

CHECKLIST OF THE SPECIES OF SYLLIDAE (ANNELIDA: PHYLLODOCIDA) RECORDED IN BRAZIL

ANDREZZA RIBEIRO MENEZES MOURA^{1,4,*}, MARCO ANTÔNIO BASTOS GOMES⁴, MARCELO VERONESI FUKUDA³ & CHRISTINE RUTA^{2,4}

¹ Laboratório de Bentos Costeiro (LABEC), Universidade Federal de Sergipe – Campus São Cristóvão. * Corresponding author: drezza-bio@gmail.com.

² Departamento de Zoologia, Instituto de Biologia, Universidade Federal do Rio de Janeiro. E-mail: christineruta@gmail.com

³ Museu de Zoologia, Universidade de São Paulo. E-mail: mvfukuda@usp.br.

⁴ Programa de Pós-Graduação em Zoologia, Museu Nacional, Universidade Federal do Rio de Janeiro. E-mail: marcoaiabio@gmail.com

Abstract. This study presents the first checklist focused on the Syllidae species registered in Brazil, based on extensive literature research. Data on geographic distribution in Brazil and worldwide are given herein, in addition to habitat and type material of each species deposited in Brazilian collections. A total of 96 species from 28 genera and four subfamilies have been recorded, that is 13.71% of the species and 37.84% of the genera known worldwide. A key is provided for the species currently known from the Brazilian coast.

Key words: “Polychaeta”, species list, Brazil.

Resumo. Checklist das espécies de Syllidae (Annelida: Phyllococida) registradas no Brasil. O presente estudo fornece o primeiro checklist concentrado nas espécies de Syllidae registradas no Brasil, com base em pesquisas na literatura. Dados sobre a distribuição geográfica no Brasil e no mundo são apresentados, além do habitat e material de cada espécie depositado em coleções brasileiras. Foi registrado um total de 96 espécies de 28 gêneros e quatro subfamílias, perfazendo 14% das espécies e 38% dos gêneros conhecidos mundialmente. Finalmente, é apresentada uma chave para as espécies atualmente conhecidas da costa brasileira.

Palavras-chave: “Polychaeta”, lista de espécies, chave, Brasil.

INTRODUCTION

Syllidae Grube, 1850 is a large family of polychaetes, with almost 700 species and 74 genera (SAN MARTÍN & AGUADO, 2014), currently divided into five subfamilies: Anoplosyllinae Aguado & San Martín, 2009; Autolytinae Langerhans, 1879; Eusyllinae Malaquin, 1893; Exogoninae Langerhans, 1879; and Syllinae Grube, 1850.

Syllids usually have a fragile body and small size, from around 1 mm long and 15–20 chaetigers, up to about 140 mm and 200 chaetigers. The presence of the proventricle, a barrel-shaped structure associated with the anterior portion of the digestive system, has been considered a synapomorphy of the group (e.g., GLASBY, 2000; PLEIJEL, 2001; SAN MARTÍN, 2003; AGUADO & SAN MARTÍN, 2009; AGUADO *et al.*, 2012).

Syllids use a variety of reproduction strategies, with different types of eggs incubation and epitoke forms. Asexual reproduction by architomy or schizogamy is also common in the family (FRANKE, 1999; RIBEIRO *et al.*, 2018). However, reproductive characteristics in many genera and species remain unknown (SAN MARTÍN, 2003; ROUSE & PLEIJEL, 2006).

The first record of a syllid from Brazil, *Syllis* SAVIGNY in LAMARCK, 1818, was registered by F. MÜLLER (1858). *Syllis brevicirris* HANSEN, 1882 and *Syllis brasiliensis* MCINTOSH, 1885 are the first two described species of syllids from Brazil, based on material collected by Prof. Édouard Van Beneden and by the HMS Challenger Expedition, respectively. Although syllids from Brazil have been known since the 19th century, it is only in the 20th century that works have extended along the Brazilian coast, such as those by WESTHEIDE (1974) and RULLIER & AMOUREUX (1979). Nevertheless, the majority of the species and new records from the country have been described in the last decades (NOGUEIRA & SAN MARTÍN, 2002; NOGUEIRA *et al.*, 2004; NOGUEIRA & FUKUDA, 2008; FUKUDA *et al.*, 2009, 2013, 2015, 2016; FUKUDA & NOGUEIRA, 2013 a, b; PARESQUE *et al.*, 2014, 2015, 2016 a, b; BARROSO *et al.*, 2017).

Currently, around 150 syllid species were reported for Brazil (AMARAL *et al.*, 2013; DE CHIARA *et al.*, 2017). Most of these species, however, were described from studies in Southeast-

ern and Southern Brazil, regions with the highest concentration of specialists. There are also a number of species only reported from theses and dissertations, and many records without voucher deposited in collections. Therefore, a more accurate estimate of the diversity of syllids in Brazil is still a problematic issue.

The current paper presents an extensive compilation based exclusively on taxonomic publications of syllids recorded from Brazil, with most of the species with vouchers in collections from Brazilian museums.

MATERIAL AND METHODS

The checklist herein presented was based exclusively on taxonomic publications. Species are cited with the currently most accepted names, listed alphabetically following the most accepted division usually under subfamilies (AGUADO *et al.*, 2012). This list includes information about the syllids recorded from Brazil with remarks on their type localities, habitats, and ocean or sea distribution, with a mention of the countries and Brazilian states occurrences. The type material deposited abroad and in the main polychaete collections in Brazil is also listed when the information is available, which is not always the case for older records.

The following abbreviations are used in this paper: AM – Australian Museum, Sydney, Australia; BMNH – Natural History Museum, London, UK; LACM – Natural History Museum of Los

Angeles County, Los Angeles, USA; MACN-In – National Invertebrate Collection of Museo Argentino de Ciencias Naturales; MCNLP – Museo de La Plata, Colección Zoología Invertebrados, Anélidos, Argentina; MNCN – Museo Nacional de Ciencias Naturales, Madrid, Spain; MNRJ – Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil; MZUSP – Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil; SMF – Senckenberg Museum, Frankfurt am Main, Germany; USNM – United States National History Museum, Smithsonian Institution, Washington DC, USA; ZMH – Zoologisches Mu-

seum Hamburg, Hamburg, Germany; ZMUC-POL – Zoological Museum, Natural History Museum of Denmark, Denmark; ZUEC-POL – Museu de Zoologia, Universidade Estadual de Campinas, Campinas, Brazil. The abbreviation MHN-BPO refers to material also deposited at the ZUEC, under its former designation.

Based on the list of occurrences compiled with the criteria mentioned above, an identification key was made containing all the species registered in Brazilian waters.

RESULTS AND DISCUSSION

Species List

AUTOLYTINAE Langerhans, 1879

Proceraea rubroproventriculata Nygren & Gidholm, 2001

Type Locality: Atlantic Ocean – USA, Florida, Biscayne Bay (25°43.4'N, 80°10.4'W).

Habitat: Among hydroids, sponges and rocks with epifaunal mat; from 0-30 m depth.

Distribution: Atlantic Ocean – USA; Brazil (Paraná) (Nygren & Gidholm, 2001).

Type Material: Holotype – LACM-POLY 1964. Paratype – LACM POLY 1965.

Material in Brazilian Collections: Unknown.

EUSYLLINAE Malaquin, 1893

Eusyllis assimilis Marenzeller, 1875

Type Locality: Atlantic Ocean (Mediterranean Sea) – Italy, Trieste.

Habitat: Rocky shores; from 0-250 m depth.

Distribution: Atlantic Ocean – Italy; English Channel to South Africa; Canada to Mexico; Brazil (Rio de Janeiro and São Paulo). Indian Ocean – Australia. Pacific Ocean – Japan; Australia; New Zealand (Marenzeller, 1875; Fukuda *et al.*, 2015).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 1383-1393; ZUEC-POL 10459, 10464, 10552, 10555, 11040, 12725, 12927.

Eusyllis kupfferi Langerhans, 1879

Type Locality: Atlantic Ocean – Portugal, Madeira Island.

Habitat: Rocky shores; from 0-40 m depth.

Distribution: Atlantic Ocean – Spain; Portugal; Cuba; Brazil (Paraíba, Pernambuco and São Paulo). Indian Ocean – Australia. Pacific Ocean – Australia (Langerhans, 1879; Paresque *et al.*, 2015).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 1394-1395, 1397, 2747- 2756.

Eusyllis lamelligera Marion & Bobretzky, 1875

Type Locality: Atlantic Ocean (Mediterranean Sea) – France, Gulf of Marseille.

Habitat: From 0-680 m depth.

Distribution: Atlantic Ocean – France; USA; Cuba; Brazil (Paraíba, Pernambuco and São Paulo). Indian Ocean – Australia. Pacific Ocean – Japan; Australia (Marion & Bobretzky, 1875; Fukuda *et al.*, 2015).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 2760-2781.

Eusyllis nonatoi Fukuda, Nogueira & San Martín, 2015

Type Locality: Atlantic Ocean – Brazil, São Paulo, Ubatuba, Picinguaba Beach (23°22'31''S, 44°50'21''W).

Habitat: Algae (*Sargassum* sp.) and rocky shores in the intertidal zone.

Distribution: Atlantic Ocean – Brazil (São Paulo) (Fukuda *et al.*, 2015).

Type Material: Holotype – MZUSP 2346. Paratypes – MNCN 16.01/13188; MZUSP 2347-2348, 2354; USNM 1273435; ZUEC-POL 16090-16091.

Material in Brazilian Collections: MZUSP 2487-2491, 2493-2494; ZUEC-POL 16208-16213.

Odontosyllis aracaensis Fukuda, Nogueira, Paresque & San Martín, 2013

Type Locality: Atlantic Ocean – Brazil, São Paulo, São Sebastião, Araçá Beach (23°48'54''S, 45°24'24''W).

Habitat: Rocky shores in the intertidal zone among algae, mussel beds, colonies of sponges and ascidians, sabellariid reefs, and other substrates.

Distribution: Atlantic Ocean – Brazil (Paraíba, Pernambuco and São Paulo) (Fukuda *et al.*, 2013; Paresque *et al.*, 2015).

Type Material: Holotype – MZUSP 1017. Paratypes – MZUSP 1018-1019, 1175; ZUEC-POL 11891-11892.

Material in Brazilian Collections: MZUSP 1227-1231, 1242, 1247, 2784-2788.

Odontosyllis brevichaetosa Paresque, Fukuda, San Martín & Nogueira, 2015

Type Locality: Atlantic Ocean – Brazil, Pernambuco, Goiana, Pontas de Pedra Beach (07°36.927'S; 34°48.296'W).

Habitat: Intertidal zone, on sandstone reefs, among sponges, algae, ascidians and mussel beds.

Distribution: Atlantic Ocean – Brazil (Paraíba and Pernambuco) (Paresque *et al.*, 2015).

