

Type material of Platyhelminthes (Monogenoidea) housed in the Helminthological Collection of the Oswaldo Cruz Institute/ FIOCRUZ (CHIOC), Rio de Janeiro, Brazil, from 1979 to 2016

Daniela A. Lopes¹, Adriana Mainenti¹, Magda Sanches¹,
Marcelo Knoff¹, Delir Corrêa Gomes¹

¹ *Laboratório de Helminthos Parasitos de Vertebrados, Instituto Oswaldo Cruz, FIOCRUZ, Av. Brasil, 4365 Rio de Janeiro, RJ, Brazil*

Corresponding author: *Marcelo Knoff* (knoffm@ioc.fiocruz.br)

Academic editor: *F. Govedich* | Received 14 March 2016 | Accepted 9 August 2016 | Published 12 September 2016

<http://zoobank.org/5A8C5501-1C4A-4580-91CA-41FFE5879A56>

Citation: Lopes DA, Mainenti A, Sanches M, Knoff M, Gomes DC (2016) Type material of Platyhelminthes (Monogenoidea) housed in the Helminthological Collection of the Oswaldo Cruz Institute/ FIOCRUZ (CHIOC), Rio de Janeiro, Brazil, from 1979 to 2016. *ZooKeys* 616: 1–75. doi: 10.3897/zookeys.616.8481

Abstract

A catalogue of type material of monogenoids deposited in the Helminthological Collection of the Oswaldo Cruz Institute, FIOCRUZ (CHIOC), between 1979 and 2016, is presented, given that the last list of types was produced in 1979. The monogenoid collection comprises type lots for 203 species, distributed across 14 families and 68 genera. Specific names are listed systematically, followed by type host, infection site, type locality, specimens with the collection numbers and references. The classification and the nomenclature of the species have been updated.

Keywords

Catalogue, helminths, holotype, monogenoids, paratype

Introduction

Natural history collections provide important documentary evidence of biodiversity and the information that they contain is very useful. In the case of helminthological collections, the specimens acquired have been a source not only for knowledge of helminth biodiversity, but also for parasitological studies on taxonomy, systematics and identification of causes of zoonoses. The century-old Helminthological Collection of the Oswaldo Cruz Institute, FIOCRUZ (CHIOC), Rio de Janeiro, Brazil, contains helminths that form part of the fauna of Brazil and other countries, from a wide range of hosts that were caught in different biomes. The samples are holotypes, paratypes and representative specimens of Platyhelminthes (Trematoda, Cestoda and Monogenoidea), Acanthocephala, Nematoda and other non-helminth phyla, such as Annelida and Arthropoda. Recently, a large number of species of Monogenoidea were deposited in the CHIOC, which reflects the increased number of taxonomists working on this group in Brazil.

History and composition of the collection

The CHIOC celebrated its centenary in 2013. Its history is intertwined with that of the Laboratory of Helminth Parasites of Vertebrates of the Oswaldo Cruz Institute (LHPV–IOC), which began with the fieldwork of Gomes de Faria and his student Lauro Travassos (Faria and Travassos 1913). The Collection also received important contributions from other researchers at that time and, since then, it has increased in size through incorporation of private and institutional collections of the late nineteenth and early twentieth centuries (Noronha 2004, Noronha et al. 2004, 2009).

Today, the CHIOC holds around 38.400 samples of helminth parasites from South America and other continents. It is the biggest collection in Latin America and it is among the largest collections at a worldwide reference level (Rego 1982, Knoff et al. 2010), not only because of the number of types, but also because of the number of representative specimens (vouchers) that it contains. The collection has been constantly expanding through the large numbers of deposits made by Brazilian and foreign researchers. Some samples of arthropods (mainly pentastomids) and annelids (parasitic leeches) have also been accepted for inclusion in the collection, thus expanding its original nature of focusing on helminthological parasites of vertebrates, and resulting in a diversified parasitological collection.

All the material is organized according to the lots, which are numbered, recorded in an entry book, and digitized into a database. They are maintained in modern steel sliding closets and in a freezer that maintains some specimens and eggs of *Schistosoma mansoni* Sambon, 1907 (Trematoda) at -30 °C. Most of the information on the sample collections is available on the CHIOC web page (<http://chioc.fiocruz.br/>) and through the *speciesLink* network of the Environmental Information Reference Center (CRIA). Deposits and loans of specimens, permission for visits to examine samples *in loco*,

loans of books and reprints, mini-courses and lectures focusing on the history of the CHIOC, and professional capacitation courses are included among the facilities of this Collection.

The first and only catalogue of the type material held in the CHIOC was published by Rego et al. (1979). They recorded 719 types (only holotypes or type series) of helminths, including 408 of nematodes, 227 of trematodes (Digenea and Monogenoidea), 52 of acanthocephalans, 28 of cestodes and four of pentastomids. Subsequent to this publication, the collection has grown substantially and the number of types has increased significantly as well. The purpose of this article is to inform the scientific community about the acquisitions of the CHIOC by publishing a catalogue of types deposited up to August 1, 2016. Because of the large number of types, we are starting with the species of Monogenoidea. We have followed the articles 73–75 of the Code (ICZN 1999).

Material and methods

The specimens are stored in glass or plastic vials in 70% ethanol or as microscope slide preparations. All the material is available for consultation, but holotypes are not loaned. Unless otherwise stated, all type material is in good condition.

The catalogue is arranged taxonomically as subclasses, families, genera and species, under the original spelling and combinations. Subclasses are arranged following phylogenetic order. Families, genera and species are arranged alphabetically. The information on each entry is presented in the following format:

1. Original genus-species combination with author(s) and year of publication. Asterisk (*) denotes the type species of the genus.
2. Type host: species, author(s) and principal taxonomic group in brackets.
3. Infestation or infection site in the host.
4. Type locality: country, province or state, department, specific locality and coordinates (if available).
5. Primary type status: CHIOC catalogue number. The categories for the types used followed articles 73–75 of the Code (ICZN 1999).
6. Remark sections are inserted when necessary and include additional information about host, locality or status of the types.
7. References include publications in which the species was described and those that mention type specimens in the CHIOC.

The valid names adopted for parasitized hosts follow the most recent bibliography. Fish names are present in accordance with Froese and Pauly (2016) and turtle names, in accordance with Fritz and Havaš (2007, 2013). Mention of the monogenoids and host species in this list does not imply that the authors of the present report agree with their validity or taxonomy. Some monogenoids species catalogued have been

synonymized and the comments about their taxonomy are in the Remarks sections. The higher classification of Monogenoidea follows Boeger and Kritsky (1993), and for families and genera follows specific references.

The following abbreviations are used in the text:

AHC SAMA	Australian Helminthological Collection of the South Australian Museum, North Terrace, Adelaide, Australia;
BMNH	British Museum of Natural History, Collection at the Department of Zoology, Natural History Museum, London, England;
CHIOC	Helminthological Collection of the Oswaldo Cruz Institute, FIOCRUZ, Rio de Janeiro, Brazil;
CHMLP	Helminthological Collection of the Museum of La Plata, La Plata, Buenos Aires, Argentina;
CNHE	National Collection of Helminths, Institute of Biology, National Autonomous University of Mexico, Mexico City, Mexico;
HWML	Harold W. Manter Laboratory, University of Nebraska State Museum, Lincoln, Nebraska, USA;
INPA	National Institute for Amazon Research, Manaus, Amazonas, Brazil;
IPCAS/IPCR/ASCR	Institute of Parasitology, Academy of Sciences of the Czech Republic, České Budějovice, Czech Republic;
MNHN	National Museum of Natural History, Paris, France;
MPEG	Invertebrate Collection of the Emílio Goeldi Museum, Belém, Pará, Brazil;
MPM	Meguro Parasitological Museum, Meguro-ku, Tokyo, Japan;
MZUSP	Helminthological Collection of the Zoology Museum, University of São Paulo, São Paulo, Brazil;
PC–IBPRAS	Parasitological Collection of the Institute of Biology and Pedology, Russian Academy of Sciences, Vladivostok, Russia;
QM	Queensland Museum, Brisbane, Queensland, Australia;
UNICAMP	Collection of the Natural History Museum of the University of Campinas, Campinas, São Paulo, Brazil;
USNM	United States National Museum, Beltsville, Maryland, USA;
USNPC	United States National Parasitological Collection, Beltsville, Maryland, USA;
ZIAC	Zoological Institute of the Russian Academy of Sciences, Saint Petersburg, Russia.

Results and discussion

This database and bibliographic survey presents the diversity of Monogenoidea types in CHIOC, from Brazil and other countries in the world, covering more than 35 years of parasitological studies. This catalogue is the second list of type species held in

this Collection. The only previous checklist recorded only 11 type species of monogenoids, without considering paratypes (Rego et al. 1979). Now, there is a total of approximately 1100 primary types of Monogenoidea, represented by 203 species distributed across 14 families and 68 genera. Dactylogyridae is the most representative family, with 141 species, followed by Gyrodactylidae, with 29. These numbers illustrate the importance of the parasitological collection of the CHIOC, which is among the most significant in Latin America, together with other collections in Mexico and Argentina (Lamothe-Argumedo et al. 2010, Tablado and Tricárico 2010, Lunaschi et al. 2012).

It was observed that 93% of the type species of monogenoids catalogued in this Collection were parasites of bony fish. Only 12 species were parasites of cartilaginous fishes (Potamotrigonidae) and two monogenoids were parasites of turtles (Kinosternidae and Chelidae). All those samples were collected mainly in Brazil (95%), from all regions of this country. This situation could be a reflection of the large number of studies carried out on fish from Brazilian rivers and the Atlantic Ocean, and especially, of the increase in knowledge of monogenoids in Brazil that has been achieved since the late 1960s (Cohen et al. 2013).

List of type species

Phylum Platyhelminthes Gegenbaur, 1859

Class Monogenoidea Bychowsky, 1937

Subclass Polyonchoinea Bychowsky, 1937

Capsalidae Baird, 1853

Caballerocotyla Price, 1960

Caballerocotyla lenti Mogrovejo & Santos, 2002

Type host. *Auxis thazard* (Lacépède, 1800) (Osteichthyes: Scombridae).

Infection site. Gills.

Type locality. Brazil, coastal zone of Rio de Janeiro State (22°55'S, 40°18'W).

Holotype. CHIOC 34938.

Paratypes. CHIOC 34939, 34940, 34941.

Remarks. The species is referred to as *Caballerocotyla magronum* (Ishii, 1936) by Cohen et al. (2013). Gibson and Bray (2016) consider the species to be a synonym of *Capsala magronum* (Ishii, 1936).

References. Mogrovejo and Santos (2002), Gibson and Bray (2016).

Caballerocotyla llewelyni Kohn & Justo, 2006

Type host. *Katsuwonus pelamis* (Linnaeus, 1758) (Osteichthyes: Scombridae).

Infection site. Gills.

Type locality. Brazil, coastal zone of Rio de Janeiro State (22°55'S, 40°18'W).

Holotype. CHIOC 36611 a.

Paratype. CHIOC 36611 b.

Remarks. The species is referred to as *Caballerocotyla katsuwoni* (Ishii, 1936) by Cohen et al. (2013). Gibson and Bray (2016) consider the species to be a synonym of *Capsala katsuwoni* (Ishii, 1936).

References. Kohn and Justo (2006), Gibson and Bray (2016).

Encotylabe Diesing, 1850

Encotyllabe souzalimae Carvalho & Luque, 2012

Type host. *Trichiurus lepturus* (Linnaeus, 1758) (Osteichthyes: Trichiuridae).

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Guanabara Bay (23°1'52"S, 43°11'56"W).

Holotype. CHIOC 37382.

Paratypes. CHIOC 37383, 37384, 37385.

Reference. Carvalho and Luque (2012).

Nasicola Yamaguti, 1968

Nasicola brasiliensis Kohn, Baptista-Farias, Santos & Gibson, 2004

Type host. *Thunnus obesus* (Lowe, 1839) (Osteichthyes: Scombridae).

Infection site. Nasal cavities.

Type locality. Brazil, Rio de Janeiro State, off Cabo Frio (22°52'46"S, 42°01'07"W).

Holotype. CHIOC 34924 a.

Paratypes. CHIOC 34924 b, 34925 a–b, 34935.

Remarks. Other paratypes deposited in the BMNH collection.

Reference. Kohn et al. (2004).

Sprostoniella Bychowsky & Nagibina, 1967

Sprostoniella micrancycra Cezar, Luque & Amato, 1999

Type host. *Chaetodipterus faber* (Broussonet, 1782) (Osteichthyes: Ehippidae).

Infection site. Gills.

Type locality. Brazil, coastal zone of Rio de Janeiro State (21–23°S, 41–45°W).

Holotype. CHIOC 34000 a.

Paratypes. CHIOC 34000 b–d.

Remarks. Other paratype deposited in CNHE.

Reference. Cezar et al. (1999).

Dactylogyridae Bychowsky, 1933

***Ameloblastella* Kritsky, Mendoza-Franco & Scholz, 2000**

***Ameloblastella paranaensis* (França, Isaac, Pavanelli & Takemoto, 2003) Mendoza-Franco & Scholz, 2009**

Type host. *Iheringichthys labrosus* (Lütken, 1874) (Osteichthyes: Pimelodidae).

Infection site. Gills.

Type locality. Brazil, upper Paraná River floodplain (22°43'S, 53°10'W).

Holotype. CHIOC 34598 a.

Paratypes. CHIOC 34598 b, 34588 a–d.

Remarks. Material deposited as *Pseudovancleaveus paranaensis*. Mendoza-Franco and Scholz (2009) transferred *Pseudovancleaveus* to *Ameloblastella*.

References. França et al. (2003), Mendoza-Franco and Scholz (2009), Monteiro et al. (2010a).

***Anacanthoroides* Kritsky & Thatcher, 1976**

***Anacanthoroides sanctifrancisci* Monteiro & Brasil-Sato, 2014**

Type host. *Prochilodus argenteus* Spix & Agassiz, 1829 (Osteichthyes: Prochilodontidae).

Infection site. Gill filaments.

Type locality. Brazil, Minas Gerais State, São Francisco River near Três Marias Reservoir (18°12'32"S, 45°14'41"W).

Holotype. CHIOC 37914.

Paratypes. CHIOC 37915, 37916 a–b, 37917, 37918 a–c, 37919, 37920 a–b.

Reference. Monteiro and Brasil-Sato (2014a).

***Anacanthorus* Mizelle & Price, 1965**

***Anacanthorus acuminatus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus angulatus* (Spix & Agassiz, 1829) (Osteichthyes: Triporthidae).

Infection site. Gills.

Type locality. Brazil, Amazonas State, Furo do Catalão near Manaus.

Paratype. CHIOC 33369.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

Anacanthorus adkruidenieri Monteiro, Cohen & Brasil-Sato, 2015

Type host. *Salminus franciscanus* Lima & Britski, 2007 (Osteichthyes: Bryconidae).

Infection site. Gills.

Type locality. Brazil, Minas Gerais State, São Francisco River near Três Marias Reservoir (18°12'32"S, 45°15'41"W).

Holotype. CHIOC 38018 a.

Paratypes. CHIOC 38017 a–b, 38018 b–e, 38019 a–d, 38020 a–d

Reference. Monteiro et al. (2015).

Anacanthorus alatus Kristky, Boeger & Van Every, 1992

Type host. *Triportheus albus* Cope, 1872

Infection site. Gills.

Type locality. Brazil, Amazonas State, Furo do Catalão near Manaus.

Paratype. CHIOC 33365.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

Anacanthorus amazonicus Van Every & Kristky, 1992

Type host. *Serrasalmus rhombeus* (Linnaeus, 1766) (Osteichthyes: Serrasalminidae).

Infection site. Gills.

Type locality. Brazil, Amazonas State, Água Branca stream, Pitinga River.

Paratypes. CHIOC 33389 a–b.

Remarks. Specimens from CHIOC collected in the Uatamá River. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kristky (1992).

***Anacanthorus bellus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus albus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Furo do Catalão near Manaus.

Paratype. CHIOC 33366.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus bicuspidatus* Cohen, Kohn & Boeger, 2012**

Type host. *Salminus brasiliensis* (Cuvier, 1816)

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River, below and above of the reservoir of Itaipu Hydroelectric Power Station, in the locality of Guaíra (24°04'48"S, 54°15'21"W).

Holotype. CHIOC 37595.

Paratypes. CHIOC 37587, 37588, 37598 a–b, 37600, 37604, 37612, 37613, 37623, 37631, 37722, 37730.

Reference. Cohen et al. (2012).

***Anacanthorus brevicirrus* Monteiro, Kritsky & Brasil-Sato, 2010**

Type host. *Brycon orthotaenia* (Günther, 1864) (Osteichthyes: Bryconidae).

Infection site. Gills.

Type locality. Brazil, Minas Gerais State, São Francisco River near Três Marias Reservoir (18°12'32"S, 45°15'41"W).

Holotype. CHIOC 37333 a.

Paratypes. CHIOC 37333 b–c, 37334.

Remarks. Other paratypes deposited in the collections of INPA, IPCAS and USNM.

Reference. Monteiro et al. (2010b).

***Anacanthorus calophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus elongatus* (Günther, 1864)

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratype. CHIOC 33377.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

***Anacanthorus carinatus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus angulatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Paratype. CHIOC 33370.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

***Anacanthorus catoprioni* Kristky, Boeger & Van Every, 1992**

Type host. *Catoprion mento* (Cuvier, 1819) (Osteichthyes: Serrasalminidae).

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumã River, Balbina.

Paratype. CHIOC 33383.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

***Anacanthorus chelophorus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus angulatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Paratype. CHIOC 33371.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

***Anacanthorus cinctus* Van Every & Kristky, 1992**

Type host. *Pristobrycon striolatus* (Steindachner, 1908)

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumã River, Samaumã Lake.

Paratypes. CHIOC 33605 a–b.

Remarks. Specimens deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kritsky (1992).

***Anacanthorus cladophallus* Van Every & Kristky, 1992**

Type host. *Serrasalmus spilopleura* Kner, 1858

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratypes. CHIOC 33393 a–b.

Remarks. Specimens deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kritsky (1992).

