

## Family Cichlidae (Cichlids)

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The cichlids are the most species-rich non-Ostariophysan fish family in freshwaters world-wide, and one of the major vertebrate families, with at least 1300 species and with estimates approaching 1900 species (Kullander, 1998).

The geographical distribution includes freshwaters of Africa (900 valid species, estimated more than 1300 species), the Jordan Valley in the Middle East (four species), Iran (one species), southern India and Sri Lanka (three species, also in brackish water), Madagascar (17 valid species, some also in brackish water), Cuba and Hispaniola (four valid species, some in brackish water), North America and isthmian Central America (111 valid species), and South America (291 valid species) (Kullander, 1998, updated).

Cichlids are known by family or genus-level local names, commonly with an adjective to distinguish well-marked species. Higher level names include bujurqui (Peru, most cichlids), acará (Brazil, most cichlids), mochoroca (Venezuela), mojarra (Ecuador, Colombia, throughout Central America), krobia (Surinam), prapra (French Guiana).

*Cichla* species are known locally as pavón (Venezuela, Colombia) or tucunaré (Brazil, Peru), the latter name expressed as lukanani (Guyana), toekoenali (Surinam), toukounaré (French Guiana) or similar names in the Guianas. *Crenicichla* species are known as jacundá in Brazil, añashúa in Peru, angoumot (French Guiana), mataguaro (Colombia, Venezuela), datra fisi (Surinam), cabeza amarga (Argentina and Uruguay).

Cichlids are recognized by several unambiguous anatomical synapomorphies.

1. The loss of a major structural association between parts A2 and Aw of the adductor mandibulae muscle and the muscular insertion of a large ventral section of A2 onto the posterior border of the ascending process of the anguloarticular (Stiassny, 1981)
2. The presence of an extensive cartilaginous cap on the anterior margin of each second epibranchial bone (Stiassny, 1981)
3. The presence of an expanded head of each fourth epibranchial bone (Stiassny, 1981)
4. The presence of characteristically shaped and distributed micro-branchiospines on the gill arches (Stiassny, 1981)
5. The transversus dorsalis anterior muscle is subdivided into four distinct parts (Liem & Greenwood, 1981)
6. The stomach has an extendible blind pouch (Zihler, 1982)
7. The stomach has a left hand exit to the anterior intestine and the first intestinal loop is on the left side (Zihler, 1982)
8. The sagitta features an antero-caudal pseudocolliculum having a long and thick ventral part which is separated from the crista inferior by a long, deep and sharp furrow (Gaemers, 1985)
9. The presence of short paired hypapophyses on the third and/or fourth vertebral centra (Kullander, 1998).

Cichlid diversity has been explained both by their advanced brood care and by the versatile design of the pharyngeal jaw complex used for food mastication. The unpaired lower pharyngeal toothplate and the opposed upper pharyngeal toothplates are contained in a muscular sling characterizing labroid fishes. There is considerable variation in the shape of the toothplates and associated dentition, reflecting diet specializations. The oral jaws are generally highly movable and protrusible, and tooth shape varies greatly, although most Neotropical cichlids have simple, subconical, unicuspid teeth, whereas African cichlids commonly have laterally bicuspid or tricuspid oral teeth.

Among Neotropical fishes they can be recognized externally by the possession of 7-24 (usually 13-16) spines in the dorsal fin, 2-12 (usually 3, rarely more than 5) anal-fin spines; and a single nostril on each side of the head. The lateral line is usually divided into one anterior upper portion ending below the end of the dorsal-fin base, and a posterior lower portion running along the middle of the caudal peduncle.

Among Neotropical taxa, lengths range from about 25-30 mm adult size in *Apistogramma* and *Taeniacara*, to about 1 meter in *Cichla temensis*. Most taxa are in the interval 10-20 cm, however.

Most Neotropical cichlids occupy lentic habitats within rivers and streams; but there is also a number of moderately to strongly adapted rheophilic species. The latter include many *Crenicichla* species and the genera *Teleocichla* and *Retroculus*, which are distributed mainly in the Brazilian and Guianan highlands.

The majority of the Neotropical cichlids feed on a variety of invertebrates and some plant matter, and specializations

among those species remain little investigated. *Cichla*, large *Crenicichla* species, *Petenia*, *Parachromis*, *Caquetaia*, *Astronotus*, and *Acaronia*, feed on fishes and large invertebrates. *Chaetobranchopsis*, *Chaetobranchus* and *Satanoperca acuticeps* are plankton feeders.

Most Neotropical Cichlidae are moderately to strongly sex dimorphic, and breed pairwise. Eggs are typically deposited on a substrate and both parents guard offspring over several weeks, even for some time after the young are free-swimming. Smaller species, particularly in the genus *Apistogramma*, may be strongly sexually dimorphic. Sexes differ in color and the female is smaller than the male and assumes all or most of the care for the eggs and young. Oral incubation, or mouth-brooding, has been recorded for many *Geophagus*, *Gymnogeophagus*, and *Satanoperca* species, but also for one species of *Aequidens* and one species of *Heros*. Mouthbrooding species are usually biparental, and eggs are guarded on a substrate prior to oral incubation which starts with advanced eggs or newly hatched larvae. A few mouthbrooding species practice exclusive maternal brood care, with a minimum delay between egg-laying and oral incubation (*Gymnogeophagus balzanii*, NE Colombian *Geophagus* species).

Geographical ranges are commonly limited to a single river or even one or a few streams, reflecting both ecological constraints and drainage basin histories. A few Neotropical cichlids are recorded from brackish water conditions. The northernmost species are *Herichthys cyanoguttatus* from the lower Grande River drainage in Texas, USA, on the Atlantic coast, and '*Cichlasoma beani*', which reaches north to the Yaquí River on the Pacific coast of Mexico. In South America cichlids are recorded from virtually all river drainages, but rarely occupy elevations over 500 m ASL, and generally remain below 200 m ASL. Cichlids are absent from the Marañón River above the Pongo de Manseriche and from the Ucayali River drainage upstream of Atalaya (the mouth of the Urubamba River [Vilcanota River] and Tombo River [Apurimac River]). There are four permanent cichlid species occurring on the island of Trinidad, but no cichlids are found on any other islands close to the Venezuelan coast. Most Atlantic coastal rivers of Brazil have 1-3 species of cichlids. The southern limit of the family in South America is not well documented, but may be in the lower Negro River in Argentina, which river marks the northern limit of Patagonia. On the Pacific slope, cichlids are found in a succession of permanent rivers south to the Jequetepeque River or perhaps even to slightly south of Lima, Peru.

Because of the varied behavior and often attractive colors and moderate size, cichlids are commonly kept as ornamental fish. Practically all genera and more than half of the species have been kept in aquaria at some time. The traditionally most important aquarium species are *Pterophyllum* and *Symphysodon* species, the former often representing the aquarium hobby in logotypes.

Sportfishing is concentrated on the *Cichla* species for which there is a strong North American and Brazilian market including sport fishing safaris and Tucunaré fishing contests predominantly in Brazil (Kelber, 1999).

All the larger species are used as food fish, within a traditional artisanal and subsistence fishery, and all local markets in the lowland Amazon and Orinoco drainages offer *Cichla*, *Astronotus*, and other available species of sizes over 10 cm (Ferreira et al., 1998, for a market survey at Santarém). *Astronotus* species, and to some extent *Cichla* species are subject to aquaculture in Brazil.

The family Cichlidae was first monographed by Heckel (1840), based on the Natterer collection from Brazil (illustrations in Riedl-Dorn, 2000). Another early major treatise is by Jardine (1843), based on the Schomburgk collection from Guyana, Brazil and Venezuela (Kullander & Stawikowski, 1997a-b, for identifications). Steindachner (1875) worked on the Thayer expedition collection of Amazonian cichlids, but did not add much beyond the work of Heckel. Günther (1868, based on several shorter papers) described and illustrated a large part of the Central American cichlid fauna, followed by Regan (1906-1908).

Pellegrin (1904) revised the family with diagnoses of all genera and species known to him. Much of Pellegrin's efforts with the Neotropical taxa were improved upon by Regan's series of generic revisions in the next two years (Regan, 1905-1906), which remained the platform for all Neotropical cichlid systematics until the 1980s. The first modern phylogenetic revision of the Neotropical cichlids was presented by Cichocki (1976), and most recently Kullander (1998) and Farias et al. (1999) have provided phylogenetic hypotheses based on morphology and molecular data respectively. A formal classification down to tribe is provided by Kullander (1998).

Scientific general reviews of the family are provided by Keenleyside (1991) and Barlow (2000). There is no scientific monograph covering all Neotropical cichlid species, but numerous aquarium books of variable quality, of which Stawikowski & Werner (1998) may be consulted for the most updated compilation of cichlasomatine cichlids.

Country monographs of cichlids are available for Peru (Kullander, 1986) and Surinam (Kullander & Nijssen, 1989). Bussing (1998: 293-384) summarizes data on 24 Costa Rican cichlid species; Keith et al. (2000: 146-229) summarize data for 38 cichlid species from French Guiana and adjacent countries; Greenfield & Thomerson (1997: 184-206) cover 19 species from Belize

Recent generic revisions cover *Crenicichla* (Ploeg, 1991; many errors and inconsistencies), *Gymnogeophagus* (Reis & Malabarba, 1988), *Apistogramma* (Kullander, 1980a, somewhat outdated), *Cichlasoma* (Kullander, 1983a), *Teleocichla* (Kullander, 1988), *Retroculus* (Gosse, 1971), *Geophagus* s. lato (Gosse, 1976, somewhat outdated), *Biotocetus* (Kullander,

1989a), and *Mesonauta* (Kullander & Silfvergrip, 1991).

The checklist herein recognizes 406 valid Neotropical cichlid species out of 635 nominal taxa. Kullander (1998) estimated that there are about ten undescribed North-Central American cichlid taxa and about 160 undescribed South American taxa. Numerous problems of species discrimination remain. Some of the most enigmatic cases include '*Cichlasoma*' *urophthalmus*, of which Hubbs (1936) described numerous subspecies. Some of these taxa are certainly distinct species, but the status of highly localized subspecies from the Yucatán peninsula, which are based on one or very few specimens, remains a subject for revision. All these taxa are herein treated as valid for want of any better option.

Another source of frustration concerns the generic assignment of Central American taxa, and a few South American taxa, which were excluded from the catch-all genus *Cichlasoma* by Kullander (1983a). Most of these are now recognized in well-diagnosed genera (Kullander, 1986, 1996b, Kullander & Hartel, 1997), but several are kept with the generic denomination '*Cichlasoma*' which is judged better than to include them in genera to which they certainly do not belong.

On the whole it is not satisfactory to have one-third of the Neotropical cichlid fauna without a scientific name, illustrating a real problem with the more formalized procedure of naming species, but it could also signify a safeguarding against doubtful species. The current estimate of 450 South American taxa is based on species already represented in museum collections; it can be assumed that new collections will bring in many more new taxa.

### ACARICHTHYS

*Acarichthys* Eigenmann, 1912: 500. Type species: *Acara heckelii* Müller & Troschel, 1849. Type by original designation. Gender: masculine.

#### *Acarichthys heckelii* (Müller & Troschel, 1849)

*Acara heckelii* Müller & Troschel in Schomburgk, 1849: 624. Type locality: Sümpfen der Savanne. No types known. Originally spelled as *Acara Heckelii*

*Geophagus Thayeri* Steindachner, 1875: 108 [48], pl. 3 (fig. 2, 2a-2b). Type locality: Amazonenstrom bei Teffé, Villa bella, Obidos, Cudajas, Tonantins, Jatuarana, Ueranduba, Serpa, Rio Tapajos, R. Trombetas, R. negro, R. Xingu, see Hyanuary, José Assú, Saraca, Alexo und Lago maximo etc. Syntypes: (many) NMW 74135 (1), 9249-9254 (5), NMW 17046-17048 (3), NMW 17050-17051 (2), NMW 17052-17054 (3), NMW 17055-17057 (3), NMW 17058-17060 (2), NMW 17061-17064 (3), NMW 17066 (1), NMW 17067-17070 (4), NMW 17101-17102 (1), NMW 17103-17110 (several), NMW 17119-17125 (several), NMW 23819-23821 (3), NMW 24012 (1), NMW 24094-24095 (2), 24096 (7), NMW 24105-24106 (2), NMW 24107-24108 (2), NMW 24109-24110 (2), NMW 24111-24114 (3), NMW 24115-24116 (2), NMW 24133-24138 (6), ZSM 27335 (1).

*Acara subocularis* Cope, 1878: 696. Type locality: [Peruvian Amazon]. Holotype: ANSP 21233 (missing).

Maximum length: 13.4 cm SL

Distribution: South America: Along mainstream Amazon River in Peru, Colombia, and Brazil, including lower parts of the Putumayo, Trombetas, Negro, and Xingu Rivers; lower Tocantins River, and Capim River; Branco River (Amazon basin) in Brazil and Guyana, and the Essequibo River in Guyana.

Countries: Brazil, Colombia, Guyana, Peru

Remarks and references: Redescription based on Peruvian material by Kullander (1986: 134).

### ACARONIA

*Acara (Acaropsis)* Steindachner, 1875: 80. Type species: *Acara nassa* Heckel, 1840. Type by monotypy. Gender: feminine. Preoccupied by *Acaropsis* Moquin-Tandon 1859 in Arachnida.