Type Material: Holotype – MZUSP 2806. Paratypes – MZUSP 2807-2810; ZUEC-POL 17003-17005.

Material in Brazilian Collections: MZUSP 2811-2813, 2817-2819, 2821.

Odontosyllis cf. fulgurans (Audouin & Milne-Edwards, 1833)

Type Locality: Atlantic Ocean – France.

Habitat: Rocky shores, algae, sponges, corals and sandy bottoms; from 0-129 m depth.

Distribution: Atlantic Ocean – France; Spain; Brazil (Paraíba, Pernambuco, São Paulo and Paraná). Pacific Ocean – Japan (Audouin & Milne-Edwards, 1833; Fukuda & Nogueira, 2006; Nogueira, 2006; Paresque *et al.*, 2015).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 958-969, 1223-1226; ZUEC-POL 11290-11300.

Odontosyllis guarauensis Fukuda, Nogueira, Paresque & San Martín, 2013

Type Locality: Atlantic Ocean – Brazil, São Paulo, Peruíbe, Guaraú Beach (24°22'02"S 47°00'35"W).

Habitat: Rocky shores and algae (*Bostrychia* sp. and *Sargassum* sp.) in the intertidal zone.

Distribution: Atlantic Ocean – Brazil (São Paulo) (Fukuda *et al.*, 2013).

Type Material: Holotype – MZUSP 1020. Paratypes – MZUSP 1021-1022; ZUEC-POL 11893-11897.

Material in Brazilian Collections: MZUSP 1023-1025, 1222, 1239-1241, 3056.

Odontosyllis guillermoi Fukuda & Nogueira, 2006

Type Locality: Atlantic Ocean – Brazil, São Paulo, Guarujá, Branca Beach (23°52'S, 46°08'W).

Habitat: Rocky shores, sponges, algae, sabelariid reefs and other substrates in the intertidal zone.

Distribution: Atlantic Ocean – Venezuela, Brazil (Paraíba, Pernambuco, Espírito Santo and São Paulo) (Fukuda & Nogueira, 2006; Liñero-Arana & Díaz-Díaz, 2011; Paresque *et al.*, 2015).

Type Material: Holotype – MHN-BPO 102-0. Paratypes – MHN-BPO 102-1/3.

Material in Brazilian Collections: MZUSP 683-686, 982-1003, 1232-1238, 2794-2803, 3066-3067; ZUEC-POL 11302-11324.

Opisthodonta morena Langerhans, 1879

Type Locality: Atlantic Ocean – Portugal, Madeira Island.

Habitat: Found at depths of 0-240 m.

Distribution: Atlantic Ocean – Madeira Island; Brazil (Rio de Janeiro and São Paulo). Indian Ocean – Australia; Red Sea. Pacific Ocean – Australia (Langerhans, 1879; Fukuda *et al.*, 2015).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 1006-1010, 2385-2405; ZUEC-POL 16117-16131, 16133-16137, 16143-16145.

Opisthodonta russelli San Martín, López & Aguado, 2009

Type Locality: Atlantic Ocean – Venezuela, Morrocoy National Park.

Habitat: Algae (*Thalassia testudinum*), very fine sand and silty sand; from 0-258 m depth.

Distribution: Atlantic Ocean – Belize; Venezuela; Brazil (Rio de Janeiro and São Paulo) (San Martín *et al.*, 2009; Fukuda *et al.*, 2015).

Type Material: Holotype – MNCN 16.01/6063. Paratypes – MNCN 16.01/6064-6069.

Material in Brazilian Collections: MZUSP 2406-2446; ZUEC-POL 16093, 16138-16142, 16146-16147, 16149-16157, 16159-16165, 16167-16173.

EXOgoninae Langerhans, 1879

Brania arminii (Langerhans, 1881)

Type Locality: Atlantic Ocean – Canary Islands.

Habitat: Rocky shores, sponges, corals, algae (*Posidonia* sp.), fine sand, *Sabellaria* reefs and mussels in the intertidal zone.

Distribution: Atlantic Ocean – Canary Islands; Brazil (São Paulo). Indian Ocean – Egypt (Langerhans, 1881; Westheide, 1974; Nogueira *et al.*, 2004; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 922-935; ZUEC-POL 11257-11271.

Erinaceusyllis centroamericana (Hartmann-Schröder, 1959)

Type Locality: Pacific Ocean – El Salvador, Estero Jaltepeque.

Habitat: Rocky shores, roots of mangrove plants, algae, sponges and sand in the intertidal zone.

Distribution: Atlantic Ocean – Brazil (São Paulo); South Africa. Indian Ocean – South Africa; Australia. Pacific Ocean – El Salvador; Central America; Galapagos Islands (Hartmann-Schröder, 1959; Nogueira *et al.*, 2004; Nogueira, 2006).

Type Material: Holotype – ZMH P-14794.

Material in Brazilian Collections: MNH-BPO 88/1-3; MZUSP 936-946.

Erinaceusyllis subterranea (Hartmann-Schröder, 1965)

Type Locality: Indian Ocean – Red Sea, Egypt, Hurghada.

Habitat: Algae and sand in the intertidal zone.

Distribution: Atlantic Ocean – Mediterranean Sea; Brazil (São Paulo). Indian Ocean – Egypt (Hartmann-Schröder, 1960; Nogueira *et al.*, 2004).

Type Material: Holotype – ZMH P-14724.

Material in Brazilian Collections: MZUSP 947-949; ZUEC-POL 11283-11285.

Exogone africana Hartmann-Schröder, 1974

Type Locality: Atlantic Ocean – Namibia, Luderitz.

Habitat: Found at depths of 0-81 m.

Distribution: Atlantic Ocean – Angola; Namibia; Brazil (Paraíba, Pernambuco, Espírito Santo and São Paulo); Mediterranean Sea: Egypt; Turkey. Indian Ocean – Australia. Pacific Ocean – USA; Japan; Australia (Hartmann-Schröder, 1974; Paresque *et al.*, 2014).

Type Material: Holotype – ZMH P-14595.

Material in Brazilian Collections: MZUSP 1210-1212, 1329, 1334, 2060-2065; ZUEC-POL 13046, 13526.

Exogone anomalochaeta Benham, 1921

Type Locality: Antarctic Ocean – Macquarie Island.

Habitat: Found at depths of 0-1050 m.

Distribution: Atlantic Ocean – Brazil (Espírito Santo and Rio de Janeiro). Antarctic Ocean – Macquarie Island, Livingston Island (Benham, 1921; Barroso *et al.*, 2017; Soto & San Martín, 2017).

Type Material: Syntypes – AM W617.

Material in Brazilian Collections: MNRJ 1151-1152; MZUSP 2904-2909, 2911-2918.

Exogone arenosa Perkins, 1981

Type Locality: Atlantic Ocean – USA, Florida, Hutchinson Island.

Habitat: Found at depths of 0-150 m.

Distribution: Atlantic Ocean – USA; Cuba; Panama; Venezuela; Brazil (Paraíba, Pernambuco, Rio de Janeiro and São Paulo) (Perkins, 1981; Paresque *et al.*, 2014).

Type Material: Holotype – USNM 60442. Paratypes – ZMH P-16389.

Material in Brazilian Collections: MZUSP 1335-1336, 2062-2065.

Exogone brevantennata Hartmann-Schröder, 1959

Type Locality: Pacific Ocean – El Salvador, Estero Jaltepeque.

Habitat: Corals, sponges, hydroids, algae, roots of mangrove, mud, very fine sand and shell remains; from 0-21 m depth.

Distribution: Atlantic Ocean – USA; Cuba; Bahamas; Belize; Venezuela; Brazil (Paraíba, Espírito Santo, Rio de Janeiro and São Paulo); Mediterranean Sea: Lebanon. Pacific Ocean – China; Australia; Galápagos Islands; El Salvador. Indian Ocean – Australia; Tanzania; Mozambique (Hartmann-Schröder, 1959; Nogueira *et al.*, 2004; Nogueira, 2006; Paresque *et al.*, 2014).

Type Material: Holotype – ZMH P-14589.

Material in Brazilian Collections: MNH-BPO 73/1-3; MZUSP 1206-1209, 1306-1319, 2066, 2068-2078.

Exogone cebimar Fukuda & Nogueira, 2014

Type Locality: Atlantic Ocean – Brazil, São Paulo, São Sebastião, Araçá Bay (23°48'54"S 45°24'24"W).

Habitat: Rocky shores, among algae, sponges, ascidians and other substrates in the intertidal zone.

Distribution: Atlantic Ocean – Brazil (São Paulo) (Fukuda & Nogueira, 2014).

Type Material: Holotype – MZUSP 1966. Paratypes – MZUSP 1967-1968; ZUEC-POL 14101.

Material in Brazilian Collections: See "Type Material".

Exogone dispar (Webster, 1879)

Type Locality: Atlantic Ocean – USA, Virginia.

Habitat: Found at depths of 0-157 m.

Distribution: Atlantic Ocean – North Sea: Skagerrak; Spain; Portugal; Mediterranean Sea: Italy; South Africa; USA; Mexico; Cuba; Panama; Trinidad and Tobago; Brazil (Paraíba, Pernambuco, Espírito Santo, Rio de Janeiro, São Paulo, Paraná and Santa Catarina). Indian Ocean – Australia. Pacific Ocean – Mexico; Galápagos Islands; Japan; China (Webster, 1879; Paresque *et al.*, 2014).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 1320-1328, 2085-2095.

Exogone gigas Paresque, Fukuda & Nogueira, 2014

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin (22°11'56"S 40°32'15"W).

Habitat: Found at depths of 0-157 m.

Distribution: Atlantic Ocean – Brazil (Paraíba, Rio de Janeiro) (Paresque *et al.*, 2014).

Type Material: Holotype – MZUSP 1271. Paratypes – MNCN 16.01/14629-14639; MZUSP 1272-1274; 2083-2084; ZUEC-POL 13532-13534.

Material in Brazilian Collections: MZUSP 1275-1347.

Exogone naidina Örsted, 1845

Type Locality: Atlantic Ocean (Mediterranean Sea) – France, Sète.

Habitat: Algae, sand and mud, up to 49 m depth.

Distribution: Circumtropical. Atlantic Ocean – USA; Scotland; Mediterranean Sea: Spain, France, Italy, Cyprus, Greece, Israel; Adriatic Sea: Italy and North Adriatic; Brazil (Espírito Santo). Pacific Ocean – Canada; USA. (Örsted, 1845, McIntosh, 1874; McIntosh, 1908; Hartman, 1961; Rullier & Amoureux, 1979; MUSCO & Giangrande, 2005).

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Exogone naidinoides Westheide, 1974

Type Locality: Pacific Ocean – Ecuador, Galápagos Islands.

Habitat: Found at depths of 0-12 m.