***Anacanthorus contortus* Cohen, Kohn & Boeger, 2012**

Type host. *Salminus brasiliensis*

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River, below and above of the reservoir of Itaipu Hydroelectric Power Station, Guaira (24°04'48"S, 54°15'21"W).

Holotype. CHIOC 37662 a.

Paratypes. CHIOC 37583, 37601 a–c, 37605, 37615, 37620 a–b, 37621 a–b, 37626, 37632, 37660 a–c, 37662 b, 37705, 37706, 37707, 37714, 37716, 37718 a–b, 37721, 37724, 37727 a–b, 37729.

Reference. Cohen et al. (2012).

***Anacanthorus cornutus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus angulatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Paratype. CHIOC 33372.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

***Anacanthorus crytocaulus* Van Every & Kristky, 1992**

Type host. *Pristobrycon striolatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumá River, Samaumá Lake.

Paratypes. CHIOC 33606 a–b.

Remarks. Specimens deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kritsky (1992).

***Anacanthorus daulometrus* Cohen, Kohn & Boeger, 2012**

Type host. *Salminus brasiliensis*

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River, below and above of the reservoir of Itaipu Hydroelectric Power Station, Guaíra (24°04'48"S, 54°15'21"W).

Holotype. CHIOC 37681.

Paratypes. CHIOC 37596, 37602, 37614, 37630, 37636, 37641, 37659, 37663, 37666 a–c, 37668, 37671, 37683, 37684, 37709 a–b, 37711 a–c, 37713 a–b, 37717, 37726, 37728.

Reference. Cohen et al. (2012).

***Anacanthorus dipelecinus* Kristky, Boeger & Van Every, 1992**

Type host. *Roeboides myersii* Gill, 1870 (Osteichthyes: Characidae).

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratype. CHIOC 33600.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

***Anacanthorus douradensis* Cohen, Kohn & Boeger, 2012**

Type host. *Salminus brasiliensis*

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River, below and above of the reservoir of Itaipu Hydroelectric Power Station, Guaíra (24°04'48"S, 54°15'21"W).

Holotype. CHIOC 37594.

Paratypes. CHIOC 37584, 37599 a–b, 37610, 37611, 37616, 37654, 37679.

Reference. Cohen et al. (2012).

***Anacanthorus euryphallus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus angulatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Furo do Catalão near Manaus.

Paratype. CHIOC 33373.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

***Anacanthorus formosus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus elongatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Furo do Catalão near Manaus.

Paratype. CHIOC 33378.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

Anacanthorus franciscanus Monteiro, Kritsky & Brasil-Sato, 2010

Type host. *Brycon orthotaenia*

Infection site. Gills.

Type locality. Brazil, Minas Gerais State, São Francisco River near Três Marias Reservoir (18°12'32"S, 45°15'41"W).

Holotype. CHIOC 37330.

Paratypes. CHIOC 37331 a–e, 37332.

Remarks. Other material deposited in the collections of INPA, IPCAS and USNM.

Reference. Monteiro et al. (2010b).

Anacanthorus furculus Kristky, Boeger & Van Every, 1992

Type host. *Triportheus elongatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Solimões River near Manaus.

Paratype. CHIOC 33379.

Remarks. Specimen from CHIOC collected in the Manaus Fish market. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

Anacanthorus glyptophallus Kristky, Boeger & Van Every, 1992

Type host. *Triportheus angulatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Paratype. CHIOC 33374.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kritsky et al. (1992).

***Anacanthorus gravihamulatus* Van Every & Kristky, 1992**

Type host. *Serrasalmus rhombeus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumá River, Água Branca stream, Pitinga River.

Paratypes. CHIOC 33391 a–b.

Remarks. Specimens deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kristky (1992).

***Anacanthorus jegui* Van Every & Kristky, 1992**

Type host. *Serrasalmus rhombeus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumá River, a tributary of Amazonas River.

Paratype. CHIOC 33390.

Remarks. Specimen from CHIOC collected in the Pitinga River, Água Branca stream (Amazonas State). Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kristky (1992).

***Anacanthorus lasiophallus* Van Every & Kristky, 1992**

Type host. *Pristobrycon striolatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Água Branca stream, Pitinga River.

Paratypes. CHIOC 33607 a–b.

Remarks. Specimens from CHIOC collected in the Samaumá Lake, Uatumá River (Amazonas State). Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kristky (1992).

***Anacanthorus lepyrophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Serrasalmus elongatus* Kner, 1858

Infection site. Gills.

Type locality. Brazil, Amazonas State, Negro River near Manaus.

Paratype. CHIOC 33385.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus mastigophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Pristobrycon eigenmanni* Norman, 1929

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumã River, Nazaré.

Paratype. CHIOC 33602.

Remarks. Specimen from CHIOC collected in Santa Luzia, Uatumã River. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus mesocondylus* Van Every & Kristky, 1992**

Type host. *Serrasalmus elongatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratypes. CHIOC 33384 a–b.

Remarks. Specimens deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kristky (1992).

***Anacanthorus nanus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus angulatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Paratype. CHIOC 33375.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus palamophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Pristobrycon eigenmanni*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumã River, Nazaré.

Paratype. CHIOC 33603.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus paradouradensis* Monteiro, Cohen & Brasil-Sato, 2015**

Type host. *Salminus franciscanus*

Infection site. Gills.

Type locality. Brazil, Minas Gerais State, São Francisco River near Três Marias Reservoir (18°12'32"S, 45°15'41"W).

Holotype. CHIOC 38023 a.

Paratypes. CHIOC 38021 a–d, 38022 a–c, 38023 b–d, 38024 a–d.

Reference. Monteiro et al. (2015).

***Anacanthorus parakruidenieri* Cohen, Kohn & Boeger, 2012**

Type host. *Salminus brasiliensis*

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River, below and above of the reservoir of Itaipu Hydroelectric Power Station, Guaíra (24°04'48"S, 54°15'21"W).

Holotype. CHIOC 37656.

Paratypes. CHIOC 37603 a–b, 37617, 37624, 37633 a–b, 37639, 37661 a–b, 37697.

Reference. Cohen et al. (2012).

***Anacanthorus paraspathulatus* Kristky, Boeger & Van Every, 1992**

Type host. *Mylossoma duriventre* (Cuvier, 1818) [= *Mylossoma duriventris*] (Osteichthyes: Serrasalminidae).

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratype. CHIOC 33396.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus pedanophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Myleus rubripinnis* (Müller & Troschel, 1844) [= *Myleus rubripinnus*] (Osteichthyes: Serrasalminidae).

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumá River, Nazaré.

Paratype. CHIOC 33397.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus pelorophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus elongatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratype. CHIOC 33380.

Remarks. Specimen from CHIOC collected in the Manaus Fish market. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus penilabiatus* Boeger, Husak & Martins, 1995**

Type host. *Piaractus mesopotamicus* (Holmberg, 1887) (Osteichthyes: Serrasalminidae).

Infection site. Gills.

Type locality. Brazil, São Paulo State, Jaboticabal, Aquaculture Center of the Paulista State University.

Holotype. CHIOC 33268 a.

Paratypes. CHIOC 33268 b–j.

Remarks. Other paratypes deposited in the collections of HWML and USNM.

Reference. Boeger et al. (1995b).

***Anacanthorus periphallus* Kristky, Boeger & Van Every, 1992**

Type host. *Serrasalmus* sp.

Infection site. Gills.

Type locality. Brazil, Amazonas State, Furo do Catalão near Manaus.

Paratype. CHIOC 33395.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus pithophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Tripurtheus angulatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Paratype. CHIOC 33376.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus prodigiosus* Van Every & Kristky, 1992**

Type host. *Serrasalmus elongatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Negro River near Manaus.

Paratypes. CHIOC 33386 a–b.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kristky (1992).

Anacanthorus quinqueramus Kristky, Boeger & Van Every, 1992

Type host. *Triportheus albus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Furo do Catalão near Manaus.

Paratype. CHIOC 33367.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

Anacanthorus ramosissimus Van Every Boeger & Kristky, 1992

Type host. *Serrasalmus elongatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratypes. CHIOC 33387 a–b.

Remarks. Specimens deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kristky (1992).

Anacanthorus ramulosus Kristky, Boeger & Van Every, 1992

Type host. *Triportheus albus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Furo do Catalão near Manaus.

Paratype. CHIOC 33368.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and

USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus scapanus* Van Every & Kristky, 1992**

Type host. *Serrasalmus spilopleura*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratype. CHIOC 33394.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kristky (1992).

***Anacanthorus sciponophallus* Van Every & Kristky, 1992**

Type host. *Serrasalmus elongatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratypes. CHIOC 33388 a–b.

Remarks. Specimens deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kristky (1992).

***Anacanthorus serrasalmi* Van Every & Kristky, 1992**

Type host. *Serrasalmus rhombeus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Água Branca stream, Pitinga River.

Paratypes. CHIOC 33392 a–b.

Remarks. Specimens from CHIOC collected in the Uatumã River (Amazonas State). Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Van Every and Kristky (1992).

***Anacanthorus spinatus* Kristky, Boeger & Van Every, 1992**

Type host. *Myleus rubripinnis*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumã River, Nazaré.

Paratype. CHIOC 33398.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus stachophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Pygocentrus nattereri* Kner, 1858 (Osteichthyes: Serrasalminidae).

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratype. CHIOC 33601.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus stagmophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Myleus rubripinnis*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumã River, Nazaré.

Paratype. CHIOC 33399.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus strongylophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus elongatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratype. CHIOC 33381.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus toledoensis* Leão, São Clemente & Cohen, 2015**

Type host. *Piaractus mesopotamicus*

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River, in the locality of Toledo (24°44'29.0"S, 53°44'51.2"W).

Holotype. CHIOC 37905 a.

Paratypes. CHIOC 37905 b–c.

Remarks. Other paratypes deposited in the INPA collection.

Reference. Leão et al. (2015).

***Anacanthorus tricornis* Kristky, Boeger & Van Every, 1992**

Type host. *Triportheus elongatus*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Solimões River near Marchantaria Island.

Paratype. CHIOC 33382.

Remarks. Specimen deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

***Anacanthorus xaniophallus* Kristky, Boeger & Van Every, 1992**

Type host. *Pristobrycon eigenmanni*

Infection site. Gills.

Type locality. Brazil, Amazonas State, Uatumã River, Nazaré.

Paratypes. CHIOC 33604 a–c.

Remarks. Specimens deposited in CHIOC collected from the type host/locality. Holotype deposited in the INPA collection. Other paratypes deposited in HWML and USNM. The CHIOC was cited in the original description as one of those collections of deposit, but its number was not informed there.

Reference. Kristky et al. (1992).

Annulotrematoides Kritsky & Boeger, 1995

**Annulotrematoides amazonicus* Kritsky & Boeger, 1995

Type host. *Psectrogaster rutiloides* (Kner, 1858) (Osteichthyes: Curimatidae).

Infection site. Gills.

Type locality. Brazil, Amazonas State, Manaus, Furo do Catalão.

Holotype. CHIOC 33364.

Remarks. Collection number referred to as CHIOC “33664” in the original description due to a mistake. Paratypes deposited in HWML and USNPC.

Reference. Kritsky and Boeger (1995).

Annulotrematoides bryconi Cuglianna, Cordeiro & Luque, 2003

Type host. *Brycon cephalus* (Günther, 1869)

Infection site. Gills.

Type locality. Brazil, São Paulo State, ponds in Pirassununga.

Holotype. CHIOC 36276.

Paratypes. CHIOC 36272, 36273 a–b, 36274 a–b, 36275.

Remarks. Four paratypes deposited in UNICAMP.

Reference. Cuglianna et al. (2003).

Annulotrematoides glossophallus Cohen, Kohn & Boeger, 2012

Type host. *Salminus brasiliensis*

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River below and above of the reservoir of Itaipu Hydroelectric Power Station, Guaíra (24°04'48"S, 54°15'21"W).

Holotype. CHIOC 37607.

Paratypes. CHIOC 37586, 37618, 37625, 37627, 37629, 37642, 37657 a–b, 37669, 37682.

Reference. Cohen et al. (2012).

***Annulotrematoides parisellei* Cohen, Kohn & Boeger, 2012**

Type host. *Salminus brasiliensis*

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River below and above of the reservoir of Itaipu Hydroelectric Power Station, Guaira (24°04'48"S, 54°15'21"W).

Holotype. CHIOC 37689.

Paratypes. CHIOC 37585, 37589, 37590, 37591, 37592, 37593, 37597, 37608, 37619, 37622 a–b, 37634, 37643, 37648, 37649 a–b, 37652, 37658, 37664 a–b, 37667, 37676, 37677, 37680, 37685, 37686, 37692 a–b, 37694, 37698 a–b, 37701, 37715, 37725.

Reference. Cohen et al. (2012).

***Apedunculata* Cuglianna, Cordeiro & Luque, 2009**

****Apedunculata discoidea* Cuglianna, Cordeiro & Luque, 2009**

Type host. *Prochilodus lineatus* (Valenciennes, 1837)

Infection site. Gills.

Type locality. Brazil, São Paulo State, ponds in Pirassununga.

Holotype. CHIOC 36904.

Paratypes. CHIOC 36905, 36906, 36907, 36908.

Reference. Cuglianna et al. (2009).

***Aphanoblastella* Kritsky, Mendoza-Franco & Scholz, 2000**

***Aphanoblastella juizforense* Carvalho, Tavares & Luque, 2009**

Type host. *Rhamdia quelen* (Quoy & Gaimard, 1824) (Osteichthyes: Heptapteridae).

Infection site. Gills.

Type locality. Brazil, Minas Gerais State, Juiz de Fora, Paraibuna River (21°41'20"S, 43°20'40"W).

Holotype. CHIOC 37175 a.

Paratypes. CHIOC 37175 b–e.

Reference. Carvalho et al. (2009).

***Cacatuocotyle* Boeger, Domingues & Kritsky, 1997**

***Cacatuocotyle guaibensis* Gallas, Calegari-Marques & Amato, 2014**

Type host. *Astyanax* aff. *fasciatus* (Cuvier, 1819) (Osteichthyes: Characidae).

Infection site. External surface.

Type locality. Brazil, Rio Grande do Sul State, Guaíba Lake, Barra do Ribeiro (30°17'11"S, 51°18'01"W).

Holotype. CHIOC 37965 a.

Paratypes. CHIOC 37965 b–c.

Reference. Gallas et al. (2014).

****Cacatuocotyle paranaensis* Boeger, Domingues & Kritsky, 1997**

Type host. *Characidium lanei* Travassos, 1967 (Osteichthyes: Crenuchidae).

Infection site. Gills.

Type locality. Brazil, Paraná State, Antonina, Cacatu River.

Holotype. CHIOC 33682 a.

Paratypes. CHIOC 33683 a–b, 33684 a–e, 33685 a–d.

Remarks. All paratypes were collected from *C. pterostictum* Gomes, 1947, except CHIOC 33685 b, which was collected from the type host. Other paratypes deposited in HWML and USNPC.

Reference. Boeger et al. (1997).

***Chaubanellus* Bychowsky & Nagibina, 1969**

***Chaubanellus boegeri* Domingues & Fehlaue, 2006**

Type host. *Genidens barbatus* (Lacepède, 1803) (Osteichthyes: Ariidae).

Infection site. Gills.

Type locality. Brazil, Paraná State, Guaratuba, Guaratuba Bay (25°52'16.73"S, 48°39'07.32"W).

Paratypes. CHIOC 36821 a–e.

Remarks. Specimens deposited in CHIOC collected from the type host/locality. Holotype deposited in MZUSP. Other paratypes deposited in MZUSP and USNPC.

Reference. Domingues and Fehlaue (2006).

***Chaubanellus hamatopeduncularoideum* Domingues, Soares & Watanabe, 2016**

Type host. *Amphiarius rugispinis* (Valenciennes, 1840) (Osteichthyes: Ariidae).

Infection site. Secondary lamellae of the gills.

Type locality. Brazil, Pará State, Bragança, Fishing village of Ajuruteua (0°49'31"N, 46°36'29"W).

Holotype. CHIOC 38240 a.

Paratypes. CHIOC 38240 b–h.

Remarks. Other paratypes deposited in the collections of INPA and MPEG.

Reference. Domingues et al. (2016).

***Chaubanellus hypenocleithrum* Domingues, Soares & Watanabe, 2016**

Type host. *Sciades proops* (Valenciennes, 1840) (Osteichthyes: Ariidae).

Infection site. Secondary lamellae of the gills.

Type locality. Brazil, Pará State, Bragança, Fishing village of Ajuruteua (0°49'31"N, 46°36'29"W).

Holotype. CHIOC 38247.

Paratypes. CHIOC 38248 a–b, 38249 a–b, 38250 a–b.

Remarks. Other paratypes deposited in the collections of INPA and MPEG.

Reference. Domingues et al. (2016).

***Chaubanellus neotropicalis* Domingues & Fehlaue, 2006**

Type host. *Aspistor luniscutis* (Valenciennes, 1840) (Osteichthyes: Ariidae).

Infection site. Gills.

Type locality. Brazil, Paraná State, Paranaguá, Fish market.

Paratypes. CHIOC 36823 a–b.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in MZUSP and USNPC.

Reference. Domingues and Fehlaue (2006).

***Chaubanellus susamlimae* Domingues, Soares & Watanabe, 2016**

Type host. *Sciades herzbergii* (Bloch, 1794)

Infection site. Secondary lamellae of the gills.

Type locality. Brazil, Pará State, Bragança, Fishing village of Ajuruteua (0°49'31"N, 46°36'29"W).

Holotype. CHIOC 38251 a.

Paratypes. CHIOC 38251 b–h.

Remarks. Other paratypes deposited in the collections of INPA and MPEG.

Reference. Domingues et al. (2016).

***Chaubanellus velum* Domingues, Soares & Watanabe, 2016**

Type host. *Sciades couma* (Valenciennes, 1840)

Infection site. Internal borders of the primary lamellae of the gills.

Type locality. Brazil, Pará State, Bragança, Fish market.

Holotype. CHIOC 38261.

Remarks. Paratype deposited in the INPA collection.

Reference. Domingues et al. (2016).

