

# Checklist of the freshwater fishes of Colombia: a Darwin Core alternative to the updating problem

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Academic editor: N. Bogutskaya | Received 31 May 2017 | Accepted 8 September 2017 | Published 16 October 2017

<http://zoobank.org/FB01BD9E-6656-4FA8-AFB0-4EC546CFF953>

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**Citation:** DoNascimento C, Herrera-Collazos EE, Herrera-R GA, Ortega-Lara A, Villa-Navarro FA, Usma-Oviedo JS, Maldonado-Ocampo JA (2017) Checklist of the freshwater fishes of Colombia: a Darwin Core alternative to the updating problem. ZooKeys 708: 25–138. <https://doi.org/10.3897/zookeys.708.13897>

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## Abstract

The present work is part of a process to create a Catalogue of the Freshwater Fishes of Colombia and consisted in the depuration and updating of the taxonomic and geographic components of the checklist of the freshwater fishes of Colombia. An exhaustive revision of the 1435 species recorded in 2008 was necessary to: 1. Add new species described since 2009 and species originally described from Colombia but inadvertently omitted in 2008; 2. Add new records of already described species; 3. Delete species whose presence in Colombia was not supported by voucher specimens in ichthyological collections; and 4. Revise the geographic distribution of the species listed in 2008. This process resulted in the following numbers: 1. Total number of freshwater fish species in Colombia: 1494; 2. Number of species recorded by hydrographic region - Amazon: 706, Orinoco: 663, Caribbean: 223, Magdalena-Cauca: 220, Pacific: 130; and 3. Number of endemic species: 374 (76% from the trans-Andean region). Updating the current checklist is a fundamental requirement to ensure its incorporation in the decision-making process with regard to the conservation of Colombian aquatic species and ecosystems, which are facing transformation

processes as a result of activities such as mining, construction of hydroelectric plants, expansion of the agricultural frontier and subsequent deforestation, industrial and domestic pollution, development of waterways, introduction of exotic species, and climate change.

## Resumen

El presente trabajo es parte de un proceso para crear un Catálogo de Peces de Agua Dulce de Colombia y consistió en la depuración y actualización de los componentes taxonómico y geográfico del listado de peces de agua dulce de Colombia. Una revisión exhaustiva de las 1435 especies registradas en 2008 fue necesaria para: 1. Adicionar las especies nuevas descritas desde 2009 y especies descritas originalmente para Colombia pero omitidas inadvertidamente en 2008; 2. Adicionar nuevos registros de especies ya descritas; 3. Eliminar especies cuya presencia en Colombia no estaba soportada por especímenes en colecciones ictiológicas; y 4. Revisar la distribución geográfica de las especies listadas en 2008. Este proceso resultó en las siguientes cifras: 1. Número total de especies de peces de agua dulce en Colombia: 1494; 2. Número de especies registradas por región hidrográfica - Amazonas: 706, Orinoco: 663, Caribe: 223, Magdalena-Cauca: 220, Pacífico: 130; y 3. Número de especies endémicas 374 (76% distribuidas en la región transandina). La actualización del presente listado es un requerimiento fundamental para asegurar su incorporación en el proceso de toma de decisiones en lo concerniente a la conservación de las especies y ecosistemas acuáticos colombianos, los cuales están enfrentando procesos de transformación, como resultado de actividades como la minería, construcción de plantas hidroeléctricas, expansión de la frontera agropecuaria y subsecuente desforestación, polución industrial y doméstica, desarrollo de hidrovías, introducción de especies exóticas y cambio climático.

## Keywords

Aquatic ecosystems, conservation, endemic, richness, South America

*This paper is in honour of the late Richard Peter Vari, who was a co-author of the checklist of the freshwater fishes of Colombia in 2008, a paper that highlighted the importance of the Colombian ichthyofauna in the Neotropical and global contexts, and addressed important issues in terms of the conservation challenges and needs to improve the sampling effort of the continental aquatic systems in Colombia. After almost a decade since that checklist was published, the challenges and tasks pointed out by Richard and co-authors have been attained in several ways in the present paper. He will always be remembered not just for his enormous contribution to the Colombian and Neotropical ichthyology, but most especially for his kindness and willing collaboration.*

## Introduction

Since Maldonado-Ocampo et al. (2008), important advances have been made to update the current number of fish species found in Colombian freshwater ecosystems. The first is new fieldwork, which has led to significant range expansions in known distribution of species and new species discoveries; the second is new revisions of existing ichthyological collections. Several checklists have been published at local or regional scales (e.g. Lasso et al. 2009, Villa-Navarro et al. 2011, Ortega-Lara et al. 2012); and an important

amount of information has also been published in books that include aspects on ecology, fisheries, threats, and migratory status (e.g. Usma et al. 2009, 2013, Lasso et al. 2011a, Maldonado-Ocampo et al. 2012, Mojica et al. 2012, Zapata and Usma 2013).

During this time frame (nine years), fieldwork efforts have been conducted mainly in three of the five hydrographic Colombian regions as delimited by IDEAM (2015): Amazon (Putumayo, Caquetá, Guainía, and Vaupés rivers), Orinoco (piedmont rivers of the Meta and Guaviare basins, and rivers draining directly to the Orinoco as the Bita and Inírida), and Magdalena-Cauca (especially the upper and middle sectors). Some collections in other important rivers as the Catatumbo, Sinú, and Atrato (Caribbean system), San Juan and Dagua (Pacific system), have also been conducted. All fishes collected in these rivers are deposited in the following ichthyological collections of Colombia (acronyms follow Sabaj, 2016): CAR, CIACOL, CIUA, CP-UCO, CZUT-IC, IAvH-P, ICN-MHN, IMCN, and MPUJ.

Complementing these fieldwork and taxonomic efforts that improve the information quality of the current annotated checklist, an important project “Catalogue of the Freshwater Fishes of Colombia” is in progress. From mid-2014, all previously mentioned ichthyological collections began a data depuration process. First, and the most important task, all the catalogue data bases associated with these collections are being translated to the Darwin Core standard, allowing the data to be adequately formatted to make them freely accessible through facilitators such as GBIF and SiB Colombia (Colombia Biodiversity Information System: [www.sibcolombia.net](http://www.sibcolombia.net)).

At the moment, all available records to mid-2017 in CAR, CIACOL, CICH, CIUA, CP-UCO, CZUT-IC, IAvH-P, ICN-MHN, IMCN, and MPUJ from the hydrographic regions of Orinoco (29000), Magdalena-Cauca (22000), Amazon (14000), Caribbean (5000), and Pacific (1000), have been updated in the following data fields: Occurrence, Organism, Event, Location, Identificacion, and Taxon. The project hopes to conclude this data depuration process for all available records in these collections (around 75000 in total) by December of 2017. The updated annotated checklist presented here and the data available in the collections is the basis for the “Catalogue of the Freshwater Fishes of Colombia” that will be hosted at the Catalogue of Species of the Colombia Biodiversity Information System (<http://www.biodiversidad.co/#/>), and linked to the website of the Colombian Ichthyological Association (ACICTIOS, <http://acictios.org>).

For the first time in Colombia, freshwater ecosystems are the focus of public attention and different strategies are being discussed by the academy and decision-makers to develop adequate conservation and sustainable use strategies for these ecosystems and their biota (Vilardi et al. 2014, Tognelli et al. 2016). The updated information presented here plus the continuous work in the collections to update and edit the data bases will be of extreme importance in terms of the quality and quantity of available information to facilitate evidence-based decision making that can help counter the numerous threats facing aquatic ecosystems (hydropower development, mining, pollution, deforestation, exotic species invasion, and climate change scenarios) that are affecting this enormous fish diversity.

## Methods

The starting point for the updating process and corrections to the checklist of the freshwater fishes of Colombia was the checklist of Maldonado-Ocampo et al. (2008). This revision incorporated four main aspects: 1. Addition of newly described species since 2009 and species originally described for Colombia but inadvertently omitted in Maldonado-Ocampo et al. (2008), 2. Addition of new records of already described species, 3. Deletion of nominal species whose presence in Colombia was not supported by voucher specimens in collections, and 4. Revision of the geographic distribution of those species previously listed in Maldonado-Ocampo et al. (2008). The main sources used for this revision consisted in research articles describing new species, taxonomic and systematic revisions of genera and families, direct examination of specimens catalogued at CZUT-IC, IAvH-P, IMCN, and MPUJ, and to a lesser extent, regional checklists explicitly supported by catalogued lots of specimens for each species entry, and lists of examined material of taxonomic and systematic works dealing with Neotropical groups.

The complete list of species was assembled using the Darwin Core standard (DwC) and is available both as Suppl. material 1 and through the Integrated Publishing Tool of the Colombian node of GBIF, the SiB Colombia (<http://www.sibcolombia.net/>), as version 2.5 at <http://doi.org/10.15472/numrso>. Future updates of the list will be published in the latter repository. Changes incorporated to each new version of the list will be summarized in the respective metadata section of the electronic resource. A curatorial team presented during the celebration of the biannual meeting of the “Asociación Colombiana de Ictiólogos” (ACICTIOS) will be in charge of the updating and revision process of the list and of its periodic publication (annually or semestraly, depending on the amount of changes accumulated every six months). Below we list fields for which we consider a further detailed explanation of the criteria adopted is needed in order to provide an unequivocal framework for the definitions used for each field.

**taxonID.** This field is defined as a unique and stable-through-time alphanumeric identifier (taxonomic identifier) provided by Life Science Identifier (LSID).

**namePublishedIn.** This field links each species name to its respective source (i.e., a bibliographic reference) and was restricted to include only those species originally described from Colombia, i.e., only the bibliographic reference of the original description of species that listed Colombian specimens (in some cases from border regions as well) as types, as well as descriptions that explicitly listed Colombian specimens as non-types.

**references.** This field is reserved for those species not described from Colombia, but whose presence in the country is supported by a bibliographic reference. In this case, we made a special effort to locate the first chronological reference that explicitly mentioned Colombian specimens collected and deposited in national or international collections or that provided images that allows unambiguous recognition of a determined species,

for each main hydrographic system. In some cases, we complemented these primary bibliographic references with more recent references, where additional catalogued lots are provided. Therefore, this approach is somewhat different from the practice implemented in Maldonado-Ocampo et al. (2008), in order to avoid the inclusion of references that are merely lists solely based on previous published works. Future publications reporting new species or distribution extensions of those species already included in this checklist are encouraged to indicate catalogued lots that support them. This action allows traceability and verification of records whenever needed, and facilitates the implementation of new taxonomical arrangements when they need to be proposed.

**associatedOccurrences.** As in the previous field, here we supported the presence of species not originally described from Colombia. We listed catalogued lots (preferably available in Colombian collections) for species not supported by bibliographic references or to complement references that do not provide lots. Lots are provided for each main hydrographic system. In addition, we also listed here catalogued lots corresponding to types.

**locationRemarks.** Only includes species that are endemic to the Colombian territory.

**dynamicProperties.** Corresponds to the column CT (endangered and threatened species) used in Maldonado-Ocampo et al. (2008). The information in this field was based in Mojica et al. (2012) and since the scope of the present list is of national scale, threat categories are restricted to Colombia.

**occurrenceRemarks.** Indicates the type of commercial use of each species (i.e., Fisheries, Ornamental). The list of fish species included in Colombian inland fisheries is from Lasso et al. (2011a), while the list of ornamental species is from Ortega-Lara et al. (2015) and Ortega-Lara (2016).

**locality.** Type localities of species described from Colombia are listed as they are cited in their respective original descriptions or as they appear in the Catalogue of Fishes (<http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>).

Institutional acronyms follow Sabaj (2016). Species formerly indicated as indeterminate (sp) in Maldonado-Ocampo et al. (2008) are listed at the genus level, since they represent still undescribed species and account for the presence of genera not represented by already described species in Colombia. Classification of taxa of higher taxonomic ranks (Class to Suborder) and arrangement order of respective taxa followed the proposal of Betancur-R. et al. (2017). The following proposals of classification were adopted for the indicated groups: Tagliacollo et al. (2016): Gymnotiformes; Mirande (2009, 2010) and Oliveira et al. (2011): Characiformes, but in incongruent cases, we just adopted the latest published proposal (i.e., Oliveira et al. 2011), not implying in any form a validation over the former works of Mirande; Thomaz et al. (2015): Stevardiinae; Sullivan et al. (2006): Siluriformes; Lujan et al. (2015a): Hypostominae; Roxo et al. (2014): Hypoptopomatinae and Otothyridinae; Covain et al. (2016): Loricariinae; Birindelli (2014): Doradoidea; Sullivan et al. (2013a): Pimelodoidea; López-Fernández et al. (2010): Cichlidae. For remaining groups we followed Nelson et al. (2016).

## Results

### New species described from Colombia

Since the publication of the most recent checklist (Maldonado-Ocampo et al. 2008), 106 new species of freshwater fishes have been described from Colombia (Suppl. material 2), at a rate of approximately ten species per year. This places the total number of species described or recorded for Colombia at 1494 freshwater fishes (Table 1), a slightly higher figure than the last recorded number of 1435 species (Maldonado-Ocampo et al. 2008). This slight increment in the total number is especially noteworthy since our careful review of each species name in Maldonado-Ocampo et al. (2008) led to the deletion of 202 nominal species that lacked solid support for keeping them in the current version of the checklist (see below). The assessment process of some doubtful species led to the inclusion of most of the newly recorded species presented here (see also below), through the direct examination of lots of specimens that were formerly used to support those doubtful species. These figures together,

**Table 1.** Number and percentage of species of freshwater fishes by order in Maldonado-Ocampo et al. (2008) compared to the present checklist.

| Order  | Number of species in<br>Maldonado-Ocampo et al. (2008) | %    | Number of species<br>in the present work | %    |
|--|--|------|--|------|
| Characiformes  | 637  | 44.4 | 644                                      | 43.1 |
| Siluriformes   | 524  | 36.5 | 588                                      | 39.3 |
| Cichliformes   | 115  | 8.0  | 94                                       | 6.3  |
| Gymnotiformes  | 74   | 5.2  | 78                                       | 5.2  |
| Cyprinodontiformes   | 35   | 2.4  | 42                                       | 2.8  |
| Clupeiformes   | 11   | 0.8  | 10                                       | 0.7  |
| Myliobatiformes  | 9  | 0.6  | 11                                       | 0.7  |
| Polycentridae and Sciaenidae<br>(included in Perciformes in<br>Maldonado-Ocampo et al. 2008) | 7  | 0.5  | 8  | 0.5  |
| Pleuronectiformes  | 7  | 0.5  | 5  | 0.3  |
| Beloniformes   | 5  | 0.3  | 4  | 0.3  |
| Batrachoidiformes  | 3  | 0.2  | 3  | 0.2  |
| Osteoglossiformes  | 3  | 0.2  | 3  | 0.2  |
| Eleotridae (included in Perciformes in<br>Maldonado-Ocampo et al. 2008)                      | 2  | 0.1  | 1  | 0.1  |
| Synbranchiformes   | 1  | 0.1  | 1  | 0.1  |
| Tetraodontiformes  | 1  | 0.1  | 1  | 0.1  |
| Ceratodontiformes (Lepidosireniformes<br>in Maldonado-Ocampo et al. 2008)                    | 1  | 0.1  | 1  | 0.1  |
|  | 1435   | 100  | 1494                                     | 100  |

still place Colombia as the second most-species rich country in the world in terms of its freshwater ichthyofauna. The number of species by hydrographic system is presented in the Table 2, where the Amazon accounts for the highest number of species. A remarkable total of 374 endemic species is now reported from Colombia; 76% of them are species from trans-Andean basins (286 species), and stand as testimony of the unique geological and climatic events that shaped the biogeographic history and taxonomic diversification of the Colombian ichthyological biota.

### New records of species for Colombia

The high number of species already described from other countries but newly recorded for Colombia is a direct result of recent inventories in previously unsampled regions (e.g. Lasso et al. 2009, Villa-Navarro et al. 2011, Ortega-Lara et al. 2012) and perhaps equally or more important, from the verification of the taxonomic identity of records of doubtful species listed in Maldonado-Ocampo et al. (2008), as well as suspicious identifications (i.e., names of species distributed in river basins distant or isolated from the Colombian territory), found in the databases of the examined collections. Thus, the number of new records for the Colombian continental ichthyofauna reaches 114 species (see full list in Suppl. material 3, where also respective hydrographic zone and supporting lot and/or bibliographic reference are provided).

### Corrections and additions to the geographic distribution of species listed in Maldonado-Ocampo et al. (2008)

The original distribution of 175 species was modified (Suppl. material 4), with 39 species having wider distributions (i.e., encompassing at least one additional hydrographic system than previously recorded), 128 species with more restricted distributions, and 8 species with wrong distributions. At the end of the checklist are

**Table 2.** Number of species by hydrographic system (HS) in Maldonado-Ocampo et al. (2008) compared to the present work.

| HS              | Number of species in Maldonado-Ocampo et al. (2008) | Number of species in the present work | Number of species in Maldonado-Ocampo et al. (2008) with distribution changes |
|-----------------|---|---------------------------------------|---|
| Amazon          | 788   | 706                                   | 58  |
| Orinoco         | 658   | 663                                   | 54  |
| Magdalena-Cauca | 213   | 220                                   | 40  |
| Caribbean       | 186   | 223                                   | 42  |
| Pacific         | 151   | 130                                   | 30  |

summarized the total number of each type of modification (addition or deletion) by hydrographic system.

A special treatment was implemented for the species of the genera *Astroblepus* and *Trichomycterus* that were originally described from Colombia. Most species of *Astroblepus* have restricted geographic distributions, being limited to portions of single river drainages at elevations above 1000 m (Schaefer et al. 2011). A similar scenario is also found for *Trichomycterus* species, which show high endemism and restricted geographic distributions to headwaters and streams of river systems (Fernández and Vari 2009, Ferrer and Malabarba 2013, DoNascimento et al. 2014b). The taxonomic knowledge of the Colombian species of these genera and their respective geographic distributions is precarious. This uncertainty has resulted in misidentifications of specimens that ultimately result in misplacing species in different disjunct hydrographic zones, without any consideration of the ecological constraints for the geographic distribution of a certain taxonomic group or its biogeographic history. Based on these considerations, we circumscribed the geographic distribution of these species to the hydrographic zone that encompasses the river drainage from which the species were originally described.

### Species deleted from the Colombian continental ichthyofauna

A total of 202 nominal species originally listed in Maldonado-Ocampo et al. (2008) was removed from the updated checklist of the freshwater fishes of Colombia (numerical distribution of deleted species by orders and families is presented in the checklist). These species were found to be absent from Colombian freshwaters or were recently synonymized with other species. Each individual case of species removal is commented (Suppl. material 5) following the format of Lasso et al. (2004).

### Checklist of the native freshwater fishes of Colombia

Abbreviations: **DC** – described from Colombia. **EN** – endemic. **ET** – endangered and threatened species. **Amz** – Amazon River Basin. **Ori** – Orinoco River Basin. **Mag-Cau** – Magdalena-Cauca River Basin. **Pac** – Pacific slope rivers. **Car** – Caribbean slope rivers. Asterisk (\*) denotes species newly recorded for Colombia after Maldonado-Ocampo et al. (2008). Two asterisks (\*\*) indicate species inadvertently omitted in Maldonado-Ocampo et al. (2008). Plus (+) and minus (-) signs in the columns corresponding to individual hydrographic systems, indicate respectively, added or deleted presence in each hydrographic system, of species listed in Maldonado-Ocampo et al. (2008) with geographic distribution modified in the present checklist. **X** indicates unchanged presence in hydrographic systems already accounted in the above bibliographic reference.