*Acaronia* Myers, 1940: 170. Type species: *Acara nassa* Heckel, 1840. Type by being a replacement name. Gender: feminine. Replacement for *Acaropsis* Steindachner 1875, preoccupied by *Acaropsis* Moquin-Tandon 1859 in Arachnida.

#### *Acaronia nassa* (Heckel, 1840)

*Acara nassa* Heckel, 1840: 353. Type locality: Rio-Guaporé. Syntypes: NMW 10538-40 (3), NMW 16185 (1), NMW uncat. (1).

*Acara unicolor* Heckel, 1840: 357, pl. 30 (fig. 25). Type locality: Barra do Rio-negro. Syntypes: NMW 33347-33348 (2).

*Acara cognatus* Heckel, 1840: 356. Type locality: Barra do Rio-negro. Holotype: NMW 33619.

*Centrarchus ? rostratus* Jardine, 1843: 163, pl. 15. Type locality: Rio Negro. No types known.

*Apistogramma ambloplitoides* Fowler, 1940: 281, fig. 63. Type locality: Ucayali River basin, Contamana, Peru. Holotype: ANSP 68681.

Maximum length: 15.4 cm SL

Distribution: South America: Amazonas lowlands in Peru, Brazil, and Colombia, Bolivian Amazon basin, middle and lower Negro River, Branco River, also Amapá State, the Oyapock drainage in French Guiana, and the Essequibo drainage in Guyana.

Countries: Bolivia, Brazil, Colombia, French Guiana, Guyana, Peru

Remarks and references: Redescription based on Peruvian material in Kullander (1986: 79), distinguishing characters and synonymy discussed in Kullander (1989b).

Common names: Krobié (French Guiana), Paya (French Guiana)

### *Acaronia vultuosa* Kullander, 1989

*Acaronia vultuosa* Kullander, 1989b: 447, fig. 1. Type locality: Venezuela, Terr. Federal Amazonas, Departamento Ature, small drying backwater pool off road from El Burro to Puerto Ayacucho, approximately 05°47'N, 67°29'W. Holotype: MBUCV-V 17714.

Maximum length: 12.2 cm SL

Distribution: South America: Orinoco River basin in Colombia and Venezuela, including the Casiquiare, Inírida, Caura, Vichada Rivers; upper Negro River in Brazil and Venezuela (San Carlos, Ererê River and Tamaquaré Island).

Countries: Brazil, Colombia, Venezuela

### AEQUIDENS

*Aequidens* Eigenmann & Bray, 1894: 616. Type species: *Acara tetramerus* Heckel, 1840. Type by original designation. Gender: masculine. Originally *Astronotus (Aequidens)*.

#### *Aequidens biseriatus* (Regan, 1913)

*Cichlosoma (Aequidens) biseriatum* Regan, 1913b: 471. Type locality: Rio Condoto. Syntypes: BMNH 1913.10.1.80-88 (7 of 8).

Maximum length: 8 cm TL

Distribution: South America: Atrato, San Juan and Baudó River basins.

Countries: Colombia

#### *Aequidens chimantanus* Inger, 1956

- Aequidens chimantanus* Inger, 1956: 437, fig. 94. Type locality: Río Abácapa on the west side of Chimantá-tepui; 1,300 feet altitude. Holotype: FMNH 45702. Maximum length: 10.2 cm SL. Distribution: South America: Caroní River basin in Orinoco River drainage. Countries: Venezuela
- Aequidens coeruleopunctatus* (Kner & Steindachner, 1863)**  
*Acara coeruleopunctata* Kner & Steindachner in Kner, 1863: 222, fig. 3. Type locality: Rio Chagres im Staate Panama, Nordseite. Syntypes: NMW 33635-33636 (2), 22168 (1). Maximum length: 14.5 cm SL. Distribution: Central America: Atlantic slope of Panama, and Pacific slope of Costa Rica (Coto River). Countries: Costa Rica, Panama. Remarks and references: Reviewed by Bussing (1998: 310), with key, diagnosis, geographical distribution, and figures. Common names: Chogorro (Panama), Mojarra (Costa Rica)
- Aequidens diadema* (Heckel, 1840)**  
*Acara diadema* Heckel, 1840: 344. Type locality: einem Ygarapé oder Waldbache bei Marabitanos. Syntypes: NMW 33791 (1), 33797 (1). Maximum length: 11.8 cm SL. Distribution: South America: Amazon River basin, in the upper Negro River; Orinoco River basin, in tributaries of the Orinoco River in Colombia and Venezuela. Countries: Brazil, Colombia, Venezuela. Remarks and references: *Aequidens diadema* reported from Peru by Kullander (1986: 348) is a different species.
- Aequidens epae* Kullander, 1995**  
*Aequidens epae* Kullander, 1995: 158, fig. 10. Type locality: Brazil, State of Pará, Río Tapajós drainage, igarapé in Barreirinha. Holotype: MZUSP 21979. Maximum length: 11.3 cm SL. Distribution: South America: Amazon River basin, in the lower Tapajós River drainage near Jacareacanga and São Luis. Countries: Brazil
- Aequidens gerciliae* Kullander, 1995**  
*Aequidens gerciliae* Kullander, 1995: 150, fig. 1. Type locality: Brazil, State of Mato Grosso, Núcleo Aripuanã, Igarapé do Aeroporto, above the cachoeira (approximately 10°10'S 59°25'W). Holotype: INPA 974. Maximum length: 12.8 cm SL. Distribution: South America: Amazon River basin, known only from the upper Aripuanã River, near Cachoeira de Dardanelos and in a headwater stream on the Juína-Vilhena road. Countries: Brazil
- Aequidens hoehnei* (Miranda Ribeiro, 1918)**  
*Nannacara hoehnei* Miranda Ribeiro, 1918b: 14, pl. 7 (top figs.). Type locality: rio Branco, affluente do Araguaya, e n'uma lagoa do Coxipo da Ponte, em Mato Grosso. Holotype: MNRJ 1245. Maximum length: 5.6 cm SL. Distribution: South America: Amazon River basin, in the Araguaia River drainage. Countries: Brazil
- Aequidens latifrons* (Steindachner, 1878)**  
*Acara latifrons* Steindachner, 1878: 89. Type locality: Cienaga, Río Magdalena, Colombia; Panama. Syntypes: (several) NMW. Maximum length: 17 cm TL. Distribution: South America: Magdalena, Atrato, Sinú, and San Juan River basins. Countries: Colombia
- Common names: Azulejo (Colombia), Casasola (Colombia), Mojarra azul (Colombia)
- Aequidens mauesanus* Kullander, 1997**  
*Aequidens mauesanus* Kullander, 1997a: 378, fig. 1. Type locality: Brazil, Estado do Amazonas, rio Maués drainage, município do Maués, igarapé do rio Maraú. Holotype: MZUSP 7306. Maximum length: 13.4 cm SL. Distribution: South America: Amazon River basin, in the Maués and Arapiuns Rivers. Countries: Brazil
- Aequidens metae* Eigenmann, 1922**  
*Aequidens metae* Eigenmann, 1922a: 241, pl. 30 (fig. 2). Type locality: Barrigón.; Eigenmann, 1922b: 198. Type locality: Barrigona Río Meta. Holotype: CAS 66884 [ex IU 13967]. Maximum length: 12.5 cm SL. Distribution: South America: Orinoco River basin, in the Meta River. Countries: Colombia. Remarks and references: Eigenmann (1922a) and (1922b) appeared both in October 1922 and it cannot be decided with available evidence which publication should have priority.
- Aequidens michaeli* Kullander, 1995**  
*Aequidens michaeli* Kullander, 1995: 163, fig. 14. Type locality: Brazil, State of Pará, Rio Xingu drainage, Belo Monte, rocky pool near cachoeira. Holotype: MZUSP 32674. Maximum length: 20 cm TL. Distribution: South America: Amazon River basin, in the lower Xingu River at Altamira and Belo Monte. Countries: Brazil
- Aequidens pallidus* (Heckel, 1840)**  
*Acara pallidus* Heckel, 1840: 347. Type locality: Rio-negro. Holotype: NMW 33678.  
*Centrarchus ? vittatus* Jardine, 1843: 161, pl. 14. Type locality: [not stated]. Types not known.  
*Aequidens duopunctata* Haseman, 1911: 338, pl. 56. Type locality: Manaus. Holotype: FMNH 54033 [ex CM 2573]. Apparently the number 2574 in the caption to pl. 56 should have been 2573. Maximum length: 14.3 cm SL. Distribution: South America: Amazon River basin, in the middle and lower Negro River, Uatumã, Preto da Eva, and Puraquequara Rivers. Countries: Brazil. Remarks and references: Redescribed by Kullander & Ferreira (1991).
- Aequidens paloemeuensis* Kullander & Nijssen, 1989**  
*Aequidens paloemeuensis* Kullander & Nijssen, 1989: 141, fig. 77. Type locality: Suriname, Dist. Marowijne, R. Marowijne system, small brook tributary to the right bank of R. Paloemeu, on road between Trombaka Noord and Trombaka Zuid. Holotype: IRSNB 755. Maximum length: 9.5 cm SL. Distribution: South America: Known only from the Paloemeu River, Marowijne River drainage. Countries: Suriname
- Aequidens patricki* Kullander, 1984**  
*Aequidens patricki* Kullander, 1984b: 2, fig. 1. Type locality: Pérou, depto. Ucayali, prov. Coronel Portillo, bassin du R. Aguaytia, petit ruisseau drainant un marais desséché, affluent du R. Aguaytia, le long de la route de Pucallpa à Tingo Maria, 15 km à l'Ouest du village d'Aguaytia (9°02'S, 75°31'W). Holotype: MHNG 2163.93. Maximum length: 11.6 cm SL. Distribution: South America: Amazon River basin, restricted to the

Aguaytía and Pachitea Rivers.

Countries: Peru

Remarks and references: Redescribed by Kullander (1986: 347).

***Aequidens plagiozonatus* Kullander, 1984**

*Aequidens plagiozonatus* Kullander, 1984a: 155, fig. 1. Type locality: Brazil, State of Mato Grosso, R. Paraguay system ... Mun. Itiquira, internal lakes of the Piquiri-Itiquira system, Fazenda Santo Antonio do Paraíso. Holotype: MZUSP 28232.

Maximum length: 10.3 cm SL

Distribution: South America: Amazon River basin (upper Guaporé River drainage), and Paraná River basin (upper Paraguay River drainage).

Countries: Brazil

***Aequidens potaroensis* Eigenmann, 1912**

*Aequidens potaroensis* Eigenmann, 1912: 490, pl. 66 (fig. 2). Type locality: Amatuk. Holotype: FMNH 53892 [ex CM 2407].

Maximum length: 10 cm SL

Distribution: South America: Essequibo River basin.

Countries: Guyana

***Aequidens pulcher* (Gill, 1858)**

*Cychlasoma pulchrum* Gill, 1858: 382. Type locality: [western portion of Trinidad]. Syntypes: USNM 1110 (orig. 1, now 2).

Maximum length: 16 cm TL

Distribution: Central and South America: Trinidad, W.I., and adjacent Venezuela.

Countries: Trinidad and Tobago, Venezuela

Common names: Blue coscarob (Trinidad and Tobago), Cocoroba (Venezuela)

***Aequidens rivulatus* (Günther, 1860)**

*Chromis rivulata* Günther, 1860b: 418. Type locality: Andes of Western Ecuador. Syntypes: BMNH 1860.6.16.153 (1).

*Acara aequinoctialis* Regan, 1905b: 337. Type locality: W. Ecuador. Syntypes: BMNH 1860.6.15.13-16 (4).

*Aequidens azurifer* Fowler, 1911: 515, fig. 7. Type locality: Affluent of the Chimbo River, near Bucay, Province of Guayas, Ecuador. Holotype: ANSP 39118.

Maximum length: 20 cm TL

Distribution: South America: Pacific slope from Ecuador (Esmeraldas River) to Peru (Tumbes River).

Countries: Ecuador, Peru

***Aequidens rondoni* (Miranda Ribeiro, 1918)**

*Acaropsis rondoni* Miranda Ribeiro, 1918b: 11, pl. 4 (fig.1). Type locality: Rio do Sangue, acima do Salto Bello. Holotype: MNRJ 1616.

Maximum length: 9.7 cm SL

Distribution: South America: Amazon River basin, in the upper Tapajós River basin.

Countries: Brazil

***Aequidens sapayensis* (Regan, 1903)**

*Acara sapayensis* Regan, 1903b: 628. Type locality: Rio Sapayo, N.W. Ecuador. Holotype: BMNH 1902.7.29.56.

Maximum length: 10 cm TL

Distribution: South America: Pacific slope, in the Cayapas River drainage in northwestern Ecuador.

Countries: Ecuador

***Aequidens tetramerus* (Heckel, 1840)**

*Acara tetramerus* Heckel, 1840: 341, pl. 29 (fig. 1-4). Type locality: Rio-branco. Syntypes: NMW 33757-58 (2).

*Chromys uniozellata* Castelnau, 1855: 15, pl. 6 (fig. 1). Type locality: rio Ucayale, mission de Sarayacu. Syntypes: MNHN A.9481 (2). Spelled *uniozellatus* in list of figures.