Demidospermus Suriano, 1983

Demidospermus araguaiaensis Cepeda & Luque, 2010

Type host. *Brachyplatystoma filamentosum* (Lichtenstein, 1819) (Osteichthyes: Pimelodidae).

Infection site. Gill lamellae.

Type locality. Brazil, Mato Grosso State, Araguaia River (13°23'07.3"S, 50°39'58.1"W).

Holotype. CHIOC 37326.

Paratype. CHIOC 37327.

Remarks. Other paratype deposited in the INPA collection.

Reference. Cepeda and Luque (2010).

Demidospermus brachyplatystomae Cepeda & Luque, 2010

Type host. *Brachyplatystoma filamentosum*

Infection site. Gill lamellae.

Type locality. Brazil, Mato Grosso State, Araguaia River (13°23'07.3"S, 50°39'58.1"W).

Holotype. CHIOC 37320.

Paratypes. CHIOC 37321 a–b, 37322 a–d.

Remarks. Other paratypes deposited in the INPA collection.

Reference. Cepeda and Luque (2010).

Demidospermus ceccarellii Cepeda & Luque, 2010

Type host. *Brachyplatystoma filamentosum*

Infection site. Gill lamellae.

Type locality. Brazil, Mato Grosso State, Araguaia River (13°23'07.3"S, 50°39'58.1"W).

Holotype. CHIOC 37323.

Paratypes. CHIOC 37324 a–d, 37325 a–e.

Remarks. Other paratypes deposited in the INPA collection.

Reference. Cepeda and Luque (2010).

***Demidospermus labrosi* França, Isaac, Pavanelli & Takemoto, 2003**

Type host. *Iheringichthys labrosus*

Infection site. Gills.

Type locality. Brazil, upper Paraná River floodplain (22°43'S, 53°10'W).

Holotype. CHIOC 34594 a.

Paratypes. CHIOC 34587 a–c, 34594 b–c, 34595, 34596, 34597.

Remarks. Some authors considered the species to be a synonym of *Demidospermus cornicinus* Kritsky & Gutiérrez, 1998 (Cohen and Kohn 2008a, Monteiro et al. 2010a). Takemoto et al. (2009) referred to it as *D. labrosi*.

References. França et al. (2003), Cohen and Kohn (2008a), Takemoto et al. (2009), Monteiro et al. (2010a).

***Demidospermus mandi* França, Isaac, Pavanelli & Takemoto, 2003**

Type host. *Iheringichthys labrosus*

Infection site. Gills.

Type locality. Brazil, upper Paraná River floodplain (22°43'S, 53°10'W).

Holotype. CHIOC 34586 a.

Paratypes. CHIOC 34586 b, 34589, 34590, 34591, 34592, 34593 a–b.

Remarks. Some authors considered the species to be a synonym of *Demidospermus leptosynophallus* Kritsky & Gutiérrez, 1998 (Cohen and Kohn 2008a, Monteiro et al. 2010a). Takemoto et al. (2009) referred to it as *D. mandi*.

References. França et al. (2003), Cohen and Kohn (2008a), Takemoto et al. (2009), Monteiro et al. (2010a).

***Demidospermus osteomystax* Tavernari, Takemoto, Lacerda & Pavanelli, 2010**

Type host. *Auchenipterus osteomystax* Miranda-Ribeiro, 1918 (Osteichthyes: Auchenipteridae).

Infection site. Gills.

Type locality. Brazil, upper Paraná River floodplain (22°50'–22°70'S, 53°15'–53°40'W).

Holotype. CHIOC 37252 a.

Paratypes. CHIOC 37252 b, 37253, 37254.

Reference. Tavernari et al. (2010).

***Demidospermus paranaensis* Ferrari-Hoeinghaus, Bellay, Takemoto & Pavanelli, 2010**

Type host. *Loricariichthys platymetopon* Isbrücker & Nijssen, 1979 (Osteichthyes: Loricariidae).

Infection site. Gill filaments.

Type locality. Brazil, upper Paraná River floodplain (22°43'S, 53°10'W).

Holotype. CHIOC 37255 a.

Paratypes. CHIOC 37255 b–e.

Reference. Ferrari-Hoeninghaus et al. (2010).

Euryhaliotrema Kritsky & Boeger, 2002

Euryhaliotrema dontykoleos Fehlaue & Boeger, 2005

Type host. *Pachyurus junki* Soares & Casatti, 2000 (Osteichthyes: Sciaenidae).

Infection site. Gills.

Type locality. Brazil, Tocantins State, Santa Rosa, São Valério River (11°21'57"S, 48°28'35"W)

Paratypes. CHIOC 36497, 36498, 36499 a–c, 36500.

Remarks. Paratypes collected in different localities of the Tocantins River (Tocantins State): CHIOC 36498 (Peixe, 11°46'19"S, 48°27'26"W), 36499 a–c (Ipueiras, 11°18'50"S, 48°27'26"W) and 36500 (Porto Nacional, 10°41'45"S, 48°21'43"W). Holotype deposited in MZUSP. Other paratypes deposited in MNHN, MZUSP and USNPC.

Reference. Fehlaue and Boeger (2005).

Hamatopeduncularia Yamaguti, 1953

Hamatopeduncularia cangatae Domingues, Soares & Watanabe, 2016

Type host. *Aspistor quadriscutis* (Valenciennes, 1840)

Infection site. Secondary lamellae of the gills.

Type locality. Brazil, Pará State, Bragança, Fish market.

Holotype. CHIOC 38264.

Paratypes. CHIOC 38265 a–b, 38266.

Remarks. Other paratypes deposited in the INPA collection.

Reference. Domingues et al. (2016).

Jainus Mizelle, Kritsky & Crane, 1968

Jainus iocensis Cohen, Kohn & Boeger, 2012

Type host. *Salminus brasiliensis*

Infection site. Gills.

Type locality. Brazil, Paraná River below and above of the reservoir of Itaipu Hydroelectric Power Station, Guaira (24°04'48"S, 54°15'21"W).

Holotype. CHIOC 37647 a.

Paratypes. CHIOC 37606, 37635, 37637 a–c, 37638, 37640 a–b, 37644, 37645, 37646, 37647 b, 37650, 37651, 37653, 37655, 37670, 37672 a–c, 37673 a–b, 37675, 37687 a–b, 37690, 37695 a–c, 37700, 37702, 37703, 37704, 37708, 37710 a–b, 37712, 37723.

Reference. Cohen et al. (2012).

Jainus piava Karling, Bellay, Takemoto & Pavanelli, 2011

Type host. *Schizodon borellii* (Boulenger, 1900) (Osteichthyes: Anostomidae).

Infection site. Gill filaments.

Type locality. Brazil, upper Paraná River floodplain (22°50'–22°70'S, 53°15'–53°40'W).

Holotype. CHIOC 37235 a.

Paratypes. CHIOC 37235 b–c, 37236.

Reference. Karling et al. (2011a).

Kritskyia Kohn, 1990

Kritskyia annakobnae Boeger, Tanaka & Pavanelli, 2001

Type host. *Serrasalmus marginatus* Valenciennes, 1836

Infection site. Urinary bladder and ureters.

Type locality. Brazil, Paraná State, upper Paraná River, Baía River near Porto Rico.

Holotype. CHIOC 34243 a.

Paratypes. CHIOC 34243 b–m, 34244, 34245 a–b.

Remarks. Paratypes CHIOC 34244 and 34245 a–b collected from *S. spilopleura* Kner, 1858. Other paratypes deposited in the collections of INPA, HWML, MNHN and USNPC.

Reference. Boeger et al. (2001).

Kritskyia boegeri Takemoto, Lizama & Pavanelli, 2002

Type host. *Prochilodus lineatus*

Infection site. Urinary bladder.

Type locality. Brazil, upper Paraná River floodplain.

Holotype. CHIOC 34701.

Paratypes. CHIOC 34599, 34700.

Reference. Takemoto et al. (2002).

***Kritskyia eirasi* Guidelli, Takemoto & Pavanelli, 2003**

Type host. *Leporinus lacustris* Campos, 1945 (Osteichthyes: Anostomidae).

Infection site. Urinary bladder and ureters.

Type locality. Brazil, upper Paraná River floodplain (22°50'–22°70'S, 53°15'–53°40'W).

Holotype. CHIOC 36401.

Paratypes. CHIOC 36396, 36397, 36398 a–b, 36399, 36400.

Reference. Guidelli et al. (2003).

****Kritskyia moraveci* Kohn, 1990**

Type host. *Rhamdia quelen*

Infection site. Urinary bladder and ureters.

Type locality. Brazil, Rio Grande do Sul State, reservoir of the Hydroelectric Power of Passo Fundo, São Valentim (27°32'S, 52°44'W).

Holotype. CHIOC 32443 c.

Paratypes. CHIOC 32443 a–b, d–r, 32444 a–b.

Reference. Kohn (1990).

***Kritskyia salmini* Cepeda, Ceccarelli & Luque, 2011**

Type host. *Salminus brasiliensis*

Infection site. Urinary bladder.

Type locality. Brazil, Mato Grosso State, Pantanal wetlands, Cuiabá River (17°50'48"S, 57°24'6"W)

Holotype. CHIOC 37533 a.

Paratypes. CHIOC 37533 b–j.

Remarks. Other paratypes deposited in the INPA collection.

Reference. Cepeda et al. (2011).

Ligophorus* Euzet & Suriano, 1977**Ligophorus brasiliensis* Abdallah, Azevedo & Luque, 2009**

Type host. *Mugil liza* Valenciennes, 1836 (Osteichthyes: Mugilidae).

Infection site. Gill lamellae.

Type locality. Brazil, Rio de Janeiro State, Guandu River (22°48'32"S, 43°37'35"W).

Holotype. CHIOC 37180 a.

Paratypes. CHIOC 37180 b–d.

Reference. Abdallah et al. (2009).

***Ligophorus guanduensis* Abdallah, Azevedo & Luque, 2009**

Type host. *Mugil liza*

Infection site. Gill lamellae.

Type locality. Brazil, Rio de Janeiro State, Guandu River (22°48'32"S, 43°37'35"W).

Holotype. CHIOC 37181 a.

Paratypes. CHIOC 37181 b–d.

Reference. Abdallah et al. (2009).

***Ligophorus lizae* Abdallah, Azevedo & Luque, 2009**

Type host. *Mugil liza*

Infection site. Gill lamellae.

Type locality. Brazil, Rio de Janeiro State, Guandu River (22°48'32"S, 43°37'35"W).

Holotype. CHIOC 37178 a.

Paratype. CHIOC 37178 b.

Reference. Abdallah et al. (2009).

***Ligophorus tainhae* Abdallah, Azevedo & Luque, 2009**

Type host. *Mugil liza*

Infection site. Gill lamellae.

Type locality. Brazil, Rio de Janeiro State, Guandu River (22°48'32"S, 43°37'35"W).

Holotype. CHIOC 37179 a.

Paratypes. CHIOC 37179 b–d.

Reference. Abdallah et al. (2009).

***Marumbius* Boeger, Ferreira, Vianna & Patella, 2014**

***Marumbius amplexus* Boeger, Ferreira, Vianna & Patella, 2014**

Type host. *Characidium lanei*

Infection site. Gills.

Type locality. Brazil, Paraná State, Morretes, Marumbi River (25°29'27"S, 45°49'67"W).

Holotype. CHIOC 37897.

Paratype. CHIOC 37896.

Remarks. Other paratypes deposited in the collections of IPCAS and USNPC.

Reference. Boeger et al. (2014).

****Marumbius dorsivaginat* Boeger, Ferreira, Vianna & Patella, 2014**

Type host. *Characidium pterostictum* Gomes, 1947

Infection site. Gills.

Type locality. Brazil, Paraná State, Morretes, Marumbi River (25°29'27"S, 45°49'67"W).

Holotype. CHIOC 37893.

Paratypes. CHIOC 37884, 37885, 37886, 37887, 37888, 37889, 37890, 37891, 37892, 37894, 37895.

Remarks. Other paratypes deposited in the collections of IPCAS, HWML and USNPC.

Reference. Boeger et al. (2014).

Mexicana Caballero & Bravo-Hollis, 1959

***Mexicana anisotremum* Cezar, Paschoal & Luque, 2012**

Type host. *Anisotremus virginicus* (Linnaeus, 1758) (Osteichthyes: Haemulidae).

Infection site. Gills.

Type locality. Brazil, coastal zone of Rio de Janeiro State (21–23°S, 42–45°W).

Holotype. CHIOC 37767.

Paratypes. CHIOC 37768, 37769.

Remarks. Paratype CHIOC 37769 collected from *A. surinamensis* (Bloch, 1791).

Reference. Cezar et al. (2012).

***Mexicana atlantica* Luque, Amato & Takemoto, 1992**

Type host. *Haemulon steindachneri* (Jordan & Gilbert, 1882) (Osteichthyes: Haemulidae).

Infection site. Distal portion of gill filaments.

Type locality. Brazil, Rio de Janeiro State, Sepetiba Bay, Itacuruçá (22°51'S, 43°56'W).

Paratypes. CHIOC 33109, 33110.

Remarks. Holotype and other paratypes deposited in the USNM collection.

Reference. Luque et al. (1992).

***Mymarothecium* Kritsky, Boeger & Jégu, 1996**

***Mymarothecium boegeri* Cohen & Kohn, 2005**

Type host. *Colossoma macropomum* (Cuvier, 1816) (Osteichthyes: Serrasalminidae).

Infection site. Gills.

Type locality. Brazil, Ceará State, Pentecoste, Aquaria of the Research Center in Aquiculture "Rodolfo von Ihering, DNOCS".

Holotype. CHIOC 36453.

Paratypes. CHIOC 36454, 36455, 36456, 36457.

Reference. Cohen and Kohn (2005).

***Mymarothecium ianwhittingtoni* Leão, São Clemente & Cohen, 2015**

Type host. *Piaractus mesopotamicus*

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River, Toledo (24°44'29.0"S, 53°44'51.2"W).

Holotype. CHIOC 37906 a.

Paratypes. CHIOC 37906 b–d.

Remarks. Other paratypes deposited in the INPA collection.

Reference. Leão et al. (2015).

***Mymarothecium viatorum* Boeger, Piasecki & Sobocka, 2002**

Type host. *Piaractus brachypomus* (Cuvier, 1818)

Infection site. Gills.

Type locality. Poland, Szczecin, Odra River.

Holotype. CHIOC 35041.

Paratypes. CHIOC 35042 a–i.

Remarks. Other paratypes deposited in the collections of INPA, HWML and USNPC.

Reference. Boeger et al. (2002).

***Notozothecium* Boeger & Kritsky, 1988**

***Notozothecium lamotheargumedi* Cohen & Kohn, 2008**

Type host. *Rhaphiodon vulpinus* Spix & Agassiz, 1829 (Osteichthyes: Cynodontidae).

Infection site. Gills.

Type locality. Brazil, Paraná State, inside and outside of the reservoir of Itaipu Hydroelectric Power Station, Foz do Iguaçu (25°32'52"S, 54°35'17"W).

Holotype. CHIOC 36895.

Paratypes. CHIOC 36896 a–b, 36897 a–d, 36898, 36899 a–d, 36900 a–s, 36901 a–e.

Remarks. Paratypes collected in different localities of the reservoir of Itaipu Hydroelectric Power Station: CHIOC 36897 a–d and 36898 (Santa Helena, 24°51'37"S, 54°19'58"W), and 36899 a–d, 36900 a–d and 36901 a–e (Guaíra, 24°04'48"S, 54°15'21"W).

Reference. Cohen and Kohn (2008b).

Parancylodiscoides Caballero & Bravo-Hollis, 1960

Parancylodiscoides caballerobravorum Cezar, Luque & Amato, 1999

Type host. *Chaetodipterus faber*

Infection site. Gill filaments.

Type locality. Brazil, coastal zone of Rio de Janeiro State (21–23°S, 41–45°W).

Holotype. CHIOC 34001 a.

Paratypes. CHIOC 34001 b–d.

Remarks. Collection numbers were not cited in the original description. Other paratypes deposited in CNHE. Kritsky (2012) considered the species to be a synonym of *Parancylodiscoides longiphallus* (MacCallum, 1915).

References. Cezar et al. (1999), Kritsky (2012).

Pavanelliella Kritsky & Boeger, 1998

Pavanelliella laertei Aguiar, Ceccarelli & Luque, 2011

Type host. *Pimelodus microstoma* Steindachner, 1877 (= *Pimelodus heraldoi* Azpelicue-ta, 2001) (Osteichthyes: Pimelodidae).

Infection site. Nasal cavity.

Type locality. Brazil, São Paulo State, Pirassununga, Cachoeira de Emas, Mogi Guaçu River (21°58'S, 47°26'W).

Holotype. CHIOC 37561.

Paratypes. CHIOC 37562, 37563, 37564, 37565, 37566.

Reference. Aguiar et al. (2011).

Pavanelliella takemotoi Aguiar, Ceccarelli & Luque, 2011

Type host. *Pimelodus maculatus* Lacepède, 1803

Infection site. Nasal cavity.

Type locality. Brazil, São Paulo State, Pirassununga, Cachoeira de Emas, Mogi Guaçu River (21°58'S, 47°26'W).

Holotype. CHIOC 37567 a.

Paratypes. CHIOC 37567 b, 37568 a–f, 37569, 37570 a–b, 37571, 37572, 37573, 37574, 37575 a–b, 37576 a–b, 37577 a–b, 37578, 37579 a–b, 37580, 37582 a–c.

Reference. Aguiar et al. (2011).

***Philocorydoras* Suriano, 1986**

***Philocorydoras longus* Yamada, Brandão, Yamada & Silva, 2015**

Type host. *Hoplosternum littorale* (Hancock, 1828) (Osteichthyes: Callichthyidae).

Infection site. Gills.

Type locality. Brazil, São Paulo State, Taquarituba, upper Paranapanema River, Jurumirim Reservoir (23°12'17"S, 49°13'19"W).

Holotype. CHIOC 38205.

Paratype. CHIOC 38206.

Reference. Yamada et al. (2015).

***Protogyrodactylus* Johnston & Tiegs, 1922**

***Protogyrodactylus ethiopicus* Boeger, Diamaka, Pariselle & Patella, 2012**

Type host. *Gerres nigri* Günther, 1859 (Osteichthyes: Gerreidae).

