

Catalog of Type Specimens
of Recent Fishes in the
National Museum of Natural History,
Smithsonian Institution, 1:
Characiformes (Teleostei: Ostariophysi)

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and
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Robert McC. Adams
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SMITHSONIAN INSTITUTION PRESS

Washington, D.C.

1991

ABSTRACT

Vari, Richard P., and Jeffrey C. Howe. Catalog of Type Specimens of Recent Fishes in the National Museum of Natural History, Smithsonian Institution, 1: Characiformes (Teleostei: Ostariophysi). *Smithsonian Contributions to Zoology*, number 517, 52 pages, 1991.—The known type specimens of characiform fishes in the collections of the Division of Fishes of the National Museum of Natural History, Smithsonian Institution, published through 1990 are listed. These include 8214 specimens in 614 lots including 101 holotypes, 3 lectotypes, 101 syntypes, 8074 paratypes, and 35 paralectotypes of 308 nominal species and subspecies.

The listing is arranged alphabetically by original genus, species, and subspecies names. Information for each entry includes genus, species, and subspecies names (if any); author(s) and date of publication; page of original description, and accompanying figures and plates (if any); current type status; USNM catalog number; number of specimens and their range of standard lengths; locality; collector; and date collected. This is followed by "Remarks," which includes correction, expansion, and updating of information in original description, and cross-reference to changes in type status. A familial assignment using a modification of the classification of Greenwood et al. (1966) completes each entry. A listing of the nominal taxa by family and an index of species and subspecies as originally described follows the catalog.

OFFICIAL PUBLICATION DATE is handstamped in a limited number of initial copies and is recorded in the Institution's annual report, *Smithsonian Year*. SERIES COVER DESIGN: The coral *Montastrea cavernosa* (Linnaeus).

Library of Congress Cataloging-in-Publication Data
National Museum of Natural History (U.S.)

Catalog of type specimens of recent fishes in the National Museum of Natural History, Smithsonian Institution.
(Smithsonian contributions to zoology ; no. 517)

Includes bibliographical references.

Contents: v. 1. Characiformes (Teleostei: Ostariophysi) / Richard P. Vari and Jeffrey C. Howe.—v. 2. Blenniidae / Victor G. Springer, Jeffrey T. Williams, and Thomas M. Orrell.

1. Fishes—Catalogs and collections—Washington (D.C.) 2. Type specimens (Natural history)—Catalogs and collections—Washington (D.C.) 3. National Museum of Natural History (U.S.)—Catalogs. I. Title. II. Series: Smithsonian contributions to zoology ; no. 517, etc.

QL1.S54 no. 517 etc. 591 s 90-28564

[QL618.15] [598'.074'753]

⊕ The paper used in this publication meets the minimum requirements of the American National Standard for Permanence of Paper for Printed Library Materials Z39.48—1984.

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Catalog of Type Specimens of Recent Fishes in the National Museum of Natural History, Smithsonian Institution, 1: Characiformes (Teleostei: Ostariophysii)

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Introduction

The collections of type specimens in the Division of Fishes, National Museum of Natural History, Smithsonian Institution, are among the largest in the world, including specimens from the freshwaters of all continents and from marine waters throughout the planet. At the end of 1990 there were approximately 15,500 putative type lots of Recent fishes in these collections. The large number of lots in the type collections, and the diversity of taxa they represent from all regions of the world, makes it unrealistic to attempt to produce a comprehensive listing of all type specimens in the collections within the foreseeable future. Rather than wait some decades until an all-inclusive listing could be prepared, it was decided that listings of type specimens for subunits of the collection should be prepared by specialists in each group. This listing is the first of these efforts prepared in response to Recommendation 72G(4) of the *International Code of Zoological Nomenclature* (ICZN) that "Every institution in which name-bearing types are deposited should publish lists of name-bearing types in its possession or custody."

We have chosen to address the fishes of the order Characiformes as our first effort because these are the focus of ongoing research projects by the senior author. Members of the order are also major components of the freshwater ichthyofaunas of Africa and particularly South and Central America. These regions are the focus of increased research by systematists, ecologists, and other scientists attempting to assess and

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Review Chairman: James G. Mead, Smithsonian Institution. Reviewers for this paper: Karsten E. Hartel and Horacio Higuchi, Museum of Comparative Zoology, Harvard University.

describe the biological diversity on those continents where aquatic ecosystems are progressively adversely impacted by myriad development schemes and human population pressures.

The type specimens of characiform fishes in the collections of the Division of Fishes came from two primary sources, (1) the field work and systematic studies of curators and other researchers associated with the division, and (2) exchanges from colleagues and institutions worldwide. Type specimens originally deposited in the division and reported on during this century are nearly invariably cited with USNM catalog numbers. Citations of catalog numbers were often lacking for species described in the nineteenth century. Many types were exchanged to the Smithsonian subsequent to publication under a catalog number of another institution. Foremost among these are a number of paratypes of species described by Carl H. Eigenmann and his co-workers that were exchanged to the Smithsonian from the Carnegie Museum, Indiana University, and Museum of Comparative Zoology. Syntypes of various species of African characiforms were also received in exchange from the British Museum (Natural History) (now the Natural History Museum, London) and the Muséum National d'Histoire Naturelle, Paris. This listing will serve to bring those specimens and others to the attention of interested researchers.

MISSING TYPE SPECIMENS OF SPECIES DESCRIBED BY GILL.—Gill (1858, 1871) described a series of characiforms with type localities on the island of Trinidad and in the western portions of the Amazon basin. In neither paper did Gill, however, cite the depository of the type specimens, nor did he, in most cases, state the number of specimens on which he based his descriptions. Type series of four species described in Gill's 1858 paper (*Curimatus argenteus*, *Erythrinus cinereus*, *Macrodon ferox*, and *Poecilurichthys Brevortii*) are deposited in the

collections of the Division of Fishes (see following listing for details). The type series of the other seven characiform species described in that paper (*Corynopoma Riisei*, *C. Veedonii*, *Nematopoma Searlesii*, *Poecilurichthys pulcher*, *P. taeniurus*, *P. (Hemigrammus) unilineatus*, and *Stewardia albipinnis*) were not located in the collections of the Division of Fishes, nor was any indication found in the USNM ledgers that they had been deposited at the Smithsonian.

Gill described five species of characiforms from the western portions of the Amazon basin in 1871, again without any indication of where the material was deposited. The type series of four of these (*Astyanax Carolinae*, *Hydrolycus Copei*, *Pygocentrus alatus*, and *Raeoides Myersii*) were located in the holdings of the Division of Fishes, but no trace was found of the type specimens of the fifth species (*Tetragonopterus Ortonii*).

ABBREVIATIONS.—Most of the specimens listed in this catalog were described under USNM catalog numbers. A number of the cited type specimens were, however, deposited in other institutions at the time the species was described. In addition, in some instances specimens originally reported on with USNM catalog numbers have been exchanged to other repositories. These various changes are noted under "Remarks" for each species with the following abbreviations for institutions and collections used in those citations.

AMNH	American Museum of Natural History, New York
ANSP	Academy of Natural Sciences of Philadelphia
BMNH	British Museum (Natural History), London (now the Natural History Museum, London)
CAS	California Academy of Sciences, San Francisco
CIMLP	Colección de Ictiología, Museo de La Plata, La Plata
CM	Carnegie Museum, Pittsburgh. Collections of Recent fishes subsequently transferred to FMNH.
FMNH	Field Museum of Natural History, Chicago
IU	Indiana University Collections, Bloomington. Often cited as I.U.M. in publications by C.H. Eigenmann and collaborators. Specimens now largely at California Academy of Sciences, but with portions in other collections.
IZUA	Instituto de Zoología de la Universidad Austral de Chile, Valdivia
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge
MNHN	Muséum National d'Histoire Naturelle, Paris
MHNG	Muséum d'Histoire Naturelle, Geneva
MNRJ	Museo Nacional, Rio de Janeiro
MZUSP	Museo de Zoologia da Universidade de São Paulo, São Paulo
NMNH	National Museum of Natural History, Smithsonian Institution, Washington D.C.
NMW	Naturhistoriska Museum Wien, Vienna
RMNH	Rijksmuseum van Natuurlijke Historie, Leiden
SU	Stanford University, collections now at CAS
UKEN	University of Kentucky, Lexington
UMMZ	University of Michigan, Museum of Zoology, Ann Arbor
USNM	collections of the former United States National Museum, now deposited in the National Museum of Natural History, Smithsonian Institution, Washington D.C.
ZMA	Instituut voor Taxonomische Zoölogie, Zoölogisch Museum, Amsterdam

Some authors have incorrectly cited the name of the museum encompassing the Division of Fishes as "United States National Museum of Natural History" rather than its official

name "National Museum of Natural History." These actions presumably are an attempt to reflect the acronym used for the collection, USNM, in the supposed title for the museum. The acronym USNM for the collections of the present National Museum of Natural History is derived from the name for the organization originally housing both those collections and others, the United States National Museum. The collections encompassed within the former United States National Museum incorporated natural history specimens, fine art objects, and historical items. The later two classes of objects were moved to other Smithsonian museums and the original museum was renamed the "National Museum of Natural History" (NMNH) to better reflect its predominant research focus. The acronym USNM is still applied to the various holdings now housed in NMNH, although no longer reflecting the official name of the organization.

ACKNOWLEDGMENTS.—This publication builds on an earlier effort by the staff of the Division of Fishes to develop a computerized listing of the putative types and associated USNM catalog numbers. The listing that resulted was completed in 1983 and was the first attempt to search the ledgers in the Division of Fishes for all listings of type specimens and to cross-check those records with the specimens curated in the type collection. Only 30 copies of the listing (without authorship) were produced and were distributed to the ichthyology departments of selected museums worldwide. Support in that project and in subsequent refinements of the type inventory was provided by Edgar "Nat" Gramblin, the late Robert Kanazawa, Victor G. Springer, Janet R. Gomon, Susan L. Jewett, Jeffrey T. Williams, Andrew Gerberich, Thomas Orrell, Jeffrey Clayton, Ann W. Vari, and many other past and present members of the Division of Fishes who have searched for and counted specimens, pored through over 200,000 ledger entries, and in many other ways provided the foundation both for this paper and future type specimen lists. M. Eric Anderson and David Catania (CAS) provided information on various characiform type series originally at Indiana University that are now deposited, at least in part, at NMNH. Karsten E. Hartel and Horácio Higuchi (MCZ) helped us to resolve numerous questions concerning type specimens received from MCZ. Darrell Siebert and Gordon J. Howes (BMNH) assisted with information on those lots received in exchange from the BMNH. Volker Mahmert (MNHG) provided information on type specimens in that collection. William L. Fink (UMMZ) and Paulo A. Buckup (UMMZ) sent us information on a variety of type series that they had on loan. The examination of various type specimens in Brazilian and Venezuelan institutions was made possible by funding from the Neotropical Lowland Research Program of the International Environmental Sciences Program of the Smithsonian Institution. Stanley H. Weitzman (NMNH), Bruce B. Collette (National Marine Fisheries Service, Systematics Laboratory), Victor G. Springer (NMNH), Marilyn Weitzman (NMNH), Karsten E. Hartel (MCZ) and Horácio Higuchi (MCZ) offered suggestions for the improvement of this paper.

Format

The following template has been used to structure each entry in the "Catalog of Types."

Genus species (subspecies) Author(s), year:page, figure(s), plate(s).

Type status

USNM catalog number (number of specimens, range of standard lengths in mm). Locality (country, department, province or state, specific locality), collector(s), date(s) collected.

Remarks: Includes comments on originally cited authorship and year of publication; reference to lectotype, or paralectotype designation; previous depository and catalog number of specimens; and correction and/or expansion of data on locality or collector.

FAMILY

(familial assignment following classification in Greenwood et al. (1966) as modified by Roberts (1974), Howes (1976), and Vari (1979)).

This listing includes all known published characiform types deposited in the collections of the National Museum of Natural History through 1991. The order of listing is alphabetical by genus and then species and subspecies. Genus, species, and subspecies are spelled as they appear in the original description, except that diacritical marks have been deleted as recommended by the International Commission on Zoological Nomenclature. In instances where the original description included an incorrect spelling there is a cross-reference to a corrected entry elsewhere in the text. Page refers to the first page of the species description. Complete references to publications can be found in Literature Cited.

The presented "Type status" is that which is currently thought correct based on the original description and subsequent literature designations. The categories for primary and secondary types used herein are holotype, syntype(s), lectotype, paratype(s), and paralectotype(s) as defined by the International Commission on Zoological Nomenclature (1985), articles 73 and 74. Missing and exchanged types are indicated as such. A question mark following the type status indicates uncertainty concerning the specimen(s) in question, with the problem discussed further in the "Remarks" section under the species. Discrepancies between the number of specimens originally reported or listed in the USNM ledgers and those found when the lots were inventoried or at this time are noted and discussed under "Remarks." The cited length for the specimens is the present standard length in millimeters (mm). In those cases where a different measurement of length (e.g., total length) was presented in the original description, or where there is a discrepancy between the originally cited standard length(s) and present standard length(s), that is noted under "Remarks." Locality is presented as in the original description, with sequence of presentation of data standardized throughout. Modern equivalents for countries are provided in brackets

where necessary. Collector and date collected are as in the original description. Modern and corrected localities for specimens collected during the Thayer Expedition to Brazil follow Higuchi (ms). Data on the specimens in addition to, or inconsistent with that in the original species description either located in the jar or in the ledgers in the Division of Fishes are discussed under "Remarks." Complete references for papers involving lectotype and paralectotype designations can be found in Literature Cited. The locality of additional type specimens for species are noted only in two circumstances. First, when the type specimens were originally cited with USNM catalog numbers and were subsequently exchanged to other institutions. Second, when type specimens were originally cited under the catalog number of another institution and subsequently transferred to the Smithsonian.

A large number of the type specimens cited in the following listing were described by Carl H. Eigenmann and his co-workers. Portions of the type series of these species were exchanged to the Smithsonian and other institutions from the Carnegie Museum and Indiana University, both prior and subsequent to the publication of the various species descriptions. In most instances, however, those exchanges were not noted in the ledgers of either the Indiana University or Carnegie Museum fish collections, making it difficult, or more usually impossible, to determine the disposition of the entire type series. All material cited as type specimens in the correspondence associated with such exchanges to the Smithsonian is included in the following listing except in those instances where collection information for the specimens now in the USNM collections does not agree with that given for the type series in the original species description. Correspondence concerning the type status of the specimens is archived in the files of the Office of the Registrar, National Museum of Natural History.

Characiform classification has undergone major modifications during the last quarter of a century and it is likely that it will be some time until the data is available to produce a stable familial nomenclature reflecting hypotheses of relationship based on shared derived characters. For that reason we have not arranged this list by family, but rather present it arranged alphabetically by original genus and species. Each taxon is assigned to a family following Greenwood et al. (1966) with several modifications. The Cynodontidae of those authors is considered a tribe within the Characidae, rather than a distinct family, in keeping with the results of Howes (1976). The Ichthyboridae of Greenwood et al. (1966) is placed within the Distichodontidae of those authors following Vari (1979). The genus *Anodus* Spix and its synonyms are placed in the family Hemiodontidae rather than Curimatidae in keeping with the findings of Roberts (1974) and Vari (1983, 1989a). Given the large number of outstanding problems involving the recognizable species of both the African and New World members of the Characiformes, it is premature to make comments on the validity or possible synonymy of most members of the order at this time.

Catalog of Types

Arranged Alphabetically by Genus, Species, and Subspecies

Acanthocharax microlepis Eigenmann, 1912a:405, pl. LXI:
fig. 1.

Paratype

USNM 66109 (1, 54.3 mm). British Guiana [= Guyana],
Tumatumari; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly,
CM 2139a-t, in part; 2 specimens cited in USNM
ledger, 1 specimen unaccounted for.

CHARACIDAE

Acestrocephalus boehlkei Menezes, 1977:185.

Paratype

USNM 216140 (1, 77.0 mm). Ecuador, Río Punino, a
tributary of Río Payamino (Río Napo system), above
Coca; T. Roberts and Parker, 25-27 Nov 1971.

Remarks: Collected with holotype.

Paratype

USNM 216141 (1, 38.0 mm). Ecuador, Río Payamino
and tributary, 3-4 km upriver from mouth of Río
Payamino into Río Coca; T. Roberts et al., 20 Nov
1971.

CHARACIDAE

Acestrorhynchus grandoculis Menezes and Géry, 1983:582,
fig. 8.

Paratype

USNM 228083 (1, 91.0 mm). Brazil, Amazonas, Marar-
iuá, in Rio Negro; M. Goulding, Oct 1979.

Paratype

USNM 228084 (1, 68.0 mm). Brazil, Amazonas, Paraná
do Jacaré, Rio Negro; M. Goulding, 1979.

Paratype

USNM 228085 (1, 87.0 mm). Brazil, Amazonas, mouth
of Rio Urubaxi; M. Goulding, 6 Feb 1980.

Remarks: Collected with holotype.

Paratype

USNM 228086 (1, 85.0 mm). Brazil, Amazonas, Ara-
rirá, in Rio Negro; M. Goulding, 6 Dec 1979.

CHARACIDAE

Acestrorhynchus isalineae Menezes and Géry, 1983:577, figs.
5, 6.

Paratypes

USNM 228087 (2, 79.0-83.0 mm). Brazil, Amazonas,
tributary of Rio dos Marmelos (Rio Madeira basin), 110
km E of Humaitá along rodovia Transamazônica; H.A.
Axelrod et al., 23 Aug 1976.

CHARACIDAE

Acnodon normani Gosline, 1951:43, pl. 3: fig. 5b.

Paratype

USNM 232931 (1, not measured due to poor condi-
tion). Brazil, State of Goiaz [= Goiás; now in state of
Tocantins], Rio Santa Teresa, a western tributary of the
upper Rio Tocantins; C. Ternetz, 25 Jan 1924.

Remarks: Specimen cleared and stained, and disarticu-
lated.

CHARACIDAE

Ammocryptocharax elegans Weitzman and Kanazawa,
1976:325, figs. 1-4.

Holotype

USNM 210692 (1, 36.6 mm). Colombia, Meta, Vichada
river basin, Caño Muco about 15 km W of Puerto
Gaitán toward Puerto Carreno; J. Thomerson et al., 2
Apr 1974.

Paratypes

USNM 214364 (5, 34.0-38.9 mm). Colombia, Meta,
Vichada river basin, Caño Muco about 15 km W of
Puerto Gaitán toward Puerto Carreno; J. Thomerson et
al., 2 Apr 1974.

Remarks: Collected with holotype; 6 specimens cited in
original description; 2 specimens cleared and stained.

CHARACIDAE

Anacyrus guatemalensis Günther, 1864:347.

Syntype

USNM 133137 (1, 41.9 mm). Guatemala, Huamuchal,
Río Chagres; Salvin.

Remarks: Specimen received from BMNH, formerly
BMNH 1864.1.26:366, in part.

CHARACIDAE

Anoptichthys antrobius Alvarez, 1946:278, figs. 16-23.

Paratypes

USNM 132517 (4, 34.7-43.7 mm). Mexico, San Luis
Potosi, Cueva "El Pachón," Antigua Morelos; R.
Hernández Corzo et al., 7 Dec 1945.

Remarks: Received from J. Alvarez.

CHARACIDAE

Anostomus dissimilis Garman, 1890d:22.

Syntypes

USNM 120238 (3, 168.6-206.8 mm). Rio Puty; Thayer
Expedition.

Remarks: Received from MCZ, formerly MCZ 19381,
in part; complete collection information: Brazil, Piauí,
Rio Poti (tributary of Rio Parnaíba); O. St. John, Dec
1865.

ANOSTOMIDAE

Anostomus garmani Borodin, 1931:47, pl. 4, fig. 1.

Paratype

USNM 120397 (1, 65.7 mm). Brazil, Iça,

Remarks: Received from MCZ, formerly MCZ 19366, in part; complete collection information: Brazil, Amazonas, Rio Iça (tributary of Rio Solimões) near Brazilian-Colombian border; W. James and "Talisman," Nov 1865.

ANOSTOMIDAE

Anostomus intermedius Winterbottom, 1980:14, fig. 11.

Paratype

USNM 216593 (1, 78.7). Brazil, Amazon River system, upper Xingu River, below the cataracts near Suya-Missu [= Suiá-missu] or Paranajuba; H. Schultz, 15 Nov 1960.

Remarks: Collected with holotype.

ANOSTOMIDAE

Anostomus nitens Garman, 1890d:20.

Paratypes

USNM 120242 (3, 82.4–90.9 mm) Iça.

Remarks: Cited in original description as "*Anostomus nitens*, *A. varius*, var. n." suggesting that *nitens* is a new variety of *Anostomus varius* described by Garman (see below); not clear whether intended as a species or subspecies; herein considered a species; received from MCZ, formerly MCZ 19367, in part; complete collection information: Brazil, Amazonas, Rio Içá (tributary of Rio Solimões) near Brazilian-Colombian border; W. James and "Talisman," Nov 1865.

ANOSTOMIDAE

Anostomus rostratus Borodin, 1931:50, pl. 4, fig. 2.

Paratypes

USNM 120237 (3, 169.4–193.9 mm). Brazil, Rio Puty; Thayer Expedition.

Remarks: Received from MCZ, formerly MCZ 19380, in part (those specimens now MCZ 69542); complete collection information: Brazil, Piauí, Rio Poti (tributary of Rio Parnaíba) at Teresina; O. St. John, Dec 1865.

ANOSTOMIDAE

Anostomus spiloclistron Winterbottom, 1974:154, figs. 1–6.

Paratype

USNM 209432 (1, 76.2 mm). Surinam; Nickerie River system, Fallawatra River at rapids, 5 km SSW of Stondansie Falls; H. Nijssen, Apr 1967.

Remarks: Collected with holotype.

ANOSTOMIDAE

Anostomus varius Garman, 1890d:19.

Syntype

USNM 120398 (1, 86.6 mm). José Fernandez.

Remarks: Received from MCZ, formerly MCZ 19378, in part; complete collection information: Brazil, Amazonas, Lago José Fernandes (presumably near Manaus); J.M.S. Coutinho, Nov 1865.

ANOSTOMIDAE

Apareiodon pongoense Allen in Eigenmann and Allen, 1942:286, pl. XIV: fig. 7

Paratype

USNM 167806 (1, 44.6 mm). Peru, Pongo de Manse-riche; Allen, Oct 1920.

Remarks: No catalog number cited in original description; collected with CAS 38567 and CAS 38568.

PARODONTIDAE

Aphyocharax axelrodi Travassos, 1959:5, text figs., figs. 1–3.

Paratype ?

USNM 177553 (1, MISSING). Trinidad, near Piarcó; H.A. Axelrod, May 1958.

Remarks: Received from H.A. Axelrod. Although specimen is not specifically cited as a paratype, Travassos stated under paratypes that "data also from United States National Museum was [?] sent to me] by Dr. Leonard P. Schultz to this paper." That comment may refer to this specimen.

CHARACIDAE

Aphyocharax erythrurus Eigenmann, 1912a:313, pl. XLIV: fig. 4.

Paratypes

USNM 66095 (2, 26.7–29.3 mm). British Guiana [= Guyana], Rockstone sand bank; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1880a–e, in part.

CHARACIDAE

Astyanax abramoides Eigenmann, 1909:21.

Paratypes

USNM 66272 (2, 45.0–52.9 mm). British Guiana [= Guyana]; Kangaruma, lower Potaro River.

Remarks: Received from CM, presumably formerly CM 1031a–e, in part; collected by S.E. Schideler, 1908.

Paratypes

USNM 66273 (5, 36.1–50.9 mm). British Guiana [= Guyana]; Tumatumari; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1029a–j, in part.

Paratype

USNM 120395 (1, 42.2 mm). British Guiana [= Guyana] Kangaruma, Lower Potaro River.

Remarks: Received from MCZ, formerly MCZ 30177, in part; presumably originally CM 1031a–e or IU 11729, in part; collected by S.E. Schideler, 1908.

CHARACIDAE

Astyanax argentatus Baird and Girard, 1855:27.

Syntypes

USNM 869 (28, 34.4–59.8 mm). Mexico, upper tributaries of Río Nueces; J.H. Clark.

Remarks: 24 specimens previously cited in USNM ledger.

CHARACIDAE

Astyanax atratoensis Eigenmann in Eigenmann and Ogle, 1907:28, fig. 5.

Holotype

USNM 1659 (1, MISSING). Colombia, Truando; Michler and Schott, 1857-1858.

Remarks: USNM ledgers for other portions of collection indicate that collector is Lt. N. Michler; A. Schott cited as "preparator." According to introductory statements in Eigenmann and Ogle the material was collected "near the Rio Atrato." "Type" (= holotype) and 4 "Cotypes" (= paratypes) were intermingled in single lot (USNM 1659), which contained only 4 specimens when checked in 1982. Specimens remaining in lot were approximately 65, 66, 72, and 95 mm SL and evidently represent paratypes cited by Eigenmann as 68, 68, 75, and 100 mm to "base of caudal," a measurement that evidently included the 2 or 3 scales extending beyond hypural joint onto middle caudal fin-rays. The specimens remaining in the lot are estimated to have been 80, 83, 89, and +115 mm total length, not approximating the "105 mm. long over all" cited by Eigenmann for holotype. The holotype is apparently missing and the four specimens remaining in the lot are considered the paratypes; those were recataloged as USNM 306566.

Paratypes

USNM 306566 (4, 64.4-92.2 mm). Colombia, Truando; Michler and Schott, 1857-1858.

Remarks: Collected with holotype; see discussion under holotype with respect to these specimens; specimens originally cited as 68 to 100 mm to base of caudal.

CHARACIDAE

Astyanax Carolinae Gill, 1871:92.

Holotype

USNM 8225 (1, 83.3 mm). Peru and Ecuador [= Ecuador], Marañon or upper Amazon and Napo Rivers; J. Orton.

CHARACIDAE

Astyanax eigenmanni Evermann and Kendall, 1906:83, fig. 1.

Holotype

USNM 55570 (1, 60.7 mm). Argentina, Province of Cordoba, Río Primero; J.W. Titcomb, 1903-1904.

CHARACIDAE

Astyanax emperador Eigenmann and Ogle, 1907:26.

Holotype

USNM 55651 (1, 48.5 mm). Panama, Empire Station; Bransford.

Remarks: "cotypes" of the species originally cited as USNM 55651a, now cataloged as USNM 306565; specimen originally cited as "52 mm to base of caudal."

Paratypes

USNM 306565 (2, 33.5-34.3 mm). Panama, Empire Station; Bransford.

Remarks: Originally cited as "cotypes" USNM 55651a;

specimens originally cited as "37-35 mm long to base of caudal."

CHARACIDAE

Astyanax essequibensis Eigenmann 1909:17.

Paratypes

USNM 66107 (4, 31.4-36.5 mm). British Guiana [= Guyana], Tumatumari, Potaro River; Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1019a-z, in part; 5 specimens originally cited in USNM ledger, 1 specimen unaccounted for.

CHARACIDAE

Astyanax fasciatus parahybae Eigenmann, 1908:97.

Syntypes

USNM 120245 (3, 86.5-97.0 mm). Brazil, Rio Parahyba; Thayer Expedition, 1872.

Remarks: Received from MCZ, formerly MCZ 20685, in part; that lot incorrectly cited as 20635 by Eigenmann (1921:304); complete collection information: Brazil, Rio de Janeiro, Rio Paraíba do Sul between Barra do Pirai and Três Rios (Dom Pedro II Railroad); L. Agassiz and D. Bourget, Apr 1865.

CHARACIDAE

Astyanax guianensis Eigenmann, 1909:16.

Paratypes

USNM 66105 (5, 29.7-33.7 mm). British Guiana [= Guyana], Rockstone; C.H. Eigenmann, 1908.

Remarks: Received from CM; presumably formerly CM 1014a-z, in part.

Paratype

USNM 66106 (1, 35.2 mm). British Guiana [= Guyana], Tumatumari; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1017a-j, in part.

Paratypes

USNM 120394 (2, 29.3-34.5 mm). British Guiana [= Guyana], Rockstone; C.H. Eigenmann, 1908.

Remarks: Received from MCZ, formerly MCZ 29960, in part; originally CM 1014a-z or IU 11718, in part.

CHARACIDAE

Astyanax hastatus Myers, 1928:87.

Holotype

USNM 92952 (1, 36.9 mm). Brazil, Rio de Janeiro; R. Brocca.

Remarks: Received from G.S. Myers. Myers noted in the description that "All of the specimens were presented to me by Mr. Richard Dorn who received them as living aquarium fishes directly from Mr. R. Brocca, of Rio de Janeiro. The fishes were said to have been collected in the vicinity of the city, but there is a possibility of their having come from any of a number of places in southeastern Brazil."

Paratypes

USNM 94312 (29, 21.5-40.6 mm). Brazil, Rio de

Janeiro; Brocca.

Remarks: See "Remarks" under holotype.

CHARACIDAE

Astyanax (Astyanax) kennedyi Géry, 1964d:21, fig. 3.

Holotype

USNM 200425 (1, 36.7 mm) Peru, Upper Amazon region, near Iquitos; J. Roberts, end of 1963.

Remarks: Received from J. Géry.

CHARACIDAE

Astyanax kompi Hildebrand, 1938:260, fig. 3.

Holotype

USNM 106510 (1, 51.3 mm). Panama, Pacific Slope, Laguna Gulnar or Grande, Volcán.

Remarks: Hildebrand noted that specimens from Laguna Gulnar and Laguna Grande were not kept separate.

Paratypes

USNM 109262 (40, 13.4–58.6 mm). Panama, Pacific Slope, Laguna Gulnar or Grande, Volcán.

Remarks: 39 specimens originally cited in USNM ledger; collected with holotype.

CHARACIDAE

Astyanax microlepis Eigenmann, 1913:24.

Paratypes

USNM 79167 (4, 65.1–85.3 mm). Colombia, Cartago.

