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Inventory

Checklist of the ichthyofauna of Mamirauá Sustainable Development Reserve, Middle Solimões, Amazonas, Brazil: high richness in a large protected area of Western-Central Amazonia

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Abstract: The present study reviews the records of occurrences of fish species found in the Mamirauá Sustainable Development Reserve (MSDR). The reserve is located in a large section of the middle Solimões River basin, in its interflow with Japurá River. For the elaboration of the list of fish species occurring in Mamirauá Reserve, we used a database of different studies on fish communities carried out in the area over the last three decades, in addition to the material deposited in the ichthyological collections of three scientific institutions, the National Institute for Amazon Research – INPA, the Mamirauá Sustainable Development Institute – IDSM and the Science and Technology Museum of the Catholic University of Rio Grande do Sul – PUCRS. The ichthyofauna of the MSDR is composed of 541 species, encompassing 45 families and 15 orders. These correspond to 20% of all valid species known for the entire Amazonia so far. As observed in other studies in the Neotropical Region, the more represented orders were Siluriformes (209 species) and Characiformes (185 species), followed by the Gymnotiformes (78 species). The results presented here demonstrate a considerable increase (86%) in the knowledge about the fish diversity found in Mamirauá Reserve, in relation to its first list of fish species, published in the 90's. This increase reflects not only the growth in number of studies on fish diversity in the area, with new surveys, but also the continuous taxonomic work on the collections, and descriptions of twenty-eight new species, with one hundred and ten type series. Further surveys are expected to take place in the Northwestern, more isolated areas of the Reserve, and will allow the identification of new occurrences, and may even unveil new fish species yet to be described to Science..
Keywords: *Amazon; Checklist; Distribution; First record; Neotropical; Taxonomy.*

Lista de verificação da ictiofauna da Reserva de Desenvolvimento Sustentável Mamirauá, Médio Solimões, Amazonas, Brasil: alto endemismo e riqueza em uma grande área protegida da Amazônia Centro-Ocidental

Resumo: Este estudo apresenta uma revisão dos registros de ocorrências das espécies de peixes encontradas na Reserva de Desenvolvimento Sustentável Mamirauá (RDSM), ampla área localizada na bacia do Médio Solimões, em seu interflúvio com o Rio Japurá. Para a elaboração da lista de peixes que ocorrem na Reserva Mamirauá foram utilizados os bancos de dados de diferentes estudos sobre comunidades de peixes realizados na área ao longo das últimas décadas, além de informações referentes ao material tombado nas coleções ictiológicas de três instituições científicas, o Instituto Nacional de Pesquisas da Amazônia- INPA,o Instituto de Desenvolvimento Sustentável Mamirauá – IDSM e o Museu de Ciências e Tecnologia da Pontifícia Universidade Católica do Rio Grande do Sul – PUCRS. A ictiofauna da RDSM é composta por 541 espécies, incluindo 45 famílias e 15 ordens. Estes valores correspondem a cerca de 20% de todas espécies válidas conhecidas para toda a Amazônia até o momento. Assim como em outros estudos na região Neotropical as ordens que apresentaram as maiores riquezas

foram siluriformes (209 espécies) e Characiformes (185 espécies), seguidas de Gymnotiformes (78 espécies). Os resultados apresentados neste trabalho demonstram um aumento considerável (86%) no conhecimento sobre a diversidade de peixes encontrados na Reserva Mamirauá, em relação à primeira lista de peixes da RDSM, publicada na década de 1990. Este aumento reflete não apenas o crescimento no número de estudos sobre a diversidade de peixes na área, com a ocorrência de novos levantamentos, como também a intensificação dos trabalhos taxonômicos de classificação e descrição de vinte oito novas espécies com cento e dez séries tipos. Novos levantamentos deverão ocorrer nas áreas mais isoladas da Reserva, na sua porção noroeste. Estas atividades permitirão a identificação de novas ocorrências, e podem até revelar espécies novas a serem descritas..
Palavras-chave: *Amazônia; Lista de verificação; Distribuição; Primeiro registro; Neotropical; Taxonomia.*

Introduction

At the end of the XX century, an attempt to inventory the fish fauna of the Mamirauá Reserve was made, and produced a first list of 291 species (Crampton 1999). This first effort was limited by the lack of human and financial resources and did not encompassed a representative portion of the reserve. Seemingly, the problems that led to a limited list of fish species for the Mamirauá area are the same observed for the entire Amazon basin. The current knowledge on the Amazonian fish diversity is far from adequate, and the estimates on the number of existing fish species varies greatly (Malabarba et al., 1998; Carvalho et al. 2009; Albert et al. 2011; van der Sleen & Albert 2017; Dagosta & De Pina, 2019; Oberdorff et al., 2019). But it is widely accepted that there are approximately 2700 already described fish species living in the Amazon basin (Dagosta & De Pina, 2019). Nevertheless, a strikingly high number of fish species are being described for the Amazon every year (Valsecchi et al., 2017). Unfortunately, a relevant portion of the currently known fish fauna, like in other important megadiverse freshwater ecosystems of the World, is now threatened (Darwall et al, 2016; Arthington et al. 2016; IBAMA, 2018). Although some of the areas of the Central Amazonia and its floodplains have been intensively surveyed during the last half century (Correa et al., 2008; Freitas et al., 2014; Siqueira-Souza et al., 2016), some areas remain virtually unknown, or very poorly known, demonstrating the importance of inventory studies in the region. There is very few information available about the fish diversity of the middle Solimões region, a vast and biologically important part of the Western Brazilian Amazonia.

For many centuries the floodplain areas of the Amazon, annually inundated by white sediment-rich waters, have been visited and studied. Most of the material collected in these expeditions was sent to foreign institutions, mainly in Europe (Filho, 2009). The majority of the large cities and small towns in the Amazon are located in the várzea ecosystem, and almost all the commercial fisheries in the Amazon is carried out in várzea water bodies. The Amazonian varzea is a particular type of wetland, a seasonal floodplain forest inundated by whitewater rivers, with an intricate mosaic of waterbodies and annually flooded shores (Junk et al., 2011; Junk et al., 2014). Probably this is why we have the existing information about its fish fauna (Santos et al., 1991; Goulding et al. 1996; Saint-Paul et al., 2000; Zuanon et al., 2008). Records are, however, focused on the large-bodied species, most of commercial value, and a very few information is available about occurrence and distribution of the fish fauna in most parts of the Amazonian várzea. This information is usually originated in species lists from very restricted areas, tend to be taxonomically unreliable and not supported by voucher specimens deposited in the main scientific fish collections. Despite these limitations, it is generally recognized that the ichthyofauna found in the Solimões-Amazonas várzea is placed among the more diverse of the Amazon, especially at the Western parts of the Central Brazilian Amazon, upstream from Manaus, the capital city of Amazonas State. This várzea ecosystem holds at least 647 fish species, including areas from the borders with Peru and Colombia, and the mouth, in the Atlantic coast (Zuanon et al., 2008).

Fish surveys and other similar studies in the Middle Solimões region were intensified in the early 1990's through an intense research program implemented to support the regulation of the management for the newly created Mamirauá Sustainable Development Reserve – RDSM. The RDSM was the first protected area of this category implemented in Brazil. One of the main characteristics of this type of protected area, is the participatory management of natural resources by the local populations, combined with the scientific research to support their activities (Queiroz 2005). In this way, a large inventory was made for the Mamirauá Reserve area and its adjacent rivers, generating a first list of fish species (Crampton 1999). The vast majority of the material collected at that time was deposited in large national collections such as INPA, and also the Science and Technology Museum of Pontifical Catholic University of Rio Grande do Sul (PUCRS). Part of this material collected at Mamirauá Reserve was used to build a small reference collection at Mamirauá Institute, located in the town of Tefé, Amazonas State.

Subsequently, with the consolidation of the Mamirauá Sustainable Development Institute (IDSM), several other inventories were carried out in the region, generating new lists of fish species for the RDSM, and representing a considerable increase in the knowledge about the richness of the fish fauna of that protected area. The previous reference collection was greatly improved with new deposits from this reserve and other protected areas, and also from different parts of the Western Brazilian Amazonia, which became the current IDSM ichthyological collection. However, this recently generated information on the RDSM was never compiled in a single checklist. Therefore, the goal of the present paper, is to provide an updated list of the fish fauna that occur in the Mamirauá Sustainable Development Reserve.

Material and Methods

1. *Study area*

The fish collections were all conducted during field expeditions to the Mamirauá Sustainable Development Reserve (RDSM), in the Brazilian Central Amazon floodplain (Figure 1). Mamirauá is a wetland site of international importance listed under the UN Ramsar Convention, and the largest protected area of flooded forests in Brazil. The whole reserve's area (1,124,000 ha) if formed exclusively by the lowland floodplains of the Solimões and Japurá rivers, a complex mosaic of flooded forests interspaced by different types of water bodies; lakes, "canos" (channels), rivers and "paranãs" (river connections), each of them with particular physical and biological features, but connected at least once a year, since the entire reserve is completely flooded for 3 to 6 months annually (Henderson, 1999). The mosaic of forests (Wittmann et al. 2006) and water bodies, lakes and channels, at Mamirauá is typical of the *várzea* environment (Figure 2).

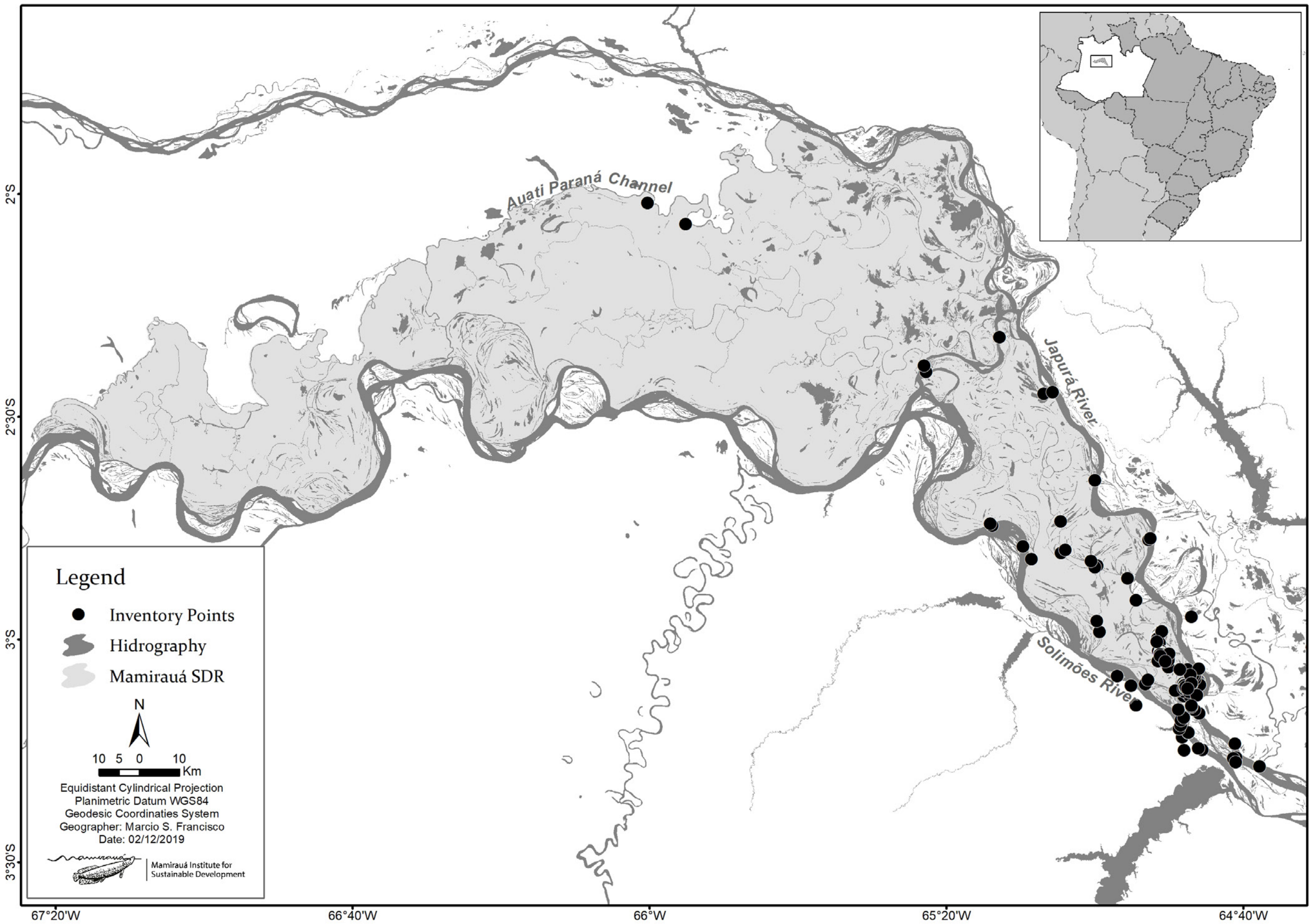

Figure 1. Map showing the Mamirauá Sustainable Development Reserve, Amazonas State, Brazil, with the geographical distribution of the points of distribution of fish sampling sites (black dots), and the main water bodies in the region (rivers, lakes and channels).

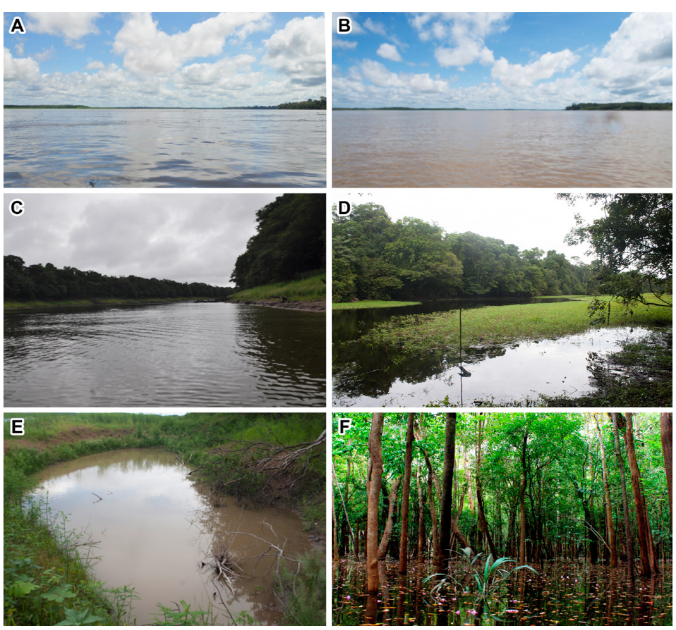

Figure 2. Examples of permanent and temporary aquatic environments sampled during the fish collections carried out at the Mamirauá Reserve: a) Japurá River; b) Solimões River; c) Mamirauá lake channel; d) Taracuazinho lake; e) Taxizal flood pool; f) Igapó (flooded forest) in Mamiraua system lake.