Infection site. Gills.

Type locality. Senegal, Bamboung, Sine–Saloum River (13°49'30.5"N, 16°31'44"W).

Paratypes. CHIOC 37744 a–n.

Remarks. Holotype deposited in the MNHN collection. Other paratypes deposited in MNHN and USNPC.

Reference. Boeger et al. (2012).

***Protogyrodactylus kritskyi* Boeger, Diamaka, Pariselle & Patella, 2012**

Type host. *Gerres nigri*

Infection site. Gills.

Type locality. Senegal, Bamboung, Sine–Saloum River (13°49'30.5"N, 16°31'44"W).

Paratypes. CHIOC 37743 a–k.

Remarks. Holotype deposited in the MNHN collection. Other paratypes deposited in MNHN and USNPC.

Reference. Boeger et al. (2012).

Protorhinoxenus* Domingues & Boeger, 2002***Protorhinoxenus prochilodi* Domingues & Boeger, 2002**

Type host. *Prochilodus lineatus*

Infection site. Gill filaments.

Type locality. Brazil, Paraná State, metropolitan area of Curitiba, Campina Grande do Sul, reservoir of Capivari–Cachoeira.

Holotype. CHIOC 34542.

Paratype. CHIOC 34543.

Remarks. Other paratypes deposited in the collections of INPA and IPCR.

Reference. Domingues and Boeger (2002).

Pseudempleurosoma* Yamaguti, 1965**Pseudempleurosoma gibsoni* Santos, Mourão & Cárdenas, 2001**

Type host. *Paralonchurus brasiliensis* (Steindachner, 1875) (Osteichthyes: Sciaenidae).

Infection site. Oesophagus.

Type locality. Brazil, São Paulo State, off Ubatuba (23°35'S, 045°06'W).

Holotype. CHIOC 34337 a.

Paratypes. CHIOC 34337 b–e, 34338 a–b.

Reference. Santos et al. (2001).

***Pseudempleurosoma guanabarensis* Carvalho & Luque, 2012**

Type host. *Trichiurus lepturus*

Infection site. Oesophagus.

Type locality. Brazil, Rio de Janeiro State, Guanabara Bay (23°1'52"S, 43°11'56"W).

Holotype. CHIOC 37389.

Paratypes. CHIOC 37390 a–c, 37391.

Reference. Carvalho and Luque (2012).

Rhinonastes* Kritsky, Thatcher & Boeger, 1988**Rhinonastes curimatae* Monteiro & Brasil-Sato, 2014**

Type host. *Prochilodus argenteus*

Infection site. Nasal cavity.

Type locality. Brazil, Minas Gerais State, São Francisco River near Três Marias (18°12'32"S, 45°14'41"W).

Holotype. CHIOC 37953 a.

Paratypes. CHIOC 37953 b–c, 37954 a–f, 37955.

Reference. Monteiro and Brasil-Sato (2014b).

***Rhinoxenus* Kritsky, Thatcher & Boeger, 1988**

***Rhinoxenus anaclaudiae* Domingues & Boeger, 2005**

Type host. *Triportheus* cf. *nematurus* (Kner, 1858)

Infection site. Nasal cavity.

Type locality. Brazil, Mato Grosso do Sul State, Miranda River, Passo do Lontra.

Holotype. CHIOC 36300.

Paratypes. CHIOC 36301 a–e.

Remarks. Other paratypes deposited in INPA, MZUSP, MNHN and USNPC.

Reference. Domingues and Boeger (2005).

***Rhinoxenus bulbovaginatus* Boeger, Domingues & Pavanelli, 1995**

Type host. *Salminus brasiliensis*

Infection site. Nasal cavities.

Type locality. Brazil, Paraná State, Paraná River basin near Porto Rico.

Holotype. CHIOC 33269 a.

Paratypes. CHIOC 33269 b–e.

Remarks. Other paratypes deposited in the collections of HWML and USNM.

Reference. Boeger et al. (1995a).

***Rhinoxenus curimbatae* Domingues & Boeger, 2005**

Type host. *Prochilodus* cf. *lineatus*

Infection site. Nasal cavity.

Type locality. Brazil, Paraná State, metropolitan area of Curitiba, Campina Grande do Sul, reservoir of Capivari–Cachoeira.

Holotype. CHIOC 36303.

Paratypes. CHIOC 36304 a–b.

Remarks. Other paratypes deposited in the collections of INPA and MNHN.

Reference. Domingues and Boeger (2005).

***Rhinoxenus euryxenus* Domingues & Boeger, 2005**

Type host. *Serrasalmus marginatus*

Infection site. Nasal cavity.

Type locality. Brazil, Mato Grosso do Sul State, Paraná River, Medalha Bay.

Holotype. CHIOC 36293.

Paratypes. CHIOC 36294 a–g.

Remarks. Other paratypes deposited in the collections of INPA and MNHN.

Reference. Domingues and Boeger (2005).

***Rhinoxenus guianensis* Domingues & Boeger, 2005**

Type host. *Curimata cyprinoides* (Linnaeus, 1766) (Osteichthyes: Curimatidae).

Infection site. Nasal cavity.

Type locality. French Guiana, Degrad Forian, Iracoubo.

Holotype. CHIOC 36305.

Paratypes. CHIOC 36306 a–d.

Remarks. Other paratypes deposited in the collections of INPA, MNHN and USNPC.

Reference. Domingues and Boeger (2005).

Sciadicleithrum* Kritsky, Thatcher & Boeger, 1989**Sciadicleithrum araguariensis* Paschoal, Scholz, Tavares-Dias & Luque, 2016**

Type host. *Crenicichla labrina* (Spix & Agassiz, 1831) (Osteichthyes: Cichlidae).

Infection site. Gills.

Type locality. Brazil, Amapá State, Ferreira Gomes, Araguari River (0°52'N, 51°12'W).

Holotype. CHIOC 38091 a.

Paratypes. CHIOC 38091 b–d.

Remarks. Other paratype deposited in the IPCA collection.

Reference. Paschoal et al. (2016).

***Sciadicleithrum edgari* Paschoal, Scholz, Tavares-Dias & Luque, 2016**

Type host. *Satanoperca jurupari* (Heckel, 1840) (Osteichthyes: Cichlidae).

Infection site. Gills.

Type locality. Brazil, Amapá State, Ferreira Gomes, Araguari River (0°52'N, 51°12'W).

Holotype. CHIOC 38092 a.

Paratypes. CHIOC 38092 b–c.

Remarks. Other paratype deposited in the IPCA collection.

Reference. Paschoal et al. (2016).

***Sciadicleithrum frequens* Bellay, Takemoto, Yamada & Pavanelli, 2008**

Type host. *Geophagus brasiliensis* (Quoy & Gaimard, 1824) (Osteichthyes: Cichlidae).

Infection site. Gills.

Type locality. Brazil, Paraná State, Ivaí River basin, Mourão Reservoir (24°02'S, 52°22'W).

Holotype. CHIOC 36924.

Paratypes. CHIOC 36921 a–c, 36922, 36923.

Remarks. Paratypes collected in other reservoirs: CHIOC 36921 a–c (Iguaçu River basin, Iraí, 25°25'S, 49°06'W) and 36922 (Piriqui River basin, Melissa, 24°48'S, 53°18'W). Other paratype deposited in the BMNH collection.

Reference. Bellay et al. (2008).

***Sciadicleithrum guanduensis* Carvalho, Tavares & Luque, 2008**

Type host. *Geophagus brasiliensis*

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Seropédica, Guandu River (22°48'32"S, 43°37'35"W).

Holotype. CHIOC 36989 a.

Paratypes. CHIOC 36989 b–f.

Reference. Carvalho et al. (2008).

***Sciadicleithrum joanae* Yamada, Takemoto, Bellay & Pavanelli, 2009**

Type host. *Crenicichla niederleinii* Holmberg, 1891

Infection site. Gill filaments.

Type locality. Brazil, Paraná, Paraná River (22°50'–22°70'S, 53°15'–53°40'W).

Holotype. CHIOC 37161.

Paratypes. CHIOC 37162, 37163 a–b, 37164.

Reference. Yamada et al. (2009).

***Sciadicleithrum jurupari* Melo, Santos & Santos, 2012**

Type host. *Satanoperca jurupari*

Infection site. Gills.

Type locality. Brazil, Pará State, Belém, Guamá River (01°27'21"S, 48°30'14"W).

Holotype. CHIOC 37766 a.

Paratypes. CHIOC 37766 b–f.

Reference. Melo et al. (2012).

***Sciadicleithrum kritskyi* Bellay, Takemoto, Yamada & Pavanelli, 2009**

Type host. *Geophagus proximus* (Castelnau, 1855)

Infection site. Gill filaments.

Type locality. Brazil, Paraná State, upper Paraná River floodplain, Porto Rico (22°50'–22°70'S, 53°15'–53°40'W).

Holotype. CHIOC 37188.

Paratypes. CHIOC 37189, 37190, 37191.

Reference. Bellay et al. (2009).

***Sciadicleithrum paranaensis* Bellay, Takemoto, Yamada & Pavanelli, 2009**

Type host. *Geophagus proximus*

Infection site. Gill filaments.

Type locality. Brazil, Paraná State, upper Paraná River floodplain, Porto Rico (22°50'–22°70'S, 53°15'–53°40'W).

Holotype. CHIOC 37183.

Paratypes. CHIOC 37184, 37185, 37186, 37187.

Reference. Bellay et al. (2009).

***Sciadicleithrum satanopercae* Yamada, Takemoto, Bellay & Pavanelli, 2009**

Type host. *Satanoperca pappaterra* (Heckel, 1840)

Infection site. Gill filaments.

Type locality. Brazil, Paraná State, upper Paraná River floodplain (22°50'–22°70'S, 53°15'–53°40'W).

Holotype. CHIOC 37165 a.

Paratypes. CHIOC 37165 b, 37166 a–b, 37167.

Reference. Yamada et al. (2009).

***Susanlimae* Boeger, Pariselle & Patella, 2015**

****Susanlimae ianwhittingtoni* Boeger, Pariselle & Patella, 2015**

Type host. *Pseudeutropius moolenburghae* Weber & de Beaufort, 1913 (Osteichthyes: Schilbeidae).

Infection site. Gill rakers.

Type locality. Indonesia, Jambi Province, Pemayang Subdistrict, Batang Hari River, near Kubu Kandang village (1°36'17.51"S, 103°19'16.65"E).

Holotype. CHIOC 38202 a.

Paratypes. CHIOC 38202 b–c.

Remarks. Two paratypes deposited in MNHN and one paratype kept in the private collection of Antoine Pariselle.

Reference. Boeger et al. (2015).

***Telethecium* Kritsky, Van Every & Boeger, 1996**

****Telethecium nasalis* Kritsky, Van Every & Boeger, 1996**

Type host. *Osteoglossum bicirrhosum* (Vandelli, 1829) (Osteichthyes: Osteoglossidae).

Infection site. Nasal cavity.

Type locality. Brazil, Amazonas State, Furo do Catalão near Manaus.

Holotype. CHIOC 33639.

Remarks. Paratypes deposited in HWML and USNPC.

Reference. Kritsky et al. (1996).

***Telethecium paniculum* Kritsky, Van Every & Boeger, 1996**

Type host. *Pellona flavipinnis* (Valenciennes, 1837) (Osteichthyes: Pristigasteridae).

Infection site. Nasal cavity.

Type locality. Brazil, Amazonas State, Solimões River, Marchantaria Island near Manaus.

Holotype. CHIOC 33640.

Remarks. Paratypes deposited in HWML and USNPC.

Reference. Kritsky et al. (1996).

Tereancistrum* Kritsky, Thatcher & Kayton, 1980**Tereancistrum arcuatus* Cohen, Kohn & Boeger, 2012**

Type host. *Salminus brasiliensis*

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River below and above of the reservoir of Itaipu Hydroelectric Power Station, Guaíra (24°04'48"S, 54°15'21"W).

Holotype. CHIOC 37628.

Paratypes. CHIOC 37609, 37665, 37674 a–b, 37678.

Reference. Cohen et al. (2012).

***Tereancistrum curimba* Lizama, Takemoto & Pavanelli, 2004**

Type host. *Prochilodus lineatus*

Infection site. Gills.

Type locality. Brazil, upper Paraná River floodplain (22°43'S, 53°10'W).

Holotype. CHIOC 36224.

Paratypes. CHIOC 36225, 36226, 36227 a–b, 36228.

Remarks. Other paratypes deposited in BMNH and USNPC.

Reference. Lizama et al. (2004).

***Tereancistrum paranaensis* Karling, Lopes, Takemoto & Pavanelli, 2014**

Type host. *Schizodon borellii*

Infection site. Gill filaments.

Type locality. Brazil, upper Paraná River floodplain (22°50'–22°70'S, 53°15'–53°40'W).

Holotype. CHIOC 37868.

Paratypes. CHIOC 37866, 37867.

Reference. Karling et al. (2014).

***Tereancistrum pirassununguensis* Cepeda, Ceccarelli & Luque, 2012**

Type host. *Prochilodus lineatus*

Infection site. Gills.

Type locality. Brazil, São Paulo State, Pirassununga, Mogi Guaçu River (21°55'32.49"S, 47°22'13.76"W).

Holotype. CHIOC 37816 a.

Paratypes. CHIOC 37816 b–j.

Reference. Cepeda et al. (2012).

***Tereancistrum toksonum* Lizama, Takemoto & Pavanelli, 2004**

Type host. *Prochilodus lineatus*

Infection site. Gills.

Type locality. Brazil, upper Paraná River floodplain (22°43'S, 53°10'W).

Holotype. CHIOC 36229.

Paratypes. CHIOC 36230 a–b, 36231.

Remarks. Other paratypes deposited in BMNH and USNPC.

Reference. Lizama et al. (2004).

***Trinibaculum* Kritsky, Thatcher & Kayton, 1980**

***Trinibaculum rotundus* Karling, Lopes, Takemoto & Pavanelli, 2011**

Type host. *Schizodon borellii*

Infection site. Gill filaments.

Type locality. Brazil, upper Paraná River floodplain (22°50'–22°70'S, 53°15'–53°40'W).

Holotype. CHIOC 37529 a.

Paratypes. CHIOC 37529 b–e.

Reference. Karling et al. (2011b).

***Trinigyrus* Hanek, Molnar & Fernando, 1974**

***Trinigyrus mourei* Boeger & Belmont-Jégu, 1994**

Type host. *Squaliforma emarginata* (Valenciennes, 1840) [= *Hypostomus emarginatus*] (Osteichthyes: Loricariidae).

Infestation site. Body surface.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Holotype. CHIOC 33052 a.

Paratypes. CHIOC 33052 b–d.

Remarks. Other paratypes deposited in the collections of HWML and USNM.

Reference. Boeger and Belmont-Jégu (1994).

***Unilatus* Mizelle & Kritsky, 1967**

***Unilatus irae* Branches & Domingues, 2014**

Type host. *Leporacanthicus galaxias* Isbrücker & Nijssen, 1989 (Osteichthyes: Loricariidae).

Infection site. Gills.

Type locality. Brazil, Pará State, Guamá River, Capitão Poço (1°34.465'S, 47°02.063'W).

Holotype. CHIOC 37861 a.

Paratypes. CHIOC 37861 b–k.

Remarks. Other paratypes deposited in INPA, MPEG and USNPC.

Reference. Branches and Domingues (2014).

Urocleidoides Mizelle & Price, 1964

Urocleidoides aimarai Moreira, Scholz & Luque, 2015

Type host. *Hoplias aimara* (Valenciennes, 1847) (Osteichthyes: Erythrinidae).

Infection site. Gills.

Type locality. Brazil, Pará State, Xingu River around Altamira (3°12'S, 52°12'W).

Holotype. CHIOC 38001 a.

Paratypes. CHIOC 38001 b–d.

Remarks. Two paratypes deposited in the IPCAS collection.

Reference. Moreira et al. (2015).

Urocleidoides brasiliensis Rosim, Mendoza-Franco & Luque, 2011

Type host. *Hoplias malabaricus* (Bloch, 1794)

Infection site. Gill lamellae.

Type locality. Brazil, Mato Grosso State, Cuiabá (16°58'N, 56°25'W).

Holotype. CHIOC 37470 a.

Paratypes. CHIOC 37470 b–f.

Reference. Rosim et al. (2011).

Urocleidoides cuiabai Rosim, Mendoza-Franco & Luque, 2011

Type host. *Hoplias malabaricus*

Infection site. Gill lamellae.

Type locality. Brazil, Mato Grosso State, Cuiabá (16°58'N, 56°25'W).

Holotype. CHIOC 37469 a.

Paratypes. CHIOC 37469 b–e.

Remarks. Other paratypes deposited in CNHE.

Reference. Rosim et al. (2011).

***Urocleidoides malabaricus* Rosim, Mendoza-Franco & Luque, 2011**

Type host. *Hoplias malabaricus*

Infection site. Gill lamellae.

Type locality. Brazil, Mato Grosso State, Cuiabá (16°58'N, 56°25'W).

Holotype. CHIOC 37466 a.

Paratypes. CHIOC 37466 b–c.

Reference. Rosim et al. (2011).

***Urocleidoides naris* Rosim, Mendoza-Franco & Luque, 2011**

Type host. *Hoplias malabaricus*

Infection site. Nasal cavities.

Type locality. Brazil, Mato Grosso State, Cuiabá (16°58'N, 56°25'W).

Holotype. CHIOC 37468 a.

Paratypes. CHIOC 37468 b–k.

Remarks. Other paratypes deposited in CNHE.

Reference. Rosim et al. (2011).

***Urocleidoides xinguensis* Moreira, Scholz & Luque, 2015**

Type host. *Hoplias aimara*

Infection site. Gills.

Type locality. Brazil, Pará State, Xingu River around Altamira (3°12'S, 52°12'W).

Holotype. CHIOC 38002 a.

Paratypes. CHIOC 38002 b–d.

Remarks. Two paratypes deposited in the IPCAS collection.

Reference. Moreira et al. (2015).

***Whittingnocotyle* Santos Neto, Rodrigues & Domingues, 2015**

*** *Whittingnocotyle caetei* Santos Neto, Rodrigues & Domingues, 2015**

Type host. *Hoplerythrinus unitaeniatus* (Agassiz, 1829) (Osteichthyes: Erythrinidae).