Remarks: Received from CM, presumably formerly CM 5003a–z, in part; collector C.H. Eigenmann.

CHARACIDAE

Astyanax multidentis Eigenmann, 1908:98.

Syntypes

USNM 120244 (6, 25.2–27.6 mm). Obidos.

Remarks: Received from MCZ, formerly MCZ 21064A, in part (those specimens now MCZ 89559); complete collection information: Brazil, Pará, Rio Amazonas at Óbidos; W. James and W. Hunnewell, Dec 1865.

CHARACIDAE

Astyanax mutator Eigenmann, 1909:18.

Paratypes

USNM 66108 (5, 30.8–38.9 mm). British Guiana [= Guyana], Savannah Landing, Upper Potaro (River).

Remarks: Received from CM, presumably formerly CM 1024a–z, in part; collector C.H. Eigenmann, 1908.

CHARACIDAE

Astyanax orthodus Eigenmann in Eigenmann and Ogle, 1907:27.

Holotype

USNM 55655 (1, 90.2 mm). Colombia, Truando; Michler and Schott.

Remarks: USNM ledgers for other specimens collected at same time indicate that collector is Lt. N. Michler; A. Schott cited as "preparator"; specimen originally cited as "92 mm long to origin of caudal."

CHARACIDAE

Astyanax ruberrimus Eigenmann, 1913:25.

Paratypes

USNM 76940 (24, MISSING). Colombia, Istmina.

Remarks: Received from IU, presumably formerly IU 12751, in part; collector C.H. Eigenmann.

Paratypes

USNM 79168 (3, 34.0–37.3 mm). Colombia, Puerto Negria; Eigenmann.

Remarks: Received from CM, presumably formerly CM 12753, in part.

CHARACIDAE

Astyanax rutilus nicaragunesis Eigenmann and Ogle, 1907:23.

Holotype

USNM 55653 (1, 72.0 mm). Nicaragua; J.T. Bransford.

Paratypes

USNM 55657 (32, 32.8–71.8 mm). Original description stated "Several specimens from same source"; but no USNM catalog number was cited. This series of specimens was evidently collected with the holotype and was cataloged at same time as that specimen.

CHARACIDAE

Astyanax scologaster Weitzman and Vari, 1986:710, figs. 1, 3.

Paratypes

USNM 272609 (4, 35.3–36.0 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, Caño Chola, where crossed by road from San Carlos de Río Negro to Solano (01°58'N, 67°00'W), 5 Dec 1984.

Remarks: Collectors R.P. Vari et al.

Paratypes

USNM 272610 (5, 32.2–36.0 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, San Carlos de Río Negro, Río Negro margin upstream of town landing, 3 Dec 1984.

Remarks: Collectors R.P. Vari et al.

Paratypes

USNM 272611 (5, 29.6–33.0 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, Río Negro, one-half hour upstream of San Carlos de Río Negro, 4 Dec 1984.

Remarks: Collectors R.P. Vari et al.

Paratypes

USNM 272612 (8, 24.5–36.2 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, Caño Manu, which drains into Río Casiquiare about 250 m upstream of Solano (–02°00'N, 66°57'W); R.P. Vari et al., 7 Dec 1984.

Remarks: Collected with holotype.

Paratypes

USNM 276503 (5, 39.6–42.0 mm). Venezuela, Territorio Federal Amazonas; Departamento Río Negro, Río Negro at San Carlos de Río Negro; 2 Feb 1984.

Remarks: Collector C.J. Ferraris, Jr.

Paratypes

USNM 276504 (5, 35.7–39.8 mm). Brazil, Amazonas,

Rio Negro, Ilha de Tamaquaré just downstream from Tapurucuara, beach ($-0^{\circ}25'S$, $64^{\circ}55'W$), 10 Oct 1979.

Remarks: Collector M. Goulding.

Paratypes

USNM 276505 (6, 37.0–41.4 mm). Brazil, Amazonas, Rio Negro, Massarabi, sand beach just above Barcelos ($-0^{\circ}57'S$, $62^{\circ}56'W$); M. Goulding, 18 Oct 1979.

CHARACIDAE

Astyanax superbus Myers, 1942:92, fig. 2.

Paratype

USNM 130640 (1, 71.1 mm). Venezuela, small brook tributary to the Río Tamanaco (a tributary of the Río Paye; Río Portuguesa drainage), at Camuruco, 20 km NE of San Carlos; F.F. Bond, 9 Mar 1938.

Remarks: Collected with holotype; received from SU, formerly SU 36490, in part.

CHARACIDAE

Astyanax venezuelae Schultz, 1944:359, fig. 54.

Holotype

USNM 121449 (1, 86.5 mm). Venezuela, Río Torbes, 1 km above Táriba, Río Orinoco system; L.P. Schultz, 31 Mar 1942.

Paratypes

USNM 121450 (3, 75.1–87.8 mm). Venezuela, Río Torbes, 1 km above Táriba, Río Orinoco system; L.P. Schultz, 31 Mar 1942.

Remarks: 5 specimens cited in original description; 1 specimen exchanged to UMMZ Jun 1948, 1 specimen exchanged to MCZ Jul 1951.

CHARACIDAE

Aulixidens eugeniae Böhlke, 1952:775.

Paratype

USNM 157368 (1, 36.9 mm). Venezuela, Río Orinoco, Playa Matepalma, the playa below Yapacana (either region of Lagoa Mata de Palma, $-3^{\circ}43'N$, $66^{\circ}53'W$, or Ilha Mata de Palma, $-3^{\circ}44'N$, $66^{\circ}57'W$); C. Ternetz, 2 Apr 1925.

Remarks: Received from SU, formerly SU 16942, in part.

CHARACIDAE

Axelrodia riesei Géry, 1966b:112, figs. 1–5.

Holotype

USNM 207923 (1, 14.3 mm). Colombia, upper Río Meta basin, E of Villavicencio; H.A. Axelrod and W. Riese, Nov 1964.

Paratypes

USNM 207924 (3, 12.3–13.2 mm). Colombia, upper Río Meta basin, E of Villavicencio; H.A. Axelrod and W. Riese, Nov 1964.

Remarks: Collected with holotype.

CHARACIDAE

Bivibranchia bimaculata Vari, 1985:507, figs. 1–4.

Holotype

USNM 225974 (1, 80.5 mm). Surinam, Nickerie Dis-

trict, rocky pool in the center of the Corantijn River at "Camp Hydro" ($-3^{\circ}42'N$, $57^{\circ}58'W$); R.P. Vari and L.R. Parenti, 17 Sep 1980.

Paratypes

USNM 268203 (9, 68.3–94.7 mm). Surinam, Nickerie district, rocky pool in the center of the Corantijn River at "Camp Hydro" ($-3^{\circ}42'N$, $57^{\circ}58'W$); R.P. Vari and L.R. Parenti, 17 Sep 1980.

Remarks: Collected with holotype; 1 specimen cleared and stained.

HEMIODONTIDAE

Bivibranchia notata Vari and Goulding, 1985:1055, figs. 1, 2.

Paratype

USNM 268049 (1, 68.3 mm). Brazil, Pará, Rio Tapajós, beach at Alter do Chão ($-2^{\circ}31'S$, $54^{\circ}57'W$); M. Goulding, 25 Nov 1983.

Paratypes

USNM 268562 (3, 28.4–35.1 mm). Brazil, Pará, pool in Rio Tapajós at Barreirinha, near São Luís ($-4^{\circ}26'S$, $56^{\circ}14'W$); Expedição Permanente de Amazônia, 25 Nov 1970.

HEMIODONTIDAE

Bivibranchia protractila Eigenmann, 1912a:259, pl. XXXIII: figs. 1–5.

Paratype

USNM 66126 (1, 73.7 mm). British Guiana [= Guyana], Rockstone, sand-bank.

Remarks: Received from CM, presumably formerly CM 1875a–c, in part; collector C.H. Eigenmann.

HEMIODONTIDAE

Brachychalcinus nummus Böhlke, 1958:74, pl. 4: fig. 5.

Holotype

USNM 164019 (1, 84.0 mm). Ecuador, Napo-Pastaza, Chicherota, lower Río Bobonaza ($2^{\circ}23'S$, $76^{\circ}45'W$); R. Olalla, Jan 1954.

Paratypes

USNM 164044 (2, 30.7–55.9 mm). Ecuador, Napo-Pastaza, upper portion of Río Villano, southern tributary of upper Río Curaray, Río Napo system, at Villano ($1^{\circ}30'S$, $77^{\circ}28'W$); M. Olalla, May 1948.

Paratypes

USNM 164058 (2, 47.5–55.9 mm). Ecuador, Napo-Pastaza, Río Pucuno, tributary of Río Suno, northern tributary of upper Río Napo; J. Olalla, Nov 1951.

Paratype

USNM 164059 (1, 55.9 mm) Ecuador, Napo-Pastaza, Río Pucuno, tributary of Río Suno, northern tributary of upper Río Napo; M.E. Olalla, Nov 1950.

Paratypes

USNM 164069 (2, 51.1–59.6 mm). Ecuador, Napo-Pastaza, Río Tutapishco, small tributary of Río Suno, a northern tributary of upper Río Napo, near Loreto ($0^{\circ}38'S$, $77^{\circ}19'W$); M. Olalla, Apr 1952.

- Paratype
USNM 175141 (1, 69.8 mm). Ecuador, Napo-Pastaza, Chicherota, lower Río Bobonaza (2°23'S, 76°45'W); R. Olalla, Jan 1954.
Remarks: Collected with holotype.
- CHARACIDAE
- Bramocharax Bransfordii* Gill in Gill and Bransford, 1877:190.
Syntypes
USNM 16885 (3, 78.0–127.5 mm). Nicaragua, Lake Nicaragua; J.F. Bransford, spring 1876.
- CHARACIDAE
- Brittanichthys axelrodi* Géry, 1965:22, figs. 1–4.
Holotype
USNM 198132 (1, 24.3 mm). Brazil (Amazonas), Rio Negro basin, Praio [= Praia] Bulufu, Rio Itu, ~80 km upstream from meeting [of Rio Itu] with Rio Negro (0°30'S, 63°30'W); M.R. Brittan and H.W. Schwartz, 26 Apr 1964.
Remarks: 28.1 mm SL recorded in original description.
- Paratypes
USNM 198133 (7, 22.4–24.7 mm). Brazil (Amazonas), Rio Negro basin, Praio [= Praia] Bulufu, Rio Itu, ~80 km upstream from meeting [of Rio Itu] with Rio Negro, 0°30'S, 63°30'W; M.R. Brittan and H.W. Schwartz, 26 Apr 1964.
Remarks: Collected with holotype.
- CHARACIDAE
- Brittanichthys myersi* Géry, 1965:62, figs. 5–8.
Holotype
USNM 198131 (1, 30.7 mm). Brazil (Amazonas), Rio Negro, unnamed inlet on shore, ~13 km W of junction with the Amazon, 10 km W of Manaus (3°10'S, 59°55'W); W.R. Brittan, 7 Apr 1964.
- CHARACIDAE
- Brycon argenteus* Meek and Hildebrand, 1913:84.
Paratypes ?
USNM 78471 (13, 25.6–175.2 mm). Panama, Río Aruza, Aruza.
Remarks: Probable paratypes; Meek and Hildebrand specifically cited only holotype in original description, but species description is based on more than one specimen; these specimens collected at type locality; 10 specimens originally cited in USNM ledgers.
- CHARACIDAE
- Brycon behrae* Hildebrand, 1938:278, fig. 5.
Paratypes
USNM 109205 (3, 26.7–210.5 mm). Panama, western Panama, Pacific slope, Río Chiriquí basin, general vicinity of Caldera; E.H. Behre, 1923.
Remarks: Received from CAS; 2 specimens originally cited in USNM ledgers.
- Paratype
USNM 109206 (1, 76.4 mm). Panama, western Panama, Pacific slope, Río Chiriquí basin, general vicinity of Caldera; E.H. Behre, 1923.
Remarks: Received from CAS.
- CHARACIDAE
- Brycon henni* Eigenmann, 1913:26.
Paratypes
USNM 79169 (3, 102.2–134.2 mm). Colombia, Caldas.
Remarks: Received from CM; presumably formerly CM 5153a–f, in part; collector C.H. Eigenmann.
- CHARACIDAE
- Brycon meeki* Eigenmann and Hildebrand in Eigenmann, 1917:688.
Paralectotypes
USNM 280489 (12, 37.6–116.9 mm). Colombia, Río Telembi, 8 mi above Barbacoas; A. Henn, 16 Jan 1913.
Remarks: Lectotype designated by Eigenmann, 1922:322; specimens received from CAS; formerly IU 12984, in part.
- CHARACIDAE
- Brycon obscurus* Hildebrand, 1938:283, fig. 6.
Holotype
USNM 106512 (1, 73.8 mm). Panama, Pacific slope, creek in El Valle.
Remarks: Note in jar indicates specimen was collected by S.F. Hildebrand, 12 Mar 1937.
- Paratypes
USNM 109207 (3, 29.4–33.1 mm). Panama, Pacific slope, creek in El Valle.
- CHARACIDAE
- Brycon petrosus* Meek and Hildebrand, 1913:84.
Paratype
USNM 78495 (1, 161.9 mm). Panama, upper Chagres.
Remarks: Probable paratype; Meek and Hildebrand specifically cited only holotype in original description, but description is based on more than one specimen; specimen collected at type locality; data in jar indicate specimen was collected 24 Feb 1911.
- CHARACIDAE
- Bryconamericus alfredae* Eigenmann, 1927a:394, pl. 99: fig. 1.
Paratypes
USNM 120246 (6, 22.1–39.8 mm). Peru, Río Urbamba at Santa Ana; E. Heller.
Remarks: Received from MCZ, formerly MCZ 30983, in part; originally IU 13755, in part; 5 specimens originally cited in USNM ledgers.
- CHARACIDAE
- Bryconamericus beta motatanensis* Schultz, 1944:341, fig. 50.
Holotype
USNM 121477 (1, 39.4 mm). Venezuela, Maracaibo basin, Río San Juan at bridge S of Mene Grande; L.P. Schultz, 20 Mar 1942.
- Paratypes
USNM 121478 (74, 22.3–47.7 mm). Venezuela, Maracaibo basin, Río San Juan at bridge S of Mene Grande;

L.P. Schultz, 20 Mar 1942.

Remarks: 77 specimens cited in original description; 2 specimens exchanged to J. Géry Apr 60, subsequently transferred to MHNG; 1 specimen unaccounted for; collected with holotype.

Paratypes

USNM 121479 (10, 22.3–36.1 mm). Venezuela, Maracaibo basin, Río Motatán, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Paratype

USNM 121480 (1, 34.2 mm). Venezuela, Maracaibo basin, Río Jimelles, 12 km E of Motatán, Río Motatán system; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121481 (35, 21.8–43.9 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge S of Mene Grande, Motatán system; L.P. Schultz, 17–20 Mar 1942.

Remarks: 45 specimens cited in original description; 5 specimens exchanged to UMMZ Jun 1948; 5 specimens exchanged to MCZ Jul 51.

CHARACIDAE

Bryconamericus breviceps Eigenmann, 1908:105.

Paratypes

USNM 120274 (4, 55.6–68.9 mm). Goyaz.

Remarks: Received from MCZ, formerly MCZ 20692, in part; complete collection information: Brazil, Goiás; "Senhor Honorio," 1865.

CHARACIDAE

Bryconamericus cascajalensis Meek and Hildebrand, 1916:284, pl. XIX.

Paratypes

USNM 78448 (17, 44.1–70.9 mm). Panama, Río Cascajal, Porto Bello.

Remarks: 19 specimens originally cited in USNM ledger; 2 specimens unaccounted for.

CHARACIDAE

Bryconamericus chocoensis Eigenmann, 1913:14.

Paratypes

USNM 76943 (19, 35.0–53.1 mm). Colombia, Istmina.

Remarks: According to Eigenmann (1912b:8), he collected at Istmina 18–20 Mar 1912; specimens received from IU, presumably formerly IU 12939, in part; 5 specimens removed to USNM 236096 and 249871.

Paratypes

USNM 79173 (4, 42.8–50.3 mm). Colombia, Istmina.

Remarks: According to Eigenmann (1912b:8), he collected at Istmina 18–20 Mar 1912; specimens received from CM, presumably formerly CM 5037a–z, in part.

Paratypes

USNM 236096 (3, MISSING). Colombia, Istmina.

Remarks: Specimens cleared and stained, formerly USNM 76943, in part; see under that lot for additional collection information.

Paratypes

USNM 249871 (2, 45.5–48.5 mm). Colombia, Istmina.

Remarks: Specimens cleared and stained, formerly USNM 76943, in part; see under that lot for additional collection information.

CHARACIDAE

Bryconamericus conventus Eigenmann, 1913:13.

Paratypes

USNM 79174 (4, 34.2–38.4 mm). Colombia, Soplaviento.

Remarks: Received from CM, presumably formerly CM 5061a–n, in part; collector C.H. Eigenmann.

CHARACIDAE

Bryconamericus dentatus Eigenmann, 1913:19.

Paratypes

USNM 79175 (3, 64.2–78.9 mm). Colombia, Paila.

Remarks: Received from CM; presumably formerly CM 5053a–e, in part; collector C.H. Eigenmann; 4 specimens originally cited in USNM ledgers, 1 specimen unaccounted for.

CHARACIDAE

Bryconamericus deuterodonoides eurydous Schultz, 1944:344, fig. 51.

Holotype

USNM 121437 (1, 33.2 mm). Venezuela, Estado de Aragua, Río Guárico and tributaries between San Sebastián and San Casimiro; L.P. Schultz et al., 12 May 1942.

Paratypes

USNM 121438 (388, 17.6–36.4 mm). Venezuela, Estado de Aragua, Río Guárico and tributaries between San Sebastián and San Casimiro; L.P. Schultz et al., 12 May 1942.

Remarks: 408 specimens cited in original description; 5 specimens exchanged to UMMZ Jun 1948; 5 specimens exchanged to MCZ Jul 1951; 10 specimens exchanged to ZMA Mar 1958.

CHARACIDAE

Bryconamericus heteresthes Eigenmann, 1908:105.

Syntypes

USNM 120247 (6, 31.1–38.3 mm). Tapajos.

Remarks: Received from MCZ, formerly MCZ 20862a, in part (those specimens now MCZ 89966); complete collection information: Brazil, Pará, Rio Tapajós; H. Dexter, W. James, and "Talisman," 26 Aug 1865.

CHARACIDAE

Bryconamericus loisae Géry, 1964a:46, fig. 12.

Holotype

USNM 198645 (1, 69.5 mm). Colombia, upper Río Meta drainage, about 200 miles [~320 km] E of Bogota; R. Socolof et al., May 1963.

Remarks: 74.0 mm SL recorded in the original description; exact locality Colombia, Río Manacacias into upper Río Meta, at Restrepo.

CHARACIDAE

Bryconamericus magdalenensis Eigenmann, 1913:14.

Paratypes

USNM 79176 (4, 37.8–42.7 mm). Colombia, Girardot.
Remarks: Received from CM; presumably formerly CM 5064, in part; collector C.H. Eigenmann.

CHARACIDAE

Bryconamericus pectinatus Vari and Siebert, 1990:517, figs. 1–5.

Paratypes

USNM 303441 (5, 19.8–34.8 mm). Peru, Departamento Madre de Dios, Provincia Manú, Parque Nacional de Manú, second large quebrada along Trail 1 leading to the E from Pakitza, tributary of Río Manú (~11°50'S, 71°21'W); H. Ortega et al., 13 Sep 1988.

Paratypes

USNM 303442 (8, 17.0–23.6 mm). Peru, Departamento Madre de Dios, Provincia Manú, Parque Nacional de Manú, second large quebrada along Trail 1 leading to the E from Pakitza, tributary of Río Manú (~11°50'S, 71°21'W); H. Ortega et al., 17 Sep 1988.

Remarks: Collected with holotype.

CHARACIDAE

Bryconamericus scopiferus Eigenmann, 1913:16.

Paratypes

USNM 79177 (4, 49.5–59.5 mm). Colombia, Istmína.
Remarks: Received from CM; presumably formerly CM 5027a–z, in part; collector C.H. Eigenmann.

Paratypes

USNM 76945 (24, 21.8–51.4 mm). Colombia, Istmína.
Remarks: Received from IU, presumably formerly IU 12793, in part; 29 specimens cited in USNM ledger, 5 specimens unaccounted for.

CHARACIDAE

Bryconamericus zeteki Hildebrand, 1938:265, fig. 4.

Holotype

USNM 106511 (1, 70.0 mm). Panama, Pacific Slope, creek in El Valle.

Remarks: USNM ledgers list S.F. Hildebrand as collector.

Paratypes

USNM 109263 (52, 14.2–70.0 mm). Panama, Pacific Slope, creek in El Valle.

Remarks: Collected with holotype.

Paratypes

USNM 109264 (32, 31.8–64.5 mm). Panama, Pacific Slope, creek in El Valle.

Remarks: USNM ledgers list E. Robson as collector.

CHARACIDAE

Bryconexodon juruena Géry, 1980:2, figs. 1, 2, 5–11.

Paratypes

USNM 194289 (6, 51.0–75.0 mm). Brazil, Mato Grosso, upper Rio Juruena, tributary of Rio Tapajós; H. Schultz, 16 Jul 1962.

Paratype

USNM 194331 (1, MISSING). Brazil, Mato Grosso,

upper Rio Juruena, tributary of Rio Tapajós, near the road between Cuiaba and Porto Velho; H. Schultz, 8 Jul 1962.

Remarks: Collected with holotype; reported by Géry as 45 mm SL.

Paratypes

USNM 194333 (4, 44.4–102.9 mm) Brazil, Mato Grosso, upper Rio Juruena, tributary of Rio Tapajós, near the road between Cuiaba and Porto Velho; H. Schultz, 8 Jul 1962.

Remarks: Collected with holotype.

Paratype

USNM 194336 (1, 103.4 mm). Brazil, Mato Grosso, upper Rio Juruena, tributary of Rio Tapajós; H. Schultz, 19 Jul 1962.

Paratype

USNM 194350 (1, 122.5 mm). Brazil, Mato Grosso, upper Rio Juruena, tributary of Rio Tapajós; H. Schultz, 27 Aug 1962.

Paratype

USNM 194366 (1, 62.6 mm). Brazil, Mato Grosso, upper Rio Juruena, tributary of Rio Tapajós; H. Schultz, Jun to Oct 1962.

CHARACIDAE

Chalcinus angulatus fuscus Garman, 1890a:4.

Syntypes

USNM 120253 (3, 98.6–110.3 mm). Villa Bella.

Remarks: Received from MCZ, formerly MCZ 21190, in part; complete collection information: Brazil, Amazonas, Rio Amazonas at Parintins and environs; L. Agassiz, 27 Aug 1865.

CHARACIDAE

Characidium blennioides Eigenmann, 1909:37.

Paratype

USNM 66129 (1, 27.3). British Guiana [= Guyana], Crab Falls.

Remarks: Received from CM, presumably formerly CM 1149a–b, in part; collector C.H. Eigenmann, 1908.

CHARACIDAE

Characidium bolivianum Pearson, 1924:31, pl. IX: fig. 3.

Syntype

USNM 117523 (1, 42.8 mm). Bolivia, upper Beni, Popoi River; N. Pearson, Sep 1921.

Remarks: Received from UMMZ, formerly IU 17301 and UMMZ 66488, in part. Pearson termed the lot this specimen came from as “cotypes,” a term often applied to paratypes by Eigenmann and his associates. No “type” was designated by Pearson making his “cotypes” syntypes in this instance.

CHARACIDAE

Characidium caucanum Eigenmann, 1912b:25.

Paratypes

USNM 79183 (2, 35.3–36.2). Colombia, Cali.

Remarks: Received from CM; presumably formerly CM

4848a-j, in part; collector C.H. Eigenmann, Mar 1912.

CHARACIDAE

Characidium chupa chupa Schultz, 1944:283, fig. 33.

Holotype

USNM 121417 (1, 64.3 mm). Venezuela, Estado de Mérida, Río Chama at Estanques; L.P. Schultz, 3 Apr 1942.

Paratype

USNM 121418 (1, 72.9 mm). Venezuela, Estado de Mérida, Río Chama, 10 km below Lagunillas; L.P. Schultz, 30 Mar 1942.

Paratypes

USNM 121419 (44, 34.0–79.0 mm). Venezuela, Estado de Mérida, Río Chama at Estanques; L.P. Schultz, 3 Apr 1942.

Remarks: Collected with holotype; 80 specimens cited in original description; 5 specimens exchanged to UMMZ 1 Jun 1948; 4 specimens exchanged to RMNH Mar 1951; 3 specimens exchanged to MCZ Jul 1951; 4 specimens exchanged to ZMA Mar 1958; 2 specimens exchanged to J. Géry Jan 1960, subsequently transferred to MHNG; 6 specimens exchanged to MNRJ; 12 specimens unaccounted for; 2 specimens cleared and stained.

Paratypes

USNM 121420 (9, 31.8–62.1 mm). Venezuela, Estado de Mérida, Río Chama at La Gonzáles; L.P. Schultz, 29 Mar 1942.

CHARACIDAE

Characidium chupa torbesensis Schultz, 1944:286, fig. 34.

Holotype

USNM 121415 (1, 59.6 mm). Venezuela, Río Torbes, 1 km above Táriba, Orinoco drainage; L.P. Schultz, 31 Mar 1942.

Paratypes

USNM 121416 (5, 49.6–73.2 mm). Venezuela, Río Torbes, 1 km above Táriba, Orinoco drainage; L.P. Schultz, 31 Mar 1942.

Remarks: 7 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951, 1 specimen exchanged to UMMZ 1 Jun 1948.

CHARACIDAE

Characidium japyhybensis Travassos, 1949:229, figs. 1–4.

Paratypes

USNM 149945 (3, 38.4–45.6 mm). Brazil, Rio de Janeiro, Município de Angra dos Reis, Japyhyba [= Japyúba]; H. Travassos, 1 Jan 1945.

Remarks: Received from MNRJ; evidently collected with holotype.

CHARACIDAE

Characidium marshi Breder, 1925:5, fig. 5.

Paratypes

USNM 120234 (2, 19.6–22.3 mm). Panama, Darien, Rio Chucunaque; Marsh-Darien Expedition, 1924.

Remarks: Received from AMNH.

Paratype

USNM 120235 (1, 27.5 mm). Panama, Darien, Rio Sucubtí; Marsh-Darien Expedition, 1924.

Remarks: Received from AMNH.

Paratype

USNM 120236 (1, 41.7 mm). Panama, Darien, Rio Sucubtí; Marsh-Darien Expedition, 1924.

Remarks: Received from AMNH.

CHARACIDAE

Characidium pterostictum Gomes, 1947:18, pl. I: fig. 3.

Paratype

USNM 143848 (1, 29.8 mm). Brazil, Rio Grande do Sul, Conceição do Arroio County [Município de Conceição do Arroio; now Osório], swift current of Rio Maquiné, a tributary to Lagôa dos Quadros; H. Kleerekoper, 1941.

Remarks: Received from UMMZ, formerly UMMZ 143290, in part; collected with holotype.

CHARACIDAE

Characidium timbuiensis Travassos, 1946:60, figs. 1–23.

Paratypes

USNM 133901 (8, 25.0–47.5 mm). Brazil, Espírito Santo, Município de Santa Teresa, Córrego do Cemitério, tributary of Rio Timbui, Santa Tereza; Ruschi et al., 24 Nov 1942.

Remarks: Received from MNRJ, formerly MNRJ 4555, in part.

Paratype

USNM 133902 (1, 45.3 mm). Brazil, Espírito Santo, Município de Santa Teresa, Córrego Valsungana, tributary of Rio Timbui, near Santa Teresa; Ruschi et al., 24 Nov 1942.

Remarks: Received from MNRJ, formerly MNRJ 4290.

Paratype

USNM 133903 (1, 54.8 mm). Brazil, Espírito Santo, Município de Santa Teresa, Córrego Valsungana, tributary of Rio Timbui, near Santa Teresa; Ruschi et al., 24 Nov 1942.

Remarks: Received from MNRJ, formerly MNRJ 4327.

CHARACIDAE

Characidium vintoni Eigenmann, 1909:36.

Paratypes

USNM 288086 (1, 62.9 mm). British Guiana [= Guyana], Shrimp Creek.

Remarks: Received from CAS, formerly IU 11674, in part; collector C.H. Eigenmann, 1908; 2 specimens originally in lot, 1 specimen unaccounted for.

CHARACIDAE

Characidium voladorita Schultz, 1944:280, fig. 32.

Holotype

USNM 121407 (1, 39.2 mm). Venezuela, Maracaibo Basin, 4 km above Motatán in the Río Motatán; L.P. Schultz, 25 Mar 1942.

Paratypes

USNM 121408 (32, 15.5–37.4 mm). Venezuela, Maracaibo Basin, 4 km above Motatán in the Río Motatán; L.P. Schultz, 25 Mar 1942.

Remarks: Collected with holotype; 40 specimens originally in lot, 6 specimens exchanged to ZMA Mar 1952, 2 specimens exchanged to MNRJ Nov 1946.

Paratypes

USNM 121409 (15, 22.7–32.0 mm). Venezuela, Maracaibo Basin, Río Palmar, near Totuma, about 100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121410 (27, 19.8–33.1 mm). Venezuela, Maracaibo basin, Río San Pedro, at bridge S of Mene Grande, Motatán system; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 121411 (3, 23.7–30.9 mm). Venezuela, Maracaibo basin, Río Machango, 20 km above bridge S of Lagunillas; L.P. Schultz, 21 Mar 1942.

Paratypes

USNM 121412 (5, 25.0–34.8 mm) Venezuela, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Remarks: 10 specimens cited in original description; 5 specimens exchanged to UMMZ 1 Jun 1948.

Paratypes

USNM 121413 (26, 17.9–25.5 mm). Venezuela, Maracaibo basin, Estado de Zulia, Río San Juan, 12 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121414 (95, mm). Venezuela, Maracaibo basin, Río San Juan near the bridge near Mene Grande, Motatán system; L.P. Schultz, 17 and 20 Mar 1942.