During a complete hydrological cycle, the water level in Mamirauá varies by more than 10 m (Ramalho et al. 2009), alternating wet and dry periods in a typical annual flood pulse (Junk et al., 1989). Four seasons can be identified, based on water level (Gaston & He, 2011). These are (i) high water season, from May until mid-July; (ii) falling water season, from mid-July to September; (iii) low water season, in the months of September, October and November; and (iv) rising water season, from December to April. These water bodies support a large fish fauna (Henderson & Crampton 1997), with diverse communities in each of the major aquatic habitats present (Henderson & Hamilton 1995).

The floodplain area in the confluence of Japurá and Solimões Rivers, where Mamirauá is located, is characterized by high atmospheric temperatures with average annual ranging from 28°C to 30°C, with maximum monthly ranging from 33°C to 35°C and minimum monthly ranging from 20°C to 22°C. The highest precipitations are concentrated between December and May (Ramalho et al., 2009) when it can reach 300 mm per month during the wettest years and the annual precipitation in the reserve is in average 3000 mm. The Japurá and Solimões Rivers consists of large white water rivers, carrying sediments from the erosion of the Andes, and forming large inundated habitats. Solimões River is one of the largest Amazonian rivers (discharge 53.3 x 10^3 m^3/second) and the main channel of the Amazon Basin, until it gets the discharge of blackwaters from the Negro River and creates the mighty Amazon River. Japurá River, on the other hand, although smaller (discharge 14,5 x 10^3 m^3/second) is the Brazilian name for the Caquetá River, from Colombia. Successive erosion and deposition processes along the geological history of this floodplain created a complex mosaic of permanent and temporary waterbodies. The annual variation of water level responds for the various degrees of connectivity between those different waterbodies and the two main rivers. There are five main aquatic environments types in the Mamirauá Reserve relevant to the present work, since they were systematically surveyed over the years: the main rivers, lakes, canos and paranãs, flooded florest and the temporary pools formed inside the forest, when the water level recedes. The paranãs are channels connecting the main rivers, while the canos are channels that transport water from the rivers and from main channels to lower order aquatic environments within the floodplain, like smaller channels or lakes. Since canos are very shallow, some of them may dry completely during the low water periods. The lakes, on the other hand, may vary in shapes and sizes, and usually retain water during the entire hydrologic cycle. Therefore, lakes may retain a loose connection to the main channel during low water phase. During the high water period, all water bodies are connected and a direct communication is established among them all (Table 1).

2. *Data collection*

To prepare this checklist, a database was built with the information from different studies carried out mainly in the Southern, Eastern and Southeastern parts of the area (see black dots in Figure 1) over the last decades (Crampton, 1999; Chaves 2006; Santos 2007; Reis 2007). Whenever necessary, the collected material was revised in the fish collection of the IDSM. Additionally, we searched for all material collected at the RDSM in other important ichthyological collections in Brazil: Museum of Science and Technology (MCP) of the Pontifical Catholic University of Rio Grande do Sul, Museum of Zoology of the University of São Paulo (MZUSP), University of Campinas (ZUEC) and National Institute for Amazonian Research (INPA), available on SpeciesLink (www.specieslink.org.br). After the list was compiled, possible names and synonyms, and their occurrence, were confronted with information available in the Eschmeyer's Catalog of Fishes (Fricke et al.2020). To avoid possible synonymies between species cataloged by the many studies in the area, we applied the precautionary principle and remove all risks of double entries.

Results

Until the present, the ichthyofauna of the Mamirauá Sustainable Development Reserve is composed of 541 species, including 45 families and 15 orders (Table 2). These figures correspond to about 20% of all species valid for the Amazon (Dagosta and De Pinna 2019), and represent a 86% increase in relation to the first list produced for the RDSM, published in the end of the last century (Crampton, 1999). As detected in other studies and fish fauna surveys in Neotropical sites, the most represented orders were Siluriformes, with 209 species, and Characiformes, with 185 species (Beltrão and Soares 2018; Beltrão et al. 2019; Dagosta and De Pinna 2019). Together they represent more than 70% of the fish species richness at Mamirauá Reserve. Next in importance comes the Gymnotiformes, with 78 species. The gymnotids are remarkably diverse at the Mamirauá Reserve, where several new species have been described during the last two decades (Albert & Crampton 2001; Crampton et al. 2004; Crampton et al. 2005) (Figure 3f). At least, three new gymnotid species were recently discovered, two Apteronotids and one Hypopomids, and are under description. In the fourth place, the Cichliformes, with 40 species, is another species-rich order present. At Mamirauá we included in the checklist *Apistogrammoides pucallpaensis* Meinken, 1965, which had its first record for Brazil published recently (Oliveira et al. 2019) (Figure 3d).

The species richness at the family level also follows the general pattern found in the Neotropics. The five richest families are Characidae, with 61 species, Loricariidae with 55 species, Cichlidae with 37 species, Apteronotidae with 33 species and Auchenipteridae with 25 species. These numbers correspond to 39% of the total species richness at Mamirauá. Remarkably, family Characidae alone holds 11% of the total richness, demonstrating the diversity of this fish family at the protected area.

The richest aquatic environment present was the floodplain lakes (369 spp.), followed by the "canos" and paranás (301 spp.), and the rivers (261 spp.). In all aquatic environments Characiformes was the dominant order, followed by Siluriformes and Cichliformes. Such richness distribution among orders is expected for the Neotropical fish fauna, being reported from several prior studies (Queiroz et al., 2013; Sleen and Albert, 2018; Beltrão et al., 2019; Dagosta and De Pinna, 2019) (figure 4).

From the names included in the first fish species list published for Mamirauá Reserve (Crampton, 1999), we removed those identified only at the genus level, since they are not present in the material deposited in any known biological collection. They are *Saccoderma* sp.1, *Pimelodus* sp.1, *Pseudostegophilus* sp.1, *Hoplosternum* sp.1, *Plagioscion* sp.1 and "*Petalodoras* sp.1". We also removed *Knodus*

Table 1. Physical and chemical parameters of water quality for the water bodies at Mamirauá Reserve based on Henderson (1999), Affonso et al. (2011 and 2015) and Pedro et al. (2013).

	Solimões River		Japurá River		Várzea Lakes		Várzea Canos and Paranãs		Temp. Pools
Parameters	High Water	Low Water	High Water	Low Water	High Water	Low Water	High Water	Low Water	Low Water
Secchi (m)	1.2	0.6	1.35	0.56	1.7	0.43	1.7	0.40	0.30
pH	6.9	6.8	6.36	6.60	6.85	7.01	6.84	7.29	6.95
Eletr. Conduc. (µS.cm-1)	87.7	200.6	77.3	131.0	115.29	85.21	110.53	231.02	155.29
Turbidity (NTU)	57.74	62.21	23.82	28.75	6.33	43.19	6.97	51.93	-
Dis. Oxygen (mg.l-1)	0.6	0.2	0.77	0.34	2.59	5.12	2.3	6.12	0.18
Temperature (°C)	27.1	31.3	27.8	30.9	27.27	31.52	26.62	31.32	28.14

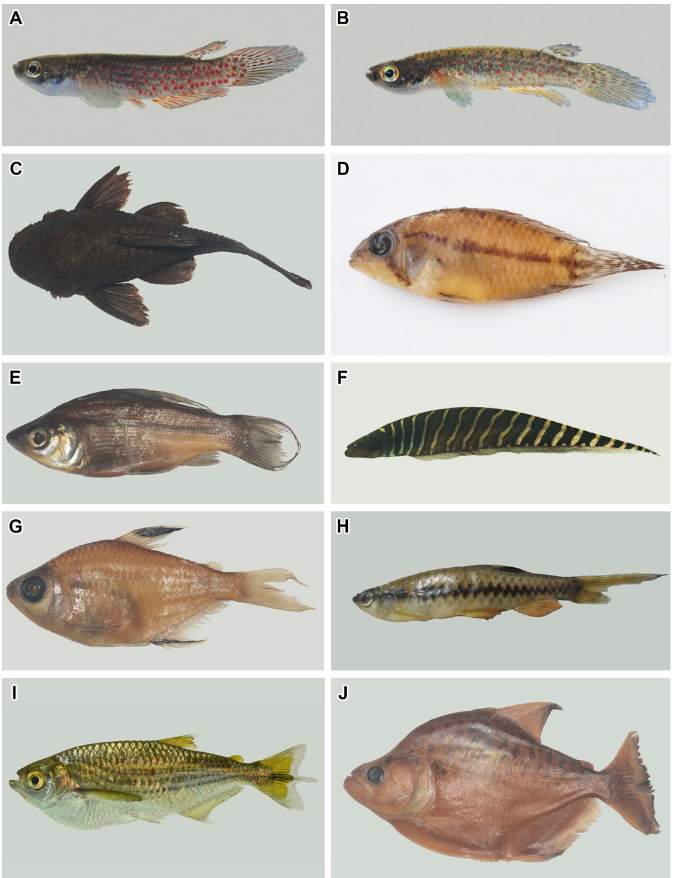

Figure 3. Representative individuals of some species collected at Mamiraua Reserve: a) *Anablepsoides* "mamiraua" sp.n ♂; b) *Anablepsoides* "mamiraua" sp.n ♀; c) *Ancistrus* cf. *hoplogenys*; d) *Apistogrammoides pucallpaensis*; e) *Curimatopsis microlepis*; f) *Gymnotus mamiraua*; g) *Moenkhausia hemigrammoides*; h) *Pyrrhulina zigzag*; i) *Triportheus angulatus*; j) *Serrasalmus* sp. n.

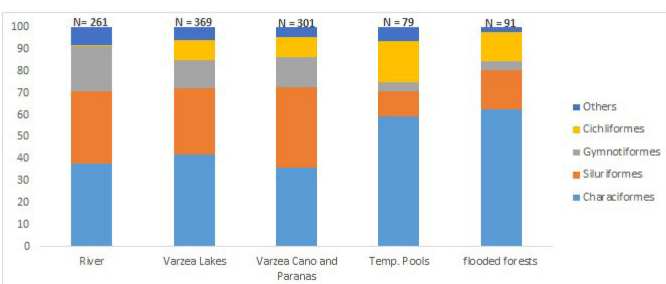

Figure 4. Ranking of richness by Orders and habitat of fish species found in the Mamirauá Sustainable Development Reserve (MSDR), N = Number of species.

sp.1 and *Tetragonopterus* sp.1, both included in a scientific report (M. Catarino, unpublished), informed as collected and identified only at the genus level. We found no correspondence with any material deposited in the collections consulted. Additionally, in the present version of the fish species list, we removed three names identified at the species level, mentioned in inventories and studies carried out at Mamirauá Reserve, but not deposited in any biological collection. They are *Microglanis carlae* Vera Alcaraz, da Graça & Shibatta, 2008, *Nannostomus harrisoni* (Eigenmann, 1909), *Crenicichla cametana* Steindachner, 1911 and *Lycengraulis grossidens* (Spix & Agassiz 1829). The decision to remove these four entries from the list was based on the consideration that *Microglanis carlae* has its distribution restricted to the Paraguay River basin; *Nannostomus harrisoni* has its distribution restricted to the Demerara river basin in Guyana, and that *Crenicichla cametana*, occurs only in the Xingu and Tocantins-Araguaia river basins (Dagosta and De Pinna 2019). *Lycengraulis grossidens* is a marine/estuarine species, with not confirmed records for freshwater habitats, and freshwater specimens identified. Consequently, it is more likely that these were misidentifications made by those responsible for the reports of the inventories consulted.

The miniature Crenuchidae *Elachocharax pulcher* Myers, 1927 (sensu Weitzman and Vari 1988; Toledo-Piza et al. 2014), and the hemiodontid *Hemiodus atranalis* (Fowler, 1940) were added to this list because they were recently captured at the Mamirauá Reserve, and we also included in our list three more species that just had their first records for the Solimões river basin, *Curimatopsis microlepis*, *Moenkhausia hemigrammoides* Géry, 1965 and *Pyrrhulina zigzag* Zarske & Géry, 1997 (Figures 3e; 3g; 3h).

Serrasalmus cf. *spilopleura* and *Mesonauta insignis* have their geographic distribution falling far from the Mamirauá Reserve area, and their occurrence can be questioned (Dagosta and De Pinna 2019; Kullander and Silfvergrip, 1991). A careful review of the identification of these species should be conducted in the near future.

Fifty-seven taxa in the list were not identified at the species level, and thus have an uncertain identification at this level. They were included in the list because there are deposited material in scientific collections to voucher for their names. Forty of them were identified only at the genus level, such as *Potamotrygon* sp.1, *Microcharacidium* sp.1, *Microschemobrycon* sp.1 and *Ancistrus* sp.1"mancha dorsal". Sixteen species were pre-determined with "cf.", such as *Metynnis* cf. *maculatus*, *Jupiaba* cf. *zonata* and *Ancistrus* cf. *hoplogenys* (Figure 3f). Eight species are new and are now under the process of description, listed here as *Characidium* sp. n., *Serrasalmus* sp. n., *Paravandellia* sp. n., *Plectrochilus* sp. n., *Brachyhypopomus* **sp.** n., *Adontosternarchus* sp. n., *Sternarchella* sp. n. and *Anablepsoides*"mamiraua" sp. n. (Figures 3a; 3b; 3c).

Discussion

The fish fauna found at the Mamirauá Reserve is typical of the Amazonian várzea ecosystem. Like other parts of the várzea (Zuanon et al. 2008), the more represented or richest families detected at RDSM fish fauna were Characidae, Loricariidae and Cichlidae. Species found at várzea lakes at the vicinity of the Solimões river (Saint-Paul et al., 2000; Freitas et al., 2014; Siqueira-Souza et al., 2016) are very similar to those found at lakes in Mamirauá. Similarly, the species found in floating meadows mattresses at the Eastern Peruvian Amazon (Correa et al., 2008) are also similar to those found in the floating meadows at Mamirauá. However, in all those previous accounts, species richness was not as high as the one found at Mamirauá Reserve and its aquatic environments. The study area is located in a part of the várzea considered exceptionally species-rich, and holding a set of important endemic species (Zuanon et al., 2008).

By any account, the Amazon basin has a superlative number of fish species. Available estimates vary greatly, but most of them suggest a number that may reach 3,500 species (Malabarba et al., 1998; Junk et al. 2007; Carvalho et al. 2009; Albert et al. 2011; van der Sleen & Albert 2017;

Dagosta & De Pina, 2019). However, some other authors suggest a significant upward trend, and that this number may reach up to 5,000 species in the next 70 years, if we maintain the current rate of description of new species (Ota et al. 2015). These values suggest that the Amazon fish fauna may represent about 15% of all freshwater fish species described in the world at the present (Oberdorff et al. 2019). The Congo River basin, in Africa, is considered the second most diverse river basin in the world, with less than half the number of fish species registered for the Amazon River basin (Snoeks et al. 2011).