*Aequidens stollei* Miranda Ribeiro, 1918b: 13, pl. 5 (fig. 3). Type

locality: Rio Jamary. Lectotype: MNRJ 1592A, designated by Miranda Ribeiro (1953: 397) [but perhaps specimen not isolated]. *Acaronia trimaculata* Allen in Eigenmann & Allen, 1942: 389, pl. 22 (fig. 8). Type locality: Iquitos. Holotype: CAS 67009 [ex IU 17794].

Maximum length: 16.2 cm SL

Distribution: South America: Widely distributed in the Amazon River basin in Peru, Colombia, Ecuador, Brazil and Bolivia, also in the Tocantins and Parnaíba Rivers, French Guiana, Suriname, Guyana, and in the Orinoco River basin of Venezuela and Colombia.

Countries: Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, Venezuela

Common names: Acará-cuaima (Brazil), Acará-pixuna (Brazil), Kokko (Suriname), Manja koko (Suriname), Prapra (French Guiana)

***Aequidens tubicen* Kullander & Ferreira, 1991**

*Aequidens tubicen* Kullander & Ferreira, 1991: 427, fig. 4. Type locality: Brazil, Estado do Pará, Reserva Biológica de Trombetas, Igarapé at km 4 on the road to Perimetral Norte. Holotype: MZUSP 15887.

Maximum length: 11.6 cm SL

Distribution: South America: Amazon River basin, restricted to the Trombetas River close to Cachoeira Porteira.

Countries: Brazil

***Aequidens viridis* (Heckel, 1840)**

*Acara viridis* Heckel, 1840: 343. Type locality: in den durch das Anschwellen der Flüsse gebildeten Waldlachen ..., ... in einer derselben bei der Stadt Matogrosso liegenden und Juquã ... genannten. Syntypes: NMW 16247 (1), 33833 (1), ?91433 (1); SMF 2925 [ex NMW in 1844] (1).

*Aequidens awani* Haseman, 1911: 335, pl. 55. Type locality: São Antonio de Guaporé, Rio Guaporé, Brazil. Holotype: FMNH 54036 [ex CM 2576].

*Aequidens guaporensis* Haseman, 1911: 335, pl. 54. Type locality: São Antonio de Guaporé. Holotype: FMNH 54035 [ex CM 2575].

Maximum length: 16.5 cm SL

Distribution: South America: Amazon River basin, in the Guaporé River basin.

Countries: Bolivia, Brazil

**AMPHILOPHUS**

*Amphilophus* Agassiz, 1859: 408. Type species: *Amphilophus froebelii* Agassiz, 1859. Type by monotypy. Gender: masculine.

*Astatheros* Pellegrin, 1904: 203. Type species: *Heros (Cichlasoma) heterodontus* Vaillant & Pellegrin, 1902. Type by monotypy. Gender: masculine.

*Erythrichthys* Meek, 1907b: 118. Type species: *Heros citrinellus* Günther, 1864. Type by original designation. Gender: masculine. Originally *Cichlasoma (Erythrichthys)*.

*Curraichthys* Fernández-Yépez, 1969: [3]. Type species: *Heros lobochilus* Günther, 1868. Type species by original designation. Gender: masculine.

***Amphilophus alfari* (Meek, 1907)**

*Cichlasoma alfari* Meek, 1907a: 148. Type locality: Turrialba, Costa Rica. Holotype: FMNH 6032.

*Cichlosoma lethrinus* Regan, 1908a: 462. Type locality: Rio Iroquois. Syntypes: BMNH 1909.3.13.92-97 (5 of 6) and 1909.3.13.98 (1, skeleton).

*Cichlasoma bouchellei* Fowler, 1923: 29. Type locality: Tunky Bin River above Eden, Nicaragua. Holotype: ANSP 51222.

Maximum length: 15 cm SL

Distribution: Central America: Atlantic slope from Honduras (Patuca River) to Costa Rica; Atlantic slope of Costa Rica.

Countries: Costa Rica, Honduras, Nicaragua

Remarks and references: Villa and Miller, 1975 identified *C. bouchellei* as a junior synonym of *A. alfari*. Reviewed by Bussing (1998: 318), with key, diagnosis, geographical distribution, and figures.

Common names: Mojarra (Costa Rica)

***Amphilophus amarillo* Stauffer & McKaye, 2002**

*Amphilophus amarillo* Stauffer & McKaye, 2002: 8, fig. 4. Type locality: Agua caliente, Lake Xiloá (N 12° 13,848' W 86° 19,387'). Holotype: PSU 3448.1).

Maximum length: 15.5 cm SL

Distribution: Central America: Atlantic slope of Nicaragua, endemic to Lake Xiloá.

Countries: Nicaragua

***Amphilophus altifrons* (Kner, 1863)**

*Heros altifrons* Kner, 1863: 223. Type locality: Panama. Syntype: NMW 21204 (1).

Maximum length: 13 cm SL

Distribution: Central America: Pacific slope of Costa Rica (Térraba River) to Panama (Chiriqui River).

Countries: Costa Rica, Panama

Remarks and references: Also appeared as new in Kner & Steindachner (1864: 11, pl. 2, fig. 1) from Colombia and Panama. Reviewed by Bussing (1998: 322), with key, diagnosis, geographical distribution, and figures.

Common names: Mojarra (Costa Rica)

***Amphilophus bussingi* Loiséle, 1997**

*Amphilophus bussingi* Loiséle, 1997: 2, fig. p. 2. Type locality: Río Cocolis, a tributary of the Río Sixaola, 3.5 km SE of Shiroles on the Bratsí-Shiroles road, Limón Province, Costa Rica. Holotype: AMNH 59077.

Maximum length: 15 cm SL

Distribution: Central America: Atlantic slope of Costa Rica (Sixaola River drainage) to Panama (Guarumo River).

Countries: Costa Rica, Panama

Remarks and references: Reviewed by Bussing (1998: 325), with key, diagnosis, geographical distribution, and figures.

Common names: Mojarra (Costa Rica)

***Amphilophus calobrensis* (Meek & Hildebrand, 1913)**

*Cichlasoma calobrense* Meek & Hildebrand, 1913: 90. Type locality: Río Calobre, Panama. Holotype: FMNH 7600.

Maximum length: 25 cm TL

Distribution: Central America: Pacific slope of Panama (Tuíra, Chucunaque and Bayano River basins).

Countries: Panama

***Amphilophus citrinellus* (Günther, 1864)**

*Heros citrinellus* Günther, 1864c: 153. Type locality: Lake of Nicaragua. Syntypes: BMNH 1864.1.26.201-203 (3).

*Heros basilaris* Gill in Gill & Bransford, 1877: 182. Type locality: Lake Nicaragua. Types not located, but may be present in the Bransford collection deposited in the USNM.

*Cichlasoma granadense* Meek, 1907b: 121. Type locality: Lago Nicaragua, Granada, Nicaragua. Holotype: FMNH 5951.

Maximum length: 24.4 cm SL

Distribution: Central America: Atlantic slope of Nicaragua and Costa Rica (San Juan River drainage, including Lakes Nicaragua, Managua, Masaya, and Apoyo).

Countries: Costa Rica, Nicaragua

Remarks and references: *Cichlasoma granadense* was synonymised with *A. citrinellus* by Villa (1976: 381). Systematics and biology covered by Barlow & Munsey (1976). Reviewed by Bussing (1998: 312), with key, diagnosis, geographical distribution, and figures.

Common names: Mojarra (Costa Rica), Mojarra rayada (Costa

Rica, Nicaragua)

***Amphilophus diquis* (Bussing, 1974)**

*Cichlasoma diquis* Bussing, 1974: 37, fig. 2. Type locality: Costa Rica, Puntarenas Province, tributary (20 m) of Río Sierpe 2 km S of Palmar Sur at IH. Holotype: LACM 33911-1.

Maximum length: 13.5 cm SL

Distribution: Central America: Pacific slope of SE Costa Rica.

Countries: Costa Rica

***Amphilophus hogaboomorum* (Carr & Giovannoli, 1950)**

*Cichlasoma hogaboomorum* Carr & Giovannoli, 1950: 27, pl. 2 (fig. 1). Type locality: Río Choluteca, 5 kilometers below Choluteca, elevation 50 meters. Holotype: UMMZ 144664.

Maximum length: 15 cm SL

Distribution: Central America: Pacific slope of Honduras, in the Choluteca River basin.

Countries: Honduras

Common names: Guapotillo (Honduras)

***Amphilophus labiatus* (Günther, 1864)**

*Amphilophus froebelii* Agassiz, 1859: 408. Type locality: Lake Nicaragua. Types in MCZ, missing.

*Heros labiatus* Günther, 1864a: 27, pl. 4 (fig. 1). Type locality: Lake of Managua, Nicaragua. Syntypes: BMNH 1867.9.23.7-8 (2) or 1863.12.15.74-76 (3).

*Heros erythraeus* Günther, 1867: 602. Type locality: Lake of Managua. Holotype: BMNH 1865.7.20.33. Described in more detail in Günther (1868: 457, pl. 75, fig. 2).

*Heros lobochilus* Günther, 1867: 602. Type locality: Lake of Managua. Syntypes: BMNH 1865.7.20.36 (2). Described in more detail in Günther 1868: 457, pl. 75 (fig. 1).

*Cichlasoma dorsatum* Meek, 1907b: 123. Type locality: Lago Managua, Managua, Nicaragua. Holotype: FMNH 5971.

Maximum length: 24 cm SL

Distribution: Central America: Atlantic slope of Nicaragua, in Lakes Nicaragua and Managua.

Countries: Nicaragua

Remarks and references: Systematics and biology covered by Barlow & Munsey (1976). Kullander & Hartel (1997: 199) examined Agassiz' description of *Amphilophus froebelii* and searched in vain for type material. Villa (1976: 381) added *Cichlasoma dorsatum* to the synonymy of *A. labiatus*. The name *froebelii* has never been used as a senior synonym of *A. labiatus* subsequent to its description. Original description copied in Günther (1864b: 231).

Common names: Mojarra picuda (Nicaragua)

***Amphilophus longimanus* (Günther, 1867)**

*Heros longimanus* Günther, 1867: 601. Type locality: Lake of Nicaragua. Holotype: BMNH 1864.1.26.204.

*Cichlasoma popenoei* Carr & Giovannoli, 1950: 31, pl. 2 (fig. 2). Type locality: Río Yeguaré, about 1 kilometer below bridge on road between Tegucigalpa and Danlí, Department of Morazan, Honduras; elevation 735 meters. Holotype: UMMZ 147178.

Maximum length: 13.5 cm SL

Distribution: Central America: Atlantic slope from Honduras (Aguan River) to Nicaragua and Costa Rica (Prinzapolka, San Juan River drainage including Lake Nicaragua), Pacific slope from Guatemala to Costa Rica (Nahualate River to Bebedero River).

Countries: Costa Rica, Guatemala, Honduras, Nicaragua

Remarks and references: Reviewed by Bussing (1998: 329), with key, diagnosis, geographical distribution, and figures.

Common names: Carataca (Honduras), Carate (Nicaragua), Machaca (Honduras), Pecho rojo (Nicaragua), Viejito (Guatemala)

***Amphilophus lyonsi*** (Gosse, 1966)

*Cichlasoma lyonsi* Gosse, 1966: 16, fig. 1. Type locality: Costa Rica (prov. Puntarenas), affluent du Rio Coto, Plantation United Fruit Company, Golfito. Holotype: IRSNB 464.

Maximum length: 15 cm SL

Distribution: Central America: Pacific slope of Costa Rica (Coto River) and Panama (Dupí River).

Countries: Costa Rica, Panama

Remarks and references: Reviewed by Bussing (1998: 316), with key, diagnosis, geographical distribution, and figures.

Common names: Mojarra (Costa Rica)

***Amphilophus macracanthus*** (Günther, 1864)

*Heros macracanthus* Günther, 1864c: 153. Type locality: Chiapas and Huamuchal. Syntypes: (about 12) BMNH 1864.1.26.197-200 (4), 1864.1.26.252-254 (3) Chiapas, 1864.1.26.368 (1) Huamuchal, 1864.1.26.255 (1, skeleton).

*Heros (Cichlasoma) heterodontus* Vaillant & Pellegrin, 1902: 86 [2]. Type locality: Isthme de Tehuantepec (Mexique). Syntypes: MNHN A.9528 (3).

*Cichlasoma evermanni* Meek, 1904: 214, fig. 70. Type locality: Tehuantepec, Oaxaca. Holotype: FMNH 4727 [not 4227].

*Cichlasoma meeki* Hildebrand, 1925: 275, fig. 20. Type locality: Lake Guija, El Salvador. Holotype: USNM 87301. Secondarily preoccupied by *Thorichthys helleri meeki* Brind, 1918, replaced by *Cichlasoma guija* Hildebrand, 1934.

*Cichlasoma guija* Hildebrand, 1934: 192. Type locality: [Lake Guija, El Salvador.] Holotype: USNM 87301. Replacement name for *Cichlasoma meeki* Hildebrand, 1925, preoccupied in *Cichlasoma* by *Thorichthys helleri meeki* Brind, 1918.

Maximum length: 25 cm SL

Distribution: North and Central America: Pacific slope from southern Mexico to El Salvador.

Countries: El Salvador, Guatemala, Mexico

***Amphilophus margaritifer*** (Günther, 1862)

*Heros margaritifer* Günther, 1862: 287. Type locality: Lake Peten, Guatemala. Holotype: BMNH 1864.1.26.62.

Maximum length: 12.7 cm SL

Distribution: Central America: Atlantic slope of Guatemala (Lake Petén).