Distribution: Atlantic Ocean – Canary Islands; Cuba; Mexico; Belize; Panama; Venezuela; Brazil (Paraíba, Pernambuco and São Paulo). Indian Ocean – Australia. Pacific Ocean – Galapagos Islands (Westheide, 1974; Paresque *et al.*, 2014).

Type Material: Holotype – ZMH P-13611.

Material in Brazilian Collections: MZUSP 1011-1015, 1339-1343, 2081-2082, 3065.

Exogone rolani San Martín, 1991

Type Locality: Atlantic Ocean – Cuba, Canarreos Archipelago.

Habitat: Found at depths of 0-91m.

Distribution: Atlantic Ocean – USA; Cuba; Brazil (Paraíba and Rio de Janeiro) (San Martín, 1991; Paresque *et al.*, 2014).

Type Material: Holotype – MNCN 16.01/635. Paratypes – MNCN 16.01/636; USNM 101327.

Material in Brazilian Collections: MZUSP 1350-1360, 2079-2080.

Exogone simplex Hartmann-Schröder, 1960

Type Locality: Red Sea – Egypt, Hurghada.

Habitat: Intertidal zone.

Distribution: Atlantic Ocean – Angola; Brazil (Paraíba and São Paulo). Indian Ocean – Australia; Red Sea: Egypt. Pacific Ocean – Australia (Hartmann-Schröder, 1960; Paresque *et al.*, 2014).

Type Material: Holotype – ZMH P-14704.

Material in Brazilian Collections: MZUSP 1337-1338.

Parexogone anseforbansensis Böggemann & Westheide, 2004

Type Locality: Indian Ocean – Seychelles (4°46'37.2"S, 55°31'30"E).

Habitat: Rocky shores, rocks and coralline algae, from 0-5 m depth.

Distribution: Atlantic Ocean – Cuba; Brazil (São Paulo). Indian Ocean – Seychelles (Böggemann & Westheide, 2004; Nogueira *et al.*, 2004; Nogueira, 2006).

Type Material: Holotype – SMF 11386. Paratypes – SMF 11385.

Material in Brazilian Collections: MZUSP 954-955; ZUEC-POL 11286-11287.

Parexogone campoyi (San Martín, Ceberio & Aguirrezabalaga, 1996)

Type Locality: Atlantic Ocean – Bay of Biscay.

Habitat: Found at depths of 734-1964 m.

Distribution: Atlantic Ocean – North Sea; Bay of Biscay; Brazil (Espírito Santo and Rio de Janeiro) (San Martín *et al.*, 1996; Barroso *et al.*, 2017).

Type Material: Holotype – MNCN 16.01/2949. Paratypes – MNCN 16.01/2950.

Material in Brazilian Collections: MNRJ 1160-1171.

Parexogone caribensis (San Martín, 1991)

Type Locality: Atlantic Ocean – USA, Texas (Gulf of Mexico).

Habitat: Sandy and muddy bottom, from 0-1100 m depth.

Distribution: Atlantic Ocean – Spain; Gulf of Mexico: USA; Brazil (São Paulo). Pacific Ocean – Australia (San Martín, 1991; Nogueira *et al.*, 2004; Nogueira, 2006).

Type Material: Holotype – USNM 1150945. Paratypes – USNM 1150946-1150947; USNM 75291-75293.

Material in Brazilian Collections: MNH-BPO 82/1-2.

Parexogone minuscula (Hartman, 1953)

Type Locality: Atlantic Ocean – South Georgia Island, Moraine Fjord.

Habitat: From 12-754 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro); Falkland and South Georgia Islands (Hartman, 1953; Barroso *et al.*, 2017).

Type Material: Unknown.

Material in Brazilian Collections: MNRJ 1172-1176.

Parexogone wolfi (San Martín, 1991)

Type Locality: Atlantic Ocean – USA, Florida (Gulf of Mexico).

Habitat: From 35-5497 m depth.

Distribution: Atlantic Ocean – Bay of Biscay; Angola; Gulf of Mexico: USA; Brazil (Espírito Santo and Rio de Janeiro). Indian Ocean – Australia (San Martín, 1991; Barroso *et al.*, 2017).

Type Material: Holotype – USNM 101326. Paratype – USNM 101336.

Material in Brazilian Collections: MNRJ 1153-1159.

Prosphaerosyllis brachycephala Fukuda, Yunda-Guarin & Nogueira, 2009

Type Locality: Atlantic Ocean – Brazil, Ceará, Fortaleza (03°40'04.3"S, 38°32'00.6"W).

Habitat: Sand from 10.5-15.5 m depth.

Distribution: Atlantic Ocean – Brazil (Ceará) (Nogueira *et al.*, 2004; Nogueira, 2006; Fukuda *et al.*, 2009).

Type Material: Holotype – MZUSP 901. Paratypes – MZUSP 902-904; ZUEC-POL 29-31.

Material in Brazilian Collections: MZUSP 3068-3083.

Prosphaerosyllis isabellae (Nogueira, San Martín & Amaral, 2001)

Type Locality: Atlantic Ocean – Brazil, São Paulo, Alcatrazes Island (26°06'S, 45°04'W).

Habitat: Rocky shores, corals (*Mussismilia hispida* (Verrill, 1901)) and sandy bottoms; from 99-808 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro, São Paulo and Rio Grande do Sul). Indian Ocean – Australia. Pacific Ocean – Australia (Nogueira *et al.*, 2001; Nogueira, 2006; Fukuda *et al.*, 2009; Barroso *et al.*, 2017).

Type Material: Holotype – MHN-BPO 70-0. Paratypes – MHN-BPO 70-1/2.

Material in Brazilian Collections: MNRJ 1177; MZUSP 906-909, 956-957; ZUEC-POL 11288-11289.

Prosphaerosyllis xarifae (Hartmann-Schröder, 1960)

Type Locality: Indian Ocean – Saudi Arabia, Farasan Archipelago, Sarso Island (Red Sea).

Habitat: Algae (*Posidonia* sp.), sandy bottoms, hydrozoans, corals and calcareous concretions in the intertidal zone.

Distribution: Atlantic Ocean – Mediterranean Sea: Italy, Cyprus, Greece; Brazil (São Paulo). Indian Ocean – Red Sea; Australia (Hartmann-Schröder, 1960; Fukuda *et al.*, 2009).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 905; ZUEC-POL 32-35.

Salvatoria breviarticulata (Nogueira, San Martín & Amaral, 2001)

Type Locality: Atlantic Ocean – Brazil, São Paulo, Alcatrazes Island (26°06'S, 45°04'W).

Habitat: Rocky shores and corals in the intertidal and subtidal zones.

Distribution: Atlantic Ocean – Brazil (São Paulo) (Nogueira *et al.*, 2001; Nogueira, 2006).

Type Material: Holotype – MHN-BPO 67/0. Paratypes – MHN-BPO 67/1-3.

Material in Brazilian Collections: MHN-BPO 67/1-3.

Salvatoria longiarticulata (Nogueira, San Martín & Amaral, 2001)

Type Locality: Atlantic Ocean – Brazil, São Paulo, Alcatrazes Island (26°06'S, 45°04'W).

Habitat: Rocky shores and corals in the intertidal and subtidal zones.

Distribution: Atlantic Ocean – Brazil (São Paulo) (Nogueira *et al.*, 2001, 2004; Nogueira, 2006).

Type Material: Holotype – MHN-BPO 68/0. Paratypes – MHN-BPO 68/1-5.

Material in Brazilian Collections: MHN-BPO 68/1-5.

Salvatoria neapolitana (Goodrich, 1930)

Type Locality: Atlantic Ocean (Mediterranean Sea) – Italy, Gulf of Naples.

Habitat: Interstitial sand in the intertidal and subtidal zones.

Distribution: Atlantic Ocean – France; Spain; Canary Islands; Venezuela; Brazil (São Paulo); Mediterranean Sea: Italy. Pacific Ocean – Galápagos Islands (Goodrich, 1930; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Sphaerosyllis annulata Nogueira, San Martín & Fukuda, 2004

Type Locality: Atlantic Ocean – Brazil, São Paulo, Ubatuba (23°24'S 44°47'W).

Habitat: Fine sand, from 0-25 m depth.

Distribution: Atlantic Ocean – Brazil (São Paulo) (Nogueira *et al.*, 2004; Nogueira, 2006).

Type Material: Holotype – MHN-BPO 91-0.

Material in Brazilian Collections: MZUSP 3054-3055.

Sphaerosyllis brasiliensis Nogueira, San Martín & Amaral, 2001

Type Locality: Atlantic Ocean – Brazil, São Paulo, Alcatrazes Island (26°06'S, 45°04'W).

Habitat: Rocky shores and corals in the intertidal zone.

Distribution: Atlantic Ocean – Brazil (São Paulo) (Nogueira *et al.*, 2001; Nogueira, 2006).

Type Material: Holotype – MHN-BPO 69/0.

Material in Brazilian Collections: MHN-BPO 69/1-3.

Sphaerosyllis ceciliae Barroso, Paiva, Nogueira & Fukuda, 2017

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin, (22°26'28.8''S, 39°58'53.3''W).

Habitat: Soft bottoms, from 749-1903 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro) (Barroso *et al.*, 2017).

Type Material: Holotype – MNRJ 1178. Paratypes – MNRJ 1179-1184; MZUSP 2964-2965; ZUEC-POL 19881.

Material in Brazilian Collections: MZUSP 2972-3000.

Sphaerosyllis monicae Barroso, Paiva, Nogueira & Fukuda, 2017

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin, (22°04'32.8''S, 39°54'11.4''W).

Habitat: Soft bottoms, from 722 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro) (Barroso *et al.*, 2017).

Type Material: Holotype – ZUEC-POL 19882.

Material in Brazilian Collections: species only known from the holotype.

Sphaerosyllis mussismiliaicola Nogueira, San Martín & Amaral, 2001

Type Locality: Atlantic Ocean – Brazil, São Paulo, Alcatrazes Island (26°06'S, 45°04'W).

Habitat: Rocky shores and corals in the intertidal zone.

Distribution: Atlantic Ocean – Brazil (São Paulo) (Nogueira *et al.*, 2001).

Type Material: Holotype – MHN-BPO 71/0.

Material in Brazilian Collections: MHN-BPO 71/1-4.

SYLLINAE Grube, 1850

Branchiosyllis diazi Rioja, 1958

Type Locality: Atlantic Ocean – Mexico, Isla Verde.

Habitat: Algae and sandy bottoms; up to 32 m depth.

Distribution: Atlantic Ocean – Mexico; Brazil (Alagoas) (Rioja, 1958; Rullier & Amoureux, 1979).

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Branchiosyllis exilis (Gravier, 1900)

Type Locality: Atlantic Ocean (Mediterranean Sea) – Italy, Trieste.

Habitat: Rocks, corals, dead sponges, algae (*Posidonia oceanica*) and coarse sand in the intertidal and subtidal zones.