Species richness in a particular area is the result of several processes operating at multiple spatial and temporal scales (Peláez & Pavanelli 2018), comprising numerous evolutionary lineages, resulting from the interaction of geological factors associated with vicariant and dispersion agents (Lundberg, 1998; Dagosta and de Pinna 2017). The distribution of fish species in the Amazonian sub-basins and adjacent drainage systems is complex, and amounts to numerous distribution overlaps and superlative degrees of biogeographic congruence (Dagosta and De Pinna 2017). The diversity patterns of this mega-fauna and the processes that generate these patterns are still only partially known (Dagosta and De Pinna 2019). However, recent studies suggest that the richness pattern of the Amazonian ichthyofauna is supported mainly by three factors: area, climate and energy availability (Oberdorff et al. 2019). The pattern shown here for Mamirauá fish species diversity is consistent with the recent predictions, but the pattern of fish endemism at Mamirauá is much higher than expected (Oberdorff et al., 2019).

The total number of species listed for the Mamirauá Reserve is considerably higher than in other studies, with the species richness at Middle Solimões basin reaching figures higher than those from other Amazonian sub-basins, such as the Tapajós River basin (with 529 species), the Xingu River basin (with 502 species), even though the study area of the Middle-Solimões corresponds to a small proportion of those two sub-basins. In addition, its known species richness reaches about 63% to 85% of the total species registered for the main channel of the Amazon River, depending on the source adopted (Zuanon et al., 2008; Dagosta and De Pinna 2019). This high value we found is probably the result of two combined factors. The first would be the high sampling effort applied during the last decades to the study area (Figure 5). The ichthyofauna of many Amazonian regions remain under-sampled, some of them are still nearly unknown to science, with no biological collection performed so far. Consequently, the differences in species richness found may simply reflect the difference in collection efforts (Queiroz et al. 2013). The two sub-basins under the greatest sampling effort are the same with the highest richness, the Negro River, with 1165 registered species (Beltrão et al. 2019), and the Madeira River, with 1062 species. Besides those two we have, of course, the main river channel, the Solimões-Amazonas, with 922 species recorded (Dagosta and De Pinna 2019).

The other explaining factor that may be responsible for the high species richness recorded would be the location of the Mamirauá Reserve and its environmental diversity. Located in the interflow of two great rivers, Solimões and Japurá, and in a large floodplain area, Mamirauá Reserve has a complex mosaic of bodies of water that are repeatedly connected and isolated, at least once a year. This type of ecosystem and the dynamics of its permanent or temporary aquatic environments provide several habitats and microhabitats that are distinct, and therefore can support a very high species richness (Figure 4). In this part of the Amazonian floodplains the water level rises annually around 11m (Ramalho et al., 2009), invading a mosaic of equally diverse array of forest types, and connecting and isolating all the local water bodies, sometimes for many consecutive months, probably with important implications for the richness of fish species in the area (Junk, et al. 1989; Arantes et al., 2017. In each part of the hydrological cycle, the aquatic environments present at the várzea can show a striking variation in water quality parameters (see Table 2). Besides that, Mamirauá Reserve lays at the confluence of the Japurá River, and the mouths of Tefé, Jutaí and Juruá Rivers are also very close, just few kilometers away. This high proximity to many other river basins and their fish faunas, with distinct levels of dissimilarity among them, could be another source of diversity and species richness. The distribution of the fish species in the Amazon sub-basins and adjacent drainage systems is complex, and amounts to numerous distributional

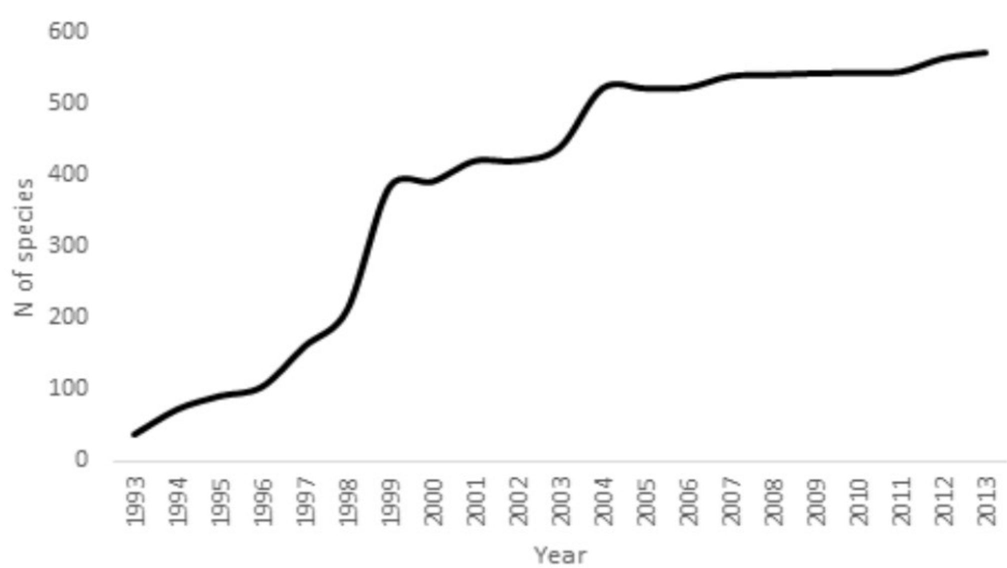

Figure 5. Species accumulation curve per year in the list of fish species recorded for Mamirauá Sustainable Development Reserve.

overlaps and superlative degrees of biogeographic congruence (Dagosta and de Pinna 2017). In the same way the high species richness of the Solimões River near Manaus can also be explained by its close proximity to the mouth of the Negro River (Zuanon et al., 2008).

None of the species recorded for the study area is listed as threatened of extinction, according with the International Union for Conservation of Nature (IUCN) and IBAMA (2018). Since the 2000's, several new species have been described for the area, almost all of them belonging to the Gymnotiformes, demonstrating a high species richness of this particular order at the Mamirauá Reserve, as in other várzea areas with habitats of similar diversity and structural complexity. This is probably due to the high number of taxonomic studies on this particular group of fish at Mamirauá (Albert & Crampton 2001; Crampton et al. 2004; Crampton et al. 2005; Correa et al. 2006; Albert and Crampton 2006; de Santana & Crampton 2007; de Santana & Crampton 2010; de Santana & Vari 2010; Lundberg et al. 2013; Sullivan et al. 2013; Carvalho & Albert 2015; Crampton et al. 2016; Evans et al. 2017).

It is expected that, as new undersampled areas are explored and surveyed, especially in the Northwestern part of Mamirauá Reserve, another significant increase in the fish species list will be achieved. As can be said for the whole Amazon, improvements in the sampling effort, together with continued taxonomic revision of the collected material, will result in the increase in the number of records, of new occurrences, and even in the description of new fish species for the study area. Recent studies on the Neotropical fish fauna have led to a significant improvement on the knowledge on fish diversity in the Amazon as never before (Sleen and Albert 2018; Dagosta and De Pinna 2019; Oberdorff et al. 2019), and we expect that this trend will be maintained or improved for the next decades.

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Author Contributions

Alexandre Pucci Hercos: elaboration of study's concept and design; data collection, analysis and preparation of manuscript.
Jonas Alves de Oliveira: elaboration of study's concept and design; data collection and analysis.
Jomara Cavalcante de Oliveira: elaboration of study's concept and design; data collection, analysis and preparation of manuscript.
Elizabeth Kathleen de Queiroz Rodrigues: elaboration of study's concept and design; data collection, analysis and preparation of manuscript.
Rita Louro Barbosa: data collection, analysis and preparation of manuscript.
Helder Lima de Queiroz: elaboration of study's concept and design; data collection, analysis and preparation of manuscript.

Table 2. List of fish species found at the Mamirauá Sustainable Development Reserve, during inventories, surveys and research on fish auto-ecology, biology and fish community ecology. * Paratype; **Holotype; ***Neotype. IDSM = Instituto de Desenvolvimento Sustentável Mamirauá; MCP = Museu de Ciências e Tecnologia da Pontifícia Universidade Católica do Rio Grande do Sul; INPA = Instituto Nacional de Pesquisa da Amazônia; MZUSP = Museu de Zoologia da Universidade de São Paulo; ZUEC = Museu de Zoologia da Universidade Estadual de Campinas.

ESPÉCIE	FONTE
MYLIOBATIFORMES: Potamotrygonidae	
*Potamotrygon constellata (*Vaillant, 1880)	IDSM3017
Potamotrygon henlei (Castelnau, 1855)	MCP32907
Potamotrygon histrix (Müller & Henle, 1839)	IDSM3018
Potamotrygon motoro (Müller & Henle, 1841)	IDSM3019
Potamotrygon sp.1	MCP32891
OSTEOGLOSSIFORMES: Osteoglossidae	
Osteoglossum bicirrhosum (Cuvier, 1829)	IDSM254; IDSM1106; INPA-ICT18698
OSTEOGLOSSIFORMES: Arapaimidae	
Arapaima gigas (Schinz, 1822)	IDSM3020
CLUPEIFORMES: Engraulidae	
Anchoviella alleni (Myers, 1940)	INPA-ICT18808; MCP29620; MCP29621
Anchoviella guianensis (Eigenmann, 1912)	IDSM1918
Jurengraulis juruensis (Boulenger, 1898)	IDSM23; INPA-ICT19407; INPA-ICT18782
Lycengraulis batesii (Günther, 1868)	IDSM24; IDSM41; MCP29902; MCP29903
Lycengraulis cf. *figueiredoi*	MCP30002
CLUPEIFORMES: Pristigasteridae	

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Ilisha amazonica (Miranda Ribeiro, 1920)	IDSM1099; INPA-ICT19280
Pellona castelnaeana (Valenciennes, 1847)	IDSM53
Pellona flavipinnis (Valenciennes, 1837)	IDSM25; IDSM1837; IDSM2289; INPA-ICT18828
Pristigaster cayana Cuvier, 1829	IDSM43; IDSM1091; IDSM1836; MCP29649; MCP29650
Pristigaster whiteheadi Menezes, de & Pinna, 2000	INPA-ICT18718
CHARACIFORMES: Crenuchidae	
Characidium aff. *Zebra*	IDSM1932
Crenuchus spilurus Günther, 1863	IDSM3021
Characidium sp. *n.*	IDSM3016
Microcharacidium sp.*1*	MCP29347; MCP29348; MCP29349; MCP29350; MCP29436; MCP29437; MCP29438; MCP29439
CHARACIFORMES: Erythrinidae	
*Erythrinus erythrinus (*Bloch & Schneider, 1801)	IDSM116; IDSM167; IDSM328; INPA-ICT19242; MCP29924; MCP29925; MCP29926; MCP29927
Hoplerythrinus unitaeniatus (Spix & Agassiz, 1829)	IDSM117; INPA-ICT19246
Hoplias malabaricus (Bloch, 1794)	IDSM196; IDSM214; IDSM238; IDSM285; IDSM1135; IDSM2653; MCP32755; MCP32756; MCP32757; MCP32759; MCP32760
CHARACIFORMES: Cynodontidae	
Cynodon gibbus Spix & Agassiz, 1829	IDSM397; IDSM1965; MCP29921
Hydrolycus scomberoides (Cuvier, 1819)	IDSM1104; IDSM1966; IDSM35; IDSM137
Rhaphiodon vulpinus Spix & Agassiz, 1829	MCP30586
CHARACIFORMES: Serrasalmidae	
Colossoma macropomum (Cuvier, 1818)	IDSM2996
Metynnis altidorsalis Ahl, 1923	IDSM1394; IDSM1395; IDSM1396; IDSM1397; IDSM1398; IDSM1399; IDSM1400; IDSM1401; IDSM1402; IDSM1403; IDSM1473
*Metynnis hypsauchen (*Müller & Troschel, 1844)	In the process of cataloging
Metynnis luna Cope, 1878	IDSM1467; IDSM1468; IDSM1470; IDSM1471; IDSM1472; IDSM1517; IDSM1727; IDSM1521; MCP31637
*Metynnis maculatus (*Kner, 1858)	IDSM1739
Myloplus asterias (Müller & Troschel, 1844)	IDSM1453; IDSM1454; IDSM1455; IDSM1456; IDSM1457; IDSM1459; IDSM1460; IDSM1461; IDSM1462; IDSM1463; IDSM1464; IDSM1465; IDSM1466; IDSM1516
Myloplus rhomboidalis (Cuvier, 1818)	In the process of cataloging
Myloplus rubripinnis (Müller & Troschel, 1844)	IDSM1732; IDSM1452; MCP31638
Myloplus schomburgkii (Jardine & Schomburgk, 1841)	In the process of cataloging
Myloplus torquatus (Kner, 1858)	IDSM1093
Mylossoma aureum (Spix & Agassiz, 1829)	IDSM233; IDSM1014; IDSM1518; IDSM1519; IDSM1689; IDSM1505; IDSM1514; IDSM1695; IDSM1696; IDSM1703; IDSM1704; IDSM1733; IDSM1737; IDSM1740; IDSM1741; IDSM1742; MCP31679; MCP31681
Mylossoma albiscopum (Cope 1872)	IDSM194; IDSM232; IDSM283; IDSM1035; IDSM1504; IDSM1506; IDSM1507; IDSM1508; IDSM1509; IDSM1510; IDSM1511; IDSM1513; IDSM1530; IDSM1645; IDSM1690; IDSM1692; IDSM1693; IDSM1694; IDSM1697; IDSM1698; IDSM1699; IDSM1700; IDSM1701; IDSM1702; IDSM1705; IDSM1706; IDSM1707; IDSM1708; IDSM1709; IDSM1710; IDSM1711; IDSM1712; IDSM1714; IDSM1715; IDSM1726; IDSM1728; IDSM1729; IDSM1730; IDSM1731; IDSM1734; IDSM1735; IDSM1736; IDSM1738; IDSM1743; MCP31654; MCP31656
Piaractus brachypomus (Cuvier, 1818)	IDSM205; IDSM1120; IDSM1691
Pristobrycon calmoni (Steindachner, 1908)	MCP29976; MCP29977; MCP29978; MCP29979; MCP29980; MCP29981; MCP29982; MCP29983
Pristobrycon striolatus (Steindachner, 1908)	IDSM1412; IDSM1421; IDSM1422; IDSM1423; IDSM1424; IDSM1425