**Table ASD.** Number and

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <b>Myliobatiformes</b>                                    |    |    |    |     |     |         |     |     |   |
| <b>11 spp (3 added and 2 deleted from 2008)</b>           |    |    |    |     |     |         |     |     |   |
| <b>Potamotrygonidae</b>                                   |    |    |    |     |     |         |     |     |   |
| * <i>Heliotrygon gomesi</i> Carvalho & Lovejoy, 2011      |    |    | X  |     |     |         |     |     | Lasso et al. (2013a)  |
| <i>Paratrygon aiereba</i> (Müller & Henle, 1841)          |    | X  | X  | X   |     |         |     |     | Maldonado-Ocampo et al. (2006a)   Lasso et al. (2013a)                |
| <i>Plesiotrygon iwamae</i> Rosa, Castello & Thorson, 1987 |    |    | X  |     |     |         |     |     | Lasso et al. (2010)   |
| * <i>Plesiotrygon nana</i> Carvalho & Rago, 2011          |    |    | X  |     |     |         |     |     | Lasso et al. (2013a)  |
| <i>Potamotrygon constellata</i> (Vaillant, 1880)          |    |    | X  |     |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)                            |
| <i>Potamotrygon magdalena</i> (Duméril, 1865)             | X  | X  | X  |     |     | X       |     | X   | Duméril (1865)   Maldonado-Ocampo et al. (2006b)   MNHN A-2368        |
| <i>Potamotrygon motoro</i> (Müller & Henle, 1841)         |    |    | X  | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)                |
| <i>Potamotrygon orbignyi</i> (Castelnau, 1855)            |    |    | X  | +   | X   |         |     |     | Lasso et al. (2013)   |
| <i>Potamotrygon Schroederi</i> Fernández-Yépez, 1958      |    |    | X  | X   | X   |         |     |     | Lasso et al. (2013)   |
| * <i>Potamotrygon scobina</i> Garman, 1913                |    |    | X  | X   | X   |         |     |     | Lasso et al. (2013)   Acosta-Santos et al. (2016)                     |
| <i>Potamotrygon yepezi</i> Castex & Castello, 1970        |    |    | X  |     |     |         |     | X   | Ortega-Lara et al. (2012)   |
| <b>Osteoglossiformes</b>                                  |    |    |    |     |     |         |     |     |   |
| <b>3 spp</b>  |    |    |    |     |     |         |     |     |   |
| <b>Osteoglossidae</b>                                     |    |    |    |     |     |         |     |     |   |
| <i>Anapaima gigas</i> (Schinz 1822)                       |    |    | X  | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Osteoglossum bicirrhosum</i> (Cuvier, 1829)            |    |    | X  | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)                |
| <i>Osteoglossum ferreirai</i> Kanazawa, 1966              |    |    | X  |     | X   |         |     |     | Cala (1977)   |
| <b>Clupeiformes</b>                                       |    |    |    |     |     |         |     |     |   |
| <b>10 spp (1 deleted from 2008)</b>                       |    |    |    |     |     |         |     |     |   |
| <b>Pristigasteridae</b>                                   |    |    |    |     |     |         |     |     |   |
| <b>4 spp</b>  |    |    |    |     |     |         |     |     |   |
| <i>Ilisha amazonica</i> (Miranda Ribeiro, 1920)           |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Pellona castelnaeana</i> Valenciennes, 1847            |    |    |    | X   | X   |         |     |     | Correa (2003)   Maldonado-Ocampo (2001)                               |
| <i>Pellona flavipinnis</i> (Valenciennes, 1837)           |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Lasso et al. (2005)   ICN-MHN 733, 4144, 11309 |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Pristigaster cayana</i> Cuvier, 1829                                    |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <b>Engraulidae</b><br><b>6 spp (1 deleted from 2008)</b>                   |    |    |    |     |     |         |     |     |  |
| <i>Amazonaprattus scintilla</i> Roberts, 1984                              |    |    |    |     | X   |         |     |     | Maldonado-Ocampo and Bogotá-Gregory (2007)   |
| <i>Anchoviella guianensis</i> (Eigenmann, 1912)                            |    |    |    | -   | X   |         |     |     | Galvis et al. (2007a)  |
| <i>Anchoviella jamesi</i> (Jordan & Seale, 1926)                           |    |    |    | X   | X   |         |     |     | Kullander and Ferraris (2003)  |
| <i>Jurengraulis juriensis</i> (Boulenger, 1898)                            |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Lycengraulis batesii</i> (Günther, 1868)                                |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Kullander and Ferraris (2003)   |
| <i>Pterengraulis atherinoides</i> (Linnaeus, 1766)                         |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)  |
| <b>Characiformes</b><br><b>644 spp (92 added and 93 deleted from 2008)</b> |    |    |    |     |     |         |     |     |  |
| <b>Crenuchidae</b><br><b>28 spp (2 added and 2 deleted from 2008)</b>      |    |    |    |     |     |         |     |     |  |
| <i>Crenuchus spilurus</i> Günther, 1863                                    |    |    |    |     | X   | X       |     |     | Arbeláez et al. (2004)   Galvis et al. (2007a)   |
| <i>Poecilocharax weitzmani</i> Géry, 1965                                  |    |    |    |     | X   | X       |     |     | IAvH-P 10679   |
| <i>Ammocryptocharax elegans</i> Weitzman & Kanazawa, 1976                  |    |    |    |     |     | X       |     |     | Weitzman and Kanazawa (1976)   FMNH 80401   USNM 210692, 214364  |
| <i>Ammocryptocharax minutus</i> Buckup, 1993                               |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Characidium boavistae</i> Stein-dachner, 1915                           |    |    |    |     | +   | X       |     | +   | Urbano-Bonilla et al. (2009); Ortega-Lara et al. (2012)   Villa-Navarro et al. (2006)                    |
| <i>Characidium caucanum</i> Eigenmann, 1912                                | X  | X  | X  |     |     | X       |     |     | Eigenmann (1912)   FMNH 56057 [ex CM 4847], 56058-60, 69546   CAS 41275-77 [ex IU 12701-03]   USNM 79183 |
| <i>Characidium chupa</i> Schultz, 1944                                     |    |    |    |     | X   |         |     | +   | Urbano-Bonilla et al. (2009); Ortega-Lara et al. (2012)  |
| <i>Characidium ethostoma</i> Cope, 1872                                    |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Characidium longum</i> Ta-phorn, Montaña & Buckup, 2006                 |    |    |    |     | X   |         |     |     | Lasso et al. (2009)   IAvH-P 2753, 13756, 13790  |
| <i>Characidium pellucidum</i> Eigenmann, 1909                              |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)   |
| <i>Characidium phoxocephalum</i> Eigenmann, 1912                           | X  | X  | X  |     |     | X       |     |     | Eigenmann (1912)   FMNH 56061 [ex CM 4851]   CAS 60254 [ex IU 12704]                                     |
| <i>Characidium pteroides</i> Eigenmann, 1909                               |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2008)   Maldonado-Ocampo et al. (2006a)   |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Characidium roesseli</i> Géry, 1965                                  |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Characidium sanctijohanni</i> Dahl, 1960                             | X  | X  |    |     |     |         | X   | -   | Dahl (1960c)   Agudelo-Zamora et al. (2014)  |
| <i>Characidium steindachneri</i> Cope, 1878                             |    |    |    | X   | X   |         |     |     | Urbano-Bonilla et al. (2009).   Bogotá-Gregory and Maldonado-Ocampo (2006a)   CAS-SU 50488, 50655        |
| <i>Characidium zebra</i> Eigenmann, 1909                                |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Maldonado-Ocampo (2001)   |
| <i>Elachoharax geryi</i> Weitzman & Kanazawa, 1978                      |    |    |    |     | X   |         |     |     | Weitzman and Kanazawa (1978)   |
| * <i>Elachoharax mitopterus</i> Weitzman, 1986                          |    |    |    | X   |     |         |     |     | CZUT-IC 4071, 4086, 5106   |
| <i>Elachoharax pulcher</i> Myers, 1927                                  |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Weitzman and Kanazawa (1978)  |
| <i>Klausewitzia</i> Géry, 1965  |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   |
| <i>Leptocharacidium omospilus</i> Buckup, 1993                          |    |    |    |     | X   |         |     |     | IAvH-P 13758   |
| <i>Melanocharacidium dispiloma</i> Buckup, 1993                         |    |    |    | -   | X   |         |     |     | Buckup (1993)  |
| * <i>Melanocharacidium nigrum</i> Buckup, 1993                          |    |    |    | X   |     |         |     |     | IAvH-P 8660, 8700, 8765, 8796, 8859, 9421  |
| <i>Melanocharacidium pectorale</i> Buckup, 1993                         |    |    |    | X   | X   |         |     |     | Buckup (1993)   Mojica et al. (2005)   |
| <i>Microcharacidium eleotrioides</i> (Géry, 1960)                       |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)   |
| <i>Microcharacidium gnomus</i> Buckup, 1993                             |    |    |    |     | X   |         |     |     | Buckup (1993)  |
| <i>Microcharacidium weitzmani</i> Buckup, 1993                          |    |    |    |     | X   |         |     |     | Buckup (1993)  |
| <i>Odontocharacidium aphanes</i> (Weitzman & Kanazawa, 1977)            |    |    |    | X   |     |         |     |     | Buckup (1993)  |
| <b>Erythrinidae</b>   |    |    |    |     |     |         |     |     |  |
| <b>4 spp (1 added and 1 deleted from 2008)</b>                          |    |    |    |     |     |         |     |     |  |
| <i>Erythrinus erythrinus</i> (Bloch & Schneider, 1801)                  |    |    |    | X   | X   |         |     |     | Eigenmann (1922)   Fowler (1945)   ICN-MHN 440, 3801   |
| <i>Hoplyerithrinus unitaeniatus</i> (Agassiz, 1829)                     |    |    |    | X   | X   |         |     |     | Fowler (1945)   Cala (1977)  |
| * <i>Hoplias curupira</i> Oyakawa & Mattox 2009                         |    |    |    |     | X   |         |     |     | IAvH-P 1349, 2274, 2407, 2743  |
| <i>Hoplias malabaricus</i> (Bloch, 1794)                                |    |    |    | X   | X   | X       | X   | X   | Fowler (1943)   Steindachner (1879a)   Eigenmann (1922)   Maldonado-Ocampo et al. (2013b)   Regan (1914) |
| <b>Parodontidae</b>   |    |    |    |     |     |         |     |     |  |
| <b>9 spp (3 added from 2008)</b>  |    |    |    |     |     |         |     |     |  |
| <i>Parodon alfonsoi</i> Londoño-Burbano, Román-Valencia & Taphorn, 2011 | X  | X  |    |     |     | X       |     |     | Londoño-Burbano et al. (2011)  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Parodon apolinari</i> Myers, 1930   |    |    |    |     | X   |         |     |     | Myers (1930)   |
| <i>Parodon atratoensis</i> Londoño-Burbano, Román-Valencia & Taphorn, 2011   | X  | X  |    |     |     |         |     | X   | Londoño-Burbano et al. (2011)  |
| <i>Parodon buckleyi</i> Boulenger, 1887                                      |    |    |    | X   |     |         |     |     | Londoño-Burbano et al. (2011)  |
| <i>Parodon caliensis</i> Boulenger, 1895                                     | X  | X  | X  |     |     | X       |     |     | Boulenger (1895)   |
| <i>Parodon magdalenensis</i> Londoño-Burbano, Román-Valencia & Taphorn, 2011 | X  | X  |    |     |     | X       |     |     | Londoño-Burbano et al. (2011)  |
| <i>Parodon pongoensis</i> (Allen, 1942)                                      |    |    |    | X   |     |         |     |     | Londoño-Burbano et al. (2011)  |
| <i>Parodon suborbitalis</i> Valenciennes, 1850                               |    |    |    |     |     | -       | X   |     | Londoño-Burbano et al. (2011)   Eigenmann (1922)   |
| <i>Saccodon dariensis</i> (Meek & Hildebrand, 1913)                          |    |    | X  |     |     | X       |     | X   | Pavanelli and Starnes (2015)   |
| <b>Cynodontidae</b>  |    |    |    |     |     |         |     |     |  |
| <b>7 spp</b>   |    |    |    |     |     |         |     |     |  |
| <i>Cynodon gibbus</i> Spix & Agassiz, 1829                                   |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Toledo-Piza (2000a)   |
| <i>Cynodon septenarius</i> Toledo-Piza, 2000                                 |    |    |    |     | X   |         |     |     | Lasso et al. (2005)   IAvH-P 1043, 1053, 3237  |
| <i>Hydrolycus armatus</i> (Jardine & Schomburgk, 1841)                       |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Maldonado-Ocampo et al. (2006a)   |
| <i>Hydrolycus scomberoides</i> (Cuvier, 1816)                                |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Hydrolycus tatauaia</i> Toledo-Piza, Menezes & Santos, 1999               |    |    |    |     | X   |         |     |     | IAvH-P 9915  |
| <i>Hydrolycus wallacei</i> Toledo-Piza, Menezes & Santos, 1999               |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Maldonado-Ocampo et al. (2006a)   |
| <i>Rhaphiodon vulpinus</i> Spix & Agassiz, 1829                              |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)   |
| <b>Serrasalmidae</b>   |    |    |    |     |     |         |     |     |  |
| <b>39 spp (1 added and 4 deleted from 2008)</b>                              |    |    |    |     |     |         |     |     |  |
| <i>Catoprion mento</i> (Cuvier, 1819)  |    |    |    |     | X   | X       |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Lasso et al. (2005)   IAvH-P 751, 779, 814, 961, 1130, 1173, 1385, 2436, 4911, 5026, 5917, 11272, 12771   ICN-MHN 5246, 5664 |
| <i>Colosoma macropomum</i> (Cuvier, 1818)                                    |    |    | X  | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Cala (1977)   IAvH-P 2031, 5898, 10549, 11601, 11607   |
| <i>Metynnismartini</i> Ahl, 1923   |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   IAvH-P 1399, IAvH-P 11260, IAvH-P 13864  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Metynnis hypsauchen</i> (Müller & Troschel, 1844)          |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Maldonado-Ocampo and Bogotá-Gregory (2007) |
| <i>Metynnis lippincottianus</i> (Cope, 1870)                  |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Maldonado-Ocampo (2001)                    |
| <i>Metynnis luna</i> Cope, 1878                               |    |    |    | X   | X   |         |     |     | Correa (2003)   Maldonado-Ocampo (2001)   |
| <i>Myleus rhomboidalis</i> (Cuvier, 1818)                     |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)  |
| <i>Myleus setiger</i> Müller & Troschel, 1844                 |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Maldonado-Ocampo et al. (2006a)            |
| <i>Myleus torquatus</i> (Kner, 1858)                          |    |    |    | X   | X   |         |     |     | Mojica (1999)   Maldonado-Ocampo (2001)   ICN-MHN 2557, 3426, 3838                      |
| <i>Myloplus asterias</i> (Müller & Troschel, 1844)            |    |    |    | X   | -   |         |     |     | Correa (2003)   |
| <i>Myloplus rubripinnis</i> (Müller & Troschel, 1844)         |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)  |
| <i>Myloplus schomburgkii</i> (Jardine, 1841)                  |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Cala (1977)                                |
| <i>Mylossoma acanthogaster</i> (Valenciennes, 1850)           |    | X  |    |     |     |         | X   |     | Usma et al. (2002)  |
| <i>Mylossoma aureum</i> (Spix & Agassiz, 1829)                |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)  |
| <i>Mylossoma duriventre</i> (Cuvier, 1818)                    |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)  |
| <i>Piaractus brachypomus</i> (Cuvier, 1818)                   |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)  |
| <i>Pristobrycon aureus</i> (Spix & Agassiz, 1829)             |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   ICN-MHN 5251                              |
| <i>Pristobrycon calmoni</i> (Steindachner, 1908)              |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)  |
| <i>Pristobrycon careopinus</i> Fink & Machado-Allison, 1992   |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Maldonado-Ocampo et al. (2006a)            |
| <i>Pristobrycon maculipinnis</i> Fink & Machado-Allison, 1992 |    |    |    | X   |     |         |     |     | Correa (2003)   |
| <i>Pristobrycon striolatus</i> (Steindachner, 1908)           |    |    |    | X   | X   |         |     |     | Correa (2003)   Maldonado-Ocampo et al. (2006a)   |
| <i>Pygocentrus cariba</i> (Humboldt & Valenciennes, 1821)     |    |    |    |     | X   |         |     |     | Maldonado-Ocampo (2001)   |
| <i>Pygocentrus nattereri</i> Kner, 1858                       |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)  |
| <i>Pygopristis denticulata</i> (Cuvier, 1819)                 |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Serrasalmus altuvei</i> Ramírez, 1965                      |    |    |    | X   | X   |         |     |     | Correa (2003)   Maldonado-Ocampo (2001)   |
| <i>Serrasalmus compressus</i> Jégu, Leão & Santos, 1991       |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)   |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| * <i>Serrasalmus eigenmanni</i><br>Norman, 1929                         |    |    |    | X   |     |         |     |     | CZUT-IC 7334  |
| <i>Serrasalmus elongatus</i> Kner,<br>1858                              |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Serrasalmus gouldingi</i> (Fink<br>& Machado-Allison, 1992)          |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   IAvH-P 262          |
| <i>Serrasalmus hollandi</i> Eigenmann,<br>1915                          |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Serrasalmus humeralis</i> Valenciennes,<br>1850                      |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   ICN-MHN 5255, 6108  |
| <i>Serrasalmus irritans</i> Peters,<br>1877                             |    |    |    | -   | X   |         |     |     | Maldonado-Ocampo (2001)   |
| <i>Serrasalmus maculatus</i> Kner,<br>1858                              |    |    |    | X   |     |         |     |     | Jégu and Dos Santos (2001)  |
| <i>Serrasalmus manueli</i> (Fernández-Yépez & Ramírez, 1967)            |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Maldonado-Ocampo (2001)                   |
| <i>Serrasalmus medinai</i><br>Ramírez, 1965                             |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)  |
| <i>Serrasalmus nalseni</i><br>Fernández-Yépez, 1969                     |    |    |    | X   |     |         |     |     | Correa (2003)   |
| <i>Serrasalmus rhombeus</i><br>(Linnaeus, 1766)                         |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)  |
| <i>Serrasalmus sanchezi</i> Géry,<br>1964                               |    |    |    | X   |     |         |     |     | IAvH-P 10526-10528, 10539, 10554-10556, 10559, 11543-11552, 11585 |
| <i>Serrasalmus spilopleura</i> Kner,<br>1858                            |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)                      |
| <b>Hemiodontidae</b><br><b>14 spp (1 added and 1 deleted from 2008)</b> |    |    |    |     |     |         |     |     |   |
| <i>Anodus elongatus</i> Agassiz,<br>1829                                |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Anodus orinocensis</i> (Steindachner, 1887)                          |    |    |    |     | X   |         |     |     | Zapata and Usma (2013)   CUZT-IC 3450, 4062                       |
| <i>Hemiodus amazonum</i> (Humboldt, 1821)                               |    |    |    | +   | -   |         |     |     | ICN-MHN 17168   |
| <i>Hemiodus argenteus</i> Pellegrin,<br>1909                            |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Galvis et al. (2007a)                     |
| * <i>Hemiodus atranalis</i> (Fowler,<br>1940)                           |    |    |    | X   |     |         |     |     | IAvH-P 2389   |
| <i>Hemiodus gracilis</i> Günther,<br>1864                               |    |    |    | -   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)                                   |
| <i>Hemiodus immaculatus</i> Kner,<br>1858                               |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Maldonado-Ocampo et al. (2006a)           |
| <i>Hemiodus microlepis</i> Kner,<br>1858                                |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Lasso et al. (2005)   IMCN 606           |
| <i>Hemiodus semitaeniatus</i> Kner,<br>1858                             |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Cala (1977)                               |
| <i>Hemiodus thayeria</i> Böhlke,<br>1955                                |    |    |    | X   | +   |         |     |     | Böhlke (1955)   Galvis et al. (2007b)   Ortega-Lara (2016)        |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Hemiodus unimaculatus</i> (Bloch, 1794)             |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Cala (1977)   |
| <i>Hemiodus vorderwinkleri</i> (Géry, 1964)            |    |    |    | X   |     |         |     |     | Géry (1964b)  |
| <i>Argoneutes longiceps</i> (Kner, 1858)               |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   IAvH-P 5746   |
| <i>Bivibranchia fowleri</i> (Steindachner, 1908)       |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Maldonado-Ocampo et al. (2006a)   |
| <b>Anostomidae</b>                                     |    |    |    |     |     |         |     |     |   |
| <b>43 spp (4 added and 14 deleted from 2008)</b>       |    |    |    |     |     |         |     |     |   |
| <i>Abramites eques</i> (Steindachner, 1878)            | X  | X  | X  |     |     | X       |     |     | Steindachner (1878)   BMNH 1895.5.17.155-156   NMW 69549, 69548, 69550                            |
| <i>Abramites hypselonotus</i> (Günther, 1868)          |    |    |    | X   | X   |         |     |     | Lasso et al. (2005)   Mojica et al. (2005)   IAvH-P 3411  |
| * <i>Anostomoides laticeps</i> (Eigenmann, 1912)       |    |    |    | X   |     |         |     |     | XIII Congreso Colombiano de Ictiología  |
| <i>Anostomus anostomus</i> (Linnaeus, 1758)            |    |    |    | X   | X   |         |     |     | Fowler (1943)   Cala (1977)   IAvH-P 1014, 2830   |
| <i>Anostomus ternetzi</i> Fernández-Yépez, 1949        |    |    |    | -   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Gnathodolus bidens</i> Myers, 1927                  |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Laemolyta fernandezi</i> Myers, 1950                |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)   |
| <i>Laemolyta garmani</i> (Borodin, 1931)               |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Laemolyta proxima</i> (Garman, 1890)                |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Laemolyta taeniata</i> (Kner, 1858)                 |    |    |    | X   | X   |         |     |     | Mautari and Menezes (2006)   Mojica et al. (2005)   |
| <i>Leporellus vittatus</i> (Valenciennes, 1850)        |    |    |    |     | X   | X       |     | +   | Steindachner (1880)   Garavello and Britski (2003)   Maldonado-Ocampo et al. (2005)   Dahl (1955) |
| <i>Leporinus affinis</i> Günther, 1864                 |    |    |    | X   |     |         |     |     | Garavello and Britski (2003)  |
| <i>Leporinus agassizii</i> Steindachner, 1876          |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| * <i>Leporinus amazonicus</i> Santos & Zuanon, 2008    |    |    |    | X   |     |         |     |     | XIII Congreso Colombiano de Ictiología  |
| <i>Leporinus aripuanensis</i> Garavello & Santos, 1981 |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Leporinus bimaculatus</i> Castelnau, 1855           |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Leporinus boehlkei</i> Garavello, 1988              | X  | X  |    |     | X   |         |     |     | Garavello (1988)   ANSP 136487, 135432-33, 136489, 138803, 140316   MZUSP 28061                   |
| <i>Leporinus brunneus</i> Myers, 1950                  |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Maldonado-Ocampo et al. (2006a)   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Leporinus enyae</i> Burns, Chatfield, Birindelli & Sidlauskas, 2017 |    |    |    |     | X   |         |     |     | Burns et al. (2017)  |
| <i>Leporinus fasciatus</i> (Bloch, 1794)                               |    |    |    | X   | X   |         |     |     | Correa (2003)   Maldonado-Ocampo et al. (2006a)  |
| <i>Leporinus friderici</i> (Bloch, 1794)                               |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)   |
| <i>Leporinus granti</i> Eigenmann, 1912                                |    |    |    |     | X   |         |     |     | Lasso et al. (2009)   ICN-MHN 948, 1301  |
| <i>Leporinus jamesi</i> Garman, 1929                                   |    |    |    | X   |     |         |     |     | Garavello et al. (2014)  |
| <i>Leporinus klausewitzi</i> Géry, 1960                                |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Leporinus moralesi</i> Fowler, 1942                                 |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   |
| <i>Leporinus nattereri</i> Steindachner, 1876                          |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   IAvH-P 8822  |
| <i>Leporinus niceforoi</i> Fowler, 1943                                | X  | X  |    | X   |     |         |     |     | Fowler (1943)   ANSP 70491, 70492  |
| <i>Leporinus ortomaculatus</i> Garavello, 2000                         |    |    |    |     | X   |         |     |     | IAvH-P 13843   |
| * <i>Leporinus parae</i> Eigenmann, 1907                               |    |    |    | X   | X   |         |     |     | IAvH-P 1822, 12770, 13003, 13011   |
| <i>Leporinus subniger</i> Fowler, 1943                                 |    |    |    | X   |     |         |     |     | Fowler (1943)   IAvH-P 3430-3432   ANSP 70493, 70494   |
| <i>Leporinus striatus</i> Kner, 1858                                   |    |    |    | + X | X   | X       | X   |     | Galvis et al. (2007b)   Urbano-Bonilla et al. (2009).   Steindachner (1879a)   Eigenmann (1922)   Regan (1914) |
| <i>Leporinus wolfi</i> Fowler, 1940                                    |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Leporinus y-ophorus</i> Eigenmann, 1922                             |    |    |    |     | X   |         |     |     | Eigenmann (1922)   CAS 61680   |
| <i>Megaleporinus myscorum</i> (Steindachner, 1900)                     | X  | X  | X  |     |     | X       |     | X   | Steindachner (1900)   Eigenmann (1922)   |
| <i>Megaleporinus trifasciatus</i> (Steindachner, 1876)                 |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Pseudanos trimaculatus</i> Kner, 1858                               |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Pseudanos winterbottomi</i> Sidlauskas & Santos, 2005               |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)  |
| <i>Rhytidodus argenteofuscus</i> Kner, 1858                            |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Rhytidodus microlepis</i> Kner, 1858                                |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Schizodon corti</i> Schultz, 1944                                   |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)  |
| <i>Schizodon fasciatus</i> Spix & Agassiz, 1829                        |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Schizodon scotorhabdotus</i> Sidlauskas, Garavello & Jellen, 2007   |    |    |    |     | X   |         |     |     | Sidlauskas et al. (2007)   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Synaptolaemus latofasciatus</i> (Steindachner, 1910)        |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   CZUT-IC 4092                                    |
| <b>Chilodontidae</b>   |    |    |    |     |     |         |     |     |   |
| <b>5 spp (1 added and 1 deleted from 2008)</b>                 |    |    |    |     |     |         |     |     |   |
| <i>Caenotropus labyrinthicus</i> (Kner, 1858)                  |    |    |    | X   | X   |         |     |     | Cala (1977)   Vari et al. (1995)  |
| <i>Caenotropus mestomorgmatus</i> Vari, Castro & Raredon, 1995 |    |    |    | X   | +   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   IAvH-P 281, 4098, 4101              |
| * <i>Caenotropus schizodon</i> Scharcansky & Lucena, 2007      |    |    |    | X   |     |         |     |     | CZUT-IC 12280   |
| <i>Chilodus gracilis</i> Isbrücker & Nijssen, 1988             |    |    |    | X   | +   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   USNM 190300, 232361, 263288, 431461 |
| <i>Chilodus punctatus</i> Müller & Troschel, 1844              |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)  |
| <b>Curimatidae</b>   |    |    |    |     |     |         |     |     |   |
| <b>47 spp (2 added and 2 deleted from 2008)</b>                |    |    |    |     |     |         |     |     |   |
| <i>Curimata aspera</i> (Günther, 1868)                         |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Curimata cerasina</i> Vari, 1984                            |    |    |    | -   | X   |         |     |     | CZUT-IC 11494   |
| <i>Curimata cisandina</i> (Allen, 1942)                        |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Curimata cyprinoides</i> (Linnaeus, 1766)                   |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)                                       |
| <i>Curimata incompta</i> Vari, 1984                            |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo (2001)   IAvH-P 4370                      |
| <i>Curimata mivartii</i> (Steindachner, 1878)                  | X  | X  | X  |     |     | X       |     | +   | Steindachner (1878)   Vari (1989a)  |
| <i>Curimata ocellata</i> (Eigenmann & Eigenmann, 1889)         |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Curimata roseni</i> Vari, 1989                              |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)                                       |
| <i>Curimata vittata</i> (Kner, 1858)                           |    |    |    | X   | X   |         |     |     | Vari (1989a)   Maldonado-Ocampo (2001)  |
| <i>Curimatella albuna</i> (Müller & Troschel, 1844)            |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)  |
| <i>Curimatella dorsalis</i> (Eigenmann & Eigenmann, 1889)      |    |    |    | X   | X   |         |     |     | Mojica et al. (2005); Maldonado-Ocampo (2001)                                     |
| <i>Curimatella immaculata</i> (Fernández-Yépez, 1948)          |    |    |    | X   | X   |         |     |     | Vari (1992b)   Bogotá-Gregory and Maldonado-Ocampo (2006a)                        |
| <i>Curimatella meyeri</i> (Steindachner, 1882)                 |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Curimatopsis crypticus</i> Vari, 1982                       |    |    |    |     | X   |         |     |     | IAvH-P 13266  |
| <i>Curimatopsis evelynae</i> Géry, 1964                        |    |    |    |     | X   |         |     |     | Géry (1964a)  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Curimatopsis macrolepis</i> (Steindachner, 1876)           |    |    |    | X   | X   |         |     |     | Vari (1982)   |
| * <i>Curimatopsis microlepis</i> Eigenmann & Eigenmann, 1889  |    |    |    | X   |     |         |     |     | CZUT-IC 4073, 4075  |
| <i>Cyphocharax abramoides</i> (Kner, 1858)                    |    |    |    |     | X   |         |     |     | Vari (1992a)  |
| <i>Cyphocharax aspilos</i> Vari, 1992                         |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)   |
| <i>Cyphocharax festivus</i> Vari, 1992                        |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Maldonado-Ocampo et al. (2006a) |
| <i>Cyphocharax leucostictus</i> (Eigenmann & Eigenmann, 1889) |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)   |
| <i>Cyphocharax magdalenae</i> (Steindachner, 1878)            |    |    |    |     |     | X       |     | X   | Steindachner (1878)   Eigenmann (1922)   Vari (1992a)                         |
| <i>Cyphocharax multilineatus</i> (Myers, 1927)                |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Galvis et al. (2007a)                                 |
| <i>Cyphocharax nigripinnis</i> Vari, 1992                     |    |    |    | X   |     |         |     |     | Vari (1992a)  |
| * <i>Cyphocharax notatus</i> (Steindachner, 1908)             |    |    |    | X   |     |         |     |     | CZUT-IC 10874   |
| <i>Cyphocharax oenae</i> Vari, 1992                           |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Cyphocharax pantostictos</i> Vari & Barriga, 1990          |    |    |    | X   |     |         |     |     | IAvH-P 8354-8357  |
| <i>Cyphocharax spiluropsis</i> (Eigenmann & Eigenmann, 1889)  |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)  |
| <i>Cyphocharax spilurus</i> (Günther, 1864)                   |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)  |
| <i>Potamorhina altamazonica</i> (Cope, 1878)                  |    |    |    | X   | X   |         |     |     | Vari (1984)   |
| <i>Potamorhina laticeps</i> (Valenciennes, 1850)              |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)   |
| <i>Potamorhina latior</i> (Spix & Agassiz, 1829)              |    |    |    | X   |     |         |     |     | Vari (1984)   |
| <i>Potamorhina pristigaster</i> (Steindachner, 1876)          |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)                                   |
| <i>Psectrogaster amazonica</i> Eigenmann & Eigenmann, 1889    |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Psectrogaster ciliata</i> (Müller & Troschel, 1844)        |    |    |    |     | X   |         |     |     | Vari (1989b)  |
| <i>Psectrogaster esequibensis</i> (Günther, 1864)             |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Psectrogaster rhombooides</i> Eigenmann & Eigenmann, 1889  |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Psectrogaster rutiloides</i> (Kner, 1858)                  |    |    |    | X   |     |         |     |     | Vari (1989b)  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Pseudocurimata lineopunctata</i> (Boulenger, 1911)          |    |    |    |     |     | X       | X   |     | Boulenger (1911)   Eigenmann (1922)  |
| <i>Pseudocurimata patiae</i> (Eigenmann, 1914)                 | X  | X  | X  |     |     |         | X   |     | Eigenmann et al. (1914)   FMNH 56554, 56555   CAS 60622 [ex IU 13055]  |
| <i>Steindachnerina argentea</i> (Gill, 1858)                   |    |    |    | -   | X   |         |     |     | Eigenmann (1922)   |
| <i>Steindachnerina atratoensis</i> (Eigenmann, 1912)           | X  | X  |    |     |     |         |     | X   | Eigenmann (1912)   FMNH 56024 [ex CM 4814a], 56043, 71308   CAS 44218 [ex IU 12676]   MCZ 30933   USNM 79192         |
| <i>Steindachnerina bimaculata</i> (Steindachner, 1876)         |    |    |    | X   |     |         |     |     | Vari (1991)  |
| <i>Steindachnerina dobula</i> (Günther, 1868)                  |    |    |    | X   |     |         |     |     | Vari (1991)  |
| <i>Steindachnerina guentheri</i> (Eigenmann & Eigenmann, 1889) |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Vari (1991)   |
| <i>Steindachnerina hypostoma</i> (Boulenger, 1887)             |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Steindachnerina pupula</i> Vari, 1991                       |    |    |    |     | X   |         |     |     | Vari (1991)  |
| <b>Prochilodontidae</b>  |    |    |    |     |     |         |     |     |  |
| <b>10 spp</b>  |    |    |    |     |     |         |     |     |  |
| <i>Ichthyolephas longirostris</i> (Steindachner, 1879)         | X  | X  | X  |     |     | X       |     | +   | Steindachner (1879b)   Castro and Vari (2004)  |
| <i>Prochilodus magdalenae</i> Steindachner, 1879               | X  | X  | X  |     |     | X       |     | X   | Steindachner (1879a)   Eigenmann (1922)  |
| <i>Prochilodus mariae</i> Eigenmann, 1922                      |    |    |    |     | X   |         |     |     | Eigenmann (1922)   |
| <i>Prochilodus nigricans</i> Spix & Agassiz, 1829              |    |    |    | X   |     |         |     |     | Fowler (1943)  |
| <i>Prochilodus reticulatus</i> Valenciennes, 1850              |    |    | X  |     |     |         |     | X   | Ortega-Lara et al. (2012)  |
| <i>Prochilodus rubrotaeniatus</i> Jardine & Schomburgk, 1841   |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Urbano-Bonilla et al. (2009).   IAvH-P 5844, 6195, 10879, 10880, 12764 |
| <i>Semaprochilodus insignis</i> (Jardine & Schomburgk, 1841)   |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Castro and Vari (2004)  |
| <i>Semaprochilodus kneri</i> (Pellegrin, 1909)                 |    |    |    | X   | X   |         |     |     | Correa (2003)   Maldonado-Ocampo et al. (2006a)  |
| <i>Semaprochilodus laticeps</i> (Steindachner, 1879)           |    |    |    |     | X   |         |     |     | Cala (1977)   Castro and Vari (2004)   |
| <i>Semaprochilodus taeniurus</i> (Valenciennes, 1821)          |    |    |    | X   |     |         |     |     | Correa (2003)  |
| <b>Lebiasinidae</b>  |    |    |    |     |     |         |     |     |  |
| <b>30 spp (3 added and 10 deleted from 2008)</b>               |    |    |    |     |     |         |     |     |  |
| <i>Lebiasina astrigata</i> Regan, 1913                         |    |    |    |     |     |         | X   |     | Maldonado-Ocampo et al. (2006b)  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Lebiasina chocoensis</i> Ardila Rodríguez, 2010         | X  | X  |    |     |     |         | X   |     | Ardila Rodríguez (2010)  |
| <i>Lebiasina chucuriensis</i> Ardila Rodríguez, 2001       | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2001)   CAR 150424, 150423, 150425   |
| <i>Lebiasina colombia</i> Ardila Rodríguez, 2008           | X  | X  |    |     |     |         | X   |     | Ardila Rodríguez (2008b)   CAR 190, 191, 192   ICN-MHN 5314  |
| <i>Lebiasina elongata</i> (Boulenger, 1887)                |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Lebiasina erythrinoides</i> (Valenciennes, 1850)        |    |    |    | X   | X   | X       | X   | +   | Maldonado-Ocampo et al. (2005)   Lasso et al. (2005)   Bogotá-Gregory and Maldonado-Ocampo (2005)   Ortega-Lara et al. (2012)   IAvH-P 573 |
| <i>Lebiasina festae</i> Boulenger, 1899                    |    |    |    |     |     |         | X   | X   | Maldonado-Ocampo et al. (2013b)   Fowler (1939)  |
| <i>Lebiasina floridablancaensis</i> Ardila Rodríguez, 1994 | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (1994)   CAR 15-04-01   MBUCV-V-26713 [ex CAR 15-04-02 and 03]   MHNUNC 1837  |
| <i>Lebiasina multimaculata</i> Boulenger, 1911             | X  | X  |    |     |     |         | X   |     | Boulenger (1911)   BMNH 1910.7.11.167-169  |
| <i>Lebiasina narinensis</i> Ardila Rodríguez, 2002         | X  | X  |    |     |     | -       | X   |     | Ardila Rodríguez (2002)   ICN-MHN 2340, 2340-1   |
| <i>Lebiasina ortegai</i> Ardila Rodríguez, 2008            | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2008a)   CAR 157, 265   CZUT-IC 2586   IAvH-P 9875   IMCN 4200, 4201   |
| <i>Lebiasina panamensis</i> Gill, 1877                     |    |    |    |     |     |         | X   | X   | Eigenmann (1922)   Fowler (1944)   |
| <i>Copeina guttata</i> (Steindachner, 1876)                |    |    |    | X   |     |         |     |     | Steindachner (1876)  |
| <i>Copella eigenmanni</i> (Regan, 1912)                    |    |    |    |     | X   |         |     |     | Regan (1912d)  |
| <i>Copella nattereri</i> (Steindachner, 1876)              |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Galvis et al. (2007a)   |
| <i>Copella vilmae</i> Géry, 1963                           |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Pyrrhulina brevis</i> Steindachner, 1876                |    |    |    | X   | X   |         |     |     | Correa (2003)   Urbano-Bonilla et al. (2009).  |
| <i>Pyrrhulina eleanorae</i> Fowler, 1940                   |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)   |
| <i>Pyrrhulina filamentosa</i> Valenciennes, 1847           |    |    |    |     | X   |         |     |     | Lasso et al. (2005)   IAvH-P 1589, 3405  |
| <i>Pyrrhulina laeta</i> (Cope, 1872)                       |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)   |
| <i>Pyrrhulina lugubris</i> Eigenmann, 1922                 |    |    |    | -   | X   |         |     |     | Eigenmann (1922)   CAS 78888 [ex IU 15041a], 78888 [ex IU 15041]   |
| <i>Pyrrhulina obermulleri</i> Myers, 1926                  |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Pyrrhulina semifasciata</i> Steindachner, 1876          |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   USNM 311003  |
| * <i>Nannostomus grammus</i> (Fowler, 1913)                |    |    |    | X   |     |         |     |     | IAvH-P 10688, 10692, 10694   |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Nannostomus eques</i> Stein-dachner, 1876            |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)  |
| <i>Nannostomus harrisoni</i> (Eigenmann, 1909)          |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Maldonado-Ocampo et al. (2006a)                                    |
| <i>Nannostomus marginatus</i> Eigenmann, 1909           |    |    |    | X   | X   |         |     |     | Weitzman (1966)   Lasso et al. (2005)   |
| <i>Nannostomus marilynae</i> Weitzman & Cobb, 1975      |    |    |    | X   | X   |         |     |     | Weitzman and Cobb (1975)  |
| <i>Nannostomus trifasciatus</i> Steindachner, 1876      |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Galvis et al. (2007a)  |
| <i>Nannostomus unifasciatus</i> Steindachner, 1876      |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Maldonado-Ocampo et al. (2006a)  |
| <b>Ctenoluciidae</b>                                    |    |    |    |     |     |         |     |     |   |
| <b>7 spp</b>  |    |    |    |     |     |         |     |     |   |
| <i>Boulengerella cuvieri</i> (Agassiz, 1829)            |    |    |    | X   | X   |         |     |     | Vari (1995)   |
| <i>Boulengerella lateristriga</i> (Boulenger, 1895)     |    |    |    | X   | X   |         |     |     | Correa (2003)   Maldonado-Ocampo et al. (2006a)   |
| <i>Boulengerella lucius</i> (Cuvier, 1816)              |    |    |    | -   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Boulengerella maculata</i> (Valenciennes, 1850)      |    |    |    | X   | X   |         |     |     | Vari (1995)   Cala (1977)   |
| <i>Boulengerella xyrekes</i> Vari, 1995                 |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Maldonado-Ocampo et al. (2006a)   IAvH-P 1789, 2044, 2851         |
| <i>Ctenolucius beani</i> (Fowler, 1907)                 |    |    |    |     |     | X       | X   |     | Fowler (1907)   Vari (1995)   |
| <i>Ctenolucius hujeta</i> (Valenciennes, 1850)          |    |    |    |     |     | X       |     | X   | Vari (1995)   Bean (1908)   |
| <b>Acestrorhynchidae</b>                                |    |    |    |     |     |         |     |     |   |
| <b>18 spp (1 added and 1 deleted from 2008)</b>         |    |    |    |     |     |         |     |     |   |
| <i>Acestrorhynchus abbreviatus</i> (Cope, 1878)         |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)   |
| <i>Acestrorhynchus falcatus</i> (Bloch, 1794)           |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Eigenmann (1922)  |
| <i>Acestrorhynchus falcirostris</i> (Cuvier, 1819)      |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)  |
| <i>Acestrorhynchus grandoculis</i> Menezes & Géry, 1983 |    |    |    | X   |     |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Acestrorhynchus heterolepis</i> (Cope, 1878)         |    |    |    | X   | X   |         |     |     | Lasso et al. (2005)   Galvis et al. (2007b)   IAvH-P 834, 918, 2157, 10772                                      |
| <i>Acestrorhynchus microlepis</i> (Schomburgk, 1841)    |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Toledo-Piza and Menezes (1996)   Cala (1977)   |
| <i>Acestrorhynchus minimus</i> Menezes, 1969            |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Acestrorhynchus nasutus</i> Eigenmann, 1912          |    |    |    |     | X   |         |     |     | Lasso et al. (2009)   IAvH-P 1124, 9908, 9909, 9910, 9911, 9912, 9913, 9914, 13688, 13797, 13875   ICN-MHN 1280 |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Gnathocharax steindachneri</i><br>Fowler, 1913          |    |    |    |     | X   |         |     |     | Cala (1977)   |
| <i>Heterocharax macrolepis</i><br>Eigenmann, 1912          |    |    |    | X   | X   |         |     |     | Toledo-Piza (2000b)   IAvH-P 10658  |
| * <i>Heterocharax virgulatus</i><br>Toledo-Piza, 2000      |    |    |    |     | X   |         |     |     | IAvH-P 14091  |
| <i>Hoplocharax goerhei</i> Géry,<br>1966                   |    |    |    |     | X   |         |     |     | IAvH-P 15984  |
| <i>Lonchogenys ilisha</i> Myers,<br>1927                   |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)  |
| <i>Gilbertolus alatus</i><br>(Steindachner, 1878)          | X  | X  |    |     |     | X       |     | +   | Steindachner (1878)   Eigenmann (1922)  |
| <i>Gilbertolus atratoensis</i><br>Schultz, 1943            | X  | X  |    |     |     |         | X   |     | Schultz (1943)   USNM 76976, 120170   |
| <i>Gilbertolus maracaiboensis</i><br>Schultz, 1943         |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)   |
| <i>Roestes molossus</i> (Kner, 1858)                       |    |    |    | X   |     |         |     |     | Prada-Pedreros (1997)   |
| <i>Roestes ogilviei</i> (Fowler, 1914)                     |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)   |
| <b>Characidae</b>  |    |    |    |     |     |         |     |     |   |
| <b>325 spp (68 added and 51 deleted from 2008)</b>         |    |    |    |     |     |         |     |     |   |
| <i>Brachychalcinus copei</i><br>(Steindachner, 1882)       |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Brachychalcinus nummus</i><br>Böhlke, 1958              |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)  |
| <i>Brachychalcinus orbicularis</i><br>(Valenciennes, 1850) |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   ICN-MHN 1309   824, 839, 862, 865  |
| <i>Gymnocorymbus bondi</i><br>(Fowler, 1911)               |    |    |    |     | X   |         |     |     | Benine et al. (2015)  |
| <i>Gymnocorymbus thayeri</i><br>Eigenmann, 1908            |    |    |    | X   | -   |         |     |     | Fowler (1945)   Galvis et al. (2007a)   |
| <i>Poptella brevispina</i> Reis, 1989                      |    |    |    |     | X   |         |     |     | IAvH-P 4382   |
| <i>Poptella compressa</i> (Günther, 1864)                  |    |    |    | +   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo and Bogotá-Gregory (2007)                               |
| <i>Poptella longipinnis</i> (Poppe, 1901)                  |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2013a)   |
| <i>Stethaprion erythrops</i> (Cope, 1870)                  |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)   |
| <i>Stichodon insignis</i><br>(Steindachner, 1876)          |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Parastremma album</i> Dahl, 1960                        | X  | X  |    |     |     | X       |     |     | Dahl (1960c)   ICN-MHN 147, 147a  |
| <i>Parastremma pulchrum</i> Dahl, 1960                     | X  | X  |    |     |     | X       | -   |     | Dahl (1960c)   ICN-MHN 204  |
| <i>Parastremma sadina</i><br>Eigenmann, 1912               | X  | X  |    |     |     | X       | X   |     | Eigenmann (1912)   FMNH 56022 [ex CM 4812], 56023, 69678   CAS 57600 [ex IU 12675]   USNM 79225 |
| <i>Acestrocephalus anomalus</i><br>(Steindachner, 1880)    | X  | X  | X  |     |     | X       |     |     | Steindachner (1880)   NMW 57983   |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Acestrocephalus boehlkei</i><br>Menezes, 1977                |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Acestrocephalus sardina</i><br>(Fowler, 1913)                |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Lasso et al. (2005)   IAvH-P 4092-4093, 4793-4796, 5851, 12001, 12025, 12026, 12119  |
| <i>Charax condei</i> (Géry & Knöppel, 1976)                     |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   |
| <i>Charax metae</i> Eigenmann, 1922                             |    |    |    |     | X   |         |     |     | Eigenmann (1922)   CAS 41300 [ex IU 15027], 69117 [ex IU 15027]   FMNH 55145   IAvH-P 3566, 3567, 3569, 3571, 3573, 3574, 7732   SU 60707 [ex IU 15028]   UMMZ 160226   USNM 83631 [ex IU 15027] |
| <i>Charax michaeli</i> Lucena, 1989                             |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Charax niger</i> Lucena, 1989                                |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| * <i>Charax notulatus</i> Lucena, 1987                          |    |    |    |     | X   |         |     |     | IAvH-P 7521, 13028, 13073  |
| <i>Charax tectifer</i> (Cope, 1870)                             |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)   |
| <i>Cynopotamus amazonus</i> (Günther, 1868)                     |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Cynopotamus atratoensis</i> (Eigenmann, 1907)                | X  | X  | X  |     |     |         | X   |     | Eigenmann and Ogle (1907)   USNM 1664, 306567 [ex USNM 1664]   |
| <i>Cynopotamus bipunctatus</i> Pellegrin, 1909                  |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).  |
| <i>Cynopotamus magdalenae</i> (Steindachner, 1879)              | X  | X  | X  |     |     | X       |     |     | Steindachner (1879a)   NMW 62501-02, 62504-05, 77769   |
| <i>Cynopotamus venezuelae</i> (Schultz, 1944)                   |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)  |
| <i>Exodon paradoxus</i> Müller & Troschel, 1844                 |    |    |    |     | X   |         |     |     | Cala (1977)  |
| <i>Galeocharax gulo</i> (Cope, 1870)                            |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| * <i>Phenacogaster maculoblonga</i> de Lucena & Malabarba, 2010 |    |    |    |     | X   |         |     |     | CZUT-IC 9680   |
| * <i>Phenacogaster napoatilis</i> de Lucena & Malabarba, 2010   |    |    |    | X   |     |         |     |     | CZUT-IC 9008   |
| <i>Phenacogaster pectinata</i> (Cope, 1870)                     |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| * <i>Phenacogaster prolata</i> de Lucena & Malabarba, 2010      |    |    |    |     | X   |         |     |     | CZUT-IC 7223   |
| <i>Priocnemis pygmaeus</i> Weitzman & Vari, 1987                | X  | X  |    | X   |     |         |     |     | Weitzman and Vari (1987)   NRM 15048   MBUCV-V-15342   MZUSP 36498   NRM 17593   USNM 278479   |
| <i>Roeboides affinis</i> (Günther, 1868)                        |    |    |    | X   | X   |         |     |     | Lucena (2007)  |
| <i>Roeboides araguaito</i> Lucena, 2003                         |    |    |    | X   |     |         |     |     | Lucena (2003)  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Roeboides dayi</i> (Steindachner, 1878)            |    |    |    |     |     | X       | X   | X   | Steindachner (1878)   Maldonado-Ocampo et al. (2013b)  |
| <i>Roeboides dientonito</i> Schultz, 1944             |    |    |    |     | X   |         |     | +   | Lasso et al. (2005)   Ortega-Lara et al. (2012)   IAvH-P 2935, 2988, 3329-3332, 4906, 9497, 13083, 13169, 13185, 13198, 13216, 13236, 13249, 13278, 13296, 13376 |
| <i>Roeboides myersii</i> Gill, 1870                   |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   |
| <i>Roeboides occidentalis</i> Meek & Hildebrand, 1916 |    |    |    |     |     | -       | X   | -   | Maldonado-Ocampo et al. (2013b)  |
| <i>Bario steindachneri</i> (Eigenmann, 1893)          |    |    |    | X   |     |         |     |     | Galvis et al. (2006)   |
| <i>Hemigrammus aguaruna</i> Lima, Correa & Ota, 2016  |    |    |    | X   |     |         |     |     | Lima et al. (2016)   Galvis et al. (2006)  |
| <i>Hemigrammus analis</i> Durbin, 1909                |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Maldonado-Ocampo (2001)   |
| <i>Hemigrammus barrigona</i> Eigenmann & Henn, 1914   |    |    |    |     | X   |         |     |     | Eigenmann and Henn (1914)   AMNH 5320   CAS 44368 [ex IU 13423], 44369 [ex IU 13424]   IAvH-P 3633   |
| <i>Hemigrammus bellottii</i> (Steindachner, 1882)     |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)   IAvH-P 10304, 10307   |
| <i>Hemigrammus bleheri</i> Géry & Mahnert, 1986       |    |    |    |     | X   |         |     |     | Géry and Mahnert (1986)  |
| <i>Hemigrammus coeruleus</i> Durbin, 1908             |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   ICN-MHN 5065   |
| * <i>Hemigrammus geisleri</i> Zarske & Géry, 2007     |    |    |    | X   | X   |         |     |     | CZUT-IC 4400, 5097, 8655, 8851, 8933, 8954, 9099, 9245, 9993, 14642, 16138, 16309, 16837, 16934, MPUJ 306, 1232, 1234, 1237, 1357, 4378, 4392, 10804             |
| <i>Hemigrammus gracilis</i> (Lütken, 1875)            |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo (2001)   Fowler (1945)   IAvH-P 8735, 8763  |
| <i>Hemigrammus hyanuary</i> Durbin, 1918              |    |    |    | X   | X   |         |     |     | Castro (1987a)   Lasso et al. (2005)   ICN-MHN 2787  |
| <i>Hemigrammus levis</i> Durbin, 1908                 |    |    |    | X   | -   |         |     |     | Correa (2003)   Maldonado-Ocampo et al. (2006a)  |
| <i>Hemigrammus luelingi</i> Géry, 1964                |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Hemigrammus lunatus</i> Durbin, 1918               |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Hemigrammus melanochrous</i> Fowler, 1913          |    |    |    | X   |     |         |     |     | Correa (2003)  |
| <i>Hemigrammus micropterus</i> Meek, 1907             |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)  |
| <i>Hemigrammus microstomus</i> Durbin, 1918           |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Cala (1977)   IAvH-P 2605   IICN-MHN 4273  |
| <i>Hemigrammus newboldi</i> (Fernández-Yépez, 1949)   |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo (2001)   CZUT-IC 7204, 7250, 14763  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Hemigrammus ocellifer</i><br>(Steindachner 1882)                                 |    |    |    | X   |     |         |     |     | Mojica (1999)   CIACOL 2327, CZUT-IC 18072  |
| <i>Hemigrammus pretoensis</i><br>Géry, 1965   |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   USNM 216881   ICN-MHN: 16850-16851  |
| <i>Hemigrammus pulcher</i><br>Ladiges, 1938   |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Hemigrammus rhodostomus</i><br>Ahl, 1924   |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Cala (1977)   |
| <i>Hemigrammus rubrostriatus</i><br>Zarske, 2015                                    | X  | X  |    |     | X   |         |     |     | Zarske (2015)   |
| <i>Hemigrammus schmardae</i><br>(Steindachner, 1882)                                |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Maldonado-Ocampo et al. (2006a)  |
| <i>Hemigrammus stictus</i><br>(Durbin, 1909)  |    |    |    | -   | X   |         |     |     | Cala (1977)   |
| <i>Hemigrammus unilineatus</i><br>(Gill, 1858)                                      |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Cala (1977)   |
| <i>Hemigrammus vorderwinkleri</i><br>Géry, 1963                                     |    |    |    | X   | X   |         |     |     | Correa (2003)   Maldonado-Ocampo et al. (2006a)   |
| * <i>Hemigrammus jinyang</i> Lima & Sousa, 2009                                     |    |    |    | X   |     |         |     |     | CZUT-IC 4323, 4467, 4553, 4857, MPUJ 12525, 12623-12631   |
| <i>Hyphessobrycon acaciae</i><br>García-Alzate, Román-Valencia & Prada-Pedros, 2010 | X  | X  |    |     | X   |         |     |     | García-Alzate et al. (2010a)   MPUJ 5683, 393   IUQ 2795, 2433, 2492, 2793  |
| <i>Hyphessobrycon agulha</i><br>Fowler, 1913  |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   IAvH-P 8331-8332, 8334, 8336-8344, 8346-8350, 8728, 8794, 8888, 8919, 8941, 8953, 8973, 8989, 9012, 9025, 9046, 9071, 9096, 9121, 9407, 11175-11178 |
| <i>Hyphessobrycon amaronsensis</i><br>García-Alzate, Román-Valencia & Taphorn, 2010 | X  | X  |    | X   |     |         |     |     | García-Alzate et al. (2010b)   IUQ 2286   |
| <i>Hyphessobrycon bentosi</i><br>Durbin, 1908                                       |    |    |    | X   | -   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)  |
| <i>Hyphessobrycon choconensis</i><br>García-Alzate, Román-Valencia & Taphorn, 2013  | X  | X  |    |     |     |         | X   |     | García-Alzate et al. (2013)   IUQ 3035   AUM 55075   IUQ 2274, 2275, 3036, 3044   |
| <i>Hyphessobrycon columbianus</i><br>Zarske & Géry, 2002                            | X  | X  |    |     |     |         |     | X   | Zarske and Géry (2002)   MTDF 25497, 25498  |
| <i>Hyphessobrycon condotensis</i><br>Regan, 1913                                    | X  | X  |    |     |     |         | X   |     | Regan (1913)   BMNH 1913.10.1.19-21   |
| <i>Hyphessobrycon copelandi</i><br>Durbin, 1908                                     |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Hyphessobrycon diancistrus</i><br>Weitzman, 1977                                 |    |    |    |     | X   |         |     |     | Weitzman (1977)   USNM 216607, 216606   BMNH 1977.1.12.1-2   MZUSP 13179-80   |
| * <i>Hyphessobrycon dorsalis</i><br>Zarske, 2014                                    |    |    |    |     | X   |         |     |     | IAvH-P 1032, 2315   |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| * <i>Hyphessobrycon epicharis</i><br>Weitzman & Palmer, 1997                                    |    |    |    | X   |     |         |     |     | CZUT-IC 4171, 5098   |
| <i>Hyphessobrycon erythrostigma</i><br>(Fowler, 1943)   |    |    |    | X   |     |         |     |     | Weitzman and Palmer (1997)   |
| <i>Hyphessobrycon gracilior</i><br>Géry, 1964   |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   ICN-MHN 4277   |
| * <i>Hyphessobrycon heterorhabdus</i> (Ulrey, 1894)   |    |    |    | X   |     |         |     |     | García-Alzate et al. (2008)  |
| <i>Hyphessobrycon klausanni</i><br>García-Alzate, Urbano-Bonilla & Taphorn, 2017                | X  | X  |    |     | X   |         |     |     | García-Alzate et al. (2017)  |
| <i>Hyphessobrycon loretoensis</i><br>Ladiges, 1938  |    |    |    | X   |     |         |     |     | ICN-MHN 16814, 16846-16848   |
| <i>Hyphessobrycon mavro</i><br>García-Alzate, Román-Valencia & Prada-Pedreros, 2010             | X  | X  |    |     | X   |         |     |     | García-Alzate et al. (2010a)   IUQ 2791, 1964   IMCN 3751  |
| <i>Hyphessobrycon melazonatus</i><br>Durbin, 1908   |    |    |    | X   |     |         |     |     | Castro and Arboleda (1988)   ICN-MHN 16855-16856   |
| <i>Hyphessobrycon metae</i><br>Eigenmann & Henn, 1914   |    |    |    |     | X   |         |     |     | Eigenmann and Henn (1914)  |
| <i>Hyphessobrycon minimus</i><br>Durbin, 1909   |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)   |
| <i>Hyphessobrycon natagaima</i><br>García-Alzate, Taphorn, Román-Valencia & Villa-Navarro, 2015 | X  | X  |    |     |     | X       |     |     | García-Alzate et al. (2015b)   |
| <i>Hyphessobrycon niger</i><br>García-Alzate, Román-Valencia & Prada-Pedreros, 2010             | X  | X  |    |     | X   |         |     |     | García-Alzate et al. (2010a)   MPUJ 5657, 5039   IUQ 2794  |
| <i>Hyphessobrycon ocasoensis</i><br>García-Alzate & Román-Valencia, 2008                        | X  | X  |    |     |     | X       |     |     | García-Alzate and Román-Valencia (2008)  |