Remarks: 98 specimens cited in original description; 5 specimens exchanged to MCZ Jul 1951.

CHARACIDAE

Charax apurensis Lucena, 1987:30, fig. 2.

Paratype

USNM 233691 (1, 68.0 mm). Venezuela, Estado de Monagas, inlet on N shore of Isla Varadero, downstream from Barrancas, 142 nautical miles [356 km] from Sea Buoy; J. Baskin et al., 11 Nov 1979.

Paratypes

USNM 260317 (17, 56.0–118.0 mm). Venezuela, Estado de Apure, ponds along road to Modulos de Mantecal, ~4 km S of main road to San Fernando de Apure; technicians of San Fernando Fisheries Station, 14 Jan 1983.

CHARACIDAE

Charax atratoensis Eigenmann in Eigenmann and Ogle, 1907:33, fig. 7.

Holotype

USNM 1664 (1, 306.1 mm). Colombia, Truando; Michler and Schott.

Remarks: USNM ledgers for other portions of collection indicate that collector is Lt. N. Michler; A. Schott cited as “preparator”; originally cited as “300 mm to end of lateral line”; “cotype” originally cited as USNM 1664, in part, now cataloged as USNM 306567.

Paratype

USNM 306567 (1, 216.2 mm). Colombia, Truando; Michler and Schott.

Remarks: See above with respect to collector; originally cited as “217 mm to end of lateral line”; originally cataloged as USNM 1664, in part.

CHARACIDAE

Charax caudimaculatus Lucena, 1987:32, fig. 3.

Holotype

USNM 280291 (1, 85.0 mm). Peru, Madre de Dios, Reserva Natural de Tambopata, Laguna Chica, (12°50'30"S, 69°17'30"W); R.P. Vari et al., 19 Aug 1983.

Paratypes

USNM 263877 (17, 53.0–80.0 mm). Peru, Madre de Dios, Reserva Natural de Tambopata, Laguna Coccocha (12°49'S, 69°30'W); R.P. Vari et al., 20 Aug 1983.

CHARACIDAE

Charax metae Eigenmann, 1922:238, pl. XXV: fig. 1.

Paratypes

USNM 83631 (4, 51.3–69.1 mm). Colombia, Barrigón; M. Gonzales.

Remarks: Received from C.H. Eigenmann; formerly IU 15027, in part.

CHARACIDAE

Charax notulatus Lucena, 1987:46, fig. 10.

Paratypes

USNM 233197 (10, 48.0–62.0 mm). Venezuela, Territorio Federal Delta Amacuro, Río Orinoco, small caño on W side of river just above downstream mouth of Caño Remolinas, 74 nautical miles [137 km] upstream of Sea Buoy (8°30'N, 61°10'W); J. Lundberg et al., 25 Feb 1978.

Paratypes

USNM 233624 (17, 53.0–74.0 mm). Venezuela, Territorio Federal Delta Amacuro, Río Orinoco, small caño near mouth of Caño Soroco, 111 nautical miles [205 km] from Sea Buoy (8°35'N, 61°42'W); J. Baskin et al., 20 Feb. 1978.

Remarks: Collected with holotype; original description cites 16 specimens in lot.

Paratype

USNM 260302 (1, 79.0 mm). Venezuela, Estado de Guarico, Río Caracol; R.P. Vari et al., 19 Jan 1983.

Remarks: Additional locality data: Río Caracol, where crossed by bridge on Fundo Masaguaral (8°34'N, 67°30'W).

Paratypes

USNM 270254 (3, 70.0–74.0 mm). Venezuela, isolated lagoon on Isla Tapapata, at Los Castillos, between Puerto Ordan and Barrancas, 163 nautical miles [181 km] from Sea Buoy (8°31'36"N, 62°26'42"W); E. Marsh et al., 10 Oct 1979.

Remarks: Locality is in Estado de Monagas; Tapapata cited as Tajopatá in original description.

Paratype

USNM 260305 (1, 76.0 mm). Venezuela, Estado de Guarico, Caño Falcon, ~5 km N of RPV 83-4, Río Portuguesa basin (8°14'N, 67°35'W); A. Machado and L. Aguana, 20 Jan 1983.

CHARACIDAE

Cheirodon australe Eigenmann, 1927b:44, pl. IX: fig. 3.

Paratypes

USNM 84317 (12, 28.2–50.6 mm). Chile, Puerto Varas, mostly from a creek flowing through the town into Lake Llanquihue; Irwin Expedition, 1919.

Remarks: Received from IU, presumably formerly IU 15509, in part; originally 14 specimens in lot, 2 specimens recataloged as USNM 22198.

Paratypes

USNM 221998 (2, 32.1–46.4 mm). Chile, Puerto Varas, mostly from a creek flowing through the town into Lake Llanquihue; Irwin Expedition, 1919.

Remarks: Formerly USNM 84317, in part; specimens cleared and stained.

CHARACIDAE

Cheirodon axelrodi Schultz, 1956:42, text fig.

Holotype

USNM 164483 (1, 22.4 mm). Brazil, near Porto Velho. Remarks: Weitzman and Fink (1983:368, 388–389) noted that collection information for type is probably Brazil, Amazonas, stream near Tomar [= Thomar] (0°25'S, 63°55'W), Rio Negro, collected for Paramount Aquarium, Inc., 1956.

Paratype

USNM 164484 (1, 20.0 mm). Brazil, near Porto Velho. Remarks: Length cited as 20.5 mm in original description; see under holotype concerning type locality.

CHARACIDAE

Cheirodon dialepturus Fink and Weitzman, 1974:5, figs. 1–5.

Holotype

USNM 208524 (1, 28.0 mm). Panama, Veraguas Province, Río San Pedro basin, creek at bridge 12 miles [19.2 km] W of Santiago on road to Sona; H. Loftin et al., 28 Jan 1962.

Paratypes

USNM 208523 (132, 20.1–30.0 mm). Panama, Veraguas Province, Río San Pedro basin, creek at bridge 12 miles [19.2 km] W of Santiago on road to Sona; H. Loftin et al., 28 Jan 1962.

Remarks: 144 specimens cited in original description;

collected with holotype; 3 specimens cleared and stained; 12 specimens unaccounted for.

CHARACIDAE

Cheirodon galusdae Eigenmann, 1927b:44, pl. IX: fig. 2.

Paratypes

USNM 84319 (9, 31.9–52.3 mm). Chile, Río Locomilla, San Javier; Irwin Expedition, 23 Mar 1919.

Remarks: Received from IU, presumably formerly IU 15506, in part; originally 10 specimens in lot; 1 specimen removed for cleared and staining, now cataloged as USNM 221997.

Paratype

USNM 221997 (1, 52.1 mm). Chile, Río Locomilla, San Javier; Irwin Expedition, 23 Mar 1919.

Remarks: Formerly USNM 84319, in part; specimen cleared and stained.

CHARACIDAE

Cheirodon gorgonae Evermann and Goldsborough, 1909:99, figs. 1–3.

Holotype

USNM 64094 (1, 21.8 mm). Panama, Canal Zone, small seepage pool below spillway of the reservoir dam at Gorgona; A.H. Jennings; 7 Feb 1908.

Remarks: Cited as 28 mm (? total length) in original description.

Paratypes

USNM 64095 (4, MISSING). Panama, Canal Zone, small seepage pool below spillway of the reservoir dam at Gorgona; A.H. Jennings; 7 Feb 1908.

Remarks: Collected with holotype; 5 specimens cited in original description, but only 4 cited in USNM ledgers.

Paratypes

USNM 127086 (3, 18.8–23.0 mm). Panama, Canal Zone, small seepage pool below spillway of the reservoir dam at Gorgona; A.H. Jennings; 7 Feb 1908.

Remarks: Collected with holotype; specimens originally cited as deposited in "Reserve Series of the Bureau of Fisheries."

CHARACIDAE

Cheirodon kiliani Campos, 1982:154, figs. 10, 11.

Paratype

USNM 227309 (1, 26.9 mm). Chile, Valdivia, Río Cau-Cau; H. Campos, 10 Aug 1963.

Remarks: Received from H. Campos, formerly IZUA 2341, in part.

Paratypes

USNM 227310 (1, 25.3 mm). Chile, Valdivia, Río Cau-Cau; H. Campos, 10 Aug 1963.

Remarks: Received from H. Campos, formerly IZUA 2341, in part.

CHARACIDAE

Cheirodon mitopterus Fink and Weitzman, 1974:12, figs. 6, 7.

Holotype

USNM 208539 (1, 35.0 mm). Panama, Coclé Province,

Río Cocle del Norte basin, Río Tucue at junction of river and road between Tucue and Tambo; J.D. McPhail, 18 Aug 1972.

Paratypes

USNM 208513 (8, 28.5–36.8 mm). Panama, Cocle Province, Río Cocle del Norte basin, Río Tucue at junction of river and road between Tucue and Tambo; J.D. McPhail, 18 Aug 1972.

Remarks: Collected with holotype; 7 specimens cited in original description; 1 specimen cleared and stained.

CHARACIDAE

Cheirodontops geayi Schultz, 1944:319, fig. 42, 43.

Holotype

USNM 121507 (1, 37.3 mm). Venezuela, Estado de Aragua, Río Guárico and tributaries between San Sebastián and San Casimiro; L.P. Schultz et al., 12 May 1942.

Paratypes

USNM 121508 (3, 32.7–36.9 mm). Venezuela, Estado de Aragua, Río Guárico and tributaries between San Sebastián and San Casimiro; L.P. Schultz et al., 12 May 1942.

Remarks: 6 specimens cited in original description; 1 specimen exchanged to UMMZ Jun 1948; 1 specimen exchanged to MCZ Jul 1951, 1 specimen exchanged to CAS.

CHARACIDAE

Coelurichthys iporangae Miranda-Ribeiro, 1908:4th unpaginated page, fig. 6.

Holotype

USNM 92955 (1, 34.8 mm). Brazil, São Paulo, Ribeirão das Pedras, Iporanga; R. Krone.

Remarks: Deposited by G.S. Myers, who obtained it in exchange from C.H. Eigenmann; originally from MNRJ. Specimen agrees with photograph of holotype in original description, which was based on a single specimen (S.H. Weitzman, pers. comm.).

CHARACIDAE

Copella vilmae Géry, 1963c:25, figs. 1, 2.

Paratypes

USNM 198135 (4, 32.6–46.2 mm). Brazil, Igarapé Preto, tributary to upper Amazon, near Belém, ~60 km downstream from Leticia; H. Schultz, Dec 1960.

Remarks: Collected with holotype.

LEBIASINIDAE

Creagrutops maracaiboensis Schultz, 1944:327, figs. 45, 46.

Holotype

USNM 121531 (1, 22.1 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratypes

USNM 121532 (42, 9.7–21.7 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: Collected with holotype; 48 specimens cited in original description; 2 specimens exchanged to UMMZ Jan 1948, 2 specimens exchanged to MCZ Jul 1951; 1 specimen exchanged to MHNG May 1987, 1 specimen unaccounted for.

CHARACIDAE

Creagrutus bolivari Schultz, 1944:334, fig. 49.

Holotype

USNM 121497 (1, 51.3 mm). Venezuela, Estado de Aragua, Río Guárico and its tributaries, between San Sebastián and San Casimiro; L.P. Schultz et al., 12 May 1942.

Paratypes

USNM 121498 (82, 28.7–47.6 mm). Venezuela, Estado de Aragua, Río Guárico and its tributaries, between San Sebastián and San Casimiro; L.P. Schultz et al., 12 May 1942.

Remarks: Collected with holotype; 90 specimens cited in original description, 3 specimens exchanged to UMMZ Jun 1948, 5 specimens exchanged to MCZ Jul 1951.

CHARACIDAE

Creagrutus brevipinnis Eigenmann, 1913:10.

Paratypes

USNM 79188 (4, 31.9–41.8 mm). Colombia, Piedra Moler.

Remarks: Received from CM; presumably formerly CM 4887a–i, in part; collector C.H. Eigenmann.

CHARACIDAE

Creagrutus cochui Géry, 1964d:56, fig. 12.

Holotype

USNM 200426 (1, 67.7 mm). Peru, upper Amazon region surrounding Iquitos; J. Roberts, end of 1963.

CHARACIDAE

Creagrutus hildebrandi Schultz, 1944:330, figs. 47, 48.

Holotype

USNM 121482 (1, 49.7 mm). Venezuela, Maracaibo basin, Río Táchira, 7 km N of San Antonio, Catatumba system; L.P. Schultz, 1 Apr 1942.

Paratype

USNM 121483 (1, 27.9 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge, Río Motatán system; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 121484 (20, 24.2–44.6 mm). Venezuela, Maracaibo basin, Río San Juan near bridge, Motatán system; L.P. Schultz, 17–20 Mar 1942.

Paratypes

USNM 121485 (97, 19.7–57.8 mm). Venezuela, Maracaibo basin, Río Jimelles, 12 km E of Motatán; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121486 (314, 13.7–39.6 mm). Venezuela, Maracaibo basin, Río Apón ~35 km S of Rosario; L.P.

Schultz, 26 Feb 1942; 334 specimens cited in original description, 10 specimens exchanged to ZMA Mar 1958, 10 specimens exchanged to MCZ Jul 1951.

Paratypes

USNM 121487 (219, 16.3–53.8 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, ~100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Remarks: 229 specimens cited in original description; 10 specimens exchanged to ZMA Mar 1958.

Paratypes

USNM 121488 (159, 13.0–45.0 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratypes

USNM 121489 (154, 14.7–46.7 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above its mouth; L.P. Schultz, 24 Feb 1942.

Paratypes

USNM 121490 (148, 19.5–48.7 mm). Venezuela, Maracaibo basin, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121491 (10, 30.2–64.6 mm). Venezuela, Maracaibo basin, Río Táchira, 7 km N of San Antonio, Catatumba system; L.P. Schultz, 1 Apr 1942.

Remarks: Collected with holotype.

Paratypes

USNM 121492 (66, 16.9–44.9 mm). Venezuela, Maracaibo basin, Río Machango at bridge S of Lagunillas; L.P. Schultz, 16 Mar 1942.

Paratypes

USNM 121493 (11, 16.7–34.6 mm). Venezuela, Maracaibo basin, Río Machango, 20 km above bridge, S of Lagunillas; L.P. Schultz, 21 Mar 1942.

Paratypes

USNM 121494 (261, 13.4–50.7 mm). Venezuela, Maracaibo basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Paratypes

USNM 121495 (16, 18.6–24.9 mm). Venezuela, Maracaibo basin, Río Palmar at bridge, 70 km NW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Paratypes

USNM 121496 (387, 28.5–63.5 mm). Venezuela, Maracaibo basin, Río Motatan, 4 km above Motatán; L.P. Schultz, 25 Mar 1942.

Remarks: 403 specimens cited in original description; 10 specimens exchanged to UMMZ Jun 1948, 6 specimens exchanged to J. Géry Jan 1960, subsequently transferred to MHNG.

CHARACIDAE

Creagrutus simus Meek and Hildebrand, 1913:85.

Paratypes ?

USNM 78570 (41, 26.4–51.0 mm). Panama, Río Cupe,

Cituro.

Remarks: Probable paratypes; Meek and Hildebrand specifically cited only holotype in original description, but description is based on more than 1 specimen; these specimens collected at type locality and are identified as "cotypes" in USNM ledger; 42 specimens originally cited in USNM ledgers, 1 specimen unaccounted for; data in jar indicates that specimens were collected by Meek and Hildebrand, 25 Feb 1912.

CHARACIDAE

Curimata cerasina Vari, 1984:30, figs. 1–3.

Paratype

USNM 257085 (1, 89.3 mm). Venezuela, Guarico, Laguna Los Laureles between Camaguán and Caño Falcón; A. Machado-Allison and L. Aguana, 17–20 Mar 1972.

Paratypes

USNM 257086 (3, 125.6–139.8 mm). Venezuela, Apure, flooded area near the road from San Fernando de Apure to Arichuna, 15 km SE of San Fernando de Apure (–7°47'N, 67°23'W); O. Castillo, 7 May 1981.

Paratypes

USNM 257087 (2, 151.3–160.9 mm). Venezuela, Apure, Río Apure in front of the airport at San Fernando de Apure (7°53'N, 67°29'W); N. Ortiz et al., 5 Jan 1983.

Paratypes

USNM 257088 (2, 91.7–93.6 mm). Venezuela, Guarico, flooded borrow pit side of road from Calabozo to Camaguán (8°17'N, 67°36'W); A. Machado-Allison and R.P. Vari, 20 Jan 1983.

CURIMATIDAE

Curimata fasciata Vari and Géry, 1985:1030, fig. 1.

Paratypes

USNM 270375 (2, 90.1–96.0 mm). Brazil, Mato Grosso; Rio Aripuanã, above cachoeira de Dardanelos (–10°19'42"S, 59°12'30"W).

Paratypes

USNM 270376 (2, 78.0–83.3 mm). Brazil, Mato Grosso; Cidade de Humboldt, Rio Aripuanã, ~10 km above cachoeira de Dardanelos.

Paratypes

USNM 270377 (4, 72.3–92.3 mm). Brazil, Território de Rondônia, Rio Romari (or São Domingo) near Nova União, Municipality of [= Município de] Ouro Preto de Oeste; G.W. Nunan et al., Nov 1983.

CURIMATIDAE

Curimata incompta Vari, 1984:34, figs. 4, 5.

Paratype

USNM 236551 (1, 42.3 mm). Venezuela, Monagas, pools on Cocos Island, Río Orinoco opposite Los Castillos, (8°30'42"N, 62°26'06"W); E. Marsh and D. Stewart, 10 Nov 1979.

Paratype

USNM 236552 (1, 64.8 mm). Venezuela, Monagas, Río Orinoco, inlet below Barrancas, (8°43'N, 62°08'W); J. Baskin et al., 17 Feb 1978.

Paratypes

USNM 236553 (9, 58.7–72.0 mm). Venezuela, Monagas, Caño between Río Orinoco and Laguna Guatero, near Barrancas, (8°43'N, 62°11'W); J. Lundberg et al., 12 Nov 1979.

Remarks: 2 specimens cleared and stained.

Paratypes

USNM 236554 (5, 57.9–61.5 mm). Venezuela, Territorio Federal Delta Amacuro, Caño Paloma system (8°28'N, 61°25'36"W), 92 nautical miles [170.2 km] from Sea Buoy; D. Stewart et al., 21 Nov 1979.

Paratypes

USNM 236555 (2, 66.1–72.8 mm). Venezuela, Territorio Federal Delta Amacuro, mouth of Caño on Isla Tortola (8°44'N, 62°07'W); H. Lopez and D. Taphorn, 17 Feb 1978.

Paratypes

USNM 236556 (4, 43.8–57.3 mm). Venezuela, Territorio Federal Delta Amacuro, stream off Río Orinoco (8°37'36"N, 60°49'36"W); J. Baskin et al., 20 Nov 1979.

Paratype

USNM 236557 (1, 94.6 mm). Venezuela, Bolivar, Río Orinoco just downriver of San Félix (8°23'N, 62°40'W); J. Lundberg et al., 14 Feb 1978.

Paratype

USNM 236558 (1, 51.2 mm). Venezuela, Monagas, pool on Isla Tapatapa at Los Castillos (8°31'36"N, 62°26'42"W); E. Marsh et al., 10 Nov 1979.

Paratypes

USNM 236559 (5, 51.5–74.7 mm). Venezuela, Monagas, Caño Guarguapo system (8°39'24"N, 62°14'W); J. Baskin et al., 11 Nov 1979.

Paratype

USNM 236560 (1, 53.0 mm). Venezuela, Territorio Federal Delta Amacuro, lagoon W of Caño Araguaito (8°40'42"N, 62°99'24"W); E. Marsh et al., 14 Nov 1979.

Paratype

USNM 257083 (1, 104.8 mm). Venezuela, Apure, Río Meta near Puerto Paez (~6°13'N, 67°28'W); F. Mago-Leccia and J. Mosco, 11 Mar 1967.

CURIMATIDAE

Curimata inornata Vari, 1989b:31, figs. 21–23.

Paratype

USNM 267966 (1, 133.8 mm). Brazil, Mato Grosso, Rio Arinos, Pôrto dos Gaúchos (~11°29'S, 57°22'W); M. Goulding, 19 Aug 1984.

Paratypes

USNM 267993 (10, 104.6–138.2 mm). Brazil, Pará, Rio

Xingu, Belo Monte, edge of river channel (~3°05'S, 51°46'W); M. Goulding, Jul–Aug 1983.

Paratypes

USNM 267994 (8, 118.3–135.3 mm). Brazil, Pará, Rio Tapajós, Itaituba, edge of river channel (~4°17'S, 55°59'W); M. Goulding, Sep–Oct 1983.

Paratypes

USNM 268597 (5, 115.7–131.7 mm). Brazil, Pará, São Luís, Rio Tapajós (~4°25'S, 50°15'W); Expedição Permanente da Amazonas, 4–8 Sep 1970.

CURIMATIDAE

Curimata punctata Vari and Nijssen, 1986:52, pl. 1: figs. 1–4.

Holotype

USNM 275000 (1, 25.9 mm). Surinam, Marowijn District, upper Marowijn River system, Litani River near Kawatop Village; R.J. Philips, 25 Sep 1978.

Paratypes

USNM 278053 (6, 25.3–27.3 mm). Surinam, Marowijn District, upper Marowijn River system, Litani River near Kawatop Village; R.J. Philips, 25 Sep 1978.

Remarks: Collected with holotype; 3 specimens cleared and stained.

Paratypes

USNM 278054 (5, 19.2–25.1 mm). Surinam, Marowijne District, small tributary to Oelemari River; J. P. Gosse, 13 Nov 1966.

CURIMATIDAE

Curimata roseni Vari, 1989b:35, figs. 25–27.

Paratypes

USNM 267995 (7, 108.0–144.3 mm). Brazil, Roraima, Rio Branco, Cachoeira do Bem Querer, cataract pool (~2°50'N, 60°43'W); M. Goulding, 8 Jan 1984.

Paratypes

USNM 267349 (3, 96.8–106.0 mm). Brazil, Roraima, Rio Branco, Marara.

Paratype

USNM 267595 (1, 90.3 mm). Brazil, Roraima, Rio Branco, 160 km from its mouth.

Remarks: Collector M. Brittan.

Paratypes

USNM 267350 (4, 83.8–92.6 mm). Brazil, Roraima, Rio Branco, Boa Vista (~2°49'N, 61°49'W).

Remarks: 2 specimens cleared and stained.

Paratypes

USNM 268596 (3, 90.7–96.7). Brazil, Amazonas, Rio Negro, Mandiquié; M. Goulding, 8 Oct 1979.

CURIMATIDAE

Curimata spilota Vari, 1987:603, figs. 1, 2.

Paratypes

USNM 285194 (12, 36.9–59.7 mm). Brazil, Rio Grande do Sul, Rio Santa Maria, at bridge on highway BR 293, between Dom Pedrito and Livramento (cited as Santana do Livramento on some maps); C. de Lucena and L. Malabarba, 22 Jan 1982.

Remarks: 2 specimens cleared and stained.

CURIMATIDAE

Curimata stigmosa Vari, 1987:606, figs. 2, 3.

Paratypes

USNM 285193 (3, 65.5–73.6 mm). Brazil; Rio Grande do Sul, Rio Jacui, at bridge on the road between Santa Maria and Veracruz (~29°41'S, 53°19'W); C. de Lucena et al., 16 Sep 1983.

Remarks: 1 specimen cleared and stained.

Paratype

USNM 285191 (1, 53.7 mm). Brazil, Rio Grande do Sul, Rio Forqueta, at Marquês de Souza, Município de Lajeado; MZUSP/USNM expedition, 7 Nov 1979.

Paratypes

USNM 285190 (2, 43.5–56.5 mm). Brazil, Rio Grande do Sul, Arroio Chasqueiro (empties into Lagoa Mirim N of Arroio Grande), along highway (Br 116) between Pelotas and Jaguarão, MZUSP/USNM expedition, 14 Dec 1978.

CURIMATIDAE

Curimatopsis crypticus Vari, 1982b:19, figs. 15–18.

Holotype

USNM 226872 (1, 27.7 mm). Guyana, Rupununi District, stream ~2 km E of Lake Amucu (~3°43'N, 59°25'W).

Paratypes

USNM 226880 (15, 21.2–37.2 mm). Brazil, Igarapé Anapichi leading to Rio Negro 64 miles [102 km] NW of intersection of Rio Branco and Rio Negro, on Rio Negro; Axelrod, Sep 1975.

Remarks: Locality is in Amazonas state; 3 specimens cleared and stained.

Paratypes

USNM 226883 (4, 33.4–36.3 mm). Brazil, Pará, Santarém, Uruará Brook into Rio Tapajós.

Paratypes

USNM 226884 (4, 30.6–34.2 mm). Brazil, middle Rio Negro, Praia Mofulu on the Rio Itu; M. Brittan, Apr 1964.

Remarks: Locality is in Amazonas state.

Paratype

USNM 226885 (1, 33.2 mm) Brazil, Brazilian-Bolivian border region near Guajará-Mirim; Von Graeve, 1970.

Paratypes

USNM 228354 (3, 43.8–45.4 mm). Brazil, Pará, Monte Alegre; C. Ternetz.

CURIMATIDAE

Curimatopsis evelynae Géry, 1964a:47, figs. 13, 14.

Holotype

USNM 198644 (1, 22.3 mm). Colombia, upper Río Meta drainage, ~200 miles [~320 km] E of Bogota; R. Socolof et al., May 1963.

Remarks: Exact collection locality: Colombia, Río Manacacias into upper Río Meta, at Restrepo.

Paratype

USNM 198638 (1, 28.4 mm). Colombia, upper Río

Meta drainage, ~200 miles [~320 km] E of Bogota; R. Socolof et al., May 1963.

Remarks: Exact collection locality: Colombia, Río Manacacias into upper Río Meta, at Restrepo; collected with holotype.

CURIMATIDAE

Curimatopsis myersi Vari, 1982c:788, figs. 1, 2.

Holotype

USNM 233602 (1, 39.3 mm). Paraguay, San Pedro Department, in a swamp 3 km NE of Lima (~23°55'S, 56°29'W); N. Scott and L. Fitzgerald, 31 Oct 1981.

Paratypes

USNM 233601 (8, 27.0–42.4 mm). Paraguay, San Pedro Department, in a swamp 3 km NE of Lima (~23°55'S, 56°29'W); N. Scott and L. Fitzgerald, 31 Oct 1981.

Remarks: Collected with holotype; 1 specimen cleared and stained.

CURIMATIDAE

Curimatus argenteus Gill, 1858:422.

Lectotype

USNM 1114 (1, 67.3 mm). Trinidad, W.I. (West Indies), western portions.

Remarks: Designated as lectotype by Vari (1991:41).

Paralectotypes

USNM 293745 (2, 51.5–61.5 mm). Trinidad, W.I. (West Indies), western portions.

Remarks: Lectotype designated by Vari (1991:41).

CURIMATIDAE

Curimatus atratoensis Eigenmann, 1912b:19.

Paratypes

USNM 79192 (3, 69.5–76.5 mm). Colombia, Quibdo; C.H. Eigenmann.

Remarks: Received from CM, presumably formerly CM 4833a-j, in part.

CURIMATIDAE

Curimatus bimaculatus sialis Eigenmann and Eigenmann, 1889b:422.

Lectotype

USNM 120401 (1, 126.0 mm). Manacapuru, W. James. Remarks: Received from MCZ, formerly MCZ 20206, in part; complete collection information: Brazil, Amazonas, Lago Grande de Manacapuru; designated as lectotype by Vari (1991:49).

CURIMATIDAE

Curimatus brevipes Eigenmann and Ogle, 1907:3, fig. 1.

Holotype

USNM 35333 (1, 120.9 mm). Peru?; Orton collection. Remarks: Originally cited as 131 mm to base of caudal; Vari (1989d:20) notes that the specimen probably originated in Pacific slope drainages.

CURIMATIDAE

Curimatus elegans bahiensis Eigenmann and Eigenmann, 1889b:421.

Paralectotypes

USNM 120251 (5, 38.5–43.0 mm). Bahia; Thayer

Expedition.

Remarks: Received from MCZ, formerly MCZ 20324, in part; complete locality information: Brazil, Bahia, Salvador and environs; lectotype designated by Vari (1991:96).

CURIMATIDAE

Curimatus leuciscus bolivae Eigenmann and Ogle, 1907:4.

Holotype

USNM 44832 (1, 91.5 mm). Bolivia; Gibbon.

Remarks: Originally cited as 95 mm to base of caudal; USNM ledger indicates that specimen was collected in "Mamora R.," presumably Río Mamoré, by Lt. Lardner Gibbon, Aug 1852.

CURIMATIDAE

Curimatus macrops Eigenmann and Eigenmann, 1889b:429.

Paralectotypes

USNM 120249 (3, 124.5–141.0 mm). San Gonçallo; O. St. John.

Remarks: Received from MCZ, formerly MCZ 20311 in part; locality is Brazil, Piauí, Rio Poti; lectotype designated by Vari (1989b:45).

CURIMATIDAE

Curimatus morawhannae Eigenmann, 1912a:266, pl. XXXIV: fig. 3.

Paratypes

USNM 66142 (2, 37.5–38.6 mm). British Guiana [= Guyana], Mora Passage; C.H. Eigenmann.

Remarks: Received from CM, presumably formerly CM 2120a,b, in part; Vari (1991:87) noted that there is a discrepancy between the number of paratypes from this locality cited by Eigenmann (1912a) and the total number of putative paratypes of the species from this locality deposited in the USNM, CAS, and BMNH.

CURIMATIDAE

Curimatus plumbeus Eigenmann and Eigenmann, 1889b:425.

Syntypes

USNM 120256 (6, 58.5–97.9 mm). Lake Hyanuary; Navez.