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Pristobrycon sp.*1*	MCP33149
Pygocentrus nattereri Kner, 1858	IDSM127; IDSM234; IDSM1114; IDSM1426; IDSM1427; IDSM1428; IDSM1429; IDSM1430; IDSM1431; IDSM1432; IDSM1433; IDSM1434; IDSM1435; IDSM1436; IDSM1437; IDSM1438; IDSM1439; IDSM1440; IDSM1441; IDSM1442; IDSM1443; IDSM1444; IDSM1445; IDSM1446; IDSM1448; IDSM1449; IDSM1450; IDSM1451; IDSM1520; IDSM1522; IDSM1523; IDSM1524; IDSM1526; IDSM1527; IDSM1528; MCP32747; MCP32748; MCP32749
Serrasalmus cf. *altipinis*	MCP33213; MCP33214;
Serrasalmus eigenmanni Norman, 1929	IDSM1416; IDSM1417; IDSM1418; IDSM1419; IDSM1420; IDSM163; IDSM1414
Serrasalmus elongatus Kner, 1858	IDSM136; IDSM235; IDSM1406; IDSM1515; IDSM2308; MCP31652; MCP32900; MCP32901; MCP32902; MCP32904
Serrasalmus maculatus Kner, 1858	IDSM1407; IDSM1408; IDSM1411; IDSM1883
Serrasalmus medinai Ramírez, 1965	IDSM2302; IDSM256; IDSM1713
Serrasalmus rhombeus (Linnaeus, 1766)	IDSM261; IDSM333; IDSM113; IDSM1251; IDSM1405; IDSM1409; IDSM1481; IDSM1482; IDSM1483; IDSM1484; IDSM1485; IDSM1486; IDSM1487; IDSM1489; IDSM1490; IDSM1492; IDSM1494; IDSM1495; IDSM1496; IDSM1497; IDSM1498; IDSM1499; IDSM1500; IDSM1501; IDSM1502; IDSM1503; IDSM1512; IDSM1716; IDSM1717; IDSM2299; IDSM2300; IDSM2301; IDSM2304; IDSM2305; IDSM2307; IDSM2309; IDSM2310; IDSM1744; IDSM255; MCP32905
Serrasalmus serrulatus (Valenciennes, 1850)	MCP33038
Serrasalmus sp. *n.*	IDSM1474; IDSM1475; IDSM1476; IDSM1477; IDSM1478; IDSM1479; IDSM1480
Serrasalmus sp.*1*	MCP31677; MCP31678; MCP32753; MCP32754; MCP32894; MCP32895; MCP32897; MCP32909; MCP33198; MCP33200; MCP33201; MCP33202; MCP33203; MCP33205; MCP33206; MCP33207; MCP33209
Serrasalmus aff. *spilopleura* Kner, 1858	MCP33032
CHARACIFORMES: Hemiodontidae	
Anodus elongatus Agassiz, 1829	IDSM2202; MCP30042
Hemiodus gracilis Günther, 1864	In the process of cataloging
Hemiodus argenteus Pellegrin, 1908	In the process of cataloging
Hemiodus atranalis (Fowler, 1940)	IDSM3063
Hemiodus immaculatus Kner, 1858	MCP31710
Hemiodus microlepis Kner, 1858	IDSM3064
Hemiodus unimaculatus (Bloch, 1794)	IDSM3015
CHARACIFORMES: Anostomidae	
Abramites hypselonotus (Günther, 1868)	IDSM1046; IDSM1652; IDSM1796; IDSM1828
Anostomoides atrianalis Pellegrin, 1909	IDSM3022
Laemolyta proxima (Garman, 1890)	INPA-ICT18852; INPA-ICT18853; IDSM91
Laemolyta taeniata (Kner, 1859)	IDSM1105; IDSM1955; IDSM1964; IDSM1970
Leporinus agassizi Steindachner, 1876	IDSM151; IDSM334; IDSM1033; INPA-ICT19293
Leporinus cf. *niceforoi*	IDSM1971; IDSM1973; INPA-ICT18805
Leporinus fasciatus (Bloch, 1794)	IDSM1971; IDSM1973; INPA-ICT18805
*Leporinus friderici (*Bloch, 1794)	IDSM29; IDSM152; IDSM226; IDSM1878; INPA-ICT19347; INPA-ICT19346; INPA-ICT19341; INPA-ICT19340; INPA-ICT19339; INPA-ICT19338; INPA-ICT19335; INPA-ICT19333; INPA-ICT19332; INPA-ICT19330; INPA-ICT19329; INPA-ICT19327; INPA-ICT19326; INPA-ICT19325; INPA-ICT19324; INPA-ICT19319; MCP31647 MCP32810; MCP32811; MCP32812; MCP32813; MCP32814; MCP32815

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Leporinus jamesi Garman, 1929	MCP33034; MCP33121
Megaleporinus trifasciatus Steindachner, 1876	IDSM149; IDSM153; IDSM1884; IDSM2103; INPA-ICT19351; INPA-ICT19350; INPA-ICT19349; INPA-ICT19348; MCP29754; MCP29755; MCP29756
Pseudanos gracilis (Kner, 1858)	IDSM2997
Pseudanos trimaculatus (Kner, 1858)	IDSM1084; INPA-ICT19309; INPA-ICT19308
Rhytiodus argenteofuscus Kner, 1858	IDSM259; IDSM1073; INPA-ICT19306; MCP32935
Rhytiodus microlepis Kner, 1858	IDSM125; IDSM154; IDSM165; IDSM1054; INPA-ICT19289; *INPA-ICT19288; MCP29923*
Schizodon fasciatus Spix & Agassiz, 1829	IDSM1638; IDSM1972; IDSM155; IDSM198; IDSM1638; *INPA-ICT19546; INPA-ICT18712; MCP29992; MCP29993; MCP29994; MCP29995*
CHARACIFORMES: Chilodontidae	
Caenotropus labyrinthicus (Kner, 1858)	IDSM30; MCP33026; MCP33027
Caenotropus sp.*1*	IDSM1143; IDSM2118
Chilodus punctatus Müller & Troschel, 1844	IDSM3065
CHARACIFORMES: Curimatidae	
Curimata incompta Vari, 1984	IDSM2204
Curimata knerii Steindachner, 1876	MCP30627
Curimata vittata (Kner, 1858)	IDSM105; IDSM1121
Curimatella alburna (Müller & Troschel, 1844)	IDSM146; IDSM330; IDSM1077; IDSM1891; IDSM1949; INPA-ICT19264
Curimatella dorsalis (Eigenmann & Eigenmann, 1889)	In the process of cataloging
Curimatella meyeri (Steindachner, 1882)	MCP29607; MCP30621
Curimatopsis evelynae Géry, 1964	IDSM1865
Curimatopsis macrolepis (Steindachner, 1876)	IDSM1079
Curimatopsis microlepis Eigenmann & Eigenmann, 1889	IDSM2998
Cyphocharax abramoides (Kner, 1859)	IDSM1859
Cyphocharax festivus Vari, 1992	IDSM103; IDSM108; INPA-ICT19262
Cyphocharax plumbeus (Eigenmann & Eigenmann, 1889)	MCP33043
Cyphocharax gouldingi Vari, 1992	IDSM2999
Cyphocharax spiluropsis (Eigenmann & Eigenmann, 1889*)*	MCP29543; MCP29545; IDSM3000
Potamorhina altamazonica (Cope, 1878)	IDSM27; IDSM1900; MCP29381
Potamorhina latior (Spix & Agassiz, 1829)	IDSM26; IDSM1103; IDSM1818; IDSM1899; MCP32936
Psectrogaster amazonica Eigenmann & Eigenmann, 1889	IDSM225; IDSM3001
Psectrogaster essequibensis (Günther, 1864)	IDSM1946
Psectrogaster rutiloides (Kner, 1858)	IDSM135; IDSM1806; IDSM1846; MCP29795; MCP29796
Steindachnerina bimaculata (Steindachner, 1876)	MCP33140
Steindachnerina hypostoma (Boulenger, 1887)	IDSM1851; IDSM1847; MCP29931
Steindachnerina leucisca (Günther, 1868)	IDSM28; IDSM1061; IDSM1947; IDSM1948; MCP33141 MCP33142; MCP33143; MCP33144
CHARACIFORMES: Prochilodontidae	
Prochilodus nigricans Spix & Agassiz, 1829	IDSM99; IDSM223; IDSM1137; IDSM1803; MCP29711; MZUSP27925.0
Semaprochilodus insignis (Jardine, 1841)	IDSM1804; IDSM1108; IDSM204
Semaprochilodus taeniurus (Valenciennes, 1821)	IDSM224
CHARACIFORMES: Lebiasinidae	
Copeina guttata (Steindachner, 1876)	IDSM3002
Copella gr. *nattereri*	IDSM3038
Copella callolepis (Regan, 1912)	IDSM1138; IDSM1906; IDSM2657

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Nannostomus eques Steindachner, 1876	IDSM1908; IDSM1957
Nannostomus unifasciatus Steindachner, 1876	IDSM1907; IDSM1956
Nannostomus trifasciatus Steindachner, 1876	In the process of cataloging
Pyrrhulina australis Eigenmann & Kennedy 1903	IDSM2658
Pyrrhulina brevis Steindachner, 1876	IDSM222
Pyrrhulina filamentosa Valenciennes, 1847	In the process of cataloging
Pyrrhulina semifasciata Steindachner, 1876	IDSM183; IDSM207; IDSM1122; IDSM1905; IDSM2654
Pyrrhulina vittata Regan, 1912	IDSM3003
Pyrrhulina zigzag Zarske & Géry, 1997	IDSM2607; IDSM2671; IDSM2672; IDSM2673
CHARACIFORMES: Ctenoluciidae	
Boulengerella maculata (Valenciennes, 1850)	IDSM3066
Boulengerella cuvieri (Spix & Agassiz, 1829)	MCP32767
CHARACIFORMES: Chalceidae	
Chalceus erythrurus (Cope, 1870)	IDSM1083; IDSM1653; IDSM1890; INPA-ICT18619; INPA-ICT19286
CHARACIFORMES: Triportheidae	
Agoniates anchovia Eigenmann, 1914	IDSM31; IDSM1038; IDSM1549; IDSM1759; IDSM1936; IDSM2137; INPA-ICT19531; INPA-ICT19529; MCP29799; MCP29801; MCP29804
Triportheus albus Cope, 1872	IDSM1102; IDSM1931; MCP29940; MCP29941; MCP299942
Triportheus angulatus (Spix & Agassiz, 1829)	IDSM1755; IDSM1789; IDSM1053; INPA-ICT19303; INPA-ICT18767; MCP29943***; MCP29944; MCP29945; MCP29947
Triportheus auritus (Valenciennes, 1864)	IDSM1100; IDSM1756
CHARACIFORMES: Gasteropelecidae	
Carnegiella marthae Myers, 1927	IDSM2622; IDSM2660; IDSM1118; IDSM1825
Carnegiella strigata (Günther, 1864)	IDSM2627
Gasteropelecus sternicla (Linnaeus, 1758)	IDSM237; IDSM997; INPA-ICT18821
Thoracocharax stellatus (Kner, 1858)	IDSM55; IDSM1060; IDSM1101; IDSM1758; IDSM1791; IDSM1830; IDSM1838; IDSM1839; IDSM1852; IDSM1860; IDSM1937; IDSM2136; IDSM2625; INPA-ICT18816; MCP29568; MCP29569
CHARACIFORMES: Bryconidae	
Brycon amazonicus (Spix & Agassiz, 1829)	INPA-ICT19118; INPA-ICT19108; INPA-ICT19107; MCP29758; IDSM0111; IDSM228; MZUSP27924.0
Brycon falcatus Müller & Troschel, 1844	IDSM176
Brycon melanopterus (Cope, 1872)	In the process of cataloging
CHARACIFORMES: Iguanodectidae	
Bryconops melanurus (Bloch, 1794)	In the process of cataloging
Iguanodectes geisleri Géry, 1970	IDSM1911; IDSM2133
Iguanodectes purusii (Steindachner, 1908)	IDSM3005
*Iguanodectes spilurus (*Günther, 1864)	IDSM1126; MCP30630
Piabucus dentatus (Koelreuter, 1763)	IDSM3006
CHARACIFORMES: Acestrorhynchidae	
Acestrorhynchus abbreviatus (Cope, 1878)	IDSM1968; INPA-ICT19179; INPA-ICT19178; INPA-ICT19177; MCP29973
Acestrorhynchus falcatus (Bloch, 1794)	IDSM213
Acestrorhynchus falcirostris (Cuvier, 1819)	IDSM114; INPA-ICT18833; MCP29558; MCP29559
Acestrorhynchus microlepis (Schomburgk, 1841)	IDSM115; MCP30588; MCP30590
Acestrorhynchus nasutus Eigenmann, 1912	IDSM3007
Gnathocharax steindachneri Fowler, 1913	IDSM3008
CHARACIFORMES: Characidae	
Aphyocharax gr. *dentatus*	IDSM2290

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Aphyocharax pusillus Günther, 1868	IDSM44; IDSM45; IDSM1037; IDSM1130; IDSM1667; IDSM1787; IDSM1809; IDSM1933; MCP29551; MCP29552; MCP29553; MCP29580; MCP29581; MCP32769
Astyanax sp.*1*	IDSM2188; IDSM2212
Astyanax bimaculatus (Linnaeus, 1758)	IDSM3024
Boehlkea fredcochui Géry, 1966	IDSM1141
Brachychalcinus copei (Steindachner, 1882)	IDSM1930; IDSM2162
Charax condei (Géry & Knöppel, 1976)	IDSM3025
Charax gibbosus (Linnaeus, 1758)	INPA-ICT18779
Charax tectifer (Cope, 1870)	IDSM1843
Chrysobrycon sp.*1*	IDSM2159
Ctenobrycon hauxwellianus (Cope, 1870)	IDSM2171
Ctenobrycon spilurus (Valenciennes, 1850)	IDSM1136; IDSM1525; IDSM1566; IDSM1781; IDSM1896; IDSM1951; IDSM2624; INPA-ICT18793
Galeocharax gulo (Cope, 1870)	IDSM1082; IDSM1919; IDSM2186
Gymnocorymbus thayeri Eigenmann, 1908	IDSM1864; IDSM2184; IDSM2185; IDSM2606; IDSM2644
Hemigrammus belottii (Steindachner, 1882)	IDSM3009
Hemigrammus analis Durbin, 1909	IDSM1912
Hemigrammus haraldi Géry 1961	IDSM193; IDSM1945; IDSM2111; IDSM1858
Hemigrammus hyanuary Durbin, 1918	IDSM3010
Hemigrammus levis Durbin, 1908	IDSM1915
Hemigrammus luelingi Géry, 1964	IDSM2656
Hemigrammus ocellifer (Steindachner, 1882)	IDSM1617; IDSM1139; IDSM2626
Hemigrammus rodwayi Durbin, 1909	IDSM1914
Hemigrammus unilineatus (Gill, 1858)	IDSM1124; IDSM1824; IDSM1897; IDSM2189; IDSM2623; IDSM2630
Hemigrammus aff. *worderwinkleri*	IDSM3026
Hyphessobrycon bentosi Durbin, 1908	IDSM3027
Hyphessobrycon copelandi Durbin, 1908	In the process of cataloging
Jupiaba cf. zonata	IDSM150
Microschemobrycon sp.*1*	IDSM039
Moenkhausia ceros Eigenmann, 1908	IDSM2569
Moenkhausia chrysargyrea (Günther, 1864)	In the process of cataloging
Moenkhausia collettii (Steindachner, 1882)	IDSM1823; IDSM2655
Moenkhausia collettii "alta"	In the process of cataloging
Moenkhausia comma Eigenmann, 1908	In the process of cataloging
Moenkhausia cotinho Eigenmann, 1908	IDSM1096
Moenkhausia dichroura (Kner, 1858)	IDSM229; IDSM1095; IDSM1913; IDSM1765; IDSM1888; IDSM1895; IDSM1954; IDSM1969; IDSM1974; INPA-ICT18703; INPA-ICT18702
Moenkhausia gracilima (Eigenmann, 1908)	IDSM1921; IDSM1938
Moenkhausia grandisquamis (Müller & Troschel, 1845)	In the process of cataloging
Moenkhausia hemigrammoides Géry, 1965	IDSM1909
Moenkhausia intermedia Eigenmann, 1908	IDSM85; IDSM1782; IDSM1040; IDSM1885; INPA-ICT18701; *INPA-ICT18700; INPA-ICT18699*
Moenkhausia lata Eigenmann, 1908	IDSM2567
Moenkhausia lepidura (Kner, 1858)	IDSM1065; IDSM1953; IDSM2092
Moenkhausia megalops (Eigenmann, 1907)	In the process of cataloging
Moenkhausia melogramma Eigenmann, 1908	IDSM1075; IDSM1866; IDSM1910; IDSM2209; IDSM2659
Moenkhausia cf. *naponis*	IDSM1762; IDSM1784; IDSM1934; IDSM2101

