioned by Pereira (1993), and the respective material was deposited in the INPA collection.

***Macrobrachium ferreirai* Kensley and Walker, 1982**

*Macrobrachium ferreirai* Kensley and Walker, 1982: 4.

*Taxonomic summary*

*Material examined.* **Brazil.** State of Amazonas: 7 spec., INPA 85, unnamed igarapé, afluentes do rio Ariáú, arquipélago de Anavilhanas, 28.ii.-06.iii.1976, leg. Equipe Ictiologia INPA; 49 spec., INPA 189, rio Uatumã, cachoeira Balbina, 01°56' S, 59°28' W, 15-17.vii.1985, leg. C. Magalhães et al.; 2 spec., INPA 190, rio Uatumã, cachoeira Balbina, 01°56' S, 59°28' W, 16.vii.1985, leg. C. Magalhães; 32 spec., INPA 191, rio Uatumã basin, 13.vii.-22.vii.1985, leg. C. Magalhães et al.; 16 spec. INPA 194, rio Uatumã, Santa Luzia, upriver from the Balbina hydroelectric dam, 01°56' S, 59°28' W, 24.vii.1985, leg. Equipe Ictiologia INPA. - State of Rondônia: 84 spec., INPA 343, small forest stream downriver from the Samuel hydroelectric dam, right bank of rio Jamari, 08°44' S, 63°63' W, 09.ix.1985, leg. G. M. Santos; 15 spec., INPA 344, rio Jamari, approximately 1 km upriver from Samuel hydroelectric dam, 08°45' S, 63°25' W, 07.ix.1985, G. M. Santos.

*Type locality.* Brazil, Mato Grosso, igarapé near Castanhal, Aripuanã.

*Distribution.* Brazil (Amazonas, Rondônia, Mato Grosso) (other documented records in Kensley and Walker, 1982).

*Remarks.* The species was previously known only from the records reported in the type material list (Kensley and Walker, 1982), which includes the states of Mato Grosso (vicinities of Aripuanã) and a couple of localities in the state of Amazonas (igarapé Tarumazinho, near Manaus, and igarapé da Aeronáutica, near Tefé). The occurrence of this

species in the Brazilian states of Roraima and Minas Gerais was mentioned in a compilation paper (Melo, 2003b), but no documented record was cited in that publication. The occurrence of the present species in Roraima is expected, as it is distributed in the Rio Negro basin. However, its presence in Minas Gerais is highly unlikely as the species seems to be restricted to the Amazon basin. The present data both document and expand the occurrence of this species in areas of its known distribution and constitute its first record from the state of Rondônia.

***Macrobrachium heterochirus* (Wiegmann, 1836)**

*Palaemon heterochirus* - Wiegmann, 1836: 149.

*Taxonomic summary*

**Material examined. Brazil.** State of Espírito Santo: 1 female, CCDB 2509, córrego Sete, Vila Velha, 03.xi.2006, leg. F. L. Mantelatto, L. G. Pileggi, E. C. Mossolin, L. S. Torati. - State of Santa Catarina: 1 male, UFRGS 00517, Praia Grande, 01.xi.1978, leg. A. Rossi; 1 male, UFRGS 02118, rio Amola Faca, Araranguá, 14.vi.1996, leg. not informed. - State of Rio Grande do Sul: 1 male, UFRGS 4557, rio Mampituba, Torres, 18.ii.2009, leg. K. F. Clayton.

*Type locality.* East coast of Mexico.

*Distribution.* Atlantic coastal waters of the United States of America, Mexico, Porto Rico, Jamaica, Haiti, Santo Domingos, Guadeloupe, Dominica, St. Vincent, Grenada, Guatemala, Panama, Colombia, Venezuela, Brazil (Rio Grande do Norte?, Pernambuco?, Bahia, Espírito Santo, Rio de Janeiro, São Paulo, Santa Catarina, Rio Grande do Sul) (other documented records in Holthuis, 1952; Chace and Hobbs, 1969; Rodríguez, 1980; Abele and Kim, 1989; Bond-Buckup and Buckup, 1989; Ramos-Porto and Coelho, 1990; Delgado et al., 1997; Buckup and Bond-Buckup, 1999; Bowles et al., 2000; Rocha and Bueno, 2004; Valencia and Campos, 2007; Almeida et al., 2008; Pileggi and Mantelatto, 2010).

*Remarks.* The occurrence of this species in the Brazilian states of Rio Grande do Norte and Pernambuco was mentioned in compilation papers (Ramos-Porto and Coelho, 1998; Melo, 2003b), but no documented record was cited in those publications. Other occurrences from the states of Rio de Janeiro and Santa Catarina were mentioned in an academic thesis by Gomes-Corrêa (1977). The present data constitute the first record from the state of Espírito Santo.

***Macrobrachium iheringi* (Ortmann, 1897)**

*Palaemon iheringi* Ortmann, 1897: 211.