| <i>Hyphessobrycon oritoensis</i><br>García-Alzate, Román-Valencia & Taphorn, 2008               | X  | X  |    | X   |     |         |     |     | García-Alzate et al. (2008)   IUQ 1574, 129, 1575   MBUCV-V 33737   MCGN 55844   |
| * <i>Hyphessobrycon otrynus</i><br>Benine & Lopes, 2008   |    |    |    |     | X   |         |     |     | Ota et al. (2015)  |
| <i>Hyphessobrycon peruvianus</i><br>Ladiges, 1938   |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Hyphessobrycon poecilioides</i><br>Eigenmann, 1913   | X  | X  | X  |     |     | X       | -   |     | Eigenmann (1913)   CAS 77396 [ex IU 12850]   FMNH 56290 [ex CM 5091], 56291, 75150   USNM 79214  |
| <i>Hyphessobrycon proteus</i><br>Eigenmann, 1913  | X  | X  |    |     |     | X       |     | X   | Eigenmann (1913)   García-Alzate et al. (2015b)   CAS 57603 [ex IU 12858], 60478-83 [ex IU 12852-57]   CIUA 295, 296   FMNH 56293 [ex CM 5094], 56294-99, 56381-82, 69778   SU 22754   USNM 79215, 167819. |
| <i>Hyphessobrycon saizi</i> Géry, 1964  | X  | X  |    |     | X   |         |     |     | Géry (1964a)   USNM 198647   ZMA 114206  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Hyphessobrycon sebastiani</i><br>García-Alzate, Román-Valencia & Taphorn, 2010 | X  | X  |    |     |     |         | X   |     | García-Alzate et al. (2010c)  |
| <i>Hyphessobrycon sovichthys</i><br>Schultz, 1944                                 |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)   |
| <i>Hyphessobrycon sweglesi</i><br>(Géry, 1961)                                    | X  | X  |    | -   | X   |         |     |     | Géry (1961)   USNM 196090, IAvH-P 9517, 11276   |
| <i>Hyphessobrycon taguae</i><br>García-Alzate, Román-Valencia & Taphorn, 2010     | X  | X  |    | X   | X   |         |     |     | García-Alzate et al. (2010b)   García-Alzate et al. (2010a)   IUQ 2288                              |
| <i>Hyphessobrycon tukunai</i> Géry, 1965  |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   ICN-MHN 4278  |
| <i>Moenkhausia browni</i><br>Eigenmann, 1909                                      |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Maldonado-Ocampo (2001)   |
| <i>Moenkhausia ceros</i><br>Eigenmann, 1908                                       |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Moenkhausia chrysargyrea</i><br>(Günther, 1864)                                |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo (2001)   IAvH-P 8652, 8690, 8725, 8766, 8797, 8830, 8860, 8914                     |
| <i>Moenkhausia collettii</i><br>(Steindachner, 1882)                              |    |    |    | X   | X   |         |     |     | Correa (2003)   Cala (1977)   |
| <i>Moenkhausia comma</i><br>Eigenmann, 1908                                       |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Moenkhausia copei</i><br>(Steindachner, 1882)                                  |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Maldonado-Ocampo et al. (2004)   ICN-MHN 11028, 11130 |
| <i>Moenkhausia cotinho</i><br>Eigenmann, 1908                                     |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Maldonado-Ocampo and Bogotá-Gregory (2007)                                  |
| <i>Moenkhausia dichroura</i><br>(Kner, 1858)                                      |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)  |
| <i>Moenkhausia eigenmanni</i><br>Géry, 1964                                       | X  | X  |    |     | X   |         |     |     | Géry (1964a)   ANSP 112249, 139712   ICN-MHN 17133   MNHN 1980-1445   USNM 198640                   |
| <i>Moenkhausia grandisquamis</i><br>(Müller & Troschel, 1845)                     |    |    |    | X   | X   |         |     |     | Mojica (1999)   Maldonado-Ocampo et al. (2006a)   ICN-MHN 3838, 6035, 6091                          |
| * <i>Moenkhausia hysterosticta</i><br>Lucinda, Malabarba & Benine, 2007           |    |    |    |     | X   |         |     |     | CZUT-IC 9821, MPUJ 4387, 4468   |
| <i>Moenkhausia intermedia</i><br>Eigenmann, 1908                                  |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Maldonado-Ocampo et al. (2006a)   |
| <i>Moenkhausia jamesi</i><br>Eigenmann, 1908                                      |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| * <i>Moenkhausia justae</i><br>Eigenmann, 1908                                    |    |    |    |     | X   |         |     |     | IAvH-P 847  |
| * <i>Moenkhausia latissima</i><br>Eigenmann, 1908                                 |    |    |    | X   |     |         |     |     | IAvH-P 11014-11015  |
| <i>Moenkhausia lepidura</i> (Kner, 1858)  |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Maldonado-Ocampo et al. (2006a)  |
| <i>Moenkhausia megalops</i><br>(Eigenmann, 1907)                                  |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Maldonado-Ocampo et al. (2006a)  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Moenkhausia melogramma</i><br>Eigenmann, 1908             |    |    |    | X   | -   |         |     |     | Arbeláez et al. (2004)  |
| <i>Moenkhausia metae</i><br>Eigenmann, 1922                  | X  | X  |    |     | X   |         |     |     | Eigenmann (1922)   CAS 55610 [ex IU 15026a], 55609 [ex IU 15026], 55608 [ex IU 13951]   FMNH 55214   IAvH-P 9177                        |
| * <i>Moenkhausia mikia</i><br>Marinho & Langeani, 2010       |    |    |    | X   |     |         |     |     | CZUT-IC 3498, 3555, 3584, 4910, 4918, 5104, 8069  |
| <i>Moenkhausia oligolepis</i><br>(Günther, 1864)             |    |    |    | X   | X   |         |     |     | Fowler (1943)   Eigenmann (1922)  |
| <i>Moenkhausia orteguasae</i><br>Fowler, 1943                | X  | X  |    | X   |     |         |     |     | Fowler (1943)   ANSP 70496  |
| <i>Moenkhausia robertsi</i> Géry,<br>1964                    |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   ICN-MHN 5511, 6036  |
| <i>Moenkhausia simulata</i><br>(Eigenmann, 1924)             |    |    |    | X   |     |         |     |     | Correa (2003)   |
| <i>Paracheirodon axelrodi</i><br>(Schultz, 1956)             |    |    |    |     | X   |         |     |     | Cala (1977)   |
| <i>Paracheirodon innesi</i><br>(Myers, 1936)                 |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Paracheirodon simulans</i><br>(Géry, 1963)                |    |    |    |     | X   |         |     |     | Weitzman and Fink (1983)  |
| <i>Parapristella georgiae</i> Géry,<br>1964                  |    |    |    |     | X   |         |     |     | Géry (1964a)   Lasso et al. 2004, Maldonado-Ocampo 2004, Maldonado-Ocampo et al. 2006b, Maldonado-Ocampo et al. 2008, Lasso et al. 2009 |
| <i>Petitella georgiae</i> Géry &<br>Boutière, 1964           |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)   |
| <i>Thayeria obliqua</i> Eigenmann,<br>1908                   |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo (2001)   ICN-MHN 6025, 17140   |
| <i>Tetragonopterus argenteus</i><br>Cuvier, 1816             |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Fowler (1945)  |
| <i>Tetragonopterus chalceus</i> Spix<br>& Agassiz, 1829      |    |    |    | X   | X   |         |     |     | Fowler (1943)   Cala (1977)   |
| <i>Aphyocharax albunus</i><br>(Günther, 1869)                |    |    |    | X   | X   |         |     |     | Fowler (1943)   Maldonado-Ocampo et al. (2006a)   |
| * <i>Aphyocharax colifax</i> Taphorn<br>& Thomerson, 1991    |    |    |    | X   |     |         |     |     | CZUT-IC 4271  |
| <i>Aphyocharax erythrurus</i><br>Eigenmann, 1912             |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   ICN-MHN 5387  |
| <i>Aphyocharax pusillus</i><br>Günther, 1868                 |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)   |
| <i>Paragoniates albunus</i><br>Steindachner, 1876            |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)  |
| <i>Phenagoniates macrolepis</i><br>(Meek & Hildebrand, 1913) |    |    |    |     |     |         | X   |     | Eigenmann and Henn (1914)   Eigenmann (1922)  |
| <i>Prionobrama filigera</i> (Cope,<br>1870)                  |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Xenagoniates bondi</i> Myers,<br>1942                     |    |    |    |     | X   |         |     |     | Cala (1977)   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Atopomesus pachyodus</i> Myers, 1927                        |    |    |    | X   |     |         |     |     | Myers (1927)   CAS 41736 [ex IU 17673]  |
| <i>Axelrodia riesei</i> Géry, 1966                             | X  | X  |    |     | X   |         |     |     | Géry (1966a)   USNM 207923, 207924   ANSP 112512, 139715   MNHN 1982-0538   ZMA 113865  |
| <i>Axelrodia stigmatias</i> (Fowler, 1913)                     |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)  |
| <i>Microschombrycon callops</i> Böhlke, 1953                   |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Microschombrycon casiquiare</i> Böhlke, 1953                |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Maldonado-Ocampo et al. (2006a)   |
| <i>Microschombrycon geisleri</i> Géry, 1973                    |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)  |
| * <i>Microschombrycon melanotus</i> (Eigenmann, 1912)          |    |    |    |     | X   |         |     |     | MPUJ 236, 247, 630, 1436, 4497  |
| * <i>Oxybrycon parvulus</i> Géry, 1964                         |    |    |    | X   |     |         |     |     | CZUT-IC 17910, 17953  |
| * <i>Parecbasis cyclolepis</i> Eigenmann, 1914                 |    |    |    | X   |     |         |     |     | CIACOL 272  |
| * <i>Tytobrycon xeruini</i> Géry, 1973                         |    |    |    |     | X   |         |     |     | IAvH-P-14408, 15186, 15208, 15216, 15233, 15244, 15256, 15358, 15391, 15427, 15433, 15469, 15482, 15517, 15556, 15573, 15597, MPUJ 11025  |
| <i>Grundulus bogotensis</i> (Humboldt, 1821)                   | X  | X  | X  |     |     | X       |     |     | Humboldt and Valenciennes (1821)   ZMB 33306, 3505, 31499   |
| <i>Grundulus cochae</i> Román-Valencia, Paepke & Pantoja, 2003 | X  | X  |    | X   |     | -       |     |     | Román-Valencia et al. (2001)   IUQ 453, 454, 455   STRI 1369  |
| <i>Nematobrycon lacortei</i> Weitzman & Fink, 1971             | X  | X  |    |     |     | X       | -   |     | Weitzman and Fink (1971)   USNM 205594, 205595-96   BMNH 1971.3.16.1   CAS 13396   FMNH 70525   ZMA 110740  |
| <i>Nematobrycon palmeri</i> Eigenmann, 1911                    | X  | X  |    |     |     | X       | X   |     | Eigenmann (1911)   Maldonado-Ocampo et al. (2013b)  |
| <i>Cheirodontops geayi</i> Schultz, 1944                       |    |    |    | X   |     |         |     |     | Urbano-Bonilla et al. (2009).   |
| <i>Nanocheirodon insignis</i> (Steindachner, 1880)             |    |    |    |     | X   |         | X   |     | Steindachner (1880)   Eigenmann (1915)   IAvH-P 11746   MCNG 24875, 24981, 32355, 33285   NMW 62543-44  |
| <i>Odontostilbe fugitiva</i> Cope, 1870                        |    |    |    | X   |     |         |     |     | Fowler (1945)   Lima RS (2003)  |
| * <i>Odontostilbe pao</i> Bührnheim & Malabarba, 2007          |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).   |
| <i>Odontostilbe pulchra</i> (Gill, 1858)                       |    |    |    |     | X   |         |     |     | Bührnheim and Malabarba (2007)  |
| <i>Odontostilbe splendida</i> Bührnheim & Malabarba, 2007      |    |    |    |     | X   |         |     |     | Bührnheim and Malabarba (2007)   ANSP 181040, 181041   IAvH-P 3239, 3326, 3328, 3615, 7943, 7945, 7949, 7951, 8050, 8051, 8070, 9553-9555, 9557, 9558, 9697   ICN-MHN 14168   INPA 25173   MBUCV 32890   MCNG 54519   MCP 38862 |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Protocheirodon pi</i> (Vari, 1978)  |    |    | X  |     |     |         |     |     | CAS 41749   |
| <i>Saccoderma hastata</i> (Eigenmann, 1913)  | X  | X  |    |     |     | X       |     | X   | Eigenmann (1913)   Eigenmann (1915)   |
| <i>Saccoderma melanostigma</i> Schultz, 1944                                       |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)   |
| <i>Saccoderma robusta</i> Dahl, 1955   | X  | X  |    |     |     |         |     | X   | Dahl (1955)   MHNG 1066.39-42   |
| <i>Eretmobrycon dahli</i> (Román-Valencia, 2000)                                   |    |    |    |     |     |         | X   |     | Román-Valencia (2000)   ICN-MNH 2722   IAvH-P 4734   IMCN 1689, 3894, 3905, 3911, 3918, 4052                    |
| <i>Eretmobrycon emperador</i> (Eigenmann & Ogle, 1907)                             |    |    |    |     |     | -       | X   | X   | Maldonado-Ocampo et al. (2013b)   |
| <i>Eretmobrycon guaytarae</i> (Eigenmann & Henn, 1914)                             | X  | X  |    |     |     | -       | X   |     | Eigenmann et al. (1914)   FMNH 56657 [ex CM 5474]   CAS 40844 [ex IU 13168]                                     |
| <i>Eretmobrycon miraensis</i> (Fowler, 1945)                                       | X  | X  |    |     |     | -       | X   |     | Fowler (1945)   ANSP 71686, 71687-92, 71693, 71694  |
| <i>Eretmobrycon peruanus</i> (Müller & Troschel, 1845)                             |    |    |    |     |     |         | X   | X   | Maldonado-Ocampo et al. (2013b)   Fowler (1939)   |
| <i>Eretmobrycon scleroparius</i> (Regan, 1908)                                     |    |    |    |     |     |         | -   | X   | Maldonado-Ocampo et al. (2006b), Colombia. Biota Colombiana 7(1): 143-154                                       |
| <i>Markiana geayi</i> (Pellegrin, 1909)  |    |    |    |     | -   | X       |     |     | Lasso et al. (2005)   |
| * <i>Scopaeocharax atopodus</i> (Böhlke, 1958)                                     |    |    |    | X   |     |         |     |     | CIACOL 2713   |
| <i>Tyttocharax cochui</i> (Ladiges, 1950)  |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)  |
| <i>Tyttocharax madeireae</i> Fowler, 1913  |    |    |    | X   |     |         |     |     | Román-Valencia et al. (2012)  |
| <i>Tyttocharax metae</i> Román-Valencia, García-Alzate, Ruiz-C. & Taphorn B., 2012 | X  | X  |    |     | X   |         |     |     | Román-Valencia et al. (2012)   IUQ 2581   |
| <i>Xenurobrycon heterodon</i> Weitzman & Fink, 1985                                |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   USNM 280246   |
| <i>Chrysobrycon guahibo</i> Vanegas-Ríos, Urbano-Bonilla & Azpelicueta, 2015       | X  | X  |    |     | X   |         |     |     | Vanegas-Ríos et al. (2015)  |
| <i>Chrysobrycon hesperus</i> (Böhlke, 1958)  |    |    |    | X   |     |         |     |     | Vanegas-Ríos et al. (2013b)   |
| <i>Chrysobrycon mojicai</i> Vanegas-Ríos & Urbano-Bonilla, 2017                    | X  | X  |    | X   |     |         |     |     | Vanegas-Ríos et al. (2017)  |
| <i>Corynopoma riisei</i> Gill, 1858  |    |    |    |     | X   |         |     |     | Cala (1977)   |
| <i>Gephyrocharax caucanus</i> Eigenmann, 1912                                      | X  | X  |    |     |     | X       | +   |     | Eigenmann (1912)   CAS 44275-77 [ex IU 12668-70]   FMNH 56012 [ex CM 4802], 56013-15, 69553, 95008   USNM 81921 |
| <i>Gephyrocharax chocoensis</i> Eigenmann, 1912                                    | X  | X  |    |     |     |         | X   | X   | Eigenmann (1912)   Vanegas-Ríos (2016)  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Gephyrocharax martae</i> Dahl, 1943  | X  | X  |    |     |     | X       |     |     | Dahl (1943)   |
| <i>Gephyrocharax melanocheir</i> Eigenmann, 1912  | X  | X  |    |     |     | X       |     | X   | Eigenmann (1912)   CAS 44292-93 [ex IU 12696-97]   FMNH 56049 [ex CM 4839], 56050-51, 69554   USNM 79209   Vanegas-Ríos (2016)                      |
| <i>Gephyrocharax sinuensis</i> Dahl, 1964   | X  | X  |    |     |     |         |     | X   | Dahl and Medem (1964)   ICN-MHN 749   |
| <i>Gephyrocharax torresi</i> Vanegas-Ríos, Azpelicueta, Mirande & García Gonzales, 2013                 | X  | X  |    |     |     | X       |     |     | Vanegas-Ríos et al. (2013a)   UIST 1767   |
| <i>Gephyrocharax valenciae</i> Eigenmann, 1920  |    |    |    |     | X   |         |     |     | Vanegas-Ríos (2016)   |
| <i>Gephyrocharax venezuelae</i> Schultz, 1944   |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)   |
| <i>Pterobrycon landoni</i> Eigenmann, 1913  | X  | X  |    |     |     |         |     | X   | Eigenmann (1913)   FMNH 56250 [ex CM 5051]  |
| <i>Boehlkea fredcochui</i> Géry, 1966   |    |    |    | X   |     |         |     |     | Géry (1966b)   ANSP 111676 [ex Géry coll. 0124.18-19], 111668   MNHN 1980-1425   ZMA 113828   |
| <i>Hemibrycon antioquiae</i> Román-Valencia, Ruiz-C., Taphorn, Mancera-Rodríguez & García-Alzate, 2013  | X  | X  |    |     |     | X       |     |     | Román-Valencia et al. (2013)  |
| <i>Hemibrycon boquiae</i> (Eigenmann, 1913)   | X  | X  |    |     |     | X       |     |     | Eigenmann (1913)   CAS 44332 [ex IU 12831]   FMNH 56259 [ex CM 5059], 56260   |
| <i>Hemibrycon brevispini</i> Román-Valencia & Arcila-Mesa, 2009   | X  | X  |    |     |     | X       |     |     | Román-Valencia and Arcila-Mesa (2009)   IUQ 542   |
| <i>Hemibrycon cairone</i> Román-Valencia & Arcila-Mesa, 2009  | X  | X  |    |     |     | X       |     |     | Román-Valencia and Arcila-Mesa (2009)   IUQ 534   |
| <i>Hemibrycon cardalensis</i> Román-Valencia, Ruiz-C., Taphorn, Mancera-Rodríguez & García-Alzate, 2013 | X  | X  |    |     |     | X       |     |     | Román-Valencia et al. (2013)  |
| <i>Hemibrycon carilloi</i> Dahl, 1960   | X  | X  |    |     |     | -       | -   | X   | Dahl (1960c)   ICN-MHN 29, 31, 126  |
| <i>Hemibrycon caucanus</i> (Eigenmann, 1913)  |    |    |    |     |     | X       |     | X   | Eigenmann (1913)   Maldonado-Ocampo et al. (2006b)  |
| <i>Hemibrycon colombianus</i> Eigenmann, 1914   | X  | X  |    |     |     | X       |     |     | Eigenmann et al. (1914)   MNH 56653 [ex CM 5470], 56654-56   CAS 44350 [ex IU 13162], 44351 [ex IU 13163], 44352 [ex IU 13164], 44353 [ex IU 13165] |
| <i>Hemibrycon cristiani</i> (Román-Valencia, 1999)  | X  | X  |    |     | X   |         |     |     | Román-Valencia (1999)   IAvH-P 7529, 7530   ICNMNH 3445, 3446-49   IUQ 381-382  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Hemibrycon dariensis</i> Meek & Hildebrand, 1916   |    |    |    |     |     |         | X   |     | Román-Valencia and Ruiz-C. (2007)   |
| <i>Hemibrycon decurrens</i> (Eigenmann, 1913)   |    |    |    |     | -   | X       |     |     | FMNH 56255 [ex CM 5055]   CAS 39542 [IU 12829]  |
| <i>Hemibrycon dentatus</i> (Eigenmann, 1913)  | X  | X  |    |     |     | X       |     |     | Eigenmann (1913)  |
| <i>Hemibrycon fasciatus</i> Román-Valencia, Ruiz-C., Taphorn, Mancera-Rodriguez & García-Alzate, 2013 | X  | X  |    |     |     | X       |     |     | Román-Valencia et al. (2013)  |
| <i>Hemibrycon galvisi</i> (Román-Valencia, 2000)  | X  | X  |    | X   |     |         |     |     | Román-Valencia (2000)   ICN-MHN 2720, 2721   IUQ 221-223  |
| <i>Hemibrycon jabonero</i> Schultz, 1944  |    |    |    |     | -   |         |     | X   | Ortega-Lara et al. (2012)   |
| <i>Hemibrycon jelskii</i> (Steindachner, 1877)  |    |    |    | X   |     |         |     |     | Maldonado-Ocampo et al. (2008)  |
| <i>Hemibrycon loisae</i> (Géry, 1964)   |    |    |    |     | X   |         |     |     | Géry (1964a)   ANSP 139713   IAvH-P 3639, 7528, 9194-9197, 9203, 9677-9680   MNHN 1980-1426   USNM 198645 |
| <i>Hemibrycon metae</i> Myers, 1930   |    |    |    | -   | X   |         |     |     | Myers (1930)  |
| <i>Hemibrycon microformaa</i> Román-Valencia & Ruiz-C., 2007  | X  | X  |    |     |     |         |     | X   | Román-Valencia and Ruiz-C. (2007)   IUQ 510, 511-514   MTDF 27628   |
| <i>Hemibrycon paez</i> Román-Valencia & Arcila-Mesa, 2010   | X  | X  |    |     |     | X       |     |     | Román-Valencia and Arcila-Mesa (2010)   |
| <i>Hemibrycon palomas</i> Román-Valencia, García-Alzate, Ruiz-C. & Taphorn, 2010                      | X  | X  |    |     |     | X       |     |     | Román-Valencia et al. (2010a)   IUQ 2727-2729, 2802, 2846, 2300, 2301, AUM 50793                          |
| <i>Hemibrycon plutarcoi</i> (Román-Valencia, 2001)  | X  | X  |    |     |     | X       |     |     | Román-Valencia (2001)   ICN-MHN 4887   IUQ 308, 461, 472, 473   |
| <i>Hemibrycon quindos</i> Román-Valencia & Arcila-Mesa, 2010  | X  | X  |    |     |     | X       |     |     | Román-Valencia and Arcila-Mesa (2010)   |
| <i>Hemibrycon rafaelense</i> Román-Valencia & Arcila-Mesa, 2008                                       | X  | X  |    |     |     | X       |     |     | Román-Valencia and Arcila-Mesa (2008)   ICN-MHN 6703, 3505   IUQ 499, 509   MCNG 54101   MTD F 27623-24   |
| <i>Hemibrycon raqueliae</i> Román-Valencia & Arcila-Mesa, 2010  | X  | X  |    |     |     | X       |     |     | Román-Valencia and Arcila-Mesa (2010)   |
| <i>Hemibrycon sanjuanensis</i> Román-Valencia, Ruiz-C., Taphorn & García-Alzate, 2014                 | X  | X  |    |     |     |         | X   |     | Román-Valencia et al. (2014b)   |
| <i>Hemibrycon santamartae</i> Román-Valencia, Ruiz-C., García-Alzate & Taphorn, 2010                  | X  | X  |    |     |     |         |     | X   | Román-Valencia et al. (2010d)   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Hemibrycon sierraensis</i><br>García-Alzate, Román-Valencia & Taphorn, 2015 | X  | X  |    |     |     |         | X   |     | García-Alzate et al. (2015a)   |
| <i>Hemibrycon velox</i> Dahl, 1964   | X  | X  |    |     |     | X       |     | X   | Dahl and Medem (1964)   ICN-MHN 1457, 1463, 1464, 2711   |
| <i>Hemibrycon virolinica</i><br>Román-Valencia & Arcila-Mesa, 2010             | X  | X  |    |     |     | X       |     |     | Román-Valencia and Arcila-Mesa (2010)  |
| <i>Hemibrycon yacopiae</i> Román-Valencia & Arcila-Mesa, 2010                  | X  | X  |    |     |     | X       |     |     | Román-Valencia and Arcila-Mesa (2010)  |
| <i>Carlstyanax aurocaudatus</i><br>(Eigenmann, 1913)                           | X  | X  | X  |     |     | X       |     |     | Eigenmann (1913)   CAS 68647 [ex IU 12911]   FMNH 56882 [ex CM 5162], 56883  |
| <i>Creagrutus affinis</i><br>Steindachner, 1880                                |    |    |    |     |     | X       | X   | X   | Steindachner (1880)   Eigenmann (1921)   |
| <i>Creagrutus amoenus</i> Fowler, 1943   |    |    |    | X   |     |         |     |     | Fowler (1943)   ANSP 70499, 70500-02, 70503  |
| <i>Creagrutus atratus</i> Vari & Harold, 2001                                  | X  | X  |    |     | X   | -       |     |     | Vari and Harold (2001)   ANSP 134080   IAvH-P 3659, 3660, 8426   ICN-MHN 16981   NRM 16842-43   USNM 353866-67,                |
| * <i>Creagrutus barrigai</i> Vari & Harold, 2001                               |    |    |    | X   |     |         |     |     | CZUT-IC 12062  |
| <i>Creagrutus boliviari</i> Schultz, 1944                                      |    |    |    |     | X   |         |     |     | Vari and Harold (2001)   |
| <i>Creagrutus brevipinnis</i><br>Eigenmann, 1913                               | X  | X  |    |     |     | X       |     |     | Eigenmann (1913)   CAS 41341-42 [ex IU 12728-29], 41375 [ex IU 12730]   FMNH 56095 [ex CM 4887a], 56096-98, 75172   USNM 79188 |
| <i>Creagrutus calai</i> Vari & Harold, 2001                                    | X  | X  |    |     | X   |         |     |     | Vari and Harold (2001)   ANSP 130527, 139149, 177718   IAvH-P 7918   NRM 16848-49, 43015-16   USNM 353304, 353307, 353868      |
| <i>Creagrutus caucanus</i><br>Eigenmann, 1913                                  | X  | X  |    |     |     | X       |     |     | Eigenmann (1913)   CAS 41373-74 [ex IU 12736-37], 69304 [ex IU 12738]   FMNH 56104 [ex CM 4895a], 56105-08                     |
| <i>Creagrutus cochui</i> Géry, 1964  |    |    |    | X   | +   |         |     |     | Vari and Harold (2001)   |
| <i>Creagrutus flavescens</i> Vari & Harold, 2001                               |    |    |    | X   |     |         |     |     | Vari and Harold (2001)   |
| <i>Creagrutus guanes</i> Torres-Mejia & Vari, 2005                             | X  | X  |    |     |     | X       |     |     | Torres-Mejia and Vari (2005)   ICN-MHN 8520, 8521, 8522, 9893, 9894, 9895, 9896, 9897, 9898                                    |
| <i>Creagrutus hildebrandi</i><br>Schultz, 1944                                 |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)  |
| <i>Creagrutus leuciscus</i> Regan, 1913  | X  | X  |    |     |     |         | X   |     | Regan (1913)   |
| <i>Creagrutus machadoi</i> Vari & Harold, 2001                                 |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Creagrus maculosus</i><br>Román-Valencia, García-Alzate, Ruiz C. & Taphorn B, 2010 | X  | X  |    |     | X   |         |     |     | Román-Valencia et al. (2010b)   |
| <i>Creagrus magdalena</i> e<br>Eigenmann, 1913  | X  | X  |    |     |     | X       |     |     | Eigenmann (1913)   CAS 41641 [ex IU 12722], 60056-57 [ex IU 12725-26]   FMNH 56088 [ex CM 4880], 56089, 56092-93, 69730   |
| <i>Creagrus maracaiboensis</i><br>Schultz, 1944                                       |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)   |
| <i>Creagrus maxillaris</i> (Myers, 1927)  |    |    |    | X   | X   |         |     |     | Myers (1927)   IAvH-P 10192   |
| <i>Creagrus melasma</i> Vari, Harold & Taphorn, 1994                                  |    |    |    |     | X   |         |     |     | MPUJ 8814, 8815, 9207, 9208, 9209   |
| <i>Creagrus nigrostigmatus</i><br>Dahl, 1960  | X  | X  |    |     |     | -       | X   |     | Dahl (1960b)   ICN-MHN 989   SU 49491   |
| <i>Creagrus paralacus</i> Harold & Vari, 1994   |    |    |    |     |     |         | X   |     | Harold and Vari (1994)  |
| <i>Creagrus phasma</i> Myers, 1927  |    |    |    |     | X   |         |     |     | Vari and Harold (2001)  |
| * <i>Creagrus runa</i> Vari & Harold, 2001  |    |    |    | X   |     |         |     |     | CZUT-IC 4117, 4163  |
| <i>Creagrus taphorni</i> Vari & Harold, 2001  |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).   |
| <i>Creagrus tuyuka</i> Vari & Lima, 2003  |    |    |    | X   |     |         |     |     | Vari and Lima (2003)  |
| <i>Creagrus vexillapinnus</i> Vari & Harold, 2001                                     |    |    |    |     | X   |         |     |     | IAvH-P-14609, 14813   |
| <i>Bryconacidnus hypopterus</i> (Fowler, 1943)  | X  | X  |    | X   |     |         |     |     | Fowler (1943)   ANSP 70505  |
| * <i>Ceratobranchia binghami</i><br>Eigenmann 1927                                    |    |    |    | X   |     |         |     |     | ANSP 70504  |
| * <i>Ceratobranchia joanae</i><br>Chernoff & Machado-Allison, 1990                    |    |    |    |     | X   |         |     |     | CZUT-IC 12827   |
| <i>Ceratobranchia obtusirustris</i><br>Eigenmann, 1914                                |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   IAvH-P 7526   |
| <i>Knodus alpha</i> (Eigenmann, 1914)   |    |    |    |     | X   |         |     |     | Eigenmann et al. (1914)   CAS 18511 [ex IU 13157]   EBRG 295, 490, 493, 690, 822, 856, 886, 921, 922, 941, 1311   FMNH 56646 [ex CM 5463], 56646-47   IAvH-P 3558, 3640, 3641, 3643-3647, 3650-3653, 3657, 8042-8044, 8054, 8055, 9152-9158, 9178-9180, 9200-9202, 9664-9676, 9781, 11789 |
| <i>Knodus breviceps</i><br>(Eigenmann, 1908)  |    |    |    | X   | X   |         |     |     | IAvH-P 12289, 2538, 2575, 13165, 5176, 5187, 5418, 5419, 8315, 8316, 8317, 8318, 8319, 8320, 8321, 8322, 8323, 8324, 8325, 8326, 8327, 8328, 8329, 8330, 8655, 8694, 8729, 8764, 8795, 8828, 8858, 8889, 8920, 8942, 8954, 8974, 8990, 9013, 9026, 9047, 9072, 9097                       |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Knodus cinarucoense</i> Román-Valencia, Taphorn B. & Ruiz-C., 2008                   |    |    |    |     | X   |         |     |     | IAvH-P-14385, 14396, 14443, 14610, 14637, 14705, 14806, 14811, 14994, 15059, 15228, 15237, 15542, 15583, 15603  |
| <i>Knodus deuterodonoides</i> (Eigenmann, 1914)   |    |    | -  | X   |     |         |     |     | Eigenmann et al. (1914)   FMNH 56644 [ex CM 5461], 56645   CAS 61221 [ex IU 13156]  |
| * <i>Knodus gamma</i> Géry, 1972  |    |    |    | X   |     |         |     |     | CZUT-IC 12073, 12967  |
| <i>Knodus heteresthes</i> (Eigenmann, 1908)   |    |    |    | X   |     |         |     |     | Román-Valencia (2003b)   CZUT-IC 4151, 4200, 12308  |
| <i>Knodus meridae</i> Eigenmann, 1911   |    |    |    |     |     |         | X   |     | Maldonado-Ocampo et al. (2008)  |
| <i>Knodus moenkhausii</i> (Eigenmann & Kennedy, 1903)                                   |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)   Bogotá-Gregory and Maldonado-Ocampo (2006a)  |
| <i>Knodus orteguasae</i> (Fowler, 1943)   | X  | X  |    | X   |     |         |     |     | Fowler (1943)   |
| <i>Knodus tiquiensis</i> Ferreira & Lima, 2006  |    |    |    | X   |     |         |     |     | Ferreira and Lima (2006)   CZUT-IC 12307  |
| * <i>Rhinobrycon negrensis</i> Myers, 1944  |    |    |    |     | X   |         |     |     | CZUT-IC 5081  |
| <i>Argopleura chocoensis</i> (Eigenmann, 1913)  | X  | X  |    |     |     | X       | X   |     | Eigenmann (1913)   Maldonado-Ocampo et al. (2006b)  |
| <i>Argopleura conventus</i> (Eigenmann, 1913)   | X  | X  |    |     |     | X       |     |     | Eigenmann (1913)   CAS 39439 [ex IU 12802]   FMNH 56261 [ex CM 5060], 56262, 71290   USNM 79174;  |
| <i>Argopleura diquensis</i> (Eigenmann, 1913)   | X  | X  |    |     |     | X       |     |     | Eigenmann (1913)   CAS 39013 [ex IU 12820]   FMNH 56272 [ex CM 5072], 56273, 69690;   |
| <i>Argopleura magdalenensis</i> (Eigenmann, 1913)                                       | X  | X  |    |     |     | X       |     |     | Eigenmann (1913)   BMNH 1924.3.3.37-38   CAS 40827-32 [ex IU 12821-26]   FMNH 56263 [ex CM 5063], 56264-65, 56267-71, 56275, 69760   USNM 79176, 236097 |
| * <i>Cyanogaster noctivaga</i> Mattox, Britz, Toledo-Piza & Marinho, 2013               |    |    |    | X   | X   |         |     |     | CZUT-IC 18065, MPUJ 273, 1257, 9846-9847, 10726-10729, 10744  |
| <i>Othonocheirodus</i> Myers, 1927  |    |    |    | +   | X   |         |     |     | CZUT-IC 5497, 12031, 12033, 12525, MPUJ 3747  |
| <i>Bryconamericus andresoi</i> Román-Valencia, 2003                                     | X  | X  |    |     |     | -       | X   |     | Román-Valencia (2003a)   IUQ 447, 448-449   CAS 70099-101   FMNH 56566-67   |
| <i>Bryconamericus arilepis</i> Román-Valencia, Vanegas-Ríos & Ruiz-C., 2008             | X  | X  |    |     |     | X       |     |     | Román-Valencia et al. (2008)   IUQ 920, 1915, 1917, 1567  |
| <i>Bryconamericus caldasi</i> Román-Valencia, Ruiz-C., Taphorn B. & García-Alzate, 2014 | X  | X  |    |     |     | X       |     |     | Román-Valencia et al. (2014a)   IUQ 3714  |
| <i>Bryconamericus carlosi</i> Román-Valencia, 2003                                      |    |    |    | X   |     |         |     |     | Román-Valencia (2003c)  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Bryconamericus cismontanus</i><br>Eigenmann, 1914                                      |    |    |    |     | X   |         |     |     | Román-Valencia (2003c)   FMNH 56642 [ex CM 5459]   IAvH-P 3315, 3317-3319, 7920, 9168-9170, 9188-9193, 9480, 9481, 9650-9663, 9753 |
| <i>Bryconamericus foncensis</i><br>Román-Valencia, Vanegas-Ríos & Ruiz-C., 2009           | X  | X  |    |     |     | X       |     |     | Román-Valencia et al. (2009)   IUQ 1941  |
| <i>Bryconamericus guizae</i><br>Román-Valencia, 2003                                      | X  | X  |    |     | -   | X       |     |     | Román-Valencia (2003a)   IUQ 450, 451-452   STRI 1370  |
| <i>Bryconamericus huilae</i><br>Román-Valencia, 2003                                      | X  | X  |    |     |     | X       |     |     | Román-Valencia (2003a)   IUQ 422, 312-313, 423-424, 462-463, 476-477   STRI 00574  |
| <i>Bryconamericus icelus</i> Dahl, 1964   | X  | X  |    |     |     |         |     | X   | Dahl and Medem (1964)   SMF 16284  |
| <i>Bryconamericus ichoensis</i><br>Román-Valencia, 2000                                   | X  | X  |    |     |     |         |     | X   | Román-Valencia (2000)   ICN-MHN 2718, 2719   |
| <i>Bryconamericus macarenae</i><br>Román-Valencia, García-Alzate, Ruiz-C. & Taphorn, 2010 | X  | X  |    |     | X   |         |     |     | Román-Valencia et al. (2010c)   IUQ 2448, 2271, 2326, 2435, 2437, 2440-2447, 2559-2561   AUM 50297                                 |
| * <i>Bryconamericus macrophthalmus</i> Román-Valencia, 2003                               |    |    |    | X   |     |         |     |     | CZUT-IC 5124   |
| <i>Bryconamericus multiradiatus</i><br>Dahl, 1960   | X  | X  |    |     |     |         |     | X   | Dahl (1960c)   ICN-MHN 82, 58  |
| * <i>Bryconamericus orinocoense</i><br>Román-Valencia, 2003                               |    |    |    | X   |     |         |     |     | CZUT-IC 4886, 4916   |
| <i>Bryconamericus tolimae</i><br>Eigenmann, 1913  | X  | X  |    |     |     | X       |     |     | Eigenmann (1913)   |
| <i>Microgenys minuta</i><br>Eigenmann, 1913   | X  | X  | X  |     |     | X       |     |     | Eigenmann (1913)   CAS 47170 [ex IU 12818]   FMNH 56215 [ex CM 5007], 56216  |
| <i>Astyanacinus yariguies</i><br>Torres-Mejía, Hernández & Senechal, 2012                 | X  | X  |    |     |     | X       |     |     | Torres-Mejía et al. (2012)   UIST 1752   |
| * <i>Astyanax anterior</i><br>Eigenmann, 1908   |    |    |    | X   |     |         |     |     | IAvH-P 8238-8240, 9117, 11012  |
| <i>Astyanax atratoensis</i><br>Eigenmann, 1907  | X  | X  |    |     |     |         |     | X   | Eigenmann and Ogle (1907)  |
| <i>Astyanax bimaculatus</i><br>(Linnaeus, 1758)   |    |    |    | X   | X   | X       | X   | X   | Fowler (1943)   Maldonado-Ocampo et al. (2013b)   Steindachner (1879a)   IAvH-P 1694, 9110   |
| <i>Astyanax caucanus</i><br>(Steindachner, 1879)  | X  | X  |    |     |     | X       |     |     | Steindachner (1879c)   NMW 57372-76   SMNS 2833   ZMUC 993   |
| <i>Astyanax daguae</i> Eigenmann, 1913  | X  | X  | X  |     |     |         | X   | X   | Eigenmann (1913)   Maldonado-Ocampo et al. (2006b)   |
| <i>Astyanax fasciatus</i><br>(Cuvier, 1819)   |    |    |    | X   | X   | X       | X   | X   | Eigenmann (1922)   Fowler (1943)   Lima et al. (2003)   Eigenmann (1921)   |
| <i>Astyanax fasslii</i><br>(Steindachner, 1915)   | X  | X  |    |     |     | X       |     |     | Steindachner (1915)  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Astyanax filiferus</i> (Eigenmann, 1913)             | X  | X  |    |     |     | X       |     | X   | Eigenmann (1913)   Maldonado-Ocampo et al. (2006b)   |
| <i>Astyanax gisleni</i> Dahl, 1943                      | X  | X  |    |     |     | X       |     |     | Dahl (1943)  |
| * <i>Astyanax guianensis</i> Eigenmann, 1909            |    |    |    | X   |     |         |     |     | Marinho (2015)   |
| <i>Astyanax integer</i> Myers, 1930                     |    |    |    | -   | X   |         |     |     | Myers (1930)   IAvH-P 3300, 3305-3307, 3309, 3497-3499, 3503, 3505-3507, 3512, 3514-3516, 9698-9704   SU 23726   |
| <i>Astyanax magdalenae</i> Eigenmann & Henn, 1916       |    |    |    |     |     | X       |     | X   | Eigenmann and Henn (1916)   Maldonado-Ocampo et al. (2006b)  |
| <i>Astyanax maximus</i> (Steindachner, 1876)            |    |    |    | X   | -   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   IAvH-P 1731  |
| <i>Astyanax megaspilura</i> Fowler, 1944                | X  | X  |    |     |     |         | X   | X   | Fowler (1944)   Maldonado-Ocampo et al. (2006b)  |
| <i>Astyanax metae</i> Eigenmann, 1914                   |    |    |    |     | X   |         |     |     | Eigenmann et al. (1914)   CAS 39229 [ex IU 13153]   CRPUT 302, 305, 327, 331, 332   FMNH 56640 [ex CM 5457], 56641   IAvH-P 3302, 3521, 3522, 3525-3531, 3535-3544, 7909, 9484, 9643-964 |
| <i>Astyanax microlepis</i> Eigenmann, 1913              | X  | X  |    | -   | -   | X       | -   |     | Eigenmann (1913)   CAS 39341-45 [ex IU 12769-73]   FMNH 56209 [ex CM 5001], 56210-14, 69559-61, 71291, 95006   USNM 79167  |
| <i>Astyanax orthodus</i> Eigenmann, 1907                | X  | X  |    |     |     |         | X   | X   | Eigenmann and Ogle (1907)   Maldonado-Ocampo et al. (2006b)  |
| <i>Astyanax ruberrimus</i> Eigenmann, 1913              |    |    |    |     |     | -       | X   | X   | Eigenmann (1913)   Maldonado-Ocampo et al. (2006b)   Eigenmann (1921)  |
| <i>Astyanax scintillans</i> Myers, 1928                 |    |    |    |     | X   |         |     |     | IAvH-P 4979  |
| <i>Astyanax siapae</i> Garutti, 2003                    |    |    |    |     | X   |         |     |     | IMCN 3652  |
| <i>Astyanax stilbe</i> (Cope, 1870)                     |    |    |    |     |     |         | X   |     | Eigenmann (1921)   |
| <i>Astyanax venezuelae</i> Schultz, 1944                |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).  |
| * <i>Brittanichthys axelrodi</i> Géry, 1965             |    |    |    |     | X   |         |     |     | Weitzman et al. (2005)   |
| <i>Bryconella pallidifrons</i> (Fowler 1946)            |    |    |    | X   |     |         |     |     | F. C. T. Lima (pers. com.): as <i>Hemigrammus analis</i> in Galvis et al. (2006)   CZUT-IC 17948, IAvH-P 2605, MPUJ 12206, 12207   |
| * <i>Ctenobrycon oliverai</i> Benine, Lopes & Ron, 2010 |    |    |    |     | X   |         |     |     | CZUT-IC 7217, 9056, 9279, 9321, 9670, 9752, 9785, 9801, 9810, 9851   |
| <i>Ctenobrycon spilurus</i> (Valenciennes, 1850)        |    |    | X  | X   |     |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)   |
| <i>Genycharax tarpon</i> Eigenmann, 1912                | X  | X  | X  |     |     | X       |     |     | Eigenmann (1912)   CAS 44271-73 [ex IU 12672-74]   FMNH 56018 [ex CM 4808], 56019-2, 69547, 69779   USNM 79207   |
| <i>Jupiaba abramoides</i> (Eigenmann, 1909)             |    |    |    |     | X   |         |     |     | Cala (1977)   ICN-MHN 546  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Jupiaba anteroides</i> (Géry, 1965)                               |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Galvis et al. (2007a)   |
| <i>Jupiaba asymmetrica</i> (Eigenmann, 1908)                         |    |    |    | X   |     |         |     |     | Fowler (1945)   Lima et al. (2003)   |
| <i>Jupiaba polylepis</i> (Günther, 1864)                             |    |    |    |     | X   |         |     |     | IAvH-P 2013  |
| <i>Jupiaba scologaster</i> (Weitzman & Vari, 1986)                   |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Jupiaba zonata</i> (Eigenmann, 1908)                              |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Pseudochalceus kyburzi</i> Schultz, 1966                          | X  | X  |    |     |     |         | X   |     | Schultz (1966)   USNM 231738 [was USNM 257403-F27], 171751, 231739 [ex USNM 258173-F1] |
| <i>Pseudochalceus longianalis</i> Géry, 1972                         |    |    |    |     |     |         | X   |     | Géry (1972)   MHNG 1226.90., 1226.91-99   ANSP 140067   Géry personal collection 0690  |
| <i>Schultzites axelrodi</i> Géry, 1964                               | X  | X  |    |     | X   |         |     |     | Géry (1964a)   USNM 198642   |
| <i>Serrabrycon magoi</i> Vari, 1986                                  |    |    |    |     | X   |         |     |     | FMNH 92642   |
| <i>Thrirobrycon pectinifer</i> Böhlke, 1953                          |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)  |
| <b>Gasteropelecidae</b><br><b>9 spp</b>                              |    |    |    |     |     |         |     |     |  |
| <i>Carnegiella marthae</i> Myers, 1927                               |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)   |
| <i>Carnegiella myersi</i> Fernández-Yépez, 1950                      |    |    |    | X   |     |         |     |     | Mojica (1999)   NRM 200   IMCN 7062  |
| <i>Carnegiella schererii</i> Fernández-Yépez, 1950                   |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Carnegiella strigata</i> (Günther, 1864)                          |    |    |    | X   | X   |         |     |     | Weitzman (1960)   Cala (1977)  |
| <i>Engraulisoma taeniatum</i> Castro, 1981                           |    |    | -  | X   |     |         |     |     | IAvH-P 13957   |
| <i>Gasteropelecus maculatus</i> Steindachner, 1879                   |    |    |    |     |     | X       | X   | X   | Eigenmann (1912)   Eigenmann (1922)   Weitzman (1960)                                  |
| <i>Gasteropelecus sternicla</i> (Linnaeus, 1758)                     |    |    |    | X   |     |         |     |     | Weitzman (1960)  |
| <i>Thoracocharax securis</i> (De Filippi, 1853)                      |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Thoracocharax stellatus</i> (Kner, 1858)                          |    |    |    | X   | X   |         |     |     | Weitzman (1960)  |
| <b>Bryconidae</b><br><b>22 spp (2 added and 3 deleted from 2008)</b> |    |    |    |     |     |         |     |     |  |
| <i>Brycon amazonicus</i> (Agassiz, 1829)                             |    |    |    | +   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   IAvH-P 11603   |
| <i>Brycon argenteus</i> Meek & Hildebrand, 1913                      |    |    |    |     |     |         | X   |     | Maldonado-Ocampo et al. (2013b)  |
| <i>Brycon dentex</i> Günther, 1860                                   |    |    |    |     |     |         | X   |     | Mojica et al. (2004)   ICN-MHN 2351, 5025  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Brycon falcatus</i> Müller & Troschel, 1844                          |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Maldonado-Ocampo et al. (2006a)   IAvH-P 5326   ICN-MHN 4260, 2000, 5677 |
| <i>Brycon fowleri</i> Dahl, 1955  | X  | X  |    |     |     | X       |     | X   | Dahl (1955)   ICN-MHN 2044   |
| <i>Brycon henni</i> Eigenmann, 1913                                     | X  | X  |    |     |     | X       | X   |     | Eigenmann (1913)   Maldonado-Ocampo et al. (2005)  |
| * <i>Brycon hilarii</i> (Valenciennes, 1850)                            |    |    |    | X   |     |         |     |     | Lima (2017)  |
| <i>Brycon labiatus</i> Steindachner, 1879                               | X  | X  | X  |     |     | X       |     |     | Steindachner (1879b)   NMW   |
| <i>Brycon medemi</i> Dahl, 1960   | X  | X  |    |     |     |         |     | X   | Dahl (1960c)   ICN-MHN 41, 73  |
| <i>Brycon meeki</i> Eigenmann & Hildebrand, 1918                        | X  | X  |    |     |     |         | X   | X   | Eigenmann (1918a)   Maldonado-Ocampo et al. (2006b)  |
| <i>Brycon melanopterus</i> (Cope, 1871)                                 |    |    |    | X   | -   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)   |
| <i>Brycon moorei</i> Steindachner, 1878                                 | X  | X  | X  |     |     | X       |     | X   | Steindachner (1878)   Mojica et al. (2006b)  |
| <i>Brycon oligolepis</i> Regan, 1913                                    |    |    |    |     |     |         | X   | X   | Regan (1913)   Maldonado-Ocampo et al. (2006b)   Eigenmann (1922)  |
| * <i>Brycon pesu</i> Müller & Troschel, 1845                            |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Galvis et al. (2007a)  |
| * <i>Brycon polylepis</i> Moscó Morales 1988                            |    |    |    |     | X   |         |     |     | Lima (2017)   IAvH-P 3554, 3671  |
| <i>Brycon posadae</i> Fowler, 1945                                      |    |    |    |     |     |         | X   |     | Fowler (1945)   ANSP 71695   |
| <i>Brycon rubricauda</i> Steindachner, 1879                             | X  | X  | X  |     |     | X       |     | -   | Steindachner (1879b)   |
| <i>Brycon sinuensis</i> Dahl, 1955                                      | X  | X  | X  |     |     |         |     | X   | Dahl (1955)  |
| <i>Brycon striatulus</i> (Kner, 1863)                                   |    |    |    |     |     |         | X   | X   | Regan (1913)   Maldonado-Ocampo et al. (2008)  |
| <i>Brycon whitei</i> Myers & Weitzman, 1960                             | X  | X  |    |     | X   |         |     |     | Myers and Weitzman (1960)   Urbano-Bonilla et al. (2009).  |
| <i>Salminus affinis</i> Steindachner, 1880                              |    |    | X  | -   |     | X       |     | X   | Steindachner (1880)   ANSP 140067   MHNG 1226.90, 1226.91-99   |
| <i>Salminus hilarii</i> Valenciennes, 1850                              |    |    |    | X   | X   |         |     |     | Fowler (1943)   Cala (1977)  |
| <b>Triplotheidae</b><br><b>12 spp (2 added and 2 deleted from 2008)</b> |    |    |    |     |     |         |     |     |  |
| <i>Agoniates anchovia</i> Eigenmann, 1914                               |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Agoniates halecinus</i> Müller & Troschel, 1845                      |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Maldonado-Ocampo et al. (2006a)   |
| <i>Triportheus albus</i> Cope, 1872                                     |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Triportheus angulatus</i> (Spix & Agassiz, 1829)                     |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Triportheus auritus</i> (Valenciennes, 1850)                         |    |    |    | +   | X   |         |     |     | Maldonado-Ocampo and Bogotá-Gregory (2007)   Galvis et al. (2007b)   |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Triportheus brachipomus</i> (Valenciennes, 1850)                 |    |    |    | X   |     |         |     |     | Galvis et al. (2007a)  |
| * <i>Triportheus culter</i> (Cope, 1872)                            |    |    |    | X   |     |         |     |     | CZUT-IC 7310   |
| <i>Triportheus magdalenae</i> (Steindachner, 1878)                  | X  | X  |    |     |     | X       |     |     | Steindachner (1878)   NMW 69151-54   ZMUC 87   |
| <i>Triportheus orinocensis</i> Malabarba, 2004                      |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2013a)  |
| <i>Triportheus pictus</i> (Garman, 1890)                            |    |    |    | X   |     |         |     |     | Correa (2003)  |
| * <i>Triportheus rotundatus</i> (Jardine, 1841)                     |    |    |    | X   |     |         |     |     | IAvH-P 11059   |
| <i>Triportheus venezuelensis</i> Malabarba, 2004                    |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)  |
| <b>Iguanodectidae</b><br>12 spp (1 added and 1 deleted from 2008)   |    |    |    |     |     |         |     |     |  |
| <i>Bryconops affinis</i> (Günther, 1864)                            |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Cala (1977)   IAvH-P 2725, 3579   |
| <i>Bryconops alburnoides</i> Kner, 1858                             |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   ICN-MHN 9918   |
| <i>Bryconops caudomaculatus</i> (Günther, 1864)                     |    |    |    | X   | X   |         |     |     | Correa (2003)   Eigenmann (1922)   |
| <i>Bryconops collettei</i> Chernoff & Machado-Allison, 2005         |    |    |    | X   |     |         |     |     | Maldonado-Ocampo et al. (2008)   |
| <i>Bryconops humeralis</i> Machado-Allison, Chernoff & Buckup, 1996 |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)  |
| <i>Bryconops giacopinii</i> (Fernández-Yépez, 1950)                 |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Maldonado-Ocampo and Bogotá-Gregory (2007)   IAvH-P 1691, 5307   ICN-MHN 4625, 10371 |
| <i>Bryconops inpai</i> Knöppel, Junk & Géry, 1968                   |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)   |
| * <i>Bryconops magoi</i> Chernoff & Machado-Allison, 2005           |    |    |    | X   |     |         |     |     | CZUT-IC 4129   |
| <i>Iguanodectes adujai</i> Géry, 1970                               |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2008)   |
| <i>Iguanodectes geisleri</i> Géry, 1970                             |    |    |    | X   | X   |         |     |     | Castro and Arboleda (1988)   Maldonado-Ocampo (2001)   |
| <i>Iguanodectes purusii</i> (Steindachner, 1908)                    |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Iguanodectes spilurus</i> (Günther, 1864)                        |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Maldonado-Ocampo et al. (2006a)   |
| <b>Chalceidae</b><br>3 spp  |    |    |    |     |     |         |     |     |  |
| <i>Chalceus epakros</i> Zanata & Toledo-Piza, 2004                  |    |    |    | X   | X   |         |     |     | Zanata and Toledo-Piza (2004)   Maldonado-Ocampo et al. (2006a)  |
| <i>Chalceus erythrurus</i> (Cope, 1870)                             |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Chalceus macrolepidotus</i><br>Cuvier, 1816                                 |    |    |    | X   | X   |         |     |     | Correa (2003)   Cala (1977)  |
| <b>Gymnotiformes</b><br><b>78 spp (12 added and 8 deleted from 2008)</b>       |    |    |    |     |     |         |     |     |  |
| <b>Gymnotidae</b><br><b>12 spp (2 deleted from 2008)</b>                       |    |    |    |     |     |         |     |     |  |
| <i>Electrophorus electricus</i><br>(Linnaeus, 1766)                            |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo and Albert. (2003)   Cala (1977)                  |
| <i>Gymnotus anguillaris</i><br>Hoedeman, 1962                                  |    |    |    |     | X   |         |     |     | Maldonado-Ocampo and Albert. (2003)                                |
| <i>Gymnotus ardilai</i><br>Maldonado-Ocampo & Albert, 2004                     | X  | X  | X  |     |     | X       |     |     | Maldonado-Ocampo and Albert (2004)   IAvH-P 3477, 4001             |
| <i>Gymnotus carapo</i> Linnaeus, 1758  |    |    |    | X   | X   |         |     |     | Fowler (1945)   Eigenmann (1922)                                   |
| <i>Gymnotus cataniapo</i> Mago-Leccia, 1994                                    |    |    |    |     | X   |         |     |     | Maldonado-Ocampo and Albert (2003)                                 |
| <i>Gymnotus choco</i> Albert, Crampton & Maldonado-Ocampo, 2003                | X  | X  | X  |     |     |         | X   | X   | Albert and Crampton (2003b)   ICN-MHN 6621   NRM 27734             |
| <i>Gymnotus coropinae</i><br>Hoedeman, 1962                                    |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo and Albert (2003)   Galvis et al. (2007a)         |
| <i>Gymnotus henni</i> Albert, Crampton & Maldonado-Ocampo, 2003                |    |    | X  |     |     |         | X   |     | Albert and Crampton (2003b)   CAS 47290, 217162   FMNH 56793       |
| <i>Gymnotus javari</i> Albert, Crampton & Hagedorn, 2003                       |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Gymnotus pedanopterus</i><br>Mago-Leccia, 1994                              |    |    |    | X   |     |         |     |     | Maldonado-Ocampo and Albert (2003)                                 |
| <i>Gymnotus stenoleucus</i> Mago-Leccia, 1994                                  |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo and Albert (2003)                                 |
| <i>Gymnotus tigre</i> Albert & Crampton, 2003                                  |    |    |    | X   |     |         |     |     | Albert and Crampton (2003b)   UF 25552, 128412   ICN-MHN 6690      |
| <b>Hypopomidae</b><br><b>9 spp (5 added and 2 deleted from 2008)</b>           |    |    |    |     |     |         |     |     |  |
| <i>Brachyhypopomus batesi</i><br>Crampton, de Santana, Waddell & Lovejoy, 2016 |    |    |    | X   |     |         |     |     | Crampton et al. (2016)   |
| <i>Brachyhypopomus beebei</i><br>(Schultz, 1944)                               |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo and Albert (2003)                                 |
| <i>Brachyhypopomus bennetti</i><br>Sullivan, Zuanon & Cox Fernandes, 2013      |    |    |    | X   |     |         |     |     | Sullivan et al. (2013b)  |
| <i>Brachyhypopomus brevirostris</i><br>(Steindachner, 1868)                    |    |    |    | X   | X   | -       |     |     | Maldonado-Ocampo and Albert (2003)                                 |
| <i>Brachyhypopomus bullocki</i><br>Sullivan & Hopkins, 2009                    |    |    |    | X   | X   |         |     |     | Sullivan and Hopkins (2009)   Crampton et al. (2016)   ANSP 187477 |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Brachyhypopomus flavigaster</i><br>Crampton, de Santana,<br>Waddell & Lovejoy, 2016 |    |    |    | X   |     |         |     |     | Crampton et al. (2016)   |
| <i>Brachyhypopomus occidentalis</i><br>(Regan, 1914)                                   |    |    |    |     |     | X       | X   | X   | Regan (1914)   Maldonado-Ocampo et al. (2006b)   Albert and Crampton (2003a) |
| <i>Brachyhypopomus sullivani</i><br>Crampton, de Santana,<br>Waddell & Lovejoy, 2016   |    |    |    |     | X   |         |     |     | Crampton et al. (2016)   |
| <i>Microsternarchus bilineatus</i><br>Fernández-Yépez, 1968                            |    |    |    |     | X   |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| <b>Rhamphichthyidae</b><br><b>10 spp (1 added and 1 deleted from 2008)</b>             |    |    |    |     |     |         |     |     |  |
| <i>Gymnorhamphichthys hypostomus</i> Ellis, 1912                                       |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| <i>Gymnorhamphichthys rondoni</i><br>(Miranda Ribeiro, 1920)                           |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| * <i>Rhamphichthys apurensis</i><br>(Fernández-Yépez, 1968)                            |    |    |    |     | X   |         |     |     | CZUT-IC 3244, 5178, 5179, 9362, 9421, 9422, 9423, 9424, 9448, 9449, 9547     |
| <i>Rhamphichthys drepanium</i><br>Triques, 1999  |    |    |    |     | X   |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| <i>Rhamphichthys marmoratus</i><br>Castelnau, 1855                                     |    |    |    |     | X   |         |     |     | Cala (1977)  |
| <i>Rhamphichthys rostratus</i><br>(Linnaeus, 1766)                                     |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| <i>Hoplopogon lepturus</i><br>Hoedeman, 1962   |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| <i>Hoplopogon neblinae</i> Mago-Leccia, 1994   |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Maldonado-Ocampo and Albert (2003)                   |
| <i>Steatogenys duidae</i> (La Monte, 1929)   |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   Maldonado-Ocampo and Albert (2003)         |
| <i>Steatogenys elegans</i><br>(Steindachner, 1880)                                     |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| <b>Sternopygidae</b><br><b>16 spp (2 added from 2008)</b>                              |    |    |    |     |     |         |     |     |  |
| <i>Distocyclus conirostris</i><br>(Eigenmann & Allen, 1942)                            |    |    |    | X   |     |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| ' <i>Eigenmannia</i> ' <i>goajira</i><br>Schultz, 1949                                 |    |    |    |     |     |         | X   |     | Maldonado-Ocampo and Albert (2003)   |
| <i>Eigenmannia humboldtii</i><br>(Steindachner, 1878)                                  |    |    |    |     |     | X       |     | X   | Steindachner (1878)   Maldonado-Ocampo et al. (2006b)                        |
| <i>Eigenmannia limbata</i><br>(Schreiner & Ribeiro, 1903)                              |    |    |    | X   |     |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| <i>Eigenmannia macrops</i><br>(Boulenger, 1897)  |    |    |    |     | X   |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| <i>Eigenmannia nigra</i> Mago-Leccia, 1994   |    |    |    | X   |     |         |     |     | Maldonado-Ocampo and Albert (2003)   |
| <i>Eigenmannia virescens</i><br>(Valenciennes, 1836)                                   |    |    |    | X   | X   | X       | X   | X   | Eigenmann and Ward (1905)   Maldonado-Ocampo and Albert (2003)               |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections                                     |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Rhabdolichops caviceps</i><br>(Fernández-Yépez, 1968)                             |    |    |    | X   |     |         |     |     | Maldonado-Ocampo and Albert (2003)                         |
| * <i>Rhabdolichops eastwardi</i><br>Lundberg & Mago-Leccia,<br>1986                  |    |    |    | X   |     |         |     |     | CZUT-IC 3642, 3987   |
| <i>Rhabdolichops troscheli</i><br>(Kaup, 1856)                                       |    |    |    | X   |     |         |     |     | Maldonado-Ocampo and Albert (2003)                         |
| * <i>Rhabdolichops zareti</i><br>Lundberg & Mago-Leccia,<br>1986                     |    |    |    |     | X   |         |     |     | CZUT-IC 9471   |
| <i>Sternopygus aequilabiatus</i><br>(Humboldt, 1805)                                 |    |    |    |     |     | X       | +   | +   | Humboldt (1805)   Maldonado-Ocampo et al. (2013b)          |
| <i>Sternopygus astrabes</i> Mago-Leccia, 1994  |    |    |    | X   |     |         |     |     | Maldonado-Ocampo and Albert (2003)                         |
| <i>Sternopygus dariensis</i> Meek & Hildebrand, 1916                                 |    |    |    |     |     |         | X   | X   | Hulen et al. (2005)  |
| <i>Sternopygus macrurus</i> (Bloch & Schneider, 1801)                                |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo and Albert (2003)   Eigenmann (1922)      |
| <i>Sternopygus pejeraton</i> Schultz, 1949   |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)                                  |
| <b>Apteronotidae</b><br><b>31 spp (4 added and 3 deleted from 2008)</b>              |    |    |    |     |     |         |     |     |  |
| <i>Adontosternarchus balaenops</i><br>(Cope, 1878)                                   |    |    |    | X   |     |         |     |     | Maldonado-Ocampo and Albert (2003)                         |
| <i>Adontosternarchus clarkeae</i><br>Mago-Leccia, Lundberg & Baskin, 1985            |    |    |    | X   |     |         |     |     | Mago-Leccia et al. (1985)                                  |
| <i>Adontosternarchus devenanzii</i><br>Mago-Leccia, Lundberg & Baskin, 1985          |    |    |    |     | X   |         |     |     | Mago-Leccia et al. (1985)                                  |
| * <i>Adontosternarchus sachsi</i><br>(Peters, 1877)                                  |    |    |    |     | X   |         |     |     | CZUT-IC 9438, 9451, 9453, 9455, 9457, 9475, 9490, 9492     |
| <i>Apteronotus albifrons</i><br>(Linnaeus, 1766)                                     |    |    |    |     | X   |         |     |     | Maldonado-Ocampo and Albert (2003)                         |
| <i>Apteronotus anu</i> de Santana & Vari, 2013                                       |    |    |    |     |     |         | X   |     | de Santana and Vari (2013)                                 |
| <i>Apteronotus apurensis</i><br>Fernández-Yépez, 1968                                |    |    |    |     | X   |         |     |     | Maldonado-Ocampo and Albert (2003)                         |
| <i>Apteronotus bonapartii</i><br>(Castelnau, 1855)                                   |    |    |    | X   |     |         |     |     | Maldonado-Ocampo and Albert (2003)                         |
| <i>Apteronotus cuchillejo</i><br>(Schultz, 1949)                                     |    |    |    |     |     |         | X   |     | Maldonado-Ocampo and Albert (2003)                         |
| <i>Apteronotus cuchillo</i> Schultz, 1949  |    |    |    |     |     |         | X   |     | Maldonado-Ocampo and Albert (2003)                         |
| <i>Apteronotus eschmeyeri</i><br>de Santana, Maldonado-Ocampo, Severi & Mendez, 2004 | X  | X  |    |     |     | X       |     | X   | de Santana et al. (2004)   Maldonado-Ocampo et al. (2006b) |



| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <b>Trichomycteridae</b><br><b>66 spp (16 added and 6 deleted from 2008)</b> |    |    |    |     |     |         |     |     |   |
| <i>Eremophilus mutisii</i><br>Humboldt, 1805                                | X  | X  | X  |     |     | X       |     |     | Humboldt (1805)   |
| <i>Ituglanis guayaberensis</i> (Dahl, 1960)                                 | X  | X  |    |     | X   |         |     |     | Dahl (1960a)  |
| <i>Ituglanis metae</i> (Eigenmann, 1917)                                    |    |    |    |     | X   |         |     |     | Eigenmann (1917a)   CAS 58138 [ex IU 13770]   |
| <i>Rhizosomichthys totae</i> (Miles, 1942)                                  | X  | X  | X  |     | +   | -       |     |     | Miles (1942)   ICN-MHN 353   MCZ 35744   SU 37074   |
| <i>Trichomycterus arhuaco</i> Ardila Rodríguez, 2016                        | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2016c)   Holotype CAR 684   |
| <i>Trichomycterus ballesterosi</i><br>Ardila Rodríguez, 2011                | X  | X  |    |     |     |         | X   |     | Ardila Rodríguez (2011a)   CAR 400  |
| <i>Trichomycterus banneai</i><br>(Eigenmann, 1912)                          | X  | X  |    |     |     | X       |     |     | Eigenmann (1912)   CAS 58127 [ex IU 12677]   Holotype FMNH 56025 [ex CM 4815], 56026, 69815   USNM 79234              |
| <i>Trichomycterus bogotensis</i><br>(Eigenmann, 1912)                       | X  | X  |    |     |     | X       |     |     | Eigenmann (1912)   CAS 58118 [ex IU 12679]   Holotype FMNH 56030 [ex CM 4820]   56031, 56044   AMNH 7107   USNM 79232 |
| <i>Trichomycterus cachiraensis</i><br>Ardila Rodríguez, 2008                | X  | X  | X  |     |     | X       |     |     | Ardila Rodríguez (2008c)   CAR 125, 97   CZUT-IC2920   IAvH-P 11114   MBUCV-V35384;                                   |
| <i>Trichomycterus caliensis</i><br>(Eigenmann, 1912)                        | X  | X  | X  |     |     | X       | -   |     | Eigenmann (1912)   FMNH 56029 [ex CM 4819 not 6819]   |
| <i>Trichomycterus casitaensis</i><br>Ardila Rodríguez, 2017                 | X  | X  |    |     |     |         | X   |     | Ardila Rodríguez (2017b)  |
| <i>Trichomycterus chapmani</i><br>(Eigenmann, 1912)                         | X  | X  |    |     |     | X       | -   |     | Eigenmann (1912)   CAS 58128 [ex IU 12678]   Holotype FMNH 56027 [ex CM 4817], 50628, 69813   USNM 79233              |
| <i>Trichomycterus dorsostriatum</i><br>(Eigenmann, 1917)                    | X  | X  |    |     | X   |         |     |     | Eigenmann (1917a)   CAS 64579 [ex IU 13810]   Holotype FMNH 58096 [ex CM 7093], 58097                                 |
| * <i>Trichomycterus emanueli</i><br>(Schultz, 1944)                         |    |    |    |     |     |         | X   |     | IAvH-P 9797   |
| <i>Trichomycterus garciamarquezi</i> Ardila Rodríguez, 2016                 | X  | X  |    |     |     |         | X   |     | Ardila Rodríguez (2016c)   Holotype CAR 682   |
| <i>Trichomycterus gorgona</i><br>Fernández & Schaefer, 2005                 | X  | X  | X  |     |     |         | X   |     | Fernández and Schaefer (2005)   ANSP 149946   ICN-MHN 10019   |
| <i>Trichomycterus kankuamo</i><br>Ardila Rodríguez, 2016                    | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2016c)   Holotype CAR 685   |
| <i>Trichomycterus knerii</i><br>Steindachner, 1882                          |    |    |    |     | X   |         |     |     | Eigenmann (1918b)   |
| <i>Trichomycterus latidens</i><br>(Eigenmann, 1917)                         | X  | X  |    |     |     | -       | X   |     | Eigenmann (1917a)   CAS 76335 [ex IU 13801]   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Trichomycterus latistriatus</i> (Eigenmann, 1917)                                       | X  | X  |    |     |     | X       |     |     | Eigenmann (1917a)   FMNH 58449 [ex CM 7450]  |
| <i>Trichomycterus maldonadoi</i> Ardila Rodríguez, 2011                                    | X  | X  |    |     |     |         |     | X   | Ardila Rodríguez (2011b)   CAR 380, 500  |
| <i>Trichomycterus manauensis</i> Ardila Rodríguez, 2016                                    | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2016c)   Holotype CAR 683  |
| <i>Trichomycterus maracaiboensis</i> (Schultz, 1944)                                       |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)  |
| <i>Trichomycterus migrans</i> (Dahl, 1960)   | X  | X  |    |     | X   |         |     |     | Dahl (1960a)   ICN-MHN 399, 400  |
| <i>Trichomycterus montesi</i> Ardila Rodríguez, 2016                                       | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2016c)   Holotype CAR 681  |
| <i>Trichomycterus nietoi</i> Ardila Rodríguez, 2014  | X  | X  |    |     |     |         |     | X   | Ardila Rodríguez (2014)  |
| <i>Trichomycterus nigromaculatus</i> Boulenger, 1887                                       | X  | X  |    |     |     | -       | -   | X   | Boulenger (1887)   BMNH 1880.2.26.16-17  |
| <i>Trichomycterus ocanensis</i> Ardila Rodríguez, 2011                                     | X  | X  |    |     |     |         |     | X   | Ardila Rodríguez (2011d)   IAvH-P 11115, 9797  |
| <i>Trichomycterus regani</i> (Eigenmann, 1917)   | X  | X  |    |     |     |         | X   |     | Eigenmann (1917a)   CAS 64591 [ex IU 13772]  |
| <i>Trichomycterus retropinnis</i> Regan, 1903  | X  | X  |    |     |     | X       |     |     | Regan (1903)   BMNH 1899.8.21.12-13  |
| <i>Trichomycterus romeroi</i> (Fowler, 1941)   | X  | X  |    |     |     | X       |     |     | Fowler (1941)   ANSP 69331, 69332-35   |
| <i>Trichomycterus ruitoquensis</i> Ardila-Rodríguez, 2007                                  | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2007)   CAR 340, 37, 88, 89, 325, 331, 332   IAvH-P 4342, 4344   IMCN 4195         |
| <i>Trichomycterus sandovali</i> Ardila Rodríguez, 2006                                     | X  | X  | X  |     |     | X       |     |     | Ardila Rodríguez (2006a)   CAR 116   |
| <i>Trichomycterus santanderensis</i> Castellanos-Morales, 2007                             | X  | X  |    |     |     | X       |     |     | Castellanos-Morales (2007)   CAC-CDMB 035  |
| <i>Trichomycterus sketi</i> Castellanos-Morales, 2011                                      | X  | X  |    |     |     | X       |     |     | Castellanos-Morales (2011)   CAC-CDMB 104  |
| <i>Trichomycterus spilosoma</i> (Regan, 1913)  | X  | X  |    |     |     | -       | X   |     | Regan (1913)   BMNH 1910.7.11.106-107, 1910.7.11.108   |
| <i>Trichomycterus steindachneri</i> DoNascimento, Prada-Pedreros & Guerrero-Kommritz, 2014 | X  | X  |    |     | X   |         |     |     | DoNascimento et al. (2014)   |
| <i>Trichomycterus stellatus</i> (Eigenmann, 1918)  | X  | X  |    |     |     | X       |     |     | Eigenmann (1918b)   CAS 58121 [ex IU 13814]   FMNH 58101 [ex CM 7097], 58102                         |
| <i>Trichomycterus straminius</i> (Eigenmann, 1917)   | X  | X  |    |     |     | X       |     | -   | Eigenmann (1917a)   CAS 58148 [ex IU 13818], 58105 [ex IU 13804]   FMNH 58105 [ex CM 7101], 58091-92 |
| <i>Trichomycterus striatus</i> (Meek & Hildebrand, 1913)                                   |    |    |    |     |     | -       | -   | +   | Eigenmann (1918b)  |
| <i>Trichomycterus taenia</i> Kner, 1863  |    |    |    |     |     | -       | X   |     | Regan (1913)   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Trichomycterus tetuanensis</i><br>García-Melo, Villa-Navarro & DoNascimento, 2016 | X  | X  |    |     |     | X       |     |     | García-Melo et al. (2016)   |
| <i>Trichomycterus torcoromaensis</i><br>Ardila-Rodríguez, 2016                       | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2016a)  |
| <i>Trichomycterus transandianus</i><br>(Steindachner, 1915)                          | X  | X  |    |     |     | X       |     |     | Steindachner (1915)   NMW 44475   |
| <i>Trichomycterus uisae</i><br>Castellanos-Morales, 2008                             | X  | X  |    |     |     | X       |     |     | Castellanos-Morales (2008)   CAC-CDMB 072   |
| <i>Trichomycterus unicolor</i><br>(Regan, 1913)                                      | X  | X  |    |     |     |         | X   |     | Regan (1913)   BMNH 1913.10.1.42-43   |
| <i>Malacoglanis gelatinosus</i><br>Myers & Weitzman, 1966                            | X  | X  |    | X   | +   |         |     |     | Myers and Weitzman (1966)   CZUT-IC 13816, IA <small>V</small> H-P 13640, SU 50754, 50755 |
| <i>Tridens</i> Eigenmann & Eigenmann, 1889   |    |    |    | X   | +   |         |     |     | ICN-MHN 10101, 10330, 12112, 12114  |
| <i>Tridensimilis venezuelae</i><br>Schultz, 1944                                     |    |    |    |     | -   |         |     | X   | Ortega-Lara et al. (2012)   |
| * <i>Tridentopsis pearsoni</i> Myers, 1925   |    |    |    | X   |     |         |     |     | CZUT-IC 17989, 18069  |
| <i>Haemomaster venezuelae</i><br>Myers, 1927   |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Henonemus punctatus</i><br>(Boulenger, 1887)                                      |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Henonemus triacanthopomus</i><br>DoNascimento & Provenzano, 2006                  |    |    |    |     | X   |         |     |     | Lasso et al. (2009)   CZUT-IC 9648  |
| <i>Megalocentor echthrus</i> de Pinna & Britskii, 1991                               |    |    |    | X   | -   |         |     |     | IA <small>V</small> H-P 5995  |
| <i>Ochmacanthus alternus</i><br>Myers, 1927  |    |    |    |     | X   |         |     |     | Dahl (1960a)  |
| <i>Ochmacanthus orinoco</i> Myers, 1927  |    |    |    |     | X   |         |     |     | IA <small>V</small> H-P 14250-14252   |
| <i>Ochmacanthus reinhardtii</i><br>(Steindachner, 1882)                              |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)  |
| <i>Pseudostegophilus haemomyzon</i> (Myers, 1942)                                    |    |    |    |     | X   |         |     |     | IA <small>V</small> H-P 1478, 6997  |
| <i>Pseudostegophilus nemurus</i><br>(Günther, 1869)                                  |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   IA <small>V</small> H-P 1189, 4996                                 |
| <i>Schultzichthys bondi</i> (Myers, 1942)  |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)  |
| <i>Schultzichthys gracilis</i> Dahl, 1960  | X  | X  |    |     | X   |         |     |     | Dahl (1960a)   ICN-MHN 17123  |
| <i>Stegophilus septentrionalis</i><br>Myers, 1927                                    |    |    |    |     | X   |         |     |     | CZUT-IC 5049  |
| <i>Paracanthopoma</i> Giltay, 1935   |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)  |
| <i>Paravandellia phaneromena</i><br>(Miles, 1943)                                    | X  | X  |    |     |     | X       |     |     | Miles (1943)   MCZ 35874   USNM 120141  |
| <i>Vandellia beccarii</i> Di Capriacco, 1935   |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2013a)   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Vandellia cirrhosa</i><br>Valenciennes, 1846                          |    |    |    | X   |     |         |     |     | Castro and Arboleda (1988)   de Pinna and Wosiacki (2003)   |
| <b>Callichthyidae</b><br><b>44 spp (2 added and 3 deleted from 2008)</b> |    |    |    |     |     |         |     |     |   |
| <i>Callichthys callichthys</i><br>(Linnæus, 1758)                        |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)   IAvH-P 2089, 12161   ICN-MHN 548, 6377, 7494, 7495, 16897                                |
| <i>Callichthys fabricioi</i> Román-Valencia, Lehmann A. & Muñoz, 1999    | X  | X  | X  |     |     | X       |     |     | Román-Valencia et al. (1999)   ICN-MHN 3842   IUQ 152, 305, 306, 307   MCP 21174-75   UV 89018, 91063, 93001-04, 98002, 98031 |
| <i>Callichthys oibaensis</i> Ardila-Rodríguez, 2006                      | X  | X  | X  |     |     | X       |     |     | Ardila Rodríguez (2006b)   CAR 251, 250   IMCN 3310   CZUT-IC 1837   IAvH-P 5730   ICNMNH 13396   MBUCV-V 32798               |
| <i>Dianema longibarbis</i> Cope, 1872                                    |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Hoplosternum littorale</i><br>(Hancock, 1828)                         |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)  |
| <i>Hoplosternum magdalena</i> e Eigenmann, 1913                          |    |    |    |     |     | X       |     | X   | Eigenmann (1913)   Eigenmann (1922)   |
| <i>Hoplosternum punctatum</i><br>Meek & Hildebrand, 1916                 |    |    |    |     |     |         |     | X   | Maldonado-Ocampo et al. (2006b)   |
| <i>Lepthoplosternum altamazonicum</i> Reis, 1997                         |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)   |
| <i>Megalechis picta</i> (Müller & Troschel, 1849)                        |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)  |
| <i>Megalechis thoracata</i><br>(Valenciennes, 1840)                      |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)  |
| <i>Corydoras aeneus</i> (Gill, 1858)                                     |    |    |    |     | X   |         |     |     | Nijssen and Isbrücker (1983)   Cala (1977)  |
| <i>Corydoras agassizii</i><br>Steindachner, 1876                         |    |    |    | X   |     |         |     |     | Castro (1987b)  |
| <i>Corydoras ambiacus</i> Cope, 1872                                     |    |    |    | X   |     |         |     |     | Castro (1987b)  |
| <i>Corydoras arcuatus</i> Elwin, 1939                                    |    |    |    | X   |     |         |     |     | Castro (1987b)  |
| <i>Corydoras Axelrodi</i> Rössel, 1962                                   |    |    |    | -   | X   |         |     |     | Nijssen and Isbrücker (1983)  |
| <i>Corydoras brevirostris</i> Fraser-Brunner, 1947                       |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)   |
| * <i>Corydoras concolor</i><br>Weitzman, 1961                            |    |    |    |     | X   |         |     |     | CZUT-IC 11794, 11892  |
| * <i>Corydoras crypticus</i> Sands, 1995                                 |    |    |    | X   |     |         |     |     | IMCN 5833, IMCN 5834   CZUT-IC 11837  |
| <i>Corydoras delphax</i> Nijssen & Isbrücker, 1983                       | X  | X  |    | -   | X   |         |     |     | Nijssen and Isbrücker (1983)   NRM 26073 [197222.3251]   NRM 26074   ZMA 119063   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Corydoras elegans</i> Steindachner, 1876          |    |    |    | X   |     |         |     |     | Castro (1987b)  |
| <i>Corydoras esperanzae</i> Castro, 1987             | X  | X  |    |     | X   |         |     |     | Castro (1987b)   UBJTL MM275  |
| <i>Corydoras evelynae</i> Rössel, 1963               |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)   |
| <i>Corydoras fowleri</i> Böhlke, 1950                |    |    |    | X   |     |         |     |     | Mojica (1999).   IMCN 5710   NRM 16554                                |
| <i>Corydoras gomezi</i> Castro, 1986                 |    |    |    | X   |     |         |     |     | Castro (1986)   UBJTL MM536   |
| <i>Corydoras habrosus</i> Weitzman, 1960             |    |    |    |     | X   |         |     |     | Castro (1987b)  |
| <i>Corydoras leucomelas</i> Eigenmann & Allen, 1942  |    |    |    | X   |     |         |     |     | Castro (1987b)  |
| <i>Corydoras loxozonus</i> Nijssen & Isbrücker, 1983 | X  | X  |    | -   | X   |         |     |     | Nijssen and Isbrücker (1983)   ANSP 150170                            |
| <i>Corydoras melanistius</i> Regan, 1912             |    |    |    |     | X   |         |     |     | Castro (1987b)  |
| <i>Corydoras melanotaenia</i> Regan, 1912            | X  | X  |    | -   | X   |         |     |     | Regan (1912b)   BMNH 1909.7.23.41   BMNH 1909.7.23.42                 |
| <i>Corydoras melini</i> Lönnberg & Rendahl, 1930     |    |    |    | X   | X   |         |     |     | Regan (1912b)   Nijssen and Isbrücker (1983)                          |
| <i>Corydoras metae</i> Eigenmann, 1914               | X  | X  |    | -   | X   |         |     |     | Eigenmann (1914)   CAS 36447 [ex IU 13451]                            |
| <i>Corydoras osteocarus</i> Böhlke, 1951             |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)   |
| <i>Corydoras pastazensis</i> Weitzman, 1963          |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Corydoras pygmaeus</i> Knaack, 1966               |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)   |
| <i>Corydoras rabauti</i> La Monte, 1941              |    |    |    | X   |     |         |     |     | Castro (1987b)  |
| <i>Corydoras reticulatus</i> Fraser-Brunner, 1938    |    |    |    | X   |     |         |     |     | Castro (1987b)  |
| <i>Corydoras reynoldsi</i> Myers & Weitzman, 1960    | X  | X  |    | X   |     |         |     |     | Myers and Weitzman (1960)   SU 52349, 50702   ZMA 111424              |
| <i>Corydoras semiaquilus</i> Weitzman, 1964          |    |    |    | X   |     |         |     |     | Myers and Weitzman (1960)   Arbeláez et al. (2004)                    |
| <i>Corydoras septentrionalis</i> Gosline, 1940       |    |    |    |     | X   |         |     |     | Isbrücker (1999)  |
| <i>Corydoras simulatus</i> Weitzman & Nijssen, 1970  | X  | X  |    | -   | X   |         |     |     | Weitzman and Nijssen 1970)   USNM 197615, 197616, 197667   ZMA 110384 |
| <i>Corydoras sodalis</i> Nijssen & Isbrücker, 1986   |    |    |    | X   |     |         |     |     | Castro (1987b)  |
| <i>Corydoras splendens</i> (Castelnau, 1855)         |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Corydoras trilineatus</i> Cope, 1872              |    |    |    | X   |     |         |     |     | Nijssen and Isbrücker (1983)  |
| <i>Corydoras zygatus</i> Eigenmann & Allen, 1942     |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <b>Astroblepididae</b><br><b>38 spp (16 added and 3 deleted from 2008)</b> |    |    |    |     |     |         |     |     |   |
| <i>Astroblepus acostai</i> Ardila Rodríguez, 2011                          | X  | X  |    |     |     |         | X   |     | Ardila Rodríguez (2011e)   CAR 473, 422,   ICN-MHN 17843  |
| <i>Astroblepus ardiladuartei</i> Ardila Rodríguez, 2015                    | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2015a)  |
| <i>Astroblepus ardilai</i> Ardila Rodríguez, 2012                          | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2012)   CAR 619, 539, 548, 423, 616   ICN-MHN 18326   IMCN 5260                           |
| <i>Astroblepus bellezaensis</i> Ardila Rodríguez, 2015                     | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2015a)  |
| <i>Astroblepus cacharas</i> Ardila Rodríguez, 2011                         | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2011c)   CAR 460  |
| <i>Astroblepus caquetae</i> Fowler 1943                                    | X  | X  |    | X   |     |         |     |     | Fowler (1943)   ANSP 70506, 70507-08  |
| <i>Astroblepus chapmani</i> (Eigenmann, 1912)                              | X  | X  |    |     |     | X       | -   | -   | Eigenmann (1912)   CAS 64658 [ex IU 12708a-c]   FMNH 56071 [ex CM 4863], 50672                              |
| <i>Astroblepus chotae</i> (Regan, 1904)                                    |    |    |    |     |     | -       | X   | -   | Maldonado-Ocampo et al. (2013b)   |
| <i>Astroblepus cirratus</i> (Regan, 1912)                                  | X  | X  |    |     |     | -       | X   |     | Regan (1912c)   BMNH 1912.3.2.7   |
| <i>Astroblepus curitiensis</i> Ardila Rodríguez, 2015                      | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2015b)  |
| <i>Astroblepus floridablancaensis</i> Ardila Rodríguez, 2016               | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2016b)   CAR 660  |
| <i>Astroblepus frenatus</i> Eigenmann, 1918                                | X  | X  |    |     | -   | X       |     | -   | Eigenmann (1918a)   FMNH 58384 [ex CM 7380]   |
| <i>Astroblepus grixalvii</i> Humboldt, 1805                                | X  | X  |    |     |     | X       | -   | -   | Humboldt (1805)   |
| <i>Astroblepus guentheri</i> (Boulenger, 1887)                             | X  | X  |    |     |     | X       | -   |     | Boulenger (1887)   BMNH 1880.2.26.18-25   |
| <i>Astroblepus heterodon</i> (Regan, 1908)                                 | X  | X  |    |     |     |         | X   |     | Regan (1908)   BMNH 1908.5.29.80  |
| <i>Astroblepus homodon</i> (Regan, 1904)                                   | X  | X  |    |     |     | X       | -   |     | Regan (1904)   BMNH 1902.5.15.27  |
| <i>Astroblepus itae</i> Ardila Rodríguez, 2011                             | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2011e)   CAR 555, 432, 433, 435   ICN-MHN 7844  |
| <i>Astroblepus jimenezae</i> Ardila Rodríguez, 2013                        | X  | X  |    |     |     |         | X   |     | Ardila Rodríguez (2013a)   CAR 470, 542   CIUA 756, 757, 758;   |
| <i>Astroblepus jurubidae</i> Fowler, 1944                                  | X  | X  |    |     |     |         | X   |     | Fowler (1944)   ANSP 71431  |
| <i>Astroblepus latidens</i> Eigenmann, 1918                                | X  | X  |    |     | +   | -       | -   |     | Eigenmann (1918a)   FMNH 58366 [ex CM 7362], 58367-71, 69816   CAS 64659 [ex IU 13678], 64689 [ex IU 13679] |
| <i>Astroblepus mariae</i> (Fowler, 1919)                                   | X  | X  |    |     | X   | -       |     |     | Fowler (1919)   ANSP 49368, 49369-84  |
| <i>Astroblepus marmoratus</i> (Regan, 1904)                                | X  | X  |    |     |     | X       |     |     | Regan (1904)   BMNH 1899.8.21.10-11   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Astroblepus martinezii</i> Ardila Rodríguez, 2013               | X  | X  |    |     |     |         |     | X   | Ardila Rodríguez (2013a)   CAR 550,421   MBUCV 35674   |
| <i>Astroblepus micrescens</i> Eigenmann, 1918                      | X  | X  |    |     | -   | X       |     |     | Eigenmann (1918a)   CAS 64692 [ex IU 13686]   FMNH 58376 [ex CM 7372], 58377 [ex CM 7373]  |
| <i>Astroblepus mojicai</i> Ardila Rodríguez, 2015                  | X  | X  |    |     |     |         | X   |     | Ardila Rodríguez (2015a)   |
| <i>Astroblepus nettoferreirai</i> Ardila Rodríguez, 2015           | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2015a)   |
| <i>Astroblepus nicefori</i> Myers, 1932                            | X  | X  |    |     | -   | X       | -   |     | Myers (1932)   SU 24796   USNM 94178   |
| <i>Astroblepus onzagaensis</i> Ardila Rodríguez, 2015              | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2015b)   |
| <i>Astroblepus orientalis</i> (Boulenger, 1903)                    |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)  |
| <i>Astroblepus pradai</i> Ardila Rodríguez, 2015                   | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2015b)   |
| <i>Astroblepus putumayoensis</i> Ardila Rodríguez, 2015            | X  | X  |    | X   |     |         |     |     | Ardila Rodríguez (2015a)   |
| <i>Astroblepus rengifoii</i> Dahl, 1960                            | X  | X  |    |     |     |         |     | X   | Dahl (1960c)   |
| <i>Astroblepus retropinnus</i> (Regan, 1908)                       | X  | X  |    |     |     |         | X   |     | Regan (1908)   BMNH 1908.5.29.81–82   IMCN 295   |
| <i>Astroblepus santanderensis</i> Eigenmann, 1918                  | X  | X  |    |     |     | X       |     |     | Eigenmann (1918a)   FMNH 58433 [ex CM 7430], 58372–75, 58427–28, 58431–32   CAS 47001 [ex IU 13741], 47002 [ex IU 13682], 60163 [ex IU 13740], 64696 [ex IU 13683], 64697 [ex IU 13684], 64698 [ex IU 13685] |
| <i>Astroblepus trifasciatus</i> (Eigenmann, 1912)                  | X  | X  |    |     |     | -       | X   | -   | Eigenmann (1912)   AMNH 18667 [ex IU 12711]   CAS 64716–17 [ex IU 12711–12]   FMNH 56076 [ex CM 4868], 56077–78   ?64718   USNM 79198  |
| <i>Astroblepus unifasciatus</i> (Eigenmann, 1912)                  | X  | X  |    |     |     | -       | X   | -   | Eigenmann (1912)   FMNH 56079 [ex CM 4871], 56080, 69817   CAS 64718 [ex IU 12713]   USNM 79199  |
| <i>Astroblepus ventralis</i> (Eigenmann, 1912)                     | X  | X  |    |     |     | -       | X   |     | Eigenmann (1912)   FMNH 56074 [ex CM 4866], 56073, 56075   AMNH 18666 [ex IU 12710] (1)   CAS 47013 [ex CM 4865, IU 12709], 47014 [ex CM 4867a-g, IU 12710a-g]   |
| <i>Astroblepus verai</i> Ardila Rodríguez, 2015                    | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2015b)   |
| <b>Loricariidae</b><br>187 spp (30 added and 24 deleted from 2008) |    |    |    |     |     |         |     |     |  |
| <i>Pseudorinkelepis genibarbis</i> (Valenciennes, 1840)            |    |    |    | +   | X   |         |     |     | Ortega-Lara (2016)   Galvis et al. (2007a)   |
| <i>Acestridium colombiensis</i> Retzer, 2005                       | X  | X  |    |     | X   |         |     |     | Retzer (2005)   FMNH 115255, 105169   INHS 99093   USNM 381314   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| * <i>Acestridium dichromum</i><br>Retzer, Nico & Provenzano,<br>1999 |    |    |    | X   | X   |         |     |     | IAvH-P 9946-9948, 10704   |
| <i>Acestridium martini</i> Retzer,<br>Nico & Provenzano, 1999        |    |    |    |     | X   |         |     |     | Lasso et al. (2005)   IAvH-P 9949-9951<br>  ICN-MHN 5333, 6328, 12380-<br>12383, 12817, 12818, 12384, 12819                     |
| <i>Hypoptopoma bianale</i> Aquino<br>& Schaefer, 2010                |    |    |    | X   |     |         |     |     | Aquino and Schaefer (2010)  |
| <i>Hypoptopoma brevirostratum</i><br>Aquino & Schaefer, 2010         |    |    |    | X   |     |         |     |     | Aquino and Schaefer (2010)  |
| <i>Hypoptopoma gulare</i> Cope,<br>1878                              |    |    |    | X   |     |         |     |     | Aquino and Schaefer (2010)  |
| <i>Hypoptopoma machadoi</i><br>Aquino & Schaefer, 2010               |    |    |    |     | X   |         |     |     | Aquino and Schaefer (2010)  |
| <i>Hypoptopoma spectabile</i><br>(Eigenmann, 1914)                   |    |    |    | X   | X   |         |     |     | Eigenmann (1914)   Aquino and Schaefer<br>(2010)  |
| <i>Hypoptopoma steindachneri</i><br>Boulenger, 1895                  |    |    |    | +   | -   |         |     |     | Aquino and Schaefer (2010)  |
| <i>Hypoptopoma sternoptychum</i><br>(Schaefer, 1996)                 |    |    |    | X   |     |         |     |     | Schaefer (1996)   |
| <i>Hypoptopoma thoracatum</i><br>Günther, 1868                       |    |    |    | X   |     |         |     |     | Aquino and Schaefer (2010)  |
| <i>Otocinclus batmani</i> Lehmann<br>A., 2006                        |    |    |    | X   |     |         |     |     | Lehmann (2006)   ICN-MHN 6721,<br>6722   ANSP 178616   MCP 28172,<br>34087   MHNUC 474  |
| <i>Otocinclus buaorani</i> Schaefer,<br>1997                         |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Maldonado-<br>Ocampo et al. (2013a)   |
| <i>Otocinclus macropilus</i><br>Eigenmann & Allen, 1942              |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Otocinclus vestitus</i> Cope, 1872                                |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Otocinclus vittatus</i> Regan,<br>1904                            |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)   |
| <i>Oxyropsis acutirostra</i> Miranda<br>Ribeiro, 1951                |    |    |    | -   | X   |         |     |     | Aquino and Schaefer (2002)  |
| <i>Oxyropsis carinata</i><br>(Steindachner, 1879)                    |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Oxyropsis wrightiana</i><br>Eigenmann & Eigenmann,<br>1889        |    |    |    | X   |     |         |     |     | Aquino and Schaefer (2002)  |
| <i>Parotocinclus eppleyi</i> Schaefer<br>& Provenzano, 1993          |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Parotocinclus variola</i><br>Lehmann, Schwambach &<br>Reis, 2015  | X  | X  |    | X   |     |         |     |     | Lehmann et al. (2015)   |
| <i>Farlowella acus</i> (Kner, 1854)                                  |    |    |    |     | X   |         |     |     | MPUJ 6067, 6083, 6089, 6095   |
| <i>Farlowella amazona</i><br>(Günther, 1864)                         |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)  |
| <i>Farlowella colombiensis</i> Retzer<br>& Page, 1997                | X  | X  |    | -   | X   |         |     |     | Retzer and Page (1997)   ANSP 88080  <br>CAS 123733, 169739 [ex CAS 123733]<br>  ICN-MHN 17113   INHS 32939 [ex<br>ASNP 88080]; |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Farlowella curtirostra</i> Myers, 1942                          |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)   |
| <i>Farlowella gracilis</i> Regan, 1904                             | X  | X  |    | X   | -   |         |     |     | Regan (1904)   BMNH 1902.5.29.180                                       |
| <i>Farlowella mariaelenae</i> Martín Salazar, 1964                 |    |    |    |     | X   |         |     |     | Retzer and Page (1997)  |
| <i>Farlowella mitoupibo</i> Ballen, Urbano-Bonilla & Zamudio, 2016 | X  | X  |    |     | X   |         |     |     | Ballen et al. (2016b)   MPUJ 8481                                       |
| <i>Farlowella nattereri</i> Steindachner, 1910                     |    |    |    | X   |     |         |     |     | Retzer and Page (1997)  |
| <i>Farlowella oxyrryncha</i> (Kner, 1853)                          |    |    |    | X   | -   |         |     |     | Arbeláez et al. (2004)  |
| <i>Farlowella smithi</i> Fowler, 1913                              |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   ICN-MHN 5748   IAvH-P 490 |
| * <i>Farlowella taphorni</i> Retzer & Page, 1997                   |    |    |    |     |     |         | X   |     | IAvH-P 9800, 9801   |
| <i>Farlowella vittata</i> Myers, 1942                              |    |    |    |     | X   |         |     |     | Retzer and Page (1997)   Cala (1977)                                    |
| <i>Farlowella yariguai</i> Ballen & Mojica, 2014                   | X  | X  |    |     |     | X       |     |     | Ballen and Mojica (2014)   ICN-MHN 17819, 17789, 18889                  |
| * <i>Lamontichthys filamentosus</i> (La Monte, 1935)               |    |    |    | X   |     |         |     |     | IAvH-P 1610, 1617   |
| <i>Lamontichthys llanero</i> Taphorn & Lilyestrom, 1984            |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).   |
| <i>Lamontichthys maracaibero</i> Taphorn & Lilyestrom, 1984        |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)   |
| <i>Sturisoma caquetae</i> (Fowler, 1945)                           | X  | X  |    | X   |     |         |     |     | Fowler (1945)   ANSP 71719  |
| <i>Sturisoma tenuirostre</i> (Steindachner, 1910)                  |    |    |    |     | X   |         |     |     | Cala (1977)   |
| <i>Sturisomatichthys aureus</i> (Steindachner, 1900)               | X  | X  |    |     |     | X       | -   | X   | Steindachner (1900)   Maldonado-Ocampo et al. (2006b)                   |
| <i>Sturisomatichthys festivus</i> (Myers, 1942)                    |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)   |
| <i>Sturisomatichthys leightoni</i> (Regan, 1912)                   | X  | X  |    |     |     | X       | X   |     | Regan (1912c)   Eigenmann (1922)   BMNH 1909.7.23.45, 1909.7.23.46-4    |
| <i>Sturisomatichthys panamensis</i> (Eigenmann & Eigenmann, 1889)  |    |    |    |     |     | X       | X   | X   | Eigenmann (1922)   Regan (1913)   |
| <i>Sturisomatichthys tamanae</i> (Regan, 1912)                     | X  | X  |    |     |     | -       | X   | -   | Regan (1912c)   BMNH 1910.7.11.133, BMNH 1910.7.11.134                  |
| <i>Crossoloricaria cephalaspis</i> Isbrücker, 1979                 | X  | X  |    |     | -   | +       |     |     | Isbrücker (1979)   BMNH 1947.7.1.228                                    |
| <i>Crossoloricaria variegata</i> (Steindachner, 1879)              |    |    |    |     |     | X       | X   | X   | Eigenmann (1922)   Regan (1914)   |
| <i>Crossoloricaria venezuelae</i> (Schultz, 1944)                  |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)   |
| <i>Dasyloricaria filamentosa</i> (Steindachner, 1878)              |    |    |    |     |     | X       |     | X   | Steindachner (1878)   Londoño-Burbano and Reis (2016)                   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Dasyloricaria latiura</i> (Eigenmann & Vance, 1912)                 |    |    |    |     |     | -       | X   |     | Eigenmann (1912)   FMNH 55115   USNM 79219  |
| <i>Dasyloricaria paucisquamata</i> Londoño-Burbano & Reis, 2016        | X  | X  |    |     |     | X       |     |     | Londoño-Burbano and Reis (2016)   |
| <i>Dentectus barbarmatus</i> Martín Salazar, Isbrücker & Nijssen, 1982 |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).   |
| <i>Hemiodontichthys acipenserinus</i> (Kner, 1853)                     |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Limatulichthys griseus</i> (Eigenmann, 1909)                        |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)  |
| <i>Loricaria cataphracta</i> Linnaeus, 1758                            |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Galvis et al. (2007a)   |
| <i>Loricaria nickeriensis</i> Isbrücker, 1979                          |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Loricaria simillima</i> Regan, 1904                                 |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).   |
| <i>Loricariichthys brunneus</i> (Hancock, 1828)                        |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)   |
| * <i>Loricariichthys bauxwelli</i> (Hancock, 1828)                     |    |    |    | X   |     |         |     |     | IAvH-P 12562  |
| <i>Pseudohemiodon</i> Bleeker, 1862                                    |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).   |
| <i>Rhadinoloricaria laani</i> (Nijssen & Isbrücker, 1988)              |    |    |    | -   | X   |         |     |     | Nijssen and Isbrücker (1988)   ANSP 131483, 131484, 157750, 157940-41   |
| <i>Rhadinoloricaria listrorhinosa</i> (Nijssen & Isbrücker, 1988)      | X  | X  |    | -   | X   |         |     |     | Nijssen and Isbrücker (1988)   ANSP 131482  |
| <i>Rhadinoloricaria rhami</i> (Isbrücker & Nijssen, 1983)              |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Rineloricaria castroi</i> Isbrücker & Nijssen, 1984                 |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)  |
| * <i>Rineloricaria daraha</i> Rapp Py-Daniel & Fichberg, 2008          |    |    |    | X   |     |         |     |     | Bogotá-Gregory et al. (2016)  |
| <i>Rineloricaria eigenmanni</i> (Pellegrin, 1908)                      |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)   |
| <i>Rineloricaria formosa</i> Isbrücker & Nijssen, 1979                 |    |    |    | -   | X   |         |     |     | Isbrücker and Nijssen (1979)   FMNH 83713, 83714-15   IRSNB 608-609   MZUSP [ex IRSNB 608, MZUSP ex IRSNB 609]   ZMA 114922-23, 115182, 115196-97   ZSM 25821 |
| <i>Rineloricaria jubata</i> (Boulenger, 1902)                          |    |    |    |     |     | X       | X   |     | Eigenmann (1922)   Regan (1914)   |
| <i>Rineloricaria lanceolata</i> (Günther, 1868)                        |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)  |
| <i>Rineloricaria magdalenaee</i> (Steindachner, 1879)                  |    |    |    |     | X   | -       | X   |     | Steindachner (1879a)   Eigenmann (1922)   |
| <i>Rineloricaria rupestris</i> (Schultz, 1944)                         |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)   |
| <i>Rineloricaria sneiderni</i> (Fowler, 1944)                          | X  | X  |    |     |     | X       |     |     | Fowler (1944)   ANSP 71433, 71434   |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Spatularicaria atratoensis</i> Schultz, 1944                                 | X  | X  |    |     |     |         | X   |     | Schultz (1944b)   USNM 93810   |
| <i>Spatularicaria caquetae</i> (Fowler, 1943)                                   | X  | X  |    | X   |     |         |     |     | Fowler (1943)   ANSP 70526, 70527  |
| <i>Spatularicaria curvispina</i> (Dahl, 1942)                                   | X  | X  |    |     |     | X       |     |     | Dahl (1942)  |
| <i>Spatularicaria euacanthagenys</i> Isbrücker, 1979                            | X  | X  |    | X   |     |         |     |     | Fowler (1943)  |
| <i>Spatularicaria gymnogaster</i> (Eigenmann & Vance, 1912)                     | X  | X  |    |     |     | X       |     | X   | Eigenmann (1912)   Villa-Navarro et al. (2006)                                       |
| <i>Spatularicaria fimbriata</i> (Eigenmann & Vance, 1912)                       |    |    |    |     |     | X       |     | X   | Eigenmann (1912)   Miles (1947)  |
| <i>Spatularicaria lagoichthys</i> (Schultz, 1944)                               |    |    |    |     |     |         | X   |     | Miles (1947)   |
| <i>Spatularicaria phelpsi</i> Schultz, 1944                                     |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)  |
| <i>Acanthicus hystrix</i> Spix & Agassiz, 1829                                  |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Cala (1977)   ICN-MHN 596   IAvH-P 2301 |
| <i>Baryancistrus beggini</i> Lujan, Arce & Armbruster, 2009                     |    |    |    |     | X   |         |     |     | Lujan et al. (2009)  |
| <i>Baryancistrus demantoides</i> Werneke, Sabaj Pérez, Lujan & Armbruster, 2005 |    |    |    |     | X   |         |     |     | Ajíaco-Martínez et al. (2012c)   Ortega-Lara (2016)                                  |
| <i>Chaetostoma aburrense</i> (Posada, 1909)                                     | X  | X  |    |     |     | X       |     |     | Posada (1909)  |
| <i>Chaetostoma analae</i> (Fowler, 1943)  | X  | X  |    | X   |     |         |     |     | Fowler (1943)   ANSP 70525   |
| <i>Chaetostoma anomalum</i> Regan, 1903   |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)  |
| <i>Chaetostoma brevilabiatum</i> Dahl, 1942                                     | X  | X  |    |     |     | X       |     |     | Dahl (1943)  |
| <i>Chaetostoma dorsale</i> Eigenmann, 1922                                      |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).  |
| <i>Chaetostoma fischeri</i> Steindachner, 1879                                  |    |    |    |     |     | X       | X   | X   | Eigenmann (1922)   |
| <i>Chaetostoma floridablancaense</i> Ardila Rodríguez, 2013                     | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2013b)   CAR 633, 104, 105, 417   MBUCV 35676   IMCN 5676          |
| <i>Chaetostoma formosae</i> Ballen, 2011  | X  | X  |    |     | X   |         |     |     | Ballen (2011)   ICN-MHN 17114  |
| <i>Chaetostoma joropo</i> Ballen, Urbano-Bonilla & Maldonado-Ocampo, 2016       | X  | X  |    |     | X   |         |     |     | Ballen et al. (2016a)  |
| <i>Chaetostoma lepturum</i> Regan, 1912   | X  | X  |    |     |     |         | X   |     | Regan (1912c)   BMNH 1910.7.11.116-118   |
| <i>Chaetostoma leucomelas</i> Eigenmann, 1918                                   | X  | X  |    |     |     | X       | X   | X   | Eigenmann (1918a)   Maldonado-Ocampo et al. (2006b)   Miles (1947)                   |
| <i>Chaetostoma marginatum</i> Regan, 1904                                       |    |    |    |     |     | -       | X   |     | Regan (1913)   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Chaetostoma milesi</i> Fowler, 1941                                       | X  | X  |    |     | -   | X       |     |     | Fowler (1941)   ANSP 69330  |
| <i>Chaetostoma niveum</i> Fowler, 1944                                       | X  | X  |    |     |     |         | X   |     | Fowler (1944)   ANSP 71432  |
| <i>Chaetostoma palmeri</i> Regan, 1912                                       | X  | X  |    |     |     |         | X   |     | Regan (1912c)   BMNH 1910.7.11.120-121  |
| <i>Chaetostoma patiae</i> Fowler, 1945                                       | X  | X  |    |     |     |         | X   |     | Fowler (1945)   ANSP 71716, 71717   |
| <i>Chaetostoma paucispinis</i> Regan, 1912                                   | X  | X  |    |     |     |         | X   |     | Regan (1912c)   BMNH 1910.7.11.119  |
| <i>Chaetostoma platyrhynchus</i> (Fowler, 1943)                              |    |    |    | X   | +   |         |     |     | Fowler (1943)   ANSP 70512, 70513-15  |
| <i>Chaetostoma setosum</i> Boulenger, 1887                                   | X  | X  |    |     | -   | +       |     |     | Boulenger (1887)   BMNH 1880.2.26.9-10  |
| <i>Chaetostoma sovichthys</i> Schultz, 1944                                  |    |    |    |     |     |         | X   |     | Ballen (2011)   |
| <i>Chaetostoma tachiraense</i> Schultz, 1944                                 |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)   |
| <i>Chaetostoma thomsoni</i> Regan, 1904                                      | X  | X  |    |     |     | X       |     |     | Regan (1904)   BMNH 1902.5.15.28-30   |
| <i>Chaetostoma vagum</i> Fowler, 1943  | X  | X  |    | X   |     |         |     |     | Fowler (1943)   |
| <i>Cordylancistrus daguae</i> (Eigenmann, 1912)                              | X  | X  |    |     |     | -       | X   |     | Eigenmann (1912)   FMNH 56052 [ex CM 4842], 56053-54   CAS 56745 [ex IU 12698], 74161 [ex IU 12699] |
| <i>Cordylancistrus pijao</i> Provenzano R. & Villa-Navarro, 2017             | X  | X  |    |     |     | X       |     |     | Provenzano R. and Villa-Navarro (2017)  |
| <i>Dolichancistrus atratoensis</i> (Dahl, 1960)                              | X  | X  |    |     |     |         | X   |     | Dahl (1960c)   ICN-MHN 51, 46 (now apparently 48)   |
| <i>Dolichancistrus carnegiei</i> (Eigenmann, 1916)                           | X  | X  |    |     |     | X       |     |     | Eigenmann (1916)   FMNH 58350 [ex CM 7346], 58351   CAS 77344 [ex IU 13661], 77345 [ex IU 13662]    |
| <i>Dolichancistrus cobrensis</i> (Schultz, 1944)                             |    |    |    |     | +   |         |     | X   | Ballen and Vari (2012)   ICN-MHN 18009  |
| <i>Dolichancistrus fuesslii</i> (Steindachner, 1911)                         | X  | X  |    |     | X   |         |     |     | Steindachner (1911)   NMW 48026   |
| <i>'Hemiancistrus' guahiborum</i> Werneke, Armbruster, Lujan & Taphorn, 2005 |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| * <i>'Hemiancistrus' subviridis</i> Werneke, Sabaj, Lujan & Armbruster, 2005 |    |    |    |     | X   |         |     |     | IMCN 5897, 6094, 6189, 6195, 6196, 6284, 6574, 6575   |
| <i>Hypancistrus contradens</i> Armbruster, Lujan & Taphorn, 2007             |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)  |
| <i>Hypancistrus debilittera</i> Armbruster, Lujan & Taphorn, 2007            |    |    |    |     | X   |         |     |     | Ortega-Lara (2016)   IAvH-P 12471   |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| * <i>Hypancistrus furunculus</i><br>Armbruster, Lujan & Taphorn, 2007 |    |    |    |     | X   |         |     |     | Ortega-Lara (2016)   IMCN 5828, 6017, 6018, 6297, 6298, 6299, 6300                     |
| * <i>Hypancistrus inspector</i><br>Armbruster, 2002                   |    |    |    |     | X   |         |     |     | Ortega-Lara (2016)   |
| <i>Hypancistrus lunaorum</i><br>Armbruster, Lujan & Taphorn, 2007     |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)   IAvH-P 7044   |
| <i>Leporacanthicus galaxias</i><br>Isbrücker & Nijssen, 1989          |    |    |    |     | X   |         |     |     | IAvH-P 7041  |
| * <i>Leporacanthicus triactis</i><br>Isbrücker, Nijssen & Nico, 1992  |    |    |    |     | X   |         |     |     | IMCN 5772, 5773, 5774  |
| * <i>Leptoancistrus canensis</i><br>(Meek & Hildebrand, 1913)         |    |    |    |     |     |         | X   |     | Maldonado-Ocampo et al. (2013b)  |
| <i>Leptoancistrus cordobensis</i><br>Dahl, 1964                       | X  | X  |    |     |     | X       |     | X   | Dahl and Medem (1964)   IMCN 233, 250  |
| <i>Panaque cochliodon</i><br>(Steindachner, 1879)                     | X  | X  | X  |     |     | X       |     |     | Steindachner (1879b)   NMW 47297-98  |
| <i>Panaque nigrolineatus</i> (Peters, 1877)                           |    |    |    |     | X   |         |     |     | Lujan et al. (2010)   Cala (1977)  |
| <i>Panaque suttonorum</i> Schultz, 1944                               |    |    |    |     |     |         | X   |     | Lujan et al. (2010)  |
| * <i>Panaque titan</i> Lujan, Hidalgo & Stewart 2010                  |    |    |    | X   |     |         |     |     | IMCN 6059  |
| <i>Panaqolus albomaculatus</i> (Kanazawa, 1958)                       |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Panaqolus maccus</i> Schaefer & Stewart, 1993                      |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).  |
| <i>Peckoltia brevis</i> (La Monte, 1935)                              |    |    |    | X   |     |         |     |     | Armbruster (2008)  |
| * <i>Peckoltia caenosa</i><br>Armbruster, 2008                        |    |    |    |     | X   |         |     |     | IMCN 7061  |
| <i>Peckoltia lineola</i> Armbruster, 2008                             |    |    |    |     | X   |         |     |     | Armbruster (2008)  |
| <i>Peckoltia lujani</i> Armbruster, Werneke & Tan, 2015               |    |    |    |     | X   |         |     |     | Armbruster et al. (2015)   |
| <i>Peckoltia sabaji</i> Armbruster, 2003                              |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).  |
| <i>Peckoltia vittata</i><br>(Steindachner, 1881)                      |    |    |    |     | X   |         |     |     | Armbruster (2008)  |
| <i>Peckoltichthys bachi</i><br>(Boulenger, 1898)                      |    |    |    | X   |     |         |     |     | Armbruster (2008)  |
| <i>Parancistrus</i> Bleeker, 1862                                     |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)  |
| * <i>Pseudoancistrus sidereus</i><br>Armbruster, 2004                 |    |    |    |     | X   |         |     |     | IMCN 6232, 6234  |
| <i>Aphanotorulus ammophilus</i><br>Armbruster & Page, 1996            |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)   |
| <i>Aphanotorulus emarginatus</i><br>(Valenciennes, 1840)              |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Ray and Armbruster (2016)   ICN-MHN 2543 |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Aphanotorulus horridus</i> (Kner, 1854)                |    |    |    | X   |     |         |     |     | Ray and Armbruster (2016)  |
| <i>Aphanotorulus unicolor</i> (Steindachner, 1908)        |    |    |    | X   |     |         |     |     | Ray and Armbruster (2016)  |
| <i>Hypostomus annectens</i> (Regan, 1904)                 |    |    |    |     |     |         | X   |     | Eigenmann (1922)   |
| <i>Hypostomus argus</i> (Fowler, 1943)                    |    |    |    | -   | X   |         |     |     | Fowler (1943)   ANSP 70510   |
| <i>Hypostomus carinatus</i> (Steindachner, 1881)          |    |    |    | X   |     |         |     |     | Maldonado-Ocampo et al. (2008)   |
| <i>Hypostomus hemicochliodon</i> Armbruster, 2003         |    |    |    | X   |     |         |     |     | Lasso et al. (2009)   IAvH-P 8910  |
| ' <i>Hypostomus</i> ' <i>holostictus</i> (Regan, 1913)    | X  | X  |    |     |     |         | X   | X   | Regan (1913)   BMNH 1913.10.1.57   |
| <i>Hypostomus hondae</i> (Regan, 1912)                    |    |    | X  |     |     | X       | X   | X   | Regan (1912c)   Dahl (1955)   Eigenmann (1922)                                 |
| <i>Hypostomus niceforoi</i> (Fowler, 1943)                | X  | X  |    | X   | X   |         |     |     | Fowler (1943)   Urbano-Bonilla et al. (2009).                                  |
| <i>Hypostomus oculatus</i> (Fowler, 1943)                 |    |    |    | X   |     |         |     |     | Fowler (1943)   ANSP 70518, 70519-20   |
| <i>Hypostomus plecostomoides</i> (Eigenmann, 1922)        |    |    |    | X   | X   |         |     |     | Eigenmann (1922)   CAS 82501 [ex IU 15043]   IAvH-P 3045                       |
| <i>Hypostomus plecostomus</i> (Linnaeus, 1758)            |    |    |    |     | X   |         |     |     | Eigenmann (1922)   |
| <i>Hypostomus pyrineusi</i> (Miranda Ribeiro, 1920)       |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2008)                          |
| * <i>Hypostomus robinii</i> Valenciennes, 1840            |    |    |    |     | X   |         |     |     | IAvH-P 423, 736, 4957, 5372, 5373, 5495, 5502, 5504                            |
| <i>Hypostomus sculpodon</i> Armbruster, 2003              |    |    |    |     | X   |         |     |     | IAvH-P 5614  |
| <i>Hypostomus varimaculatus</i> (Fowler, 1945)            |    |    |    | X   |     |         |     |     | Fowler (1945)   ANSP 71707   |
| <i>Hypostomus wilsoni</i> (Eigenmann, 1918)               | X  | X  |    |     |     |         | X   | X   | Eigenmann (1918a)   Dahl (1955)  |
| <i>Isorineloricaria tenuicauda</i> (Steindachner, 1878)   | X  | X  |    |     |     | X       |     |     | Steindachner (1878)   MSNG 8856   NMW 42596, 44263-66, 44268), 44294   ZMUC 85 |
| <i>Isorineloricaria villarsi</i> (Lütken, 1874)           |    |    |    |     | -   |         |     | +   | Ray and Armbruster (2016)  |
| <i>Pterygoplichthys gibbiceps</i> (Kner, 1854)            |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)  |
| <i>Pterygoplichthys lituratus</i> (Kner, 1854)            |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Pterygoplichthys multiradiatus</i> (Hancock, 1828)     |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2013a)  |
| <i>Pterygoplichthys pardalis</i> (Castelnau, 1855)        |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Pterygoplichthys undecimialis</i> (Steindachner, 1878) | X  | X  |    |     | -   | X       |     |     | Steindachner (1878)   NMW 47224, 47220-22                                      |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Pterygoplichthys weberi</i><br>Armbruster & Page, 2006                       |    |    |    | X   |     |         |     |     | Armbruster and Page (2006)   ICN-MHN 13455   FMNH 96959, 101378   MSU 2736.2   USNM 177204 |
| * <i>Pterygoplichthys zuliaensis</i><br>Weber, 1991                             |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)  |
| <i>Ancistrus caucanus</i> Fowler, 1943  | X  | X  |    |     |     | X       |     |     | Fowler (1943)   ANSP 70516   |
| <i>Ancistrus centrolepis</i> Regan, 1913  | X  | X  |    |     |     | -       | X   | X   | Regan (1913)   Taphorn et al. (2013)   |
| <i>Ancistrus lineolatus</i> Fowler, 1943  | X  | X  |    | X   |     |         |     |     | Fowler (1943)   ANSP 70517   |
| <i>Ancistrus macrophthalmus</i><br>(Pellegrin, 1912)                            |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)  |
| <i>Ancistrus martini</i> Schultz, 1944  |    |    |    |     |     |         | X   |     | Taphorn et al. (2013)  |
| <i>Ancistrus tolima</i> Taphorn, Armbruster, Villa-Navarro & Ray, 2013          | X  | X  |    |     |     | X       |     |     | Taphorn et al. (2013)   CZUT-IC 4040   |
| <i>Ancistrus triradiatus</i><br>Eigenmann, 1918                                 |    |    |    | -   | X   |         |     | -   | Eigenmann (1918a)  |
| <i>Ancistrus vericaucanus</i><br>Taphorn, Armbruster, Villa-Navarro & Ray, 2013 | X  | X  |    |     |     | X       |     |     | Taphorn et al. (2013)  |
| <i>Dekeyseria amazonica</i> Rapp Py-Daniel, 1985                                |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Dekeyseria brachyura</i> (Kner, 1854)  |    |    |    |     | X   |         |     |     | Ortega-Lara (2016)   |
| <i>Dekeyseria pulchra</i><br>(Steindachner, 1915)                               |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)  |
| <i>Dekeyseria scaphirhyncha</i><br>(Kner, 1854)                                 |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)  |
| <i>Lasiancistrus caucanus</i><br>Eigenmann, 1912                                |    |    |    |     |     | X       | X   | X   | Eigenmann (1912)   Fowler (1945)   Dahl (1955)   |
| <i>Lasiancistrus guacharote</i><br>(Valenciennes, 1840)                         |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)  |
| <i>Lasiancistrus schomburgkii</i><br>(Günther, 1864)                            |    |    |    | X   |     |         |     |     | Armbruster (2005)  |
| <i>Lasiancistrus tentaculatus</i><br>Armbruster, 2005                           |    |    |    |     | X   |         |     |     | Armbruster (2005)   IAvH-P 5100-5105, 7692, 7982, 7983, 9487, 9595, 9596                   |
| <i>Lithoxancistrus orinoco</i><br>Isbrücker, Nijssen & Cala, 1988               |    |    |    |     | X   |         |     |     | Isbrücker et al. (1988)   ICN-MHN 1200, 1201   ZMA 119882   ZMUL 972/3482                  |
| * <i>Pseudolithoxus anthrax</i><br>(Armbruster & Provenzano, 2000)              |    |    |    |     | X   |         |     |     | IMCN 6601, 6602, 6603, 6604, 5874, 5880, 5881, 6063, 6064, 6231                            |
| <i>Pseudolithoxus dumus</i><br>(Armbruster & Provenzano, 2000)                  |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)  |
| * <i>Pseudolithoxus kelsorum</i><br>Lujan & Birindelli, 2011                    |    |    |    |     | X   |         |     |     | IMCN 5876, IMCN 5877   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Pseudolithoxus tigris</i> (Armbruster & Provenzano, 2000)   |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)                                 |
| <b>Cetopsidae</b>  |    |    |    |     |     |         |     |     |   |
| <b>15 spp (4 deleted from 2008)</b>                            |    |    |    |     |     |         |     |     |   |
| <i>Cetopsisidium morenoi</i> (Fernández-Yépez, 1972)           |    |    |    |     | X   |         |     |     | Vari et al. (2005)  |
| <i>Cetopsisidium pemon</i> Vari, Ferraris & de Pinna, 2005     |    |    |    |     | X   |         |     |     | Vari et al. (2005)  |
| <i>Cetopsis amphiloglossa</i> (Eigenmann, 1914)                |    |    |    |     |     | X       | X   |     | Eigenmann et al. (1914)   Vari et al. (2005)                    |
| <i>Cetopsis baudoensis</i> (Dahl, 1960)                        | X  | X  |    |     |     |         | X   |     | Dahl (1960c)   ICN-MHN 118, 100                                 |
| <i>Cetopsis candiru</i> Spix & Agassiz, 1829                   |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Cetopsis coecutiens</i> (Lichtenstein, 1819)                |    |    |    | X   | X   |         |     |     | Vari et al. (2005)   Dahl (1960a)                               |
| <i>Cetopsis fimbriata</i> Vari, Ferraris & de Pinna 2005       | X  | X  |    |     |     |         |     | X   | Vari et al. (2005)   USNM 305348, 372825, 372826   ICN-MHN 7272 |
| <i>Cetopsis jurubiae</i> (Fowler, 1944)                        | X  | X  |    |     |     |         | X   |     | Fowler (1944)   ANSP 71430                                      |
| <i>Cetopsis motatanensis</i> (Schultz, 1944)                   |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)                                       |
| <i>Cetopsis orinoco</i> (Schultz, 1944)                        |    |    |    |     | X   |         |     |     | Cala (1977); Vari et al. (2005)                                 |
| <i>Cetopsis othonops</i> (Eigenmann, 1912)                     | X  | X  |    |     |     | X       |     | X   | Eigenmann (1912)   Vari et al. (2005)                           |
| <i>Cetopsis umbrosa</i> Vari, Ferraris & de Pinna 2005         | X  | X  |    |     | X   |         |     |     | Vari et al. (2005)  |
| ** <i>Denticetopsis seducta</i> Vari, Ferraris & de Pinna 2005 |    |    |    |     | X   |         |     |     | Vari et al. (2005)  |
| <i>Helogenes castaneus</i> (Dahl, 1960)                        | X  | X  |    |     | X   |         |     |     | Dahl (1960a)  |
| <i>Helogenes marmoratus</i> Günther, 1803                      |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo (2001)                  |
| <b>Aspredinidae</b>  |    |    |    |     |     |         |     |     |   |
| <b>18 spp (2 added and 2 deleted from 2008)</b>                |    |    |    |     |     |         |     |     |   |
| <i>Amaralia hypsiura</i> (Kner, 1855)                          |    |    |    | X   |     |         |     |     | Friel and Carvalho (2016)                                       |
| <i>Bunocephalus aleuropsis</i> Cope, 1870                      |    |    |    | X   | +   |         |     |     | Cardoso (2008)  |
| * <i>Bunocephalus aloikae</i> Hoedeman, 1961                   |    |    |    |     | X   |         |     |     | Cardoso (2008)  |
| <i>Bunocephalus colombianus</i> Eigenmann, 1912                | X  | X  |    |     |     | X       | X   | X   | Eigenmann (1912)   Cardoso (2008)   Miles (1945)                |
| <i>Bunocephalus coracoideus</i> (Cope, 1874)                   |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Bunocephalus kneri</i> Steindachner, 1882                   |    |    |    | X   |     |         |     |     | Cardoso (2008)  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Bunocephalus verrucosus</i> (Walbaum, 1792)                     |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   |
| <i>Pseudobunocephalus amazonicus</i> (Mees, 1989)                  |    |    |    | X   |     |         |     |     | Friel (2008)   |
| <i>Pseudobunocephalus bifidus</i> (Eigenmann, 1942)                |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Pseudobunocephalus lundbergi</i> Friel, 2008                    |    |    |    |     | X   |         |     |     | Friel (2008)   |
| * <i>Pterobunocephalus depressus</i> Hasseman, 1911                |    |    |    | X   | X   |         |     |     | IAvH-P 674, 8714, 8779, 8814, 8844, 8872, 8903, 11991  |
| <i>Dupouyichthys sapito</i> Schultz, 1944                          |    |    |    |     |     | X       |     | +   | Mojica et al. (2000)   Ortega-Lara et al. (2012)   Miles (1945)  |
| <i>Hoplomyzon papillatus</i> Stewart, 1985                         |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Hoplomyzon sexpapilostoma</i> Taphorn & Marrero, 1990           |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)   |
| <i>Xylipterus kryptos</i> Taphorn & Lilyestrom, 1983               |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)  |
| <i>Xylipterus lepturus</i> Orcés, 1962                             |    |    |    |     | X   |         |     | -   | Cala (1977)   ICN-MHN 1772   |
| <i>Xylipterus magdalena</i> Eigenmann, 1912                        | X  | X  |    |     |     | X       |     |     | Eigenmann (1912)   FMNH 56039 [ex CM 4829]   |
| <i>Xylipterus melanopterus</i> Orcés, 1962                         |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Urbano-Bonilla et al. (2009)   |
| <b>Auchenipteridae</b><br>46 spp (7 added and 4 deleted from 2008) |    |    |    |     |     |         |     |     |  |
| <i>Centromochlus altae</i> Fowler, 1945                            | X  | X  |    | X   | +   |         |     |     | Fowler (1945)   ANSP 71700, 71701-04   IAvH-P 551  |
| <i>Centromochlus existimatus</i> Mees, 1974                        |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Centromochlus heckelii</i> (De Filippi, 1853)                   |    |    |    | X   | X   |         |     |     | Lasso et al. (2005)   Mojica et al. (2005)   IAvH-P 966, 1055, 3691, 10964   ICN-MHN 952, 1927, 2716, 8549, 11950-11952, 12801 |
| * <i>Centromochlus macracanthus</i> , 2000                         |    |    |    | X   |     |         |     |     | IAvH-P 14318   |
| <i>Centromochlus perugiae</i> Steindachner, 1882                   |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)   IAvH-P 9270-9271, 9284, 9287, 9300-9301, 9314-9315, 9332-9333, 9348-9349, 9361-9362, 9378-9379        |
| <i>Centromochlus reticulatus</i> (Mees, 1974)                      |    |    |    | X   | +   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)   |
| <i>Centromochlus romani</i> (Mees, 1988)                           |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).  |
| <i>Gelanoglanis stroudi</i> Böhlke, 1980                           |    |    |    |     | X   |         |     |     | Böhlke (1980)   ANSP 142937, 142938-39, 142940, 142941   FMNH 83911, 83912   MZUSP 14641                                       |
| <i>Tatia aulopygia</i> (Kner, 1858)                                |    |    |    | X   | -   |         |     |     | IAvH-P 9108, 9134  |
| <i>Tatia dunnii</i> (Fowler, 1945)                                 |    |    |    | X   |     |         |     |     | Fowler (1945)   ANSP 71705, 71706  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Tatia galaxias</i> Mees, 1974                                |    |    |    |     | X   |         |     |     | Sarmento-Soares and Martins-Pinheiro (2008)  |
| <i>Tatia gyrina</i> (Eigenmann & Allen, 1942)                   |    |    |    | X   |     |         |     |     | Sarmento-Soares and Martins-Pinheiro (2008)  |
| <i>Tatia intermedia</i> (Steindachner, 1877)                    |    |    |    | X   | X   |         |     |     | Sarmento-Soares and Martins-Pinheiro (2008)   IAvH-P 1232  |
| * <i>Tatia marthae</i> Vari & Ferraris, 2013                    |    |    |    |     | X   |         |     |     | IAvH-P 12458, 12463, 12473, 12483, 12496, 12861, 12870, 12873  |
| * <i>Tatia nigra</i> Sarmento-Soares & Martins-Pinheiro, 2008   |    |    |    | X   | X   |         |     |     | CZUT-IC 4441, 4544, IAvH-P 12862, 12874  |
| * <i>Tatia strigata</i> Soares-Porto, 1995                      |    |    |    | X   | X   |         |     |     | CZUT-IC 4527, IAvH-P 5634, 10049, 10761, 12577, 12579, 12581-12583   |
| * <i>Ageneiosus dentatus</i> Kner 1857                          |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)   Ribeiro et al. (2017)  |
| <i>Ageneiosus inermis</i> (Linnaeus, 1766)                      |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Dahl (1960a)  |
| <i>Ageneiosus magoi</i> Castillo & Brull, 1989                  |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2013a)  |
| <i>Ageneiosus pardalis</i> Lütken, 1874                         |    |    | X  |     |     | X       |     | X   | Steindachner (1879a)   Dahl (1955)   |
| <i>Ageneiosus ucayalensis</i> Castelnau, 1855                   |    |    |    | X   | -   |         |     |     | Mojica et al. (2005)   |
| <i>Ageneiosus vittatus</i> Steindachner, 1908                   |    |    |    | X   | -   |         |     |     | ICN-MHN 5476, 5975-5976, 5978, 6605, 9178  |
| * <i>Asterophysus batrachus</i> Kner, 1858                      |    |    |    |     | X   |         |     |     | Ortega-Lara (2016)   IMCN 5528, 5529, 5530, 5964, 6116, 6117, 6118, 6119, 6120, 6121, 6122, 6123, 6124, 6433, 6434 |
| <i>Tympanopleura atronasis</i> (Eigenmann & Eigenmann, 1888)    |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Tympanopleura brevis</i> (Steindachner, 1881)                |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Tympanopleura piperata</i> Eigenmann, 1912                   |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| * <i>Auchenipterichthys coracoideus</i> Eigenmann & Allen, 1942 |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Auchenipterichthys longimanus</i> (Günther, 1864)            |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Maldonado-Ocampo et al. (2006a)   IAvH-P 255, 5260                   |
| <i>Auchenipterichthys punctatus</i> (Valenciennes, 1840)        |    |    |    | X   | +   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   IAvH-P 254, 2393, 10008-10019  |
| <i>Auchenipterus ambyiacus</i> Fowler, 1915                     |    |    |    | X   | X   |         |     |     | Ferraris and Vari (1999)   |
| <i>Auchenipterus nuchalis</i> (Spix & Agassiz, 1829)            |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2008)   Mojica et al. (2005)  |
| <i>Entomocorus gameroi</i> Mago-Leccia, 1984                    |    |    |    |     | X   |         |     |     | Reis and Borges (2006)   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Epapterus dispilurus</i> Cope, 1878                           |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Liosomadoras morrowi</i> Fowler, 1940                         |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   |
| <i>Liosomadoras oncinus</i> (Jardine, 1841)                      |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Pseudopapeterus cucuhyensis</i> Böhlke, 1951                  |    |    |    | X   |     |         |     |     | Böhlke (1951)  |
| <i>Pseudopapeterus hasemani</i> (Steindachner, 1915)             |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Tetranematicichthys wallacei</i> Vari & Ferraris, 2006        |    |    |    | X   | X   |         |     |     | Vari and Ferraris (2006)   IAvH-P 9084   |
| <i>Trachelyichthys decaradiatus</i> Mees, 1974                   |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)  |
| <i>Trachelyoptericichthys anduzei</i> Ferraris & Fernandez, 1987 |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)  |
| <i>Trachelyoptericichthys taeniatus</i> (Kner, 1858)             |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Cala (1977)   CAS-SU 42795   |
| <i>Trachelyopterus fisheri</i> (Eigenmann, 1916)                 | X  | X  |    |     |     | -       |     | X   | Eigenmann (1916)   FMNH 57695 [ex CM 6667a], 57696-98   CAS 52136 [ex IU 13496], 57937 [ex IU 13495], 57938 [ex IU 13497]   USNM 76929 |
| <i>Trachelyopterus galeatus</i> (Linnaeus, 1766)                 |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)   |
| <i>Trachelyopterus insignis</i> (Steindachner, 1878)             | X  | X  |    |     |     | X       |     | X   | Steindachner (1878)   Mojica et al. (2006a)  |
| <i>Trachelyopterus peloichthys</i> (Schultz, 1944)               |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)  |
| <i>Trachycorystes trachycorystes</i> (Valenciennes, 1840)        |    |    |    |     | X   |         |     |     | IAvH-P 12863, 12876, 12889   |
| <b>Doradidae</b>   |    |    |    |     |     |         |     |     |  |
| <b>56 spp (7 added and 4 deleted from 2008)</b>                  |    |    |    |     |     |         |     |     |  |
| <i>Acanthodoras cataphractus</i> (Linnaeus, 1758)                |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Galvis et al. (2007a)   ICN-MHN 360, 2772, 4183, 5402                                    |
| * <i>Acanthodoras depressus</i> (Steindachner, 1881)             |    |    |    | X   |     |         |     |     | CZUT-IC 4312   |
| <i>Acanthodoras spinosissimus</i> (Eigenmann & Eigenmann, 1888)  |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)   |
| <i>Agamyxis albomaculatus</i> (Peters, 1877)                     |    |    |    | -   | X   |         |     |     | Galvis et al. (2007a)  |
| <i>Agamyxis pectinifrons</i> (Cope, 1870)                        |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| * <i>Astrodonas</i> Bleeker, 1862                                |    |    |    | X   |     |         |     |     | Roa-Fuentes et al. (2010)  |
| <i>Amblydoras affinis</i> (Kner, 1855)                           |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   IAvH-P 747, 1075, 1181, 2807  |
| <i>Amblydoras bolivarensis</i> (Fernández-Yépez, 1968)           |    |    |    | X   |     |         |     |     | Maldonado-Ocampo et al. (2006a)  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Amblydoras gonzalezi</i> (Fernández-Yépez 1968)           |    |    |    | -   | X   |         |     |     | Galvis et al. (2007b)   |
| <i>Amblydoras monitor</i> (Cope, 1872)                       |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Amblydoras nauticus</i> (Cope, 1874)                      |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Anadoras grypus</i> (Cope, 1872)                          |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Anadoras regani</i> (Steindachner, 1908)                  |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)                    |
| <i>Hypodoras forficulatus</i> Eigenmann, 1925                |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Physopyxis ananas</i> Sousa & Rapp Py-Daniel, 2005        |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2008)                                |
| <i>Physopyxis lyra</i> Cope, 1871                            |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Scorpiodoras heckelii</i> (Kner, 1855)                    |    |    |    | X   | X   |         |     |     | Correa (2003)   Galvis et al. (2007a)                         |
| <i>Anduzedoras oxyrhynchus</i> (Valenciennes, 1821)          |    |    |    |     | X   |         |     |     | Cala (1977)   |
| <i>Centrochir crocodili</i> (Humboldt, 1821)                 | X  | X  |    |     |     | X       |     |     | Humboldt and Valenciennes (1821)                              |
| <i>Centrodoras brachiatus</i> (Cope, 1872)                   |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   IAvH-P 405, 479 |
| * <i>Centrodoras hasemani</i> (Steindachner, 1915)           |    |    |    | X   |     |         |     |     | CZUT-IC 14832   |
| <i>Doras phlyzakion</i> Sabaj Pérez & Brindelli, 2008        |    |    |    | X   |     |         |     |     | Sabaj Pérez and Birindelli (2008)                             |
| <i>Doraops zuloagai</i> Schultz, 1944                        |    |    | X  |     |     |         | X   |     | Ortega-Lara et al. (2012)                                     |
| <i>Hassar orestis</i> (Steindachner, 1875)                   |    |    |    | X   | X   |         |     |     | Birindelli et al. (2011)   IAvH-P 6046                        |
| <i>Hemidoras stenopeltis</i> (Kner, 1855)                    |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Hemidoras stuebelii</i> (Steindachner, 1882)              |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Leptodoras acipenserinus</i> (Günther, 1868)              |    |    |    | X   |     |         |     |     | Maldonado-Ocampo et al. (2008)                                |
| <i>Leptodoras juriensis</i> Boulenger, 1898                  |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Leptodoras linnelli</i> Eigenmann, 1912                   |    |    |    |     | X   |         |     |     | IAvH-P 15132  |
| <i>Leptodoras nelsoni</i> Sabaj Pérez, 2005                  |    |    |    | X   | X   |         |     |     | Sabaj (2005)   IAvH-P 904                                     |
| * <i>Leptodoras rogersae</i> Sabaj Pérez, 2005               |    |    |    |     | X   |         |     |     | CZUT-IC 9529  |
| * <i>Lithotodoras dorsalis</i> (Valenciennes, 1840)          |    |    |    | X   |     |         |     |     | CZUT-IC 14500   |
| <i>Megalodoras uranoscopus</i> (Eigenmann & Eigenmann, 1888) |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections                                 |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Nemadoras cristinae</i> Sabaj Pérez, Arce H., Sousa & Birindelli, 2014 |    |    |    | X   | X   |         |     |     | Sabaj Pérez et al. (2014)                              |
| <i>Nemadoras elongatus</i> (Boulenger, 1898)                              |    |    |    | X   |     |         |     |     | Sabaj Pérez et al. (2014)                              |
| <i>Nemadoras hemipeltis</i> (Eigenmann, 1925)                             |    |    |    | X   |     |         |     |     | Sabaj Pérez et al. (2014)                              |
| <i>Nemadoras humeralis</i> (Kner, 1855)                                   |    |    |    | X   |     |         |     |     | Sabaj Pérez et al. (2014)                              |
| <i>Orinocodoras eigenmanni</i> Myers, 1927                                |    |    |    |     | X   |         |     |     | Maldonado-Ocampo (2001)                                |
| <i>Opsodoras boulegeri</i> Steindachner, 1915                             |    |    |    | X   |     |         |     |     | Mojica et al. (2005)                                   |
| <i>Opsodoras morrisi</i> Eigenmann, 1925                                  |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)            |
| <i>Ossancora punctata</i> (Kner, 1853)                                    |    |    |    | X   |     |         |     |     | Birindelli and Sabaj Pérez (2011)                      |
| <i>Oxydoras niger</i> (Valenciennes, 1821)                                |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a) |
| <i>Oxydoras sifontesi</i> Fernández-Yépez, 1968                           |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   CZUT-IC 9380         |
| <i>Platydoras armatulus</i> (Valenciennes, 1840)                          |    |    |    | X   | X   |         |     |     | Piorski et al. (2008)                                  |
| <i>Platydoras hancockii</i> (Valenciennes, 1840)                          |    |    |    |     | X   |         |     |     | Cala (1977)  |
| <i>Pterodoras granulosus</i> (Valenciennes, 1821)                         |    |    |    | X   |     |         |     |     | Mojica et al. (2005)                                   |
| <i>Pterodoras rivasi</i> (Fernández-Yépez, 1950)                          |    |    |    | -   | X   |         |     |     | Birindelli (2014)                                      |
| * <i>Rhinodoras boehlkei</i> Glodek, Whitmire & Orcés V., 1976            |    |    |    | X   |     |         |     |     | CZUT-IC 12272, 12318                                   |
| <i>Rhinodoras gallagheri</i> Sabaj, Taphorn & Castillo G., 2008           |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)                         |
| <i>Rhinodoras thomsoni</i> Taphorn & Liljestrom, 1984                     |    |    | X  |     |     |         | X   |     | Ortega-Lara et al. (2012)                              |
| <i>Tenellus leporinus</i> (Eigenmann, 1912)                               |    |    |    | -   | X   |         |     |     | Sabaj Pérez et al. (2014)                              |
| <i>Tenellus ternetzi</i> (Eigenmann, 1925)                                |    |    |    | X   | +   |         |     |     | Sabaj Pérez et al. (2014)                              |
| <i>Tenellus trimaculatus</i> (Boulenger, 1898)                            |    |    |    | X   |     |         |     |     | Mojica et al. (2005)                                   |
| <i>Trachydoras microstomus</i> (Eigenmann, 1912)                          |    |    |    | -   | +   |         |     |     | IAvH-P 10752   |
| <i>Trachydoras nattereri</i> (Steindachner, 1881)                         |    |    |    | X   |     |         |     |     | Mojica et al. (2005)                                   |
| <i>Trachydoras steindachneri</i> (Perugia, 1897)                          |    |    |    | X   |     |         |     |     | Mojica et al. (2005)                                   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <b>Ariidae</b>   |    |    |    |     |     |         |     |     |  |
| <b>1 sp</b>  |    |    |    |     |     |         |     |     |  |
| <i>Notarius bonillai</i> (Miles, 1945)                                   | X  | X  | X  |     |     | X       |     | +   | Miles (1945)   Acero and Betancur-R (2006)   |
| <b>Heptapteridae</b>   |    |    |    |     |     |         |     |     |  |
| <b>52 spp (14 added and 7 deleted from 2008)</b>                         |    |    |    |     |     |         |     |     |  |
| * <i>Brachyrhamdia imitator</i> Myers, 1927                              |    |    |    |     | X   |         |     |     | IMCN 5691  |
| * <i>Brachyrhamdia meesi</i> Sands & Black, 1985                         |    |    |    | X   |     |         |     |     | IAvH-P 11146   |
| * <i>Brachyrhamdia thayeria</i> Slobodian & Bockmann, 2013               |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Cetopsorhamdia boquillae</i> Eigenmann, 1922                          | X  | X  |    |     |     | X       |     |     | Eigenmann (1922)   CAS 63607 [ex IU 15004]   FMNH 55212 [ex CM 3923], 55213 [ex CM 3924] |
| <i>Cetopsorhamdia molinae</i> Miles, 1943                                | X  | X  |    |     |     | X       |     |     | Miles (1943)   |
| <i>Cetopsorhamdia nasus</i> Eigenmann & Fisher, 1916                     | X  | X  |    |     |     | X       |     |     | Eigenmann (1916)   FMNH 58126 [ex CM 7124]   |
| <i>Cetopsorhamdia orinoco</i> Schultz, 1944                              |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).  |
| <i>Cetopsorhamdia picklei</i> Schultz, 1944                              |    |    |    |     | -   |         |     | X   | Ortega-Lara et al. (2012)  |
| <i>Chasmocranus rosae</i> Eigenmann, 1922                                | X  | X  |    |     | X   |         |     |     | Eigenmann (1922)   FMNH 55140 [ex CM 3841], 55141 [?CM 3842]   CAS 75751 [ex IU 15019]   |
| <i>Gladioglanis conquistador</i> Lundberg, Bornbusch & Mago-Leccia, 1991 |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| * <i>Gladioglanis machadoi</i> Ferraris & Mago-Leccia, 1989              |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   CZUT-IC 5091, 5126                                     |
| <i>Goeldiella eques</i> (Müller & Troschel, 1848)                        |    |    |    | X   | X   |         |     |     | Correa (2003)   Maldonado-Ocampo (2001)  |
| <i>Heptapterus panamensis</i> Bussing, 1970                              |    |    |    |     |     |         | X   |     | IAvH-P 7273-7274   |
| <i>Imparfinis microps</i> Eigenmann & Fisher, 1916                       | X  | X  |    |     | X   |         |     |     | Eigenmann (1916)   FMNH 57793 [ex CM 6776 not 8778]                                      |
| <i>Imparfinis nemacheir</i> (Eigenmann & Fisher, 1916)                   |    |    |    |     |     | X       | X   | X   | Eigenmann (1916)   Eigenmann (1922)  |
| <i>Imparfinis pristos</i> Mees & Cala, 1989                              |    |    |    |     | X   |         |     |     | Mees and Cala (1989)   ICN-MHN 1401, 1402   RMNH 30544                                   |
| <i>Imparfinis pseudonemacheir</i> Mees & Cala, 1989                      |    |    |    |     | X   |         |     |     | Mees and Cala (1989)   |
| <i>Imparfinis spurrellii</i> (Regan, 1913)                               | X  | X  |    |     |     |         | X   |     | Regan (1913)   BMNH 1913.10.1.41   |
| <i>Imparfinis stictonotus</i> (Fowler, 1940)                             |    |    |    | X   |     |         |     |     | Fowler (1945)  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Imparfinis timana</i> Ortega-Lara, Milani, DoNascimento, Villa-Navarro & Maldonado-Ocampo, 2011 | X  | X  |    |     |     | X       |     |     | Ortega-Lara et al. (2011)   IAvH-P 10696   |
| <i>Imparfinis usmai</i> Ortega-Lara, Milani, DoNascimento, Villa-Navarro & Maldonado-Ocampo, 2011  | X  | X  |    |     |     | X       | X   |     | Ortega-Lara et al. (2011)   IMCN 4812  |
| <i>Mastiglanis asopos</i> Bockmann, 1994   |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Myoglanis koepckeae</i> Chang, 1999   |    |    |    | X   |     |         |     |     | Galvis et al. (2007b)  |
| <i>Nemuroglanis mariae</i> (Schultz, 1944)   | X  | X  |    |     | X   |         |     |     | Schultz (1944a)   USNM 121251  |
| * <i>Nemuroglanis pauciradiatus</i> Ferraris, 1988   |    |    |    |     | X   |         |     |     | IAvH-P   |
| <i>Pariolius armillatus</i> (Mees, 1987)   |    |    |    | X   |     |         |     |     | IAvH-P 8680, 8935, 9003, 9087, 9113, 9389, 9433  |
| * <i>Phenacorhamdia anisura</i> (Mees, 1987)   |    |    |    |     | X   |         |     |     | IAvH-P 12894   |
| <i>Phenacorhamdia macarenensis</i> Dahl, 1961  | X  | X  |    |     | X   |         |     |     | Dahl (1961)  |
| <i>Phenacorhamdia nigrolineata</i> Zarske, 1998  |    |    |    | X   |     |         |     |     | Maldonado-Ocampo et al. (2008)   |
| * <i>Phenacorhamdia provenzanoi</i> DoNascimento & Milani, 2008                                    |    |    |    |     | X   |         |     |     | CZUT-IC 6351, 6881, 6988   |
| * <i>Phenacorhamdia taphorni</i> DoNascimento & Milani, 2008                                       |    |    |    |     | X   |         |     |     | IAvH-P 7932, 9254, 9594, 10727   |
| <i>Pimelodella chagresi</i> (Steindachner, 1876)   |    |    |    |     |     | X       | X   | X   | Fowler (1944)   Eigenmann (1922)   |
| <i>Pimelodella conquetaensis</i> Ahl, 1925   | X  | X  |    | X   |     |         |     |     | Ahl (1925)   ZMB 32030   |
| <i>Pimelodella cristata</i> (Müller & Troschel, 1848)  |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Urbano-Bonilla et al. (2009).   |
| * <i>Pimelodella cruxenti</i> Fernández-Yépez, 1950  |    |    |    |     | X   |         |     |     | CZUT-IC 7180, 7192   |
| <i>Pimelodella eutaenia</i> Regan, 1913  | X  | X  |    |     |     | -       | X   | X   | Regan (1913)   BMNH 1913.10.1.37-40  |
| <i>Pimelodella figueroai</i> Dahl, 1961  | X  | X  |    |     | X   |         |     |     | Dahl (1961)  |
| <i>Pimelodella floridablancaensis</i> Ardila Rodríguez, 2017                                       | X  | X  |    |     |     | X       |     |     | Ardila Rodríguez (2017a)   |
| <i>Pimelodella geryi</i> Hoedeman, 1961  |    |    |    | X   |     |         |     |     | Arbeláez et al. (2004)   |
| <i>Pimelodella gracilis</i> (Valenciennes, 1835)   |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Lasso et al. (2005)   IAvH-P 1847, 1967, 3724, 3725-3729, 10004-10005   ICN-MHN 1816, 3731, 1909, 2179, 5512, 5654 |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Pimelodella grisea</i> (Regan, 1903)                               |    |    |    |     |     | X       |     |     | Regan (1913)  |
| <i>Pimelodella linami</i> Schultz, 1944                               |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)   |
| <i>Pimelodella macrocephala</i> (Miles, 1943)                         | X  | X  | X  |     |     | X       |     |     | Miles (1943)   MCZ 35876   USNM 120157  |
| <i>Pimelodella metae</i> Eigenmann, 1917                              |    |    |    |     | X   |         |     |     | Eigenmann (1917b)   CAS [ex IU 13768]   FMNH 58441 [ex CM 7441 or 7141], 58442   ICN-MHN 17128                |
| <i>Pimelodella modestus</i> (Günther, 1860)                           |    |    |    |     |     |         | X   |     | Eigenmann (1922)  |
| <i>Pimelodella odynea</i> Schultz, 1944                               |    |    |    |     |     |         |     | X   | Ortega-Lara et al. (2012)   |
| <i>Pimelodella pallida</i> Dahl, 1961                                 | X  | X  |    |     | X   |         |     |     | Dahl (1961)   |
| <i>Pimelodella reyesi</i> Dahl, 1964                                  | X  | X  |    |     |     |         |     | X   | Dahl and Medem (1964)   |
| * <i>Rhamdia guatemalensis</i> (Günther, 1864)                        |    |    |    |     | X   | X       | X   |     | Hernández et al. (2015)   |
| <i>Rhamdia laukidi</i> Bleeker, 1858                                  |    |    |    |     | X   |         |     |     | Hernández et al. (2015)   |
| <i>Rhamdia quelen</i> (Quoy & Gaymard, 1824)                          |    |    |    | X   | X   | -       | -   | -   | Bogotá-Gregory and Maldonado-Ocampo (2006a)   Eigenmann (1922)   IAvH-P 6182, 6223   ICN-MHN 5029, 6579, 6591 |
| * <i>Rhamdia saijaensis</i> Rendahl, 1941                             | X  | X  |    |     |     |         | X   |     | Rendahl (1941)  |
| <b>Pimelodidae</b><br><b>53 spp (3 added and 4 deleted from 2008)</b> |    |    |    |     |     |         |     |     |   |
| <i>Aguarunichthys inpai</i> Zuanon, Rapp Py-Daniel & Jégu, 1993       |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Brachyplatystoma filamentosum</i> (Lichtenstein, 1819)             |    |    | X  | X   | X   |         |     |     | Ajíaco-Martínez et al. 2012a)   |
| <i>Brachyplatystoma juriense</i> (Boulenger, 1898)                    |    |    | X  | X   | X   |         |     |     | Ramírez-Gil et al. (2012a)   Cala (1977)  |
| <i>Brachyplatystoma platynemum</i> Boulenger, 1898                    |    |    | X  | X   | X   |         |     |     | Ramírez-Gil et al. (2012b)  |
| <i>Brachyplatystoma rousseauxii</i> (Castelnau, 1855)                 |    |    | X  | X   | X   |         |     |     | Agudelo-Córdoba et al. (2012)   |
| <i>Brachyplatystoma tigrinum</i> (Britskii, 1981)                     |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Brachyplatystoma vaillantii</i> (Valenciennes, 1840)               |    |    | X  | X   | X   |         |     |     | Ajíaco-Martínez (2012b)   Dahl (1961)   |
| <i>Platynematicthys notatus</i> (Jardine, 1841)                       |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2004)   |
| <i>Calophysus macropterus</i> (Lichtenstein, 1819)                    |    |    |    | X   | X   |         |     |     | Dahl (1961)   Mojica et al. (2005)   IAvH-P 2210   ICN-MHN 7889, 8158   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Cheirocerus abuelo</i> (Schultz, 1944)                        |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)  |
| <i>Cheirocerus goeldii</i> (Steindachner, 1908)                  |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Duopalatinus peruanus</i> Eigenmann & Allen, 1942             |    |    |    |     | X   |         |     |     | MPUJ   |
| * <i>Exallodontus aguanai</i> Lundberg, Mago-Leccia & Nass, 1991 |    |    |    |     | X   |         |     |     | CZUT-IC 9407, 9420, 9553, 9660, 9708, 9727, 9733, 9745, 9842   |
| <i>Hemisorubim platyrhynchos</i> (Valenciennes, 1840)            |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   Mojica et al. (2005)   |
| <i>Hypophthalmus edentatus</i> Spix & Agassiz, 1829              |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)   |
| <i>Hypophthalmus fimbriatus</i> Kner, 1858                       |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Hypophthalmus marginatus</i> Valenciennoes, 1840              |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Lasso et al. (2005)   ICN-MHN 8228  |
| <i>Hypophthalmus orenmaculatus</i> Nani & Fuster, 1947           |    |    |    | X   | +   |         |     |     | Mojica et al. (2005)   Littmann et al. (2015)  |
| <i>Leiarius marmoratus</i> (Gill, 1870)                          |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Eigenmann (1922)  |
| <i>Leiarius perruno</i> (Schultz, 1944)                          |    |    |    | -   |     |         |     | +   | Ortega-Lara et al. (2012)  |
| <i>Leiarius pictus</i> (Müller & Troschel, 1849)                 |    |    |    | X   | X   |         |     |     | Lasso et al. (2005)   Correa (2003)   IMCN 842   |
| <i>Megalonema orixanthum</i> Lunberg & Dahdul, 2008              |    |    |    |     | X   |         |     |     | Lundberg and Dahdul (2008)   ANSP 187449 (ex ANSP 148143)  |
| <i>Megalonema platycephalum</i> Eigenmann, 1912                  |    |    |    | -   | X   |         |     |     | Dahl (1961)}   |
| <i>Megalonema psammium</i> Schultz, 1944                         |    |    |    |     |     |         | X   |     | Ortega-Lara et al. (2012)  |
| <i>Megalonema xanthum</i> Eigenmann, 1912                        | X  | X  | X  |     |     | X       |     |     | Eigenmann (1912)   FMNH 56032 [ex CM 4822]   AMNH 5340   BMNH 1920.12.20.112-113, 1924.3.3.83-84   CAS 63674-75 [ex IU 12681-82]   FMNH 10251, 10284-89, 77909, 56032-33, 69818, 95984   MCZ 30961   UMMZ 190406   USNM 76930, 79222, 167852 |
| <i>Phractocephalus hemiolopterus</i> (Bloch & Schneider, 1801)   |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Dahl (1961)   |
| <i>Pimelodina flavipinnis</i> Steindachner, 1877                 |    |    |    | X   | X   |         |     |     | Lasso et al. (2005)   Mojica et al. (2005)   ICN-MHN 6874, 8143  |
| <i>Pimelodus albofasciatus</i> Mees, 1974                        |    |    |    | + X |     |         |     |     | Lasso et al. (2005)   IAvH-P 256, 503, 836, 477, 2150, 2677, 2731, 6023, 8754, 8821, 8850, 8913   ICN-MHN 1259, 1951, 1798, 3725, 3726   3822, 3386  |
| <i>Pimelodus blochii</i> Valenciennes, 1840                      |    |    |    | X   | X   | X       | X   | X   | Mojica et al. (2005)   Galvis et al. (2007a)   Mojica et al. (2006a)   Maldonado-Ocampo et al. (2013b)   |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|--|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Pimelodus coprophagus</i> Schultz, 1944                         |    |    | X  |     |     |         | X   |     | Ortega-Lara et al. (2012)  |
| <i>Pimelodus crypticus</i> Villa-Navarro & Cala, 2017              | X  | X  |    |     |     | X       |     |     | Villa-Navarro et al. (2017)  |
| <i>Pimelodus garciabarrigai</i> Dahl, 1960                         | X  | X  |    |     | X   |         |     |     | Dahl (1961)   ICN-MHN 744, ICN-MHN 410   |
| <i>Pimelodus grosskopffii</i> Steindachner, 1879                   | X  | X  | X  |     |     | X       | -   | -   | Steindachner (1879b)   NMW 45781-45782   |
| <i>Pimelodus navarroi</i> Schultz, 1944                            |    |    |    |     |     |         | X   |     | Mojica (1999)   ICN-MHN 2150   |
| <i>Pimelodus ornatus</i> Kner, 1858                                |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Dahl (1961)   |
| <i>Pimelodus pictus</i> Steindachner, 1877                         |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)   |
| <i>Pimelodus punctatus</i> (Meek & Hildebrand, 1913)               |    |    |    |     |     |         | +   | X   | Maldonado-Ocampo et al. (2013b)   Villa-Navarro et al. (2017)  |
| <i>Pimelodus yuma</i> Villa-Navarro & Acero P., 2017               | X  | X  |    |     |     | X       |     | X   | Villa-Navarro et al. (2017)  |
| <i>Pinirampus pirinampu</i> (Spix & Agassiz, 1829)                 |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)   |
| <i>Platysilurus malarmo</i> Schultz, 1944                          |    |    | X  |     |     |         |     | X   | Ortega-Lara et al. (2012)  |
| <i>Platysilurus mucosus</i> (Vaillant, 1880)                       |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)   |
| <i>Platystomatichthys sturio</i> (Kner, 1858)                      |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Pseudoplatystoma magdaleniatum</i> Buitrago-Suárez & Burr, 2007 | X  | X  | X  |     |     | X       |     |     | Buitrago-Suárez and Burr (2007)   CAS 19165   FMNH 56278, 59234  |
| <i>Pseudoplatystoma metaense</i> Buitrago-Suárez & Burr, 2007      |    |    | X  |     | X   |         |     |     | Buitrago-Suárez and Burr (2007)   ANSP 146858, 128135, 149541  |
| <i>Pseudoplatystoma orinocoense</i> Buitrago-Suárez & Burr, 2007   |    |    | X  |     | X   |         |     |     | Buitrago-Suárez and Burr (2007)  |
| <i>Pseudoplatystoma punctifer</i> (Castelnau, 1855)                |    |    | X  | X   |     |         |     |     | Buitrago-Suárez and Burr (2007)  |
| <i>Pseudoplatystoma tigrinum</i> (Valenciennes, 1840)              |    |    | X  | X   |     |         |     |     | Buitrago-Suárez and Burr (2007)  |
| <i>Sorubim cuspicaudus</i> Littmann, Burr & Nass, 2000             |    |    | X  |     |     | X       |     | +   | Littmann et al. (2000)   AUM 28756   CAS 150404, 150406   EBRG 8216   FMNH 56223, 60305, 107492   IAvH-P 11809   INHS 35428; |
| <i>Sorubim elongatus</i> Littmann, Burr, Schmidt & Isern, 2001     |    |    |    | X   | X   |         |     |     | Littmann et al. (2001)   |
| <i>Sorubim lima</i> (Bloch & Schneider, 1801)                      |    |    | X  | X   | X   |         |     |     | Littmann (2007)   Dahl (1961)  |
| <i>Sorubim maniradii</i> Littmann, Burr & Buitrago-Suarez, 2001    |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Sorubimichthys planiceps</i> (Spix & Agassiz, 1829)             |    |    | X  | X   | X   |         |     |     | Mojica et al. (2005)   Dahl (1961)   ICN-MHN 7880, 9938, 17351   |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Zungaro zungaro</i> (Humboldt, 1821)                       |    |    | X  | X   | X   |         |     |     | Mojica et al. (2005)   |
| <b>Pseudopimelodidae</b><br><b>12 spp (1 added from 2008)</b> |    |    |    |     |     |         |     |     |  |
| <i>Batrochoglanis acanthochiroides</i> (Günther, 1942)        |    |    |    |     |     |         | -   | +   | Ortega-Lara et al. (2012)  |
| <i>Batrochoglanis raninus</i> (Valenciennes, 1840)            |    |    |    | X   | -   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   |
| <i>Batrochoglanis transmontanus</i> (Regan, 1913)             |    |    |    |     |     | -       | X   | X   | Regan (1913)   Maldonado-Ocampo et al. (2013b)   |
| <i>Batrochoglanis villosus</i> (Eigenmann, 1912)              |    |    |    |     | -   | +       |     |     | Lasso et al. 2004, Bogotá-Gregory and Maldonado-Ocampo 2006, Maldonado-Ocampo et al. 2008, Lasso et al. 2009   IAvH-P 5705, 10059, 10060, 10061, 10062, 10063, 10064, 10065, 10066, 10743, 10798, 12466, 12467, 12481, 12867, 12880, 12913 |
| <i>Cephalosilurus apurensis</i> (Mees, 1978)                  |    |    |    |     | X   |         |     |     | Lasso et al. (2005)   IAvH-P 3731  |
| <i>Cruciglanis pacifici</i> Ortega-Lara & Lehmann, 2006       | X  | X  | X  |     |     |         | X   |     | Ortega-Lara and Lehmann (2006)   IMCN 2359   IAvH-P 7505   |
| <i>Microglanis iheringi</i> Gomes, 1946                       |    |    |    |     | X   |         |     |     | Cala (1977)  |
| <i>Microglanis poecilus</i> Eigenmann, 1912                   |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)   |
| <i>Microglanis secundus</i> Mees, 1974                        |    |    |    |     | X   |         |     | -   | Lasso et al. (2005)   ICN-MHN 1912   |
| <i>Pseudopimelodus bufonius</i> (Valenciennes, 1840)          |    |    |    | X   | X   | -       |     | X   | Lasso et al. (2005)   Ortega-Lara et al. (2012)   IAvH-P 3371, 9198-9199, 11294, 12291   ICN-MHN 772, 6582   |
| <i>Pseudopimelodus schultzi</i> (Dahl, 1955)                  | X  | X  | X  |     | -   | X       |     | X   | Dahl (1955)   Mojica et al. (2006a)  |
| <i>Rhyacoglanis annulatus</i> Shibatta & Vari, 2017           |    |    |    |     | X   |         |     |     | Shibatta and Vari (2017)   |
| <b>Batrachoidiformes</b><br><b>3 spp</b>                      |    |    |    |     |     |         |     |     |  |
| <b>Batrachoididae</b>   |    |    |    |     |     |         |     |     |  |
| <i>Daector gerringi</i> (Rendahl, 1941)                       | X  | X  |    |     |     |         | X   |     | Rendahl (1941)   NRM 10651   |
| <i>Daector quadrizonatus</i> (Eigenmann, 1922)                | X  | X  |    |     |     |         | -   | X   | Eigenmann (1922)   FMNH [ex CM 3921]   |
| <i>Thalassophryne amazonica</i> Steindachner, 1876            |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <b>Gobiiformes</b><br><b>1 sp (1 deleted from 2008)</b>       |    |    |    |     |     |         |     |     |  |
| <b>Eleotridae</b>   |    |    |    |     |     |         |     |     |  |
| <i>Microphylypnus ternetzi</i> Myers, 1927                    |    |    |    | +   | X   |         |     |     | Caires and Figueiredo (2011)   Galvis et al. (2007a)   |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <b>Synbranchiformes</b>   |    |    |    |     |     |         |     |     |   |
| <b>1 sp</b>   |    |    |    |     |     |         |     |     |   |
| <b>Synbranchidae</b>  |    |    |    |     |     |         |     |     |   |
| <i>Synbranchus marmoratus</i><br>Bloch, 1795                            |    |    |    | X   | X   | X       | X   | X   | Mojica et al. (2005)   Fowler (1943)   Galvis et al. (2007a)   Steindachner (1880)   Maldonado-Ocampo et al. (2013b)   Regan (1913) |
| <b>Pleuronectiformes</b>  |    |    |    |     |     |         |     |     |   |
| <b>5 spp (2 added and 2 deleted from 2008)</b>                          |    |    |    |     |     |         |     |     |   |
| <b>Achiridae</b>  |    |    |    |     |     |         |     |     |   |
| <i>Achirus novoae</i> Cervigón,<br>1982                                 |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| * <i>Apionichthys nattereri</i><br>(Steindachner, 1876)                 |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Apionichthys sauli</i> Ramos,<br>2003                                |    |    |    |     | X   |         |     |     | Ramos (2003b)   ANSP 176081, 163851-53, 163854, 163855-56   MZUSP 52055   UFPB 3596   |
| <i>Hypoclinemus mentalis</i><br>(Günther, 1862)                         |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Lasso et al. (2009)   IMCN 2657, 2662   IAvH-P 10784-10787   |
| <i>Trinectes hubbsbollingeri</i><br>Duplain, Chapleau &<br>Munroe, 2012 | X  | X  |    |     |     |         | X   |     | Duplain et al. (2012)   BMNH 1915.10.1.19,  |
| <b>Ovalentaria incertae sedis</b>                                       |    |    |    |     |     |         |     |     |   |
| <b>Polycentridae</b>  |    |    |    |     |     |         |     |     |   |
| <b>1 sp</b>   |    |    |    |     |     |         |     |     |   |
| <i>Monocirrhus polyacanthus</i><br>Heckel, 1840                         |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Cala (1977)  |
| <b>Cichliformes</b>   |    |    |    |     |     |         |     |     |   |
| <b>94 spp (8 added and 30 deleted from 2008)</b>                        |    |    |    |     |     |         |     |     |   |
| <b>Cichlidae</b>  |    |    |    |     |     |         |     |     |   |
| <i>Cichla intermedia</i> Machado-Allison, 1971                          |    |    |    |     | X   |         |     |     | Maldonado-Ocampo (2001)   |
| <i>Cichla monoculus</i> Spix & Agassiz, 1831                            |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Maldonado-Ocampo et al. (2006a)  |
| <i>Cichla orinocensis</i> Humboldt, 1821                                |    |    |    | X   | X   |         |     |     | Kullander and Ferreira (2006)   |
| <i>Cichla temensis</i> Humboldt, 1821                                   |    |    |    | X   | X   |         |     |     | Galvis et al. (2007b)   Cala (1977)   |
| <i>Chaetobranchus flavescens</i><br>Heckel, 1840                        |    |    |    | X   | X   |         |     |     | Kullander (1986)   Galvis et al. (2007a)  |
| <i>Acarichthys heckelii</i> (Müller & Troschel, 1849)                   |    |    |    | X   |     |         |     |     | Kullander (1986)  |
| <i>Biotoecus dicentrarchus</i><br>Kullander, 1989                       |    |    |    |     | X   |         |     |     | Kullander (1989a)   ICN-MHN 1400   FMNH 85650, 105089   NRM 16662, 37078  |
| <i>Crenicara punctulatum</i><br>(Günther, 1863)                         |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Crenicichla alta</i> Eigenmann, 1912                            |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Maldonado-Ocampo et al. (2006a)                            |
| <i>Crenicichla anthurus</i> Cope, 1872                             |    |    |    | X   | X   |         |     |     | Correa (2003)   Galvis et al. (2007a)   |
| <i>Crenicichla geayi</i> Pellegrin, 1903                           |    |    |    |     | X   |         |     |     | Regan (1905)  |
| <i>Crenicichla johanna</i> Heckel, 1840                            |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)  |
| <i>Crenicichla lenticulata</i> Heckel, 1840                        |    |    |    | X   | X   |         |     |     | Correa (2003)   Cala (1977)   |
| <i>Crenicichla lugubris</i> Heckel, 1840                           |    |    |    | X   | X   |         |     |     | Fowler (1943)   IAvH-P 389, 2327, 4893, 10110   ICN-MHN 867, 877, 884, 1553, 1668, 2286                 |
| <i>Crenicichla monicae</i> Kullander & Varella, 2015               |    |    |    | X   |     |         |     |     | Kullander and Varella (2015)  |
| <i>Crenicichla reticulata</i> (Heckel, 1840)                       |    |    |    | X   | -   |         |     |     | Kullander (1986)  |
| <i>Crenicichla strigata</i> Günther, 1862                          |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   ICN-MHN 2594, 10233                                       |
| <i>Crenicichla sveni</i> Ploeg, 1991                               |    |    |    |     | X   |         |     |     | Ploeg (1991)   RMNH 31622, 31623   ZMA 120388   |
| * <i>Crenicichla zebra</i> Montaña, López-Fernández & Taphorn 2008 |    |    |    |     | X   |         |     |     | IMCN 6476   |
| <i>Dicrossus filamentosus</i> (Ladiges, 1958)                      |    |    |    |     | X   |         |     |     | Cala (1977)   |
| <i>Dicrossus gladiocauda</i> Schindler & Staek, 2008               |    |    |    |     | X   |         |     |     | Schindler and Staek (2008)   MTDF 31312, 33313-18   |
| <i>Apitogramma agassizii</i> (Steindachner, 1875)                  |    |    |    | X   |     |         |     |     | Kullander (1986)  |
| <i>Apitogramma alacrina</i> Kullander, 2004                        | X  | X  |    | X   | X   |         |     |     | Kullander (2004)   UF 33670, 128785, 33687, 33717   CAS 50638   ICNM-NHN 6735   NRM 27040, 33375, 36102 |
| <i>Apitogramma betaeniata</i> Pellegrin, 1936                      |    |    |    | X   |     |         |     |     | Kullander (1986)  |
| <i>Apitogramma cacatuoides</i> Hoedeman, 1951                      |    |    |    | X   |     |         |     |     | Kullander (1986)  |
| <i>Apitogramma cruzi</i> Kullander, 1986                           |    |    |    | X   |     |         |     |     | Kullander (1986)  |
| <i>Apitogramma diplostenia</i> Kullander, 1987                     |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)  |
| <i>Apitogramma eunotus</i> Kullander, 1981                         |    |    |    | X   |     |         |     |     | Kullander (1986)   NRM 17784  |
| * <i>Apitogramma flabellicauda</i> Mesa S. & Lasso, 2011           |    |    |    | X   | X   |         |     |     | CZUT-IC 1494, IAvH-P 10087, 10089-10092, 10094-10098  |
| <i>Apitogramma hoignei</i> Meinken, 1965                           |    |    |    |     | X   |         |     |     | Urbano-Bonilla et al. (2009).   |
| <i>Apitogramma hongsloi</i> Kullander, 1979                        |    |    |    | -   | X   |         |     |     | Kullander (1979)   NRM 11234, 11235-39  |

| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Apitogramma iniridae</i><br>Kullander, 1979               | X  | X  |    | X   | X   |         |     |     | Kullander (1979)   Bogotá-Gregory and Maldonado-Ocampo (2005)                                 |
| <i>Apitogramma lineata</i> Mesa S. & Lasso, 2011             | X  | X  |    |     | X   |         |     |     | Mesa S and Lasso (2011b)  |
| <i>Apitogramma macmasteri</i><br>Kullander, 1979             | X  | X  |    |     | X   |         |     |     | Kullander (1979)   AMNH 22733   FMNH 55218 [ex CM 3930]   ICN-MHN 17117   NRM 11240, 11241-44 |
| <i>Apitogramma megaptera</i><br>Mesa & Lasso, 2011           |    |    |    |     | X   |         |     |     | Mesa Salazar and Lasso (2011a)  |
| <i>Apitogramma minima</i> Mesa S. & Lasso, 2011              |    |    |    |     | X   |         |     |     | Mesa S and Lasso (2011b)   IAvH-P 11876   |
| <i>Apitogramma piaroa</i> Mesa S. & Lasso, 2011              |    |    |    |     | X   |         |     |     | Mesa S and Lasso (2011b)  |
| <i>Apitogramma velifera</i> Staek, 2003                      |    |    |    |     | X   |         |     |     | Mesa S and Lasso (2011b)  |
| <i>Apitogramma viejita</i><br>Kullander, 1979                |    |    |    |     | X   |         |     |     | Kullander (1979)   NRM 11231, 11232   |
| <i>Apitogrammoides pucallpaensis</i> Meinken, 1965           |    |    |    | X   |     |         |     |     | Kullander (1986)  |
| <i>Biotodoma cupido</i> (Heckel, 1840)                       |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Biotodoma wavrini</i> (Gosse, 1963)                       |    |    |    | X   | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   Arbeláez et al. (2004)                                      |
| <i>Geophagus abalios</i> López-Fernández & Taphorn, 2004     |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Galvis et al. (2007a)                            |
| <i>Geophagus crassilabris</i> Steindachner, 1876             |    |    |    |     |     | X       |     |     | ICN-MHN 98  |
| <i>Geophagus dicrozoster</i> López-Fernández & Taphorn, 2004 |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Geophagus megasema</i> Heckel, 1840                       |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)  |
| <i>Geophagus pellegrini</i> Regan, 1912                      | X  | X  |    |     |     | X       | X   |     | Regan (1912a)   Eigenmann (1922)  |
| <i>Geophagus steindachneri</i> Eigenmann & Hildebrand, 1910  |    |    |    |     |     | X       |     | X   | Eigenmann (1910)   Ortega-Lara et al. (2012)  |
| <i>Geophagus surinamensis</i> (Bloch, 1791)                  |    |    |    | X   |     |         |     |     | Correa (2003)   |
| <i>Geophagus taeniopareius</i> Kullander & Royero, 1992      |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2006a)   |
| <i>Geophagus winemilleri</i> López-Fernández & Taphorn, 2004 |    |    |    | X   | X   |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)   Maldonado-Ocampo and Bogotá-Gregory (2007)       |
| <i>Mikrogeophagus ramirezi</i> (Myers & Harry, 1948)         |    |    |    |     | X   |         |     |     | Cala (1977)   |
| <i>Satanoperca daemon</i> (Heckel, 1840)                     |    |    |    | X   | X   |         |     |     | Correa (2003)   Maldonado-Ocampo et al. (2006a)   |
| <i>Satanoperca jurupari</i> (Heckel, 1840)                   |    |    |    | X   |     |         |     |     | Kullander (1986)  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <i>Satanoperca mapiritensis</i> (Fernández-Yépez, 1950) |    |    |    |     | X   |         |     |     | Galvis et al. (2007a)  |
| <i>Astronotus ocellatus</i> (Agassiz, 1831)             |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)   |
| <i>Acaronia nassa</i> (Heckel, 1840)                    |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)   IAvH-P 5308                                |
| <i>Acaronia vultuosa</i> Kullander, 1989                |    |    |    | -   | X   |         |     |     | Kullander (1989b)  |
| <i>Aequidens diadema</i> (Heckel, 1840)                 |    |    |    | X   | X   |         |     |     | Arbeláez et al. (2004)   Maldonado-Ocampo et al. (2006a)                                 |
| <i>Aequidens metae</i> Eigenmann, 1922                  |    |    |    | -   | X   |         |     |     | Eigenmann (1922)   CAS 66884 [ex IU 13967], 66983 [ex IU 13967]   IAvH-P 3162            |
| <i>Aequidens tetramerus</i> (Heckel, 1840)              |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   |
| <i>Andinoacara biseriatus</i> (Regan, 1913)             | X  | X  |    |     |     |         | X   | X   | Regan (1913)   Eigenmann (1922)  |
| <i>Andinoacara latifrons</i> (Steindachner, 1878)       | X  | X  |    |     |     | X       | X   | X   | Steindachner (1878)   Maldonado-Ocampo et al. (2013b)   Eigenmann (1922)                 |
| <i>Andinoacara sapayensis</i> (Regan, 1903)             |    |    |    |     |     |         | X   |     | Eigenmann (1922)   |
| <i>Bujurquina mariae</i> (Eigenmann, 1922)              | X  | X  |    | -   | X   |         |     |     | Eigenmann (1922)   |
| <i>Bujurquina moriorum</i> Kullander, 1986              |    |    |    | X   |     |         |     |     | Kullander (1986)   |
| <i>Bujurquina peregrinabunda</i> Kullander, 1986        |    |    |    | X   |     |         |     |     | Kullander (1986)   |
| <i>Bujurquina sysphilus</i> (Cope, 1872)                |    |    |    | X   |     |         |     |     | Mojica (1999)   ICN-MHN 1523, 1529   |
| <i>Chocoheros microlepis</i> (Dahl, 1960)               | X  | X  |    |     |     |         | X   |     | Dahl (1960c)   ICN-MHN 95, 95a   |
| <i>Cichlasoma amazonarum</i> Kullander, 1983            |    |    |    | X   |     |         |     |     | Kullander (1986)   |
| <i>Cichlasoma gephyrum</i> Eigenmann, 1922              | X  | X  |    |     |     |         | X   |     | Eigenmann (1922)   FMNH 58614 [ex CM 7639], 58615 [ex CM 7639]   CAS 66956 [ex IU 14171] |
| <i>Cichlasoma orinocense</i> Kullander, 1983            |    |    |    |     | X   |         |     |     | Kullander (1983)   ANSP 127364, 127364, 127397   FMNH 84008   NRM 39282                  |
| <i>Laetacara flavilabris</i> (Cope, 1870)               |    |    |    | X   |     |         |     |     | IMCN 6026  |
| * <i>Laetacara fulvipinnis</i> Staek & Schindler, 2007  |    |    |    |     | X   |         |     |     | CZUT-IC 8653   |
| <i>Laetacara thayeri</i> (Steindachner, 1875)           |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <i>Caquetaia kraussii</i> (Steindachner, 1879)          |    |    |    |     | X   | -       | X   |     | Steindachner (1878)   Eigenmann (1922)   |
| <i>Caquetaia myersi</i> (Schultz, 1944)                 |    |    |    | X   |     |         |     |     | Schultz (1944c)   USNM 120533, 120534  |