Remarks: Received from MCZ, formerly MCZ 20348, in part; complete locality information: Brazil, Amazonas, Paraná do Januari; Senhor Naves, 10 Jan 1866.

CURIMATIDAE

Curimatus reticulata Eigenmann and Allen, 1942:295, pl. XIV: fig. 2.

Paratypes

USNM 167807 (7, 68.8–87.5 mm). Peru, Lago Cashibo; W.R. Allen, Aug 1920.

Remarks: Specimen received from UKEN, through W.R. Allen; originally IU 17857, in part; USNM ledger cites 8 specimens; 1 specimen unaccounted for.

CURIMATIDAE

Curimatus spiluroopsis Eigenmann and Eigenmann, 1889b:420.

Syntypes ?

USNM 120403 (2, 53.9–54.5 mm). Ica; W. James.

Remarks: Received from MCZ, and supposedly formerly MCZ 20216, in part. That lot was, however, irretrievably intermingled with MCZ 20218, syntypes of *Curimatus spiluroopsis* and MCZ 27408, non-type specimens of the species from the type locality. MCZ 20216 furthermore originally contained only 1 specimen, whereas there are two specimens in lot at this time; second or perhaps both specimens presumably out of MCZ 20218 or 27408. Specimens consequently potentially syntypes. Complete collection information: Brazil, Amazonas, Rio Içá (tributary of Rio Solimões) near Brazilian-Colombian border; W. James and "Talisman," Sep 1865.

CURIMATIDAE

Curimatus tigris Fowler, 1913:518, fig. 2.

Paratypes

USNM 92957 (2, 14–19.8 mm). Brazil, tributary of Madeira River, near Porto Velho; E.A. Smith, Jan 1913.

Remarks: Previously ANSP 39185-6; received from G.S. Myers, who received it on exchange from ANSP (Myers, 1929:621).

PROCHILODONTIDAE

Cynopotamus biserialis Garman, 1890c:14.

Syntypes

USNM 120180 (6, 34.0–46.5 mm). Brazil, Lago do Maximo; Thayer Expedition.

Remarks: Received from MCZ, formerly MCZ 21335, in part; complete collection information: Brazil, Amazonas, Lago Maximo (small lake near Parintins); L. Agassiz et al., 27 Aug 1865.

CHARACIDAE

Cynopotamus gouldingi Menezes, 1987:3, fig. 2.

Paratypes

USNM 278962 (5, 138.0–162.0 mm). Brazil, Territory of Rondônia, Rio Madeira at Calama; M. Goulding, Mar–Aug 1980.

Remarks: Collected at type locality.

CHARACIDAE

Cynopotamus juruena Menezes, 1987:3, fig. 2.

Paratype

USNM 194279 (1, 68.5 mm). Brazil, Mato Grosso, upper Rio Juruena; H. Schultz, Jul 1962.

Paratype

USNM 194296 (1, 79.0 mm). Brazil, Mato Grosso, upper Rio Juruena; H. Schultz, Jul 1962.

CHARACIDAE

Cynopotamus tocantinensis Menezes, 1987:5, fig. 3.

Paratypes

USNM 278984 (5, 135.0–168.0 mm). Brazil, Pará, Rio Itacaiunas, Serra dos Carajás; M. Goulding, Apr 1983.

CHARACIDAE

Cyphocharax pantostictos Vari and Barriga, 1990:551, fig. 1.

Holotype

USNM 306594 (1, 72.4 mm). Ecuador, Napo, Laguna

de Jatuncocha (01°00'S, 75°29'W); R. Barriga, 29 Sep 1988.

Paratype

USNM 280573 (1, 72.0 mm). Peru, Loreto, Río Nanay, Nanay beach along river W of Iquitos (~3°50'S, 73°11'W); R.P. Vari et al., 17 Aug 1986.

Paratype

USNM 305616 (1, 66.7 mm). Ecuador, Napo, Río Napo, 2.7 km along river above bridge at Coca (0°29.0'S, 77°04.0'W); D. Stewart et al., 3 Oct 1983.

Paratype

USNM 305617 (1, 98.2 mm). Ecuador, Napo, Estero Culebrero, tributary of Río Yasuni (0°54'45"S, 76°13'03"W); R. Barriga, 9 May 1988.

CURIMATIDAE

Cyrtocharax kincaidi Schultz, 1950:60.

Holotype

USNM 1694 (1, 169.7 mm). Paraguay; Captain T.J. Page, 1853.

CHARACIDAE

Cyrtocharax magdalenae venezuelae Schultz, 1944:298, fig. 37.

Holotype

USNM 121390 (1, 203.0 mm). Venezuela, Maracaibo Basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratype

USNM 121391 (1, 243.3 mm). Venezuela, Maracaibo basin, caño ³/₄ km W of Sinamaica; L.P. Schultz, 11 Mar 1942.

Remarks: 2 specimens cited in original description; 1 exchanged to RMNH Mar 1952.

Paratype

USNM 121392 (1, 208.0 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, ~100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121393 (5, 197.0–250.0 mm). Venezuela, Maracaibo Basin, Río Socuy, 3 km above its mouth; L.P. Schultz, 24 Feb 1942.

Paratypes

USNM 121394 (3, 183.3–206.5 mm). Venezuela, Maracaibo basin, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Remarks: 4 specimens cited in original description; 1 specimen exchanged to ZMA Mar 1958.

Paratypes

USNM 121395 (3, 184.1–203.3 mm). Venezuela, Maracaibo Basin, Río Apón ~35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Remarks: 4 specimens cited in original description; 1 specimen exchanged to MCZ Jul 1951.

Paratypes

USNM 121396 (EXCHANGED) Venezuela, Maracaibo

Basin, Río Motatán at bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Remarks: Lot exchanged to UMMZ 1 Jun 1948; originally cited as 2 specimens, 205–206 mm SL.

Paratypes

USNM 121397 (2, 223.8–237.5 mm). Venezuela, Maracaibo Basin, Río Machango at bridge S of Lagunillas; L.P. Schultz, 16 Mar 1942.

Paratypes

USNM 121398 (7, 165.2–292.8 mm). Venezuela, Maracaibo Basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: Collected with holotype.

CHARACIDAE

Deuterodon pinnatus Eigenmann, 1909:25.

Paratype

USNM 66171 (1, 43.0 mm). British Guiana [= Guyana], Amatuk; C.H. Eigenmann, Sep–Dec, 1908.

Remarks: Received from CM, presumably formerly CM 1047, in part.

Paratype

USNM 66172 (1, 15.8 mm). British Guiana [= Guyana], Warraputa; C.H. Eigenmann, Sep–Dec, 1908.

Remarks: Received from CM, presumably formerly CM 1049a–c, in part.

CHARACIDAE

Distoechus stigmaturus Gomes, 1947:13, fig. 2, pl. I: fig. 2.

Paratype

USNM 143846 (1, 23.6 mm). Brazil, Rio Grande do Sul, Conceição do Arroio County [? = Município de Conceição do Arroio], backwater of Rio Maquiné, tributary to Lagôa dos Quadros; H. Kleerekoper, Jun 1941.

Remarks: Received from UMMZ, formerly UMMZ 143274, in part; collected with holotype.

CHARACIDAE

Elachocharax geryi Weitzman and Kanazawa, 1978:173, figs. 9–14.

Paratypes

USNM 216558 (2, 14.4–15.6 mm). Brazil, state of Amazonas, Rio Negro, Lago Paricatuba (3°7'S, 60°30'W); P. Vanzolini, EPA, 11 Nov 1972.

CHARACIDAE

Elachocharax mitopterus Weitzman, 1986:740, figs. 1–3.

Paratypes

USNM 270147 (2, 12.3–12.7 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, Caño Chola, where crossed by road from San Carlos de Río Negro to Solano (~1°58'N, 67°00'); R.P. Vari et al., 5 Dec 1984.

Paratypes

USNM 274100 (2, 12.7–13.3 mm). Brazil, Amazonas, Igarapé Tarumzinho, ~45 km N of Manaus on road between Manaus, Amazonas, and Caracari, Roraima

($-2^{\circ}42'S$, $60^{\circ}02'W$); I. Vieira, 25 Sep 1976.

Paratype

USNM 274101 (1, 12.6 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, Caño Chola, where crossed by road from San Carlos de Río Negro to Solano ($-1^{\circ}58'N$, $67^{\circ}00'W$); R.P. Vari et al., 5 Dec 1984.

Remarks: Specimen cleared and stained.

CHARACIDAE

Elopomorphus Jordanii Gill, 1878:112.

Holotype

USNM 5926 (1, 180.0 mm). Bolivia, Mamora River; Lt. Gibbon.

Remarks: Mamora River is presumably Río Mamoré.

HEMIODONTIDAE

Eretmobycon bayano Fink, 1976:334, figs. 1–4.

Holotype

USNM 213842 (1, 52.4 mm). Panamá, Bayano river basin, pool in small stream ~19 km along road from El Llano to Carti, ~0.5 km downstream from the road; J.D. McPhail and R. Dressler, 10 Mar 1973.

Paratypes

USNM 213843 (14, 32.1–56.9 mm). Panamá, Bayano river basin, pool in small stream ~19 km along road from El Llano to Carti, ~0.5 km downstream from the road; J.D. McPhail and R. Dressler, 10 Mar 1973.

Remarks: Collected with holotype; 22 specimens cited in original description, 3 specimens exchanged to MZUSP Nov 1975, 2 specimens exchanged to MCZ Jan 1977, 3 specimens exchanged to UMMZ 4 Aug 1986.

CHARACIDAE

Erythrinus cinereus Gill, 1858:413.

Holotype

USNM 5882 (1, 202.1 mm). Trinidad, W.I. (West Indies), western portions.

Remarks: Received from T. Gill.

ERYTHRINIDAE

Erythrinus Kessleri Steindachner, 1876:596.

Syntype

USNM 120407 (1, 66.6 mm). Bahia.

Remarks: Steindachner evidently based this species on a series of Thayer Expedition specimens, but did not specifically state whether the description was based on material he had examined at MCZ or specimens he had brought back to NMW or both. Specimens received from MCZ, formerly MCZ 21480, in part; complete collection information: Brazil, Bahia, Salvador and environs; F.C. Hartt and E. Copeland, Jun 1866.

ERYTHRINIDAE

Gasteropelecus fasciatus Garman, 1890b:9.

Syntypes

USNM 120261 (6, 24.0–36.0 mm). Brazil, Manacapouru; Thayer Expedition.

Remarks: Received from MCZ, formerly MCZ 21286,

in part; complete collection information: Brazil, Amazonas, Lago Grande de Manacapuru; W. James, 27 Nov 1865.

GASTEROPELECIDAE

Gasteropelecus pectorosus Garman, 1890b:9.

Syntypes

USNM 120412 (2, 43.9–45.8 mm). Brazil, Manacapouru; Thayer Expedition.

Remarks: Received from MCZ, formerly MCZ 21283, in part; complete collection information: Brazil, Amazonas, Lago Grande de Manacapuru; W. James, 27 Nov 1865.

GASTEROPELECIDAE

Genycharax tarpon Eigenmann, 1912b:23.

Paratype

USNM 79207 (1, 112.1 mm). Colombia, Cartago.

Remarks: Received from CM, presumably formerly CM 4809a–c, in part.

CHARACIDAE

Gephyrocharax caucanus Eigenmann, 1912b:24.

Paratypes

USNM 81921 (3, 43.0–50.6 mm). Colombia, Cartago.

Remarks: Received from CM, presumably formerly CM 4803a–j, in part.

CHARACIDAE

Gephyrocharax chocoensis Eigenmann, 1912b:23.

Paratypes

USNM 76973 (12, 28.8–47.2 mm). Colombia, Istmina.

Remarks: Received from IU, presumably formerly IU 12671, in part; Eigenmann indicated that he made his collections at Istmina 18–20 Mar 1912.

Paratypes

USNM 79208 (2, 45.1–48.0 mm). Colombia, Istmina.

Remarks: Received from CM, presumably formerly CM 4807a–j, in part; Eigenmann indicated that he made his collections at Istmina 18–20 Mar 1912.

CHARACIDAE

Gephyrocharax intermedius Meek and Hildebrand, 1916:278.

Paratypes

USNM 78556 (26, 22.8–35.5 mm). Panama, Río Chame.

Remarks: Meek and Hildebrand specifically cited only holotype, but description was based on more than one specimen; 29 specimens originally cited in USNM ledger, 3 specimens unaccounted for.

CHARACIDAE

Gephyrocharax melanocheir Eigenmann, 1912b:24.

Paratypes

USNM 79209 (2, 31.7–35.4 mm). Colombia, Bernal Creek.

Remarks: Received from CM, presumably formerly CM 4840a–f, in part.

CHARACIDAE

Gephyrocharax venezuelae Schultz, 1944:324, fig. 44.

Holotype

USNM 121369 (1, 32.4 mm). Venezuela, Maracaibo basin, Río San Juan at the bridge S of Mene Grande, Motatán system; L.P. Schultz, 20 Mar 1942.

Paratype

USNM 121359 (1, 24.1 mm). Venezuela, Maracaibo basin, Río Apón, ~35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratype

USNM 121360 (1, 22.9 mm). Venezuela, Maracaibo basin, Caño de Sagua, 35 km N of Sinamaica; L.P. Schultz, 12 Mar 1942.

Paratypes

USNM 121361 (24, 22.9–36.8 mm). Venezuela, Maracaibo basin, Río San Juan at the bridge S of Mene Grande, Motatán system; L.P. Schultz, 20 Mar 1942.

Remarks: 24 specimens cited in original description; 25 specimens cited in ledger; 1 specimen unaccounted for.

Paratypes

USNM 121362 (11, 21.8–34.1 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, ~100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121363 (11, 20.7–41.4 mm). Venezuela, Maracaibo basin, Río Motatán, 34 km above Motatán; L.P. Schultz, 25 Mar 1942.

Paratypes

USNM 121364 (41, 19.1–31.7 mm). Venezuela, Maracaibo basin, Río Motatán at the bridge 22 km N of Motatán, L.P. Schultz, 17 Mar 1942.

Paratypes

USNM 121365 (22, 22.1–32.6 mm). Venezuela, Maracaibo basin, Río Motatán, 8 km below Motatán; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121366 (126, 20.3–27.5 mm). Venezuela, Maracaibo Basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: 134 specimens cited in original description; 5 specimens exchanged to MCZ Jul 1951, 3 specimens recataloged as USNM 236087.

Paratypes

USNM 121367 (6, 20.8–27.3 mm). Venezuela, Maracaibo basin, Río San Juan 12 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121368 (94, 19.3–31.7 mm). Venezuela, Maracaibo basin, Río Machango at the bridge S of Lagunillas; L.P. Schultz, 16 Mar 1942.

Remarks: 107 specimens cited in original description; 10 specimens exchanged to UMMZ Jun 1978, 4 specimens exchanged to J. Géry 1 Apr 1960, subsequently transferred to MHNG.

Paratypes

USNM 121533 (3, 24.5–29.7 mm). Venezuela, Maracaibo basin, Río San Pedro at the bridge S of Mene Grande; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 236087 (3, 28.7–32.4 mm). Venezuela, Maracaibo Basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: Formerly USNM 121366, in part; specimens cleared and stained.

CHARACIDAE

Gephyrocharax whaleri Hildebrand, 1938:254, fig. 2.

Holotype

USNM 106513 (1, 39.0 mm). Panama, Pacific slope, Río Chame or a nearby stream.

Remarks: Hildebrand noted that the specimens that served as the basis for the description came from the Río Chame and several smaller nearby coastal streams crossing the national highway between Campaña and La Venta.

Paratypes

USNM 109276 (39, 18.4–45.9 mm). Panama, Pacific slope, Río Chame and several smaller nearby coastal streams crossing the National Highway between Campaña and La Venta.

Remarks: 41 specimens originally in lot, 2 specimens recataloged as USNM 235926.

Paratypes

USNM 235926 (2, 38.6–40.2 mm). Panama, Pacific slope, Río Chame and several smaller nearby coastal streams crossing the National Highway between Campaña and La Venta.

Remarks: Formerly USNM 109276, in part; specimens cleared and stained.

CHARACIDAE

Gilbertolus alatus atratoensis Schultz, 1943:275.

Holotype

USNM 76976 (1, 88.3 mm). Colombia, Río Atrato at Quibdo; Wilson.

Paratypes

USNM 120170 (14, 55.1–97.8 mm). Colombia, Río Atrato at Quibdo; Wilson.

Remarks: Collected with holotype.

CHARACIDAE

Gilbertolus alatus maracaiboensis Schultz, 1943:273.

Holotype

USNM 121386 (1, 116.4 mm). Venezuela, Maracaibo basin, Estado de Zulia, caño half a mile [0.8 km] W of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratypes

USNM 121387 (4, 104.8–122.8 mm). Venezuela, Maracaibo basin, Estado de Zulia, caño half a mile [0.8 km] W of Sinamaica; L.P. Schultz, 11 Mar 1942.

Remarks: Collected with holotype.

Paratype

USNM 121388 (1, 60.5 mm). Venezuela, Maracaibo basin, Río Socuy 3 km above its mouth; L.P. Schultz, 24 Feb 1942.

Paratype

USNM 121389 (1, 74.2 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

CHARACIDAE

Glandulocauda melanogenys Eigenmann, 1911:168, pl. V: fig. 6.

Paratypes

USNM 177724 (2, 30.9–37.3 mm). Brazil, São Paulo, Alto da Serra; J.D. Haseman, 25 Jul 1908.

Remarks: Received from FMNH, formerly CM 3554, in part.

CHARACIDAE

Glandulocauda melanopleura Eigenmann, 1911:170, pl. V: fig. 7.

Paratype

USNM 177725 (1, 28.6 mm). Brazil, Serinha Paran , Rio Iguassu; J.D. Haseman, 22 Dec 1908.

Remarks: Received from FMNH, formerly CM 3558, in part.

CHARACIDAE

Gymnocorymbus socolofi G ry, 1964a:25, fig. 1.

Holotype

USNM 198646 (1, 47.7 mm). Colombia, Rio Meta drainage, ~200 miles [~320 km] E of Bogota; R. Socolof et al., May 1963.

Remarks: Complete collection information: Colombia, Rio Manacacias into upper Rio Meta at Restrepo; cited as 52 mm SL in original description.

CHARACIDAE

Hemibrycon beni Pearson, 1924:42, pl. II: fig. 6.

Paratypes

USNM 117543 (2, 31.5–42.1 mm). Bolivia, Espia; N.E. Pearson, Jul 1921.

Remarks: Received from UMMZ, formerly UMMZ 66504, in part; originally IU 17321, in part.

CHARACIDAE

Hemibrycon dariensis Meek and Hildebrand, 1916:285, pl. XX.

Paratypes

USNM 78594 (8, 28.2–44.9 mm). Panama, Rio Tuyra basin, Rio Yape.

Remarks: 9 specimens originally cited in USNM ledgers; 1 specimen unaccounted for.

CHARACIDAE

Hemibrycon dentatus jabonero Schultz, 1944:363, fig. 55.

Holotype

USNM 121455 (1, 95.6 mm). Venezuela, Maracaibo basin, Estado de M rida, Rio Chama at Estanques; L.P. Schultz, 3 Apr 1942.

Paratypes

USNM 121465 (25, 25.3–64.9 mm) Venezuela, Maracaibo basin, Rio Motat n, 4 km above Motat n; L.P. Schultz, 25 Mar 1942.

Paratypes

USNM 121464 (2, 24.3–57.8 mm). Venezuela, Maracaibo basin, Rio Motat n, 8 km below Motat n; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121463 (9, 31.2–59.5 mm). Venezuela, Maracaibo basin, Rio San Pedro at bridge, Motat n system; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 121462 (3, 21.9–23.8 mm). Venezuela, Maracaibo basin, Rio Motat n at bridge, 22 km N of Motat n, L.P. Schultz, 17 Mar 1942.

Paratype

USNM 121461 (1, 52.7 mm). Venezuela, Maracaibo basin, Rio T chira, 7 km N of San Antonio, Catatumbo system; L.P. Schultz, 1 Apr 1942.

Paratypes

USNM 121460 (42, 38.5–85.7 mm). Venezuela, Maracaibo basin, Estado de M rida, Rio Chama at Estanques, L.P. Schultz, 3 Apr 1942.

Remarks: 52 specimens cited in original description; 5 specimens exchanged to UMMZ Jun 1948; 5 specimens exchanged to MCZ Jul 1951.

Paratypes

USNM 121459 (4, 23.3–36.6 mm). Venezuela, Maracaibo basin, Rio Palmar near Totuma, ~100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121458 (2, 47.3–56.7 mm). Venezuela, Maracaibo basin, Estado de M rida, Rio Chama, 10 km below Lagunillas; L.P. Schultz, 30 Mar 1942.

Paratypes

USNM 121457 (11, 26.3–49.8 mm) Venezuela, Maracaibo basin, Rio Jimelles, 12 km E of Motat n, Motat n system; L.P. Schultz, 24 Mar 1942.

Paratypes

USNM 121456 (581, MISSING). Venezuela, Maracaibo basin, Estado de M rida, Rio Gonz les, tributary to Rio Chama, at La Gonz les; L.P. Schultz, 29 Mar 1942.

Remarks: 601 specimens cited in original description; 10 specimens exchanged to ZMA Mar 1958; 10 specimens exchanged to J. G ry 1 Apr 1960, subsequently transferred to MHNG, originally cited as 27.0–115.0 mm SL.

CHARACIDAE

Hemibrycon orcesi B hlke, 1958:24, pl. 2: fig. 4.

Holotype

USNM 164064 (1, 46.7 mm). Ecuador, Santiago-Zamora, upper portion of Rio Macuma, northern

tributary of Río Morona (Río Amazonas system), between 2°7'–13'S, 77°35'–47'W; B. Pazmiño, Apr 1953.

Remarks: Cited as 49.5 mm SL in original description

Paratype

USNM 175128 (1, 47.9 mm). Ecuador, Santiago-Zamora, upper portion of Río Macuma, northern tributary of Río Morona (Río Amazonas system), between 2°7'–13'S, 77°35'–47'W; B. Pazmiño, Apr 1953.

Remarks: Collected with holotype.

CHARACIDAE

Hemigrammus aereus Géry, 1959a:257, fig. 4.

Paratype

USNM 179759 (1, 21.0 mm). French Guiana, Crique Nancibo, basin of the Conté, a headwater of the Mahury; J. Géry, Sep 11, 1957.

Remarks: Received from J. Géry.

CHARACIDAE

Hemigrammus analis Durbin, 1909:64.

Paratype

USNM 66192 (1, 18.2 mm). British Guiana [= Guyana], Gluck Island; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably previously CM 1468a–e, in part.

Paratypes

USNM 66193 (2, 21.3–21.4 mm). British Guiana [= Guyana], Rockstone; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably previously CM 1467a–j, in part.

CHARACIDAE

Hemigrammus armstrongi Schultz and Axelrod, 1955:5, text fig.

Holotype

USNM 163868 (1, 18.5 mm). British Guiana [= Guyana], near Georgetown.

Paratypes

USNM 163869 (20, 15.4–25.4 mm). British Guiana [= Guyana], near Georgetown.

CHARACIDAE

Hemigrammus compressus Meek, 1904:87, fig. 25.

Paratypes

USNM 55728 (2, 26.0–29.5 mm). Mexico, Oaxaca, Río Papaloapam basin, Obispo.

Remarks: Received from FMNH; evidently paratypes, only holotype cited in original description, but description based on more than one specimen.

CHARACIDAE

Hemigrammus cylindricus Durbin, 1909:62.

Paratype

USNM 66191 (1, 38.8 mm). British Guiana [= Guyana], Crab Falls; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1463a–c, in part.

CHARACIDAE

Hemigrammus erythrozonus Durbin, 1909:56.

Paratypes

USNM 66187 (2, 18.3–18.9 mm). British Guiana [= Guyana], Erukin; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1449a–e, in part.

CHARACIDAE

Hemigrammus guyanensis Géry, 1959a:254, fig. 3.

Paratypes

USNM 179756 (8, 17.5–21.1 mm). French Guiana, Maroni, creek near Ga Kaba; J. Géry, 21 Nov 1957.

Remarks: Received from J. Géry.

CHARACIDAE

Hemigrammus inconstans Eigenmann in Eigenmann and Ogle, 1907:17, fig. 4.

Holotype

USNM 34591 (1, 41.6 mm). Brazil, Para (?); J.C. Brevoort.

Remarks: Original description indicates that Brevoort was "presenter" of specimen whereas USNM ledger cites him as collector; second "type" cited under this species (USNM 55652) is an erroneous repeat of catalog number for "type" of *Hemigrammus santae* from previous page of Eigenmann and Ogle's publication; "cotypes" of *Hemigrammus inconstans* now cataloged as USNM 306824; originally cited as "44 mm to base of caudal (58 over all)."

Paratype

USNM 306824 (1, 32.9 mm). Brazil, Para (?); J.C. Brevoort.

Remarks: Collected with holotype; originally USNM 34591, in part; 4 "cotypes" 37 to 45 mm "to base of caudal" (47 to 57 "over all") cited in original description; 3 specimens unaccounted for.

CHARACIDAE

Hemigrammus levis Durbin in Eigenmann, 1908:100.

Syntypes

USNM 120266 (6, 32.0–38.9 mm). Brazil, Lago do Maximo; Thayer Expedition.

Remarks: "Type" (= Lectotype) designated by Eigenmann, 1918:149; "Type" was not, however, identified by Eigenmann (H. Higuchi, pers. comm.), consequently "Type" cannot be identified and these specimens are treated as syntypes; received from MCZ, formerly MCZ 20738, in part; complete collection data: Brazil, Amazonas, Lago Máximo (small lake near Parintins); L. Agassiz et al., 27 Aug 1865.

CHARACIDAE

Hemigrammus micropterus boesemanni Géry, 1959a:251, fig. 2.

Paratype

USNM 179758 (1, 25.2 mm). Guyane [= French Guiana], creek near Sinnamary; J. Géry, 11 May 1957.

Remarks: Received from J. Géry.

CHARACIDAE

Hemigrammus microstomus Durbin in Eigenmann, 1918:165.
Syntypes

USNM 120267 (3, 22.3–23.1). Santarem; Bourget.
Remarks: Eigenmann (1918:165) designated a “Type” and “Paratypes”; however, he did not identify “Type” (= Holotype); consequently these specimens are treated as syntypes; received from MCZ, formerly MCZ 20782, in part; complete collection information: Brazil, Pará, Santarem and environs; D. Bourget, Aug 1865.

CHARACIDAE

Hemigrammus orthus Durbin, 1909:61.

Paratype

USNM 66190 (1, 12.7 mm). British Guiana [= Guyana], Gluck Island; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1479a–f, in part.

CHARACIDAE

Hemigrammus proneki Géry, 1963b:14, fig. 2.

Holotype

USNM 198648 (1, 28.7 mm). Near Tapurucuara, upper Rio Negro; H.A. Axelrod, 1962.

Remarks: Originally cited as 30.5 mm SL; complete collection information: Brazil, Amazonas, upper Rio Negro, near Tapurucuara.

CHARACIDAE

Hemigrammus pulcher haraldi Géry, 1961c:44, fig. 2.

Holotype

USNM 196672 (1, 26.0 mm). Brazil, upper Solimões, environs of São Paulo de Olivença; H. Schultz, late 1960.

Remarks: Additional type locality information lake between Paran -Par  and Paran  Comatia.

CHARACIDAE

Hemigrammus rodwayi Durbin, 1909:58.

Paratypes

USNM 66188 (5, 30.4–35.0 mm). British Guiana [= Guyana], Georgetown Trenches; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1451a–z, in part.

CHARACIDAE

Hemigrammus santae Eigenmann in Eigenmann and Ogle, 1907:16.

Holotype and Paratype

USNM 55652 (2, 34.0–53.4 mm). Brazil, Lagoa Santa.

Remarks: USNM ledger indicates that specimens were collected by J. Reinhardt. Eigenmann cited a “Type” and mentioned a second (? paratypic) specimen in the species description, but did not give lengths for either of them, making it impossible to determine at this time which specimen is the holotype.

CHARACIDAE

Hemigrammus unilineatus cayennensis Géry, 1959a:248, fig. 1.

Paratypes

USNM 179757 (2, 25.6–29.3 mm). Guyane Fran aise [= French Guiana], freshwater creek on Cayenne Island; M. Hergat and J. Géry, 10 Mar 1957.

Remarks: Received from J. Géry.

CHARACIDAE

Hemigrammus vorderwinkleri Géry, 1963b:11, fig. 1.

Holotype

USNM 198643 (1, 32.3 mm). Tapurucuara, upper Rio Negro; H.A. Axelrod, Nov 1962.

Remarks: Complete locality information: Brazil, Amazonas, upper Rio Negro, Tapurucuara.

CHARACIDAE

Hemiodopsis ocellata Vari, 1982a:188, figs. 1, 2.

Holotype

USNM 221175 (1, 170.0 mm). Surinam, Nickerie District, main stream of Dalbana Creek, ~150 m upstream of its junction with Kabalebo River (~4°47'N, 57°29'W); R.P. Vari, 7 Dec 1979.

Paratype

USNM 225592 (1, 141.5 mm) Surinam, Nickerie District, slow-flowing side channel of Corantijn River ~180 km from its mouth (~5°08'N, 57°18'W); R. P. Vari and L.R. Parenti, 8 Sep 1980.

Paratypes

USNM 225593 (2, 104.7–113.0 mm). Surinam, Nickerie District, still pool near “Camp Hydro” on an island in middle of Corantijn River (~4°22'N, 57°58'W); R. P. Vari and L.R. Parenti, 17 Sep 1980.

Paratypes

USNM 225594 (4, 129.0–142.0 mm). Surinam, Nickerie District, small creek and the surrounded flooded rain forest of Corantijn River (~5°32'N, 57°10'W); H.M. Madarie, 15 May 1980.

HEMIODONTIDAE

Hemiodopsis sterni Géry, 1964c:70, fig. 3.