Distribution: Circumtropical. Atlantic Ocean – Mediterranean Sea: Italy; Brazil (São Paulo) (Gravier, 1900; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 2139-2144, 2208.

Branchiosyllis oculata Ehlers, 1887

Type Locality: Atlantic Ocean – USA, Florida, Key West (Caribbean Sea).

Habitat: Algae and sandy bottoms; up to 18 m depth.

Distribution: Atlantic Ocean – Caribbean Sea: USA; Brazil (Bahia) (Ehlers, 1887; Rullier & Amoureux, 1979).

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Branchiosyllis tamandarensis Paresque, Fukuda & Nogueira, 2016

Type Locality: Atlantic Ocean – Brazil, Pernambuco, Tamandaré, Carneiros Beach (08°42.849'S, 35°04.999'W).

Habitat: Rhodolith beds and sponges (*Tedania ignis*) in the intertidal zone.

Distribution: Atlantic Ocean – Brazil (Paraíba and Pernambuco) (Paresque *et al.*, 2016a).

Type Material: Holotype – MZUSP 2858. Paratypes – MNCN 16.01/16877-16878; MZUSP 2859-2860.

Material in Brazilian Collections: MZUSP 2132-2138.

Eurysyllis polytuberculata De Chiara, Fukuda & Nogueira, 2017

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin (22°46'54.841", S41°3'33.651"W).

Habitat: Sandy bottoms; from 78-106 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro) (De Chiara *et al.*, 2017)

Type Material: Holotype – MZUSP 3090. Paratypes – MZUSP 3091-3093.

Material in Brazilian Collections: See "Type Material".

Eurysyllis scutata De Chiara, Fukuda & Nogueira, 2017

Type Locality: Atlantic Ocean – Brazil, Espírito Santo, Campos Basin (18°52'31.35", S39°8'41.34"W).

Habitat: Sandy seabed with debris or rhodoliths; from 25-49 m depth.

Distribution: Atlantic Ocean – Brazil (Espírito Santo) (De Chiara *et al.*, 2017).

Type Material: Holotype – MZUSP 3094. Paratypes – MZUSP 3095-3096.

Material in Brazilian Collections: See "Type Material".

Eurysyllis tetralineata De Chiara, Fukuda & Nogueira, 2017

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin (22°6'21.902", S40°43'39.494"W).

Habitat: Sandy seabed with rhodoliths; from 47-1013 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro) (De Chiara *et al.*, 2017).

Type Material: Holotype – MZUSP 3084. Paratypes – MZUSP 3085-3089.

Material in Brazilian Collections: See "Type Material".

Haplosyllis amphimedonicola Paresque & Nogueira, 2014

Type Locality: Atlantic Ocean – Brazil, Paraíba, Tinto River (06°45'S, 34°55'W).

Habitat: Sandstone reefs and coral (*Alveopora viridis* Quoy & Gaimard, 1833) in the intertidal zone.

Distribution: Atlantic Ocean – Brazil (Paraíba and Pernambuco) (Paresque & Nogueira, 2014; Paresque *et al.*, 2016a).

Type Material: Holotype – ZUEC-POL 10099. Paratypes – MNCN 16.01/14625-14626; MZUSP 1253-1255, 1372-1373; ZUEC-POL 10100-10102.

Material in Brazilian Collections: MZUSP 1256-1262.

Haplosyllis lattigae Paresque, Fukuda & Nogueira, 2016

Type Locality: Atlantic Ocean – Brazil, Paraíba, Traição Bay, Farol Beach (06°41.331'S, 34°55.803'W).

Habitat: Intertidal zone.

Distribution: Atlantic Ocean – Brazil (Paraíba and Pernambuco) (Paresque *et al.*, 2016a).

Type Material: Holotype – MZUSP 2861. Paratypes – MZUSP 2832, 2863.

Material in Brazilian Collections: See "Type Material".

Haplosyllis lobo Paola, San Martín & Martín, 2006

Type Locality: Atlantic Ocean – Argentina, La Plata (38°05.3'S, 57°22'W).

Habitat: Sponges.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro) (Paresque *et al.*, 2016a); Argentina.

Type Material: Holotype – MCNLP 6079-1. Paratypes MCNLP 6079-2; MNCNM 16.01/9034; HZM P-24436; AM W28352.

Material in Brazilian Collections: MZUSP 2864-2896.

Haplosyllis rosenalessoae Paresque & Nogueira, 2014

Type Locality: Atlantic Ocean – Brazil, Paraíba, João Pessoa, Cabo Branco Beach (7°8.815'S, 34°47.773'W).

Habitat: Intertidal zone.

Distribution: Atlantic Ocean – Brazil (Paraíba and Pernambuco) (Paresque & Nogueira, 2014).

Type Material: Holotype – ZUEC-POL 10094.

Material in Brazilian Collections: MZUSP 1263-1270, 1374-1375; ZUEC-POL 10095-10097.

Haplosyllis spongicola (Grube, 1855)

Type Locality: Atlantic Ocean (Mediterranean Sea) – Italy, Trieste.

Habitat: Rocky shores, algae, sponges, sand corals; from 0-100 m depth.

Distribution: Atlantic Ocean – Mediterranean Sea: Italy; Brazil (Pará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe, Bahia, Espírito Santo, Rio de Janeiro and São Paulo). Indian Ocean – Red Sea. Pacific Ocean – Galapagos Islands (Grube, 1855; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Nuchalosyllis lamellicornis Rullier & Amoureux, 1979

Type Locality: Atlantic Ocean – Brazil, Bahia.

Habitat: Remains of stone, sandy bottom, sand gravel, from 44-60 m depth.

Distribution: Atlantic Ocean – Brazil (Bahia) (Rullier & Amoureux, 1979).

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Nuchalosyllis maiteae Fukuda & Nogueira, 2013a

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin (22°03'45.395"S, 40°09'59.684"W).

Habitat: Sandy bottoms, to depths of 75 m.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro) (Fukuda & Nogueira, 2013 a).

Type Material: Holotype – MZUSP 1016 (holotype).

Material in Brazilian Collections: See “Type Material”.

Opisthosyllis brunnea Langerhans, 1879

Type Locality: Atlantic Ocean – Portugal, Madeira Island.

Habitat: Rocky shores, algae and sponges in the intertidal zone.

Distribution: Circumtropical. Atlantic Ocean – Madeira Island; Brazil (Paraíba, Pernambuco, Espírito Santo and São Paulo) (Langerhans, 1879; Nogueira, 2006; Paresque *et al.*, 2016a).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 2145-2153, 2194-2207; ZUEC-POL 11120.

Opisthosyllis viridis Langerhans, 1879

Type Locality: Atlantic Ocean – Portugal, Madeira Island.

Habitat: Algae in the intertidal zone.

Distribution: Atlantic Ocean – Madeira Island; Brazil (Pernambuco, Espírito Santo and São Paulo). Indian Ocean – Australia. Pacific Ocean – South Korea; Japan; Australia (Langerhans, 1879; Paresque *et al.*, 2016b).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 2154-2162, 2189-2193.

Paraopisthosyllis correae Paresque, San Martín, Álvarez-Campos, Nogueira & Fukuda, 2016

Type Locality: Atlantic Ocean – Brazil, Pernambuco, São José da Coroa Grande (08°53'47”S, 35°08'14”W).

Habitat: Intertidal zone, sandstone reef.

Distribution: Atlantic Ocean – Brazil (Pernambuco) (Paresque *et al.*, 2016b).

Type Material: Holotype – MZUSP 2962. Paratype – MZUSP 2963.

Material in Brazilian Collections: See “Type Material”.

Syllis aciculigrossa (San Martín, 1990)

Type Locality: Atlantic Ocean – USA, Gulf of Mexico.

Habitat: Soft bottoms; from 102-480 m depth.

Distribution: Atlantic Ocean – Gulf of Mexico: USA; Brazil (Rio de Janeiro, São Paulo and Paraná) (San Martín, 1990; Amaral *et al.*, 2004; Barroso *et al.*, 2017).

Type Material: Holotype – USNM 122681. Paratypes – USNM 6568; USNM 89890-89891.

Material in Brazilian Collections: MNRJ 1185; MZUSP 2897-2903.

Syllis amica Quatrefages, 1866

Type Locality: Atlantic Ocean – USA, Gulf of Mexico.

Habitat: Rocky shores, calcareous algae, corals, bryozoans, sabellarid reefs, sponges and coarse sand in the intertidal zone.

Distribution: Atlantic Ocean – Mediterranean Sea; South Africa; Gulf of Mexico: USA; Brazil (São Paulo). Indian Ocean – South Africa; Australia (Quatrefages, 1866; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: ZUEC-POL 15446.

Syllis armillaris (O. F. Müller, 1776)

Type Locality: Atlantic Ocean – Greenland.

Habitat: Hard substrates, corals, calcareous algae, mud and sand mudflat; up to 63 m depth.

Distribution: Cosmopolitan. Atlantic Ocean – Greenland; Brazil (Rio Grande do Norte, Pernambuco, Alagoas and Bahia) (O. F. Müller, 1776; Rullier & Amoureux, 1979).

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Syllis beneliahuae (Campoy & Alquézar, 1982)

Type Locality: Atlantic Ocean – USA, Gulf of Mexico.

Habitat: Rocky shore, sand, corals (*Mussismilia hispida*) in the intertidal zone.

Distribution: Atlantic Ocean – Spain; Mediterranean Sea; Canary Islands; Gulf of Mexico: USA; Cuba; Brazil (São Paulo). Pacific Ocean – Panama (Campoy & Alquézar, 1982; Nogueira, 2006).

Type Material: Paratypes – USNM 75308; USNM 75312.

Material in Brazilian Collections: MHN-BPO 02/1-3.

Syllis brasiliensis McIntosh, 1885

Type Locality: Atlantic Ocean – Brazil, Alagoas, Barra Grande Beach.

Habitat: Red mud, up to 640 m depth.

Distribution: Atlantic Ocean – Brazil (Alagoas) (McIntosh, 1885).

Type Material: Holotype - BMNH 1885.12.1.146.

Material in Brazilian Collections: Unknown.

Syllis brevicirris Hansen, 1882

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro.

Habitat: From 5-73 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro) (Hansen, 1882).

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Syllis corallicola Verrill, 1900

Type Locality: Atlantic Ocean – Bermuda.

Habitat: Rocky shores, algae, sponges, corals and sand, from 0-75 m depth.

Distribution: Atlantic Ocean – Mediterranean Sea; Canary Islands; Bermuda; Aruba; Bonaire; Curaçao; Brazil (Bahia and São Paulo) (Verrill, 1900; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: MHN-BPO 07/1-3; MZUSP 3062-3064.

Syllis cornuta Rathke, 1843

Type Locality: Atlantic Ocean – Norway (North Sea).

Habitat: Rocky bottoms and corals, from 6-10 m depth.