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Moenkhausia oligolepis (Günther, 1864)	IDSM1123; INPA-ICT18721; INPA-ICT18723
Odontostilbe fugitiva Cope, 1870	IDSM2573; IDSM2574
Paragoniates alburnus Steindachner, 1876	MCP29612; MCP29850
Phenacogaster pectinatus (Cope, 1870)	IDSM3028
Phenacogaster sp.*1*	In the process of cataloging
Poptella compressa (Günther, 1864)	IDSM1134; IDSM1532; IDSM1780; IDSM2196
Prionobrama filigera (Cope, 1870)	IDSM1557
Prodontocharax alleni Böhlke, 1953	MCP29863; MCP31917
Prodontocharax melanotus Pearson, 1924	IDSM54; IDSM1760; IDSM1792; IDSM1795; IDSM1810; IDSM1849; IDSM1854; IDSM2571; IDSM2572
Protocheirodon pi (Vari, 1978)	*IDSM1808; IDSM2591*
Roeboides affinis (Günther, 1868)	IDSM1564; IDSM1935; IDSM1920; IDSM1840; IDSM999; IDSM1845; INPA-ICT19543; INPA-ICT19540; INPA-ICT19539; INPA-ICT19538; MCP29988
Roeboides myersii Gill, 1870	IDSM76; IDSM86; IDSM230; IDSM231; IDSM260; IDSM1036; IDSM1805; INPA-ICT19521; INPA-ICT9520; INPA-ICT19519; INPA-ICT19518; INPA-ICT19517; INPA-ICT19516; INPA-ICT18736; MCP30577; MCP30578; MCP30580; MCP30581; MCP30582; MCP30583; MCP30584
Serrapinnus gr. *gracilis*	IDSM998; IDSM1898
Stethaprion erythrops Cope, 1870	IDSM2126; IDSM2170; INPA-ICT19564; MCP29909; MCP29910
Stichonodon insignis (Steindachner, 1876)	IDSM1080
Tetragonopterus argenteus Cuvier, 1816	IDSM75; IDSM282; IDSM1783; IDSM1802; IDSM1844; IDSM1967; IDSM2105; INPA-ICT18693; INPA-ICT18692
Tetragonopterus chalceus Spix & Agassiz, 1829	INPA-ICT18707
GYMNOTIFORMES: Apteronotidae	
Adontosternarchus balaenops (Cope, 1878)	IDSM2175; IDSM2293; IDSM1820; IDSM211; IDSM1003; INPA-ICT18272; INPA-ICT18271; INPA-ICT18270; INPA-ICT18269; INPA-ICT18268; INPA-ICT18266; INPA-ICT11520; MCP33386; MCP33387; MCP33390; MCP39314; MCP39315; MCP39316; MCP39317; MCP39318; MCP39319; MCP39320; MCP39321; MCP39322; MCP39323; MCP39324; MCP39325; MCP39326; MCP39327; MCP39328; MCP39329
Adontosternarchus clarkae Mago-Leccia, Lundberg & Baskin, 1985	IDSM1004; IDSM1801; IDSM1799; IDSM1829; IDSM1877; IDSM2076; IDSM2639; IDSM785; IDSM289; IDSM2096; INPA-ICT18230; INPA-ICT18229; INPA-ICT15809; INPA-ICT9971; MCP39330; MCP39331; MCP39332; MCP39333; MCP39334; MCP39335; MCP39336; MCP39337; MCP39338; MCP39339; MCP39340; MCP39341; MCP39342
Adontosternarchus sachsi (Peters, 1877)	IDSM279; INPA-ICT18278; INPA-ICT15808; INPA-ICT11519; MCP39352; MCP39353; MCP39354; MCP39355
Adontosternarchus nebulosus Lundberg & Cox Fernandes 2007	INPA-ICT17311*
Adontosternarchus sp. *n.*	MCP39302*; MCP39303*; MCP39304**; MCP39305*; MCP39306*; MCP39307*; MCP39308*; MCP39309*; MCP39310; MCP39311; MCP39312; MCP39313
Apteronotus albifrons (Linnaeus, 1766)	IDSM828; IDSM1066; IDSM1867; INPA-ICT18179
Apteronotus apurensis Fernández-Yépez, 1968	INPA-ICT18298; INPA-ICT18256; INPA-ICT18255; INPA-ICT18254; INPA-ICT18156; INPA-ICT15834; INPA-ICT15811; INPA-ICT15803
Apteronotus bonapartii (Castelnau, 1855)	IDSM744; IDSM745; IDSM775; IDSM776; IDSM994; IDSM1798; IDSM1822; IDSM1826; IDSM1868; IDSM1944; IDSM2061; IDSM2070; IDSM2174; IDSM2082; IDSM2031; IDSM2032; IDSM2033; IDSM2034; INPA-ICT09970
Compsaraia compsa (Mago-Leccia, 1994)	In the process of cataloging
Compsaria samueli Albert & Crampton, 2009	IDSM276
Pariosternarchus amazonensis Albert & Crampton, 2006	MCP34916**; MCP34917*

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Parapteronotus hasemani (Ellis, 1913)	IDSM1001; IDSM59; IDSM637; IDSM746; IDSM754; IDSM758; IDSM2047; IDSM002056; IDSM002057; IDSM002095; IDSM002129; IDSM002147; IDSM002173; IDSM001869; INPA-ICT018315; INPA-ICT018314; INPA-ICT018313; INPA-ICT018312; INPA-ICT 018310; INPA-ICT018309; INPA-ICT018308; INPA-ICT018307; INPA-ICT018305; INPA-ICT018302; INPA-ICT018258; INPA-ICT018257; INPA-ICT015807; INPA-ICT9969; MCP33437; MCP33438; MCP33439; MCP33440; MCP33441; MCP33442
Platyurosternarchus macrostomus (Günther, 1870)	IDSM1986; IDSM2183; INPA-ICT15828; MCP41660
Porotergus duende de, Santana & Crampton, 2010	MCP37360*
Porotergus gimbeli Ellis, 1912	IDSM1006; INPA-ICT15804; MCP37523; MCP37524; MCP37525; MCP37526; MCP37527; MCP37529; MCP37530; MCP37531
Porotergus gymnotus Ellis, 1912	IDSM2291
Sternarchella calhamazon Lundberg, Cox Fernandes, Campos, da, Paz & Sullivan, 2013	MCP49414; MCP49415; MCP49416; MCP49417; MCP49418; MCP49419; MCP49420; MCP49421; MCP49422*
Sternarchella duccis (Lundberg, Cox Fernandes & Albert, 1996)	INPA-ICT15818
Sternarchella raptor (Lundberg, Cox Fernandes & Albert, 1996)	IDSM60; INPA-ICT15819; MCP33291; MCP33292
Sternarchella rex Evans, Crampton & Albert 2017	MCP49422**; MCP49423*
Sternarchella schotti (Steindachner, 1868)	IDSM2177; IDSM2634; IDSM1873; IDSM2132; IDSM295; IDSM1050; IDSM1797; IDSM2148; IDSM2298; IDSM1942; INPA-ICT18264; INPA-ICT18263; INPA-ICT 18262; INPA-ICT18261; INPA-ICT18260; INPA-ICT18191; INPA-ICT15801; INPA-ICT09979; MCP33371; MCP33372; MCP33373; MCP33389; MCP49424; MCP49425; MCP49426; MCP49427; MCP49428; MCP49429; MCP49430; MCP49431; ZUEC-PIS12339
*Sternarchella terminalis (*Eigenmann & Allen, 1942)	IDSM275; INPA-ICT18150; ZUEC-PIS12340; MCP33370; MCP49432; MCP49433; MCP49434; MCP49435; MCP49436
Sternarchella sp. *n*.	ZUEC-PIS12337*; ZUEC-PIS12338*
Sternarchogiton nattereri (Steindachner, 1868)	IDSM2176; IDSM2632; IDSM2146; IDSM2131; IDSM1800; IDSM1761; IDSM996; IDSM278; INPA-ICT18297; INPA-ICT18178; INPA-ICT18177; INPA-ICT15799; INPA-ICT11522; MCP38306
Sternarchogiton porcinum Eigenmann & Allen, 1942	MCP37532; MCP37533; MCP37534; MCP37535; MCP37536; MCP37537; MCP37539; MCP37540; MCP37541; MCP37542
Sternarchogiton sp.*1*	MCP33311; MCP37543
Sternarchorhamphus muelleri (Steindachner, 1881)	IDSM290; INPA-ICT18259; INPA-ICT15823; MCP33461; MCP33462; MCP33463; MCP33464; MCP33465; MCP33466; MCP41652; MCP41653; MCP41655; MCP41656; MCP41657; MCP41658
Sternarchorhynchus cramptoni de, Santana & Vari, 2010	MCP41637*; MCP41638*
Sternarchorhynchus curvirostris (Boulenger, 1887)	IDSM2130
Sternarchorhynchus mormyrus (Steindachner, 1868)	MCP33285; MCP41640; MCP41641; MCP41642
Sternarchorhynchus oxyrhynchus (Müller & Troschel, 1849)	IDSM1879; INPA-ICT18274; INPA-ICT18194; MCP33382; MCP33383; MCP33384; MCP33391
Sternarchorhynchus sp.*1*	MCP41639; MCP41643; MCP41645; MCP41646; MCP41647; MCP41648; MCP41649; MCP41650; MCP41651
Tenebrosternarchus preto (de Santana & Crampton, 2007)	INPA-ICT15806*; INPA-ICT18164*; MCP37548*; MCP37549*; MCP37550*; MCP37554*; MCP37555*; MCP37556*; MCP37557*
GYMNOTIFORMES: Sternopygidae	
Distocyclus conirostris (Eigenmann & Allen, 1942)	IDSM1876; IDSM2190; IDSM2150; IDSM2172; IDSM995; INPA-ICT18301; INPA-ICT18300 INPA-ICT18299; INPA-ICT18031; INPA-ICT15812; INPA-ICT11517; MCP33286; MCP33287; MCP33288; MCP33289; MCP33290
Eigenmannia limbata (Schreiner & Miranda Ribeiro, 1903)	IDSM98; IDSM128; IDSM732; IDSM778; IDSM779; IDSM1111; IDSM2051; IDSM2052; IDSM2097;INPA-ICT18684; INPA-ICT18683; INPA-ICT18681; INPA-ICT18288; INPA-ICT18287; INPA-ICT18286; INPA-ICT18285; INPA-ICT18282; INPA-ICT18281; INPA-ICT18202; INPA-ICT9976
Eigenmannia macrops (Boulenger, 1897)	IDSM96; IDSM1052; IDSM1870; IDSM2090; IDSM2098; IDSM2179; IDSM288
Eigenmannia gr. *trilineata* López & Castello, 1966	INPA-ICT15795

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Eigenmannia virescens (Valenciennes, 1842)	IDSM404; IDSM407; IDSM780; IDSM781; IDSM786; IDSM787; IDSM859; IDSM860; IDSM861; IDSM1005; IDSM1874; IDSM1848; IDSM2060; INPA-ICT35171; MCP33293; MCP33294; MCP33295; MCP33296; MCP33297
Eigenmannia sp.*1*	MCP47752
Rhabdolichops caviceps (Fernández-Yépez, 1968)	IDSM274; INPA-ICT15791; INPA-ICT9981; MCP35999; MCP36000; MCP36001; MCP36002; MCP36004; MCP36005; MCP36006; MCP36007; MCP36008; MCP36010; MCP36011; MCP36022
Rhabdolichops eastwardi Lundberg & Mago-Leccia, 1986	IDSM2180; IDSM273; INPA-ICT18220; INPA-ICT18218; INPA-ICT18217; INPA-ICT18212; INPA-ICT018211; INPA-ICT011518; MCP36012: MCP36013; MCP36014; MCP36015; MCP36018; MCP36019; MCP36020; MCP36023; MCP36024; MCP36025
Rhabdolichops electrogrammus Lundberg & Mago-Leccia, 1986	MCP36027; MCP36028; MCP36029
Rhabdolichops lundbergi Correa, Crampton & Albert, 2006	*IDSM1010; INPA-ICT18226; INPA-ICT18222; INPA-ICT25254*; MCP36031*; MCP36032*; MCP36033*; MCP36034*; MCP36035*; MCP36036*; MCP36037**; MCP36038*; MCP36039*; MCP36040*; MCP36042*; MCP36043*; MCP36044*; MCP36051*
Rhabdolichops navalha Correa, Crampton & Albert, 2006	*IDSM2094; IDSM2149; IDSM2182; IDSM1116; IDSM1872; IDSM1816*
Rhabdolichops nigrimans Correa, Crampton & Albert, 2006	*IDSM294; IDSM1007; IDSM1850; IDSM1871; IDSM1943; INPA-ICT18371; INPA-ICT18370; INPA-ICT18369; INPA-ICT18239; INPA-ICT18225; INPA-ICT18224; INPA-ICT18223; INPA-ICT18221; INPA-ICT15794*
Rhabdolichops troscheli (Kaup, 1856)	INPA-ICT18162; INPA-ICT9973; MCP36055; MCP36057; MCP36058
Sternopygus branco *Crampton, Hulen & Albert, 2004*	INPA-ICT18166; INPA-ICT15786*; MCP32241*; MCP32242*; MCP32243*; MCP32244*; MCP32245*; MCP32246*; MCP32451**
Sternopygus macrurus (Bloch & Schneider, 1801)	IDSM728; IDSM755; IDSM757; IDSM769; IDSM771; IDSM181; IDSM849; IDSM1011; IDSM1763; IDSM1976; IDSM2035; IDSM2036; IDSM2037; IDSM2038; IDSM2039; IDSM2040; IDSM2041; IDSM2042; IDSM2043; IDSM2044; IDSM2045; IDSM2053; IDSM2054; IDSM2055; IDSM2109; IDSM2128; INPA-ICT18316; INPA-ICT18190; INPA-ICT15802; INPA-ICT9974; MCP032247; MCP32248; MCP32250; MCP32251; MCP32252; MCP32258; MCP33374; MCP33375
GYMNOTIFORMES: Gymnotidae	
Electrophorus varii de Santana, Wosiacki, Crampton, Sabaj, Dillman, Mendes-Júnior & Castro e Castro, 2019	IDSM143; IDSM2667; IDSM2670; INPA-ICT57626; INPA-ICT15820
Gymnotus arapaima Albert & Crampton, 2001	IDSM142; IDSM800; IDSM765; IDSM773; IDSM804; IDSM805; IDSM806; IDSM808; IDSM2046; IDSM2048; IDSM2049; IDSM2050; INPA-ICT18391; INPA-ICT18390; INPA-ICT18389; INPA-ICT15833*; INPA-ICT14532*; INPA-ICT9963*; MCP33298; MCP33365; MCP33434; MCP33435; MCP33436; MCP49987*; MZUSP75166.0 MZUSP75167.0; MZUSP75179.0
Gymnotus carapo Linnaeus, 1758	IDSM1788; IDSM734; IDSM801; IDSM1008; IDSM1978; IDSM809
Gymnotus jonasi Albert & Crampton, 2001	IDSM122; IDSM217; IDSM802; IDSM810; IDSM811; INPA-ICT18318; INPA-ICT 11513; INPA-ICT15830*; MCP33331; MCP33332; MCP33334; MCP33335; MCP33336; MCP33337; MCP33338; MCP033339; MCP33340; MCP33341; MCP33342; MCP33343; MCP33366; MCP46931
Gymnotus mamiraua Albert & Crampton, 2001	IDSM191; IDSM218; IDSM219; IDSM733; IDSM764; IDSM766; IDSM767; IDSM772; IDSM803; IDSM807; IDSM812; IDSM869; IDSM870; IDSM871; IDSM872; IDSM873; IDSM874; IDSM1009; IDSM1861; IDSM1982; IDSM2114; IDSM2651; IDSM2665; IDSM2666; INPA-ICT18421; INPA-ICT18420; INPA-ICT18419; INPA-ICT18418; INPA-ICT18417; INPA-ICT18416; INPA-ICT18415; INPA-ICT18414; INPA-ICT18413; INPA-ICT18412; INPA-ICT18411; INPA-ICT18410; INPA-ICT18409; INPA-ICT18408; INPA-ICT18407; INPA-ICT18406; INPA-ICT18405; INPA-ICT18404; INPA-ICT18403; INPA-ICT18402; INPA-ICT 18401; INPA-ICT18400; INPA-ICT18399; INPA-ICT18398; INPA-ICT18397; INPA-ICT18396; INPA-ICT18395; INPA-ICT18394; INPA-ICT18393; INPA-ICT18392; INPA-ICT27577; INPA-ICT18159; INPA-ICT14537; INPA-ICT13504; INPA-ICT15832*; INPA-ICT9962*; INPA-ICT13503**; MCP29805; MCP33282; MCP33283; MCP33284; MCP33348; MCP33349; MCP33350; MCP33351; MCP33352; MCP33353; MCP33354