Countries: Guatemala

Remarks and references: Type locality doubtful, species not reported with certainty since original description.

***Amphilophus nourissati*** (Allgayer, 1989)

*Theraps nourissati* Allgayer, 1989: 12, fig. p. 13. Type locality: petite rivière à 1 km avant le village "La Pera" sur la route de Palenque vers Ojo de Agua, Chiapas (Mexique). Holotype: MNHN 1989-583.

Maximum length: 22 cm TL

Distribution: North and Central America: Atlantic slope of Mexico and Guatemala (Usumacinta River basin).

Countries: Guatemala, Mexico

Common names: Panza negra (Mexico)

***Amphilophus rhytisma*** (López S., 1983)

*Cichlasoma rhytisma* López S., 1983: 133, fig. 1. Type locality: Costa Rica, Limón Province, Río Cocolis, a tributary of Río Sixaola, 3.5 km SE of Shiroles on road between Bratsí and Shiroles. Holotype: LACM 42998-1.

Maximum length: 13.5 cm SL

Distribution: Central America: Atlantic slope of Costa Rica (Sixaola River).

Countries: Costa Rica

Remarks and references: Reviewed by Bussing (1998: 332), with key, diagnosis, geographical distribution, and figures.

Common names: Mojarra (Costa Rica)

***Amphilophus robertsoni*** (Regan, 1905)

*Cichlosoma robertsoni* Regan, 1905a: 239. Type locality: Stann Creek, British Honduras [=Belize]. Holotype: BMNH 1890.9.8.11.

*Cichlasoma acutum* Miller, 1907: 117, fig. 6. Type locality: Río Tenedores, Tenedores. Holotype: IU 11186.

Maximum length: 19 cm SL

Distribution: North and Central America: Atlantic slope from Mexico (Coatzacoalcos River) to Honduras.

Countries: Belize, Guatemala, Honduras, Mexico

Common names: False firemouth cichlid (Belize), Klanki (Honduras), Machaca (Honduras), Mojarra (Honduras), Tepemechine (Mexico)

***Amphilophus rostratus*** (Gill, 1877)

*Heros rostratus* Gill in Gill & Bransford, 1877: 181. Type locality: Lake Nicaragua. Syntypes: USNM 16872(9).

Maximum length: 18.5 cm SL

Distribution: Central America: Atlantic slope of Nicaragua and Costa Rica (San Juan River drainage including Lakes Managua, Nicaragua and Masaya, to Matinaon River).

Countries: Costa Rica, Nicaragua

Remarks and references: Reviewed by Bussing (1998: 334), with key, diagnosis, geographical distribution, and figures.

Common names: Carate (Nicaragua), Masamiche (Costa Rica, Nicaragua)

***Amphilophus sagittae*** Stauffer & McKaye, 2002

*Amphilophus sagittae* Stauffer & McKaye, 2002: 12, fig. 11. Type locality: Agua caliente Lake Xiloá (N 12° 13,848' W 86° 19,387'). Holotype: PSU 3386.1.

Maximum length: 16 cm SL

Distribution: Central America: Atlantic slope of Nicaragua, endemic to Lake Xiloá.

Countries: Nicaragua

***Amphilophus xiloaensis*** Stauffer & McKaye, 2002

*Amphilophus xiloaensis* Stauffer & McKaye, 2002: 9, fig. 7. Type locality: Southeastern shore of Lake Xiloá (N 12° 12,793' W 86° 19,028'). Holotype PSU 3381.1

Maximum length: 16 cm SL

Distribution: Central America: Atlantic slope of Nicaragua, endemic to Lake Xiloá.

Countries: Nicaragua

***Amphilophus zaliosus*** (Barlow, 1976)

*Cichlasoma zaliosum* Barlow in Barlow & Munsey, 1976: 363, fig. 5. Type locality: Lake Apoyo, Nicaragua. Holotype: CAS 29104.

Maximum length: 20 cm TL

Distribution: Central America: Atlantic slope of Nicaragua, endemic to Lake Apoyo.

Countries: Nicaragua

Common names: Mojarra flecha (Nicaragua)

**APISTOGRAMMA**

*Heterogramma* Regan, 1906b: 60. Type species: *Mesops taeniatus* Günther, 1862. Type by subsequent designation by Eigenmann (1910: 478). Gender: feminine. Preoccupied by *Heterogramma* Guenée, 1854.

*Apistogramma* Regan, 1913c: 282. Type species: *Mesops taeniatus* Günther, 1862. Type by being a replacement name. Gender: feminine.

*Pintoichthys* Fowler, 1954: 316. Type species: *Biotodoma trifasciatus* Eigenmann & Kennedy, 1903. Type by original designation. Gender: masculine.

***Apistogramma agassizii*** (Steindachner, 1875)

*Geophagus (Mesops) agassizii* Steindachner, 1875: 111, pl. 8 (fig.

- 2). Type locality: Syntypes from Curupira..., Cudajas..., Rio Puty..., Lago Maximo...See Manacapuru; lectotype from Manacapuru (Amazonas State, Brazil; 3°16'S 60°37'N). Lectotype: NMW 23484, designated by Kullander (1980a: 89).
- Apistogramma parva* Ahl, 1931: 210. Type locality: Rio Capim. Holotype: ZMB 23410.  
Maximum length: 4.2 cm SL  
Distribution: South America: Amazon River basin, along Amazon-Solimões River from Peru through Brazil to Capim River basin.  
Countries: Brazil, Colombia, Peru  
Remarks and references: Redescribed by Kullander (1980a: 89), with bibliography, description, distribution, lectotype designation; brief redescription of Peruvian material in Kullander (1986: 189). Holotype of *A. parva* briefly redescribed by Kullander (1980a: 145). Synonym status of *A. parva* is still tentative.
- Apistogramma arua* Römer & Warzel, 1998**  
*Apistogramma arua* Römer & Warzel, 1998: 46, fig. 1. Type locality: some 2.5 km upstream of the village of Arua in a small right-bank affluent of the Rio Arua, a tributary of the Rio Arapiuns, Para State, Brazil (approx. 2°39'27"S, 55°43'24"W). Holotype: MZUSP uncat.  
Maximum length: 4.4 cm SL  
Distribution: South America: Amazon River basin, in the Arapiuns River basin.  
Countries: Brazil  
Remarks and references: Original description repeated in German in Römer (1998: 266-283) but with additional photos.
- Apistogramma atahualpa* Römer, 1997**  
*Apistogramma atahualpa* Römer, 1997: 9, 2 figs. Type locality: Peru (Loreto). Imported...from Iquitos. Holotype: SMF 28212.  
Maximum length: 4.2 cm SL  
Distribution: South America: Amazon River basin, in the Nanay River basin.  
Countries: Peru
- Apistogramma bitaeniata* Pellegrin, 1936**  
*Apistogramma pertense* var. *bitaeniata* Pellegrin, 1936: 56. Type locality: Rio Madeira (Brésil) [apparently incorrect: Kullander, 1980a: 97], emended to: Colombia (Amazonas), environments of Leticia. Lectotype: MNHN 1935-34, designated by Kullander (1980a).  
*Apistogramma sweglesi* Meinken, 1961: 136, fig. p. 137. Type locality: Wasserläufen bei Letitia in Peru. Holotype: lost.  
*Apistogramma klausewitzi* Meinken, 1962: 138, fig. 1. Type locality: Brasilien, oberer Rio Solimões, Igarapé Preto. Holotype: SMF 5526.  
*Apistogramma kleei* Meinken, 1964: 293, fig. p. 295. Type locality: unbekannt [unknown]. Holotype: USNM 199593.  
Maximum length: 4.6 cm SL  
Distribution: South America: Amazon River basin, restricted to Peruvian and adjacent Brazilian black-water river systems (collected in the lower Nanay, Mazán and Tigre in Peru, near Leticia in Colombia, and in Igarapé Preto and Lago Tefé in Brazil).  
Countries: Brazil, Colombia, Peru  
Remarks and references: Redescribed by Kullander (1980a: 97), with bibliography, description, distribution, lectotype designation; brief redescription of Peruvian material by Kullander (1986: 191).
- Apistogramma borellii* (Regan, 1906)**  
*Heterogramma borellii* Regan, 1906b: 63. Type locality: Carandasiño, Matto Grosso. Syntypes: BMNH 1900.4.14.12-15 (3; one lost).  
*Heterogramma ritense* Haseman, 1911: 362, pl. 70. Type locality: Santa Rita, Rio Santa Rita of the Paraguay basin. Holotype: FMNH 54187 [ex CM 2765a].  
*Heterogramma rondoni* Miranda Ribeiro, 1918b: 16, pl. 11. Type locality: Caceres, na Caiçara (Campina). Lectotype: MNRJ 1247A, designated by Miranda Ribeiro (1953: 397).  
*Apistogramma aequipinnis* Ahl, 1938: 246. Type locality: vermutlich Argentinien. Holotype: ZMB 23409.  
*Apistogramma reitzigi* Mitsch, 1938: 181. Type locality: Wahrscheinlich mittleres Südamerika. No type specimens.  
Maximum length: 3.9 cm SL  
Distribution: South America: Paraguay River basin and along the lower Paraná River in Argentina.  
Countries: Argentina, Brazil, Paraguay  
Remarks and references: *Apistogramma reitzigi* was named twice (Mitsch, 1938, Ahl, 1938) with the same name. The earlier description by Mitsch (1938) clearly makes the name available. Although attributed in that paper to E. Ahl, there is no indication that Ahl would have been involved in writing the paper and Ahl cannot be author. Brief review, with key and distribution map, in Kullander (1983b: 311).
- Apistogramma brevis* Kullander, 1980**  
*Apistogramma brevis* Kullander, 1980a: 107, fig. 13. Type locality: Petit igarapé du Lago Penea, rive droite du Uaupés, État d'Amazonas, Brésil. (0°01'N 67°21'W.). Holotype: IRSNB 570.  
Maximum length: 3.9 cm SL  
Distribution: South America: Amazon River basin, in the Uaupés River basin.  
Countries: Brazil
- Apistogramma cacatuoides* Hoedeman, 1951**  
*Apistogramma cacatuoides* Hoedeman, 1951: 1, fig. p. 3. Type locality: near Paramaribo, Dutch Guiana [incorrect, restricted and emended by Kullander, 1980a: R. Amazonas basin between 69° and 71° W]. Holotype: ZMA 100033.  
Maximum length: 5 cm SL  
Distribution: South America: Amazon River basin, in tributaries of the Ucayali, Amazon and Solimões Rivers from the Pachitea River to Tabatinga.  
Countries: Brazil, Colombia, Peru  
Remarks and references: Redescription in Kullander (1980a: 86). Brief review with bibliography, diagnostic characters, and distribution map in Kullander (1986: 181).
- Apistogramma caetei* Kullander, 1980**  
*Apistogramma caetei* Kullander, 1980a: 76. Type locality: Igarapé in Bragança (Estado do Pará, Brazil; 1°45'S 46°47'W). Holotype: FMNH 54164 [ex CM 2732].  
Maximum length: 3.6 cm SL  
Distribution: South America: Apeú and Caeté Rivers in the Bragança region, Pará State.  
Countries: Brazil
- Apistogramma commbrae* (Regan, 1906)**  
*Heterogramma commbrae* Regan, 1906b: 64. Type locality: Carandasiño, Matto Grosso; Colonia Risso. Lectotype: BMNH 1900.4.14.16, designated by Kullander (1982a: 36).  
*Heterogramma corumbae* Eigenmann & Ward in Eigenmann, McAtee & Ward, 1907: 146, pl. 45 (fig. 3). Type locality: Corumba. Holotype: CAS 33719 [ex IU 10166].  
Maximum length: 3.3 cm SL  
Distribution: South America: Paraguay River basin, middle Paraná River basin in Argentina, and Uruguay River basin.  
Countries: Argentina, Brazil, Paraguay  
Remarks and references: Species monographed by Kullander (1982a).
- Apistogramma cruzi* Kullander, 1986**  
*Apistogramma cruzi* Kullander, 1986: 159, pl. 16, fig. 1. Type locality: Peru, departamento Loreto, Río Napo drainage system, lower course of a quebrada right bank tributary to the Río Mazán nearly 2 hours upstream from Puerto Alegre on the mouth of the



Río Mazán, Peru. Holotype: NRM 16664.

Maximum length: 5.1 cm SL

Distribution: South America: Amazon River basin, in the Napo River drainage of Peru and Ecuador, and the Putumayo and Caquetá River drainages of Colombia.

Countries: Colombia, Ecuador, Peru

***Apistogramma diplotaenia* Kullander, 1987**

*Apistogramma diplotaenia* Kullander, 1987a: 259, fig. 1. Type locality: Brasil, est. Amazonas, R. Negro drainage system, downstream of the R. Daraã. Holotype: MZUSP 28213.

Maximum length: 2.9 cm SL

Distribution: South America: Amazon River basin, in the middle Negro River from San Carlos to Arirará River.

Countries: Brazil, Venezuela

***Apistogramma elizabethae* Kullander, 1980**

*Apistogramma elizabethae* Kullander, 1980a: 103, fig. 12. Type locality: Igarapé affluent de la rive droite du Uaupés à Trovao (environ 20 km en amont de l'embouchure de Uaupés), État d'Amazonas. Brésil. (0°02'N 67°26'W). Holotype: IRSNB 596.