Distribution: Atlantic Ocean – North Sea: Norway; Brazil (Rio Grande do Norte). Indian Ocean – Red Sea: Egypt (Rathke, 1843; Rullier & Amoureux, 1979).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 873.

Syllis glandulata Nogueira & San Martín, 2002

Type Locality: Atlantic Ocean – Brazil, São Paulo, Laje de Santos (24°19'S 46°11'W).

Habitat: Rocky shores and corals in the intertidal zone.

Distribution: Atlantic Ocean – Brazil (São Paulo) (Nogueira & San Martín, 2002; Nogueira, 2006).

Type Material: Holotype – MHN-BPO 77/0.

Material in Brazilian Collections: MHN-BPO 77/1.

Syllis gracilis Grube, 1840

Type Locality: Atlantic Ocean – Mediterranean Sea.

Habitat: Rocky shores, algae, sponges, corals and sand, from 0-66 m depth.

Distribution: Atlantic Ocean – Mediterranean Sea; Brazil (Espírito Santo, Rio de Janeiro, São Paulo and Rio Grande do Sul). Indian Ocean – Red Sea (Grube, 1840; Rullier & Amoureux, 1979; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: ZUEC-POL 2918, 2920, 3042, 10122.

Syllis guidae Nogueira & Yunda-Guarin, 2008

Type Locality: Atlantic Ocean – Brazil, Ceará, Fortaleza (03°39'51"S, 38°32'38.7").

Habitat: Fine to coarse sand, from 10.5-16 m depth.

Distribution: Atlantic Ocean – Brazil (Ceará) (Nogueira & Yunda-Guarin, 2008).

Type Material: Holotype – MZUSP 2966. Paratypes – MZUSP 2967-2971

Material in Brazilian Collections: MZUSP 3057-3061.

Syllis hyalina Grube, 1863

Type Locality: Adriatic Sea – Croatia, Losinj Island.

Habitat: Rocky bottoms covered by algae and sandy bottoms; from 0-18 m depth.

Distribution: Atlantic Ocean – Brazil (Rio Grande do Norte and Bahia); Adriatic Sea: Croatia. Pacific Ocean – Galápagos Islands (Grube, 1863; Rullier & Amoureux, 1979).

Type Material: Unknown.

Material in Brazilian Collections: ZUEC-POL 10615.

Syllis hyllebergi (Licher, 1999)

Type Locality: Indian Ocean – Egypt, El Kura Bay, Dahab (Red Sea).

Habitat: Rocky shore, sand, corals, in the intertidal zones.

Distribution: Atlantic Ocean – Mediterranean Sea: Cyprus, Israel; Suez Canal; Brazil (São Paulo). Indian Ocean – Red Sea: Gulf of Aqaba (Licher, 1999; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: MHN-BPO 04/1-3.

Syllis lutea (Hartmann-Schröder, 1960)

Type Locality: Indian Ocean – Saudi Arabia, Sarso Island.

Habitat: Rocky shores and corals in the subtidal zone.

Distribution: Atlantic Ocean – Brazil (São Paulo). Indian Ocean – Saudi Arabia (Hartmann-Schröder, 1960; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: MHN-BPO 08/1-3.

Syllis magellanica Augener, 1918

Type Locality: Atlantic Ocean – Chile, Cape Horn, Punta Arenas.

Habitat: Rocky shores, algae and sponges in the intertidal zone.

Distribution: Atlantic Ocean – Mediterranean Sea: Italy; Brazil (São Paulo); Chile (Augener, 1918; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: ZUEC-POL 15447.

Syllis maryae San Martín, 1992

Type Locality: Atlantic Ocean – USA, North Carolina.

Habitat: Rocky shores and corals in the intertidal zone.

Distribution: Atlantic Ocean – USA to Brazil (São Paulo) (San Martín, 1992; Nogueira, 2006).

Type Material: Holotype – ZMUC-POL 882. Paratypes – ZMUC-POL 883-886; USNM 146092-146095.

Material in Brazilian Collections: MHN-BPO 03/1-3.

Syllis prolifera Krohn, 1852

Type Locality: Atlantic Ocean (Mediterranean Sea) – France, Villefranche-sur-Mer.

Habitat: Algae, hard substrates and sandy bottoms, 5 m depth.

Distribution: Cosmopolitan. Atlantic Ocean – Mediterranean Sea: France; Brazil (Alagoas, Sergipe, Rio de Janeiro and São Paulo) (Krohn, 1852; Nonato & Luna, 1970; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: MHN-BPO 06/1-3; ZUEC-POL 13013-13020, 13022-13040.

Syllis prolixa Ehlers, 1901

Type Locality: Pacific Ocean – Chile, Valparaíso.

Habitat: No information available.

Distribution: Atlantic Ocean – Brazil (Rio Grande do Sul) (Ehlers, 1901; Orensanz & Gianuca, 1974). Pacific Ocean – Chile.

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Syllis pseudoarmillaris Nogueira & San Martín, 2002

Type Locality: Atlantic Ocean – Brazil, São Paulo, Laje de Santos (24°19'S 46°11'W).

Habitat: Coral (*Mussismilia hispida*).

Distribution: Atlantic Ocean – Brazil (São Paulo) (Nogueira & San Martín, 2002; Nogueira, 2006).

Type Material: Holotype – MHN-BPO 09/0. Paratypes – MHN-BPO 09/1-2.

Material in Brazilian Collections: ZUEC-POL 10123.

Syllis truncata Haswell, 1920

Type Locality: Pacific Ocean – Australia, Sydney, Port Jackson.

Habitat: Rocky shores and corals in the intertidal zone.

Distribution: Atlantic Ocean – Brazil (São Paulo). Pacific Ocean – Chile; Australia (Haswell, 1920; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: MHN-BPO 13/1-2.

Syllis tyrrhena (Licher & Kuper, 1998)

Type Locality: Atlantic Ocean – Italy, Elba Island.

Habitat: Rocky shores and corals in the intertidal zone.

Distribution: Atlantic Ocean – Mediterranean Sea: Iberian Peninsula and Italy; Brazil (São Paulo) (Licher & Kuper, 1998; Nogueira, 2006).

Type Material: Unknown.

Material in Brazilian Collections: MHN-BPO 12/1-3.

Syllis variegata Grube, 1860

Type Locality: Atlantic Ocean (Adriatic Sea) – Croatia, Cres Island.

Habitat: Rocks, calcareous algae, corals and shells; from 2-75 m depth.

Distribution: Atlantic Ocean – North Sea: Germany; Adriatic Sea: Croatia; Brazil (Rio Grande do Norte, Pernambuco, Alagoas, Sergipe, Bahia, Espírito Santo and Rio de Janeiro). Indian Ocean – Red Sea: Egypt. Pacific Ocean – Galápagos Islands (Grube, 1860; Nonato & Luna, 1970; Rullier & Amoureux, 1979).

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Trypanosyllis aurantiacus Nogueira & Fukuda, 2008

Type Locality: Atlantic Ocean – Brazil, São Paulo, Peruíbe, Guaraú Beach (24°22'S, 47°01'W).

Habitat: Rocky shores, algae, sponges, bryozoans and other substrates.

Distribution: Atlantic Ocean – Brazil (São Paulo) (Nogueira & Fukuda, 2008).

Type Material: Holotype – MZUSP 1170. Paratypes – MZUSP 1171-1174.

Material in Brazilian Collections: MZUSP 1382.

Trypanosyllis zebra (Grube, 1860)

Type Locality: Atlantic Ocean – Croatia, Cres Island (Adriatic Sea).

Habitat: Rocky shores, in algae, sponges and corals, from 0-81 m depth.

Distribution: Atlantic Ocean – Adriatic Sea: Croatia; English Channel to South Africa; Brazil (Pernambuco, Bahia, Espírito Santo, Rio de Janeiro and São Paulo). Indian Ocean: Australia (Grube, 1860; Rullier & Amoureux, 1979; Nogueira, 2006; Nogueira & Fukuda, 2008).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 1156-1161, 1168-1169, 2163-2188, 3048-3049; ZUEC-POL 10119, 10121.

SYLLIDAE *Incertae sedis*

Amblyosyllis granosa Ehlers, 1897

Type Locality: Atlantic Ocean – Chile, Cape Horn, Punta Arenas.

Habitat: Algae in the subtidal zone.

Distribution: Atlantic Ocean – Brazil (São Paulo); Chile. Pacific Ocean – Galapagos Islands (Ehlers, 1897; Fukuda *et al.*, 2015).

Type Material: Holotype – ZMH 4751.

Material in Brazilian Collections: MZUSP 2384.

Anguillosyllis lanai Barroso, Paiva, Nogueira & Fukuda, 2017

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin (22°49'22''S, 40°08'19''W).

Habitat: Soft bottoms, from 1035-2997 m depth.

Distribution: Atlantic Ocean – Brazil (Espírito Santo and Rio de Janeiro) (Barroso *et al.*, 2017).

Type Material: Holotype – MNRJ 1186. Paratype – ZUEC-POL 19880.

Material in Brazilian Collections: MZUSP 2919-2926, 2928-2931, 2933, 2935, 2945, 2947, 2954.

Anguillosyllis palpata (Hartman, 1967)

Type Locality: Atlantic Ocean – Argentina, Cape Horn.

Habitat: Soft bottoms, from 384-3806 m depth.

Distribution: Atlantic Ocean – Brazil (Espírito Santo and Rio de Janeiro); Argentina. Pacific Ocean – Chile. Antarctic Ocean – Weddell Sea (Hartman, 1967; Barroso *et al.*, 2017).

Type Material: Holotype - USNM 55505. Paratype - USNM 55506.

Material in Brazilian Collections: MZUSP 2927, 2932, 2934, 2936-2944, 2946, 2948-2953, 2955-2961.

Brevicirrosyllis cf. mariae (San Martín & Hutchings, 2006)

Type Locality: Pacific Ocean – Australia: Queensland, Great Barrier Reef, Outer Yonge Reef.

Habitat: Rocky shores and coral reefs, from 0-30 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro and São Paulo). Pacific Ocean – Australia (San Martín & Hutchings, 2006; Fukuda *et al.*, 2015).

Type Material: Holotype – AM W28454.

Material in Brazilian Collections: MZUSP 2447-2486; ZUEC-POL 16174-16203.

Exogonoides joaoi Fukuda, San Martín, Carrerette & Paresque, 2016

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin (22°19'10''S, 40°05'42''W).

Habitat: Soft bottom, from 400 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro) (Fukuda *et al.*, 2016).

Type Material: Holotype – MZUSP 2910.

Material in Brazilian Collections: See “Type Material”

Haplosyllides aberrans (Fauvel, 1939)

Type Locality: Pacific Ocean – Vietnam, Cauda Bay.

Habitat: Corals and calcareous algae, up to 33 m depth.