*Taxonomic summary*

**Material examined. Brazil.** State of Minas Gerais: 1 male, 1 female, 2 juveniles, CCDB 3296, Mata do Baú, Barroso,

24.vii.2010, leg. V. B. Tomazela, I. C. L. Proença. - State of Paraná: 2 males, 2 females, 2 juveniles, UFRGS 4940, Ribeirão Varanal, tributary of the rio Tibagi, Londrina, x.2006, leg. S. Bennemann; 2 males, UFRGS 2664, rio Sobrado, Ponta Grossa, 25°19'44.2" S, 49°50'23.7" W, 04.x.2003, leg. G. Bond-Buckup and L. Buckup.

*Type locality.* Alto da Serra, Rio Tietê, state of São Paulo, Brazil.

*Distribution.* Inland waters of Brazil (Goiás?, Mato Grosso?, Espírito Santo, Rio de Janeiro, Minas Gerais, São Paulo, Paraná) (other documented records in Holthuis, 1952; Sampaio et al., 2009).

*Remarks.* The occurrence of this species in the Brazilian states of Goiás and Mato Grosso was mentioned in compilation papers (Ramos-Porto and Coelho, 1998; Melo, 2003b), but no documented record was cited in those publications. Other occurrences from the states of Espírito Santo, Rio de Janeiro, and São Paulo were mentioned in an academic thesis by Gomes-Corrêa (1977). The present data both document and expand the occurrence of this species in areas of its known distribution and constitute its first record from the states of Minas Gerais and Paraná.

***Macrobrachium jelskii* (Miers, 1877)**

*Palaemon jelskii* Miers, 1877: 661.

*Taxonomic summary*

**Material examined. Brazil.** State of Amapá: 3 males, 8 females, 4 ovig. females, INPA 207, Macapá, ii.1984, leg. M. Goulding. - State of Amazonas: 1 male, 1 female, 2 ovig. females, MZUSP 8178, lago Janaunacá, right bank of rio Solimões, 03.v.1978, leg. J. Donnath; 1 male, 2 females, INPA 107, rio Amazonas, ilha do Careiro, 04.xi.1981, leg. C. Magalhães; 3 males, INPA 107, rio Amazonas, ilha do Careiro, 26.xi.1983, leg. C. Magalhães. - State of Pará: 12 males, 14 females, INPA 1155, rio Xingu, mouth of paraná do Maxacá, 20.x.1992, leg. M. Jegu; 1 male, 6 females, INPA 1158, rio Xingu, paraná do Maxacá, 19.x.1992, leg. M. Jegu. - State of Ceará: 2 males, UFRGS 04172, sítio Guaramiranga, Guaramiranga, v.2006, leg. G. Bond-Buckup. - State of Mato Grosso: 2 males, 2 females, MZUSP 7293, Porto Espiridião, 14.xi.1983, leg. Projeto Polo Noroeste; 5 females, INPA 218, rio das Pitas, Araputanga, 29.ix.1984, leg. V. Py-Daniel et al.; 1 female, MZUSP 13.643, Passo do Lontra, Rio Miranda, Corumbá, 13.x.1977, leg. CEPAM. - State of Bahia: 2 males, 3 females, CCDB 2625, Itaparica, 03.xi.2006, leg. R. Batista; 3 males, 4 females, MZUSP 8154, lagoa do Urubu, Salvador, ix.1985, leg. I. Brito. - State of Minas Gerais: 2 females, 2 ovig. females, CCDB 2128, Planura, 20.iv.2006, leg. unknown. - State of Espírito Santo: 1 female, 2 ovig. females, CCDB 2626, rio Jucu, Vila

Velha, 03.xi.2006, leg. F. Mantelatto et al.; 6 males, 2 ovig. females, CCDB 2627, lagoa Grande, Vila Velha, 03.xi.2006, leg. F. Mantelatto et al.; 8 ovig. females, CCDB 2628, córrego Sete, Vila Velha, 03.xi.2006, leg. F. Mantelatto et al.; 3 males, CCDB 2629, rio Perocão, Guarapari, 03.xi.2006, leg. F. Mantelatto et al. - State of Rio de Janeiro: 2 males, 4 females, 1 ovigerous, 1 juvenile, UFRGS 4178, Lagoa Feia, Ponta Grossa dos Figalcos, Campos de Goytacazes, 21°05'53.8" S, 41°20'22.4" W 09.viii.2006, leg. G. Bond-Buckup.

*Type locality.* Oiapoque, Guiana Francesa.