Maximum length: 4 cm SL

Distribution: South America: Amazon River basin, in the Uaupés River basin.

Countries: Brazil

***Apistogramma eunotus* Kullander, 1981**

*Apistogramma eunotus* Kullander, 1981a: 184, fig. 1. Type locality: Peru, Depto. Loreto, R. Ucayali system, near Pucallpa, on road to Aguaytia, "Dunkelwasser bei 'Campo Verde'". Holotype: ZFMK 10772.

Maximum length: 5.3 cm SL

Distribution: South America: Amazon River basin, in tributaries to the Ucayali and Amazonas Rivers, and in the Yavarí River in Peru, and the Japurá River in Brazil.

Countries: Brazil, Peru

***Apistogramma geisleri* Meinken, 1971**

*Apistogramma geisleri* Meinken, 1971: 35, fig. 1. Type locality: Amazonas-Gebiet, Rio Curuçamba bei Obidos. Holotype: SMF 10617.

Maximum length: 2.8 cm SL

Distribution: South America: Amazon River basin, in the region of the lower Trombetas River basin.

Countries: Brazil

Remarks and references: Redescribed by Kullander (1980a: 72).

***Apistogramma gephyra* Kullander, 1980**

*Apistogramma gephyra* Kullander, 1980a: 131, fig. 17. Type locality: Igarapé affluent de la rive gauche du Rio Negro, dans l'Archipel des Anavilhanas, État d'Amazonas, Brésil. (3°00'S 60°45'W). Holotype: IRSNB 581.

Maximum length: 3.3 cm SL

Distribution: South America: Amazon River basin, in the lower Negro River basin.

Countries: Brazil

***Apistogramma gibbiceps* Meinken, 1969**

*Apistogramma gibbiceps* Meinken, 1969: 91, fig. 1. Type locality: Brasilien, wahrscheinlich Gebiet des Rio Negro. Holotype: SMF 9441.

*Apistogramma roraimae* Kullander, 1980a: 138, fig 19. Type locality: Igarapé Uazinho à environ 20 km de Boa Vista sur la route Boa Vista-Caracarai, Territoire du Rio Branco, Brésil. (2°49'N 60°40'W). Holotype: IRSNB 565.

Maximum length: 4.5 cm SL

Distribution: South America: Amazon River basin, in the Branco and middle Negro River basins.

Countries: Brazil

Remarks and references: Redescribed by Kullander (1980a: 115) with diagnosis, bibliography, description and distribution; synonymy of *A. roraimae* herein is based on Kullander (unpublished).

***Apistogramma gossei* Kullander, 1982**

*Apistogramma gossei* Kullander, 1982d: 65, fig. 1. Type locality: Brasil, terr. Amapá, R. Oyapock system, Martinique. Holotype: MNHN 1981-231.

Maximum length: 4.4 cm SL

Distribution: South America: Oyapock River drainage in French Guiana and Brazil; Approuague River drainage in French Guiana.

Countries: Brazil, French Guiana

Common names: Prapra (French Guiana)

***Apistogramma guttata* Antonio C., Kullander & Lasso A., 1989**

*Apistogramma guttata* Antonio C., Kullander & Lasso A., 1989: 132, fig. 1. Type locality: Venezuela, Estado Anzoátegui, Río Morichal Largo, close to village San Miguel (63°22'W 8°38'N). Holotype: MHNLS 3587.

Maximum length: 3.6 cm SL

Distribution: South America: Morichal Largo River in northeastern Venezuela.

Countries: Venezuela

***Apistogramma hippolytae* Kullander, 1982**

*Apistogramma hippolytae* Kullander, 1982b: 182, fig. 1. Type locality: Brasil, est. Amazonas, Rio Solimoes System, Igarapé des Lago Manacapuru. Holotype: MZUSP 6657.

Maximum length: 3.4 cm SL

Distribution: South America: Amazon River basin, middle Negro River drainage (near mouths of Urubaxi and Daraã Rivers), and Lake Manacapuru.

Countries: Brazil

***Apistogramma hoignei* Meinken, 1965**

*Apistogramma hoignei* Meinken, 1965a: 258, fig. 1. Type locality: Zuflüsse der Sümpfe am Unterlauf des Rio Portuguesa westlich der Orte Sta. Rosa und Camaguan, an der Autostraße von Calabozo am Süden der seenartigen Erweiterung 'Embalse del Guárico' des Río Guárico nach San Fernando am Mittellauf des Río Apuré, im Staat Guárico, Venezuela. Holotype: SMF 7891.

Maximum length: 6 cm SL

Distribution: South America: Orinoco River basin, in the Portuguesa, Aracua, and lower Caura River drainages, and along the mainstream of the lower Orinoco River to Barrancas.

Countries: Venezuela

Remarks and references: Brief redescription in Kullander (1979: 75).

Common names: Mochoroca (Venezuela)

***Apistogramma hongsloui* Kullander, 1979**

*Apistogramma hongsloui* Kullander, 1979b: 74, fig. 5. Type locality: Finca Boca de Guarrojo (small laguna closest to the houses of the finca), R. Guarrojo, Vichada, Colombia (4°07'N 70°45'W). Holotype: NRM 11234.

Maximum length: 3.4 cm SL

Distribution: South America: Orinoco River basin, in the Vichada River drainage and the middle Meta River drainage in Colombia, and along the middle Orinoco River basin.

Countries: Colombia, Venezuela

Common names: Viejita (Colombia)

***Apistogramma inconspicua* Kullander, 1983**

*Apistogramma inconspicua* Kullander, 1983b: 307, fig. 1. Type locality: Bolivia, depto. Santa Cruz, R. Paraguay system [sic!], small pool of the R. Candelaria, above bridge on road Carmen-

Santa Rosa (16°00'S 61°40'W). Holotype: IRSNB 637.  
 Maximum length: 3.7 cm SL  
 Distribution: South America: Amazon River basin, in the Guaporé River drainage in Bolivia; Paraná River basin, in the upper Paraguayan River basin.  
 Countries: Bolivia, Brazil

***Apistogramma iniridae* Kullander, 1979**

*Apistogramma iniridae* Kullander, 1979b: 76, fig. 7. Type locality: Pueblo Bretania (Yuri Bajo), Caño (Rfo) Bocón, depto. Guainía, Colombia (3°39'N 68°05'W). Holotype: NRM 11224.  
 Maximum length: 3.6 cm SL  
 Distribution: South America: Orinoco River basin, in the Inírida River basin.  
 Countries: Colombia

***Apistogramma juruensis* Kullander, 1986**

*Apistogramma juruensis* Kullander, 1986: 177, pl. 19 (fig. 1). Type locality: Brazil, estado Acre, Rio Juruá drainage system, municipio do Cruzeiro do Sul, riachos near Igarapé Formoso. Holotype: ZUEC 1374.  
 Maximum length: 2.4 cm SL  
 Distribution: South America: Amazon River basin, in the upper Juruá River basin.  
 Countries: Brazil

***Apistogramma linkei* Koslowski, 1985**

*Apistogramma linkei* Koslowski, 1985: 151, fig. 5. Type locality: Bolivia, northwest of the town Santa Cruz, Lagunen entlang der Strasse zwischen den Orten Portachuelo und Bella Vista, 76 km nordwestlich von Santa Cruz, Wasseransammlungen entlang der Strasse und kleiner flacher Wasserlauf der die Strasse kreuzt und Lagune an der Strasse ca. 2 km östlich vor dem Ort Japacani am Rio Japacani", sta. B1 und B2, about 68°25'W--16°20'S and 68°50'W--16°15'S. Holotype: ZFMK 13323.  
 Maximum length: 3.9 cm SL  
 Distribution: South America: Amazon River basin, in the Mamoré and Beni River basins.  
 Countries: Bolivia

***Apistogramma luelingi* Kullander, 1976**

*Apistogramma luelingi* Kullander, 1976: 259, fig. 1. Type locality: Kleine Quebrada unterhalb Todos Santos (Bolivien) [incorrect: corrected to Quebrada mit Altwasser unterhalb San Francisco seitlich des Rio Chiripiri by Kullander, 1986: 177]. Holotype: ZFMK (I) 66/2283.  
 Maximum length: 3.3 cm SL  
 Distribution: South America: Amazon River basin, in the Madre de Dios and Mamoré River basins.  
 Countries: Bolivia, Peru

***Apistogramma macmasteri* Kullander, 1979**

*Apistogramma macmasteri* Kullander, 1979b: 70, fig. 1. Type locality: Finca La Ponderosa (on the road to Restrepo), Villavicencio, depto Meta, Colombia. Stream... at the foot of the Cordillera (4°15'N 73°35'W). Holotype: NRM 11240.  
 Maximum length: 5.5 cm SL  
 Distribution: South America: Orinoco River basin, in the upper Meta River drainage (Guaytiquía River, Metica River).  
 Countries: Colombia

***Apistogramma meinkenii* Kullander, 1980**

*Apistogramma meinkenii* Kullander, 1980a: 118, fig. 15. Type locality: Igarapé affluent de la rive droite des Uaupés (environ 20 km en amont de l'embouchure des Uaupés), Trovao, État d'Amazonas, Brésil. (0°02'N 67°26'W). Holotype: IRSNB 567.  
 Maximum length: 3.5 cm SL  
 Distribution: South America: Amazon River basin, in the Uaupés River basin.

Countries: Brazil

***Apistogramma mendezi* Römer, 1994**

*Apistogramma mendezi* Römer, 1994: 1, fig. 1. Type locality: Small igarapé (forest stream) near airfield of Barcelos do Rio Negro, Dept. Amazonas, Brazil (aprox. 63.04'W/0.01'S), sometimes called "Rio Salgado" by local people. Holotype: ZFMK 17458.  
 Distribution: South America: Amazon River basin, in the Negro River basin.  
 Countries: Brazil  
 Remarks and references: The species name is a misspelling for mendesi, after Francisco Mendes, but cannot be corrected (International Code of Zoological Nomenclature, 4th edition, article 32.5).

***Apistogramma moae* Kullander, 1980**

*Apistogramma moae* Kullander, 1980a: 61, fig. 9. Type locality: Igarapé São Salvador, affluent rive gauche du Rio Moa, Cruzeiro-do-Sul. État de Acre. Brésil. (7°38'S 72°36'W). Holotype: IRSNB 586.  
 Maximum length: 5 cm SL  
 Distribution: South America: Amazon River basin, in the upper Juruá River basin.  
 Countries: Brazil  
 Remarks and references: Brief redescription with illustration in Kullander (1986: 169).

***Apistogramma nijsseni* Kullander, 1979**

*Apistogramma nijsseni* Kullander, 1979a: 938, fig. 1. Type locality: Perú (Loreto), R. Ucayali system, Jenaro Herrera, R. Copal, "marigots des Tupacs". Holotype: MHNG 1595.82.  
 Maximum length: 3.9 cm SL  
 Distribution: South America: Amazon River basin, in the Carahuayte River drainage, a tributary to the Ucayali River.  
 Countries: Peru

***Apistogramma norberti* Staeck, 1991**

*Apistogramma norberti* Staeck, 1991: 140, fig. 1. Type locality: Peru, Dept. Loreto, in die Quebrada Nuevo Horizonte mündender Urwaldbach im Einzugsgebiet des Rio Tahuayo (etwa 73°05'W, 4°05'S). Holotype: ZMB 32002.  
 Maximum length: 3.9 cm SL  
 Distribution: South America: Amazon River basin, in the Tahuayo River basin.  
 Countries: Peru

***Apistogramma ortmanni* (Eigenmann, 1912)**

*Heterogramma ortmanni* Eigenmann, 1912: 506, pl. 68 (fig. 1). Type locality: Erukin, Guyana. Holotype: FMNH 53801 [ex CM 2306].  
 Maximum length: 4.1 cm SL  
 Distribution: South America: Essequibo River drainage, including the Potaro and Rupununi rivers, Corantijn and Cuyuni River basins.  
 Countries: Guyana, Suriname, Venezuela

***Apistogramma panduro* Römer, 1997**

*Apistogramma panduro* Römer, 1997: 12, 4 figs. Type locality: Per (Loreto), Rio Ucayali drainage... Small forest brooks east of Jenaro Herrera at kilometer markers 26 and 27 on the road to the Brazilian border. Holotype: ZFMK 18610.  
 Maximum length: 4.9 cm SL  
 Distribution: South America: Amazon River basin, Peru, not precisely known.  
 Countries: Peru

***Apistogramma paucisquamis* Kullander & Staeck, 1988**

*Apistogramma paucisquamis* Kullander & Staeck, 1988: 190, fig. 1. Type locality: Brazil, Estado do Amazonas, Rio Negro drainage... Arquipélago das Anavilhanas, small shallow bay on the right bank of Rio Negro. Holotype: MZUSP 36952.

Maximum length: 3.4 cm SL

Distribution: South America: Amazon River basin, in the middle and lower Negro River from Daraã River to Anavilhanas Archipelago.

Countries: Brazil

***Apistogramma payaminonis* Kullander, 1986**

*Apistogramma payaminonis* Kullander, 1986: 184, fig. 64, pl. 20 (fig. 2). Type locality: Ecuador, provincia del Napo, Río Napo drainage system, Río Payamino drainage, Quebrada Ahuano, just above Ahuanopaccha (a 42 m vertical waterfall); in headwaters of the Río Tutapishcu, few km southwest of San José de Payamino (a village at confluence of Río Tutapishcu and Río Payamino (approx. 0°31.2'S, 77°20.7'W). Holotype: FMNH 96564.