Holotype

USNM 194377 (1, 78.8 mm). Brazil, Mato Grosso, Amazon system, shore of Alto Rio-Juruena not far from the road from Cuiaba to Porto Velho; H. Schultz, Jun–Oct 1962.

Paratype

USNM 194330 (1, 57.3 mm). Brazil, Mato Grosso, upper Juruena River; H. Schultz, 8 Jul 1962.

Paratype

USNM 194368 (1, MISSING). Brazil, Mato Grosso, Amazon system, shore of Alto Rio-Juruena not far from the road from Cuiaba to Porto Velho; H. Schultz, Jun–Oct 1962.

Remarks: Originally cited as 60 mm SL.

HEMIODONTIDAE

Hoplocharax goethei Géry, 1966d:291, figs. 2c, 7-11.

Paratypes

USNM 203806 (2, 20.1-21.5 mm). Brazil, Igarapé Castanha, into Rio Negro (right bank), ~2 hours by motor-boat above Manaus; E. Fittkau and J. Géry, 23 Oct 1965.

CHARACIDAE

Hydrolycus Copei Gill, 1871:93.

Syntypes

USNM 55664 (3, 61.5-83.9 mm). Peru and Ecuador [= Ecuador], Maranon or upper Amazon and Napo rivers; J. Orton.

Remarks: 4 specimens cited in original description, 1 specimen unaccounted for.

CHARACIDAE

Hyphessobrycon bentosi Durbin in Eigenmann, 1908:101.

Syntypes

USNM 120270 (3, ~22.6-24.7 mm). Obidos.

Remarks: Received from MCZ, formerly MCZ 20842a (now MCZ 20842), in part; specimens dried out at some point, length measurements approximate; complete collection information: Brazil, Pará, Rio Amazonas at Obidos; Thayer Expedition, 1865.

CHARACIDAE

Hyphessobrycon copelandi Durbin in Eigenmann, 1908:101.

Syntypes

USNM 120271 (6, 14.5-28.4 mm). Tabatinga.

Remarks: Received from MCZ, formerly MCZ 20771, in part; complete collection information: Brazil, Amazonas, Rio Solimões at Tabatinga [= Sapurara] and environs; Thayer Expedition, 1865.

CHARACIDAE

Hyphessobrycon diancistrus Weitzman, 1977b:349, figs. 1-5.

Holotype

USNM 216607 (1, 25.2 mm). Colombia, state of Vichada, Río Vichada, ~50 km W of San José de Ocuñé (4°14'N, 70°20'W), Río Orinoco basin; R. Socolof, 3-5 Jul 1974.

Paratypes

USNM 216606 (2, 24.8-25.9 mm). Colombia, state of Vichada, Río Vichada, ~50 km W of San José de Ocuñé (4°14'N, 70°20'W), Río Orinoco basin; R. Socolof, 3-5 Jul 1974.

Remarks: Collected with holotype; 1 specimen cleared and stained.

CHARACIDAE

Hyphessobrycon elachys Weitzman, 1985:800, figs. 1-5.

Holotype

USNM 232393 (1, 16.1 mm). Paraguay, Departamento San Pedro; swamp 3 km NW of Lima; Río Aguaray-guazu system (23°55'S, 56°29'W); N. Scott and L. Fitzgerald, 31 Oct 1981.

Paratypes

USNM 268474 (79, 12.9-16.6 mm). Paraguay, Departamento San Pedro; swamp 3 km NW of Lima; Río

Aguaray-guazu system (23°55'S, 56°29'W); N. Scott and L. Fitzgerald, 31 Oct 1981.

Remarks: Collected with holotype.

CHARACIDAE

Hyphessobrycon ellisi Pearson, 1924:39, pl. X: fig. 2.

Syntype

USNM 117544 (1, 31.8 mm). Bolivia, Espia; N.E. Pearson, July 1921.

Remarks: Pearson noted (1924:7) that Espia is at "the junction of the Miguilla and La Paz rivers"; received from UMMZ, formerly IU 17343 and UMMZ 66505, in part. Pearson identified the lot this specimen came from as "cotypes," a term often applied to paratypes by Eigenmann and his associates. No "type" was designated by Pearson making the "cotypes" syntypes in this instance.

CHARACIDAE

Hyphessobrycon eos Durbin, 1909:69.

Paratype

USNM 66195 (1, 24.3 mm). British Guiana [= Guyana], creek between Potaro Landing and Kangaruma; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1196a-e, in part.

Paratypes

USNM 66196 (2, 17.4-17.8 mm). British Guiana [= Guyana], Tukeit; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1195a-j, in part.

Paratype

USNM 165449 (1, 26.4 mm). British Guiana [= Guyana], creek between Potaro Landing and Kangaruma; C.H. Eigenmann, 1908.

Remarks: Received from FMNH; formerly FMNH 7353, in part, and presumably formerly CM 1196a-e, in part.

CHARACIDAE

Hyphessobrycon flammeus Myers, 1924:330, text fig.

Syntypes

USNM 92969 (2, 23.5-25.0 mm). Aquarium bred.

Remarks: Received from G.S. Myers, who noted in the accession papers (acc. 124667) that "These two specimens, male and female, are the two on which I based the description of the species..."; original stock from vicinity of Rio de Janeiro, Brazil.

CHARACIDAE

Hyphessobrycon guarani Mahnert and Géry, 1987:307, figs. 1, 2.

Paratypes

USNM 290840 (3, 26.0-28.2 mm). Paraguay, Departamento Alto Paraná, Río Alto Paraná at Puerto Bertoni (25°38'S, 54°40'W), in a dead channel of the river; P. Berner et al., 13 Nov 1982.

Remarks: Received from MHNG; formerly MHNG

2366.100, in part; collected with holotype.

CHARACIDAE

Hyphessobrycon haraldschultzi Travassos, 1960:5, fig. 1 and text-fig.

Paratypes

USNM 179749 (41, 13.7–17.3 mm). Brazil, Goiaz [= Goiás], Ilha do Bananal; H. Schultz, summer 1959.

CHARACIDAE

Hyphessobrycon herbertaxelrodi Géry, 1961b:29, fig. 4.

Holotype

USNM 196089 (1, 31.8 mm). Brazil, Mato Grosso, Rio Paraguay [= Paraguai] basin, Rio Taquary [= Taquari], Coxim; K.H. Stegemann, early 1960.

CHARACIDAE

Hyphessobrycon igneus Miguélarena et al., 1980:237, figs. 1, 2.

Paratype

USNM 256727 (1, 23.2 mm). Argentina, Corrientes, Lagoon near Escuela No. 12, road from Bella Vista to San Roque; C. Darrieu et al.

Remarks: Received from CIMLP.

CHARACIDAE

Hyphessobrycon innesi Myers, 1936:97.

Holotype

USNM 102109 (1, 22.7 mm). Peruvian Amazon, likely near Iquitos.

Remarks: USNM ledgers indicate that the specimen was collected in 1935; Weitzman and Fink (1983:388) noted that the specimen probably originated in the Río Putumayo, in the state of Amazonas, Colombia.

CHARACIDAE

Hyphessobrycon panamensis Durbin in Eigenmann, 1908:101.

Syntypes

USNM 120416 (2, 24.9–25.5). Panama.

Remarks: Received from MCZ, formerly MCZ 20688, in part; collected by Hassler Expedition.

CHARACIDAE

Hyphessobrycon poecilioides Eigenmann, 1913:29.

Paratypes

USNM 79214 (4, 37.9–41.1 mm). Colombia, Cali.

Remarks: Received from CM, presumably formerly CM 5092a–o, in part; collector C.H. Eigenmann, Mar 1912.

CHARACIDAE

Hyphessobrycon procerus Mahnert and Géry, 1987:311, figs. 3, 4.

Paratypes

USNM 290841 (3, 22.6–31.1 mm). Paraguay, Departamento Caaguazu, Río Guyrau-gua at Ltr. Juan M. Frutos; F. Baud et al., 16 May 1985.

Remarks: Received from MHNG, formerly MNHG 2385.69, in part; collected with holotype.

CHARACIDAE

Hyphessobrycon proteus Eigenmann, 1913:28.

Paratypes

USNM 167819 (8, 27.0–29.5 mm). Cienega at Calamar. Remarks: Received from UKEN, through W.R. Allen;

formerly CM 5098 or IU 12854, in part; complete collection information: Colombia, Cienega at Calamar; C.H. Eigenmann, 17–18 Jan 1912.

Paratypes

USNM 79215 (4, 40.5–44.6 mm). Colombia, Quibdo.

Remarks: Received from CM, presumably formerly CM 5095a–z, in part.

CHARACIDAE

Hyphessobrycon rosaceus Durbin, 1909:67.

Paratypes

USNM 66194 (1, 15.2 mm). British Guiana [= Guyana], Gluck Island; C.H. Eigenmann, 1908.

Remarks: Received from CM, presumably formerly CM 1191a–e, in part; 2 specimens originally in lot.

CHARACIDAE

Hyphessobrycon saizi Géry, 1964a:46, fig. 11.

Holotype

USNM 198647 (1, 22.3 mm). Colombia, upper Río Meta drainage, ~200 miles [~320 km] E of Bogota; H. Socolof et al., May 1963.

Remarks: Complete collection information: Colombia, Río Manacacias into upper Río Meta at Restrepo.

CHARACIDAE

Hyphessobrycon serpae Durbin in Eigenmann, 1908:100.

Syntypes

USNM 120269 (6, 20.5–22.9 mm). Serpa.

Remarks: Received from MCZ, formerly MCZ 20985, in part; complete collection information: Brazil, Amazonas, Rio Amazonas at Itacoatiara (formerly Serpa); Thayer Expedition, 1865.

CHARACIDAE

Hyphessobrycon simulans Géry, 1963a:15, figs. 1–3.

Paratype

USNM 197510 (1, 14.7 mm). Rio Purus; H.W. Schwartz; Nov 1962.

Remarks: Received from J. Géry. Géry (1966c:231) noted that the originally stated type locality for the species is incorrect. According to H. Schwartz, the collector, the type locality is “the Rio Jufaris (or Tupari), which empties into the Rio Negro just above the Rio Branco.”

CHARACIDAE

Hyphessobrycon socolofi Weitzman, 1977a:327, figs. 1–3.

Paratypes

USNM 216612 (5, 30.3–39.3 mm). Brazil, state of Amazonas, Rio Negro, Barcelos (62°57'W, 0°58'S); collected for G. Entel, Feb–Mar 1976.

CHARACIDAE

Hyphessobrycon sovichthys Schultz, 1944:350, fig. 53.

Holotype

USNM 121534 (1, 26.8 mm). Venezuela, Maracaibo basin, Ciénaga del Guanavana, ~10 km N of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratype

USNM 121535 (1, 27.2 mm). Venezuela, Maracaibo

basin, Río Palmar near Totuma, ~100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121536 (14, 21.3–29.9 mm) Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratype

USNM 121537 (1, 22.1 mm). Venezuela, Maracaibo basin, Río Agua Caliente, 2–3 km above Lago Maracaibo; L.P. Schultz, 1 May 1942.

Paratypes

USNM 121538 (37, 9.8–29.3 mm). Venezuela, Maracaibo basin, from a muddy pool tributary to Río Gé near Rosario; L.P. Schultz et al., 8 Mar 1942.

Paratypes

USNM 121539 (7, 16.9–28.3 mm). Venezuela, Maracaibo basin, Ciénaga del Guanavana, ~10 km N of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratypes

USNM 121540 (17, 24.9–28.5 mm). Venezuela, Maracaibo basin, Río Apón, ~35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Remarks: 28 specimens cited in original description; 5 specimens exchanged to UMMZ Jun 1948; 5 specimens exchanged to MCZ Jul 1951; 1 specimen unaccounted for.

Paratypes

USNM 121541 (2, 20.7–25.3 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above its mouth; L.P. Schultz, 24 Feb 1942.

Paratypes

USNM 121542 (7, 16.7–27.9 mm). Venezuela, Maracaibo basin, from a caño $\frac{3}{4}$ km W of Sinamaica; L.P. Schultz 11 Mar 1942.

CHARACIDAE

Hyphessobrycon stegemanni Géry, 1961a:7, figs. 1–4.

Holotype

USNM 195942 (1, 30.1 mm). Brazil, savannahs of “northeastern” Brazil, between the lower Rio Tocantins and the Rio Capim; H. Schultz, Sep 1959.

CHARACIDAE

Hyphessobrycon takasei Géry, 1964b:15, fig. 2.

Holotype

USNM 198138 (1, 27.1 mm). Brazil, lower Amazon basin, Amapá Territory, Serra do Navio, above Macapá; G. Takase, Dec 1961.

CHARACIDAE

Hyphessobrycon tropis Géry, 1963b:57, fig. 5.

Holotype

USNM 198639 (1, 21.3 mm). Tapurucuara, upper Rio Negro; H.A. Axelrod, Oct 1962.

Remarks: Complete locality information: Brazil, Amazonas, upper Rio Negro, Tapurucuara.

CHARACIDAE

Hyphessobrycon vilmae Géry, 1966a:64, fig. 1.

Paratype

USNM 198137 (1, 26.3 mm). Brazil, upper Arinos-Juruena basin; H. Schultz, Jul 1962.

Remarks: received from J. Géry.

CHARACIDAE

Hysteronotus hesperus Böhlke, 1958:35, fig. 6, pl. 3: fig. 2.

Holotype

USNM 164056 (1, 76.9 mm). Ecuador, Napo-Pastaza, Río Pucuno, tributary of Río Suno, tributary of upper Río Napo; M.E. Olalla, Nov 1950.

Paratype

USNM 175124 (1, 59.5 mm). Ecuador, Napo-Pastaza, Río Pucuno, tributary of Río Suno, tributary of upper Río Napo; M.E. Olalla, Nov 1950.

Remarks: Collected with holotype.

Paratype

USNM 164042 (1, 75.0 mm). Ecuador, Napo-Pastaza, Río Villano, southern tributary of upper Río Curaray, Río Napo system, near Villano (1°30'S, 77°28'W); M. Olalla, May 1948.

CHARACIDAE

Hysteronotus myersi Weitzman and Thomerson, 1970:140, figs. 1–4.

Holotype

USNM 203697 (1, 49.0 mm). Peru, Huanuco Province, small stream directly tributary to Pachitea River (itself tributary to Ucayali River) at northeastern outskirts of Tournavista; J. Thomerson et al., 23 Aug 1964.

Paratypes

USNM 203698 (6, 25.3–32.6 mm). Peru, Huanuco Province, small stream directly tributary to Pachitea River (itself tributary to Ucayali River) at northeastern outskirts of Tournavista; J. Thomerson et al., 23 Aug 1964.

Remarks: Collected with holotype.

CHARACIDAE

Jobertina eleotrioides Géry, 1960:4, fig. 3 and text-figure.

Paratypes

USNM 179760 (1, 16.7 mm). French Guiana, Middle-Mana, in a little brook between “St. Patawa” and “St. Grand Bacou” (between 53°–54°W and 4°–5°N); J. Géry, 16 Oct 1957.

Remarks: Received from J. Géry; originally 2 specimens in lot, 1 cleared and stained specimen exchanged to UMMZ Oct 1988.

CHARACIDAE

Klausewitzia aphanes Weitzman and Kanazawa, 1977:151, figs. 1–6.

Paratypes

USNM 213780 (2, 11.7–12.2 mm). Brazil, state of Amazonas, Rio Negro, São João, near Tapurucuara, from an igarapé on terra firme; P. Vanzolini, EPA, 23 Oct 1972.

- Paratype
USNM 213781 (1, 12.5 mm). Brazil, state of Amazonas, Rio Negro, Paricatuba, from a lake separate from the river; P. Vanzolini, EPA, 11 Nov 1972.
CHARACIDAE
- Knodus savannensis* Géry, 1961b:26, figs. 1, 2.
Holotype
USNM 196088 (1, 30.4 mm). Brazil, savannahs of "northeastern" Brazil, between the lower Rio Tocantins and the Rio Capim; H. Schultz, Sep 1959.
CHARACIDAE
- Lepidarchus adonis* Roberts, 1966:210, figs. 1-11.
Paratype
USNM 202502 (1, 17.9 mm). Ghana, small stream a mile and a half [2.4 km] E of Mpataba on the road to Half-Assini (~5°5'N, 2°35'W); T.R. Roberts, 28 Feb 1964.
Remarks: Formerly SU 63462, in part; collected with holotype.
CHARACIDAE
- Leporinus alternus* Eigenmann, 1912a:307.
Paratype
USNM 66219 (1, 53.1 mm). British Guiana [= Guyana], Bartica; C.H. Eigenmann, 1908.
Remarks: Received from CM, presumably formerly CM 1828a-c, in part.
ANOSTOMIDAE
- Leporinus conirostris* Steindachner, 1875b:233, pl. IV.
Syntypes?
USNM 120275 (2, 98.2-99.3 mm). Brazil, Mendez.
Remarks: Steindachner based this species on a series of Thayer Expedition specimens from various localities, but did not specifically state whether the description was based on material he had examined at MCZ, or on specimens he had brought back to NMW from that institution, or both. Specimens received from MCZ, formerly MCZ 20413, in part; complete collection information: Brazil, Rio de Janeiro, Mendes; F.C. Hartt and E. Copeland, 1865.
ANOSTOMIDAE
- Leporinus marcgravi* Lütken, 1875:130.
Syntype
USNM 44951 (1, 97.0 mm). Brazil, Minas Gerais, Rio das Velhas; J. Reinhardt.
Remarks: Received from C. Lütken.
ANOSTOMIDAE
- Leporinus mormyrops* Steindachner, 1875b:240, pl. VI.
Syntype
USNM 120420 (1, 126.3 mm). Brazil, Rio Parahyba.
Remarks: Steindachner noted that the species is based on a series of specimens in MCZ and NMW; received from MCZ, formerly MCZ 20366, in part; complete collection information: Brazil, Rio de Janeiro, Rio Parafba do Sul system, Rio Piabanha at Posse (~22°23'S, 43°01'W); C. Taylor for the Thayer Expedition, 1865.
ANOSTOMIDAE
- Leporinus parae* Eigenmann in Eigenmann and Ogle, 1907:8, fig. 3.
Holotype
USNM 34613 (1, 71.7 mm). Brazil, Para [= Pará]; J.C. Brevoort.
Remarks: Eigenmann and Ogle cited Brevoort as presenter of specimen whereas USNM ledger cites him as collector; originally cited as "76 mm to end of lateral line"; paratype cited by Eigenmann as USNM 34613a now cataloged as USNM 306340.
Paratypes
USNM 34575 (2, 71.6-121.1 mm). Brazil, Para [= Pará]; J.C. Brevoort.
Remarks: Eigenmann cited 2 specimens for this lot in original description, 3 specimens cited in USNM ledger, 1 specimen unaccounted for; see under holotype with respect to collector; originally cited as "126 and 74 mm to end of lateral lines."
ANOSTOMIDAE
- Macrodon ferox* Gill, 1858:411.
Syntype
USNM 1112 (1, 112.5 mm). Trinidad, W.I. (West Indies), western portions.
Remarks: Received from T. Gill.
Syntypes
USNM 6033 (2, 76.6-81.0 mm). Trinidad, W.I. (West Indies), western portions.
Remarks: Received from T. Gill.
ERYTHRINIDAE
- Megalymphodus sweglesi* Géry, 1961b:36, figs. 7-9.
Holotype
USNM 196090 (1, 27.9 mm). Upper Amazon, surroundings of Leticia (Colombia); K. Swegles, 1960.
Remarks: According to Géry (1966d:232) the originally stated type locality information is incorrect. Géry notes that F. Leidecker, the collector, stated that the specimen did not come from Leticia, but was rather collected "in the Rio Muco, upper Orinoco Basin, in 1954."
CHARACIDAE
- Micromischodus sugillatus* Roberts, 1971:5, figs. 1-13.
Paratypes
USNM 205527 (2, 97.2-105.2 mm) Brazil, Estado do Pará, Terra Santa, Igarapé do Rio Jamari; Expedição Permanente da Amazônia, 14 Dec 1967.
Remarks: Received from MCZ, formerly MCZ 46719, in part; 1 specimen cleared and stained.

- Paratypes
USNM 205528 (2, 116.5–133.2 mm). Brazil, Estado do Amazonas, Rio Canum, Canum (near Maués); Expedição Permanente da Amazônia, 28–29 Nov 1967.
Remarks: Received from MCZ, formerly MCZ 46718.
HEMIODONTIDAE
- Mimagoniates barberi* Regan, 1907:402.
Paralectotypes
USNM 179827 (2, 25.8–29.5 mm). Paraguay, Estación Caballero, Arroyo Yáca; A. Barbero.
Remarks: Received from BMNH, formerly BMNH 1907.10.22:7–8; cited as “lectoparatypes” by Weitzman and Fink (1985:105).
CHARACIDAE
- Moenkhausia browni* Eigenmann, 1909:13.
Paratypes
USNM 66238 (2, 37.7–38.4 mm). British Guiana [= Guyana], Holmia, Potaro River; C.H. Eigenmann.
Remarks: Received from CM; presumably formerly CM 1005a–e, in part.
CHARACIDAE
- Moenkhausia eigenmanni* Géry, 1964a:30, fig. 5.
Holotype
USNM 198640 (1, 48.5 mm). Colombia, ~200 miles [–320 km] E of Bogota, upper Río Meta drainage; R. Socolof et al., May 1963.
Remarks: Complete locality information: Río Manacacias into upper Río Meta, at Restrepo.
CHARACIDAE
- Moenkhausia latissimus* Eigenmann, 1908:101.
Syntypes
USNM 120277 (3, 42.5–64.5 mm). Brazil, Tabatinga; Thayer Expedition.
Remarks: Received from MCZ, formerly MCZ 20769, in part; complete collection information: Brazil, Amazonas, Rio Solimões at Tabatinga (Sapurara) and environs; Sep 1865.
CHARACIDAE
- Moenkhausia lepidurus gracilimus* Eigenmann, 1908:104.
Syntypes
USNM 120279 (4, 40.6–44.2 mm). Serpa.
Remarks: Received from MCZ, formerly MCZ 20983, in part; complete collection information: Brazil, Amazonas, Rio Amazonas at Itacoatiara (formerly Serpa); Thayer Expedition, 1865.
CHARACIDAE
- Moenkhausia lepidurus latus* Eigenmann, 1908:103.
Syntypes
USNM 120278 (4, 42.4–49.9 mm). Rio Tapajos.
Remarks: Received from MCZ, formerly MCZ 20860, in part; complete collection information: Brazil, Pará, Rio Tapajós, northernmost part; W. James et al., 22 Jan 1866.
CHARACIDAE
- Moenkhausia naponis* Böhlke, 1958:14, figs. 1, 2, pl. 2: fig. 2.
Holotype
USNM 164067 (1, 54.0 mm). Ecuador, Napo-Pastaza, upper portion of Río Arajuno, a few km N of El Puyo (between 1°14′–15′S, 77°50′–55′W); C. Estrella, Mar 1953.
Paratypes
USNM 164068 (2, 41.0–49.2 mm). Ecuador, Napo-Pastaza, upper portion of Río Arajuno, a few km N of El Puyo (between 1°14′–15′S, 77°50′–55′W); R. Olalla, Feb 1953.
Paratypes
USNM 164071 (2, 33.3–56.6 mm). Ecuador, Napo-Pastaza, upper part of Río Olgán (Río Napo basin), near eastern foot of Andes (1°18′S, 77°42′W); R. Olalla, Apr 1953.
Paratypes
USNM 175142 (2, 43.6–55.7 mm). Ecuador, Napo-Pastaza, upper portion of Río Arajuno, a few km N of El Puyo (between 1°14′–15′S, 77°50′–55′W); C. Estrella, Mar 1953.
Remarks: Collected with holotype.
CHARACIDAE
- Moenkhausia robertsi* Géry, 1964d:21, fig. 1.
Holotype
USNM 200427 (1, 46.4 mm). Peru, upper Amazon region surrounding Iquitos; J. Roberts, end of 1963.
CHARACIDAE
- Moenkhausia simulata* Eigenmann and Pearson in Eigenmann and Myers, 1929:523, pl. 57, fig. 3.
Paratypes
USNM 167811 (2, 46.7–49.1 mm). Peru, Puerto Bermudez, Río Pichis; Allen, July 1920.
Remarks: Received from UKEN, through W.R. Allen; originally IU 15860, in part.
CHARACIDAE
- Moenkhausia takasei* Géry, 1964b:13, figs. 1, 2.
Holotype
USNM 198136 (1, 32.4 mm). Brazil, Rio Guama basin, in a creek close to Belém do Pará, lower Amazon; G. Takase, Jun 1963.
CHARACIDAE
- Nannocharax altus* Pellegrin, 1930:203.
Syntype
USNM 92963 (1, 29.8 mm). Kouilou; A. Boudon.
Remarks: Received from G.S. Myers; originally from MNHN, formerly MNHN 1929-242, in part; complete locality information: Kouilou River, Gaboon.
DISTICHODONTIDAE
- Nannocharax ansorgii* Boulenger, 1911:374.
Syntype
USNM 92960 (1, 28.3 mm). Geba and Culufi rivers; W.J. Ansorge.
Remarks: Received from G.S. Myers; originally from

BMNH, formerly BMNH 1912.4.11:373-382, in part; complete locality information: Guinea Bissau, Geba river at Rafata.

DISTICHODONTIDAE

Nannocharax maculicauda Vari and Géry, 1981:1076, figs. 1-4.

Paratypes

USNM 224524 (3, 25.3-28.7 mm). Gabon, still side arm of the upper Ivindo River opposite Bourassié, at junction of the Djouah and Karouaga rivers (~1°20'N, 13°12'E); J. and G. Géry, 2 Sep 1964.

DISTICHODONTIDAE

Nannocharax seiboldi Schultz, 1942:313, pl. 35: fig. 1.

Holotype

USNM 118757 (1, 32.9 mm). Liberia, Bellyella; W.M. Mann.

Remarks: Complete collection information: Liberia, Bellyella, in the St. Pauls River drainage, ~100 miles [-160 km] inland from Monrovia; 23 Mar 1940.

Paratypes

USNM 118758 (3, 33.4-40.3 mm). Liberia, Bromley; W.M. Mann.

Remarks: Complete collection information: Liberia, Bromley, a few miles above mouth of St. Pauls River; 6 Jun 1940.

Paratype

USNM 118759 (1, 43.0 mm). Liberia, Bellyella; W.M. Mann.

Remarks: See holotype for complete collection information.

DISTICHODONTIDAE

Nannostomus anduzei Fernandez and Weitzman, 1987:165, figs 1-7.

Paratypes

USNM 277695 (6, 12.8-14.5 mm). Venezuela, Territorio Federal de Amazonas, Departamento de Ature, Caño Provincial, ~20 km N of Puerto Ayacucho (~5°50'N, 67°30'W); R.P. Vari et al., 1 Dec 1984.

Paratypes

USNM 277696 (43, 11.1-14.9 mm). Venezuela, Territorio Federal de Amazonas, Departamento de Ature, Caño Provincial, ~20 km N of Puerto Ayacucho (~5°50'N, 67°30'W); R.P. Vari et al., 1 Dec 1984.

Remarks: Incorrectly cited as USNM 244696 in original description.

Paratypes

USNM 277697 (102, 11.1-13.4 mm). Venezuela, Territorio Federal de Amazonas, Departamento de Ature, Laguna Provincial, ~20 km N of Puerto Ayacucho (~5°50'N, 67°30'W); R.P. Vari et al., 1 Dec 1984.

LEBIASINIDAE

Nannostomus britskii Weitzman, 1978:5, figs. 3, 4.

Paratype

USNM 216203 (1, 23.0 mm). Brazil, state of Amazonas,

an igarapé of Lago José-Açu, Parantins, Amazon River; H. Britski, EPA, 11-12 Dec 1967.

LEBIASINIDAE

Nannostomus limatus Weitzman, 1978:9, figs. 6-8.

Paratype

USNM 216200 (1, 33.6 mm) Brazil, state of Pará, Lago Jacupá, Oriximiná; H. Britski, EPA, 17 Dec 1967.

Paratypes

USNM 216201 (7, 19.6-34.2 mm). Brazil, state of Pará, an igarapé tributary to Lago Mapará, near Santarém, Amazon River; H. Britski, EPA, 25 Dec 1967.

Paratypes

USNM 216202 (6, 15.5-27.7 mm). Brazil, state of Pará, Rio Maicá, Santarém; Y. Maturura, EPA, 19- 27 Oct 1967.

Remarks: 5 specimens reported in original description.

LEBIASINIDAE

Nannostomus marginatus Eigenmann, 1909:41.

Paratype

USNM 66252 (1, 18.0 mm). Cane Grove Corner.

Remarks: Received from CM; presumably formerly CM 1178a-f, in part; complete collection information: British Guiana [= Guyana], Cane Grove; C.H. Eigenmann, Sep 1908.

Paratype

USNM 165450 (1, 23.9 mm). Christianburg canal?

Remarks: Received from FMNH; formerly CM 1177a and FMNH 52779; originally cited as 27 mm; complete collection information: British Guiana [= Guyana], Christianburg Canal?; C.H. Eigenmann, 1908.

LEBIASINIDAE

Nannostomus nitidus Weitzman, 1978:3, figs. 1, 2.

Paratypes

USNM 216204 (8, 17.0-34.5 mm). Brazil, state of Pará, Igarapé Candiru-Mirim near Badajós, Rio Capim; N.A. Menezes, 29 Aug 1970.

LEBIASINIDAE

Nematobrycon amphioxus Eigenmann and Wilson in Eigenmann et al., 1914:13.

Paratypes

USNM 205598 (6, 14.1-26.0 mm). Colombia, Tambo; C. Wilson, 1913.

Remarks: Formerly IU 13027, in part.

Paratype

USNM 205646 (1, 30.7 mm). Colombia, Raspadura; C. Wilson, 1913.

Remarks: Formerly FMNH 56538, in part, and presumably originally CM 5352a-e, in part.