*Distribution.* Inland waters of Trinidad, Venezuela, Suriname, French Guiana, Peru, Bolívia, Argentina, Brazil (Amapá, Amazonas, Pará, Maranhão, Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe, Bahia, Acre, Mato Grosso, Espírito Santo, Rio de Janeiro, Minas Gerais, São Paulo, Paraná, Santa Catarina?) (Holthuis, 1952, 1959, 1966; Rodríguez, 1980, 1982; Kensley and Walker, 1982; Ramos-Porto and Coelho, 1990; Arraes and Ramos-Porto, 1994; López and Pereira, 1996; Barros and Braun, 1997; Delgado et al., 1997; Collins, 2000; Magalhães, 2002; García-Dávila and Magalhães, 2003; Magalhães et al., 2005; Almeida et al., 2008; Sampaio et al., 2009).

*Remarks.* The occurrence of this species in the Brazilian state of Santa Catarina was mentioned in compilation papers (Ramos-Porto and Coelho, 1998; Melo, 2003b), but no documented record was cited in those publications. Other occurrences of the present species were mentioned in an academic thesis by Gomes-Corrêa (1977) from the states of Amapá, Ceará, Pernambuco, and Espírito Santo. The present data both document and expand the occurrence of this species in several areas of its known distribution and constitute its first record from the state of Rio de Janeiro. Similarly to *M. amazonicum*, the native distribution of *M. jelskii* encompasses areas within the Orinoco, Amazon, Paraguay, and lower Paraná River basins, while its occurrence in states of northeast and southeast Brazil is supposedly due to anthropogenic introduction (Magalhães et al., 2005).

***Macrobrachium nattereri*** (Heller, 1862)

*Palaemon nattereri* Heller, 1862: 414.

*Taxonomic summary*

*Material examined.* **Brazil.** State of Amazonas: 3 males, 1 ovig. female, INPA 279, rio Uatumã, cachoeira do Miriti, 14.vii.1985, leg. C. Magalhães; 2 males, 1 female, MZUSP 16571, corredeira acima da cachoeira do Caruru, Rio Tiquié, Comunidade Caruru, 19.x.2002, leg. F. C. T. Lima; 1 male, MZUSP 13639, igarapé Umari, 25 a 27.x.2000, leg. F. C. T. Lima; 3 males, 3 females, MZUSP 16487, igarapés entre Km 14 a 20 da estrada Cucuí-São

Gabriel da Cachoeira, 05.x.2004, leg. F. C. T. Lima. - State of Pará: 3 males, 1 female, INPA 335, igarapé São Miguel, Cachoeira Porteira, 06.x.1985, leg. C. Magalhães; 26 males, 3 females, INPA 335, Cachoeira Porteira, igarapé São Miguel, 04-06.x.1985, leg. C. Magalhães; 18 males, 50 females, 1 ovig. female, 8 juveniles, INPA 342, rio Trombetas basin, igarapé Patauí, tributary of rio Mapuera, 09-21.x.1985, leg. C. Magalhães; 12 females, INPA 1104, lago Jacundá, Alter-do-Chão, Santarém, 16.ii.2000, leg. C. R. García-Dávila; 6 males, 52 females, INPA 1117, igarapé do Irurama, Alter-do-Chão, Santarém, 17.ii.2000, leg. C. R. García-Dávila; 24 males, 50 females, 1 ovig. female, INPA 1120, igarapé São Sebastião, Alter-do-Chão, Santarém, 17.ii.2000, leg. C. R. García-Dávila; 4 males, 9 females, INPA 1121, cabeceira do lago Preto, Alter-do-Chão, Santarém, 17.ii.2000, leg. C. R. García-Dávila; 2 males, 2 females, INPA 1128, cabeceira do lago Verde, Alter-do-Chão, Santarém, 18.ii.2000, leg. C. R. García-Dávila; 1 male, INPA 1134, lago Verde, Alter-do-Chão, Santarém, 18.ii.2000, C. R. García-Dávila; 2 males, 4 females, INPA 1185, rio Tapajós, near mouth of rio Cupari, 26.x.1991, leg. C. Magalhães, J. Zuanon and E. N. Santos-Silva; 1 female, INPA 1188, rio Tapajós, Itaituba, 18.x.1991, leg. C. Magalhães et al.; 2 males, 1 female, INPA 1067, rio Tocantins, rapids downstream from Jatobal, 08.vii.1982, leg. unknown; 1 male, 1 female, INPA 1178, rio Jamanxin, igarapé unnamed, 20.x.1991, leg. C. Magalhães; 3 males, 4 female, INPA 1183, rio Jamanxin, ilha da Terra Preta, 20.x.1991, leg. Raimundinho; 17 male, 49 females, INPA 1192, rio Jamanxin, furo próximo a Ilha da terra Preta, 20.x.1991, leg. C. Magalhães et al. - State of Mato Grosso: 3 males, MZUSP 13642, rio Criqueiri, Nova Mutum, estado do Mato Grosso/Brasil, 19.ii.2001, leg. alunos de Pós-Graduação da Seção de Peixes do MZUSP; 7 males, MZUSP 13638, Fazenda Buriti, Nova Mutum, 16.ii.2000, leg. alunos de Pós-Graduação da Seção de Peixes do MZUSP. - State of Goiás: 1 male, UFRGS 3314, Alto Tocantins, Niquelândia, 19.v.1979, leg. L. A. C. Porto.