Maximum length: 4 cm SL

Distribution: South America: Amazon River basin, in the Payamino River basin in Napo River drainage.

Countries: Ecuador

***Apistogramma personata* Kullander, 1980**

*Apistogramma personata* Kullander, 1980a: 111, fig. 14. Type locality: Rio Uaupés á Assai, État d'Amazonas, Brésil (0°02'N 67°27'W). Holotype: IRSNB 575.

Maximum length: 4.9 cm SL

Distribution: South America: Amazon River basin, in the Uaupés River basin.

Countries: Brazil

***Apistogramma pertensis* (Haseman, 1911)**

*Heterogramma taeniatum pertense* Haseman, 1911: 359, pl. 66. Type locality: Manaos. Holotype: FMNH 54171 [ex CM 2741].

Maximum length: 3.9 cm SL

Distribution: South America: Amazon River basin, in the lower Negro River and from Manacapuru to Monte Alegre along the Amazon-Solimões River.

Countries: Brazil

Remarks and references: Redescription in Kullander (1980a: 126), with bibliography, diagnosis, description, distribution.

***Apistogramma piauiensis* Kullander, 1980**

*Apistogramma piauiensis* Kullander, 1980a: 79, fig. 11. Type locality: Brazil: Piauí, Lagoa Seca, about 1 km from camp on Rio Parnaíba at Barra do Longa (near Buriti dos Lopes). (3°08'S 41°54'W). Holotype: MCZ 46831.

Maximum length: 2.3 cm SL

Distribution: South America: Parnaíba River basin.

Countries: Brazil

***Apistogramma pleurotaenia* (Regan, 1909)**

*Heterogramma pleurotaenia* Regan, 1909a: 270. Type locality: La Plata. Holotype: BMNH 1909.2.25.61.

Maximum length: 2.8 cm SL

Distribution: South America: Possibly Argentina, only holotype known.

Countries: Argentina (?)

***Apistogramma pulchra* Kullander, 1980**

*Apistogramma pulchra* Kullander, 1980a: 135, fig. 18. Type locality: Rio Preto, affluent de la rive gauche du Rio Candeias à 25 km de Porto-Velho, Territoire du Rondonia, Brésil. (8°46'S 63°45'W). Holotype: IRSNB 584.

Maximum length: 3.2 cm SL

Distribution: South America: Amazon River basin, in the Madeira River basin.

Countries: Brazil

***Apistogramma regani* Kullander, 1980**

*Apistogramma regani* Kullander, 1980a: 65, fig. 10. Type locality: Igarapé affluent de la rive gauche du Rio Negro, dans l'Archipel das Anavilhanas, État d'Amazonas, Brésil. (3°00'S 60°45'W). Holotype: IRSNB 577.

Maximum length: 4.9 cm SL

Distribution: South America: Amazon River basin, in the lower Negro River basin.

Countries: Brazil

***Apistogramma resticulosa* Kullander, 1980**

*Apistogramma resticulosa* Kullander, 1980b: 158, fig. 1. Type locality: Brasil, Estado do Amazonas, R. Madeira drainage system, Igarapé Xicanga, about 5 km W of Humaitá (07°31'S 63°04'W). Holotype: ZMA 116177.

Maximum length: 2.7 cm SL

Distribution: South America: Amazon River basin, in the Madeira River drainage near Huamitá.

Countries: Brazil

***Apistogramma rubrolineata* Hein, Zarske & Zapata, 2002.**

*Apistogramma rubrolineata* Hein, Zarske & Zapata, 2002: 16, fig. 3. Type locality: Bolivien, Departamento Pando, Rio Manuripi, nahe der Ortschaft Puerto Cardenas (11°20'083" S, 67°44'576" W). Holotype: MTD F 26477.

Maximum length: 4 cm SL

Distribution: South America: Manuripi River basin, Pando Department.

Countries: Bolivia

***Apistogramma rupununi* Fowler, 1914**

*Apistogramma ortmanni rupununi* Fowler, 1914: 277, fig 19. Type locality: Rupununi River, British Guiana. Holotype: ANSP 39347.

Maximum length: 3.8 cm SL

Distribution: South America: Amazon River basin, in the Branco River; Rupununi River basin.

Countries: Brazil, Guyana

***Apistogramma staecki* Koslowski, 1985**

*Apistogramma staecki* Koslowski, 1985: 146, fig. 1. Type locality: Bolivia, south of the town Trinidad, "Lagunen beiderseits der Strasse von Trinidad ca. 10 km südlich in Richtung El Colegio und Loreto", sta. B11, about 64°51'W--14°57'S. Holotype: ZFMK 13400.

Maximum length: 2.1 cm SL

Distribution: South America: Amazon River basin, in the Mamoré and Guaporé River basins.

Countries: Bolivia, Brazil

***Apistogramma steindachneri* (Regan, 1908)**

*Heterogramma steindachneri* Regan, 1908b: 370, fig. on p. 371. Type locality: Georgetown, Demerara. Syntypes: BMNH 1909.4.30: 31-32 (2).

*Apistogramma ornatipinnis* Ahl, 1936a: 141. Type locality: Britisch-Guiana. Holotype: ZMB 21147.

*Apistogramma wickleri* Meinken, 1960b: 655, fig. 1. Type locality: Anzunehmen ist, daß die Tiere aus den Guayana-Ländern eingeführt wurden. Holotype: ZMH H5682.

Maximum length: 6.5 cm SL

Distribution: South America: Essequibo, Demerara and Mahaica River drainages, and from the Marowijne River to the Corantijn River basin.

Countries: Guyana, Suriname

Remarks and references: Redescription, based in Surinamese material, in Kullander & Nijssen (1989: 74), with bibliography,

diagnosis, description, distribution.

***Apistogramma taeniata* (Günther, 1862)**

*Mesops taeniatus* Günther, 1862: 312. Type locality: River Cupai (800 miles from the sea). Holotype: BMNH 1853.3.19.71.

Maximum length: 4.2 cm SL

Distribution: South America: Amazon River basin, in the lower Tapajós River basin.

Countries: Brazil

Remarks and references: Redescription of the holotype in Kullander (1980a: 142).

***Apistogramma trifasciata* (Eigenmann & Kennedy, 1903)**

*Biotodoma trifasciatus* Eigenmann & Kennedy, 1903: 536. Type locality: Arroyo Chagalalina [Paraguay]. Holotype: CAS 33721.

*Heterogramma trifasciatum maciliense* Haseman, 1911: 360, pl. 62 (fig. 2). Type locality: São Antonio de Guaporé. Syntypes: CAS 33722 (1), FMNH 54177 (2), one missing. Spelled *macielense* on p. 360.

*Apistogramma trifasciatum haraldschultzi* Meinken, 1960a: 291, fig. 1. Type locality: Oberer Guaporé, auch Itenes genannt, im Norden des Staates Matto Grosso. Holotype: ZMH H1209. Originally as *haraldschultzi* as a subspecies of *trifasciatum*; here regarded as one name to be combined.

Maximum length: 3.8 cm SL

Distribution: South America: Amazon River basin, in the Guaporé drainage in Brazil; Paraná River basin, in the Paraguay River drainage in Brazil and Paraguay, and in the middle Paraná River drainage in Argentina.

Countries: Argentina, Brazil, Paraguay

***Apistogramma uaupesi* Kullander, 1980**

*Apistogramma uaupesi* Kullander, 1980a: 122, fig. 16. Type locality: Igarapé affluent de la rive droite des Uaupés (environ 20 km en amont de l'embouchure des Uaupés), Trovao, État d'Amazonas, Brésil. (0°02'N 67°26'W.) Holotype: IRSNB 594.

Maximum length: 2.8 cm SL

Distribution: South America: Amazon River basin, in the Rio Uaupés and nearby Negro River basin.

Countries: Brazil

***Apistogramma urteagai* Kullander, 1986**

*Apistogramma urteagai* Kullander, 1986: 163, pl. 17 fig. 1. Type locality: Peru, departamento Madre de Dios, Río Madre de Dios drainage system, Lago Túpac Amaru, near Puerto Maldonado. Holotype: NRM 16659.

Maximum length: 4.1 cm SL

Distribution: South America: Amazon River basin, in the Rio Madre de Dios basin.

Countries: Peru

***Apistogramma viejita* Kullander, 1979**

*Apistogramma viejita* Kullander, 1979b: 73, fig. 3. Type locality: Caño, affluent of Rio Yucao, depto Meta, Colombia. About 500 m westwards along the road Puerto Gaitán-Puerto López from a laguna midway between Rio Yucao and Rio Manacacías, 300 m from the road (4°20'N 72°09'W). Holotype: NRM 11231.

Maximum length: 3 cm SL

Distribution: South America: Orinoco River basin, in the upper Rio Meta basin.

Countries: Colombia

Common names: Viejita (Colombia)

***Species inquirenda***

*Geophagus amoenus* Cope, 1872: 250. Type locality: River Ambyiacu [=Ampiyacu River, Peru]. Holotype: ANSP (not found). Species not recognized since original description, usually interpreted as an *Apistogramma* species. See Kullander (1980a: 142)

for review.

**APISTOGRAMMOIDES**

*Apistogrammoides* Meinken, 1965b: 48. Type species: *Apistogrammoides pucallpaensis* Meinken, 1965. Type by original designation. Gender: masculine.

***Apistogrammoides pucallpaensis* Meinken, 1965**

*Apistogrammoides pucallpaensis* Meinken, 1965b: 48, fig. 1. Type locality: Bach kurz außerhalb der Vorstadt von Pucallpa, Peru, der in den Ucayali mündet. Holotype: SMF 7565.

Maximum length: 2.7 cm SL

Distribution: South America: Amazon River basin, from Pucallpa on the Ucayali River in Peru, to Santa Sofía Island in the Amazon River in Colombia.

Countries: Colombia, Peru

Remarks and references: Kullander (1986: 194), with diagnosis, bibliography, and redescription, distribution map, and illustrations.

**ARCHOCENTRUS**

*Archocentrus* Gill in Gill & Bransford, 1877: 186. Type species: *Heros centrarchus* Gill in Gill & Bransford, 1877. Type by monotypy. Gender: masculine. First described as subgenus of *Heros* (*Archocentrus*).

*Cryptoheros* Allgayer, 2001: 14. Type species: *Heros spilurus* Günther, 1862. Type species by original designation. Gender: masculine.

***Archocentrus altoflavus* (Allgayer, 2001)**

*Cryptoheros altoflavus* Allgayer, 2001: 16, fig. p. 16. Type locality: Panama, Province de Bocas del Toro, Rio Carriaveral (Rio Caña). Holotype: MNHN 2001/1163.

Maximum length: 9 cm SL

Distribution: Central America: Atlantic slope, in the Cañaveral River basin.

Countries: Panama

***Archocentrus centrarchus* (Gill, 1877)**

*Heros centrarchus* Gill in Gill & Bransford, 1877: 185. Type locality: Lake Nicaragua. Holotype: USNM 16878.

Maximum length: 11 cm SL

Distribution: Central America: Pacific slope, in tributaries of Fonseca Gulf in Honduras and Nicaragua; Atlantic slope in the San Juan River basin, including Lakes Managua, Nicaragua, Jilóá and Apoyo.

Countries: Costa Rica, Honduras, Nicaragua

Remarks and references: Reviewed by Bussing (1998: 336), with key, diagnosis, geographical distribution, and figures.

Common names: Mojarra (Costa Rica), Mojarra rayada (Nicaragua), Mojarrita (Nicaragua), Viejita (Nicaragua)

***Archocentrus myrnae* Loiselle, 1997**

*Archocentrus myrnae* Loiselle, 1997: 3, fig. p. 3. Type locality: Río Cocolis, a tributary of the Río Sixaola, 3.5 km SE of Shiroles, on the Bratsí-Shiroles road, Limon Province, Costa Rica. Holotype: AMNH 59079.

Maximum length: 8 cm SL

Distribution: Central America: Atlantic slope, in Costa Rica and Panama, from Estrella River to Guarumo River.

Countries: Costa Rica, Panama

Remarks and references: Reviewed by Bussing (1998: 340), with key, diagnosis, geographical distribution, and figures.

Common names: Mojarra (Costa Rica)

***Archocentrus nanoluteus* Allgayer, 1994**

*Archocentrus nanoluteus* Allgayer, 1994: 9. Type locality: Panama, Province de Bocas del Toro, District de Chiriqui Grande,

rio Guarumo. 82°13' Ouest; 9°55' à 9°52' Nord. Holotype: MNHN 1993-260.  
Maximum length: 6.4 cm SL  
Distribution: Central America: Atlantic slope, in the Guarumo River basin.  
Countries: Panama

***Archocentrus nigrofasciatus* (Günther, 1867)**

*Heros nigrofasciatus* Günther, 1867: 601. Type locality: Lakes of Amatitlan and Atitlan. Syntypes: BMNH 1865.4.19.76-77 (2) and .78 (1, skeleton); ZMB 6882 (1).  
Maximum length: 10 cm SL  
Distribution: Central America: Pacific slope, from Guatemala to Costa Rica (Tárcoles River); Atlantic slope from Aguan River (Honduras) to Guarumo River (Panama).  
Countries: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama

Remarks and references: *Heros nigrofasciatus* described in more detail in Günther (1868: 452, pl. 74, fig. 3). Reviewed by Bussing (1998: 342), with key, diagnosis, geographical distribution, and figures.