Distribution: Atlantic Ocean – Brazil (Pernambuco) (Fauvel, 1939; Rullier & Amoureux, 1979). Pacific Ocean – Marshall Islands; Vietnam.

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Neopetitia amphophthalma (Siewing, 1956)

Type Locality: Atlantic Ocean – France, Gulf of Biscay.

Habitat: Interstitial, exposed beaches in the intertidal zone.

Distribution: Atlantic Ocean – France; Portugal; Brazil (São Paulo). Indian Ocean – Red Sea. Pacific Ocean – China (Siewing, 1955; Westheide, 1974).

Type Material: Unknown.

Material in Brazilian Collections: Unknown.

Paraehlersia longichaetosa Fukuda, Centurión, Nogueira & San Martín, 2012

Type Locality: Atlantic Ocean – Argentina, Sarmiento Bank (52°35’S, 68°08’W).

Habitat: Soft bottoms, from 16-510 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro, São Paulo and Paraná); Argentina (Fukuda *et al.*, 2012).

Type Material: Holotype – MACN-In 38370. Paratypes – MACN-In 38371; MNCN 16.01/13607; MZUSP 970-971 (paratypes); 9691 (paratype).

Material in Brazilian Collections: MZUSP 970-971 (paratypes), 972-976, 3001-3016, 3029-3042; ZUEC-POL 9688-9690, , 9692-9695.

Paraehlersia martapolae Fukuda, Centurión, Nogueira & San Martín, 2012

Type Locality: Atlantic Ocean – Brazil, off São Paulo (24°07’S, 45°51’W).

Habitat: Soft bottoms, from 93-330 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro, São Paulo, Paraná and Santa Catarina) (Fukuda *et al.*, 2012).

Type Material: Holotype – MZUSP 977. Paratypes – MZUSP 978-979, 1004-1005; ZUEC-POL 9697.

Material in Brazilian Collections: MZUSP 980-981, 3098-3111; ZUEC-POL 9696, 9698-9700.

Perkinsyllis biota Fukuda & Nogueira, 2013b

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin (22°11'32"S, 40°55'24"W).

Habitat: Soft bottoms, from 0-35 m depth.

Distribution: Atlantic Ocean – Brazil (Parafba, Rio de Janeiro and São Paulo) (Fukuda & Nogueira, 2013 b; Paresque *et al.*, 2015).

Type Material: Holotype – MZUSP 914. Paratypes – MZUSP 915-916; 1095; ZEC-POL 11446, 11577-11579.

Material in Brazilian Collections: MZUSP 917, 1092-1094, 1096-1154, 1379, 1677, 2804-2805; ZUEC-POL 11443-11445, 11447-11460, 11570-11573, 11580-11611.

Perkinsyllis koolalyoides Fukuda & Nogueira, 2013b

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin (21°17'33"S, 40°48'20"W).

Habitat: Rocky shores and algae (*Sargassum* sp.), from 0-47 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro and São Paulo) (Fukuda & Nogueira, 2013 b).

Type Material: Holotype – MZUSP 1082. Paratypes – MZUSP 918-919; ZUEC-POL 11432, 11574-11576

Material in Brazilian Collections: MZUSP 921, 1070-1081, 1083-1091, 1376-1378; ZUEC-POL 11425-11431, 1433-11442.

Perkinsyllis longisetosa (Hartmann-Schröder, 1965)

Type Locality: Pacific Ocean – Cape Quedal, Punta Galera, Gulf of Arauco, Chile.

Habitat: Algae (*Sargassum* sp.) and soft bottoms, from 0-80 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro, São Paulo and Paraná). Pacific Ocean – Chile (Hartmann-Schröder, 1965; Fukuda & Nogueira, 2013b).

Type Material: Unknown.

Material in Brazilian Collections: MZUSP 910-913, 920, 1026-1028, 1052-1069, 1371, 2351-2353; ZUEC-POL 11406-11424, 16098-16112.

Streptodonta fauchaldi Paresque, Fukuda, San Martín & Nogueira, 2015

Type Locality: Atlantic Ocean – Brazil, Rio de Janeiro, Campos Basin (21°33'52"53"– S, 40°42'53-55"W).

Habitat: Soft bottoms, from 0-110 m depth.

Distribution: Atlantic Ocean – Brazil (Rio de Janeiro) (Paresque *et al.*, 2015).

Type Material: Holotype – MZUSP 2714. Paratypes – MZUSP 2715-2717.

Material in Brazilian Collections: MZUSP 2705-2713, 3050-3053; ZUEC-POL 308-310, 312-313, 315-317.

Thirty papers were analyzed, yielding a total of 96 valid species, distributed in 28 genera and four syllids subfamilies recorded in Brazil up to now; these numbers represent, respectively, 14% and 38% of the species and genera of the family known worldwide. Since the 2000s, 39 species new to science were described, of which 33 are still only known from the Brazilian coast.

Key to subfamilies, genera and species of Syllidae currently known from the Brazilian coast *

(based on FUKUDA *et al.*, 2013; PARESQUE *et al.*, 2014; 2015)

- 1 Ventral cirri absent (or fused to parapodial lobes)2
 Ventral cirri conspicuous, inserted at the base or in the parapodial lobes3
- 2 Antennae and cirri smooth, elongate. Pharynx with one or more situations usually anterior to proventricle; trepan with 24 unequal teeth arranged in 2 rings *Proceraea*
 Antennae and cirri short, ovate. Pharynx with one soft situation anterior to proventricle; trepan with unknow number of teeth, arranged in 1 ring *Exogonoides*
- 3(1) Palps completely fused or free only in part of their distal half. Dorsal cirri usually small, ovate or subulate, rarely elongate4
 Palps free or, when fused, usually only basally, for no more than half their length. Dorsal cirri usually elongate, digitiform, whip-shaped or articulated (moniliform)11
- 4(3) Only simple chaetae, usually 2 per parapodium. Reproduction involving epitoky, with tricerous stolons (San Martín & Aguado, 2014) *Haplosyllides*
 Chaetae include both simple and compound, in variable numbers. Reproduction involving epigamy, usually with incubation of eggs and, in some genera, also juveniles5
- 5(4) With two pairs of peristomial cirri6
 With one pair of peristomial cirri7
- 6(5) Palps fused for basal 2/3 of their lengths, distally free. Pharynx narrower than proventricle, with conical tooth at the anterior border. Aciculae distally oblique and rounded, with hollow concavity. Dorsal cirri subulate, with rounded to gently tapering tips; parapodial glands usually present, although sometimes empty and indistinct. Ventral incubation of eggs - *Brania*
 Palps fused to each other along most of their extension by dorsal membrane, ventrally free. Pharynx and proventricle both long and wide, about the same length and width; large rhom-

boidal to oval pharyngeal tooth, usually away from the anterior border. Aciculae with oblique and usually acuminate tip. Parapodial glands absent. Dorsal incubation of eggs - *Salvatoria*

7(5) Peristomial and dorsal cirri short, papiliform. Aciculae distally rounded, inflated8

Peristomial and dorsal cirri subulated or basally ovate to spherical, distally tapering, digitiform. Aciculae distally inflated, straight or bent at almost right angle9

8(7) Compound chaetae of 2 types: spiniger-like and falcigers, with short blades. Blades of falcigers bidentate, with subdistal tooth larger than distal one *Exogone*

Compound chaetae as falcigers only; blades uni- or bidentate, subdistal tooth with same size or slightly smaller than distal one *Parexogone*

9(7) Short proventricle, approximately squared, with few muscle-cell rows. Aciculae usually subdistally bent at nearly right angle *Sphaerosyllis*

Proventricle large and robust, cylindrical, with numerous muscle-cell rows. Aciculae usually subdistally sinuous, acuminate10

10(9) Antennae, peristomial and dorsal cirri with elongated cirrophore and retractable cirrostyle. Blades of falcigers relatively short and unidentate. Pharynx e proventricle with approximately same width; pharyngeal tooth usually away from anterior border *Prosphaerosyllis*

Antennae, peristomial and dorsal cirri without division in cirrophore and cirrostyle. Blades of falcigers usually elongated, uni- and/or bidentate. Pharynx slightly narrower than proventricle, with papillae on anterior margin; pharyngeal tooth small, close to anterior border
..... *Erinaceusyllis*

11(3) Dorsal cirri smooth or pseudoarticulated (articulated only in part of the body or of each cirrus). Reproduction usually by epigamy12

Dorsal cirri articulated, usually moniliform, throughout body, with clearly defined articles (only 1 article in some cases). Reproduction by schizogamy21

12(11) Pharynx unarmed. Eyes absent*Anguillosyllis*

Pharynx with central tooth ad/or trepan. Eyes present13

13(12) Pharynx with trepan, with or without central tooth14

Pharynx with single tooth only, trepan absent16

- 14(13) Pharynx with trepan formed by an incomplete crown of teeth and a larger central tooth ..
*Eusyllis*
- Pharynx with trepan only, without central tooth15
- 15(14) Trepan formed by crown of teeth facing anteriorwards, each tooth usually as a multicuspitate structure*Amblyosyllis*
- Trepan formed by a crown of pointed teeth facing backwards, sometimes with two lateral plates*Odontosyllis*
- 16(13) Pharyngeal tooth located usually distinctly away from anterior margin17
- Pharyngeal tooth located at or close to anterior border18
- 17(16) Aciculae tapering throughout, distally rounded or pointed*Opisthodonta*
- Aciculae distally conspicuously enlarged, rounded, at least on anterior body
*Streptodonta*
- 18(16) Palps “articulated”, with conspicuous constriction on midlength. Ventral cirri inserted close to distal end of parapodial lobes*Neopetitia*
- Palps without constriction as above. Ventral cirri inserted at or close to bases of parapodial lobes19
- 19(18) Falcigers with bidentate blades, teeth with approximately same sizes on anterior body, distal tooth progressively smaller than subdistal one towards posterior body. Subcirral papilla present below dorsal cirri, at least on anterior body*Paraehlersia*
- Falcigers with uni- or bidentate blades; when bidentate, variation of teeth sizes along body not as pronounced as above. Subcirral papillae absent20
- 20(19) Dorsal cirri ovate to digitiform, except those of chaetiger 1. Blades of compound chaetae with short spinulation. Ventral simple chaetae usually stouter than shafts of compound chaetae, with subdistal tooth hooded, larger than distal one. Aciculae distally acuminate
*Brevicirrosyllis*
- Dorsal cirri throughout thin, elongate. Blades of compound chaetae with long spinulation, frequently surpassing tip of chaeta. Ventral simple chaetae with approximately same width as shafts of compound chaetae, with teeth of approximately same sizes, hood absent. Acicu-

- lae distally expanded*Perkinsyllis*
- 21(11) Antennae and cirri throughout articulated only in cirrophore and large, club-shaped cirrostyle*Paraopisthosyllis*
- Antennae and cirri articulated in moniliform pattern22
- 22(21) Moniliform cirri formed by only one article*Eurysyllis*
- Moniliform cirri formed by more than one article23
- 23(22) Only simple chaetae present along body, formed by fusion of shafts and blades
.....*Haplosyllis*
- Simple and compound chaetae present24
- 24(23) Dorso-ventrally flattened body; pharynx with trepan, with or without central tooth
.....*Trypanosyllis*
- Subcylindrical body; pharynx without trepan25
- 25(24) Pharyngeal tooth located in posterior region of the pharynx*Opisthosyllis*
- Pharyngeal tooth at or near anterior margin of pharynx26
- 26(25) Nuchal organs as epaulettes with transversal lamellae*Nuchalosyllis*
- Nuchal organs as transverse, ciliated pits between prostomium and peristomium27
- 27(26) Branchiae frequently present. Compound chaetae include regular falcigers and modified falcigers (“ungulae”) with enlarged blades bent at right angle with shafts axis
.....*Branchiosyllis*
- Branchiae absent. Compound chaetae include falcigers and, in some species, also spinner-like; unguiae absent*Syllis*

The Syllidae had been poorly studied in Brazil for many years. However, since the beginning of the 21st century, there has been an advance in the taxonomic knowledge, as a result of the increase in the efforts to study the family caused by the training of specialists, which were absent in Brazil until that time.