| Taxa   | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|--|----|----|----|-----|-----|---------|-----|-----|---|
| <b>Cynolebiidae</b><br>24 spp (5 added and 2 deleted from 2008)  |    |    |    |     |     |         |     |     |   |
| <i>Anablepsoides atratus</i><br>(Garman, 1895)                   |    |    |    | X   |     |         |     |     | NRM 14686   |
| <i>Anablepsoides elongatus</i> (Fels & de Rham, 1981)            |    |    |    | X   |     |         |     |     | Correa (2003)   |
| <i>Anablepsoides ophiomimus</i><br>(Huber, 1992)                 |    |    |    | X   |     |         |     |     | Correa (2003)   |
| <i>Anablepsoides ornatus</i><br>(Garman, 1895)                   |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Anablepsoides rubrolineatus</i><br>(Fels & de Rham, 1981)     |    |    |    | X   |     |         |     |     | Mojica et al. (2005)  |
| <i>Anablepsoides taeniatus</i><br>(Fowler, 1945)                 | X  | X  |    | X   |     |         |     |     | Fowler (1945)   ANSP 71720, 71721   |
| <i>Anablepsoides tessellatus</i><br>(Huber, 1992)                | X  | X  |    |     | X   |         |     |     | Huber (1992)   ANSP 139468, 168979  |
| <i>Astrofundulus guajira</i><br>Hrbek, Taphorn & Thomerson, 2005 |    |    | X  |     |     |         |     | X   | Hrbek et al. (2005)   |
| <i>Astrofundulus myersi</i> Dahl, 1958                           | X  | X  |    |     |     | X       |     |     | Dahl (1958)   SU 49513, 49513, 68324   DZVU [ex SU 49513]   |
| <i>Cynodonichthys boehlkei</i><br>(Huber & Fels, 1985)           | X  | X  |    |     |     | X       |     |     | Huber and Fels (1985)   ANSP 139467, 139467   |
| <i>Cynodonichthys elegans</i><br>(Steindachner, 1880)            | X  | X  |    |     | -   | X       | -   | -   | Steindachner (1880)   NMW 605441, 605442-3, 18893-6   |
| <i>Cynodonichthys leucurus</i><br>(Fowler, 1944)                 | X  | X  |    |     |     | X       |     |     | Fowler (1944)   ANSP 71436, 71437-50  |
| <i>Cynodonichthys magdalena</i> (Eigenmann & Henn, 1916)         | X  | X  |    |     |     | X       |     |     | Henn (1916)   CAS 44227 [ex CM 5814a-m   IU 13603], 52234 [ex IU 13606], 52235 [ex IU 13605], 78377 [ex IU 13606]   FMNH 56997 [ex CM 5813], 56998-99, 57000-02 |
| <i>Cynodonichthys pacificus</i><br>(Huber, 1992)                 | X  | X  |    |     |     | X       | X   |     | Huber (1992)   Maldonado-Ocampo et al. (2013b)  |
| <i>Laimosemion altivelis</i> (Huber, 1992)                       | X  | X  |    |     | X   |         |     |     | Huber (1992)   NRM 16548, 14687   |
| <i>Laimosemion corpulentus</i><br>(Thomerson & Taphorn, 1993)    | X  | X  |    |     | X   |         |     |     | Thomerson and Taphorn (1993)   SU [not CAS] 69692, 53693  |
| <i>Laimosemion leticia</i><br>Valdesalici, 2016                  | X  | X  |    | X   |     |         |     |     | Valdesalici (2016)  |
| <i>Rachovia brevis</i> (Regan, 1912)                             |    |    |    |     |     | X       |     | X   | Regan (1912d)   Mojica et al. (2006b)   |
| <i>Rachovia hummelincki</i> de Beaufort, 1940                    |    |    |    |     |     | X       |     |     | Taphorn and Thomerson (1978)  |
| <i>Rachovia maculipinnis</i><br>(Radda, 1964)                    |    |    |    |     | X   |         |     |     | Taphorn and Thomerson (1978)  |
| <i>Rivulus azurescens</i><br>Vermeulen, 2013                     | X  | X  |    |     |     | X       |     |     | Vermeulen (2013)  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections  |
|---|----|----|----|-----|-----|---------|-----|-----|---|
| <i>Rivulus pivijay</i> Vermeulen, 2013                                | X  | X  |    |     |     | X       |     |     | Vermeulen (2013)  |
| <i>Rivulus ribesrubrum</i> Vermeulen, 2013                            | X  | X  |    |     |     | X       |     |     | Vermeulen (2013)  |
| <i>Rivulus xi</i> Vermeulen, 2013                                     | X  | X  |    |     |     | X       |     |     | Vermeulen (2013)  |
| <b>Cyprinodontidae</b><br><b>1 sp</b>                                 |    |    |    |     |     |         |     |     |   |
| ** <i>Ysolebias martae</i> (Steindachner, 1876)                       | X  | X  |    |     |     |         |     | X   | Steindachner (1876)   |
| <b>Poeciliidae</b><br><b>17 spp (2 added and 1 deleted from 2008)</b> |    |    |    |     |     |         |     |     |   |
| <i>Fluviphylax obscurus</i> Costa, 1996                               |    |    |    |     | X   |         |     |     | IAvH-P 2171, 2219   |
| <i>Fluviphylax pygmaeus</i> (Myers & Carvalho, 1955)                  |    |    |    | X   | +   |         |     |     | Lucinda (2003)   NRM 26248  |
| <i>Gambusia lemairei</i> Fowler, 1950                                 | X  | X  |    |     |     | -       |     | +   | Fowler (1950)   ANSP 71938, 71939-40  |
| <i>Neoheterandria elegans</i> Henn, 1916                              | X  | X  |    |     |     |         | X   |     | Henn (1916)   FMNH 57007 [ex CM 5823], 57008 [ex CM 5824a-g]   AMNH 22705sw [ex FMNH 57008], 36481 [ex IU 13612]   CAS 22768 [ex IU 13612]   UMMZ 65232 [ex IU 13612] |
| <i>Poeciliopsis turubarensis</i> (Meek, 1912)                         |    |    |    |     |     | X       |     |     | Rosen and Bailey (1963)   |
| <i>Priapichthys caliensis</i> (Eigenmann & Henn, 1916)                | X  | X  |    |     |     | X       | -   |     | Henn (1916)   FMNH 57721 [ex CM 6700a], FMNH [ex CM 6700b]  |
| <i>Priapichthys choocoensis</i> (Henn, 1916)                          | X  | X  |    |     |     |         | X   |     | Henn (1916)   CAS 22547 [ex IU 13618], 22560 [ex IU 13619]   FMNH 57009   UMMZ 65223 [ex IU 13619]  |
| * <i>Priapichthys darienensis</i> (Meek & Hildebrand, 1913)           |    |    |    |     |     |         | X   |     | CZUT-IC 11742   |
| <i>Priapichthys nigroventralis</i> (Eigenmann & Henn, 1912)           | X  | X  |    |     |     | X       | X   |     | Eigenmann (1912)   Henn (1916)  |
| <i>Pseudopoecilia austrocolumbiana</i> Radda, 1987                    | X  | X  |    |     |     |         | X   |     | Radda (1987)   FMNH 56045 [ex CM 4835], 54046   BMNH 1924.3.3.85-86   CAS 22765 [ex IU 12689]   USNM 79205  |
| <i>Pseudopoecilia fria</i> (Eigenmann & Henn, 1914)                   |    |    |    |     |     |         | X   |     | Maldonado-Ocampo et al. (2013b)   ICN-MHN 2335  |
| <i>Poecilia caucana</i> (Steindachner, 1880)                          |    |    |    |     |     | X       |     | X   | Steindachner (1880)   Mojica et al. (2006b)   |
| * <i>Poecilia gilli</i> (Kner, 1863)                                  |    |    |    |     |     |         | X   |     | Poeser (2003a)  |
| ** <i>Poecilia koperi</i> Poeser, 2003                                |    |    |    |     |     |         | X   |     | Poeser (2003b)  |
| <i>Poecilia mechthildae</i> Meyer, Etzel & Bork, 2002                 | X  | X  |    |     |     |         | X   |     | Meyer et al. (2002)   MTDF 26473-26476   SMF 28889  |
| <i>Poecilia orri</i> Fowler, 1943                                     |    |    |    |     |     |         | X   |     | Poeser (2003a)  |
| <i>Poecilia sphenops</i> Valenciennes, 1846                           |    |    |    |     |     |         | X   |     | Agudelo-Zamora et al. (2010)  |