Common names: Achiba (El Salvador), Burra (Costa Rica), Burro (El Salvador), Carate (Costa Rica, Nicaragua), Chamarra (El Salvador), Chincoyo (El Salvador), Conga (El Salvador), Congo (Costa Rica, Honduras), Mojarra (El Salvador), Punto naranja (Costa Rica), Punto rojo (Nicaragua), Serica (Guatemala)

***Archocentrus panamensis* (Meek & Hildebrand, 1913)**

*Neetroplus panamensis* Meek & Hildebrand, 1913: 90. Type locality: Rio Mandingo, Bas Obispo, Canal Zone, Panama. Holotype: FMNH 7601.  
Maximum length: 13 cm TL  
Distribution: Central America: Atlantic slope of Panama (Canal Zone, including Chagres River).  
Countries: Panama  
Common names: Chogorro (Panama), Peje motete (Panama)

***Archocentrus sajica* (Bussing, 1974)**

*Cichlasoma sajica* Bussing, 1974: 30, fig. 1. Type locality: Costa Rica, Puntarenas Province, tributary (20 m) of Río Sierpe 2 km S of Palmar Sur at Interamerican Highway (IH). Holotype: LACM 33902-1.  
Maximum length: 9 cm SL  
Distribution: Central America: Pacific slope of Costa Rica.  
Countries: Costa Rica  
Remarks and references: Reviewed by Bussing (1998: 346), with key, diagnosis, geographical distribution, and figures.  
Common names: Mojarra (Costa Rica), T-Bar Cichlid (USA)

***Archocentrus septemfasciatus* (Regan, 1908)**

*Cichlosoma septemfasciatum* Regan, 1908a: 461. Type locality: Rio Iroquois. Syntypes: (14) BMNH 1909.3.13.82-90 (9), 1909.3.13.91 (1, skeleton).  
Maximum length: 10 cm SL  
Distribution: Central America: Atlantic slope of Costa Rica, from the San Juan River drainage to the Banano River.  
Countries: Costa Rica  
Remarks and references: Reviewed by Bussing (1998: 348), with key, diagnosis, geographical distribution, and figures.

***Archocentrus spilurus* (Günther, 1862)**

*Heros spilurus* Günther, 1862: 289. Type locality: Guatemala. Syntypes: (at least 2) BMNH 1864.1.26.52-55 (4?).  
*Cichlasoma cutteri* Fowler, 1932: 380, fig. p. 381. Type locality: Lancetilla, Honduras. Holotype: ANSP 53930.  
Maximum length: 12 cm TL  
Distribution: Central America: Atlantic slope from Belize to Nicaragua.

Countries: Belize, Guatemala, Honduras, Nicaragua  
Common names: Blue-eye cichlid (Belize), Congo (Nicaragua)

***Archocentrus spinosissimus* (Vaillant & Pellegrin, 1902)**

*Heros (Cichlasoma) spinosissimus* Vaillant & Pellegrin, 1902: 87 [3]. Type locality: Rio Polochic (Guatemala). Syntypes: MNHN A.352 (4).  
*Cichlasoma spinosissimum* var. *immaculata* Pellegrin, 1904: 225. Type locality: Rio Polochic [Guatemala]. Syntypes: MNHN 9846 (2).  
Maximum length: 11 cm SL  
Distribution: Central America: Atlantic slope, in the Lake Izabal basin.  
Countries: Guatemala

**ASTRONOTUS**

*Astronotus* Swainson, 1839: 173. Type species: *Lobotes ocellatus* Agassiz, 1831. Type by monotypy. Gender: masculine.  
*Acara* Heckel, 1840: 338. Type species: *Acara crassipinnis* Heckel, 1840. Type by subsequent designation by Eigenmann & Bray (1894: 616). Gender: masculine.  
*Hyrogonus* Günther, 1862: 303. Type species: *Lobotes ocellatus* Agassiz, 1829. Type by monotypy. Gender: masculine.

***Astronotus crassipinnis* (Heckel, 1840)**

*Acara crassipinnis* Heckel, 1840: 357, pl. 29 (fig. 5). Type locality: ..Rio-Paraguay... in Buchten... bei Villa Maria und Caiçara...Rio-Guaporè bei Matogrosso, im Rio-negro und im Rio-branco. Syntypes: (at least 5) NMW 58776 (1); NMW 24261 (1), 92455 (1); SMF 2926 [ex NMW in 1844] (1).  
Maximum length: 24 cm SL  
Distribution: South America: Amazon River basin, in the Bolivian Amazon and Madre de Dios River drainage in Peru; Paraná River basin in the Paraguay drainage in Paraguay and Brazil.  
Countries: Bolivia, Brazil, Paraguay, Peru  
Common names: Apaiari (Brazil)

***Astronotus ocellatus* (Agassiz, 1831)**

*Lobotes ocellatus* Agassiz in Spix & Agassiz, 1831: 129, pl. 66. Type locality: Oceano Atlantico. Types in ZSM, lost.  
*Cychla rubro-ocellata* Jardine, 1843: 153, pl. 10. Type locality: Rio Negro and tributaries. No types known.  
*Acara compressus* Cope, 1872: 256. Type locality: the Ambyiacu [=Ampiyacu River, Peru]. Lectotype: ANSP 9180.  
*Acara hyposticta* Cope, 1878: 697. Type locality: [Amazonian Peru]. Holotype: ANSP 21286.  
*Astronotus ocellatus zebra* Pellegrin, 1904: 183. Type locality: Santarem. Holotype: MNHN 1902-46.  
*Astronotus orbiculatus* Haseman, 1911: 331, pl. 53. Type locality: Santarem. Holotype: FMNH 53992 [ex CM 2515].  
Maximum length: 21 cm SL  
Distribution: South America: Amazon River basin in Peru, Colombia, Brazil; French Guiana  
Countries: Brazil, Colombia, Côte d'Ivoire (introduced), French Guiana, Peru, Puerto Rico (introduced)  
Remarks and references: Redescription of Peruvian material in Kullander (1986: 61), with diagnosis, description, distribution, and illustrations. The species is reported from the Orinoco River drainage and numerous localities in the Amazon River basin, but apparently several species are confused under the name, and names in the synonymy may represent valid species.  
Common names: Acará-açu (Brazil), Acarahuazú (Peru), Apaiari (Brazil), Carahuazú (Peru), Corró-baiano (Brazil), Corró-chinês (Brazil), Crombier (French Guiana), Dorminhoco (Brazil), Krobíé rouj (French Guiana), Paya (French Guiana)

### **BIOTODOMA**

*Mesops* Günther, 1862: 311. Type species: *Geophagus cupido* Heckel, 1840. Type by subsequent designation by Eigenmann & Bray (1894: 621). Gender: masculine. Preoccupied by *Mesops* Audinet-Serville 1831 in Orthoptera; replaced by *Biotoma* Eigenmann & Kennedy 1903.

*Biotodoma* Eigenmann & Kennedy, 1903: 533. Type species: *Geophagus cupido* Heckel, 1840. Type by being a replacement name. Gender: neuter. Replacement for *Mesops* Günther 1862, preoccupied by *Mesops* Audinet-Serville 1831.

#### ***Biotodoma cupido* (Heckel, 1840)**

*Geophagus Cupido* Heckel, 1840: 399. Type locality: Rio-negro...Rio-Guaporè und dessen Morästen in der Umgegend von Matogrosso. Syntypes: NMW 23094 (1), 23122 (1), 23414 (1).

Maximum length: 9.7 cm SL

Distribution: South America: Amazon River basin in Peru, Bolivia and Brazil; Essequibo River in Guyana.

Countries: Bolivia, Brazil, Guyana, Peru

Remarks and references: Redescription of Peruvian material in Kullander (1986: 239), with diagnosis, description, distribution, and illustrations. Kullander (1986) considered that the widespread *B. cupido* of authors may consist of several similar species.

Common names: Bujurqui (Peru)

#### ***Biotodoma wavrini* (Gosse, 1963)**

*Geophagus wavrini* Gosse, 1963: 2, pl. 1 (fig. 1). Type locality: Haut Orénoque, entre San Fernando de Atabapo et le Casiquiare. Holotype: IRSNB 457.

Maximum length: 10 cm SL

Distribution: South America: Amazon River basin, in the middle and upper Negro River drainage in Brazil and Venezuela; Orinoco River basin in Colombia and Venezuela.

Countries: Brazil, Venezuela

### **BIOTOECUS**

*Saraca* Steindachner, 1875: 125. Type species: *Saraca opercularis* Steindachner, 1875. Type by monotypy. Gender: feminine. Preoccupied by *Saraca* Walker 1865 in Lepidoptera, replaced by *Biotheucus* Eigenmann & Kennedy 1903.

*Biotheucus* Eigenmann & Kennedy, 1903: 533. Type species: *Saraca opercularis* Steindachner, 1875. Type by being a replacement name. Gender: masculine. Replacement for *Saraca* Steindachner 1875, preoccupied by *Saraca* Walker 1865 in Lepidoptera.

#### ***Biotheucus dicentrarchus* Kullander, 1989**

*Biotheucus dicentrarchus* Kullander, 1989: 227, fig. 1. Type locality: Colombia, Comisaría Vichada, Caño Alisal, tributary to Rio Bitá a few km S Puerto Carreño. Holotype: ICNMHN 1400.

Maximum length: 3.8 cm SL

Distribution: South America: Orinoco River basin, from the Infrida River (Colombia) to Maripa (Venezuela).

Countries: Colombia, Venezuela

Common names: Rebeca (Venezuela)

#### ***Biotheucus opercularis* (Steindachner, 1875)**

*Saraca opercularis* Steindachner, 1875: 125. Type locality: See Saraca und Ausstände des Amazonenstromes bei Villa bella. Syntypes: NMW 38419 (1), 77814 (8).

Maximum length: 3.8 cm SL

Distribution: South America: Amazon River basin, in the Branco River, the middle and lower Negro River, Urubu River, Lake Saracá, Parintins, Lake Carauaçú, lower Trombetas River.

Countries: Brazil

Remarks and references: Discussed by Kullander (1989), with distribution map.

### **BUJURQUINA**

*Bujurquina* Kullander, 1986: 244. Type species: *Bujurquina moriorum* Kullander, 1986. Type by original designation. Gender: feminine.

#### ***Bujurquina apoparuana* Kullander, 1986**

*Bujurquina apoparuana* Kullander, 1986: 280, pl. 29 (fig. 3). Type locality: Perú, departamento Ucayali, Río Ucayali drainage system, 3.4 km from Pucallpa on road to Lima, first bridge over stream. Holotype: FMNH 84269 (1 of 14).

Maximum length: 7.7 cm SL

Distribution: South America: Amazon River basin, in Ucayali River tributaries between Pucallpa and Shahuaya.

Countries: Peru

#### ***Bujurquina cordemadi* Kullander, 1986**

*Bujurquina cordemadi* Kullander, 1986: 261, pl. 28 (fig. 1). Type locality: Perú, departamento de Madre de Dios, R. Madre de Dios drainage system, quebrada 8 km from airport road on sideroad to Lago Túpac Amaru. Holotype: NRM 17581.

Maximum length: 6.2 cm SL

Distribution: South America: Amazon River basin, in the Madre de Dios drainage at Puerto Maldonado.

Countries: Peru

#### ***Bujurquina eurhinus* Kullander, 1986**

*Bujurquina eurhinus* Kullander, 1986: 269, pl. 28 (fig. 3). Type locality: Perú, departamento de Cuzco, R. Madre de Dios drainage system, R. Hospital at 71°27'W, 12°53'S. Holotype: ANSP 158173.

Maximum length: 8.9 cm SL

Distribution: South America: Amazon River basin, in the Madre de Dios drainage in Peru (Pilcopata, upper Madre de Dios, Manú, Colorado, Marcapata Rivers).

Countries: Peru

#### ***Bujurquina hophrys* Kullander, 1986**

*Bujurquina hophrys* Kullander, 1986: 283, pl. 30 (fig. 2). Type locality: Perú, departamento Huánuco, Río Pachitea drainage system, 2-3 km downstream of Tournavista, right bank quebrada near its mouth into the Río Pachitea. Holotype: NRM 17585.

Maximum length: 8.5 cm SL

Distribution: South America: Amazon River basin, in the Pachitea and Aguaytía River basins.

Countries: Peru

#### ***Bujurquina huallagae* Kullander, 1986**

*Bujurquina huallagae* Kullander, 1986: 290, pl. 31 (fig. 2). Type locality: Peru, departamento Huánuco, Río Huallaga drainage system, vicinity of Tingo María, c. 1/4 mi above Río Huallaga. Holotype: ANSP 158171.

Maximum length: 8.3 cm SL

Distribution: South America: Amazon River basin, in the Huallaga River basin at Tarapoto and Tingo María.

Countries: Peru

#### ***Bujurquina labiosa* Kullander, 1986**

*Bujurquina labiosa* Kullander, 1986: 277, pl. 29 (fig. 2). Type locality: Perú, departamento Ucayali, Río Ucayali drainage system, Río Chinipo drainage within farm Bella Vista c. 10 km south of Chicosa. Holotype: NRM 17589.

Maximum length: 5.5 cm SL

Distribution: South America: Amazon River basin, in the upper Ucayali River basin (near Chinipo River).