According to AMARAL *et al.* (2013), Syllidae is one of the polychaete families with the highest number of taxa registered in the country, reflecting the great diversity of the family. Nonetheless, there are still many gaps in the knowledge of the group, particularly about specific geographic regions and environments, despite recent advances in research and the increasing number of published papers, such as FUKUDA *et al.* (2009) and PARESQUE *et al.* (2015), on the Eusyllinae; NOGUEIRA *et al.* (2001; 2004), FUKUDA & NOGUEIRA (2006), FUKUDA *et al.* (2012) and PARESQUE *et al.* (2014), on the Exogoninae; and NOGUEIRA & SAN MARTÍN (2002), NOGUEIRA & FUKUDA (2008), NOGUEIRA & YUNDA-GUARIN (2008) and PARESQUE & NOGUEIRA (2014), on the Syllinae.

Taxonomic studies about this family have traditionally been restricted to low depths, generally in the intertidal zone, due to the easiness of access and low costs for exploration, with most records from up to ca. 200 m deep. Studies involving deep waters are scarce, being BARROSO *et al.* (2017) a rare exception. Thereby this vast field may be considered a gap in the knowledge about the Syllidae and about polychaetes in general. Several environments (e.g., mangroves and

estuaries) are also still poorly studied in Brazil, as well as polychaetes associations with other organisms, such as sponges, algae and corals; on this latter topic, only a few papers have been published until present (NOGUEIRA & SAN MARTÍN, 2002; PARESQUE & NOGUEIRA 2014).

Only three species have large records in the Brazilian coast: *Haplosyllis spongicola* (Rio Grande do Norte to São Paulo), *Opisthosyllis brunnea* (Paraíba to São Paulo) and *Syllis variegata* (Pernambuco to São Paulo). The other species have restricted distributions, many of them concentrated on the coasts of Paraíba and Pernambuco, and especially off the coasts of Rio de Janeiro and São Paulo. This, however, probably represents an artifact due to the still poor coverage of taxonomic surveys along the coast of the country as a whole, rather than a real pattern of restricted distributions.

Considering the whole extension of the Brazilian coast, the Northern region shows only one species registered, in the coast of Pará; the Northeast region presents 34 species recorded, from Ceará to Bahia; the Southeast region has 76 species registered, off the coasts of Espírito Santo, Rio de Janeiro and São Paulo; and the South region presents 10 species recorded, from the coast of Paraná to Rio Grande do Sul. These results, however, are probably highly skewed, showing a similar pattern in other groups of polychaetes, since the Southeastern/Southern regions are best prospected, reflecting the highest concentration of researchers (LANA *et al.*, 2017).

Table 1. Occurrences of Syllidae species currently registered in the Brazilian coast, by states and geographical region. AL – Alagoas; BA – Bahia; CE – Ceará; ES – Espírito Santo; PA – Pará; PE – Pernambuco; PB – Paraíba; PR – Paraná; RJ – Rio de Janeiro; RN – Rio Grande do Norte; RS – Rio Grande do Sul; SC – Santa Catarina; SE – Sergipe; SP – São Paulo. Geographical regions: N – North; NE – Northeast; SE – Southeast; S – South. Shaded areas in gray indicate the occurrence of the species.

| SPECIES | GEOGRAPHICAL REGIONS / STATES | | | | | | | | | | | | | |
|---|-------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | N | | | NE | | | | SE | | | | S | | |
| | PA | CE | RN | PB | PE | AL | SE | BA | ES | RJ | SP | PR | SC | RS |
| AUTOLYTINAE | | | | | | | | | | | | | | |
| <i>Proceraea rubroproventriculata</i> NYGREN & GIDHOLM, 2001 | | | | | | | | | | | | | | |
| EUSYLLINAE | | | | | | | | | | | | | | |
| <i>Eusyllis assimilis</i> MARENZELLER, 1875 | | | | | | | | | | | | | | |
| <i>Eusyllis kupfferi</i> LANGERHANS, 1879 | | | | | | | | | | | | | | |
| <i>Eusyllis lamelligera</i> MARION & BROBETZKY, 1875 | | | | | | | | | | | | | | |
| <i>Eusyllis nonatoi</i> FUKUDA, NOGUEIRA & SAN MARTÍN, 2015 | | | | | | | | | | | | | | |
| <i>Odontosyllis aracaensis</i> FUKUDA, NOGUEIRA, PARESQUE & SAN MARTÍN, 2013 | | | | | | | | | | | | | | |
| <i>Odontosyllis brevichaetosa</i> PARESQUE, FUKUDA, SAN MARTÍN & NOGUEIRA, 2015 | | | | | | | | | | | | | | |
| <i>Odontosyllis cf. fulgurans</i> (AUDOUIN & MILNE-EDWARDS, 1833) | | | | | | | | | | | | | | |
| <i>Odontosyllis guarauensis</i> FUKUDA, NOGUEIRA, PARESQUE & SAN MARTÍN, 2013 | | | | | | | | | | | | | | |
| <i>Odontosyllis guillermoi</i> FUKUDA & NOGUEIRA, 2006 | | | | | | | | | | | | | | |
| <i>Opisthodonta morena</i> LANGERHANS, 1879 | | | | | | | | | | | | | | |
| <i>Opisthodonta russelli</i> SAN MARTÍN, LÓPEZ & AGUADO, 2009 | | | | | | | | | | | | | | |
| EXOGENINAE | | | | | | | | | | | | | | |
| <i>Brania arminii</i> (LANGERHANS, 1881) | | | | | | | | | | | | | | |
| <i>Erinaceusyllis centroamericana</i> (HARTMANN-SCHRÖDER, 1959) | | | | | | | | | | | | | | |
| <i>Erinaceusyllis subterranea</i> (HARTMANN-SCHRÖDER, 1965) | | | | | | | | | | | | | | |
| <i>Exogone africana</i> HARTMANN-SCHRÖDER, 1974 | | | | | | | | | | | | | | |
| <i>Exogone anomalochaeta</i> BENHAM, 1921 | | | | | | | | | | | | | | |
| <i>Exogone arenosa</i> PERKINS, 1981 | | | | | | | | | | | | | | |

Table 1. Continuation.

| SPECIES | GEOGRAPHICAL REGIONS / STATES | | | | | | | | | | | | | |
|---|-------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | N | | | NE | | | | SE | | | S | | | |
| | PA | CE | RN | PB | PE | AL | SE | BA | ES | RJ | SP | PR | SC | RS |
| <i>Exogone breviantennata</i> HARTMANN-SCHRÖDER, 1959 | | | | ■ | | | | | ■ | ■ | ■ | | | |
| <i>Exogone cebimar</i> FUKUDA & NOGUEIRA, 2014 | | | | | | | | | | | ■ | | | |
| <i>Exogone dispar</i> (WEBSTER, 1979) | | | | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | ■ | ■ |
| <i>Exogone gigas</i> PARESQUE, FUKUDA & NOGUEIRA, 2014 | | | | ■ | ■ | ■ | | | | ■ | | | | |
| <i>Exogone naidina</i> ÖRSTED, 1845 | | | | | | | | | ■ | | | | | |
| <i>Exogone naidinoides</i> WESTHEIDE, 1974 | | | | ■ | ■ | ■ | | | | | ■ | | | |
| <i>Exogone rolandi</i> SAN MARTÍN, 1991 | | | | ■ | ■ | ■ | | | | ■ | | | | |
| <i>Exogone simplex</i> HARTMANN-SCHRÖDER, 1960 | | | | ■ | ■ | ■ | | | | | ■ | | | |
| <i>Parexogone anseforbansensis</i> Böggermann & WESTHEIDE, 2004 | | | | | | | | | | | ■ | | | |
| <i>Parexogone campoyi</i> (SAN MARTÍN, CEBERIO & AGUIRREZABALAGA, 1996) | | | | | | | | | ■ | ■ | | | | |
| <i>Parexogone caribensis</i> (SAN MARTÍN, 1991) | | | | | | | | | | | ■ | | | |
| <i>Parexogone minuscula</i> (HARTMAN, 1953) | | | | | | | | | | ■ | | | | |
| <i>Parexogone wolfi</i> (SAN MARTÍN, 1991) | | | | | | | | | ■ | ■ | | | | |
| <i>Prosphaerosyllis brachycephala</i> FUKUDA, YUNDA-GUARIN & NOGUEIRA, 2009 | | ■ | | | | | | | | | | | | |
| <i>Prosphaerosyllis isabellae</i> (NOGUEIRA, SAN MARTÍN & AMARAL, 2001) | | | | | | | | | | ■ | ■ | | | ■ |
| <i>Prosphaerosyllis xarifae</i> (HARTMANN-SCHRÖDER, 1960) | | | | | | | | | | | ■ | | | |
| <i>Salvatoria breviarticulata</i> (NOGUEIRA, SAN MARTÍN & AMARAL, 2001) | | | | | | | | | | | ■ | | | |
| <i>Salvatoria longiarticulata</i> (NOGUEIRA, SAN MARTÍN & AMARAL, 2001) | | | | | | | | | | | ■ | | | |
| <i>Salvatoria neapolitana</i> (GOODRICH, 1930) | | | | | | | | | | | ■ | | | |
| <i>Sphaerosyllis annulata</i> NOGUEIRA, SAN MARTÍN & FUKUDA, 2004 | | | | | | | | | | | ■ | | | |
| <i>Sphaerosyllis brasiliensis</i> NOGUEIRA, SAN MARTÍN & AMARAL, 2001 | | | | | | | | | | | ■ | | | |