Infection site. Gills.

Type locality. Brazil, Pará State, Augusto Corrêa, Caeté River (01°3'58.21"S, 46°40'3.65"W).

Holotype. CHIOC 38012 a.

Paratypes. CHIOC 38012 b–d.

Remarks. Other paratypes deposited in INPA and MPEG.

Reference. Santos Neto et al. (2015).

***Whittingnocotyle jeju* Santos Neto, Rodrigues & Domingues, 2015**

Type host. *Hoplerythrinus unitaeniatus*

Infection site. Gills.

Type locality. Brazil, Pará State, Irituia, Guamá River (01°51'59.8"S, 47°24'17.2"W).

Holotype. CHIOC 38014 a.

Paratypes. CHIOC 38014 b–e.

Remarks. Other paratypes deposited in INPA and MPEG.

Reference. Santos Neto et al. (2015).

Diplectanidae Monticelli, 1903***Acleotrema* Johnston & Tiegs, 1922*****Acleotrema lamothei* Santos, Bianchi & Gibson, 2008**

Type host. *Kyphosus incisor* (Cuvier, 1831) (Osteichthyes: Kyphosidae).

Infection site. Gills.

Type locality. Brazil, off Rio de Janeiro State, Ilha Grande Bay (23°00'–23°40'S, 44°00'–44°40'W)

Holotype. CHIOC 36926 a.

Paratypes. CHIOC 36926 b–d.

Reference. Santos et al. (2008).

Anoplectanum* Boeger, Fehlaue & Marques, 2006***Anoplectanum baptorodynatum* Boeger, Fehlaue & Marques, 2006**

Type host. *Petilipinnis grunniens* (Jardine & Schomburgk, 1843) (Osteichthyes: Sciaenidae).

Infection site. Gills.

Type locality. Brazil, Tocantins State, Tocantins River, Porto Nacional (10°41'45"S, 48°25'54"W).

Paratypes. CHIOC 36504 a–b.

Remarks. Paratypes from CHIOC collected in the Tocantins River, Santa Helena (Tocantins State). Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, MNHN and USNPC.

Reference. Boeger et al. (2006).

***Anoplectanum microsoma* Boeger, Fehlaue & Marques, 2006**

Type host. *Pachyurus junki*

Infection site. Gills.

Type locality. Brazil, Tocantins State, Tocantins River, Santa Helena.

Paratypes. CHIOC 36503 a–b.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, MNHN and USNPC.

Reference. Boeger et al. (2006).

***Darwinoplectanum* Domingues, Diamanka & Pariselle, 2011**

***Darwinoplectanum amphiatlanticus* Domingues, Diamanka & Pariselle, 2011**

Type host. *Eucinostomus melanopterus* (Bleeker, 1863) (Osteichthyes: Gerreidae).

Infection site. Gills.

Type locality. Senegal, Sine Saloum, Bamboung (13°49'30.5"N, 16°31'44"W).

Holotype. CHIOC 37546 a.

Paratypes. CHIOC 37546 b–d.

Remarks. Other paratypes deposited in INPA, MPEG and USNPC.

Reference. Domingues et al. (2011).

****Darwinoplectanum figueiredoi* Domingues, Diamanka & Pariselle, 2011**

Type host. *Eucinostomus argenteus* Baird & Girard, 1855

Infection site. Gills.

Type locality. Brazil, Paraná State, Pontal do Paraná (25°35'28.27"S, 48°21'10.70"W).

Holotype. CHIOC 37545 a.

Paratypes. CHIOC 37545 b–f.

Remarks. Other paratypes deposited in INPA, MPEG and USNPC.

Reference. Domingues et al. (2011).

***Diplectanum* Diesing 1858**

***Diplectanum copiosum* Boeger, Fehlaue & Marques, 2006**

Type host. *Pachyurus junki*

Infection site. Gills.

Type locality. Brazil, Tocantins State, Tocantins River, Santa Helena.

Paratypes. CHIOC 36501 a–m.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP and USNPC.

Reference. Boeger et al. (2006).

Diplectanum monticelli Domingues & Boeger, 2003

Type host. *Cynoscion leairchus* (Cuvier, 1830) (Osteichthyes: Sciaenidae).

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Itacuruçá (22°55'S, 43°55'W).

Holotype. CHIOC 34962.

Paratypes. CHIOC 34963 a–b, 34964 a–c.

Remarks. Other paratypes deposited in HWML and USNPC.

Reference. Domingues and Boeger (2003).

Diplectanum squamatum Santos, Timi & Gibson, 2002

Type host. *Cynoscion guatucupa* (Cuvier, 1830)

Infection site. Gills.

Type locality. Argentina, off Mar del Plata (38°08'S, 57°32'W).

Holotype. CHIOC 34538 a.

Paratypes. CHIOC 34538 b–d.

Remarks. Other paratype deposited in the BMNH collection.

Reference. Santos et al. (2002).

Pseudorhabdosynochus Yamaguti, 1958

Pseudorhabdosynochus jeanloui Knoff, Cohen, Cárdenas, Cárdenas-Callirgos & Gomes, 2015

Type host. *Paranthias colonus* (Valenciennes, 1846) (Osteichthyes: Serranidae).

Infection site. Gill arches.

Type locality. Peru, Lima, off Chorrillos (12°13'25"S, 76°43'49"W).

Holotype. CHIOC 38016 a.

Paratypes. CHIOC 38016 b–i.

Remarks. Other paratype deposited in the MNHN collection.

Reference. Knoff et al. (2015).

***Pseudorhabdosynochus sulamericanus* Santos, Buchmann & Gibson, 2000**

Type host. *Hyporthodus niveatus* (Valenciennes, 1828) [= *Epinephelus niveatus*] (Osteichthyes: Serranidae).

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Rio de Janeiro, off Cagarras Islands (23°02'S, 43°12'W).

Holotype. CHIOC 33985 a.

Paratypes. CHIOC 33985 b–i.

Remarks. Other paratype deposited in the BMNH collection.

Reference. Santos et al. (2000).

***Rhabdosynochus* Mizelle & Blatz, 1941**

***Rhabdosynochus bargisi* Kritsky, Boeger & Robaldo, 2001**

Type host. *Centropomus undecimalis* (Bloch, 1792) (Osteichthyes: Centropomidae).

Infection site. Gills.

Type locality. Brazil, Pernambuco State, Itamaracá, earthen ponds (7°41'S, 34°53'W).

Paratypes. CHIOC 34298 a–d.

Remarks. Holotype deposited in the INPA collection. Other paratypes deposited in INPA, MPM, HWML and USNPC.

Reference. Kritsky et al. (2001).

***Rhabdosynochus hudsoni* Kritsky, Boeger & Robaldo, 2001**

Type host. *Centropomus undecimalis*

Infection site. Gills.

Type locality. Brazil, Pernambuco State, Itamaracá, earthen ponds (7°41'S, 34°53'W).

Paratypes. CHIOC 34297 a–d.

Remarks. Holotype deposited in the INPA collection. Other paratypes deposited in INPA, MPM, HWML and USNPC.

Reference. Kritsky et al. (2001).

***Spinomatrix* Boeger, Fehlaue & Marques, 2006**

****Spinomatrix penteormos* Boeger, Fehlaue & Marques, 2006**

Type host. *Pachyurus adpersus* Steindachner, 1879

Infection site. Gills.

Type locality. Brazil, Minas Gerais State, Vau-Açú, Piranga River, Cachoeirinha da Brecha downstream (20°32'S, 42°57'W).

Paratypes. CHIOC 36502 a–f.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, MNHN, HWML and USNPC.

Reference. Boeger et al. (2006).

Gyrodactylidae Van Beneden & Hesse, 1863

***Diechodactylus* Vianna, Boeger & Silva-Souza, 2008**

***Diechodactylus joaberi* Vianna, Boeger & Silva-Souza, 2008**

Type host. *Gymnotus carapo* (Linnaeus, 1758) (Osteichthyes: Gymnotidae).

Infestation site. Body surface.

Type locality. Brazil, São Paulo State, São Carlos, Córrego do Feijão stream (22°06'10.7"S, 47°44'36.7"W).

Holotype. CHIOC 36854 a.

Paratypes. CHIOC 36854 b–e.

Remarks. Other paratypes deposited in INPA and USNPC.

Reference. Vianna et al. (2008).

***Gyrodactylus* Nordmann, 1832**

***Gyrodactylus anisopharynx* Popazoglo & Boeger, 2000**

Type host. *Corydoras paleatus* (Jenyns, 1842) (Osteichthyes: Callichthyidae).

Infestation site. Body surface.

Type locality. Brazil, Paraná State, Piraquara, Piraquara River (25°29'59"S, 49°02'40"W).

Holotype. CHIOC 34215.

Paratypes. CHIOC 34217 a–d, 34218 a–b, 34219, 34220, 34221 b, g–j, 34222.

Remarks. Other paratypes deposited in IPCR, MNHN, HWML and USNPC. CHIOC 34216, 34221 a, c–f and 32223 were cited as paratypes in the original description, but they are paratypes of *G. corydori* Bueno-Silva & Boeger (2009).

References. Popazoglo and Boeger (2000), Bueno-Silva and Boeger (2009).

***Gyrodactylus carolinae* Boeger, Ferreira, Vianna & Patella, 2014**

Type host. *Characidium lanei*

Infestation site. Body surface.

Type locality. Brazil, Paraná State, Morretes, Marumbi River (25°29'27"S, 45°49'67"W).

Holotype. CHIOC 37880.

Paratypes. CHIOC 37875, 37876, 37877, 37878, 37879, 37900.

Remarks. Other paratypes deposited in IPCAS, HWML and USNPC.

Reference. Boeger et al. (2014).

***Gyrodactylus corydori* Bueno-Silva & Boeger, 2009**

Type host. *Corydoras paleatus*

Infestation site. Body surface.

Type locality. Brazil, Paraná State, São José dos Pinhais, Miringuava River (25°38'06"S, 49°05'07"W).

Paratypes. CHIOC 34216, 34221 a, c–f, 34223 a–b, 36911, 36912.

Remarks. Paratypes from CHIOC collected in the Piraquara River (25°29'59"S, 49°02'40"W), Piraquara (Paraná State). Holotype deposited in MZUSP. Other paratypes deposited in MZUSP, MNHN, IPCR, HWML and USNPC.

Reference. Bueno-Silva and Boeger (2009).

***Gyrodactylus geophagensis* Boeger & Popazoglo, 1995**

Type host. *Geophagus brasiliensis*

Infestation site. Body surface.

Type locality. Brazil, Rio de Janeiro State, Itaguaí, Da Guarda River.

Holotype. CHIOC 33144 a.

Paratypes. CHIOC 33144 b–e

Remarks. Other paratypes deposited in the collections of HWML and USNM.

Reference. Boeger and Popazoglo (1995).

***Gyrodactylus inesperatus* Boeger, Ferreira, Vianna & Patella, 2014**

Type host. *Characidium* sp.

Infestation site. Body surface.

Type locality. Brazil, São Paulo State, Ribeirão Bonito, Das Almas River (24°8'52"S, 48°20'52"W).

Holotype. CHIOC 37869.

Paratypes. CHIOC 37870, 37871, 37872, 37873, 37874.

Remarks. Other paratypes deposited in IPCAS, HWML and USNPC.

Reference. Boeger et al. (2014).

***Gyrodactylus samirae* Popazoglo & Boeger, 2000**

Type host. *Corydoras ehrhardti* Steindachner, 1910

Infestation site. Body surface.

Type locality. Brazil, Paraná State, Piraquara, Piraquara River.

Holotype. CHIOC 34226 a.

Paratypes. CHIOC 34226 b, 34227, 34228, 34229 a–g.

Remarks. Other paratypes deposited in IPCR, MNHN, HWML and USNPC.

Reference. Popazoglo and Boeger (2000).

***Gyrodactylus trairae* Boeger & Popazoglo, 1995**

Type host. *Hoplias* aff. *malabaricus*

Infestation site. Body surface.

Type locality. Brazil, Rio de Janeiro State, Nova Iguaçu, Guandu River.

Holotype. CHIOC 33215 a.

Paratypes. CHIOC 33215 b–i.

Remarks. Other paratypes deposited in the collections of HWML and USNM.

Reference. Boeger and Popazoglo (1995).

***Hiperopletes* Boeger, Kritsky & Belmont-Jégu, 1994**

****Hiperopletes malmbergi* Boeger, Kritsky & Belmont-Jégu, 1994**

Type host. *Rhineloricaria* sp. (Osteichthyes: Loricariidae).

Infestation site. Body surface.

Type locality. Brazil, Amazonas State, Manaus, Candiru stream.

Holotype. CHIOC 33050 a.

Paratypes. CHIOC 33050 b–l.

Remarks. Other paratypes deposited in the collections of HWML and USNM.

Reference. Boeger et al. (1994).

***Nothogyrodactylus* Kritsky & Boeger, 1991**

***Nothogyrodactylus amazonicus* Kritsky & Boeger, 1991**

Type host. *Ancistrus* sp. (Osteichthyes: Loricariidae).

Infestation site. Skin.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Paratype. CHIOC 32706.

Remarks. Holotype deposited in the INPA collection. Other paratypes deposited in BMNH, HWML, USNM and ZIAC.

Reference. Kritsky and Boeger (1991).

****Nothogyrodactylus clavatus* Kritsky & Boeger, 1991**

Type host. *Ancistrus* sp.

Infestation site. Skin.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Paratype. CHIOC 32705.

Remarks. Holotype deposited in the INPA collection. Other paratypes deposited in BMNH, HWML, USNM and ZIAC.

Reference. Kritsky and Boeger (1991).

***Nothogyrodactylus plaesiophallus* Kritsky & Boeger, 1991**

Type host. *Ancistrus* sp.

Infestation site. Skin.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Paratype. CHIOC 32707.

Remarks. Holotype deposited in the INPA collection. Other paratypes deposited in BMNH, HWML, USNM and ZIAC.

Reference. Kritsky and Boeger (1991).

***Phanerothecium* Kritsky & Thatcher, 1977**

***Phanerothecium harrisi* Kritsky & Boeger, 1991**

Type host. *Hypostomus plecostomus* (Linnaeus, 1758) [= *Plecostomus plecostomus*] (Osteichthyes: Loricariidae).

Infestation site. Skin.

Type locality. Brazil, Amazonas State, Manaus, Bairro São Jorge.

Paratype. CHIOC 32704.

Remarks. Holotype deposited in the INPA collection. Other paratypes deposited in BMNH, HWML, USNM and ZIAC.

Reference. Kritsky and Boeger (1991).

***Phanerothecium spinatus* Boeger, Kritsky & Belmont-Jégu, 1994**

Type host. *Hypostomus punctatus* Valenciennes, 1840 (Osteichthyes: Loricariidae).

Infestation site. Body surface.

Type locality. Brazil, Rio de Janeiro State, Nova Iguaçu, Guandú River.

Holotype. CHIOC 33051 a.

Paratypes. CHIOC 33051 b–k.

Remarks. Other paratypes deposited in the collections of HWML and USNM.

Reference. Boeger et al. (1994).

Polyclithrum* Rogers, 1967**Polyclithrum boegeri* Ernst, Whittington & Jones, 2000**

Type host. *Mugil liza* (= *Mugil platanus* Günther, 1880)

Infestation site. Body washings.

Type locality. Brazil, Rio de Janeiro State, Itaguaí, Da Guarda River.

Holotype. CHIOC 33988 a.

Paratype. CHIOC 33988 b.

Remarks. Other paratypes deposited in the QM collection.

Reference. Ernst et al. (2000).

Monocotylidae Taschenberg, 1879***Heterocotyle* Scott, 1904*****Heterocotyle sulamericana* Santos, Santos, Cunha & Chisholm, 2012**

Type host. *Dasyatis guttata* (Bloch & Schneider, 1801) (Osteichthyes: Dasyatidae).

Infection site. Gills, between secondary lamellae.

Type locality. Brazil, Rio de Janeiro State, off Angra dos Reis (23°00'24"S, 44°19'05"W).

Holotype. CHIOC 37551 a.

Paratypes. CHIOC 37551 b–d.

Remarks. Collection numbers referred to as “3751” in the original description due to a mistake. Other paratypes deposited in AHC SAMA.

Reference. Santos et al. (2012).

Monocotyle* Taschenberg, 1878**Monocotyle guttatae* Santos, Santos & Gibson, 2006**

Type host. *Dasyatis guttata*

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, off Angra dos Reis (23°00'24"S, 44°19'05"W).

Holotype. CHIOC 36577.

Paratypes. CHIOC 36578 a–c.

Remarks. Other paratype deposited in the BMNH collection.

Reference. Santos et al. (2006).

***Potamotrygonocotyle* Mayes, Brooks & Thorson, 1981**

***Potamotrygonocotyle aramasae* Domingues, Pancera & Marques, 2007**

Type host. *Paratrygon aiereba* (Müller & Henle, 1841) (Chondrichthyes: Potamotrygonidae).

Infection site. Gills.

Type locality. Brazil, Amazonas State, Barcelos, Negro River (0°58'11"S, 62°55'13"W)

Paratypes. CHIOC 36886, 36887 a–c.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, IPCR, HWML and USNPC.

Reference. Domingues et al. (2007).

***Potamotrygonocotyle auriculocotyle* Domingues & Marques, 2011**

Type host. *Potamotrygon motoro* (Müller & Henle, 1841) (Chondrichthyes: Potamotrygonidae).

Infection site. Gills.

Type locality. Brazil, Pará State, Cachoeira do Arari, Arari River, Urubu stream (1°00'36"S, 48°57'36"W).

Paratype. CHIOC 37399.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA and MZUSP. Paratypes collected in a different site along the Urubu stream (0°59'58.2"S, 48°57'52.5594"W).

Reference. Domingues and Marques (2011).

***Potamotrygonocotyle chisholmae* Domingues & Marques, 2007**

Type host. *Potamotrygon motoro*

Infection site. Gills.

Type locality. Brazil, Mato Grosso do Sul State, Miranda, Salobra River (20°14'26"S, 56°22'42"W).

Paratypes. CHIOC 36699 a–e.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, HWML and USNPC.