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Gymnotus melanopleura Albert & Crampton, 2001	INPA-ICT9966*
Gymnotus obscurus Crampton, Thorsen & Albert,2005	IDSM2636; MZUSP60604.0; MZUSP60605.0; MZUSP60606.0
Gymnotus onca Albert & Crampton, 2001	INPA-ICT11512**
Gymnotus varzea Crampton, Thorsen & Albert, 2005	IDSM000797; IDSM798; IDSM281; INPA-ICT18424*; INPA-ICT18423*; INPA-ICT018422*; MZUSP60601.0; MZUSP60602.0; MZUSP60603.0; MZUSP75158.0*; MZUSP75159.0*; MZUSP75160.0*; MZUSP75161.0*; MZUSP75162.0*; MZUSP75163.0*; MZUSP75164.0*
GYMNOTIFORMES: Hypopomidae	
Brachyhypopomus batesi Crampton, de, Santana, Waddell & Lovejoy, 2016	IDSM2065
Brachyhypopomus beebei (Schultz, 1944)	IDSM120; IDSM739; IDSM814; IDSM816; IDSM863; IDSM864; IDSM2074; IDSM2083; IDSM2091; INPA-ICT18341; INPA-ICT18338; INPA-ICT18337; INPA-ICT18336; INPA-ICT18335; INPA-ICT9943; MCP45313; MCP45342; MCP45343; MCP45344; MCP45358; MCP45361; MCP45380; MCP45381; MCP45382; MCP45383; MCP45385; MCP45387; MCP45420; MCP45421; MCP45422; MCP45424; MCP45427; MCP45428; MCP45450
Brachyhypopomus belindae Crampton, de, Santana, Waddell & Lovejoy, 2016	MCP45267*; MCP45430*; MCP45431*; MCP47867*; MCP45360**
Brachyhypopomus bennetti Sullivan, Zuanon, Cox & Fernandes, 2013	IDSM174; IDSM220; IDSM729; IDSM730; IDSM736; IDSM741; IDSM742; IDSM748; IDSM749; IDSM1987; IDSM1988; IDSM1989; IDSM1990; IDSM1991; IDSM1992; IDSM1993; IDSM1994; IDSM1995; IDSM1996; IDSM1997; IDSM1998; IDSM1999; IDSM2000; IDSM2001; IDSM2002; IDSM2003; IDSM2004; IDSM2005; IDSM2006; IDSM2007; IDSM2008; IDSM2009; IDSM2010; IDSM2011; IDSM2012; IDSM2013; IDSM2014; IDSM2015; IDSM2016; IDSM2017; IDSM2018; IDSM2019; IDSM820; IDSM821; IDSM788; IDSM789; IDSM830; IDSM825; IDSM827; IDSM2025; IDSM2026; IDSM2027; IDSM2028; IDSM2029; IDSM2030; IDSM2064; IDSM2022; IDSM2089; IDSM836; IDSM837; IDSM840; IDSM866; IDSM867; IDSM868; IDSM843; IDSM1128; IDSM1766; IDSM2069; IDSM2072; IDSM2073; IDSM1863; IDSM2077; MCP33278; MCP33280; MCP33281; MCP45251; MCP45252; MCP45253; MCP45254; MCP45255; MCP45256; MCP45257; MCP45315; MCP45316; MCP45330; MCP45345; MCP45346; MCP45347; MCP45348; MCP45359; MCP45384; MCP45388; MCP45389; MCP45390; MCP45391; MCP45392; MCP45394; MCP45399; MCP45400; MCP45401; MCP45429; MCP45451; MCP45465; MCP46934; MCP47021; MZUSP75152.0*; MZUSP75153.0*; MZUSP75154.0*; MZUSP75155.0*; MZUSP75156.0*; MZUSP75157.0*
Brachyhypopomus brevirostris (Steindachner, 1868)	IDSM121; IDSM774; IDSM743; IDSM822; IDSM835; IDSM845; IDSM1110; IDSM1132; IDSM1928; IDSM1767; IDSM2600; IDSM1984; IDSM1886; IDSM2211; IDSM2108; INPA-ICT18252; INPA-ICT18251; INPA-ICT18250; INPA-ICT18249; INPA-ICT18248; INPA-ICT18247; INPA-ICT18343; INPA-ICT18342; MCP33367; MCP44758; MCP45259; MCP45260; MCP45261; MCP45262; MCP45317; MCP45318; MCP45319; MCP45323; MCP45326; MCP45331; MCP45362; MCP45363; MCP45386; MCP45395; MCP45396; MCP45402; MCP45403; MCP45404; MCP46927; MCP46930; MCP46935;
Brachyhypopomus flavipomus Crampton, de, Santana, Waddell & Lovejoy, 2016	IDSM123; IDSM124; IDSM126; IDSM203; IDSM815; IDSM824; IDSM838; IDSM2020; IDSM2021; IDSM2062; IDSM2161; IDSM2079; IDSM2080; IDSM2084; IDSM2085; IDSM2646; MCP45264; MCP45265*; MCP45266*; MCP45329; MCP45349*; MCP45350*; MCP45364; MCP45365; MCP45367*; MCP45368; MCP45405*; MCP45406*; MCP45425*; MCP45453
Brachyhypopomus hendersoni Crampton, de, Santana, Waddell & Lovejoy, 2016	IDSM844
Brachyhypopomus hamiltoni Crampton, de, Santana, Waddell & Lovejoy, 2016	MCP45268; MCP45269*; MCP45482**
Brachyhypopomus pinnicaudatus (Hopkins, Comfort, Bastian & Bass, 1990)	IDSM731; IDSM737; IDSM738; IDSM792; IDSM175; IDSM215; IDSM248; IDSM464; IDSM817; IDSM826; IDSM829; IDSM832; IDSM839; IDSM853; IDSM2063; IDSM1129; IDSM1977; MCP45275; MCP45276; MCP45277; MCP45278; MCP45279; MCP45280; MCP45281; MCP45328; MCP45351; MCP45370; MCP45398; MCP45409; MCP45410; MCP45433; MCP45435; MCP45436; MCP45437; MCP45438; MCP45455; MCP46928

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Brachyhypopomus walteri Sullivan, Zuanon, Cox & Fernandes, 2013	IDSM221; IDSM833; IDSM834; IDSM1927; IDSM1881; IDSM1768; IDSM1140; IDSM2023; IDSM2024; IDSM2087; MCP33368; MCP33369; MCP44607; MCP44649*; MCP44742; MCP45290; MCP45291; MCP45292; MCP45293; MCP45295*; MCP45320*; MCP45321; MCP45327; MCP45412*; MCP45413; MCP45441; MCP45443; MCP45444*; MCP45445; MCP45458*; MCP45487; MCP45488*; MCP45490; MCP46933
Brachyhypopomus regani Crampton, de, Santana, Waddell & Lovejoy, 2016	IDSM740; IDSM2075; IDSM2288; IDSM2597; IDSM2598; IDSM2601; IDSM2618; IDSM2192; IDSM2156; IDSM858; IDSM865; MCP45282; MCP45283; MCP45284; MCP45285; MCP45286; MCP45333*; MCP45334*; MCP45335*; MCP45411*; MCP45439*; MCP45446*; MCP45456; MCP45473; MCP45484*; MCP47022**
Brachyhypopomus sp. n.	MCP33279; MCP44744*; MCP44760; MCP45324*; MCP45459; MCP46021
GYMNOTIFORMES: Rhamphichthyidae	
Hypopygus lepturus Hoedeman, 1962	IDSM855
Steatogenys elegans (Steindachner, 1880)	IDSM761; IDSM253; IDSM793; IDSM993; IDSM1757; IDSM1794; IDSM1827; IDSM1880; IDSM2099; IDSM2115; INPA-ICT18231; INPA-ICT18171; INPA-ICT18169; INPA-ICT18168; INPA-ICT18167; INPA-ICT9957; MCP31923; MCP31929; MCP31930; MCP31931; MCP31936; MCP31937; MCP31938; MCP31939; MCP31941; MCP31942; MCP31943; MCP31944; MCP31945; MCP31948
Gymnorhamphichthys rondoni (Miranda Ribeiro, 1920)	In the process of cataloging
Gymnorhamphichthys hypostomus Ellis, 1912	IDSM3031
Rhamphichthys heleios Carvalho & Albert, 2015	INPA-ICT18332*; INPA-ICT18323*
Rhamphichthys lineatus Castelnau, 1855	INPA-ICT18276; MCP33456; MCP33457; MCP44757
Rhamphichthys marmoratus Castelnau, 1855	IDSM542; IDSM735; IDSM750; IDSM794; IDSM1980; IDSM1985; IDSM2100; IDSM2178; MCP33380; MCP33381; MCP33450; MCP33452; MCP33454; MCP33455; MCP44604; MCP46929; MCP46932
Rhamphichthys rostratus (Linnaeus, 1766)	IDSM1807; MCP33444; MCP33446
Rhamphichthys sp.1	MCP33378; MCP47019
SILURIFORMES: Trichomycteridae	
Apomatoceros sp.*1*	MCP33162; MCP33163; MCP33164; MCP33165
Homodiaetus sp.*1*	MCP29342
Henonemus punctatus (Boulenger, 1887)	IDSM2138; IDSM2152; IDSM2181
Megalocentor echthrus de Pinna & Britski, 1991	IDSM2198; MCP29548; MCP30637; MCP30646;
Paravandellia sp. *n*.	MCP29562*
Pareiodon microps Kner, 1855	MCP29949; MCP29950
Plectrochilus machadoi Miranda Ribeiro, 1917	IDSM2153
Plectrochilus wieneri (Pellegrin, 1909)	IDSM2635
Plectrochilus sp. *n*.	MCP29560*; MCP31629
Pseudostegophilus nemurus (Günther, 1869)	IDSM132; IDSM2151; MCP30010; MCP30013; MCP30015
Potamoglanis hasemani (Eigenmann, 1914)	In the process of cataloging
Stegophilus septentrionalis Myers, 1927	MCP29554; MCP29557
Tridensimilis sp.*1*	In the process of cataloging
Vandellia cirrhosa Valenciennes, 1846	MCP30643
Vandellia sanguinea Eigenmann, 1917	MCP30633
Vandellia sp.*1*	MCP29343; MCP29344; MCP29561
SILURIFORMES: Callichthyidae	
Callichthys callichthys (Linnaeus, 1758)	IDSM168; IDSM2652; IDSM2640; IDSM2112; MCP33116; MCP33117; MCP33118; MCP33119
Corydoras acutus Cope, 1872	In the process of cataloging
Corydoras ambiacus Cope, 1872	In the process of cataloging