*Type locality.* Barra do Rio Negro, state of Amazonas, Brazil.

*Distribution.* Inland waters of Venezuela, Colombia, French Guiana, Bolívia?, Brazil (Amazonas, Pará, Roraima?, Ceará, Bahia, Goiás, Mato Grosso, São Paulo?, Santa Catarina?) (Holthuis, 1952, 1966; Rodríguez, 1982; Kensley and Walker, 1982; Valencia and Campos, 2007).

*Remarks.* The occurrence of this species in Bolivia and in the Brazilian states of Roraima, Goiás, Mato Grosso, São Paulo, and Santa Catarina were mentioned in compilation papers (Ramos-Porto and Coelho, 1998; Melo, 2003b), but no documented record was cited in these publications.

Other occurrences were mentioned in an academic thesis by Gomes-Corrêa (1977) from the states of Ceará and Bahia, and in annals of a congress by Nascente and Costa Porto (2007) from the state of Goiás. Records of this species from São Paulo made by Luederwaldt (1919) in fact correspond to *Macrobrachium potiuna* (see Holthuis, 1952; Rocha and Bueno, 2004). This species seems to be restricted to the Amazon River basin. The records from other river basins in the states of Ceará, Bahia, São Paulo, and Santa Catarina are doubtful and could be misidentifications of *M. brasiliense*, which closely resembles the present species. The present data both document and expand the occurrence of this species in several areas of its known distribution and constitute its first documented record from the state of Mato Grosso.

***Macrobrachium surinamicum*** Holthuis, 1948

*Macrobrachium surinamicum* Holthuis, 1948: 1112.

*Taxonomic summary*

**Material examined. Brazil.** State of Amapá: 1 ovig. female, 1 juvenile, INPA 1071, rio Amapá Grande, cachoeira Grande, 26.viii.1992, leg. C. Magalhães. - State of Pará: 12 males, 10 females, 1 ovig. female, INPA 1099, baía de Marajó, foz do Rio Arari, 05.vii.1984, leg. R. Barthem; 1 male, 2 ovig. female, 1 juvenile, INPA 1216, ilha de Mosqueiro, igarapé Cajueiro, 19.v.1994, leg. R. Barthem and R. Aragão; 5 males, 1 female, 6 ovig. females, INPA 092, banco da ilha das Araras, Currálinho, 24.vii.1984, leg. R. Barthem; 4 males, 12 females, 35 ovig. females, INPA 1102, banco das Araras, Currálinho, 24.vii.1984, leg. R. Barthem; 1 ovig. female, INPA 1097, rio Pará, ilha das Araras, Currálinho, 25.vii.1984, leg. R. Barthem; 2 males, INPA 1100, Santarém, iv.1999, leg. Equipe LPHA-FIT; 1 male, 1 ovig. female, INPA 1091, rio Tocantins, 02°02' S, 49°17' W, between Curuçambaba and Maiauta, 20.xi.1994, A. Zanatta et al.; 1 male, 1 ovig. female, INPA 1068, rio Tocantins, 20.vi.1988, leg. unknown; 12 males, 6 females, INPA 1230, rio Tocantins, 30.iv.1987, leg. U. Barbosa; 11 males, 3 females, 1 ovig. female, INPA 284, rio Tocantins, between Cametá and Tucuruí, iii.1985, leg. O. Odinetz-Collart; 6 ovig. females, INPA 1218, rio Tocantins, Acaripucu, 30.iv.1988, leg. U. Barbosa; 80 males, 44 females, 55 ovig. females, INPA 183, rio Tocantins, Içangui, 25.iii.1985, leg. O. Odinetz-Collart; 4 ovig. females, INPA 1220, rio Tocantins, Içangui, 01.v.1988, leg. U. Barbosa; 1 male, 4 juveniles, INPA 1232, rio Tocantins, 01.xii.1987, leg. U. Barbosa; 5 males, 12 females, 5 juveniles, INPA 1235, rio Tocantins, igarapé Vermelho, upriver from Itupiranga, 12.vii.1987, leg. U. Barbosa.

**Type locality.** Suriname, Paramaribo, Plantation "Geyersvlijt".

**Distribution.** Venezuela, Guyana, Suriname, Colombia?, Brazil (Amapá, Pará) (other documented records in Rodríguez, 1982; Delgado et al., 1997).

**Remarks.** The occurrence of this species in the Brazilian states of Amapá and Pará was mentioned in compilation papers (Ramos-Porto and Coelho, 1998; Melo, 2003b), but no documented record was cited in these publications. A record of this species in the state of Amapá was mentioned by Ramos-Porto and Coelho (1990), also without further data. The records presented here confirm the occurrence of this species in the lower Amazon and Tocantins river basins. However, its occurrence in Colombia (Holthuis, 1948, 1952) has not yet been confirmed and was evaluated as a misreport by Valencia and Campos (2007).