Table 1. Continuation.

| SPECIES | GEOGRAPHICAL REGIONS / STATES | | | | | | | | | | | | | |
|---|-------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | N | | | NE | | | | SE | | | S | | | |
| | PA | CE | RN | PB | PE | AL | SE | BA | ES | RJ | SP | PR | SC | RS |
| <i>Sphaerosyllis ceciliae</i> BARROSO, PAIVA, NOGUEIRA & FUKUDA, 2017 | | | | | | | | | | ■ | | | | |
| <i>Sphaerosyllis monicae</i> BARROSO, PAIVA, NOGUEIRA & FUKUDA, 2017 | | | | | | | | | | ■ | | | | |
| <i>Sphaerosyllis mussismiliaicola</i> NOGUEIRA, SAN MARTÍN & AMARAL, 2001 | | | | | | | | | | | ■ | | | |
| SYLLINAE | | | | | | | | | | | | | | |
| <i>Branchiosyllis diazi</i> RIOJA, 1958 | | | | | | ■ | | | | | | | | |
| <i>Branchiosyllis exilis</i> (GRAVIER, 1900) | | | | | | | | | | | ■ | | | |
| <i>Branchiosyllis oculata</i> EHLERS, 1887 | | | | | | | | ■ | | | | | | |
| <i>Branchiosyllis tamandarensis</i> PARESQUE, FUKUDA & NOGUEIRA, 2016 | | | | ■ | ■ | | | | | | | | | |
| <i>Eurysyllis polytuberculata</i> DE CHIARA, FUKUDA & NOGUEIRA, 2017 | | | | | | | | | | ■ | | | | |
| <i>Eurysyllis scutata</i> DE CHIARA, FUKUDA & NOGUEIRA, 2017 | | | | | | | | | ■ | | | | | |
| <i>Eurysyllis tetralineata</i> DE CHIARA, FUKUDA & NOGUEIRA, 2017 | | | | | | | | | | ■ | | | | |
| <i>Haplosyllis amphimedonicola</i> PARESQUE & NOGUEIRA, 2014 | | | | ■ | ■ | | | | | | | | | |
| <i>Haplosyllis lattigae</i> PARESQUE, FUKUDA & NOGUEIRA, 2016 | | | | ■ | ■ | | | | | | | | | |
| <i>Haplosyllis lobo</i> PAOLA, SAN MARTÍN & MARTIN, 2006 | | | | | | | | | | ■ | | | | |
| <i>Haplosyllis rosenalessoae</i> PARESQUE & NOGUEIRA, 2014 | | | | ■ | ■ | | | | | | | | | |
| <i>Haplosyllis spongicola</i> (GRUBE, 1855) | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| <i>Nuchalosyllis lamellicornis</i> RULLIER & AMOUREUX, 1979 | | | | | | | | ■ | | | | | | |
| <i>Nuchalosyllis maiteae</i> FUKUDA & NOGUEIRA, 2013a | | | | | | | | ■ | | | | | | |
| <i>Opisthosyllis brunnea</i> LANGERHANS, 1879 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| <i>Opisthosyllis viridis</i> LANGERHANS, 1879 | | | | ■ | ■ | | | | ■ | | ■ | | | |
| <i>Paraopisthosyllis correiae</i> PARESQUE, SAN MARTÍN, ÁLVAREZ-CAMPOS, NOGUEIRA & FUKUDA, 2016 | | | | | ■ | | | | | | | | | |

Table 1. Continuation.

| SPECIES | GEOGRAPHICAL REGIONS / STATES | | | | | | | | | | | | | |
|---|-------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | N | | | NE | | | | SE | | | S | | | |
| | PA | CE | RN | PB | PE | AL | SE | BA | ES | RJ | SP | PR | SC | RS |
| <i>Syllis aciculigrossa</i> (SAN MARTÍN, 1990) | | | | | | | | | | | ■ | ■ | | |
| <i>Syllis amica</i> QUATREFAGES, 1866 | | | | | | | | | | | ■ | ■ | | |
| <i>Syllis armillaris</i> (O. F. Müller, 1776) | | | ■ | | ■ | ■ | | ■ | | | | | | |
| <i>Syllis beneliahuae</i> (CAMPOY & ALQUÉZAR, 1982) | | | | | | | | | | | ■ | | | |
| <i>Syllis brasiliensis</i> MCINTOSH, 1885 | | | | | | ■ | | | | | | | | |
| <i>Syllis brevicirris</i> HANSEN, 1882 | | | | | | | | | | ■ | | | | |
| <i>Syllis corallicola</i> VERRILL, 1900 | | | | | | | | ■ | | | ■ | | | |
| <i>Syllis cornuta</i> RATHKE, 1843 | | | ■ | | | | | | | | | | | |
| <i>Syllis glandulata</i> NOGUEIRA & SAN MARTÍN, 2002 | | | | | | | | | | | ■ | ■ | | |
| <i>Syllis gracilis</i> GRUBE, 1840 | | | | | | | | | ■ | ■ | ■ | | | ■ |
| <i>Syllis guidae</i> NOGUEIRA & YUNDA-GUARRIN, 2008 | | ■ | | | | | | | | | | | | |
| <i>Syllis hyalina</i> GRUBE, 1863 | | | ■ | | | | | ■ | | | | | | |
| <i>Syllis hyllebergi</i> (LICHER, 1999) | | | | | | | | | | | ■ | ■ | | |
| <i>Syllis lutea</i> (HARTMANN-SCHRÖDER, 1960) | | | | | | | | | | | ■ | ■ | | |
| <i>Syllis magellanica</i> AUGENER, 1918 | | | | | | | | | | | ■ | ■ | | |
| <i>Syllis maryae</i> SAN MARTÍN, 1992 | | | | | | | | | | | ■ | ■ | | |
| <i>Syllis prolifera</i> KROHN, 1852 | | | | | | ■ | ■ | | | ■ | ■ | | | |
| <i>Syllis prolixa</i> EHLERS, 1901 | | | | | | | | | | | | | | ■ |
| <i>Syllis pseudoarmillaris</i> NOGUEIRA & SAN MARTÍN, 2002 | | | | | | | | | | | ■ | ■ | | |
| <i>Syllis truncata</i> HASWELL, 1920 | | | | | | | | | | | ■ | ■ | | |
| <i>Syllis tyrrhena</i> (LICHER & KUPER, 1998) | | | | | | | | | | | ■ | ■ | | |
| <i>Syllis variegata</i> GRUBE, 1860 | | | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| <i>Trypanosyllis aurantiacus</i> NOGUEIRA & FUKUDA, 2008 | | | | | | | | | | | ■ | ■ | | |
| <i>Trypanosyllis zebra</i> (GRUBE, 1860) | | | | | ■ | | | ■ | ■ | ■ | ■ | ■ | | |
| <u>Syllidae Incertae sedis</u> | | | | | | | | | | | | | | |
| <i>Amblyosyllis granosa</i> EHLERS, 1897 | | | | | | | | | | | ■ | ■ | | |
| <i>Anguillosyllis lanai</i> BARROSO, PAIVA, NOGUEIRA & FUKUDA, 2017 | | | | | | | | | ■ | ■ | ■ | ■ | | |
| <i>Anguillosyllis palpata</i> (HARTMAN, 1967) | | | | | | | | | | | ■ | ■ | | |

Table 1. Continuation.

| SPECIES | GEOGRAPHICAL REGIONS / STATES | | | | | | | | | | | | | |
|--|-------------------------------|----------|----------|-----------|-----------|----------|----------|-----------|-----------|-----------|-----------|----------|----------|----------|
| | N | | | NE | | | | SE | | | | S | | |
| | PA | CE | RN | PB | PE | AL | SE | BA | ES | RJ | SP | PR | SC | RS |
| <i>Brevicirrotyllis cf. mariae</i> (SAN MARTÍN & HUTCHINGS, 2006) | | | | | | | | | | | | | | |
| <i>Exogonoides joaoi</i> FUKUDA, SAN MARTÍN, CARRERETTE & PARESQUE, 2016 | | | | | | | | | | | | | | |
| <i>Haplosyllides aberrans</i> (FAUVEL, 1939) | | | | | | | | | | | | | | |
| <i>Neopetitia amphophthalma</i> (SIEWING, 1956) | | | | | | | | | | | | | | |
| <i>Paraehlersia longichaetosa</i> FUKUDA, CENTURIÓN, NOGUEIRA & SAN MARTÍN, 2012 | | | | | | | | | | | | | | |
| <i>Paraehlersia martapolae</i> FUKUDA, CENTURIÓN, NOGUEIRA & SAN MARTÍN, 2012 | | | | | | | | | | | | | | |
| <i>Perkinsyllis biota</i> FUKUDA & NOGUEIRA, 2013b | | | | | | | | | | | | | | |
| <i>Perkinsyllis koolalyoides</i> FUKUDA & NOGUEIRA, 2013b | | | | | | | | | | | | | | |
| <i>Perkinsyllis longisetosa</i> (HARTMANN-SCHRÖDER, 1965) | | | | | | | | | | | | | | |
| <i>Streptodonta fauchaldi</i> PARESQUE, FUKUDA, SAN MARTÍN & NOGUEIRA, 2015 | | | | | | | | | | | | | | |
| SPECIES TOTAL | 2 | 3 | 6 | 19 | 18 | 6 | 4 | 10 | 16 | 34 | 62 | 7 | 3 | 4 |

Furthermore, in terms of research projects involving the Syllidae, the major contributions to the study of the marine benthic biota have also been done in the Southeastern/Southern regions – for example, ‘REVIZEE/South Score/Benthos’, ‘BIOTA/FAPESP/Benthic marine biodiversity in the state of São Paulo’ and, more recently, ‘HABITATS – Environmental heterogeneity in the Campos Basin’ and ‘AMBES – Environmental heterogeneity in the Espírito Santo Basin and northern region of the Campos Basin’.

In the last few years, other regions of the country saw a significant increase in the taxonomic knowledge, due to the capacitation of new taxonomists and the development of new projects and partnerships – such as in the Federal University of Paraíba, located in Northeastern Brazil – leading to a considerable increase in the discovery of new species along that part of the coast (PARESQUE *et al.*, 2014; PARESQUE & NOGUEIRA 2014). In this context, the Program Protax, by the National Council for Scientific and Technological Development – CNPq, contributed to the training of a new generation of taxonomists.

In this scenario, we expect for the near future an even larger increase in new occurrences for the country and also in the description of taxa new to science. Particularly regarding the former, it is possible that refinements in the study of Systematics (e.g., with the usage also of molecular characters for species delineations) may indicate that some species currently recorded in

the country, but with slight differences from other populations (such as *Brevicirrosyllis cf. mariae* and *Odontosyllis cf. fulgurans* – see FUKUDA & NOGUEIRA, 2006 and FUKUDA *et al.*, 2015), actually represent undescribed species.

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