Reference. Domingues and Marques (2007).

***Potamotrygonocotyle dromedarius* Domingues & Marques, 2007**

Type host. *Potamotrygon motoro*

Infection site. Gills.

Type locality. Brazil, Mato Grosso do Sul State, Miranda, Salobra River (20°14'26"S, 56°22'42"W).

Paratype. CHIOC 36802.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, HWML and USNPC.

Reference. Domingues and Marques (2007).

***Potamotrygonocotyle eurypotamoxenus* Domingues & Marques, 2007**

Type host. *Potamotrygon* cf. *motoro*

Infection site. Gills.

Type locality. Brazil, Mato Grosso do Sul State, Miranda, Salobra River (20°14'26"S, 56°22'42"W).

Paratype. CHIOC 36803.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, HWML and USNPC. Domingues and Marques (2011) considered this species to be a synonym of *P. tsalickisi* Mayes, Brooks & Thorson, 1981.

References. Domingues and Marques (2007), Domingues and Marques (2011).

***Potamotrygonocotyle quadracotyle* Domingues, Pancera & Marques, 2007**

Type host. *Potamotrygon* sp.

Infection site. Gills.

Type locality. Brazil, Amazonas State, Barcelos, Negro River (0°58'11"S, 62°55'13"W).

Paratypes. CHIOC 36883 a–d.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, IPCR, HWML and USNPC.

Reference. Domingues et al. (2007).

***Potamotrygonocotyle rionegrense* Domingues, Pancera & Marques, 2007**

Type host. *Potamotrygon* sp.

Infection site. Gills.

Type locality. Brazil, Amazonas State, Barcelos, Negro River (0°58'11"S, 62°55'13"W).

Paratypes. CHIOC 36885 a–d.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, IPCR, HWML and USNPC.

Reference. Domingues et al. (2007).

***Potamotrygonocotyle septemcotyle* Domingues & Marques, 2011**

Type host. *Potamotrygon scobina* Garman, 1913

Infection site. Gills.

Type locality. Brazil, Pará State, Colares, Marajó Bay, Tocantins River (0°55'45"S, 48°17'29"W).

Paratypes. CHIOC 37397 a–b.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP and USNPC.

Reference. Domingues and Marques (2011).

***Potamotrygonocotyle tatianae* Domingues & Marques, 2011**

Type host. *Paratrygon* sp.

Infection site. Gills.

Type locality. Brazil, Amazonas State, Benjamin Constant, Yavari River (4°18'15.1194"S, 70°4'19.56"W).

Paratype. CHIOC 37404.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, HMWL and USNPC. Paratypes collected in a different site along the Yavari River (4°18'25"S, 70°4'31"W).

Reference. Domingues and Marques (2011).

***Potamotrygonocotyle tocantinsense* Domingues & Marques, 2011**

Type host. *Potamotrygon* cf. *scobina*

Infection site. Gills.

Type locality. Brazil, Tocantins State, Ipueiras, Tocantins River (11°18'36"S, 48°27'36"W).

Paratypes. CHIOC 37405 a–c.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP and USNPC. Paratypes collected from a different site along the Tocantins River (11°15'48.52"S, 48°26'56.79"W).

Reference. Domingues and Marques (2011).

***Potamotrygonocotyle umbella* Domingues, Pancera & Marques, 2007**

Type host. *Potamotrygon* sp.

Infection site. Gills.

Type locality. Brazil, Amazonas State, Barcelos, Negro River (0°58'11"S, 62°55'13"W).

Paratypes. CHIOC 36884 a–b.

Remarks. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, IPCR, HWML and USNPC.

Reference. Domingues et al. (2007).

***Potamotrygonocotyle uruguayensis* Domingues & Marques, 2007**

Type host. *Potamotrygon brachyura* (Günther, 1880)

Infection site. Gills.

Type locality. Brazil, Rio Grande do Sul State, Porto Xavier, Uruguay River (27°54'00"S, 55°08'00"W).

Paratypes. CHIOC 36807 a–d.

Remarks. Domingues and Marques (2011) considered this species to be a synonym of *P. chisholmae*. Holotype deposited in MZUSP. Other paratypes deposited in INPA, MZUSP, HWML and USNPC.

References. Domingues and Marques (2007), Domingues and Marques (2011).

Subclass Polystomatoinea Lebedev, 1986

Polystomatidae Gamble, 1896

***Neopolystoma* Price, 1939**

***Neopolystoma fentoni* Platt, 2000**

Type host. *Cryptochelys leucostoma* (Duméril & Bibron, 1851) (Testudines: Kinosternidae)

Infection site. Conjunctival sac.

Type locality. Costa Rica, Guanacaste, Santa Rosa, Guanacaste Conservation Area, Quebrada Costa Rica (10°49.666'N, 85°38.216'W).

Paratypes. CHIOC 34292, 34293 a–b, 34294.

Remarks. CHIOC 34292 and 34293 a–b were collected from *Rhinoclemmys pulcherrima* (Gray, 1856) (Testudines: Geoemydidae) in Quebrada El Duende (10°50.236'N, 85°36.724'W), Guanacaste Conservation Area. Holotype and other paratypes deposited in USNPC.

Reference. Platt (2000).

Polystomoides Ward, 1917

Polystomoides brasiliensis Vieira, Novelli, Sousa & SouzaLima, 2008

Type host. *Hydromedusa maximiliani* (Mikan, 1825) (Testudines: Chelidae).

Infection site. Buccal and pharyngeal cavities.

Type locality. Brazil, Minas Gerais State, Juiz de Fora, lake of Mariano Procópio Museum (21°41'20"S, 43°20'40"W).

Holotype. CHIOC 36902.

Paratypes. CHIOC 36903 a–d.

Reference. Vieira et al. (2008).

Subclass Oligochoinea Bychowsky, 1937

Allodiscocotylidae Tripathi, 1959

Metacamopiella Kohn, Santos & Lebedev, 1996

**Metacamopiella euzeti* Kohn, Santos & Lebedev, 1996

Type host. *Trachinotus carolinus* (Linnaeus, 1766) (Osteichthyes: Carangidae).

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Guanabara Bay (23°48'S, 43°10'W).

Holotype. CHIOC 33059.

Remarks. Paratypes deposited in PC–IBPRAS.

Reference. Kohn et al. (1996).

Metacamopia oligoplites Takemoto, Amato & Luque, 1996

Type host. *Oligoplites palometa* (Cuvier, 1833) (Osteichthyes: Carangidae).

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Itacuruça, Sepetiba Bay (22°51'S, 43°56'W).

Holotype. CHIOC 33623 a.

Paratypes. CHIOC 33623 b–c, 33624, 33625.

Remarks. Other paratypes deposited in USNPC.

Reference. Takemoto et al. (1996).

Anoplodiscidae Tagliani, 1912***Anoplodiscus* Sonsino, 1890*****Anoplodiscus longivaginat* Paraguassú, Luque & Alves, 2002**

Type host. *Pagrus pagrus* (Linnaeus, 1758) (Osteichthyes: Sparidae).

Infection site. Mouth and gills.

Type locality. Brazil, coastal zone of Rio de Janeiro State (21–23°S, 41–45°W).

Holotype. CHIOC 34905.

Paratypes. CHIOC 34906 a–d, 34907.

Remarks. Other paratypes deposited in MPM and USNPC.

Reference. Paraguassú et al. (2002).

Diclidophoridae Cerfontaine, 1895***Absonifibula* Lawler & Overstreet, 1976*****Absonifibula estuarina* Santos & Timi, 2009**

Type host. *Cynoscion guatucupa*

Infection site. Gills.

Type locality. Argentina, Buenos Aires Province, Mar del Plata (38°08'S 57°32'W).

Paratypes. CHIOC 37205 a–d.

Remarks. Holotype and other paratypes deposited in CHMLP.

Reference. Santos and Timi (2009).

Choricotyle* van Beneden & Hesse, 1863**Choricotyle brasiliensis* Luque, Amato & Takemoto, 1993**

Type host. *Orthopristis ruber* (Cuvier, 1830) (Osteichthyes: Haemulidae).

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Sepetiba Bay (22°51'S, 43°56'W).

Paratypes. CHIOC 33105, 33106.

Remarks. Holotype and other paratypes deposited in the USNM collection.

Reference. Luque et al. (1993a).

***Choricotyle orthopristis* Luque, Amato & Takemoto, 1993**

Type host. *Orthopristis ruber*

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Sepetiba Bay (22°51'S, 43°56'W).

Paratypes. CHIOC 33108 a–b.

Remarks. One of the collection numbers is referred to as “38108b” in the original description due to a mistake. Holotype and other paratypes deposited in the USNM collection.

Reference. Luque et al. (1993a).

***Choricotyle rohdei* Cohen, Cárdenas, Fernandes & Kohn, 2011**

Type host. *Ctenosciaena gracilicirrhus* (Metzelaar, 1919) (Osteichthyes: Sciaenidae).

Infection site. Gill lamellae.

Type locality. Brazil, Rio de Janeiro State, Angra dos Reis (23°00'24"S, 44°19'05"W).

Holotype. CHIOC 37473 a.

Paratypes. CHIOC 37473 b, 37474 a–b, 37475, 37476 a–b, 37477 a–b, 37478, 37479 a–b, 37480, 37481, 37482, 37483 a–c, 37484 a–b, 37485, 37486, 37487, 37488 a–b, 37489 a–c, 37490 a–c, 37491.

Reference. Cohen et al. (2011).

Heteraxinidae Unnithan, 1957

***Probursata* Bravo-Hollis, 1984**

***Probursata brasiliensis* Takemoto, Amato & Luque, 1993**

Type host. *Oligoplites palometa*

Infection site. Gill filaments.

Type locality. Brazil, Rio de Janeiro State, Sepetiba Bay, Itacuruçá (22°61'S, 43°56'W).

Holotype. CHIOC 33069.

Paratypes. CHIOC 33053 a–b, 33054, 33055, 33056, 33057.

Remarks. Other paratypes deposited in the USNM collection.

Reference. Takemoto et al. (1993).

Macrovalvitrematidae Yamaguti, 1963

***Pseudotagia* Yamaguti, 1963**

***Pseudotagia rubri* Luque, Amato & Takemoto, 1993b**

Type host. *Orthopristis ruber*

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Sepetiba Bay, Itacuruçá (22°51'S, 43°56'W).

Paratypes. CHIOC 33100, 33101, 33102.

Remarks. Holotype and other paratypes deposited in the USNM collection.

Reference. Luque et al. (1993b).

Mazocraeidae Price, 1936

***Cribomazocraes* Mamaev, 1981**

***Cribomazocraes travassosi* Santos & Kohn, 1992**

Type host. *Harengula chupeola* (Cuvier, 1829) (Osteichthyes: Clupeidae).

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Rio de Janeiro, Ilha do Governador.

Holotype. CHIOC 32758.

Remarks. No paratype deposited, only vouchers.

Reference. Santos and Kohn (1992).

Microcotylidae Taschenberg, 1879

***Microcotyle* van Beneden & Hesse, 1863**

***Microcotyle pseudopercis* Amato & Cezar, 1994**

Type host. *Pseudopercis numida* Miranda-Ribeiro, 1903 (Osteichthyes: Pinguipedidae).

Infection site. Gill filaments.

Type locality. Brazil, coast of Rio de Janeiro State (21–23°S, 41–45°W).

Paratypes. CHIOC 33290 a–b.

Remarks. Holotype and other paratype deposited in the USNM collection.

Reference. Amato and Cezar (1994).

***Paranaella* Kohn, Baptista-Farias & Cohen, 2000**

****Paranaella luquei* Kohn, Baptista-Farias & Cohen, 2000**

Type host. *Hypostomus* sp.

Infection site. Gills.

Type locality. Brazil, Paraná State, Paraná River, reservoir of the Itaipu Hydroelectric Power Station.

Holotype. CHIOC 33954 a.

Paratypes. CHIOC 33954 b–h.

Remarks. There is no paratype “i”, as informed in the original description. That was a mistake.

Reference. Kohn et al. (2000).

Plectanocotylidae Poche, 1926

***Octoplectanocotyla* Yamaguti, 1937**

***Octoplectanocotyla travassosi* Carvalho & Luque, 2012**

Type host. *Trichiurus lepturus*

Infection site. Gills.

Type locality. Brazil, Rio de Janeiro State, Guanabara Bay (23°1'52"S, 43°11'56"W).

Holotype. CHIOC 37386.

Paratypes. CHIOC 37387 a–b, 37388 a–b.

Reference. Carvalho and Luque (2012).

Acknowledgements

The authors are grateful to David Elliff of GAAm Grupo Avançado de Assessoria Médica LTDA for reviewing the English of this manuscript. We thank Juliane Nunes Bernardo, Marianna Silva Costa, and Tainah Domingos Soares for technical support. AM is grateful to the National Bank for Economic and Social Development (Banco Nacional de Desenvolvimento Econômico e Social, BNDES), Project No: VPPLR-001-FIO-14-2-1-36, and the Foundation for Health-related Scientific and Technological Development in Health (Fundação para o Desenvolvimento Científico e Tecnológico em Saúde, FIOTEC) for the technological research development fellowship.

References

- Abdallah VD, Azevedo RK, Luque JL (2009) Four new species of *Ligophorus* (Monogenea: Dactylogyridae) parasitic on *Mugil liza* (Actinopterygii: Mugilidae) from Guandu River, Southeastern Brazil. *Journal of Parasitology* 95(4): 855–864. doi: 10.1645/GE-1914.1
- Aguiar JC, Ceccarelli PS, Luque JL (2011) Two new species of *Pavanelliella* (Monogenea, Dactylogyridae) parasitic on pimelodid fishes from Mogi Guaçu river, southeastern Brazil, and notes on the morphology of *P. pavanellii*. *Neotropical Helminthology* 5(2): 213–224.
- Amato JFR, Cezar AD (1994) A new species of *Microcotyle* Van Beneden and Hesse, 1863, parasitic on “namorado”, *Pseudopercis numida* Ribeiro, 1903 and *P. semifasciata* (Cuvier, 1829), from the coast of the state of Rio de Janeiro, Brazil. *Revista Brasileira de Parasitologia Veterinária* 3(1): 41–44.

- Bellay S, Takemoto RM, Yamada FH, Pavanelli GC (2008) A new species of *Sciadicleithrum* (Monogenea: Ancyrocephalinae), gill parasite of *Geophagus brasiliensis* (Quoy and Gaimard) (Teleostei: Cichlidae) from reservoirs in the State of Paraná, Brazil. *Zootaxa* 1700: 63–68.
- Bellay S, Takemoto RM, Yamada FH, Pavanelli GC (2009) Two new species of *Sciadicleithrum* (Monogenea: Dactylogyridae), gill parasites of *Geophagus proximus* (Castelnau) (Teleostei: Cichlidae), from the upper Parana River floodplain, Brazil. *Zootaxa* 2081: 57–66.
- Boeger WA, Belmont-Jégu E (1994) Neotropical Monogenoidea. 21. *Trinigyrus mourei* sp. n. (Dactylogyridae) from the gills of the Amazonian catfish *Hypostomus emarginatus* (Loricariidae). *Amazoniana* 13(1): 13–16.
- Boeger WA, Diamanka A, Pariselle A, Patella L (2012) Two new species of *Protogyrodactylus* (Monogenoidea: Dactylogyridae) from the gills of *Gerres nigri* (Teleostei: Gerreidae) from Senegal. *Folia Parasitologica* 59(1): 59–63. doi: 10.14411/fp.2012.009
- Boeger WA, Domingues MV, Kritsky DC (1997) Neotropical Monogenoidea. 32. *Cacatuocotyle paranaensis* n. g., n. sp. (Dactylogyridae, Ancyrocephalinae) from *Characidium* spp. (Teleostei, Characidae) from the State of Paraná, Brazil. *Systematic Parasitology* 36: 75–78. doi: 10.1023/A:1005796027406
- Boeger WA, Domingues MV, Pavanelli, GC (1995a) Neotropical Monogenoidea. 24. *Rhinoxenus bulbovaginatus* n. sp. (Dactylogyridae, Ancyrocephalinae) from the nasal cavity of *Salminus maxillosus* (Osteichthyes, Characidae) from the Rio Paraná, Paraná, Brazil. *Memórias do Instituto Oswaldo Cruz* 90(6): 695–698. doi: 10.1590/S0074-02761995000600007
- Boeger WA, Fehlaue KH, Marques EE (2006) Neotropical Monogenoidea. 49. Four new species of the Diplectanidae (Dactylogyridae) from the gills of some pachyurines (Teleostei: Sciaenidae) from the Rio Tocantins and Rio Doce Basins, with the proposal of *Anoplectanum* n. g. and *Spinomatrix* n. g. *Systematic Parasitology* 64: 57–68. doi: 10.1007/s11230-005-9021-7
- Boeger WA, Ferreira RC, Vianna RT, Patella L (2014) Neotropical Monogenoidea 59. Polyonchoineans from *Characidium* spp. (Characiformes: Crenuchidae) from southern Brazil. *Folia Parasitologica* 61(2): 120–132. doi: 10.14411/fp.2014.010
- Boeger WA, Husak WS, Martins ML (1995b) Neotropical Monogenoidea. 25. *Anacanthorus penilabiatus* n. sp. (Dactylogyridae, Anacanthorinae) from *Piaractus mesopotamicus* (Osteichthyes, Serrasalminidae), cultivated in the State of São Paulo, Brazil. *Memórias do Instituto Oswaldo Cruz* 90(6): 699–701. doi: 10.1590/S0074-02761995000600008
- Boeger WA, Kritsky DC (1993) Phylogeny and a revised classification of the Monogenoidea Bychowsky, 1937 (Platyhelminthes). *Systematic Parasitology* 26: 1–32. doi: 10.1007/BF00009644
- Boeger WA, Kritsky DC, Belmont-Jégu E (1994) Neotropical Monogenoidea. 20. Two new species of oviparous Gyrodactylida (Polyonchoinea) from loricariid catfishes (Siluriformes) in Brazil and the phylogenetic status of Oeogyrodactylidae Harris, 1983. *Journal of the Helminthological Society of Washington* 61(1): 34–44.
- Boeger WA, Pariselle A, Patella L (2015) *Susanlimae ianwhittingtoni* gen. nov., sp. nov. (Monogenoidea: Dactylogyridae), a dweller of the gill rakers of *Pseudeutropius moolenburghae* (Siluriformes: Schilbeidae) from Sumatra. *Zoologia* 32(6): 532–537. doi: 10.1590/S1984-46702015000600011