***Palaemonetes carteri*** Gordon, 1935

*Palaemonetes carteri* Gordon, 1935: 324, fig. 12.

*Taxonomic summary*

**Material examined. Brazil.** State of Amapá: 1 male, 1 female, INPA 1083, rio Amapá Grande, small igarapé upriver from cachoeira Grande, Amapá, 26.viii.1992, leg. C. Magalhães; 2 females, INPA 1084, rio Araguari, Reserva Biológica do lago Piratuba, viii.1992, leg. C. Magalhães; 1 male, 2 females, 3 ovig. females, INPA 1208, Macapá-Jari road, igarapé do Parma, 20.iii.1991, leg. Victor Py-Daniel et al. - State of Pará: 4 spec. UFRGS 04240, igarapé, Bragança, 16.xi.2006, leg. G. Bond-Buckup, I. Sampaio; 27 males, 29 females, 12 ovig. females, INPA 1107, lago Jacundá, Alter-do-Chão, Santarém, 16.ii.2000, leg. C. R. García-Dávila; 26 males, 25 females, 18 ovig. females, INPA 1113, lago Cavari, Alter-do-Chão, Santarém, 16.ii.2000, leg. C. R. García-Dávila; 5 males, 1 female, INPA 1125, headwaters of lago Preto, Alter-do-Chão, Santarém, 17.ii.2000, leg. C. R. García-Dávila; 2 males, INPA 1130, headwaters of lago Verde, Alter-do-Chão, Santarém, 18.ii.2000, leg. C. R. García-Dávila; 8 males, 4 females, 1 ovig. female, INPA 1126, lago Minitapi, Alter-do-Chão, Santarém, 19.ii.2000, leg. C. R. García-Dávila; 1 male, 2 ovig. females, INPA 1140, lago Jucuruí, Alter-do-Chão, Santarém, 21.ii.2000, leg. C. R. García-Dávila; 31 males, 30 females, 24 ovig. females, INPA 1143, lago Iruçanga, Alter-do-Chão, Santarém, 21.ii.2000, leg. C. R. García-Dávila; 5 males, 9 females, 1 ovig. female, INPA 1147, lago Jacaré, Alter-do-Chão, Santarém, leg. C. R. García-Dávila; 11 males, 8 females, 2 ovig. females, INPA 1137, lago Verde, Alter-do-Chão, Santarém, 18.ii.2000, leg. C. R. García-Dávila; 1 male, 1 ovig. female, INPA 1116, igarapé do Irurama, Alter-do-Chão, Santarém, 17.ii.2000, leg. C. R. García-Dávila; 9 males, INPA 1149, lago das Mangueiras, Alter-do-Chão, Santarém, 21.ii.2000, leg. C. R. García-Dávila; 12 males, 28 females, INPA 1176,



rio Tapajós, near mouth of rio Cupari, 27.x.1991, leg. C. Magalhães and L. Rapp Py-Daniel; 17 males, 22 females, INPA 1177, rio Tapajós, between Buburé and São Luis, 22.x.1991, leg. J. Zuanon et al.; 3 females, INPA 1199, rio Cupari, near mouth, 27.x.1991, leg. A. Negrão et al.; 1 male, 1 female, INPA 1200, igarapé on the left bank of rio Tapajós, near rio Cupari, 26.x.1991, leg. C. Magalhães and J. Zuanon; 2 females, INPA 1201, rio Tapajós, near mouth of rio Cupari, 26.x.1991, leg. C. Magalhães, J. Zuanon and E. N. Santos-Silva; 3 females, INPA 1206, left bank of rio Tapajós, downriver from Buburé, 22.x.1991, leg. C. Magalhães; 7 males, 10 females, 1 ovig. female, INPA 1159, rio Xingu, paraná do Maxacá, 19.x.1992, leg. M. Jegu; 4 males, 9 females, INPA 1171, rio Xingu, lago do Poção, igarapé do Poção, 11.x.1992, leg. M. Jegu et al.; 15 males, 77 females, INPA 1101, rio Trombetas, lago Jamari, 23.ii.1982, leg. unknown; 19 males, 95 females, INPA 336, right bank of rio Trombetas, lago Tapagem, 11.x.1985, leg. C. Magalhães.

*Type locality.* Creek near upper Cuyuni River, Guyana.

*Distribution.* Coastal and inland waters of Venezuela, Guyana, Suriname, French Guiana, Brazil (Amapá, Amazonas, Pará) (other documented records in Holthuis, 1952, 1959, 1966; Rodríguez, 1982; Kensley and Walker, 1982; López and Pereira, 1996).