| Taxa  | DC | EN | ET | Amz | Ori | Mag-Cau | Pac | Car | References/Collections   |
|---|----|----|----|-----|-----|---------|-----|-----|--|
| <b>Eupercaria incertae sedis</b><br>7 spp                   |    |    |    |     |     |         |     |     |  |
| <b>Sciaenidae</b>   |    |    |    |     |     |         |     |     |  |
| <i>Pachypops fourcroi</i> (Lacepède, 1802)                  |    |    |    | X   | +   |         |     |     | Casatti (2002)   IAvH-P  |
| <i>Pachypops trifilis</i> (Müller & Troschel, 1849)         |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2005)                         |
| <i>Pachyurus gabrielensis</i> Casatti, 2001                 |    |    |    |     | X   |         |     |     | Maldonado-Ocampo et al. (2008)                                     |
| <i>Pachyurus junki</i> Soares & Casatti, 2000               |    |    |    | X   |     |         |     |     | Bogotá-Gregory and Maldonado-Ocampo (2006a)                        |
| <i>Pachyurus schomburgkii</i> Günther, 1860                 |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Galvis et al. (2007a)                       |
| <i>Plagioscion magdalena</i> (Steindachner, 1878)           |    | X  |    |     |     | X       |     | X   | Steindachner (1878)   Mojica et al. (2006b)                        |
| <i>Plagioscion squamosissimus</i> (Heckel, 1840)            |    |    |    | X   | X   |         |     |     | Mojica et al. (2005)   Cala (1977)   Casatti (2005)                |
| <b>Tetraodontiformes</b>                                    |    |    |    |     |     |         |     |     |  |
| <b>Tetraodontidae</b>                                       |    |    |    |     |     |         |     |     |  |
| <i>Colomesus asellus</i> (Müller & Troschel, 1849)          |    |    |    | X   |     |         |     |     | Mojica et al. (2005)   |
| <b>Ceratodontiformes</b>                                    |    |    |    |     |     |         |     |     |  |
| <b>Lepidosirenidae</b>                                      |    |    |    |     |     |         |     |     |  |
| <i>Lepidosiren paradoxa</i> Fitzinger, 1837                 |    |    | X  | X   | X   |         |     |     | Mojica et al. (2005)   Bogotá-Gregory and Maldonado-Ocampo (2006b) |
| <b>Total of additions by hydrographic system</b>            | 11 | 23 | 3  | 3   | 18  |         |     |     |  |
| <b>Total of deletions by hidrographic system</b>            | 44 | 32 | 37 | 24  | 19  |         |     |     |  |
| <b>Total number of modifications by hidrographic system</b> | 55 | 55 | 40 | 27  | 37  |         |     |     |  |