- Boeger WA, Piasecki W, Sobecka E (2002) Neotropical Monogenea. 44. *Mymarothecium viatorum* sp. n. (Ancyrocephalinae) from the gills of *Piaractus brachipomus* (Serrasalminae, Teleostei) captured in a warm-water canal of a power plant in Szczecin, Poland. *Acta Ichthyologica et Piscatoria* 32(2): 157–162.
- Boeger WA, Popazoglo F (1995) Neotropical Monogenea. 23. Two new species of *Gyrodactylus* (Gyrodactylidae) from a cichlid and an erythrinid fish of Southeastern Brazil. *Memórias do Instituto Oswaldo Cruz* 90(6): 689–694. doi: 10.1590/S0074-02761995000600006
- Boeger WA, Tanaka LK, Pavanelli GC (2001) Neotropical Monogenea. 39: a new species of *Kritskyia* (Dactylogyridae, Ancyrocephalinae) from the ureters and urinary bladder of *Serrasalmus marginatus* and *S. spilopleura* (Characiformes, Serrasalminae) from southern Brazil with an emended generic diagnosis. *Zoosystema* 23(1): 5–10.
- Branches B, Domingues MV (2014) A new species of *Unilatus* (Platyhelminths: Monogenea) from the gills of *Leporacanthicus galaxias* Isbrücker et Nijssen (Siluriformes: Loricariidae) from Brazil. *Acta Parasitologica* 59(1): 91–97. doi: 10.2478/s11686-014-0213-7
- Bueno-Silva M, Boeger WA (2009) Neotropical Monogenea. 53. *Gyrodactylus corydori* sp. n. and redescription of *Gyrodactylus anisopharynx* (Gyrodactylidae: Gyrodactylidae), parasites of *Corydoras* spp. (Siluriformes: Callichthyidae) from southern Brazil. *Folia Parasitologica* 56(1): 13–20. doi: 10.14411/fp.2009.003
- Carvalho AR, Luque JL (2012) Three new species of monogeneans parasitic on Atlantic cutlassfish *Trichiurus lepturus* (Perciformes: Trichiuridae) from Southeastern Brazil. *Acta Scientiarum* 34(3): 359–365. doi: 10.4025/actasciobiolsci.v34i3.10360
- Carvalho AR, Tavares LER, Luque JL (2008) A new species of *Sciadicleithrum* (Monogenea, Dactylogyridae) parasitic on *Geophagus brasiliensis* (Perciformes, Cichlidae) from Guandu River, Southeastern Brazil. *Acta Parasitologica* 53(3): 237–239. doi: 10.2478/s11686-008-0035-6
- Carvalho AR, Tavares LER, Luque JL (2009) A new species of *Aphanoblastella* (Monogenea: Dactylogyridae) parasitic on *Rhamdia quelen* (Siluriformes: Heptapteridae) from Southeastern Brazil. *Acta Scientiarum* 31(3): 323–325. doi: 10.4025/actasciobiolsci.v31i3.4917
- Cepeda PB, Ceccarelli PS, Luque JL (2011) A new species of *Kritskyia* (Monogenea, Dactylogyridae) parasitic in the urinary bladder of *Salminus brasiliensis* (Characiformes) from the Pantanal wetlands, Brazil. *Acta Parasitologica* 56(3): 270–273. doi: 10.2478/s11686-011-0055-5
- Cepeda PB, Ceccarelli OS, Luque JL (2012) A new species of *Tereancistrum* (Monogenea, Dactylogyridae) parasitic on *Prochilodus lineatus* (Valenciennes, 1837) (Characiformes) from Mogiguaçu river, Brazil. *Neotropical Helminthology* 6(2): 205–210.
- Cepeda PB, Luque JL (2010) Three new species of *Demidospermus* (Monogenea: Dactylogyridae) parasitic on *Brachyplatystoma filamentosum* (Siluriformes: Pimelodidae) from the Araguaia River, Brazil. *Journal of Parasitology* 96(5): 869–873. doi: 10.1645/GE-2331.1
- Cezar AD, Luque JL, Amato JFR (1999) Two new species of Monogenea (Platyhelminths: Cercomeridea) parasitic on *Chaetodipterus faber* (Teleostei: Ephippidae) from the Brazilian coastal zone. *Revista de Biología Tropical* 47(3): 393–398.
- Cezar AD, Paschoal F, Luque JL (2012) A new species of *Mexicana* (Monogenea: Dactylogyridae) parasitic on two species of *Anisotremus* (Perciformes: Haemulidae) from the Brazilian coastal zone. *Neotropical Helminthology* 6(1): 25–29.

- Cohen SC, Cárdenas MQ, Fernandes BMM, Kohn A (2011) A new species of *Choricotyle* (Monogeneoidea: Dicliphoridae) from *Ctenosciaena gracilicirrhus* (Teleostei: Sciaenidae), a marine fish occurring in the littoral zone from the state of Rio de Janeiro, Brazil. *Comparative Parasitology* 78(2): 261–264. doi: 10.1654/4506.1
- Cohen SC, Justo MCN, Kohn A (2013) South American Monogeneoidea parasites of fishes, amphibians and reptiles. Oficina de Livros, Rio de Janeiro, 663 pp.
- Cohen SC, Kohn A (2005) A new species of *Mymarothecium* and new host and geographical records for *M. viatorum* (Monogenea: Dactylogyridae), parasites of freshwater fishes in Brazil. *Folia Parasitologica* 52(4): 307–310. doi: 10.14411/fp.2005.042
- Cohen SC, Kohn A (2008a) New data on species of *Demidospermus* (Dactylogyridae, Monogenea) parasitizing fishes from the Reservoir of the Itaipu Hydroelectric Power Station, Paraná State, Brazil, with new synonymies. *Revista Brasileira de Parasitologia Veterinária* 17(3): 167–170. doi: 10.1590/S1984-29612008000300011
- Cohen SC, Kohn A (2008b) A new species of the genus *Notozothecium* (Monogenea, Dactylogyridae) parasitizing the gills of *Rhaphiodon vulpinus* (Cynodontidae, Characiformes) from the Paraná River, State of Paraná, Brazil. *Revista Mexicana de Biodiversidad* 79: 95S–98S.
- Cohen SC, Kohn A, Boeger WA (2012) Neotropical Monogeneoidea. 57. Nine new species of Dactylogyridae (Monogeneoidea) from the gill of *Salminus brasiliensis* (Characidae, Characiformes) from the Paraná River, State of Paraná, Brazil. *Zootaxa* 3049: 57–68.
- Cuglianna AM, Cordeiro NS, Luque JL (2003) *Annulotrematoides bryconi* sp. n. (Monogenea: Dactylogyridae) parasitic on *Brycon cephalus* (Osteichthyes: Characidae) from Brazil. *Folia Parasitologica* 50: 272–274. doi: 10.14411/fp.2003.046
- Cuglianna AM, Cordeiro NS, Luque JL (2009) *Apenduculata discoidea* gen. n., sp. n. (Monogenea: Dactylogyridae) parasitic on *Prochilodus lineatus* (Valenciennes, 1837) (Characiformes: Prochilodontidae) from southeastern Brazil. *Brazilian Journal of Zoology* 69(3): 895–898. doi: 10.1590/S1519-69842009000400018
- Domingues MV, Boeger WA (2002) Neotropical Monogeneoidea. 40. *Protorhinoxenus prochilodi* gen. n., sp. n. (Monogeneoidea: Ancyrocephalinae), parasite of *Prochilodus lineatus* (Characiformes: Prochilodontidae) from South Brazil. *Folia Parasitologica* 49: 35–38. doi: 10.14411/fp.2002.009
- Domingues MV, Boeger WA (2003) Neotropical Monogeneoidea. 43. *Diplectanum monticellii* n. sp. (Diplectanidae) from the gills of *Cynoscion leiarchus* (Perciformes: Sciaenidae) in Brazil. *Journal of Parasitology* 89(4): 698–700. doi: 10.1645/GE-55R
- Domingues MV, Boeger WA (2005) Neotropical Monogeneoidea. 47. Phylogeny and coevolution of species of *Rhinoxenus* (Platyhelminths, Monogeneoidea, Dactylogyridae) and their Characiformes hosts (Teleostei, Ostariophysi) with description of four new species. *Zoosystema* 27(3): 441–467.
- Domingues MV, Diamanka A, Pariselle A (2011) Monogenoids (Diplectanidae, Polyonchoinea) from the gills of mojarras (Perciformes, Gerreidae) with the resurrection of *Neodiplectanum* Mizelle and Blatz, 1941 and the proposal of *Darwinoplectanum* n. gen. *Zootaxa* 3010: 1–19.
- Domingues MV, Fehlaue KH (2006) New species of *Chauhanellus* (Monogeneoidea, Platyhelminths) from the gills of Southern Atlantic marine catfishes (Siluriformes, Ariidae) of the Neotropical region. *Zootaxa* 1365: 61–68.

- Domingues MV, Marques FPL (2007) Revision of *Potamotrygonocotyle* Mayes, Brooks and Thorson, 1981 (Platyhelminths: Monogenea: Monocotylidae), with descriptions of four new species from the gills of the freshwater stingrays *Potamotrygon* spp. (Rajiformes: Potamotrygonidae) from the La Plata river basin. *Systematic Parasitology* 67: 157–174. doi: 10.1007/s11230-006-9086-y
- Domingues MV, Marques FPL (2011) Phylogeny and taxonomy of *Potamotrygonocotyle* Mayes, Brooks and Thorson, 1981 (Monogenea: Monocotylidae) with a description of four new species. *Journal of Helminthology* 85(4): 353–380. doi: 10.1017/S0022149X10000684
- Domingues MV, Pancera NCM, Marques FPL (2007) Monogenean parasites of freshwater stingrays (Rajiformes: Potamotrygonidae) from the Negro River, Amazon, Brazil: species of *Potamotrygonocotyle* (Monocotylidae) and *Paraheteronchocotyle* (Hexabothriidae). *Folia Parasitologica* 54(3): 177–190. doi: 10.14411/fp.2007.025
- Domingues MV, Soares GB, Watanabe A (2016) Monogenea (Polyonchoinea: Dactylogyridae) parasitizing the gills of marine catfish (Siluriformes: Ariidae) inhabiting the Atlantic Amazon Coast of Brazil. *Zootaxa* 4127(2): 301–326. doi: 10.11646/zootaxa.4127.2.4
- Ernst I, Whittington ID, Jones MK (2000) Three new species of *Polyclithrum* Rogers, 1967 (Gyrodactylidae: Monogenea) from mugilid fishes from Australia and Brazil, with a redescription of *P. mugilini* Rogers, 1967. *Systematic Parasitology* 45: 61–73. doi: 10.1023/a:1006285425710
- Faria JG, Travassos L (1913) Nota sobre a presença de larva de *Linguatula serrata* Froelich no intestino do homem, seguida de notas sobre os linguatulídeos da Coleção do Instituto. *Memórias do Instituto Oswaldo Cruz* 5: 123–128. doi: 10.1590/S0074-02761913000200002
- Fehlauer KH, Boeger WA (2005) Neotropical Monogenea: *Euryhaliotrema dontykolea* n. sp. (Dactylogyridae) from the gills of the freshwater sciaenid, *Pachyurus junki* (Perciformes). *Journal of Parasitology* 91(5): 1025–1027. doi: 10.1645/GE-486R.1
- Ferrari-Hoeinghaus AP, Bellay S, Takemoto RM, Pavanelli GC (2010) A new species of *Demi-dospermus* Suriano, 1983 (Monogenea, Dactylogyridae) parasitic on *Loricariichthys platymetopon* Isbrücker et Nijssen (Loricariidae, Siluriformes) from the Upper Paraná River floodplain, Brazil. *Acta Parasitologica* 55(1): 16–19. doi: 10.2478/s11686-010-0007-5
- França JG, Isaac A, Pavanelli GC, Takemoto RM (2003) Dactylogyridae (Monogenea) from the gills of *Iheringichthys labrosus* (Osteichthyes: Pimelodidae) from the upper Paraná River floodplain, Brazil, with the proposal of *Pseudovancaleveus* n. g. *Systematic Parasitology* 54: 25–31. doi: 10.1023/A:1022113626634
- Fritz U, Havaš P (2007) Checklist of Chelonians of the World. *Vertebrate Zoology* 57(2): 149–368.
- Fritz U, Havaš P (2013) Order Testudines: 2013 update. *Zootaxa* 3703(1): 12–14. doi: 10.11646/zootaxa.3703.1.4
- Froese R, Pauly D (2016) Fish base. World Wide Web Electronic Publication. Version 01/2016. <http://www.fishbase.org> [01 March 2016]
- Gallas M, Calegari-Marques C, Amato SB (2014) A new species of *Cacatuocotyle* (Monogenea, Dactylogyridae) parasitizing two species of *Astyanax* (Ostariophysi, Characidae) in southern Brazil. *Acta Parasitologica* 59(4): 638–642. doi: 10.2478/s11686-014-0283-6
- Gibson D, Bray R (2016) WoRMS Monogenea: World list of Monogenea. Version Feb 2013. In: Roskov Y, Abucay L, Orrell T, Nicolson D, Kunze T, Flann C, Bailly N, Kirk P, Bourgoin T, DeWalt RE, Decock W, De Wever A (Eds) *Species 2000 and ITIS Catalogue*

- of Life, 23rd December 2015. Species 2000 (ISSN 2405–8858), Naturalis, Leiden. <http://www.catalogueoflife.org/col> [29 January 2016]
- Guidelli GM, Takemoto RM, Pavanelli GC (2003) A new species of *Kritskyia* (Dactylogyridae, Ancyrocephalinae), parasite of urinary bladder and ureters of *Leporinus lacustris* (Characiformes, Anostomidae) from Brazil. *Acta Scientiarum Biological Sciences* 25(2): 279–282. doi: 10.4025/actascibiolsci.v25i2.2010
- ICZN (International Commission on Zoological Nomenclature) (1999) International code of zoological nomenclature. Fourth Edition. The International Trust for Zoological Nomenclature, London.
- Karling LC, Bellay S, Takemoto RM, Pavanelli GC (2011a) A new species of *Jainus* (Monogenea), gill parasite of *Schizodon borellii* (Characiformes, Anostomidae) from the upper Paraná river floodplain, Brazil. *Acta Scientiarum* 33(2): 227–231. doi: 10.4025/actascibiolsci.v33i2.6168
- Karling LC, Lopes LPC, Takemoto RM, Pavanelli GC (2011b) *Trinibaculum rotundus* n.sp. (Monogenea, Ancyrocephalinae), a parasite of *Schizodon borellii* (Characiformes, Anostomidae) from the upper Paraná River floodplain, Brazil. *Helminthologia* 48(2): 85–87. doi: 10.2478/s11687-011-0014-6
- Karling LC, Lopes LPC, Takemoto RM, Pavanelli GC (2014) New species of *Tereancistrum* (Dactylogyridae) monogenean parasites of *Schizodon borellii* (Characiformes, Anostomidae) from Brazil, and emended diagnosis for *T. parvus*. *Acta Scientiarum* 36(3): 365–369. doi: 10.4025/actascibiolsci.v36i3.20216
- Knoff M, Cohen SC, Cárdenas MQ, Cárdenas-Callirgos JM, Gomes DC (2015) A new species of diplectanid (Monogenoidea) from *Paranthias colonus* (Perciformes, Serranidae) off Peru. *Parasite* 22(11): 1–6. doi: 10.1051/parasite/2015011
- Knoff M, Noronha D, Magalhães-Pinto R, Sanches M, Siqueira LR, Mattos FB, Côrrea-Gomes D (2010) Coleção Helminológica do Instituto Oswaldo Cruz (CHIOC). In: Lamothe-Argumedo R, Damborenea C, García-Prieto L, Lunaschi LI, Osorio-Sarabia D (Comps) Guide to Helminthological Collections of Latin America. Publicaciones Especiales 22, Instituto de Biología, Universidad Nacional Autónoma de México and Museo de La Plata, Universidad Nacional de La Plata, Buenos Aires and Mexico City, 15–27.
- Kohn A (1990) *Kritskyia moraveci* n. g., n. sp. (Monogenea: Dactylogyridae) from the urinary bladder and ureters of *Rhamdia quelen* (Quoy and Gaimard, 1824) (Pisces: Pimelodidae) in Brazil. *Systematic Parasitology* 17: 81–85. doi: 10.1007/BF00009794
- Kohn A, Baptista-Farias MD, Cohen SC (2000) *Paranaella luquei* gen. et sp. n. (Monogenea: Microcotylidae), a new parasite of Brazilian catfishes. *Folia Parasitologica* 47(4): 279–283. doi: 10.14411/fp.2000.048
- Kohn A, Baptista-Farias MF, Santos AL, Gibson DI (2004) A new species of *Nasicola* Yamaguti, 1968 (Monogenea: Capsalidae) from the nasal cavities of *Thunnus obesus* and a redescription of *N. klawei* (Stunkard, 1962) from *T. albacores* off Brazil. *Systematic Parasitology* 57: 51–58. doi: 10.1023/B:SYPA.0000010685.91891.5e
- Kohn A, Justo MCN (2006) *Caballerocotylya llewelyni* n. sp. and *Caballerocotylya neothunni* (Yamaguti, 1968) (Monogenea; Capsalidae) parasites of Brazilian tunas (Scombridae). *Zootaxa* 1139: 19–26.