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Corydoras elegans Steindachner, 1876	IDSM2603; IDSM2604; IDSM2123
Corydoras latus Pearson, 1924	IDSM2617
Corydoras leopardus Myers, 1933	IDSM1777
Corydoras multiradiatus (Orcés V., 1960)	In the process of cataloging
Corydoras pygmaeus Knaack, 1966	IDSM2605; IDSM2631
Corydoras splendens (Castelnau, 1855)	In the process of cataloging
Corydoras gr. *zygatus*	In the process of cataloging
Dianema longibarbis Cope, 1872	IDSM145; IDSM1979; IDSM2168; IDSM2650
Hoplosternum littorale (Hancock, 1828)	IDSM147; IDSM286; IDSM1983; MCP29443; MCP29444; MCP29445; MCP29446; MCP29447; MCP29448; MCP29449; MCP29450; MCP29450; MCP29451; MCP29452; MCP29453; MCP29454; MCP29455; MCP29456; MCP29457
Lepthoplosternum altamazonicum Reis, 1997	MCP29317; MCP29319; MCP29320; MCP29321; MCP29322; MCP29323; MCP29324; MCP29325; MCP29326; MCP29327; MCP29328; MCP34561; MCP34562
Lepthoplosternum pectorale (Boulenger, 1895)	IDSM177; IDSM247; IDSM2674; IDSM2677; IDSM2678
Lepthoplosternum ucamara Reis & Kaefer, 2005	MCP29316; MCP29318; MCP29329; MCP29582
Megalechis picta (Müller & Troschel, 1849)	IDSM185; IDSM1; IDSM1131; IDSM2110; IDSM2167
Megalechis thoracata (Valenciennes, 1840)	IDSM2675; IDSM2676; MCP32940; MCP32941; MCP32943; MCP32944; MCP32945; MCP32946
SILURIFORMES: Loricariidae	
Acanthicus hystrix Spix & Agassiz 1829	IDSM2122
Ancistrus dolichopterus Kner, 1854	IDSM1030; IDSM1158; IDSM1745; IDSM1751; IDSM1752
Ancistrus hoplogenys (Günther, 1864)	MCP29784; IDSM1227
Ancistrus sp.*1* "mancha dorsal"	IDSM1170; IDSM1226; IDSM1244; IDSM1383; IDSM1384; IDSM1386; IDSM1167; IDSM1031; IDSM1159; IDSM1191; IDSM1197
Ancistrus sp.2 "robusto"	IDSM1245
Ancistrus sp.3	MCP29730; MCP29736
Aphanotorulus emarginatus (Valenciennes, 1840)	IDSM1023; IDSM1169; IDSM1229; IDSM1192; IDSM1318; IDSM1684; INPA-ICT19490; INPA-ICT19489; MCP30623; MCP30627; MCP33268; MCP33269; MCP33270; MCP33272; MCP33273
Aphanotorulus cf. *emarginatus*	IDSM1317; IDSM1247; IDSM1180
Dekeyseria amazonica Rapp Py-Daniel, 1985	IDSM1076; IDSM1258; IDSM1259; IDSM1260; IDSM1261; IDSM1262; IDSM1263; IDSM1264; IDSM1265; IDSM1266; IDSM1267; IDSM1268; IDSM1269; IDSM1270; IDSM1271; INPA-ICT19496; INPA-ICT19495; INPA-ICT19494; MCP29765
Dekeyseria scaphirhyncha (Kner, 1854)	INPA-ICT37654
Farlowella amazonum (Günther, 1864)	MCP29738
Farlowella gr. *gracilis*	IDSM1117
Farlowella henriquei MirandaRibeiro, 1918	MCP29769
Farlowella nattereri Steindachner, 1910	IDSM1153; IDSM1165; MCP29714; MCP29713; MCP29714; MCP29715; MCP29716; MCP29718
Farlowella oxyrryncha (Kner, 1853)	IDSM1026
Farlowella rugosa Boeseman, 1971	IDSM1629
Hemiodontichthys acipenserinus (Kner, 1853)	IDSM1670; IDSM1068; MCP29790; MCP29791; MCP29792; MCP29793; MCP29794
Hypoptopoma bianale Aquino & Schaefer, 2010	MCP29584; MCP29591; MCP33115
Hypoptopoma brevirostratum Aquino & Schaefer, 2010	MCP29592

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Hypoptopoma gr. *gulare* Cope, 1878	IDSM1027; IDSM1045; IDSM1160; IDSM1194; IDSM1195; IDSM1199; IDSM1202; IDSM1272; IDSM1273; IDSM1274; IDSM1275; IDSM1276; IDSM1277; IDSM1278; IDSM1279; IDSM1280; IDSM1281; IDSM1282; IDSM1283; IDSM1284; IDSM1285; IDSM1286; IDSM1287; IDSM1288; IDSM1289; IDSM1290; IDSM1291; IDSM1292; IDSM1293; IDSM1294; IDSM1295; IDSM1296; IDSM1297; IDSM1298; IDSM1299; IDSM1301; IDSM1302; IDSM1303; IDSM1304; IDSM1305; IDSM1724; IDSM1725; IDSM2680; IDSM2681; IDSM1234; INPA-ICT19065; INPA-ICT19064; INPA-ICT19062; MCP33106; MCP33107; MCP33108; MCP33109; MCP33112; MCP33113; MCP33114
Hypoptopoma psilogaster Fowler, 1915	IDSM1775
Hypoptopoma thoracatum Günther, 1868	IDSM1204; IDSM1043; IDSM1155; IDSM1171; IDSM1237
Hypostomus aff. *plecostomus*	IDSM402; IDSM1224; IDSM1243; IDSM2140
Hypostomus carinatus (Steindachner, 1881)	IDSM482; IDSM1161; IDSM1168; IDSM1230; IDSM1238; IDSM1310
Hypostomus cf. *hoplonites*	IDSM118
Hypostomus gr. *pyrineusi*	IDSM1018; IDSM1142
Limatulichthys griseus (Eigenmann, 1909)	INPA-ICT19090; INPA-ICT19089; IDSM1150
Limatulichthys sp.*1*	MCP29814; MCP29818
Loricaria cataphracta Linnaeus, 1758	INPA-ICT19087; INPA-ICT19086; INPA-ICT19085
Loricaria simillima Regan, 1904	IDSM1357; IDSM1658
Loricaria sp.*1*	MCP30613; MCP31668; MCP31669; MCP31670; MCP31672; MCP31673; MCP31674
Loricariichthys acutus (Valenciennes, 1840)	IDSM240; IDSM138; INPA-ICT18926; MCP29706; MCP29709
Loricariichthys maculatus (Bloch, 1794)	IDSM139; IDSM1074; IDSM1313; IDSM1355; IDSM1356; IDSM1358; IDSM1366; IDSM1369
Loricariichthys nudirostris (Kner, 1853)	IDSM1314; IDSM140; MCP29779; MCP29780; MCP29781
Loricariichthys stuebelii (Steindachner, 1882)	INPA-ICT18967; INPA-ICT18966
Loricariichthys sp.*1*	IDSM1315
Otocinclus vestitus Cope, 1872	IDSM1776
Oxyropsis carinata (Steindachner, 1879)	IDSM1149; IDSM1175; IDSM1183; IDSM1184; IDSM1185; IDSM1186; IDSM1188; IDSM1190; IDSM1196; IDSM1198; IDSM1200; IDSM1201; IDSM1203; IDSM1206; IDSM1209; IDSM1210; IDSM1211; IDSM1212; IDSM1300; IDSM1306; IDSM1307; IDSM1308; IDSM1309; IDSM1235; MCP29577
Oxyropsis wrightiana Eigenmann & Eigenmann, 1889	MCP29615; MCP30639
Peckoltia brevis (La Monte, 1935)	IDSM1024; IDSM1189; IDSM1225; IDSM1232; IDSM1236; IDSM2620
Peckoltichthys bachi (Boulenger, 1898)	IDSM1025; IDSM2594; IDSM2621; IDSM1205; MCP33228
Pseudorinelepis genibarbis (Valenciennes, 1840)	IDSM1371; IDSM1320; IDSM1321; IDSM1322; MCP29674; MCP29675; MCP29789; MCP30624
Pterosturisoma microps (Eigenmann & Allen, 1942)	MCP33231
Pterygoplichthys gibbiceps (Kner, 1854)	IDSM1223; IDSM1241; IDSM1319; IDSM1718; IDSM2682; IDSM1679
Pterygoplichthys pardalis (Castelnau, 1855)	IDSM303; IDSM1375; IDSM1239; IDSM1240; IDSM1242; IDSM87; IDSM1022; IDSM1172; IDSM1179; IDSM239; IDSM1176; IDSM1207; IDSM1193; IDSM1219; IDSM1220; IDSM1221; IDSM1222; IDSM1228; IDSM1231; IDSM1252; IDSM1253; IDSM1254; IDSM1255; IDSM1256; IDSM1257; IDSM1380; IDSM1311; IDSM1312; IDSM1316; IDSM1719; IDSM1720; IDSM1721; IDSM1722; IDSM1723; INPA-ICT18862; MCP31698; MCP31699; MCP31700; MCP31701; MCP31702
Rinelocaria cf. *fallax*	IDSM1029; IDSM1187; IDSM1337; IDSM1338; IDSM1328; IDSM1344; IDSM1345; IDSM1349; IDSM1350; IDSM1351; IDSM2207; IDSM1364; IDSM1561
Rineloricaria castroi Isbrücker & Nijssen, 1984	IDSM717; INPA-ICT18674; INPA-ICT18673; MCP29749; MCP29823; MCP29822; MCP33249; MCP33250; MCP33251

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Rineloricaria formosa Isbrücker & Njissen, 1979	IDSM262; IDSM264; IDSM1144; IDSM1325; IDSM1327; IDSM1330; IDSM1331; IDSM1332; IDSM1334; IDSM1335; IDSM1336; IDSM1340; IDSM1341; IDSM1359; IDSM1360; IDSM2642; IDSM1778
Rineloricaria cf. *formosa*	In the process of cataloging
Rineloricaria hasemani Isbrücker & Njissen, 1979	In the process of cataloging
Rineloricaria lanceolata (Günther, 1868)	IDSM1028; IDSM1348
Rineloricaria phoxocephala (Eigenmann & Eigenmann, 1889)	IDSM2647; IDSM2613; INPA-ICT18670; INPA-ICT18667; INPA-ICT18665; MCP29825; MCP29827; MCP33229; MCP29833
Rineloricaria sp.*1*	MCP29830
Spatuloricaria sp.*1*	IDSM2690
Sturisoma aff. *brevirostre*	IDSM1248; IDSM1086
SILURIFORMES: Cetopsidae	
Cetopsis coecutiens (Lichtenstein, 1819)	IDSM298; MCP32816
Cetopsis sp.*1*	MCP33235; MCP33253
Cetopsis sp.*2*	MCP30622; MCP33252; MCP33254;
SILURIFORMES: Aspredinidae	
Bunocephalus aleuropsis Cope, 1870	MCP29654
Bunocephalus coracoideus (Cope, 1874)	IDSM162; IDSM1067; IDSM1078; IDSM1875; IDSM2102; IDSM2117; IDSM2119; IDSM2679; MCP29643
Bunocephalus verrucosus (Walbaum, 1792)	IDSM1087; IDSM2637; IDSM2649
Pterobunocephalus depressus (Haseman, 1911)	MCP29622; INPA-ICT18725; MCP29842; MCP29843
SILURIFORMES: Auchenipteridae	
Ageneiosus intrusus Ribeiro, Rapp Py-Daniel & Walsh, 2017	MCP32961; MCP32962; MCP32965
Ageneiosus inermis (Linnaeus, 1766)	IDSM1058; IDSM186; IDSM718; IDSM292; IDSM1929; IDSM1811
Ageneiosus lineatus Ribeiro, Rapp Py-Daniel & Walsh, 2017	MCP29895; MCP29897; MCP29899
Ageneiosus ucayalensis Castelnau, 1855	IDSM293; IDSM2633; INPA-ICT18922; MCP29898; MCP32832; MCP32833; MCP32834; MCP32960; MCP32967
Ageneiosus uranophthalmus Ribeiro, Rapp & Py-Daniel, 2010	MCP32963
Ageneiosus vittatus Steindachner, 1908	IDSM680; IDSM3
Auchenipterus ambyiacus Fowler, 1915	IDSM2206; MCP29402; MCP29403; MCP29404; MCP29406; MCP29407
Auchenipterichthys coracoideus (Eigenmann & Allen, 1942)	IDSM2593; MCP29217; MCP29219; MCP29220; IDSM000157
Auchenipterus nuchalis (Spix & Agassiz, 1829)	MCP29882; MCP29884; MCP29885; MCP30602
Centromochlus existimatus Mees, 1974	IDSM134; INPA-ICT19031; INPA-ICT19029; MCP29838; MCP29839; MCP29840; MCP29841
Centromochlus heckelii (De Filippi, 1853)	IDSM38; IDSM2154; MCP29618; MCP29619
Epapterus dispilurus Cope, 1878	IDSM36; IDSM268; IDSM271; IDSM2157; MCP29331; MCP29332; MCP29333
Pseudepapterus hasemani (Steindachner, 1915)	MCP029606
Tatia intermedia (Steindachner, 1877)	IDSM2599
Trachelyopterus galeatus (Linnaeus, 1766)	IDSM89; IDSM95; IDSM178; IDSM187; IDSM241; IDSM1771; IDSM1773; IDSM2579; MCP29412; MCP29354; MCP29412; MCP32804; MCP32805; MCP32809; MCP32809
Trachelyopterus sp. "placa larga"	IDSM1113; IDSM2576; IDSM2577
Trachycorystes porosus Eigenmann & Eigenmann, 1888	IDSM1002; IDSM1680; IDSM2210; IDSM2578
Trachycorystes trachycorystes (Valenciennes, 1840)	IDSM158
Tympanopleura atronasus (Eigenmann & Eigenmann, 1888)	IDSM37; IDSM269; IDSM1041; IDSM1857; INPA-ICT18986; INPA-ICT18983; MCP33178; MCP33179
Tympanopleura brevis Steindachner, 1881	IDSM682; IDSM683; IDSM2586
Tympanopleura longipinna Walsh, Ribeiro, Rapp & Py-Daniel, 2015	MCP29602; MCP29603