*Remarks.* A few records of this species in the states of Pará and Amazonas were mentioned by Ramos-Porto and Coelho (1990), but no other data were furnished. The present records expand its distributional range to the state of Amapá, as well as expand its known distribution in the states of Pará and Amazonas.

### ***Palaemonetes ivonicus* Holthuis, 1950**

*Palaemonetes ivonicus* Holthuis, 1950: 8.

*Taxonomic summary*

*Material examined.* **Brazil.** State of Acre: 28 females, UFRGS 3179, igarapé Mappingari, BR 364, Bujari, 08.viii.2001, leg. L. R. Malabarba et al.

*Type locality.* Bolivia, Beni, rio Beni, Ivon.

*Distribution.* Venezuela, Colombia, Peru, Bolivia, Paraguay, Brazil (Acre, Amazonas, Mato Grosso, Mato Grosso do Sul) (other documented records in Holthuis, 1952, 1966; Ramos-Porto and Coelho, 1990, 1998; Zwink, 1990; López and Pereira, 1996, 1998; Magalhães, 2000, 2001, 2002; Melo, 2003b; García-Dávila and Magalhães, 2003; Pereira et al. 2010a,b; Valencia and Campos, 2010).

*Remarks.* The occurrence of *Palaemonetes ivonius* in the state of Minas Gerais (Brazil), was mentioned by Melo (2003b), but no documented record was cited in this publication. The present records expand its distributional range to the state of Acre.

### ***Palaemonetes mercedae* Pereira, 1986**

*Palaemonetes mercedae* Pereira, 1986: 209.

*Taxonomic summary*

*Material examined.* **Brazil.** State of Amazonas: 60 spec., INPA 345, unnamed igarapés, tributary of rio Uatumã near cachoeira do Miriti, 02°01' S, 59°27' W, 13-14.vii.1985, leg. C. Magalhães; 3 spec., INPA 433, unnamed igarapé on left bank of rio Uatumã, near cachoeira do Miriti, vii.1985, leg. C. Magalhães; 9 spec., INPA 451, unnamed igarapés near Balbina hydroelectric dam, 22-24.xi.1985, leg. C. Magalhães, M. Jegu and C. Gosset. - State of Pará: 2 males, 3 females, 2 ovig. females, INPA 1119, Alter-do-Chão, igarapé São Sebastião, Santarém, 17.ii.2000, leg. C. R. García-Dávila.

*Type locality.* Venezuela, Amazonas, Río Atabapo at Chamuchina, 03°20'N 67°29'W.

*Distribution.* Venezuela, Colombia, and Brazil (Amazonas, Pará) (other documented records in Pereira, 1986; Valencia and Campos, 2010).

*Remarks.* The occurrence in the rio Uatuma basin, Amazonas, Brazil was mentioned by Magalhães (1988) in the description of the larval development of this species. The present records extend its distribution area as far as the rio Tapajós basin, in the state of Pará.

### ***Pseudopalaemon chryseus* Kensley and Walker, 1982**

*Pseudopalaemon chryseus* Kensley and Walker, 1982: 16, figs. 18-19.

*Taxonomic summary*

*Material examined.* **Brazil.** State of Amapá: 1 male, INPA 1215, Macapá-Jari road, igarapé do Parma, 20.iii.1991, leg. V. Py-Daniel et al. - State of Pará: 3 males, 2 females, INPA 452, lake unnamed on the right bank of the lower rio Trombetas basin, 3 km upriver from Juquiri, 07-08.iii.1986, leg. V. Py-Daniel et al.; 1 male, 1 female, 3 ovig. females, INPA 073, rio Curuá-Una, i-ii.1981, leg. R. Best; 3 females, INPA 1186, rio Cupari, near confluence with rio Tapajós, 27.x.1991, leg. A. Negrão et al.; 12 males, 5 juveniles, INPA 1189, rio Tapajós, Itaituba, 18.x.1991, leg. C. Magalhães et al.; 3 females, INPA 1204, rio Tapajós, left bank, near mouth of rio Cupari, 27.x.1991, leg. C. Magalhães and L. Rapp Py-Daniel; 1 female, INPA 1085, rio Trombetas, Cachoeira Porteira, 05.vi.1986, leg. U. Barbosa; 32 males, 44 females, INPA 1160, rio Xingu, paraná do Maxacá, 19.x.1992, leg. M. Jegu; 102 females, INPA 1161, rio Xingu, ilha de Babaquara, 05.x.1990, leg. J. Zuanon; 30 males, 22 females, 12 ovig. females, INPA 1106, rio Tapajós, lago Jacundá, near Alter-do-Chão, 16.ii.2000, leg. C. R. García-Dávila; 94 males, 95 females, 16 ovig. females, INPA 1124, rio Tapajós, headwaters of lago Preto, near Alter-do-Chão, 17.ii.2000, leg. C. R. García-Dávila; 7 males, 9 females, 4 ovig. females, INPA