- Kohn A, Santos CP, Lebedev B (1996) *Metacamopiella euzeti* gen. n., sp. n., and *Hargicola oligoplites* (Hargis, 1957) (Monogenea: Allodiscocotylidae) from Brazilian fishes. *Journal of the Helminthological Society of Washington* 63(2): 176–180.
- Kritsky DC (2012) Revision of *Parancylodiscoides* Caballero y C. and Bravo-Hollis, 1961 (Monogenea: Dactylogyridae), with a redescription of *P. longiphallus* (MacCallum, 1915) from the Atlantic spadefish *Chaetodipterus faber* (Broussonet) (Acanthuroidei: Ephippidae) in the Gulf of Mexico. *Systematic Parasitology* 81: 97–108. doi: 10.1007/s11230-011-9327-6
- Kritsky DC, Boeger WA (1991) Neotropical Monogenea. 16. New species of oviparous Gyrodactylidea with proposal of *Nothogyrodactylus* gen. n. (Oogyrodactylidae). *Journal of the Helminthological Society of Washington* 58(1): 7–15.
- Kritsky DC, Boeger WA (1995) Neotropical Monogenea. 26. *Annulotrematoides amazonicus*, a new genus and species (Dactylogyridae: Ancyrocephalinae), from the gills of *Psectrogaster rutiloides* (Kner) (Teleostei: Characiformes: Curimatidae) from the Brazilian Amazon. *Proceedings of the Biological Society of Washington* 103(3): 528–532.
- Kritsky DC, Boeger WA, Robaldo RB (2001) Neotropical Monogenea. 38. Revision of *Rhabdosynochus* Mizelle and Blatz, 1941 (Polyonchoinea: Dactylogyridae: Diplectanidae), with descriptions of two new species from Brazil. *Comparative Parasitology* 68(1): 66–75.
- Kritsky DC, Boeger WA, Van Every LR (1992) Neotropical Monogenea. 17. *Anacanthorus* Mizelle and Price, 1965 (Dactylogyridae, Anacanthorinae) from characoid fishes of the Central Amazon. *Journal of the Helminthological Society of Washington* 59(1): 25–51.
- Kritsky DC, Van Every LR, Boeger WA (1996) Neotropical Monogenea. 27. Two new species of *Telethecium* gen. n. from the nasal cavities of Central Amazonian fishes and a redescription of *Kritskyia moravecii* Kohn, 1990 (Dactylogyridae, Ancyrocephalinae). *Journal of the Helminthological Society of Washington* 63(1): 35–41.
- Lamothe-Argumedo R, García-Prieto L, Osorio-Sarabia D, Ponce de León GP (2010) Colección Nacional de Helmintos (CNHE). In: Lamothe-Argumedo R, Damborenea C, García-Prieto L, Lunaschi LI, Osorio-Sarabia D (Comps) *Guide to Helminthological Collections of Latin America*. *Publicaciones Especiales* 22, Instituto de Biología, Universidad Nacional Autónoma de México and Museo de La Plata, Universidad Nacional de La Plata, Buenos Aires and Mexico City, 48–55.
- Leão ML, São Clemente SC, Cohen SC (2015) *Anacanthorus toledoensis* n. sp. and *Mymarothecium ianwhittingtoni* n. sp. (Dactylogyridae: Monogenea) parasitizing cage-reared *Piaractus mesopotamicus* (Characiformes, Characidae) in the State of Paraná, Brazil. *Comparative Parasitology* 82(2): 269–274. doi: 10.1654/4759.1
- Lizama MAP, Takemoto RM, Pavanelli GC (2004) New species of *Tereancistrum* Kritsky, Thatcher and Kayton, 1980 (Monogenea: Dactylogyridae: Ancyrocephalinae) from the gills of *Prochilodus lineatus* (Osteichthyes: Prochilodontidae) from the upper Paraná River floodplain, Brazil. *Systematic Parasitology* 57(1): 45–49. doi: 10.1023/B:SYPA.0000010684.67784.6e
- Lunaschi LI, Álvarez VHM, Damborenea C (2012) Type material housed in the Helminthological Collection of the Museo de La Plata, Buenos Aires, Argentina. *Zootaxa* 3199: 1–59.
- Luque JL, Amato JFR, Takemoto RM (1992) A new species of *Mexicana* (Monogenea: Dactylogyridae) parasitic on *Haemulon steindachneri* (Jordan and Gilbert) (Osteichthyes: Haemulidae) from the Brazilian coast. *Revista Brasileira de Parasitologia Veterinária* 1(2): 85–88.

- Luque JL, Amato JFR, Takemoto RM (1993a) Four species of *Choricotyle* Van Beneden and Hesse (Monogenea: Diclidophoridae: Choricotylineae) parasitic on *Orthopristis ruber* (Cuvier) (Osteichthyes: Haemulidae) from the Brazilian coast, with description of two new species. *Revista Brasileira de Parasitologia Veterinária* 2(2): 15–24.
- Luque JL, Amato JFR, Takemoto RM (1993b) A new species of *Pseudotagia* Yamaguti, 1963 (Monogenea: Macrovalvitrematidae) parasitic on *Orthopristis ruber* (Cuvier) (Osteichthyes: Haemulidae) from the Brazilian coast. *Revista Brasileira de Parasitologia Veterinária* 2(2): 111–114.
- Melo MFC, Santos JN, Santos CP (2012) *Sciadicleithrum juruparii* n. sp. (Monogenea: Ancyrocephalidae) from the gills of *Satanoperca jurupari* (Heckel) (Osteichthyes: Cichlidae) in the Guamá River, Amazon Delta, Brazil. *Systematic Parasitology* 82: 125–129. doi: 10.1007/s11230-012-9353-z
- Mendoza-Franco EF, Scholz T (2009) New dactylogyrids (Monogenea) parasitizing the gills of catfishes (Siluriformes) from the Amazon River Basin in Peru. *Journal of Parasitology* 95: 865–870. doi: 10.1645/GE-1820.1
- Mogrovejo CD, Santos CP (2002) *Caballerocotyla lenti* n. sp., a capsalid monogenean from *Auxis thazard* (Scombridae) from off the Southeastern coast of Brazil. *Memórias do Instituto Oswaldo Cruz* 37(7): 1067–1071. doi: 10.1590/S0074-02762002000700023
- Monteiro CM, Brasil-Sato MC (2014a) A new species of *Anacanthoroides* and redescription of *Apedunculata discoidea* (Monogenoidea) parasitizing *Prochilodus argenteus* (Actinopterygii) from the São Francisco River, Brazil. *Zootaxa* 3784: 259–266. doi: 10.11646/zootaxa.3784.3.5
- Monteiro CM, Brasil-Sato MC (2014b) A new species of *Rhinonastes* (Monogenoidea, Dactylogyridae), nasal parasite of *Prochilodus argenteus* (Actinopterygii, Characiformes) from Brazil. *Acta Parasitologica* 59(3): 540–543. doi: 10.2478/s11686-014-0278-3
- Monteiro CM, Cohen SC, Brasil-Sato MC (2015) New species and reports of dactylogyrids (Monogenoidea) from *Salminus franciscanus* (Actinopterygii: Bryconidae) from the upper São Francisco River, Brazil. *Zootaxa* 3941(1): 137–143. doi: 10.11646/zootaxa.3941.1.9
- Monteiro CM, Kritsky DC, Brasil-Sato MC (2010a) Neotropical Monogenoidea. 55. Dactylogyrids parasitising the pintado-amarelo *Pimelodus maculatus* Lacépède (Actinopterygii: Pimelodidae) from the Rio São Francisco, Brazil. *Systematic Parasitology* 76: 179–190. doi: 10.1007/s11230-010-9250-2
- Monteiro CM, Kritsky DC, Brasil-Sato MC (2010b) Neotropical Monogenoidea. 56. New species of *Anacanthorus* (Dactylogyridae) from the gills of matrinhã, *Brycon orthotaenia* (Characiformes: Characidae), in the Rio São Francisco, Brazil. *Folia Parasitologica* 57(3): 164–168. doi: 10.14411/fp.2010.022
- Moreira J, Scholz T, Luque JL (2015) First data on the parasites of *Hoplias aimara* (Characiformes): description of two new species of gill monogeneans (Dactylogyridae). *Acta Parasitologica* 60(2): 254–260. doi: 10.1515/ap-2015-0036
- Noronha D (2004) Correção de dados sobre a Coleção Helmintológica do Instituto Pasteur de São Paulo. *Revista Brasileira de Zoologia* 21: 1033. doi: 10.1590/S0101-81752004000400041

- Noronha D, Bragança R, Vicente JJ, Muniz-Pereira LC (2004) Coleções particulares incorporadas à Coleção Helminológica do Instituto Oswaldo Cruz (CHIOC). I: Coleção do Instituto Pasteur de São Paulo. *Revista Brasileira de Zoologia* 21(2): 303–305. doi: 10.1590/S0101-81752004000200023
- Noronha D, Sá MR, Knoff M, Muniz-Pereira LC, Pinto RM (2009) Adolpho Lutz and the Helminthological Collection of the Oswaldo Cruz Institute. *Museu Nacional, Rio de Janeiro*, 154 pp.
- Paraguassú AR, Luque JL, Alves DR (2002) A new species of *Anoplodiscus* (Monogenea: Anoplodiscidae) parasitic on *Pagrus pagrus* (Osteichthyes: Sparidae) from the coastal zone of the State of Rio de Janeiro, Brazil. *Memórias do Instituto Oswaldo Cruz* 97(8): 1197–1199. doi: 10.1590/S0074-02762002000800022
- Paschoal F, Scholz T, Tavares-Dias M, Luque JL (2016) Dactylogyrids (Monogenea) parasitic on cichlids from northern Brazil, with description of two new species of *Sciadicleithrum* and new host and geographical records. *Acta Parasitologica* 61(1): 158–164. doi: 10.1515/ap-2016-0021
- Platt TR (2000) *Neopolystoma fentoni* n. sp. (Monogenea: Polystomatidae) a parasite of the conjunctival sac of freshwater turtles in Costa Rica. *Memórias do Instituto Oswaldo Cruz* 95(6): 833–837. doi: 10.1590/S0074-02762000000600014
- Popazoglo F, Boeger WA (2000) Neotropical Monogenea 37. Redescription of *Gyrodactylus superbus* (Szidat, 1973) comb. n. and description of two new species of *Gyrodactylus* (Gyrodactylidea: Gyrodactylidae) from *Corydoras paleatus* and *C. ehrhardti* (Teleostei: Siluriformes: Callichthyidae) of Southern Brazil. *Folia Parasitologica* 47: 105–110. doi: 10.14411/fp.2000.022
- Rego AA (1982) Helminthological Collection of the Oswaldo Cruz Institute. In: Lichtenfels JR, Pritchard MH (Eds) *A Guide to Parasite Collections of the World*. American Society of Parasitologists, Special Publications, Lawrence, 9 pp.
- Rego AA, Vicente JJ, Gomes DC (1979) List of holotypes in the Helminthological Collection of the Oswaldo Cruz Institute. *Atas da Sociedade de Biologia do Rio de Janeiro* 19 (Supl): 1–29.
- Rosim DF, Mendoza-Franco EF, Luque JL (2011) New and previously described species of *Urocleidoidea* (Monogenea: Dactylogyridae) infecting the gills and nasal cavities of *Hoplias malabaricus* (Characiformes: Erythrinidae) from Brazil. *Journal of Parasitology* 97(3): 406–417. doi: 10.1645/GE-2593.1
- Santos CP, Bianchi LG, Gibson DI (2008) *Acleotrema lamothei* n. sp. (Monogenea: Diplectanidae) from the gills of *Kyphosus incisor* in Brazilian waters. *Revista Mexicana de Biodiversidad* 79: 69S–73S.
- Santos CP, Buchmann K, Gibson DI (2000) *Pseudorhabdosynochus* spp. (Monogenea: Diplectanidae) from the gills of *Epinephelus* spp. in Brazilian waters. *Systematic Parasitology* 45: 145–153. doi: 10.1023/A:1006232029426
- Santos CP, Kohn A (1992) Description of *Cribomazocraes travassosi* n. sp. (Monogenea: Mazocraeidae), a fish parasite from the Atlantic Ocean. *Memórias do Instituto Oswaldo Cruz* 87(1): 247–250. doi: 10.1590/S0074-02761992000500046
- Santos CP, Mourão ED, Cárdenas MQ (2001) *Pseudempleurosoma gibsoni* n. sp., a new Ancyrocephalid monogenean from *Paralanchurus brasiliensis* (Sciaenidae) from off the Southeast-

- ern Coast of Brazil. *Memórias do Instituto Oswaldo Cruz* 96(2): 215–219. doi: 10.1590/S0074-02762001000200013
- Santos CP, Santos AL, Cunha R, Chisholm LA (2012) A new species of *Heterocotyle* Scott, 1904 (Monogenea: Monocotylidae) from the gills of *Dasyatis guttata* (Dasyatidae) in southwestern Atlantic waters off Rio de Janeiro, Brazil. *Systematic Parasitology* 81: 65–70. doi: 10.1007/s11230-011-9328-5
- Santos CP, Santos AL, Gibson DI (2006) A new species of *Monocotyle* Taschenberg, 1878 (Monogenea: Monocotylidae) from *Dasyatis guttata* (Dasyatidae). *Journal of Parasitology* 92(1): 21–24. doi: 10.1645/GE-603R.1
- Santos CP, Timi JT (2009) *Absonifibula estuarina* sp. n. (Monogenea: Dicliphoridae) parasite of juvenile *Cynoscion guatucupa* (Osteichthyes) from southwestern Atlantic Ocean. *Memórias do Instituto Oswaldo Cruz* 104(7): 964–969. doi: 10.1590/S0074-02762009000700004
- Santos CP, Timi JT, Gibson DI (2002) *Diplectanum squamatum* n. sp. (Monogenea: Diplectanidae) from the gills of *Cynoscion guatucupa* (Sciecidae) in southwest Atlantic waters. *Systematic Parasitology* 52(3): 199–204. doi: 10.1023/A:1015737719326
- Santos Neto JF, Rodrigues ARO, Domingues MV (2015) Proposal of *Whittingtonocotyle* n. gen. (Dactylogyroidea: Dactylogyridae), with the description of two new species from the gills of *Hoplerythrinus unitaeniatus* (Characiformes: Erythrinidae) in Brazil. *Zootaxa* 3937(1): 191–200. doi: 10.11646/zootaxa.3937.1.10
- Tablado A, Tricárico F (2010) Colección Nacional de Parasitología (MACN-PA). In: Lamothe-Argumedo R, Damborenea C, García-Prieto L, Lunaschi LI, Osorio-Sarabia D (Comps) Guide to Helminthological Collections of Latin America. Publicaciones Especiales 22, Instituto de Biología, Universidad Nacional Autónoma de México and Museo de La Plata, Universidad Nacional de La Plata, Buenos Aires and Mexico City, 11–14.
- Takemoto RM, Amato JFR, Luque JL (1993) A new species of *Probursata* Bravo-Hollis, 1984 (Monogenea: Heteraxinidae: Heteraxininae) parasite of *Oligoplites* spp. (Osteichthyes: Carangidae) from the coast of the state of Rio de Janeiro, Brazil. *Memórias do Instituto Oswaldo Cruz* 88(2): 285–288. doi: 10.1590/S0074-02761993000200017
- Takemoto RM, Amato JFR, Luque JL (1996) Monogeneans of leatherjackets, *Oligoplites* spp. (Osteichthyes: Carangidae), with the description of a new species of *Metacamopia* (Monogenea: Allodiscocotylidae) from the coast of the State of Rio de Janeiro, Brazil. *Memórias do Instituto Oswaldo Cruz* 91(2): 165–172. doi: 10.1590/S0074-02761996000200008
- Takemoto RM, Lizama MAP, Pavanelli GCA (2002) New species of *Kritskyia* (Dactylogyridae, Ancyrocephalinae) parasite of urinary bladder of *Prochilodus lineatus* (Prochilodontidae, Characiformes) from the floodplain of the high Paraná River, Brazil. *Memórias do Instituto Oswaldo Cruz* 97(3): 313–315. doi: 10.1590/S0074-02762002000300006
- Takemoto RM, Pavanelli GCA, Lizama MAP, Lacerda ACF, Yamada FH, Moreira LHA, Ceschini TL, Bellay S (2009) Diversity of parasites of fish from the Upper Paraná River floodplain, Brazil. *Brazilian Journal of Biology* 69(2, Suppl.): 691–705. doi: 10.1590/S1519-69842009000300023
- Tavernari FC, Takemoto RM, Lacerda ACF, Pavanelli GC (2010) A new species of *Demi-dospermus* Suriano, 1983 (Monogenea) parasite of gills of *Auchenipterus osteomystax*

- (Auchenipteridae), from the upper Paraná river floodplain, Brazil. *Acta Scientiarum* 32(1): 79–81. doi: 10.4025/actascibiolsci.v32i1.3368
- Van Every LR, Kritsky DC (1992) Neotropical Monogenea. 18. *Anacanthorus* Mizelle and Price, 1965 (Dactylogyridae, Anacanthorinae) from piranha (Characoidea, Serrasalminidae) from the Central Amazon, their phylogeny, and aspects of host-parasite coevolution. *Journal of the Helminthological Society of Washington* 59(1): 52–75.
- Vianna RT, Boeger WA, Silva-Souza AT (2008) Neotropical Monogenea. 52. *Diechodactylus joaberi* n. g., n. sp. from the banded knifefish *Gymnotus carapo* (Gymnotiformes: Gymnotidae) in southeastern Brazil. *Systematic Parasitology* 69: 45–50. doi: 10.1007/s11230-007-9107-5
- Vieira FM, Novelli IA, Sousa BM, SouzaLima S (2008) A new species of *Polystomoides* Ward, 1917 (Monogenea: Polystomatidae) from freshwater chelonians (Testudines: Chelidae) in Brazil. *Journal of Parasitology* 94(3): 626–630. doi: 10.1645/GE-1417.1.
- Yamada FH, Brandão H, Yamada POF, Silva RJ (2015) *Philocorydoras longus* sp. n. (Monogenea, Dactylogyridae) from the gills of *Hoplosternum littorale* (Siluriformes, Callichthyidae) in Southeastern Brazil and the reassignment of two species from the genus *Urocleidoides* to *Philocorydoras*. *Helminthologia* 52(4): 331–335. doi: 10.1515/helmin-2015-0052
- Yamada FH, Takemoto RM, Bellay S, Pavanelli GC (2009) Two new species of *Sciadiclecthrum* (Monogenea, Dactylogyridae) parasites of Neotropical cichlid fishes from the Paraná River, Brazil. *Acta Parasitologica* 54(1): 6–11. doi: 10.2478/s11686-009-0004-8