## Final remarks

Confusions and misinterpretations related to the freshwater fishes distributed in Colombian territory and erroneous name assignations were included in previous checklists at local, regional or national levels, as pointed out in previous sections. The exhaustive verification process of the current checklist of the freshwater fishes of Colombia is a step forward linked to the ichthyology collections database depuration process in progress. These efforts will bring new opportunities to insert this information into new analysis dealing with new conservation opportunities or approaches to counteract the drivers of biodiversity decline of the Colombian freshwater fish fauna.

New protected areas or portfolios have been proposed for freshwaters ecosystems in the Orinoco, Magdalena-Cauca and Amazon River basins in the recent years (Lasso et al. 2011b; Téllez et al. 2011; Portocarrero-Aya and Cowx 2016). However, some species level information taken into account to designate those areas were wrong; criteria like species richness or endemic species have to be re-evaluated based on the information

provided in the current checklist. Expert criteria, although important on those analysis and proposals, also have to be reevaluated in light of rigorous data depuration at taxonomic and geographic levels (e.g. Herrera 2015). Applying a decision theory approach to guide and improve the process in the field of conservation planning is important to deal with an incomplete geographic coverage of taxonomic groups (Ornellas et al. 2011), as is the case of the Colombian freshwater fishes.

As it was mentioned in the introduction, new scenarios are in discussion in reference to new approaches dealing with the conservation of the freshwater ecosystems and their biota worldwide (Ormerod 2014). Colombia as a country with one of the richest freshwater fish faunas, faces enormous challenges due to the past and current human impacts that have been affecting the river systems running through the Colombian landscape. Most remarkable is that an important number of species have small distribution ranges in many trans-Andean rivers and piedmont areas of the Orinoco and Amazon regions.

Finally, the data depuration process, conducted mainly at the species level, reinforces the importance of biological collections as repositories of the biodiversity patrimony and allows specimen identifications to be rechecked and verified. More efforts are needed by the institutions in charge of the Colombian ichthyological collections to guarantee the adequate conservation of their specimens. A continuous interinstitutional effort and collection support is an important task to be facilitated by ACICTIOS and the Colombian Biodiversity Information System (SiB Colombia). Those interactions have an enormous impact in terms of the need to maintain a continuous and rigorous updating list process. Moving forward (in addition to field work to fill gaps in poorly sampled basins), we identify as the main tasks remaining: 1) to continue the process of verification of fish species distributions at the sub-basin level or smaller biogeographic areas; and 2) to conduct revisionary taxonomic studies of specific species-rich fish groups found in Colombia. Ideally, these studies have to be developed in the context of an integrative taxonomic approach.

## Acknowledgements

We thank the Asociación Colombiana de Ictiólogos (ACICTIOS), Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, The Nature Conservancy, Conservation International Colombia, WWF Colombia, Universidad de Antioquia, and Pontificia Universidad Javeriana for the support and funds provided throughout the project: “Catalogue of the Freshwater Fishes of Colombia”. For comments and grammar corrections on the manuscript we thank D. C. Taphorn. We gratefully acknowledge F. C. T. Lima and Sven O. Kullander who made a thorough revision of the Characidae and Bryconidae (FCTL) and Cyprinodontiformes and Cichliformes sections (SOK) of the checklist. We are indebted to A. Acosta (CIACOL), J. G. Albornoz-Garzón (CZUT-IC), and S. Prada-Pedreros and A. Urbano-Bonilla (MPUJ) for facilitating information of records in their respective collections. FAVN thanks

the Oficina de Investigaciones y Desarrollo Científico de la Universidad del Tolima, CORTOLIMA, and Grupo de Investigación en Zoología de la Universidad del Tolima for funding, logistic, and technical support.

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## Supplementary material 1

### Checklist of the native freshwater fishes of Colombia

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Data type: Microsoft Excel Worksheet (.xlsx)

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Link: <https://doi.org/10.3897/zookeys.708.13897.suppl1>

## Supplementary material 2

### New species described from Colombia after Maldonado-Ocampo et al. (2008)

Authors: Carlos DoNascimento, Edgar Esteban Herrera-Collazos, Guido A. Herrera-R, Armando Ortega-Lara, Francisco A. Villa-Navarro, José Saulo Usma Oviedo, Javier A. Maldonado-Ocampo

Data type: Microsoft Word Document (.docx)

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Link: <https://doi.org/10.3897/zookeys.708.13897.suppl2>

## Supplementary material 3

### New records of species for Colombia after Maldonado-Ocampo et al. (2008)

Authors: Carlos DoNascimento, Edgar Esteban Herrera-Collazos, Guido A. Herrera-R, Armando Ortega-Lara, Francisco A. Villa-Navarro, José Saulo Usma Oviedo, Javier A. Maldonado-Ocampo

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Link: <https://doi.org/10.3897/zookeys.708.13897.suppl3>

## Supplementary material 4

### Species listed in Maldonado-Ocampo et al. (2008) with geographic distribution corrected

Authors: Carlos DoNascimento, Edgar Esteban Herrera-Collazos, Guido A. Herrera-R, Armando Ortega-Lara, Francisco A. Villa-Navarro, José Saulo Usma Oviedo, Javier A. Maldonado-Ocampo

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Link: <https://doi.org/10.3897/zookeys.708.13897.suppl4>

## Supplementary material 5

### Species deleted from the Colombian continental ichthyofauna

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