CHARACIDAE

Nematobrycon lacortei Weitzman and Fink, 1971:59, figs. 1-4.

Holotype

USNM 205594 (1, 35.7 mm). Aquarium specimen probably from Río Calama, Colombia, or a descendant

of specimens collected there by Kyburz or later collectors.

Paratypes

USNM 205595 (3, 26.0–29.2 mm). Aquarium specimen probably from Río Calama, Colombia, or a descendant of specimens collected there by Kyburz or later collectors.

Paratypes

USNM 205596 (4, 31.2–32.4 mm). Aquarium specimen probably from Río Calama, Colombia, or a descendant of specimens collected there by Kyburz or later collectors.

CHARACIDAE

Nematocharax venustus Weitzman et al., 1986:336, figs. 1–4.

Paratypes

USNM 232955 (6, 34.0–51.7 mm). Brazil, Minas Gerais, Município Medina, Rio Jequitinhonha at Itaubim (–16°40'S, 41°23'W); H. Britski and N.A. Menezes, 25 Jun 1966.

Remarks: 2 specimens cleared and stained.

Paratypes

USNM 232956 (8, 34.7–52.0 mm). Brazil, Minas Gerais, Município Medina, Rio Jequitinhonha at Itaubim (–16°40'S, 41°23'W); H. Britski and N.A. Menezes, 25 Jun 1966.

Remarks: 7 specimens cited in original description.

Paratypes

USNM 270816 (15, 29.5–41.7 mm). Brazil, Minas Gerais, Município Jequitinhonha, Rio Jequitinhonha, near km 205, road between Salto da Divisa and Jacinto (–16°02'S, 40°00'W); N.A. Menezes et al., 22 Mar 1985.

Remarks: 14 specimens cited in original description.

CHARACIDAE

Neolebias powelli Teugels and Roberts, 1990:61, figs. 1–4.

Paratypes

USNM 301201 (25, 10.4–14.3 mm) Nigeria, Sombreiro River, near Ahoada (5°05'N, 6°39'E); T.R. Roberts, 8 Dec 1987.

DISTICHODONTIDAE

Odontostilbe hastatus Eigenmann, 1913:27.

Paratypes

USNM 79223 (2, 26.1–27.0 mm). Colombia, Bernal Creek.

Remarks: Received from CM, presumably formerly CM 5104a–j, in part.

CHARACIDAE

Odontostoechus lethostigmus Gomes, 1947:8, fig. 1.

Paratype

USNM 143847 (1, 28.5 mm). Brazil, Rio Grande do Sul, Conceição do Arroio County (Município do Con-

ceição do Arroio [= Osório]); backwater of Rio Maquiné, tributary to Lagôa dos Quadros; H. Klereker, Jun 1941.

Remarks: Received from UMMZ, formerly UMMZ 143271, in part.

CHARACIDAE

Oligosarcus longirostris Menezes and Géry, 1983:576, fig. 4.

Paratypes

USNM 228080 (2, 130.0–145.0 mm). Brazil, Paraná, Rio Iguaçú (Paraná basin) at Porto Lupion, Superintendência de Recursos Hídricos do Meio Ambiente do Estado do Paraná, May 1979.

Remarks: Collected with holotype.

CHARACIDAE

Oligosarcus paranensis Menezes and Géry, 1983:572, fig. 3.

Paratypes

USNM 228081 (2, 108.0–124.0 mm). Brazil, Paraná, Arroio Guaçu (Paraná river system); Companhia de Tecnologia de Saneamento Ambiental, São Paulo, Jul 1980.

Paratypes

USNM 228082 (5, 98.0–138.0 mm). Brazil, São Paulo, Represa de Salesópolis (Tietê river system); Instituto de Pesca da Secretaria da Agricultura do Estado de São Paulo, 23 Apr 1975.

Remarks: Collected with holotype.

CHARACIDAE

Oligosarcus schindleri Menezes and Géry, 1983:566, fig. 2.

Paratype

USNM 228088 (1, 82.0 mm). Bolivia, Cochabamba, Laguna Alalay; P. Luiz et al., 13 Oct 1953.

CHARACIDAE

Parapristella georgiae Géry, 1964a:44, figs. 9, 10.

Holotype

USNM 198641 (1, 28.8 mm). Colombia, upper Río Meta drainage, ~200 miles [~320 km] E of Bogota; R. Socolof et al., May 1963.

Remarks: Complete locality information: Colombia, Río Manacacias, into upper Río Meta, at Restrepo.

CHARACIDAE

Parastremma sadina Eigenmann, 1912b:20.

Paratypes

USNM 79225 (3, 74.8–80.8 mm) Colombia, Istmina.
Remarks: Received from CM, presumably formerly CM 4813a–e, in part; collected by C.H. Eigenmann, 18–20 Mar 1912.

CHARACIDAE

Parodon dariensis Meek and Hildebrand, 1913:83.

Paratype

USNM 78379 (1, 93.2 mm). Panama, Darien, Río Cupe, Cituro.

Remarks: According to USNM ledgers collected by S. Meek and S.F. Hildebrand, 25 Feb 1912.

PARODONTIDAE

- Parodon ecuadoriensis* Eigenmann and Henn in Eigenmann et al., 1914:12.
 Paratypes
 USNM 76974 (4, 24.8–28.7 mm). Ecuador, Vinces, river and forest pools; A. Henn.
 Remarks: Received from IU, formerly IU 13103, in part; originally 5 specimens in lot, 1 specimen exchanged to MNRJ; 1 specimen cleared and stained.
- Paratype
 USNM 120188 (1, 38.3 mm). Ecuador, Vinces, river and forest pools; A. Henn.
 Remarks: Received from CAS, formerly IU 13103, in part.
- Paratype
 USNM 120194 (1, 32.5 mm). Ecuador, Río Daule, Colimes; A. Henn.
 Remarks: Received from CAS, formerly IU 13110, in part.
- PARODONTIDAE
- Parodon guyanensis* Géry, 1959c:482.
 Paratype
 USNM 179761 (1, 46.3 mm). French Guiana, Haute-Mana, crique Deux-Branches, above St. Fini; Lelong, 25 Oct 1957.
 Remarks: Collected with holotype; received from J.R. Géry.
- PARODONTIDAE
- Parodon paraguayensis* Eigenmann in Eigenmann and Ogle, 1907:6.
 Paratype
 USNM 1641 (1, EXCHANGED). Paraguay; Capt. Page.
 Remarks: Exchanged to MNRJ Mar 1949; originally cited as “100 mm to end of lateral line.”
- Paratypes
 USNM 2108 (2, 97.9–102.9 mm). Paraguay; Capt. Page.
 Remarks: Originally cited as “112 and 105 mm. to end of lateral line.”
- Paratypes
 USNM 120193 (3, 56.2–63.2 mm). Asuncion.
 Remarks: Received from CAS, formerly IU 9952; complete collection information: Río Paraguay, Asuncion; J.D. Anisits.
- PARODONTIDAE
- Parodon piracicabae* Eigenmann in Eigenmann and Ogle, 1907:6.
 Paratype
 USNM 120192 (1, 95.8 mm). Piracicaba; von Ihering.
 Remarks: Received from CAS, formerly IU 9292a, in part.
- PARODONTIDAE
- Parodon terminalis* Eigenmann and Henn in Eigenmann et al., 1914:12.
 Paratypes
 USNM 76975 (2, 30.6–35.8 mm). Ecuador, Vinces, river and forest pools; A. Henn.
 Remarks: Received from IU, presumably formerly IU 13014, in part.
- PARODONTIDAE
- Petersius ansorgii* Boulenger, 1910:543.
 Syntype
 USNM 86614 (1, 45.4 mm). Angola, Bengo River at Cabiri; W.J. Ansorge.
 Remarks: Received from BMNH, formerly BMNH 1910.11.28:86.
- CHARACIDAE
- Phenacogaster megalostictus* Eigenmann, 1909:28.
 Paratypes
 USNM 66276 (2, 38.2–51.2 mm). British Guiana [= Guyana], Tumatumari, lower Potaro River.
 Remarks: Received from CM; presumably formerly CM 1057a–j, in part; collector C.H. Eigenmann, Sep 1908.
- Paratype
 USNM 66277 (1, 30.5 mm). British Guiana [= Guyana], Essequibo, Rockstone.
 Remarks: Received from CM; presumably formerly CM 1062a–e; in part; collector C.H. Eigenmann, Sep 1908.
- CHARACIDAE
- Piabarchus torrenticola* Mahnert and Géry, 1988:3, figs. 2–8, pl. II.
 Paratypes
 USNM 290842 (4, 34.8–42.4 mm). Paraguay, Provincia Cordillera, Salto Pirareta; C. Dlouhy et al., 21 Mar 1985.
 Remarks: Received from MHNG, formerly MHNG 2385.72, in part.
- CHARACIDAE
- Piabucina panamensis* Gill, 1876:336.
 Syntype
 USNM 16676 (1, 65.2). Panama, “stream emptying into Atlantic”; J.F. Bransford.
- Syntype
 USNM 16677 (1, 65.0 mm). Panama, Río Frijoli; J.F. Bransford.
 Remarks: Originally 2 specimens in lot; small specimen (“young” of Gill) reidentified as *Brachyrhaphis episcopi* and recataloged as USNM 116372.
- Syntype
 USNM 116372 (1, 32.4 mm). Panama, Río Frijoli; J.F. Bransford.
 Remarks: Originally USNM 16677, in part; this is evidently small specimen (“young” of Gill); reidentified as *Brachyrhaphis episcopi*.
- LEBIASINIDAE

Poecilocharax bovalii Eigenmann, 1909:34.

Paratype

USNM 120430 (1, 23.4 mm). British Guiana [= Guyana], creek at Savannah Landing.

Remarks: Received from MCZ; formerly MCZ 29950, in part; originally CM 1137a-z or IU 11686, in part; collector C.H. Eigenmann, 1908.

LEBIASINIDAE

Poecilurichthys Brevoortii Gill, 1858:417.

Syntypes

USNM 1113 (2, 63.5–66.1 mm). Trinidad, W.I. (West Indies), western portions.

Remarks: Received from T. Gill.

CHARACIDAE

Priocharax ariel Weitzman and Vari, 1987:641, figs. 1–5.

Paratype

USNM 272613 (1, 13.9 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, lagoon NE of airport at San Carlos de Río Negro (1°55'N, 67°02'W); R.P. Vari et al., 4 Dec 1984.

Paratype

USNM 272614 (1, 14.0 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, Caño Chola where crossed by road from San Carlos de Río Negro to Solano (1°58'N, 67°00'W); R.P. Vari et al., 5 Dec 1984.

Paratypes

USNM 272615 (10, 11.4–13.6 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, small caño off Caño Urami, just upriver of Santa Lucia (1°17'N, 66°51'W); R.P. Vari et al., 6 Dec 1984.

Paratype

USNM 272616 (1, 11.9 mm). Venezuela, Territorio Federal Amazonas, Departamento Ature, small caño crossed by road from Puerto Ayacucho to Samariapo, 2 km S of Mirabel (5°25'N, 67°46'W) R.P. Vari et al., 12 Dec 1984.

Paratypes

USNM 272617 (2, 12.2–12.9 mm). Venezuela, Territorio Federal Amazonas, Departamento Ature, Río Plantanillal, where crossed by road from Puerto Ayacucho to Samariapo (5°37'N, 67°35'W); R.P. Vari et al., 2 Dec 1984.

Paratypes

USNM 272618 (3, 13.7–14.9 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, Caño Loro, where crossed by road from San Carlos de Río Negro to Solano (01°19'N, 66°58'W); R.P. Vari et al., 7 Dec 1984.

Paratypes

USNM 272619 (1229, 8.8–17.1 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, Caño Manu, tributary of Río Casiquiare ~250 m upstream from Solano (2°00'N, 66°47'W); R.P. Vari et

al., 7 Dec 1984.

Remarks: Collected with holotype; 40 specimens cleared and stained.

CHARACIDAE

Priocharax pygmaeus Weitzman and Vari, 1987:646, fig. 6.

Paratypes

USNM 278479 (36, 8.1–12.2 mm). Colombia, Departamento Amazonas, in Quebrada Pajarito, tributary of Quebrada Bacada, tributary of Matamata, a tributary of Río Amazonas, NW of Leticia, -04°41'S, 69°57'W; T. Hongslo, 21 Jul 1976.

Remarks: Collected with holotype; 6 specimens cleared and stained.

CHARACIDAE

Pristella aubynei Eigenmann, 1909:24.

Paratype

USNM 120427 (1, 34.5 mm). British Guiana [= Guyana], Lama Stop-off.

Remarks: Received from MCZ, originally CM 1043a-z or IU 11735, in part, and subsequently MCZ 30028, in part; collector C.H. Eigenmann, Sep 1908.

Paratypes

USNM 66268 (6, 27.9–34.8 mm). British Guiana [= Guyana], Lama Stop-off.

Remarks: Received from CM; presumably formerly CM 1043a-z, in part; collector C.H. Eigenmann, Sep 1908.

CHARACIDAE

Prochilodus beani Eigenmann in Eigenmann and Ogle, 1907:5, fig. 2.

Holotype

USNM 1662 (1, 149.8 mm). Colombia, Truando; A. Schott.

Remarks: USNM ledgers indicate that collector is Lt. N. Michler; A. Schott cited as "preparator"; paratype (cotype of Eigenmann) originally cited as USNM 1662a, now cataloged as USNM 306593; holotype originally cited as "about 195 mm long, 153 to end of lateral line."

Paratype

USNM 306593 (1, 142.8 mm). Colombia, Truando; A. Schott.

Remarks: Collected with holotype; see under holotype for collector; specimen cited by Eigenmann as USNM 1662a; originally cited as "about 195 mm long, 160 to end of lateral line."

PROCHILODONTIDAE

Prochilodus caudifasciatus Starks, 1906:773, fig. 5.

Holotype

USNM 53473 (1, 242.7 mm). Peru, Rio Perené at Perené; P.O. Simons.

Remarks: Originally cited as "32 cm in entire length."

PROCHILODONTIDAE

Protonotocara alleni Böhlke, 1953:661.

Paratype

USNM 157366 (1, 34.9 mm). Peru, Río Ucayali, Cashiboya (~7°31'S, 74°55'W); W.R. Allen, 3-4 Aug 1920.

Remarks: Collected with holotype.

CHARACIDAE

Psectrogaster auratus Gill, 1895:211.

Holotype

USNM 5878 (1, 108.1 mm). Bolivia.

Remarks: Information in the USNM ledgers indicates that the specimen was collected in the "Mamora R. Bolivia," presumably the Río Mamoré, by Lt. Gibbon.

CURIMATIDAE

Psectrogaster cisandinus Allen in Eigenmann and Allen, 1942:290, pl. XIV: fig. 3.

Holotype

USNM 167834 (1, 121.5 mm). Iquitos; Morris, 1920.

Remarks: Specimen received from UKEN, through W.R. Allen; length cited by Allen as 146 mm, presumably total length; formerly IU 17859, in part, 2 other specimens originally in lot now USNM 268199 and USNM 268200 (see below); locality is Peru, Loreto, Iquitos.

Paratype

USNM 167805 (1, 84.5 mm). Lago Cashiboya, Allen, Aug 1920.

Remarks: Specimen received from UKEN, through W.R. Allen; length originally cited as either 102 or 103 mm, presumably total length; originally IU 17851 in part; other specimen originally in lot is now cataloged as CAS 57144, holotype of *Lambepiedra alleni* Fernández-Yépez; locality is Peru, Loreto, Lago Cashiboya; W.R. Allen.

Paratypes

USNM 167803 (2, 89.3-89.7 mm). Río Nanay, Iquitos; Allen, September 1920.

Remarks: Specimen received from UKEN, through W.R. Allen; lengths originally cited as 102 and 106 mm, presumably total length; originally IU 15837; complete locality is Peru, Loreto, Río Nanay, Iquitos; W.R. Allen.

Paratype

USNM 268199 (1, 89.9 mm). Iquitos; Morris, 1920.

Remarks: Specimen received from UKEN, through W.R. Allen; originally IU 17859, in part; 2 other specimens originally in lot now cataloged as USNM 167834 and USNM 268120; locality is Peru, Loreto, Iquitos; specimen reidentified as *Psectrogaster amazonica* (Eigenmann and Eigenmann) by Vari (1989b:49).

Paratype

USNM 268200 (1, 57.3 mm). Iquitos; Morris, 1920.

Remarks: Specimen received from UKEN, through

W.R. Allen; length cited by Allen as 67 mm; originally IU 17859, in part; 2 other specimens originally in lot now cataloged as USNM 167834 and USNM 268199; locality is Peru, Loreto, Iquitos; specimen reidentified as *Curimata aspera* Günther by Vari (1989b:49).

CURIMATIDAE

Psectrogaster rhomboides Eigenmann and Eigenmann, 1889a:7.

Paralectotypes

USNM 120287 (4, 117.0-160.2 mm). Río Putz; O. St. John.

Remarks: Received from MCZ, formerly MCZ 20303, in part; complete locality information: Brazil, Piauí, Rio Poti (tributary of Rio Parnaíba) at Teresina; lectotype designated by Vari (1989c:36).

CURIMATIDAE

Pseudochalceus kyburzi Schultz, 1966:27, 2 text figs.

Holotype

USNM 231738 (1, 77.0 mm). Colombia, Río Cauca Valley, Río Calima; H. Axelrod, Nov 1964.

Remarks: Formerly cataloged as USNM 257403-F27.

Paratype

USNM 171751 (1, 35.8 mm). Colombia, Río Anchicaya (Pacific drainage); W.A. Kyburz and H.H. Hutchins.

Paratype

USNM 231739 (1, 40.5 mm). Colombia, Río Dagua, near Buenaventura (Pacific drainage); W.A. Kyburz, Jun and Oct 1964.

Remarks: Formerly cataloged as USNM 258173-F1.

CHARACIDAE

Pseudocheirodon terrabae Bussing, 1967:212, fig. 1.

Paratypes

USNM 213486 (6, 28.3-44.9 mm). Costa Rica, San José, Río Pacuar and tributary, 4.5 km SW of San Isidro del General; W.A. Bussing and S. Jiménez C., 28 Dec 1961.

Remarks: 1 specimen cleared and stained.

CHARACIDAE

Pseudocurimata boehlkei Vari, 1989a:21, figs. 14-17.

Holotype

USNM 287745 (1, 109.1 mm). Ecuador, Esmeraldas, Esteros La Bocana del Cupa, 100 m below Puerto Cupa, Río Esmeraldas basin (~0°26'N, 79°26'W); R. Barriga, Cerón and J. Caicedo, 11 Mar 1985.

Paratypes

USNM 291690 (6, 33.9-98.6 mm). Ecuador, Esmeraldas, Esteros La Bocana del Cupa, 100 m below Puerto Cupa, Río Esmeraldas basin (~0°26'N, 79°26'W); R. Barriga, Cerón and J. Caicedo, 11 Mar 1985.

Remarks: Collected with holotype; 1 specimen cleared and stained.

CURIMATIDAE

Pterobrycon myrnae Bussing, 1974:138, figs. 1, 2.

Paratypes

USNM 210988 (2, ?-35.5 mm). Costa Rica, Puntarenas Province, Pacific coast, tributary (20 m elevation) of Río Serpe at Interamerican Highway, 1 km SE of Venecia and 300 m SE of Río Salamá Nuevo, 1 Mar 1973.

Remarks: 1 specimen severed; collector W. Bussing; 3 specimens originally in lot, 1 specimen recataloged as USNM 236068.

Paratypes

USNM 211458 (6, 27.8-33.9 mm). Costa Rica, Puntarenas Province, Pacific coast, Quebrada Aguabuena (30 m elevation), 1 km upstream from Tropical Science Center near Rincón, 28 Feb 1967.

Remarks: Collector K. Karlson.

Paratypes

USNM 211459 (40, 24.1-38.3 mm). Costa Rica, Puntarenas Province, Pacific coast, Quebrada Banegas (10 m elevation), 0.8 km upstream from Pacific road, 3 airkm SW of Rincón, 1 Mar 1968.

Remarks: Collector N. Scott; 43 specimens originally in lot, 3 specimens recataloged as USNM 236066.

Paratypes

USNM 211460 (2, 26.1-26.5 mm). Costa Rica, Puntarenas Province, Pacific coast, Banegas swamp (10 m elevation), near Quebrada Banegas, 3 airkm SW of Rincón, 14 Aug 1973.

Remarks: Collector S. Stearns; 3 specimens originally in lot, 1 specimen recataloged as USNM 236067.

Paratypes

USNM 211461 (5, 24.2-27.1 mm). Costa Rica, Puntarenas Province, Pacific coast, flooded gravel pit (20 m elevation) in Río Riyito near Charcos, 2 airkm S of Rincón airfield; 7 Aug 1967.

Remarks: Collector T. Lodge.

Paratypes

USNM 211462 (10, 24.8-33.0 mm) Costa Rica, Puntarenas Province, Pacific coast, tributary (20 m elevation) of Río Serpe, 2 km SE of Palmar Sur at Interamerican Highway; 6 Jan 1967.

Remarks: Collector W. Bussing.

Paratypes

USNM 236066 (2, 29.4-34.7 mm). Costa Rica, Puntarenas Province, Pacific coast, Quebrada Banegas (10 m elevation), 0.8 km upstream from Pacific road, 3 airkm SW of Rincón, 1 Mar 1968.

Remarks: Collector N. Scott; formerly USNM 211459, in part; 2 specimens cleared and stained; 1 specimen unaccounted for.

Paratype

USNM 236067 (1, 33.1 mm). Costa Rica, Puntarenas Province, Pacific coast, Banegas swamp (10 m elevation), near Quebrada Banegas, 3 airkm SW of Rincón,

14 Aug 1973.

Remarks: Collector S. Stearns; formerly USNM 211460, in part; specimen cleared and stained; 3 specimens originally in lot, 2 specimens unaccounted for.

Paratype

USNM 236068 (1, 27.6 mm). Costa Rica, Puntarenas Province, Pacific coast, tributary (20 m elevation) of Río Serpe at Interamerica Highway, 1 km SE of Venecia and 300 m SE of Río Salamá Nuevo, 1 Mar 1973.

Remarks: Collector W. and M. Bussing; formerly USNM 210988, in part; specimen cleared and stained.

CHARACIDAE

Pterodiscus levis Eigenmann, 1909:12.

Holotype

USNM 34454 (1, 35.4 mm). Para; J.C. Brevoort.

Remarks: USNM ledger cites locality as Brazil, Pará; original cited as 47 mm (? total length); paratypes originally in lot recataloged as USNM 306564.

Paratypes

USNM 306564 (2, 29.1-34.6 mm). Para; J.C. Brevoort. Remarks: USNM ledger cites locality as Brazil, Pará; formerly USNM 34454, in part; 3 USNM "cotypes" (= paratypes) cited in original description, 1 specimen unaccounted for; originally cited as 32 to 47 mm, presumably total length.

GASTEROPELECIDAE

Pygocentrus altus Gill, 1871:93.

Holotype

USNM 21432 (1, 122.7 mm). Peru and Ecuador [= Ecuador], Marañon or upper Amazon and Napo Rivers; J. Orton.

CHARACIDAE

Pyrrhulina guttata Steindachner, 1875a:10, pl. II: fig. 6.

Syntypes

USNM 120282 (4, 45.0-70.0 mm). Obidos.

Remarks: Received from MCZ, formerly MCZ 6429, in part; complete collection information: Brazil, Pará, Rio Amazonas at Óbidos; Thayer Expedition, 1865.

LEBIASINIDAE

Pyrrhulina maxima Eigenmann and Eigenmann, 1889c:111.

Possible Holotype

USNM 120283 (3, 29.8-39.0 mm). Tabatinga; Bourget. Remarks: Eigenmann and Eigenmann based their species on "Type No. 6343; one specimen. .08 m. to base of caudal." The 3 specimens in USNM 120283 were originally part of MCZ 6343, which now consists of 11 specimens, 28.6-41.7 mm SL (M. Weitzman, pers. comm.). Thus none of the specimens known to have been part of MCZ 6343 approach the length cited by the Eigenmanns, even if we assume that their measurement represents total rather than standard length. It is impossible at this time to determine which of the

specimens in USNM 120283 and MCZ 6343 may be the holotype. Complete collection information: Brazil, Amazonas, Rio Solimões at Tabatinga [= Sapurara] and environs; D. Bourget, Nov 1865.

LEBIASINIDAE

Pyrrhulina rachoviana Myers, 1926a:441.

Syntypes

USNM 92970 (2, 30.6–32.7 mm). Rosario.

Remarks: Received from G.S. Myers. According to letter from Myers accompanying accession (acc. no. 124667), these species are "Aquarium specimens bred from stock collected at Rosario, Argentina. The description was based on these two, male and female."

LEBIASINIDAE

Rachoviscus crassiceps Myers, 1926b:1.

Lectotype

USNM 92971 (1, 32.7 mm). Collected for the aquarium trade and sent to Myers by A. Rackow of Germany. Supposedly collected in Brazil, neighborhood of Rio de Janeiro.

Remarks: Designated as lectotype by Weitzman and Cruz (1981:1009). Weitzman and Cruz (1980:1008–1009) suggest that the originally proposed type locality for the species is incorrect. Those authors note that the species is only known from near Guarituba, a small town ~50 km S of Paranaguá, state of Paraná. Those localities are a considerable distance to the south of Rio de Janeiro. At the time that the species was described, the German aquarium import trade was receiving fishes from that area of southern Brazil, and Weitzman and Cruz suggest that the fish may have been collected in the region of Paranaguá and transhipped to Germany through Rio de Janeiro.

Paralectotypes

USNM 94216 (3, 17.2–30.7 mm).

Remarks: No locality information, received from New York Aquarium Society. Myers (1926b) recorded this lot, #47, as syntypes; not noted by Weitzman and Cruz (1981). See also "Remarks" under Lectotype above.

CHARACIDAE

Rachoviscus graciliceps Weitzman and Cruz, 1980:1003, figs. 1, 2.

Paratypes

USNM 220355 (4, 35.1–47.6 mm). Brazil, state of Bahia, collected from one of three small creeks ~1 km N of Prado and ~500 m from Atlantic Ocean (39°14'W, 17°19'S); C.A.G. da Cruz, 18 Oct 1977.

Remarks: Only 3 specimens cited in original description; 1 specimen is "young of specimens collected with holotype."

CHARACIDAE

Raeoboides Myersii Gill, 1871:92.

Holotype

USNM 21426 (1, 123.0 mm). Peru and Ecuador

[= Ecuador], Marañon or upper Amazon and Napo rivers; J. Orton.

CHARACIDAE

Rhinobrycon negrensis Myers, 1944:589, text fig.

Paratypes

USNM 123038 (4, 34.7–37.9 mm). Brazil, Amazonas, Rio Negro, Santa Izabel; C. Ternetz, 14 Jan 1925.

Remarks: Received from CAS, formerly CAS 11090, in part.

CHARACIDAE

Roeboides dayi dientonito Schultz, 1944:304, fig. 39.

Holotype

USNM 121370 (1, 62.6 mm). Venezuela, Maracaibo basin, Río Palmar at the bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Paratypes

USNM 121371 (90, 19.3–74.2 mm). Venezuela, Maracaibo basin, Ciénaga del Guanavana, ~10 km N of Sianamaica; L.P. Schultz, 11 Mar 1942.

Remarks: 91 specimens cited in original description, 1 specimen unaccounted for.

Paratypes

USNM 121372 (14, 24.9–64.3 mm). Venezuela, Maracaibo basin, Río Palmar at the bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Remarks: Collected with holotype.

Paratypes

USNM 121373 (2, 38.3–51.7 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge, Motatán system; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 121374 (23, 11.5–45.8 mm). Venezuela, Maracaibo basin, pond tributary to Río Gé, near Rosario; L.P. Schultz, 8 Mar 1942.

Remarks: 24 specimens cited in original description, 1 specimen unaccounted for.

Paratypes

USNM 121375 (106, 28.7–49.5 mm). Venezuela, Maracaibo basin, Río Agua Caliente, 2–3 km above Lago Maracaibo; L.P. Schultz, 1 May 1942.

Remarks: 112 specimens cited in original description; 6 specimens exchanged to ZMA Mar 1952.

Paratypes

USNM 121376 (2, 15.5–52.9 mm). Venezuela, Maracaibo basin, Estado de Zulia, Río San Juan, 12 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121377 (26, 36.3–58.7 mm). Venezuela, Maracaibo basin, Estado de Zulia, Río Apon ~35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121378 (EXCHANGED). Venezuela, Maracaibo Basin, Rio Machango at bridge S of Lagunillas; L.P. Schultz, 16 Mar 1942.

Remarks: Lot exchanged to UMMZ Jan 1948; originally cited as 5 specimens, 27.0–55.0 mm SL.

Paratypes

USNM 121379 (149, 18.4–66.7 mm). Venezuela, Maracaibo basin, Lago Tulé, tributary of Río Socuy, ~75 km W of Maracaibo; L.P. Schultz, 1 Mar 1942.

Remarks: 155 specimens cited in original description; 6 specimens exchanged to J. Géry, 1 Jan 1960.

Paratype

USNM 121380 (1, 64.1 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, ~100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121381 (21, 18.6–57.6 mm). Venezuela, Maracaibo basin, Río San Juan near bridge S of Mene Grande, Motatán system; L.P. Schultz, 17–20 Mar 1942.

Paratypes

USNM 121382 (20, 23.3–47.6 mm). Venezuela, Maracaibo basin, caño $\frac{3}{4}$ km W of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratypes

USNM 121383 (135, 26.3–75.1 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: 140 specimens cited in original description; 5 specimens exchanged to MCZ Jul 51.

Paratypes

USNM 121384 (71, 25.9–74.7 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above its mouth; L.P. Schultz, 24 Feb 1942.

CHARACIDAE

Roeboides myersi see *Roeboides Myersii*

Roeboides occidentalis Meek and Hildebrand, 1916:293, pl. XXIII.