1129, rio Tapajós, headwaters of lago Verde, near Alter-do-Chão, 18.ii.2000, leg. C. R. García-Dávila; 24 males, 31 females, 2 ovig. females, INPA 1139, rio Tapajós, lago Piranha, near Alter-do-Chão, 16.ii.2000, leg. C. R. García-Dávila; 1 female, INPA 1133, rio Tapajós, lago Verde, near Alter-do-Chão, 18.ii.2000, leg. C. R. García-Dávila; 1 male, 2 females, INPA 1114, rio Tapajós, lago Caravari, near Alter-do-Chão, 16.ii.2000, leg. C. R. García-Dávila; 5 males, 2 females, 1 ovig. female, INPA 1142, rio Tapajós, lago Iruçanga, near Alter-do-Chão, 21.ii.2000, leg. C. R. García-Dávila; 4 males, 8 females, INPA 1146, rio Tocantins, lago Jacaré, near Alter-do-Chão, 21.ii.2000, leg. C. R. García-Dávila.

*Type locality.* Brazil, Amazonas, Rio Tarumãzinho, near Manaus.

*Distribution.* Colombia, Brazil (Amapá, Amazonas, Pará) (other documented records in Kensley and Walker, 1982; Valencia and Campos, 2010).

*Remarks.* The present records extend the distribution of this species into the eastern Amazon region in the states of Amapá and Pará.

### *Atya scabra* (Leach, 1816)

*Atya scabra* Leach, 1816: 421, pl. 21.

#### *Taxonomic summary*

*Material examined.* **Brazil.** State of Rio Grande do Norte: 8 males, 13 females, 7 ovigerous, 7 juveniles, UFRGS 3187, rio Boca Cicca, Nisia Floresta, 20.vii.2001, leg. L.R. Malabarba, H. Gurgel. – State of Alagoas: 1 male, MNRJ 2697, rio Mundaú, Branquinha, 24.i.1986, leg. D.M. Texeira. – State of Bahia: 3 males, 4 ovigerous, CCDB 4522, rio Baiano II, Rodovia BA001, Maraú, 10/iii/2013, leg. F.L. Mantelatto, et al. – State of Espírito Santo: 1 male, CCDB 2840, rio Cacheirinha, Guarapari, 03.xi.2006, leg. F.L. Mantelatto et al. – State of Rio de Janeiro: 5 males, CCBD 2210, rio Taquari, Paraty, 16.viii.2007, leg. F.L. Mantelatto et al.; 1 female, MNRJ 8761, rio Barra Grande, Paraty, 05.xi.1993, leg. Unknown. – State of Rio Grande do Sul: 2 spec. UFRGS 02192, Maquiné, 31.v.1996, leg. F.S. Vilella.

*Type locality.* Unknown (“Habitat”; Leach, 1815:345); “*A. mexicana* (Wiegmann, 1836) sinónimo de *A. scabra*”, locality “Misantla, Ver.” (Villalobos, 1943); restricted to “the area of Veracruz, Mexico” (Holthuis, 1966:234); neotype designation to Misantla, Estado de Veracruz, Mexico, 19°56' N, 96°50' W, by H. H. Hobbs Jr. and C. W. J. Hart (1982).

*Distribution.* West Africa; Cape Verde Islands; coastal regions of Mexico; Guatemala; Honduras; West Indies; Costa Rica, Panama; Brazil (Ceará, Rio Grande do Norte, Pernambuco, Alagoas, Bahia, Espírito Santo, São Paulo, Rio de Janeiro, Santa Catarina, Rio Grande do Sul). (other

documented records in Chace and Hobbs, 1969; Hobbs Jr and Hart Jr, 1982; Abele and Kim, 1989; Ramos-Porto and Coelho, 1998; Torati et al., 2011).

*Remarks.* The occurrence of this species in the Brazilian states of Alagoas, Espírito Santo and Rio de Janeiro was mentioned in compilation paper (Ramos-Porto and Coelho, 1998), but no documented record was informed in these publications. The present records expand its distributional range into the northeastern and southeastern region in the state of Rio Grande do Norte, Alagoas, Espírito Santo and Rio de Janeiro.

### *Acetes paraguayensis* Hansen, 1919

*Acetes paraguayensis* - Hansen, 1919: 46, fig. 2 a-d.