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Tympanopleura piperata (Eigenmann, 1912)	IDSM1047; IDSM1814
Tympanopleura rondoni (Miranda Ribeiro, 1914)	INPA-ICT18962; INPA-ICT18961; INPA-ICT18960; INPA-ICT18959; MCP29874; MCP29875; MCP29876; MCP29877
Tympanopleura cf. *brevis*	IDSM3034
Tympanopleura sp.*1*	MCP33177; MCP33180; MCP33183; MCP33184; MCP33185; MCP33186
SILURIFORMES: Doradidae	
Acanthodoras cataphractus (Linnaeus, 1758)	IDSM3035; IDSM3036
Agamyxis pectinifrons (Cope, 1870)	IDSM129; IDSM1032; IDSM1960; IDSM1855; IDSM2093; MCP33150; MCP33151; MCP33152; MCP33153; INPA-ICT19104
Amblydoras affinis (Kner, 1855)	IDSM1950; IDSM1959
Anadoras grypus (Cope, 1872)	IDSM1882; IDSM1926; IDSM1963; IDSM2664; IDSM1109; IDSM1770; INPA-ICT19581; INPA-ICT19579; INPA-ICT19578; INPA-ICT19577; INPA-ICT19576; INPA-ICT19569; INPA-ICT19568; MCP29526; MCP29527; MCP29529; MCP29530
Anadoras weddellii (Castelnau, 1855, 1908)	IDSM3037
Astrodoras asterifrons (Kner, 1853)	IDSM169
Centrodoras brachiatus (Cope, 1872)	MCP29380
Hassar cf. *wilderi*	IDSM3039
Hemidoras morrisi Eigenmann, 1925	IDSM131; IDSM296; IDSM015; IDSM2135; INPA-ICT19253; MCP29660; MCP32996; MCP32998; MCP33005
Hemidoras stenopeltis (Kner, 1855)	IDSM1016; IDSM1545; IDSM1841; IDSM1939; IDSM2155; IDSM2195; IDSM2197; INPA-ICT19371; INPA-ICT19365; MCP29887; MCP29891; MCP29892; MCP29893
Leptodoras gr. *Acipenserinus*	IDSMI265
Lithodoras dorsalis (Valenciennes, 1840)	IDSM3040
Megalodoras uranoscopus (Eigenmann & Eigenmann, 1888)	IDSM172; IDSM107; IDSM1051; IDSM1901; IDSM1769; IDSM2295; MCP33195; MCP33197
Nemadoras elongatus (Boulenger, 1898)	IDSM2134; INPA-ICT19273; INPA-ICT19272; MCP33125; MCP33126; MCP41546
Nemadoras hemipeltis (Eigenmann, 1925)	MCP33122; MCP33124
Nemadoras humeralis (Kner, 1855)	IDSM1055; INPA-ICT37004; INPA-ICT18889; INPA-ICT18886; INPA-ICT18883; INPA-ICT18882; INPA-ICT18881; INPA-ICT18880; INPA-ICT18878; INPA-ICT18877; MCP29531; MCP29532; MCP29534; MCP29535; MCP29536; MCP29538; MCP29539; MCP29541; MCP29542; MCP29646
Opsodoras boulengeri (Steindachner, 1915)	IDSM1817
Opsodoras morei (Steindachner, 1881)	INPA-ICT19254; INPA-ICT19252
Opsodoras stuebelii (Steindachner, 1882)	IDSM2160; IDSM1819; IDSM1981; INPA-ICT19251; INPA-ICT19250
Opsodoras sp.*1*	MCP32997
Ossancora asterophysa Birindelli, Sabaj & Pérez, 2011	MCP29644; MCP29645; MCP29668
Ossancora fimbriata (Kner, 1855)	MCP29786; MCP32956
Ossancora punctata (Kner, 1855)	IDSM173; IDSM1772; IDSM2187; IDSM1856; IDSM2648; INPA-ICT18737; MCP29662; MCP29663; MCP29665; MCP29666; MCP29667; MCP29806; MCP29807; MCP29808
Oxydoras niger (Valenciennes, 1821)	IDSM88; IDSM266; MCP29463
Platydoras armatulus (Valenciennes, 1840)	IDSM170; IDSM2104; MCP33193
Platydoras hancockii (Valenciennes, 1840)	IDSM3041
Pterodoras granulosus (Valenciennes, 1821)	IDSM94; IDSM267; IDSM2116; INPA-ICT19486; INPA-ICT19484; INPA-ICT19480; INPA-ICT19478; INPA-ICT19477; INPA-ICT19476; INPA-ICT19475; INPA-ICT18735; MCP31686; MCP31687; MCP31688; MCP31691; MCP31692

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Rhynchodoras xingui Klausewitz & Rössel, 1961	IDSM3042
Scorpiodoras heckelii (Kner, 1855)	In the process of cataloging
Tenellus ternetzi (Eigenmann, 1925)	IDSM2145; IDSM133; IDSM141; IDSM291; IDSM2205
Tenellus trimaculatus (Boulenger, 1898)	IDSM48; IDSM49; IDSM50; IDSM1059; IDSM2194; INPA-ICT19369; INPA-ICT19367; MCP29834; MCP29835; MCP29836; MCP29837
Trachydoras brevis (Kner, 1853)	INPA-ICT36472
Trachydoras microstomus (Eigenmann, 1912)	IDSM3043
Trachydoras nattereri (Steindachner, 1881)	IDSM1017; INPA-ICT19100
Trachydoras steindachneri (Perugia, 1897)	IDSM2; IDSM1020; IDSM1813; IDSM1831; IDSM2638; INPA-ICT19459; MCP29231; MCP29233; MCP29235; MCP29236; MCP29687
SILURIFORMES: Heptapteridae	
Brachyrhamdia marthae Sands & Black, 1985	MCP49174
Brachyrhamdia meesi Sands & Black, 1985	MCP29849
Cetopsorhamdia sp.1	IDSM2592
Gladioglanis conquistador Lundberg, Bornbusch & Mago-Leccia, 1991	In the process of cataloging
Goeldiella eques (Müller & Troschel, 1849)	IDSM159
Imparfinis stictonotus (Fowler, 1940)	MCP29575
Pimelodella altipinnis (Steindachner, 1864)	IDSM3045
Pimelodella cristata (Müller & Troschel, 1849)	IDSM1062; IDSM1125; IDSM2165; IDSM1962; MCP33256; MCP33258; MCP33259; MCP33262; MCP33264
Pimelodella geryi Hoedeman, 1961	In the process of cataloging
Pimelodella aff. *eigenmanni*	IDSM219
Pimelodella sp.*1*	MCP29858; MCP29859; MCP29900
Rhamdia quelen (Quoy & Gaimard, 1824)	IDSM2164; IDSM144
SILURIFORMES: Pimelodidae	
Brachyplatystoma filamentosum (Lichtenstein, 1819)	IDSM57; IDSM2294
Brachyplatystoma vaillantii (Valenciennes, 1840)	IDSM3046
Brachyplatystoma juruense (Boulenger, 1898)	IDSM3047
Brachyplatystoma platynemum Boulenger, 1898	IDSM3048
Brachyplatystoma rousseauxii (Castelnau, 1855)	IDSM3049
Calophysus macropterus (Lichtenstein, 1819)	IDSM74; IDSM208; IDSM1069; IDSM1835; IDSM2641; INPA-ICT18937; INPA-ICT18936; INPA-ICT18935; INPA-ICT18934; INPA-ICT18933; INPA-ICT18932; INPA-ICT18931; INPA-ICT18930; INPA-ICT18929; MCP32762; MCP32763; MCP32764; MCP32765; MCP32766;
Cheirocerus eques Eigenmann, 1917	IDSM1070; IDSM1832; IDSM2193; IDSM2139
Cheirocerus goeldii (Steindachner, 1908)	IDSM1056; IDSM1790; IDSM1833; IDSM1940; MCP29578; MCP29911; MCP29915
Duopalatinus peruanus Eigenmann & Allen, 1942	INPA-ICT19038
Exallodontus aguanai Lundberg, Mago-Leccia & Nass, 1991	MCP24733; MCP29624
Hemisorubim platyrhynchos (Valenciennes, 1840)	IDSM1107; INPA-ICT19447; MCP29783
Hypophthalmus edentatus Spix & Agassiz, 1829	IDSM2201
Hypophthalmus fimbriatus Kner, 1858	IDSM3050
Hypophthalmus marginatus Valenciennes, 1840	IDSM39; IDSM58; IDSM1834; IDSM2158; MCP33160
Leiarius marmoratus (Gill, 1870)	IDSM83
Leiarius pictus (Müller & Troschel, 1849)	IDSM3051
Megalonema sp.*1*	MCP29854; MCP29855
Phractocephalus hemioliopterus (Bloch & Schneider, 1801)	IDSM148

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Pimelodina flavipinnis Steindachner, 1876	MCP30046; MCP30047; MCP30048; MCP30049; MCP30052
Pimelodus albofasciatus Mees, 1974	IDSM2163
Pimelodus altissimus Eigenmann & Pearson, 1942	IDSM297; MCP29869;
Pimelodus blochii Valenciennes, 1840	IDSM90; IDSM242; IDSM252; IDSM1000; MCP29222; MCP29223; MCP29224; MCP29458; MCP29460
Pimelodus pictus Steindachner, 1876	MCP29853
Pimelodus ornatus Kner, 1858	In the process of cataloging
Pinirampus pirinampu (Spix & Agassiz, 1829)	IDSM209; IDSM51; IDSM2191; IDSM1013; MCP32910; MCP32911; MCP32912; MCP32913; MCP32914
Platysilurus mucosus (Vaillant, 1880)	IDSM1019; IDSM1812; IDSM1821; IDSM2166; INPA-ICT19050; MCP29878; MCP29879; MCP29881
Platynematichthys notatus (Jardine, 1841)	IDSM3053
Platystomatichthys sturio (Kner, 1858)	IDSM1071; MCP31695
Propimelodus caesius Parisi, Lundberg & DoNascimiento, 2006	MCP29918; MCP29919; MCP29920
Propimelodus sp.1	MCP29870
Pseudoplatystoma punctifer (Castelnau 1855)	IDSM3054
Pseudoplatystoma tigrinum (Valenciennes, 1840)	IDSM161; IDSM1764; IDSM1952; MCP29886
Sorubim elongatus Littmann, Burr, Schmidt & Isern, 2001	IDSM1637; MCP30575
Sorubim lima (Bloch & Schneider, 1801)	IDSM327; IDSM1021; INPA-ICT18855
Sorubim maniradii Littmann, Burr & Buitrago-Suarez, 2001	INPA-ICT26636
Sorubimichthys planiceps (Spix & Agassiz, 1829)	IDSM3055
Zungaro zungaro (Humboldt, 1821)	IDSM1941; IDSM2213; INPA-ICT19498
SILURIFORMES: Pseudopimelodidae	
Batrochoglanis raninus (Valenciennes, 1840)	IDSM1112; IDSM2127; IDSM2169; INPA-ICT28580
Batrochoglanis villosus (Eigenmann, 1912)	IDSM1127; INPA-ICT18795
Microglanis poecilus Eigenmann, 1912	IDSM2292
Microglanis sp. *1*	IDSM180; MCP29625; MCP29626; MCP29627; MCP29629
Pseudopimelodus sp.*1*	MCP29845
SYNBRANCHIFORMES: Synbranchidae	
Synbranchus lampreia Favorito, Zanata & Assumpção, 2005	MCP29363; MCP29364; MCP29365; MCP29366; MCP29367; MCP29368; MCP29369; MCP29370; MCP29371; MCP29372; MCP29373; MCP29374; MCP29375; MCP32915; MCP33025
Synbranchus madeirae Rosen &Rummey, 1972	IDSM1085; IDSM1862; IDSM1887; INPA-ICT18912; INPA-ICT18911; INPA-ICT18868
Synbranchus sp.1	IDSM189; IDSM1089; IDSM1779; IDSM1925; INPA-ICT18867; INPA-ICT18866; INPA-ICT18865; INPA-ICT18869; INPA-ICT52853; MCP33007; MCP33008; MCP33009; MCP33010; MCP33011; MCP33012; MCP33013; MCP33014; MCP33015; MCP33127; MCP33128; MCP33129
CICHLIFORMES: Cichlidae	
Acarichthys heckelii (Müller & Troschel, 1849)	IDSM102; IDSM287
Acaronia nassa (Heckel, 1840)	IDSM164; IDSM250; IDSM346; MCP29335; MCP29336; IDSM3057
Aequidens tetramerus (Heckel, 1840)	IDSM8
Apistogramma agassizii (Steindachner, 1875)	IDSM2619
Apistogramma bitaeniata Pellegrin, 1936	IDSM3011
Apistogramma cacatuoides Hoedeman, 1951	IDSM2611; IDSM2615
Apistogramma eunotus Kullander, 1981	IDSM3012
Apistogramma pertensis (Haseman, 1911)	IDSM1565
Apistogramma regani Kullander, 1980	IDSM2121

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Apistogrammoides pucallpaensis Meinken, 1965	IDSM202; IDSM2616
Astronotus ocellatus (Agassiz, 1831)	IDSM97; IDSM190; IDSM243; IDSM2668
Biotodoma cupido (Heckel, 1840)	IDSM3058
Bujurquina sp.*1*	IDSM3014
Chaetobranchus flavescens Heckel, 1840	IDSM216
Chaetobranchus semifasciatus Steindachner, 1875	IDSM249; MZUSP27926.0
Cichla monoculus Spix & Agassiz, 1831	IDSM201; IDSM246
Cichlasoma amazonarum Kullander, 1983	IDSM84; IDSM244; IDSM245; IDSM199; IDSM795; IDSM1639; MCP33135; MCP33137; MCP33138
Crenicara punctulata (Günther, 1863)	IDSM3013
Crenicichla cincta Regan, 1905	MCP29338
Crenicichla inpa Ploeg, 1991	INPA-ICT19388; MCP32986; MCP32987; MCP32988; MCP32989; MCP32990; MCP32991; MCP33187; MCP331188; MCP33189; MCP33190; MCP33191; MCP33192
Crenicichla lugubris Heckel, 1840	In the process of cataloging
Crenicichla regani Ploeg, 1989	MCP29608; MCP29611
Crenicichla reticulata (Heckel, 1840)	IDSM40; IDSM2602; INPA-ICT19201; MCP33039; MCP33040
Crenicichla proteus Cope, 1872	INPA-ICT18790; INPA-ICT18788
Crenicichla sp.*1*	MCP38632
Geophagus proximus (Castelnau, 1855)	IDSM3060
Geophagus cf. *altifrons*	In the process of cataloging
Heros efasciatus Heckel, 1840	IDSM455; IDSM15; MCP32920; MZUSP27929.0
Hypselecara temporalis (Günther, 1862)	IDSM1894
Laetacara thayeri (Steindachner, 1875)	IDSM101; IDSM2662; MCP29595; MCP29596; MCP29597; MCP29598
Mesonauta insignis (Heckel, 1840)	IDSM14
Pterophyllum leopoldi (Gosse, 1963)	IDSM13; IDSM2141
Pterophyllum scalare (Schultze, 1823)	IDSM2142
Satanoperca acuticeps (Heckel, 1840)	In the process of cataloging
Satanoperca jurupari (Heckel, 1840)	MCP32818
Satanoperca sp.*1*	MCP32819; MCP32820;
Symphysodon tarzoo Lyons, 1959	IDSM3061
CYPRINODONTIFORMES: Rivulidae	
Anablepsoides micropus (Steindachner, 1863)	IDSM272; IDSM1916; IDSM2612; IDSM2628; IDSM2661;
Anablepsoides ornatus Garman, 1895	IDSM1904
Anablepsoides sp.*1*	IDSM796*; INPA-ICT58224*; INPA-ICT58223**
CYPRINODONTIFORMES: Fluviphylacidae	
Fluviphylax cf. *pygmaeus*	IDSM3062
BELONIFORMES: Belonidae	
Potamorrhaphis guianensis (Jardine, 1843)	IDSM1958; INPA-ICT19000
Pseudotylosurus microps (Günther, 1866)	IDSM1098; IDSM1853; IDSM1923; MCP30038
TETRAODONTIFORMES: Tetradontidae	
Colomesus asellus (Müller & Troschel, 1849)	IDSM1064; IDSM1662; MCP33033
PERCIFORMES: Scianidae	
Plagioscion montei Soares & Casatti, 2000	MCP30598; MCP32750
Plagioscion squamosissimus (Heckel, 1840)	INPA-ICT19002; INPA-ICT19001; MCP31705
GOBIIFORMES: Eleotridae	
Microphilypnus sp.*1*	MCP30631; MCP30638
PLEURONECTIFORMES: Achiridae	
Hypoclinemus mentalis (Günther, 1862)	IDSM2688; IDSM1049
CERATODONTIFORMES: Lepidosirenidae	
Lepidosiren paradoxa Fitzinger, 1837	IDSM1088; IDSM2113; IDSM2645; INPA-ICT18697; INPA-ICT18696; INPA-ICT18695; INPA-ICT18694

Conflicts of Interest

The authors declare that there are no conflicts of interests related to the publication of this manuscript.

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