Paratypes

USNM 78752 (21, 36.1–89.5 mm). Panama, Río Cardenas, Corazal.

Remarks: 22 specimens originally cited in USNM ledgers; 1 specimen unaccounted for.

CHARACIDAE

Roeboides salvadoris Hildebrand, 1925:246, fig. 9.

Holotype

USNM 87215 (1, 69.5 mm). El Salvador, Río Sucio, Sitio del Niño.

Remarks: Information with specimen indicates that it was collected by S.F. Hildebrand and F.J. Foster, 3 Feb 1924.

Paratypes

USNM 87212 (4, 62.8–81.6 mm). El Salvador, Río Sucio, Sitio del Niño.

Remarks: Information in jar indicates that specimens were collected by S.F. Hildebrand and F.J. Foster, 3 Feb 1924; Hildebrand specifically cited only holotype, but

multiple specimens used in original description; these specimens collected at type locality on same date as holotype; originally 6 specimens in lot, 1 specimen exchanged to "El Salvador," 1 specimen exchanged to FMNH.

Paratypes

USNM 87213 (26, 24.3–83.3 mm). El Salvador, Lake [= Lago] Guija and outlet.

Remarks: Information in jar indicates that specimens were collected by S.F. Hildebrand and F.J. Foster, 23–25 Jan 1924; Hildebrand specifically cited only holotype, but multiple specimens used in original description; originally 41 specimens in lot, 5 specimens exchanged to "El Salvador," 10 specimens exchanged to FMNH.

Paratypes

USNM 87214 (3, 21.8–23.4 mm). El Salvador, Lake [= Lago] Metapan.

Remarks: Information in jar indicates that specimens were collected by S.F. Hildebrand and S.J. Foster, 26 Jan 1924 at Metapan on Lago Metapan; Hildebrand specifically cited only holotype, but multiple specimens used in original description.

CHARACIDAE

Saccoderma melanostigma Schultz, 1944:315, figs. 40, 41.

Holotype

USNM 121519 (1, 26.3 mm). Venezuela, Maracaibo basin, Río San Juan near bridge, S of Mene Grande, Motatán system; L.P. Schultz, 17–20 Mar 1942.

Paratypes

USNM 121520 (5, 21.4–23.7 mm). Venezuela, Maracaibo basin, Río San Pedro at bridge S of Mene Grande; L.P. Schultz, 20 Mar 1942.

Paratypes

USNM 121521 (44, 16.5–26.7 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above mouth; L.P. Schultz, 24 Feb 1942.

Paratypes

USNM 121522 (24, 16.7–26.9 mm). Venezuela, Maracaibo basin, Ciénaga del Guanavana, ~10 km N of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratypes

USNM 121523 (3, 18.4–24.2 mm). Venezuela, Maracaibo basin, Lago Tulé ~75 km W of Maracaibo; L.P. Schultz, 1 Mar 1942.

Paratypes

USNM 121524 (3, 23.0–27.9 mm). Venezuela, Maracaibo basin, caño 3 km W of Sinamaica; L.P. Schultz, 11 Mar 1942.

Paratypes

USNM 121525 (19, 23.1–26.2 mm). Venezuela, Maracaibo basin, Río San Juan near bridge, S of Mene Grande, Motatán system; L.P. Schultz, 17–20 Mar 1942.

Remarks: 23 specimens cited in original description; 4 specimens exchanged to MCZ Jul 1951.

Paratypes

USNM 121526 (7, 15.9–20.3 mm). Venezuela, Maracaibo basin, Río Machango at bridge, S of Lagunillas; L.P. Schultz, 16 Mar 1942.

Paratypes

USNM 121527 (4, 18.6–23.2 mm). Venezuela, Maracaibo basin, Río Apon, ~35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121528 (98, 18.2–25.1 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Remarks: 108 specimens cited in original description; 6 specimens exchanged to SU 25 Sep 1951; 4 specimens exchanged to J. Géry, 4 Jan 1960, subsequently transferred to MHNG.

Paratypes

USNM 121529 (9, 20.2–25.2 mm). Venezuela, Maracaibo basin, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Paratypes

USNM 121530 (4, EXCHANGED). Venezuela, Maracaibo basin, Río Palmar near Totuma, ~100 km SW of Maracaibo, L.P. Schultz, 21 Feb 1942.

Remarks: Lot exchanged to UMMZ 1 Jun 1948; originally cited as 25.0–26.0 mm SL.

CHARACIDAE

Saccodon cauae Schultz and Miles, 1943:252, figs. 1, 2.

Holotype

USNM 121285 (1, 104.2 mm). Colombia, upper Río Cauca N of Cali; C. Miles, Oct 1942.

Paratype

USNM 120166 (1, 122.8 mm). Colombia, upper Río Cauca N of Cali; C. Miles, Oct 1942.

PARODONTIDAE

Saccodon craniocephalum Thominot, 1882:248.

Syntype

USNM 150431 (1, 80.1 mm). Ecuador, Río Guyaquil; M. Cassola.

Remarks: Received from MNHN, formerly MNHN 2503, in part.

PARODONTIDAE

Schizodon fasciatum corti Schultz, 1944:269, figs. 30, 31.

Holotype

USNM 121300 (1, 257.0 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, ~100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Paratypes

USNM 121301 (3, 152.7–177.0 mm). Venezuela, Maracaibo basin, caño 1/2 km W of Sinamaica; L.P. Schultz, 11 Mar 1942.

Remarks: 4 specimens cited in original description, 1

specimen exchanged to J. Géry 1960, subsequently transferred to MHNG.

Paratypes

USNM 121302 (3, 188.0–230.0 mm). Venezuela, Maracaibo basin, Río Palmar at bridge, 70 km SW of Maracaibo; L.P. Schultz, 6 Mar 1942.

Remarks: 4 specimens cited in original description, 1 specimen exchanged to ZMA Mar 1958.

Paratype

USNM 121303 (1, ~285 mm). Venezuela, Maracaibo basin, Río Motatán at the bridge, 22 km N of Motatán; L.P. Schultz, 17 Mar 1942.

Paratypes

USNM 121304 (2, ~280 and 290 mm). Venezuela, Maracaibo basin, Río Negro below mouth of Río Yasa; L.P. Schultz, 2 Mar 1942.

Paratypes

USNM 121305 (5, 235.0–265.0 mm). Venezuela, Maracaibo basin, Río Apon ~35 km S of Rosario; L.P. Schultz, 26 Feb 1942.

Paratypes

USNM 121306 (10, 166.0–134.0 mm). Venezuela, Maracaibo basin, Río Palmar near Totuma, ~100 km SW of Maracaibo; L.P. Schultz, 21 Feb 1942.

Remarks: Collected with holotype.

Paratypes

USNM 121307 (8, 129.6–309.0 mm). Venezuela, Maracaibo basin, Río Socuy, 3 km above its mouth; L.P. Schultz, 24 Feb 1942.

Remarks: 15 specimens cited in original description, 5 specimens exchanged to UMMZ 1 Jun 1948, 2 specimens exchanged to MCZ Jul 1951.

ANOSTOMIDAE

Schultzites axelrodi Géry, 1964a:32, fig. 7.

Holotype

USNM 198642 (1, 31.4 mm). Colombia, upper Río Meta drainage, ~200 miles [~320 km] E of Bogota; R. Socolof et al., May 1963.

Remarks: Originally cited as 34.5 mm SL; received from J. Géry; complete locality information: Colombia, Río Manacacias, into upper Río Meta, at Restrepo.

CHARACIDAE

Semaprochilodus varii Castro, 1988:504, fig. 1.

Paratypes

USNM 285719 (4, 59.6–64.7 mm). Surinam, Marowijne District, Marowijne River, ~25 km S of Albina; H. Nijssen, 17 Jun 1966.

PROCHILODONTIDAE

Serrabrycon magoi Vari, 1986:329, figs. 1–3.

Paratypes

USNM 270260 (11, 21.5–27.5 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, lower portion of Caño Manu, which drains into the Río Casiquiare ~250 m upstream of Solano (~2°00'N,

66°57'W); R.P. Vari et al., 7 Dec 1984.

Remarks: Collected with holotype; 3 specimens cleared and stained.

Paratypes

USNM 270259 (5, 24.9–31.8 mm). Venezuela, Territorio Federal Amazonas, Departamento Río Negro, drying lagoon NE of airport at San Carlos de Río Negro (–01°55'N, 67°02'W); R.P. Vari et al., 4 Dec 1984.

CHARACIDAE

Serrasalmo brandtii Lütken, 1875:137.

Syntype

USNM 44964 (1, 158.1 mm). Brazil, Minas Gerais, Lagoa Santa; J. Reinhardt.

Remarks: Received from C. Lütken.

CHARACIDAE

Spintherobolus broccae Myers, 1925:143, text fig., pl. XX.

Paratypes

USNM 92959 (2, 29.0–29.2 mm). Brazil, hills behind Rio de Janeiro; R. Brocca.

Remarks: Received from G.S. Myers; 3 specimens originally cited in USNM ledgers, 1 specimen unaccounted for.

CHARACIDAE

Steindachnerina gracilis Vari and Vari, 1989:474, fig. 5.

Paratype

USNM 191632 (1, ~73.4 mm). Brazil, Goiás, Rio Araguaia, Aruanã; H.A. Axelrod, 1960.

Paratypes

USNM 293034 (6, 57.4–65.4 mm). Brazil, Pará, Rio Tocantins, lagoons along margin of river near Tucuruí (3°42'S, 49°27'W); Expedição Permanente da Amazônia, 14 Sep 1970.

Remarks: 2 specimens cleared and stained.

Paratype

USNM 293035 (1, 67.2 mm). Brazil, Goiás, Rio Araguaia, Aruanã; Excurso do Departamento de Zoologia (now MZUSP), 15–19 Sep 1966.

Remarks: Collected with holotype.

CURIMATIDAE

Steindachnerina planiventris Vari and Vari, 1989:479, figs. 8–11.

Paratypes

USNM 267986 (18, 56.3–78.8 mm). Brazil, Rondônia, Rio Machado, near mouth (–8°03'S, 62°53'W); M. Goulding, 4 Sep 1980.

Remarks: Collected with holotype.

Paratypes

USNM 267987 (6, 56.5–65.1 mm). Brazil, Rondônia, Rio Machado, Santo Antonio; M. Goulding, 3 Sep 1980.

Remarks: 2 specimens cleared and stained.

Paratypes

USNM 267989 (18, 46.2–67.8 mm). Brazil, Rondônia,

Rio Machado, Jauari, channel beach; M. Goulding, 5 Sep 1980.

CURIMATIDAE

Steindachnerina pupula Vari, 1991:77, figs. 54–57.

Paratypes

USNM 235462 (2, 48.3–53.5 mm). Venezuela, Territorio Federal Delta Amacuro, lagoon on N side of Río Orinoco, opposite Isla Tres Caños, W of Caño Araguaito (8°40'30"N, 61°58'30"W); E. Marsh et al., 13 Nov 1979.

Paratypes

USNM 258008 (2, 97.8–99.3 mm). Venezuela, Guárico, Laguna Los Guácimos, Fundo Pecuario Masaguaral (–8°34'N, 67°35'W); R.P. Vari et al., 19 Jan 1983.

Paratypes

USNM 258081 (3, 52.5–56.0 mm). Venezuela, Guárico, Fundo Pecuario Masaguaral, Río Coracol, where crossed by bridge (–8°34'N, 67°30'W); R.P. Vari et al., 19 Jan 1983.

Paratype

USNM 302170 (1, 60.7 mm). Venezuela, Guárico, small caño on N shore of Río Orinoco, draining into Río Orinoco ~1 km upstream of mouth of Río Zuata.

Remarks: Collected with holotype.

CURIMATIDAE

Steindachnerina quasimodoi Vari and Vari, 1989:476, figs. 6–10.

Holotype

USNM 293041 (1, 88.9 mm). Peru, Río Javari, near Petropolis; H. Ortega, 2 Oct 1982.

Paratypes

USNM 293040 (3, 34.3–61.5 mm). Brazil, Amazonas, Rio Javari system, opposite Colonia Angamos, Peru; S. Kullander et al., 5 Aug 1984.

Paratypes

USNM 293042 (7, 49.7–122.6 mm). Peru, Río Javari, near Petropolis; H. Ortega, 2 Oct 1982.

Remarks: Collected with holotype; 2 specimens cleared and stained.

CURIMATIDAE

Steindachnerina runa Vari, 1991:75, figs. 50–53.

Paratypes

USNM 300000 (10, 57.6–92.7 mm). Surinam, Brokopondo, Morawijne or Gran Creek, 63 km S of Afobaka; H. Nijssen, 20 Oct 1966.

Remarks: Collected with holotype.

CURIMATIDAE

Tetragonopterus nanus Lütken, 1875:133.

Syntypes

USNM 44958 (4, 13.5–17.2 mm). Brazil, Minas Gerais, Lagoa Santa; J. Reinhardt.

Remarks: Received from C. Lütken.

CHARACIDAE

Thayeria ifati Géry, 1959b:128, figs. 1-3.

Paratypes

USNM 179762 (9, 15.9-23.2, mm). French Guiana, Litani, upper Maroni.

Remarks: Received from J. Géry.

CHARACIDAE

Thayeria obliquus Eigenmann, 1908:94.

Syntypes

USNM 120295 (6, 45.8-50.1 mm). Obidos.

Remarks: Received from MCZ, formerly from MCZ 20841, in part; complete collection information: Brazil, Pará, Rio Amazonas at Óbidos; Col. Bentos, Nov 1865.

CHARACIDAE

Tylobronchus maculosus Eigenmann, 1912a:272, pl. XXXV: fig. 3.

Paratypes

USNM 66290 (2, 45.9-81.4 mm). British Guiana [= Guyana], Tumatumari.

Remarks: Received from CM, presumably previously CM 1920a-e, in part; collector C.H. Eigenmann; Sep 1908.

CHILODONTIDAE

Xenagoniates bondi Myers, 1942:90, fig. 1.

Paratype

USNM 130641 (1, 36.3 mm). Venezuela, Río Amana, 6 km E of Santa Barbara and 35 km W of Maturin; F.F. Bond, 16 Mar 1939.

Remarks: Exchanged from SU, formerly SU 36487, in part.

CHARACIDAE

Xenobrycon heterodon Weitzman and Fink, 1985:88, figs. 5, 12, 30, 34, 55, 65.

Paratypes

USNM 219389 (2, both 17.0 mm). Ecuador, Pastaza, Río Bobonaza at Sarayacu (1°16'S, 78°31'W); G.R. Smith and J.D. Lynch, 12-22 Jul 1968.

Paratypes

USNM 219390 (2, 16.4-16.7 mm). Ecuador, Pastaza, Río Bobonaza at Sarayacu (1°16'S, 78°31'W); G.R. Smith and J.D. Lynch, 12-22 Jul 1968.

Remarks: Collected with USNM 219389; specimens cleared and stained.

Paratypes

USNM 219391 (12, 13.8-16.7 mm). Peru, Huanuco, Río Pachitea, across river from Hotel Puerto Inca in Puerto Inca, (9°19'S, 75°4'W); D. and T. Greenfield and G. Glodek, 29 Jul 1975.

CHARACIDAE

Xenobrycon polyancistrus Weitzman, 1987:113, figs. 1-3.

Paratypes

USNM 278188 (2, 12.5-13.0 mm). Bolivia, Estado Beni, Laguna Maticusal, Río Isiboro, ~15°40'S, 65°00'W; L. Lauzanne and G. Loubens, 1 Nov 1985.

Paratypes

USNM 278190 (4, 11.0-11.8 mm). Bolivia, Estado Beni, Laguna Santa Rosa, Río Mamoré near Trinidad, ~14°47'S, 64°41'W; L. Lauzanne and G. Loubens, 21 Sep 1983.

Paratypes

USNM 278191 (5, 12.1-13.8 mm). Bolivia, Estado Beni, Laguna Maticusal, Río Isiboro, ~15°40'S, 65°00'W; L. Lauzanne and G. Loubens, 1 Nov 1985.

CHARACIDAE

Xenobrycon pteropus Weitzman and Fink, 1985:85, fig. 4.

Paratype

USNM 232921 (1, 13.8 mm). Brazil, Amazonas, an igarapé in Fonte Boa, ~2°30'S, 67°2'W; Expedição Permanente de Amazonia, 25 Oct 1968.

Remarks: Collected with holotype; specimen cleared and stained.

CHARACIDAE

List of Taxa

Arranged Alphabetically by Family, Genus, Species, and Subspecies

ANOSTOMIDAE

Anostomus dissimilis
Anostomus garmani
Anostomus intermedius
Anostomus nitens
Anostomus rostratus
Anostomus spiloclistron
Anostomus varius
Leporinus alternus
Leporinus conirostris
Leporinus marcgravi
Leporinus mormyrops
Leporinus parae
Schizodon fasciatum corti

CHARACIDAE

Acanthocharax microlepis
Acestrocephalus boehlkei
Acestrorhynchus grandoculis
Acestrorhynchus isalineae
Acnodon normani
Ammocryptocharax elegans
Anacyrtus guatemalensis
Anoptichthys antrobius
Aphyocharax axelrodi
Aphyocharax erythrurus
Astyanax abramoides
Astyanax argentatus
Astyanax atratoensis
Astyanax Carolinae
Astyanax eigenmanni
Astyanax emperador
Astyanax essequibensis
Astyanax fasciatus parahybae
Astyanax guianensis
Astyanax hastatus
Astyanax (Astyanax) kennedyi
Astyanax kompi
Astyanax microlepis
Astyanax multidentatus
Astyanax mutator
Astyanax orthodus
Astyanax ruberrimus
Astyanax rutilus nicaraguensis
Astyanax scologaster
Astyanax superbus
Astyanax venezuelae

Aulixidens eugeniae
Axelrodia riesei
Brachyhalcinus nummus
Bramocharax Bransfordii
Brittanichthys axelrodi
Brittanichthys myersi
Brycon argenteus
Brycon behrae
Brycon henni
Brycon meeki
Brycon obscurus
Brycon petrosus
Bryconamericus alfredae
Bryconamericus beta motatenensis
Bryconamericus breviceps
Bryconamericus cascajalensis
Bryconamericus chocoensis
Bryconamericus conventus
Bryconamericus dentatus
Bryconamericus deuterodonoides euryodous
Bryconamericus heteresthes
Bryconamericus loisae
Bryconamericus magdalenensis
Bryconamericus pectinatus
Bryconamericus scopiferus
Bryconamericus zeteki
Bryconexodon juruena
Chalcinus angulatus fuscus
Characidium blennioides
Characidium bolivianum
Characidium caucanum
Characidium chupa chupa
Characidium chupa torbesensis
Characidium japuhybensis
Characidium marshi
Characidium pterostictum
Characidium timbuiensis
Characidium vintoni
Characidium voladorita
Charax apurensis
Charax atratoensis
Charax caudimaculatus
Charax metae
Charax notulatus
Cheirodon australe
Cheirodon axelrodi

Cheirodon dialepturus
Cheirodon galusdae
Cheirodon gorgonae
Cheirodon kiliani
Cheirodon mitopterus
Cheirodontops geayi
Coelurichthys iporangae
Creagrutops maracaiboensis
Creagrutus bolivari
Creagrutus brevipinnis
Creagrutus cochui
Creagrutus hildebrandi
Creagrutus simus
Cynopotamus biserialis
Cynopotamus gouldingi
Cynopotamus juruena
Cynopotamus tocantinensis
Cyrtocharax kincaidi
Cyrtocharax magdalenae venezuelae
Deuterodon pinnatus
Distoechus stigmaturus
Elachocharax geryi
Elachocharax mitopterus
Eretmobrycon bayano
Genycharax tarpon
Gephyrocharax caucanus
Gephyrocharax chocoensis
Gephyrocharax intermedius
Gephyrocharax melanocheir
Gephyrocharax venezuelae
Gephyrocharax whaleri
Gilbertolus alatus atratoensis
Gilbertolus alatus maracaiboensis
Glandulocauda melanogenys
Glandulocauda melanopleura
Gymnocorymbus socolofi
Hemibrycon beni
Hemibrycon dariensis
Hemibrycon dentatus jabonero
Hemibrycon orcesi
Hemigrammus aereus
Hemigrammus analis
Hemigrammus armstrongi
Hemigrammus compressus
Hemigrammus cylindricus
Hemigrammus erythrozonus
Hemigrammus guyanensis
Hemigrammus inconstans
Hemigrammus levis
Hemigrammus micropterus boesemanni
Hemigrammus microstomus
Hemigrammus orthus
Hemigrammus proneki
Hemigrammus pulcher haraldi
Hemigrammus rodwayi
Hemigrammus santae
Hemigrammus unilineatus cayennensis
Hemigrammus vorderwinkleri
Hoplocharax goethei
Hydrolycus Copei
Hyphessobrycon bentosi
Hyphessobrycon copelandi
Hyphessobrycon diancistrus
Hyphessobrycon elachys
Hyphessobrycon ellisi
Hyphessobrycon eos
Hyphessobrycon flammeus
Hyphessobrycon guarani
Hyphessobrycon haraldschultzi
Hyphessobrycon herbertaxelrodi
Hyphessobrycon igneus
Hyphessobrycon innesi
Hyphessobrycon panamensis
Hyphessobrycon poecilioides
Hyphessobrycon procerus
Hyphessobrycon proteus
Hyphessobrycon rosaceus
Hyphessobrycon saizi
Hyphessobrycon serpae
Hyphessobrycon simulans
Hyphessobrycon socolofi
Hyphessobrycon sovichthys
Hyphessobrycon ste gmanni
Hyphessobrycon takasei
Hyphessobrycon tropis
Hyphessobrycon vilmae
Hysteronotus hesperus
Hysteronotus myersi
Jobertina eleotrioides
Klausewitzia aphanes
Knodus savannensis
Lepidarchus adonis
Megalampodes sweglesi
Mimagoniates barberi
Moenkhausia browni
Moenkhausia eigenmanni
Moenkhausia latissimus
Moenkhausia lepidurus gracilimus
Moenkhausia lepidurus latus
Moenkhausia naponis
Moenkhausia robertsi
Moenkhausia simulata
Moenkhausia takasei
Nematobrycon amphiloxy
Nematobrycon lacortei
Nematocharax venustus
Odontostilbe hastatus
Odontostoechus lethostigmus

Oligosarcus longirostris
Oligosarcus paranensis
Oligosarcus schindleri
Parapristella georgiae
Parastremma sadina
Petersius ansorgii
Phenacogaster megalostictus
Piabarchus torrenticola
Poecilurichthys Brevoortii
Priocharax ariel
Priocharax pygmaeus
Pristella aubynei
Prodontocharax alleni
Pseudochalceus kyburzi
Pseudocheiroduon terrabae
Pterobrycon myrmae
Pygocentrus altus
Rachoviscus crassiceps
Rachoviscus graciliceps
Raeoides Myersii
Rhinobrycon negrensis
Roeboides dayi dientonito
Roeboides occidentalis
Roeboides salvadoris
Saccoderma melanostigma
Schultzites alexrodi
Serrabrycon magoi
Serrasalmo brandtii
Spintherobolus broccae
Tetragonopterus nanus
Thayeria ifati
Thayeria obliquus
Xenagoniates bondi
Xenurobrycon heterodon
Xenurobrycon polyancistrus
Xenurobrycon pteropus
 CHILODONTIDAE
Tylobranchus maculosus
 CURIMATIDAE
Curimata cerasina
Curimata fasciata
Curimata incompta
Curimata inornata
Curimata punctata
Curimata roseni
Curimata spilota
Curimata stigmosa
Curimatopsis crypticus
Curimatopsis evelynae
Curimatopsis myersi
Curimatus argenteus
Curimatus atratoensis
Curimatus bimaculatus sialis
Curimatus brevipes

Curimatus elegans bahiensis
Curimatus leuciscus bolivae
Curimatus macrops
Curimatus morawhannae
Curimatus plumbeus
Curimatus reticulata
Curimatus spiluroopsis
Cyphocharax pantostictus
Psectrogaster auratus
Psectrogaster cisandinus
Psectrogaster rhomboides
Pseudocurimata boehlkei
Steindachnerina gracilis
Steindachnerina planiventris
Steindachnerina pupula
Steindachnerina quasimodoi
Steindachnerina runa
 DISTICHODONTIDAE
Nannocharax altus
Nannocharax ansorgii
Nannocharax maculicauda
Nannocharax seboldi
Neolebias powelli
 ERYTHRINIDAE
Erythrinus cinereus
Erythrinus Kessleri
Macrodon ferox
 GASTEROPELECIDAE
Gasteropelecus fasciatus
Gasteropelecus pectorosus
Pterodiscus levis
 HEMIODONTIDAE
Bivibranchia bimaculata
Bivibranchia notata
Bivibranchia protractila
Elopomorphus Jordani
Hemiodopsis ocellata
Hemiodopsis sterni
Micromischodus sugillatus
 LEBIASINIDAE
Copella vilmae
Nannostomus anduzei
Nannostomus britskii
Nannostomus limatus
Nannostomus marginatus
Nannostomus nitidus
Piabucina panamensis
Poecilocharax bovalii
Pyrrhulina guttata
Pyrrhulina maxima
Pyrrhulina rachovianna
 PARODONTIDAE
Apareiodon pongoense
Parodon dariensis

Parodon ecuadoriensis
Parodon guyanensis
Parodon paraguayensis
Parodon piracicabae
Parodon terminalis
Saccodon cauceae

Saccodon craniocephalum
PROCHILODONTIDAE
Curimatus tigris
Prochilodus beani
Prochilodus caudifasciatus
Semaprochilodus varii

Literature Cited

- Alvarez, J.
1946. Revisión del género *Anopichthys* con descripción de una especie nueva (Pisc., Characidae). *Anales de la Escuela Nacional de Ciencias Biológicas, México*, 6:263-282.
- Baird, S.F., and C. Girard
1855. Descriptions of New Species of Fishes collected in Texas, New Mexico and Sonora, by Mr. John H. Clark, on the U.S. and Mexican Boundary Survey and in Texas by Capt. Stewart Van Vliet, U.S.A. *Proceedings of the Philadelphia Academy of Sciences*, 7:244-29.
- Böhlke, J.
1952. Studies of the Fishes of the Family Characidae, 1: A New Genus of Cheirodontine Characids from the Canal de Casiquiare and Adjacent Waters in Venezuela and Northern Brazil. *Annals and Magazine of Natural History*, series 12, 5:775-777.
1953. Studies of the Fishes of the Family Characidae, 4: The South American Genus *Prodontocharax*. *Annals and Magazine of Natural History*, series 12, 6:658-664.
1958. Studies on Fishes of the Family Characidae, 14: A Report of Several Extensive Collections from Ecuador. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 110:1-121, figures 1-13, plates 1-7.
- Borodin, N.A.
1931. On the Genus *Anostomus* (Family Characinidae). *Bulletin of the Museum of Comparative Zoology, Harvard College*, 72(2):37-52, 4 plates
- Boulenger, G.A.
1910. On a Large Collection of Fishes Made by Dr. W.J. Anson in the Quanza and Bengo Rivers, Angola. *Annals and Magazine of Natural History*, series 8, 6(36):537-561.
1911. Descriptions of New Freshwater Fishes Discovered by Dr. W.J. Anson in Portuguese Guinea. *Annals and Magazine of Natural History*, series 8, 7:373-376.
- Breder, C.M.
1925. New Loricariate, Characin and Poeciliid Fishes from the Rio Chucunaque, Panama. *American Museum Novitates*, 180:1-9, figures 1-7.
- Bussing, W.A.
1967. New Species and New Records of Costa Rican Freshwater Fishes with a Tentative List of Species. *Revista de Biología Tropical*, 14(2):205-249, figures 1-10.
1974. *Pterobyrcon myrnae*, a Remarkable New Glandulocaudine Characid Fish from Costa Rica. *Revista de Biología Tropical*, 22(1):135-159, figures 1-6.
- Campos, H.
1982. Sistemática del género *Cheirodon* (Pisces: Characidae) en Chile con descripción de una nueva especie: Análisis de Multivarianza. *Studies on Neotropical Fauna and Environment*, 17:129-162, figures 1-11.
- Castro, R.M.C.
1988. *Semaprochilodus varii*, a New Species of Prochilodontid Fish (Ostariophysi: Characiformes) from the Marowijne River, Surinam. *Proceedings of the Biological Society of Washington*, 101(3):503-508, figures 1, 2.
- Durbin, M.L.
1909. Reports on the Expedition to British Guiana of the Indiana University and the Carnegie Museum, 1908, Report No. 2: A New Genus and Twelve New Species of Tetragonopterid Characins. *Annals of the Carnegie Museum*, 6(1):55-72.
- Eigenmann, C.H.
1908. Zoological Results of the Thayer Brazilian Expedition, Preliminary Descriptions of New Genera and Species of Tetragonopterid Characins. *Bulletin of the Museum of Comparative Zoology*, 52(6):93-106.
1909. Reports on the Expedition to British Guiana of the Indiana University and the Carnegie Museum, 1908, Report No. 1: Some New Genera and Species of Fishes from British Guiana. *Annals of the Carnegie Museum*, 6(1):1-54.
1911. New Characins in the Collection of the Carnegie Museum. *Annals of the Carnegie Museum*, 8(1):164-181, plates 1-9.
1912a. The Freshwater Fishes of British Guiana, Including a Study of the Ecological Grouping of Species and the Relation of the Fauna of the Plateau to That of the Lowlands. *Memoirs of the Carnegie Museum*, 5: xii + 578 pages, plates 1-103.
1912b. Some Results of an Ichthyological Reconnaissance of Colombia, South America. *Indiana University Studies*, 10(8):1-27.
1913. Some Results of an Ichthyological Reconnaissance of Colombia, South America, Part II. *Indiana University Studies*, unnumbered volume, pages 1-30.
1917. Eighteen New Species of Fishes from Northwestern South America. *Proceedings of the American Philosophical Society*, 41:673-689.
1918. The American Characidae. *Memoirs of the Museum of Comparative Zoology*, 43(2):103-208, 22 plates.
1921. The American Characidae. *Memoirs of the Museum of Comparative Zoology*, 43(3):209-310, 28 plates.
1922. The Fishes of Western South America, Part 1. The Fresh-water Fishes of Northwestern South America, Including Colombia, Panama, and the Pacific Slopes of Ecuador and Peru, Together with an Appendix upon the Fishes of the Rio Meta in Colombia. *Memoirs of the Carnegie Museum*, 2:1-346, figures 1-21, plates 1-35.
1927a. The American Characidae. *Memoirs of the Museum of Comparative Zoology*, 43(4):311-428, 24 plates.
1927b. The Fresh-water Fishes of Chile. *Memoirs of the National Academy of Sciences, Washington*, 22(2):1-80, 7 figures.
- Eigenmann C.H., and W.R. Allen
1942. *Fishes of Western South America, I: The Intercordilleran and Amazonian Lowlands of Peru; II: The High Pampas, Bolivia, and Northern Chile; With a Revision of the Peruvian Gymnotidae, and of the Genus Orestias*. 494 pages, 48 figures, 22 plates. Lexington: University of Kentucky.
- Eigenmann, C.H., and R.S. Eigenmann
1889a. Preliminary Descriptions of New Species and Genera of Characidae. *The West American Scientist*, 6:7-8.
1889b. A Revision of the Edentulous Genera of the Curimatinae. *Annals of the New York Academy of Sciences*, 4:409-440.
1889c. A Review of the Erythrininae. *Proceedings of the California Academy of Sciences*, series 2, 2:100-116.
- Eigenmann, C.H., A. Henn, and C. Wilson
1914. New Fishes from Western Colombia, Ecuador, and Peru. *Indiana University Studies*, 19:1-15.
- Eigenmann, C.H., and G.S. Myers
1929. The American Characidae, Part 5. *Memoirs of the Museum of Comparative Zoology*, 43:429-558.
- Eigenmann, C.H., and F. Ogle
1907. An Annotated List of Characin Fishes in the United States National Museum and the Museum of Indiana University with Descriptions of