#### *Taxonomic summary*

*Material examined.* **Brazil.** State of Amazonas: 1 spec., INPA 104, rio Negro, arquipélago de Anavilhanas, lago do Prato, 02°42' S, 60°44' W, x.1980, leg. M. Goulding; 65 spec., INPA 222, paraná do lago Janauacá, margem direita do rio Solimões, 03°22' S, 60°13' W, 20.ix.1978, leg. J. Donath; 54 spec., INPA 228, rio Solimões, ilha da Marchantaria, near Manaus, 03°14' S, 59°56' W, 05.ii.1982, leg. C. Magalhães; 4 spec. INPA 229, rio Arirará, rio Negro basin, 06.x.1979, leg. M. Goulding; 106 spec., INPA 230, Moura, igarapé Mucura, rio Unini, 01°39' S, 61°34' W, 28.xii.1976, leg. Equipe Ictiologia - INPA; 53 spec., INPA 232, rio Tefé, Jurupari, 31.vii.-01.viii.1979, M. Goulding; 3 spec., INPA 756, Rosarinho, rio Madeira, between paraná do Maraca and paraná Ipiranga, 03°38.15' S, 59°02.18' W, 17.x.1994, leg. J. Lundberg; 140 spec., INPA 759, Moura, lago Tambor Velho, rio Paunini, tributary of rio Jaú, 02°13.0' S, 62°25.0' W, 15.x.1995, leg. M. Garcia; 97 spec., INPA 762, ponta do Catalão, at the confluence of rio Negro with rio Solimões, near Manaus, 12.xi.85, leg. C. Gosset and M. Jegu. - State of Pará: 200 spec., INPA 757, baía de Marajó, ilha Guariba, near Mosqueiro, 20.v.94, leg. R. Barthem and R. Aragão; 3 spec., INPA 758, igarapé Cajueiro, near Mosqueiro, 19.v.94, leg. R. Barthem and R. Aragão; 4 spec., INPA 1096, banco das Araras, Currallinho, 25.vii.1984, leg. R. Barthem; 2 spec., INPA 225, rio Tocantins, igarapé Arapari, between Breu Branco and Itupiranga, area of the UHE de Tucuruí reservoir, 03°47' S, 49°33' W, 24.xi.1981-13.vii.1982, leg. Equipe Ictiologia - INPA; 100 spec., INPA 751, Belém, baía do Marajó, ilha Tatuoca, 11.vi.1984, leg. R. Barthem; 5 spec., INPA 753, rio Amazonas, estreito de Breves, 01°47.18' S, 50°20.12' W, 10.xi.1994, leg. L. Rapp Py-Daniel; 1 spec., INPA 754, rio Amazonas, between paraná do Juriti and rio Trombetas, 02°01.0' S, 55°54.0' W, 22.x.1994, leg. M. Westneat; 9 spec., INPA 755, rio Amazonas, between rio Trombetas and paraná Mirim de Óbidos, 01°54.0' S, 55°31.0' W, 23.x.1994, leg. F. Langeant; 1 spec., INPA

1092, rio Xingu, between Senador José Porfírio e Porto de Moz, 02°03'25" S, 52°14'56" W, 08.xi.1994, leg. L. Rapp Py-Daniel et al.; 1 spec., INPA 1093, rio Tapajós, mouth of rio Maicá, Santarém, 02°26'36" S, 54°42'31" W, 23.iv.1999, leg. A. E. C. Gabelha; 1 spec., INPA 1094, Comunidade do Guajará, Santarém, 02°26'36" S, 54°42'31" W, 15.v.1999, leg. R. N. Yuki. - State of Tocantins: 150 spec., INPA 1439, Caseara, rio Traguaia, at the confluence with rio do Coco, 17.ii.2000, J. Zuanon and E. Ferreira. - State of Rondônia: 1 spec., INPA 119, rio Madeira, Calama, praia do Capararú, 08°01' S, 62°52' W, 20.xii.1980, leg. M. Goulding. - State of Acre: 2 females, UFRGS 3172, rio Iquiri, tributary of rio Branco, 06.viii.2001, leg. L. R. Malabarba, W. A. Monteiro, P. A. Souza; 1 spec., INPA 231, Tarauacá, rio Tarauacá, 08°09' S, 70°45' W, 01.viii.1984, leg. M. Goulding.

*Type locality.* Paraguay, lagoon at Rio Paraguay near its junction with Rio Paraná.

*Distribution.* Inland waters of Venezuela, Colombia, Peru, Bolivia, Paraguay, Argentina, Brazil (Acre, Amapá?, Amazonas, Pará, Tocantins, Rondônia, Goiás, Minas Gerais?, Mato Grosso, Mato Grosso do Sul?, Paraná?) (other documented records in Ringuelet, 1949; Aldrich, 1962; Omori, 1975; Boschi 1981; Rodríguez, 1982; D'Incao and Martins, 2000; Magalhães, 2002; García-Dávila and Magalhães, 2003; Williner et al, 2003; Valencia and Campos, 2010).

*Remarks.* The occurrence of this species in the Brazilian states of Amapá, Minas Gerais, Mato Grosso do Sul, and Paraná was mentioned in compilation papers (D'Incao, 1998; Melo, 2003a), but no documented record was cited in these publications. The present records greatly increase the known distribution area of this species in the Amazon river basin by encompassing the drainage area of several of its tributaries, and they also include the first reports from the states of Acre, Rondônia, and Tocantins.

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