- New Species. *Proceedings of the United States National Museum*, 33:1-36, figures 1-8.
- Evermann, B.W., and E.L. Goldsborough
1909. Notes on Some Fishes from the Canal Zone. *Proceedings of the Biological Society of Washington*, 22:95-104, figures 1-3.
- Evermann, B.W., and W.C. Kendall
1906. Notes on a Collection of Fishes from Argentina, South America, with Descriptions of Three New Species. *Proceedings of the United States National Museum*, 31:67-108.
- Fernandez, J.M., and S.H. Weitzman
1987. A New Species of *Nannostomus* (Teleostei: Lebiasinidae) from Near Puerto Ayacucho, Río Orinoco Drainage, Venezuela. *Proceedings of the Biological Society of Washington*, 100(1):164-172, figures 1-7.
- Fink, W.L.
1976. A New Genus and Species of Characid Fish from the Bayano River Basin, Panamá (Pisces, Cypriniformes). *Proceedings of the Biological Society of Washington*, 88(30):331-344, figures 1-5.
- Fink, W.L., and S.H. Weitzman
1974. The So-called Cheirodontin Fishes of Central America with Descriptions of Two New Species (Pisces: Characidae). *Smithsonian Contributions to Zoology*, 172: 46 pages, 26 figures.
- Fowler, H.W.
1913. Fishes from the Madeira River, Brazil. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 65:517-579, figures 1-25.
- Garman, S.
1890a. On the Species of the Genus *Chalcinus* in the Museum of Comparative Zoology at Cambridge, Mass., U.S.A. *Bulletin of the Essex Institute*, 22(1-3):1-7.
1890b. On Species of *Gasteropelecus*. *Bulletin of the Essex Institute*, 22(1-3):8-10.
1890c. On Species of *Cynopotamus*. *Bulletin of the Essex Institute*, 22(1-3):11-14.
1890d. On the Species of *Anostomus*. *Bulletin of the Essex Institute*, 22(1-3):15-23.
- Géry, J.
1959a. Contributions à l'étude des poissons Characoides (Ostariophys) (IV): Nouvelles espèces de Guyane Française du genre *Hemigrammus* (Tetragonopterinae) avec une liste critique des formes recensées. *Bulletin Mensuel de la Société Linnéenne de Lyon*, 28(8):248-260, figures 1-5.
1959b. *Thayeria ifati* n. sp. of Guiana, with Considerations on the Evolution of the Genus. *Senckenbergia Biologie*, 40(3-4):127-133, figures 1-4.
1959c. Contributions à l'étude des poissons Characoides (5): *Parodon guyanensis* n. sp. de Guyane française, avec quelques considérations sur le groupe (Hemiodontinae). *Bulletin du Muséum d'Histoire Naturelle*, series 2, 31(6):481-490.
1960. *Jobertina eleotriodes* n. sp. (Characidiinae) from French Guiana, with Considerations about the Genus and Redescription of the Type Species. *Opuscula Zoologica, Munich*, 47:1-10, figures 1-3.
1961a. The Savannah-tetra: *Hyphessobrycon stegmanni* sp. nov. *Tropical Fish Hobbyist*, 9(9):7-13, figures 1-4.
1961b. Three New South American Characids, *Knodus savannensis*, *Hyphessobrycon herbertaxelrodi* and *Megalampodus sweglesi*, with a Review of Some *Hyphessobrycon*-Group of Species. *Tropical Fish Hobbyist*, 9(9):26-46, figures 1-9.
1961c. *Hemigrammus pulcher haraldi*, a New Form of a Well-known Aquarium Tetra. *Tropical Fish Hobbyist*, 10(2):42-47, 50-51, figures 1-6.
1963a. *Hyphessobrycon simulans*, a New Neon-Tetra. *Tropical Fish Hobbyist*, 11(8):13-16, 70-72, figures 1-3, 3 text figures.
1963b. Three New Tetras from the Upper Rio Negro near Tapurucuara. *Tropical Fish Hobbyist*, 12(3):9, 11, 13-15, 57-59, 62-63, figures 1-6.
1963c. *Copella vilmae* n. sp. (Pisces, Characoidei). *Senckenbergiana Biologia*, 44(1):25-31, figures 1-3.
1964a. Preliminary Descriptions of Seven New Species and Two New Genera of Characid Fishes from the Upper Rio Meta in Colombia. *Tropical Fish Hobbyist*, 12(5):25-32, 41-48, figures 1-11.
1964b. Two New Tetras from the Lower Amazon Basin. *Tropical Fish Hobbyist*, 12(7):13-15, 59-60, figures 1-2.
1964c. New Species of Hemiodin Characid Fishes forming the *Hemiodopsis quadrimaculatus*-Group. *Tropical Fish Hobbyist*, 13(3):11-15, 69-74, figures 1-3.
1964d. Upper Amazonian Characid Fishes Collected by Mr. Jack Roberts. *Tropical Fish Hobbyist*, 13(4):21-32, 53-68, figures 1-18.
1965. A New Genus from Brazil—*Brittanichthys* a New Sexually-Dimorphic Characid Genus with Peculiar Caudal Ornament, from the Rio Negro, Brazil, with a Discussion of Certain Cheirodontin Genera and a Description of Two New Species, *B. axelrodi* and *B. myersi*. *Tropical Fish Hobbyist*, 13(6):13-23, 61-69, figures 1-8.
1966a. *Hyphessobrycon vilmae* sp. nov., a New Tetra from the Upper Juruena, Brazil, with Keys to the *heterorhabdus*-like Species. *Ichthyologica-The Aquarium Journal*, 37(2):63-70.
1966b. *Axelrodia riesei*, a New Characid Fish from Upper Rio Meta in Colombia. (With Remarks Concerning the Genus *Axelrodia* and Description of a Similar, Sympatric, *Hyphessobrycon*-Species.). *Ichthyologica-The Aquarium Journal*, 37(3):111-130, figures 1-8.
1966c. A Review of Certain Tetragonopterinae (Characoidei), with the Description of Two New Genera. *Ichthyologica-The Aquarium Journal*, 37(5):211-236.
1966d. *Hoplocharax goethei*, a New Genus and Species of South American Characid Fishes, with a Review of the Sub-Tribe Heterocharacini. *Ichthyologica-The Aquarium Journal*, 38(3):281-296, figures 1-11.
1980. Un nouveau Poisson characoïde occupant la niche des mangeurs d'écaillés dans le haut rio Tapajoz, Brésil. *Revue Française de Aquariologie*, 7:1-8, figures 1-11.
- Gill, T.
1858. Synopsis of the Fresh-water Fishes of the Western Portion of the Island of Trinidad, W.I. *Annals of the Lyceum of Natural History, New York*, 6:363-430.
1871. On Some New Species of Fishes Obtained by Prof. Orton from the Maranon, or Upper Amazon and Napo Rivers. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 1871 (for 1870):92-96.
1876. Notes on Fishes from the Isthmus of Panama, collected by Dr. J.F. Bransford, U.S.N. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 1876:335-339.
1878. On a Remarkable New Generic Type of Characins. *Annals and Magazine of Natural History*, series 2, 5:112.
1895. Notes on Characinoid Fishes with Ctenoid Scales, with a Description of a New *Psectrogaster*. *Proceedings of the United States National Museum*, 18:211-212.
- Gill, T., and J.F. Bransford
1877. Synopsis of the Fishes of Lake Nicaragua. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 1875:175-191.
- Gomes, A.L.
1947. A Small Collection of Fishes from Rio Grande do Sul Brazil. *Miscellaneous Publications, Museum of Zoology, University of Michigan*, 67:1-39, figures 1, 2, plates 1-3.
- Gosline, W.A.
1951. Notes on the Characid Fishes of the Subfamily Serrasalminae. *Proceedings of the California Academy of Sciences*, series 4, 27(2):17-64, plates 1-3.
- Greenwood, P.H., D.E. Rosen, S.H. Weitzman, and G.S. Myers
1966. Phyletic Studies of Teleostean Fishes with a Provisional Classification of Living Forms. *Bulletin of the American Museum of Natural*

- History*, 131(4):339-456.
- Günther, A.
1864. *Catalogue of the Fishes in the Collection of the British Museum*. Volume 5, xii + 455 pages. London.
- Higuchi, H.
Ms. An Updated List of Ichthyological Collecting Stations of the Thayer Expedition to Brazil (1865-1866). [Copy deposited in library, Museum of Comparative Zoology, Harvard University.]
- Hildebrand, S.F.
1925. Fishes of the Republic of El Salvador, Central America. *Bulletin of the U.S. Bureau of Fisheries*, 985:237-287, 20 figures.
1938. A New Catalogue of the Fresh-water Fishes of Panama. *Field Museum of Natural History, Zoological Series*, 12(4):219-359, figures 2-13.
- Howes, G.J.
1976. The Cranial Musculature and Taxonomy of Characoid Fishes of the Tribes Cynodontini and Characini. *Bulletin of the British Museum (Natural History), Zoology*, 29:203-248.
- International Commission for Zoological Nomenclature
1985. *International Code of Zoological Nomenclature*. University of California Press, 338 pages.
- Lucena, C.A.S. de
1987. Reviso e definição do gênero neotropical *Charax* Scopoli, 1777 com a descrição de quatro espécies novas (Pisces; Characiformes: Characidae). *Comunicações do Museu de Ciências da Pontifícia Universidade Católica do Rio Grande do Sul*, 40:5-124, figures 1-55.
- Lütken, C.F.
1875. Characinae novae Brasiliae centralis a clarissimo J. Reinhardt in Provincia Minas-Gerais circa oppidulum Lagoa Santa in lacu eiusdem nominis, flumine Rio das Velhas et rivulis affluentibus collectae, secundum caracteres essentiales breviter descriptae. *Oversigt over det Kongelige Danske Videnskabernes Selskabs Forhandling*, 3:127-143.
- Mahnert, V., and J. Géry
1987. Deux nouvelles espèces du genre *Hyphessobrycon* (Pisces, Ostariophysii, Characidae) du Paraguay: *H. guarani* n. sp. et *H. procerus* n. sp. *Bonner Zoologische Beiträge*, 38(4):307-314, figures 1-4.
1988. Les genres *Piabarchus* Myers et *Creagrutus* Günther du Paraguay, avec la description de deux nouvelles espèces (Pisces, Ostariophysii, Characidae). *Revue Française de l'Aquariologie*, 15(1):1-8, figures 1-7, plates I-III.
- Meek, S.
1904. The Fresh-Water Fishes of Mexico North of the Isthmus of Tehuantepec. *Field Museum of Natural History, Zoological Series*, 5: lxiii + 252 pages, figures 1-71, plates I-XV.
- Meek, S., and S.F. Hildebrand
1913. New Species of Fishes from Panama. *Field Museum of Natural History, Zoological Series*, 10(8):77-90.
1916. The Fishes of the Freshwaters of Panama. *Field Museum of Natural History, Zoological Series*, 10(15):217-374, figures 1-10, plates 6-32.
- Menezes, N.A.
1977. *Acestrocephalus boehlei*, a New and Disjunct Cynopotamine from Equadorean and Peruvian Amazon (Osteichthyes, Ostariophysii, Characidae). *Papéis Avulsos de Zoologia*, 30(13):185-193, figures 1-4.
1987. Three New Species of the Characid Genus *Cynopotamus* Valenciennes, 1849, with Remarks on the Remaining Species (Pisces, Characiformes). *Beaufortia*, 37(1):1-9, figures 1-3.
- Menezes, N.A., and J. Géry
1983. Seven New Acestrorhynchin Characid Species (Osteichthyes, Ostariophysii, Characiformes) with Comments on the Systematics of the Group. *Revue Suisse de Zoologie*, 90(3):563-592, figures 1-9.
- Miquelarena, A.M., R.C. Menni, H.L. Lopez, and J.R. Casciotta
1980. Description de *Hyphessobrycon igneus* sp. nov. (Characidae, Tetragonopterinae) y nuevas localidades para peces de agua dulce de la Republica Argentina, III. *Neotropica*, 26(76):237-245, figures 1, 2.
- Miranda-Ribeiro, A. de
1908. Peixes da Ribeira, resultados de excursão do Sr. Ricardo Krone, membro correspondente do Museu Nacional do Rio de Janeiro. *Kosmos, Revista Artística, Científica e Literária, Rio de Janeiro*, 5(2): 5 pages [unpaginated], figures 1-6.
- Myers, G.S.
1924. A New Characin Fish from Rio de Janeiro. *The Fish Culturist*, 4(3):330-331, 1 figure.
1925. Description of a New Cheirodontine Characin from Rio de Janeiro. *Annals of the Carnegie Museum*, 16:143-144, plate X.
1926a. Eine neue südamerikanische Characinenart der Gattung *Pyrrhulina*. *Blatter für Aquarien- und Terrarienkunde*, 37(18):441-442.
1926b. Eine neue südamerikanische Characinenart der Unterfamilie Cheirodontinae aus Rio de Janeiro, Brasilien. *Blatter für Aquarien- und Terrarienkunde*, 37(24):1-2.
1928. New Fresh-water Fishes from Peru, Venezuela, and Brazil. *Annals and Magazine of Natural History*, series 10, 2:83-90.
1929. On Curimatid Characin Fishes Having an Incomplete Lateral Line with a Note on the Peculiar Sexual Dimorphism of *Curimatopsis macrolepis*. *Annals and Magazine of Natural History*, series 10, 13:618-621.
1936. A New Characid Fish of the Genus *Hyphessobrycon* from the Peruvian Amazon. *Proceedings of the Biological Society of Washington*, 49:97-98.
1942. Studies on South American Fresh-Water Fishes, I. *Stanford Ichthyological Bulletin*, 2(4):89-114, figures 1-19.
1944. *Rhinobrycon negrensis*, a New Genus and Species of Characid Fishes from the Rio Negro, Brazil. *Proceedings of the California Academy of Sciences*, series 4, 23(39):587-590, 1 fig.
- Pearson, N.E.
1924. The Fishes of the Eastern Slope of the Andes, I: The Fishes of the Rio Beni Basin Collected by the Mulford Expedition. *Indiana University Studies*, 11(64):1-83, plates 1-12.
- Pellegrin, J.
1930. Poissons de l'Ogôoué, du Kouilou, de l'Alina et de la Sangha recueillis par M.A. Boudon. Description de cinq espèces et variétés nouvelles. *Bulletin de la Société Zoologique de France*, 55:196-210, 1 fig.
- Regan, C.T.
1907. Description of Two New Characinid Fishes from South America. *Annals and Magazine of Natural History*, series 7, 20:402-403.
- Roberts, T.R.
1966. Description and Osteology of *Lepidarchus adonis*, a Remarkable New Characoid Fish from West Africa. *Stanford Ichthyological Bulletin*, 8:209-227, figures 1-11.
1971. *Micromischodus sugillatus*, a New Hemiodontid Characin Fish from Brazil, and its Relationship to the Chilodontidae. *Breviora*, 367:1-25, figures 1-15.
1974. Osteology and Classification of the Neotropical Characoid Fishes of the Families Hemiodontidae (including Anodontinae) and Parodontidae. *Bulletin of the Museum of Comparative Zoology*, 146(9): 411-472, figures 1-78.
- Schultz, L.P.
1942. The Fresh-Water Fishes of Liberia. *Proceedings of the United States National Museum*, 92(3152):301-348, 1 plate.
1943. Two New Characinid Fishes from South America of the Genus *Gübertolus* Eigenmann. *Journal of the Washington Academy of Sciences*, 33(9):273-275.
1944. The Fishes of the Family Characiniidae from Venezuela, with

- Descriptions of Seventeen New Forms. *Proceedings of the United States National Museum*, 95:235-367, figures 1-56.
1950. Review of Thirteen Genera of South American Fishes in the Subfamilies Cynodontinae, Hepsetinae, and Characinae, with the Description of a New *Cyrtocharax*. In *Studies Honoring Trevor Kincaid*, pages 44-73. Seattle: University of Washington.
1956. The Amazing New Fish Called the Scarlet Characin. *Tropical Fish Hobbyist*, 4(4):41-43, figures 1-3.
1966. *Pseudochalceus kyburzi*, a New Characid Fish from Colombia. *Tropical Fish Hobbyist*, 37(1):25-30, 3 figures.
- Schultz, L.P., and H.A. Axelrod
1955. The Golden Tetra, a New Species of *Hemigrammus* from British Guiana. *Tropical Fish Hobbyist*, 3(3):4-7, 1 figure.
- Schultz, L.P., and C. Miles
1943. Descriptions of a New Genus and a New Species of Parodontinae, Characinid Fishes from South America. *Journal of the Washington Academy of Sciences*, 33(8):251-255, figures 1, 2.
- Starks, E.C.
1906. On a Collection of Fishes Made by P.O. Simons in Ecuador and Peru. *Proceedings of the United States National Museum*, 30:761-800, plates 65-66.
- Steindachner, F.
- 1875a. Beiträge zur Kenntniss der Characinen des Amazonenstromes. *Sitzungsberichte der Akademie der Wissenschaften, Wien*, 72:6-24, plates 1, 2.
- 1875b. Die Süßwasserfische des Südöstlichen Brasiliens (II). *Sitzungsberichte der Akademie der Wissenschaften, Wien*, 71:211-245, plates 1-6.
1876. Die Süßwasserfische des Südöstlichen Brasiliens (III). *Sitzungsberichte der Akademie der Wissenschaften, Wien*, 74:559-694, plates 1-13.
- Teugels, G.G., and T.R. Roberts
1990. Description of a Small Distinctively Coloured New Species of the Characoid Genus *Neolebias* from the Niger Delta, West Africa (Pisces, Distichodontidae). *Journal of African Zoology*, 104:61-67, figures 1-5.
- Thominot, A.
1882. Sur un *Saccodon* d'espèce nouvelle venant de l'Équateur. *Bulletin de la Société Philomathique de Paris*, series 7, 16:248-251.
- Travassos, H.
1946. Contribuição ao estudo da família Characidae Gill, 1893, II: *Characidium timbuiensis* n. sp. *Summa Brasiliensis, Biologiae*, 1:59-108, figures 1-23.
1949. Notas Ictiológicas, II: "*Characidium japyhybensis*" n. sp. (Actinopterygii, Ostariophysi) [sic]. *Revista Brasileira de Biologia*, 9(2):229-263, fig. 1-4.
1959. A New Species of Characid Fish from Trinidad, *Aphyocharax axelrodi*. *Tropical Fish Hobbyist*, 7(6):5-7, 48-49, 1 figure, 1 text-figure.
1960. *Hyphessobrycon haraldschultzi*, new species. *Tropical Fish Hobbyist*, 8(6):5-7, figures 1, 2.
- Vari, R.P.
1979. Anatomy, Relationships and Classification of the Families Cithariniidae and Distichodontidae (Pisces, Characoidea). *Bulletin of the British Museum (Natural History)*, 36(5):261-344.
- 1982a. *Hemiodopsis ocellata*, a New Hemiodontid Characoid Fish (Pisces: Characoidea) from Western Surinam. *Proceedings of the Biological Society of Washington*, 95(1):188-193, figures 1, 2.
- 1982b. Systematics of the Neotropical Characoid Genus *Curimatopsis* (Pisces: Characoidei). *Smithsonian Contributions to Zoology*, 373: 28 pages, 21 figures.
- 1982c. *Curimatopsis myersi*, A New Curimatid Characiform Fish (Pisces: Characiformes) from Paraguay. *Proceedings of the Biological Society of Washington*, 95(4):788-792, figures 1, 2.
1983. Phylogenetic Relationships of the Families Curimatidae, Prochilodontidae, Anostomidae, and Chilodontidae (Pisces: Characiformes). *Smithsonian Contributions to Zoology*, 378: 60 pages, 41 figures.
1984. Two New Fish Species of the Genus *Curimata* (Pisces: Curimatidae) from Venezuela. *Acta Biologica Venezuelica*, 11(4):27-43, figures 1-5.
1985. A New Species of *Bivibranchia* (Pisces: Characiformes) from Surinam, with Comments on the Genus. *Proceedings of the Biological Society of Washington*, 98(2):507-518, figures 1-4.
1986. *Serrabrycon magoi*, a New Genus and Species of Scale-eating Characid (Pisces: Characiformes) from the Upper Río Negro. *Proceedings of the Biological Society of Washington*, 99(2):328-334, figures 1-3.
1987. Two New Species of Curimatid Fishes (Ostariophysi: Characiformes) from Rio Grande do Sul, Brazil. *Proceedings of the Biological Society of Washington*, 100(3):603-609, figures 1-3.
- 1989a. A Phylogenetic Study of the Neotropical Characiform Family Curimatidae. *Smithsonian Contributions to Zoology*, 471: 71 pages, 45 figures.
- 1989b. Systematics of the Neotropical Characiform Genus *Curimata* Bosc (Pisces: Ostariophysi). *Smithsonian Contributions to Zoology*, 474: 63 pages, 42 figures.
- 1989c. Systematics of the Neotropical Characiform Genus *Psectrogaster* Eigenmann and Eigenmann (Pisces: Ostariophysi). *Smithsonian Contributions to Zoology*, 481: 43 pages, 43 figures.
- 1989d. Systematics of the Neotropical Characiform Genus *Pseudocurimata* Fernández-Yépez (Pisces: Ostariophysi). *Smithsonian Contributions to Zoology*, 490: 28 pages, 18 figures.
1991. Systematics of the Neotropical Characiform Genus *Steindachnerina* Fowler (Pisces: Ostariophysi). *Smithsonian Contributions to Zoology*, 507: 118 pages, 80 figures.
- Vari, R.P., and R. Barriga S.
1990. *Cyphocharax pantostictus*, a New Curimatid (Ostariophysi, Characiformes, Curimatidae) from the Western Portions of the Amazon Basin. *Proceedings of the Biological Society of Washington*, 103(3):550-557, figures 1-4.
- Vari, R.P., and J. Géry
1981. *Nannocharax maculicauda*, a New Species of African Characoid Fish (Characoidea; Distichodontidae) with Comments on the Genus *Hemigrammocharax*. *Proceedings of the Biological Society of Washington*, 94(4):1076-1084, figures 1-4.
1985. A New Curimatid Fish (Characiformes: Curimatidae) from the Amazon Basin. *Proceedings of the Biological Society of Washington*, 94(4):1030-1034, fig. 1.
- Vari, R.P., and M. Goulding
1985. A New Species of *Bivibranchia* (Pisces: Characiformes) from the Amazon River Basin. *Proceedings of the Biological Society of Washington*, 98(4):1054-1061, figures 1, 2.
- Vari, R.P., and H. Nijssen
1986. *Curimata punctata*, a New Uniquely Pigmented Species of Curimatid from the Marowijne River Basin of Surinam and French Guiana (Pisces, Characiformes). *Beaufortia*, 36(4):51-55, plate I: figures 1-4.
- Vari, R.P., and D. Siebert
1990. A New, Unusually Sexually Dimorphic Species of *Bryconamericus* (Pisces: Ostariophysi: Characidae) from the Peruvian Amazon. *Proceedings of the Biological Society of Washington*, 103(3):516-524, figures 1-4.
- Vari, R.P., and A.W. Vari
1989. Systematics of the *Steindachnerina hypostoma* Complex (Pisces, Ostariophysi, Curimatidae), with the Description of Three New Species. *Proceedings of the Biological Society of Washington*, 102(2):468-482, figures 1-11.

- Weitzman, M.
1985. *Hyphessobrycon elachys*, a New Miniature Characid from Eastern Paraguay (Pisces: Characiformes). *Proceedings of the Biological Society of Washington*, 98(4):799-808, figures 1-5.
- Weitzman, M., and R.P. Vari
1986. *Astyanax scologaster*, a Distinctive New Species from the Upper Río Negro of Venezuela. *Proceedings of the Biological Society of Washington*, 99(4):707-714, figures 1-4.
- Weitzman, S.H.
1977a. *Hyphessobrycon socolofi*, a New Species of Characid Fish (Teleostei: Characidae) from the Río Negro of Brazil. *Proceedings of the Biological Society of Washington*, 90(2):326-347, figures 1-8.
1977b. A New Species of Characid Fish *Hyphessobrycon diancistrus*, from the Río Vichada, Orinoco River Drainage, Colombia, South America (Teleostei: Characidae). *Proceedings of the Biological Society of Washington*, 90(2):347-357, figures 1-5.
1978. Three New Species of Fishes of the Genus *Nannostomus* from the Brazilian State of Pará and Amazonas (Teleostei: Lebiasinidae). *Smithsonian Contributions to Zoology*, 263: 14 pages, 10 figures.
1986. A New Species of *Elachocharax* (Teleostei: Characidae) from the Río Negro Region of Venezuela and Brazil. *Proceedings of the Biological Society of Washington*, 99(4):739-747, figures 1-3.
1987. A New Species of *Xenobrycon* (Teleostei: Characidae) from the Río Mamoré basin of Bolivia. *Proceedings of the Biological Society of Washington*, 100(1):112-120, figures 1-4.
- Weitzman, S.H., and C.A.G. da Cruz
1980. The South American Fish Genus *Rachoviscus*, with a Description of a New Species (Teleostei: Characidae). *Proceedings of the Biological Society of Washington*, 93(4):997-1015, figures 1-4.
- Weitzman, S.H., and S.V. Fink
1985. *Xenobryconin* Phylogeny and Putative Pheromone Pumps in Glandulocaudine Fishes (Teleostei: Characidae). *Smithsonian Contributions to Zoology*, 421: 121 pages, 81 figures.
- Weitzman, S.H., and W.L. Fink
1971. A New Species of Characid Fish of the Genus *Nematobrycon* from the Río Calima of Colombia (Pisces, Characoidei, Characidae). *Beaufortia*, 19(248):57-77, figures 1-10.
1983. Relationships of the Neon Tetras, a Group of South American Freshwater Fishes (Teleostei, Characidae), with Comments on the Phylogeny of New World Characiforms. *Bulletin of the Museum of Comparative Zoology*, 150(6):339-395, figures 1-27.
- Weitzman, S.H., and R.H. Kanazawa
1976. *Ammocryptocharax elegans*, a New Genus and Species of Riffle-inhabiting Characid Fish (Teleostei: Characidae) from South America. *Proceedings of the Biological Society of Washington*, 89(26):325-346, figures 1-5.
1977. A New Species of Pygmy Characid Fish from the Río Negro and Río Amazonas, South America (Teleostei: Characidae). *Proceedings of the Biological Society of Washington*, 90(1):149-160, figures 1-6.
1978. The South American Fish Genus *Elachocharax* Myers with a Description of a New Species (Teleostei: Characidae). *Proceedings of the Biological Society of Washington*, 91(1):158-183, figures 1-14.
- Weitzman, S.H., N.A. Menezes, and H.A. Britski
1986. *Nematocharax venustus*, a New Genus and Species of Fish from the Río Jequitinhonha, Minas Gerais, Brazil (Teleostei: Characidae). *Proceedings of the Biological Society of Washington*, 99(2):335-346, figures 1-4.
- Weitzman, S.H., and J.E. Thomerson
1970. A New Species of Glandulocaudine Characid Fish, *Hysteronotus myersi*, from Peru. *Proceedings of the California Academy of Sciences*, series 4, 37(8):139-156, figures 1-6.
- Weitzman, S.H., and R.P. Vari
1987. Two New Species and a New Genus of Miniature Characid Fishes (Pisces: Characiformes) from Northern South America. *Proceedings of the Biological Society of Washington*, 100(3):640-652, figures 1-6.
- Winterbottom, R.
1974. A New Species of Anostomid Characid Fish, *Anostomus spiloclistron*, from the Nickerie River System of Western Surinam (Pisces, Cypriniformes, Anostomidae). *Beaufortia*, 21:153-163, figures 1-8.
1980. Systematics, Osteology and Phylogenetic Relationships of Fishes of the Ostariophysan Subfamily Anostominae (Characoidei, Anostomidae). *Life Sciences Contribution, Royal Ontario Museum*, 123:1-112, figures 1-68.

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