Countries: Peru

#### ***Bujurquina mariae* (Eigenmann, 1922)**

*Aequidens mariae* Eigenmann, 1922a: 240, pl. 30 (fig. 1). Type locality: Barrigón; Eigenmann, 1922b: 197: Type locality:

Barigona; Cmaral, Llanos; Caño Caricería; Río Negro, Villcio; Oriente de Bogotá; Q. Gramalote Villcia. Holotype: CAS 34711 [ex IU 15011].

Maximum length: 15 cm TL

Distribution: South America: Orinoco River basin, in the Meta River basin.

Countries: Colombia

Remarks and references: Eigenmann (1922a) and (1922b) appeared both in October 1922 and it cannot be decided with available evidence which publication should have priority.

***Bujurquina megalospilus* Kullander, 1986**

*Bujurquina megalospilus* Kullander, 1986: 287, fig. 125, pl. 31 (fig. 1). Type locality: Perú, departamento Huánuco, Río Pachitea drainage system, drying pool c. 100 m from the left margin of the Río Pachitea and c. 1 km upstream from Tournavista. Holotype: NRM 17591.

Maximum length: 7.1 cm SL

Distribution: South America: Amazon River basin, in the Pachitea and Aguaytía River basins.

Countries: Peru

***Bujurquina moriorum* Kullander, 1986**

*Bujurquina moriorum* Kullander, 1986: 304, pl. 33 (fig. 3). Type locality: Perú, departamento Loreto, Río Ucayali drainage system, Quebrada Carahuayte at first bend downstream of km 20 on road Jenaro Herrera-Colonia Angamos. Holotype: NRM 17572.

Maximum length: 9.7 cm SL

Distribution: South America: Amazon River basin, in the Carahuayte, Mazán and lower Napo River basins.

Countries: Peru

***Bujurquina oenolaemus* Kullander, 1987**

*Bujurquina oenolaemus* Kullander, 1987b: 196, fig. 1. Type locality: Bolivie, dép. Santa Cruz. Río Aguas Calientes à Aguas Calientes, à 25 km à l'est de Roboré, sur le rail. (Bassin du Paraguay.). Holotype: IRSNB 666.

Maximum length: 6.7 cm SL

Distribution: South America: Paraná River basin, in the Aguas Calientes River basin (Paraguay River drainage).

Countries: Bolivia

***Bujurquina ortegai* Kullander, 1986**

*Bujurquina ortegai* Kullander, 1986: 294, pl. 32 (fig. 1). Type locality: Perú, departamento San Martín, Río Huallaga drainage system, Moyobamba, Puerto Juan Antonio, Río Mayo. Holotype: MHNG 2205.27.

Maximum length: 11 cm SL

Distribution: South America: Amazon River basin, in the Mayo River basin (Huallaga River drainage).

Countries: Peru

***Bujurquina peregrinabunda* Kullander, 1986**

*Bujurquina peregrinabunda* Kullander, 1986: 301, pl. 33 (fig. 1). Type locality: Perú, departamento Loreto, Río Ampiyacu system, quebrada tributary to Río Yaguasyacu, just below the village Esperanza. Holotype: NRM 17596.

Maximum length: 10.7 cm SL

Distribution: South America: Amazon River basin, in the lower Ampiyacu River basin and at Codajás (Brazil).

Countries: Brazil, Peru

***Bujurquina robusta* Kullander, 1986**

*Bujurquina robusta* Kullander, 1986: 273, pl. 29 (fig. 1). Type locality: Perú, departamento Ucayali, R. Ucayali drainage system, R. Chinipo drainage within farm Bella Vista c. 10 km south of Chicosa. Holotype: NRM 17583.

Maximum length: 8.8 cm SL

Distribution: South America: Amazon River basin, in the Chinipo

River basin (upper Ucayali River drainage).

Countries: Peru

***Bujurquina sypsilus* (Cope, 1872)**

*Acara sypsilus* Cope, 1872: 255, pl. 11 (fig. 3). Type locality: Ambyiacu River [Ampiyacu River, Peru]. Syntypes: ANSP 21430-21433 (4).

Maximum length: 10.3 cm SL

Distribution: South America: Amazon River basin, from the Pacaya River basin (Ucayali River drainage) to the lower Yavari River.

Countries: Peru

***Bujurquina tambopatae* Kullander, 1986**

*Bujurquina tambopatae* Kullander, 1986: 266, pl. 28 (fig. 2). Type locality: Perú, departamento de Madre de Dios, R. Tambopata drainage system, Quebrada San Roque at Km 11 on Puerto Maldonado-Cuzco road. Holotype: NRM 17580.

Maximum length: 8.2 cm SL

Distribution: South America: Amazon River basin, in the Tambopata River basin (Madre de Dios River drainage).

Countries: Peru

***Bujurquina vittata* (Heckel, 1840)**

*Acara vittatus* Heckel, 1840: 346. Type locality: Sümpfen um Cujabá, der Hauptstadt in der Provinz Matagrosso. Holotype: NMW 33879.

*Aequidens paraguayensis* Eigenmann & Kennedy, 1903: 534. Type locality: Asuncion. Holotype: CAS 34716 [ex IU 10066].

Maximum length: 7 cm SL

Distribution: South America: Paraná River basin, in the Paraguay River drainage, and in the middle Paraná River basin.

Countries: Argentina, Brazil, Paraguay

Common names: Acará-pirambocaia (Brazil)

***Bujurquina zamorensis* (Regan, 1905)**

*Acara zamorensis* Regan, 1905b: 339. Type locality: Río Zamora. Holotype: BMNH 1898.12.31.35.

Maximum length: 7.4 cm SL

Distribution: South America: Amazon River basin, in the Zamora River basin.

Countries: Ecuador

**CAQUETAIA**

*Caquetaia* Fowler, 1945: 133. Type species: *Caquetaia amploris* Fowler, 1945. Type by original designation. Gender: feminine.

***Caquetaia kraussii* (Steindachner, 1879)**

*Petenia Kraussii* Steindachner, 1879b: 28, pl. 2. Type locality: grossen, seeartig ausgebreiteten Cienega, welche der Magdalena-Strom mit einem seiner östlich gelegenen Hauptarme kurz vor seiner Mündung in das Meer bildet. Syntypes: NMW 75391(4), NMW 24552(1), NMW 24553 (1), NMW 24545-24551 (8), NMW 24544 (1), NMW uncat.

Maximum length: 26 cm SL

Distribution: South America: Atrato, Cauca, and Magdalena River basins; Lake Maracaibo basin. Introduced in the Orinoco River drainage in Venezuela.

Countries: Colombia, Venezuela (introduced)

Common names: Mojarra (Venezuela), Mojarra, Mojarra amarilla (Colombia)

***Caquetaia myersi* (Schultz, 1944)**

*Petenia myersi* Schultz, 1944: 410, fig. 1. Type locality: Río Dedo, tributary of the Río Orteguzza, near Florencia (Amazon system, Colombia). Holotype: USNM 120533.

*Caquetaia amploris* Fowler, 1945: 133, fig. 47. Type locality: Morelia, Río Caquetá drainage, Colombia. Holotype: ANSP 71722.

Maximum length: 19 cm SL

Distribution: South America: Amazon River basin, in the Putumayo and Napo River basins.

Countries: Colombia, Ecuador

***Caquetaia spectabilis* (Steindachner, 1875)**

*Acara (Petenia) spectabilis* Steindachner, 1875: 96, pl. 4. Type locality: Amazonenstrom bei Gurupa und Obidos. Syntypes: 76430 (2).

Maximum length: 16.5 cm SL

Distribution: South America: Amazon River basin, along the Amazon River in Brazil from the Madeira and Uatumã River drainages to Gurupá, also in the Araguari River in Amapá, Brazil; in the Branco River drainage in Brazil and Guyana.

Countries: Brazil, Guyana

***Caquetaia umbrifera* (Meek & Hildebrand, 1913)**

*Cichlasoma umbriferum* Meek & Hildebrand, 1913: 88. Type locality: Rio Cupe, Cituro, Panama. Holotype: FMNH 7598.

Maximum length: 47.5 cm SL

Distribution: South America: Atrato and Magdalena River drainages in Colombia, Tuíra and Chucunaque River drainages in Panama.

Countries: Colombia, Panama

**CHAETOBANCHOPSIS**

*Chaetobanchopsis* Steindachner, 1875: 133. Type species: *Chaetobanchus orbicularis* Steindachner, 1875. Type by monotypy. Gender: feminine. Originally as *Chaetobanchus* (*Chaetobanchopsis*).

***Chaetobanchopsis australis* Eigenmann & Ward, 1907**

*Chaetobanchopsis australe* Eigenmann & Ward in Eigenmann, McAtee & Ward, 1907: 144, pl. 44 (fig. 1). Type locality: Bahía Negra [Paraguay]. Holotype: CAS 66954 [ex IU 10157].

Maximum length: 12 cm SL

Distribution: South America: Paraná River basin, in the Paraguay River in Brazil and Paraguay, and the Paraná River close to the mouth of the Paraguay River in Argentina; probably in the Amazon River basin in Bolivia and Brazil.

Countries: Argentina, Bolivia (?), Brazil, Paraguay

***Chaetobanchopsis orbicularis* (Steindachner, 1875)**

*Chaetobanchus orbicularis* Steindachner, 1875: 133, pl. 8 (fig. 1). Type locality: Amazonenstrom bei Para, Santarem, Gurupa, Rio Xingu bei Porto do Moz, Rio negro und R. Hyavary. Syntypes: NMW 32942-32948 (7), 32956-32960 (5), 32961-32964 (4), 58202 (2), 74045 (1).

*Chaetobanchopsis bitaeniatus* Ahl, 1936a: 139. Type locality: Amazonas. Syntypes: ZMB 32381 (2).

Maximum length: 12 cm SL

Distribution: South America: Amazon River basin, along the Amazon River from the mouth of the Negro River to Marajó Island, and in Amapá, Brazil.

Countries: Brazil

Common names: Acará cascudo (Brazil), Acará tucuma (Brazil)

**CHAETOBANCHUS**

*Chaetobanchus* Heckel, 1840: 401. Type species: *Chaetobanchus flavescens* Heckel, 1840. Type by subsequent designation by Eigenmann. Gender: masculine.

***Chaetobanchus flavescens* Heckel, 1840**

*Chaetobanchus flavescens* Heckel, 1840: 402. Type locality: Fluss Guaporè und die in der Nähe seiner Ufer gelegenen Moräste, auch am Ausflusse des Rio-negro. Syntypes: NMW 16172 (1), 16428 (1), 32922 (1), 32931 (1), 32932 (1), 32933 (1),

58856 (1), 76431 (1); SMF 5410 [ex NMW] (1).

*Chaetobanchus bruneus* Heckel, 1840: 405, pl. 29 (fig. 17-20). Type locality: Rio-negro, unweit von seiner Mündung. Holotype: NMW 32941.

*Centrarchus cyanopterus* Jardine, 1843: 165, pl. 16. Type locality: Essequibo.

*Chromys ucayalensis* Castelnau, 1855: 15, pl. 6 (fig. 2). Type locality: Sarayacu (Pérou). Holotype: MNHN A.9487.

*Chaetobanchus robustus* Günther, 1862: 310. Type locality: Guiana. Holotype: BMNH 1961.12.18: 1.

*Geophagus badiipinnis* Cope, 1872: 251, pl. 11 (fig. 1). Type locality: Ambyiacu River [=Ampiyacu River, Peru]. Holotype: ANSP 9038.

Maximum length: 21 cm SL

Distribution: South America: Amazon River basin, in Peru and Brazil; Orinoco River basin in Venezuela (Rio Apure); rivers of Guyana, Suriname, French Guiana, and Amapá State. Widespread.

Countries: Brazil, French Guiana, Guyana, Peru, Suriname, Venezuela

Common names: Acará prata (Brazil), Bujurqui vaso (Peru), Camarapaca (Guyana), Kamara paru (Suriname), Koemapari (Suriname), Krobié jonn (French Guiana), Kunapari (Suriname), Owroe wefi (Suriname), Paya (French Guiana), River patwa (Guyana)

***Chaetobanchus semifasciatus* Steindachner, 1875**

*Chaetobanchus semifasciatus* Steindachner, 1875: 130, pl. 7. Type locality: Amazonenstrom bei Obidos, Cudajas, Teffé; Rio Iça; Lago Hyanuary und Saraca bei Silva. Syntypes: NMW 10722 (1), 32966(1), 32967-32968 (2), 32969 (1), 32970 (1), 32971-32973 (3), 32974 (1), 79737 (1), RMNH 15478 (1).

Maximum length: 23 cm SL

Distribution: South America: Amazon River basin, along the Amazon-Solimões River from Tabatinga to Óbidos.

Countries: Brazil

**CICHLA**

*Cichla* Bloch & Schneider, 1801: 336. Type species: *Cichla ocellaris* Bloch & Schneider, 1801. Type by subsequent designation by Eigenmann & Bray (1894, p. 611). Gender: feminine.

*Acharnes* Müller & Troschel, 1849: 622. Type species: *Acharnes speciosus* Müller & Troschel, 1849. Type by monotypy. Gender: masculine.

***Cichla intermedia* Machado-Allison, 1971**

*Cichla intermedia* Machado-Allison, 1971: 473, fig. 7-9, 10a, 11b. Type locality: río Casiquiare, Territorio Federal Amazonas. Holotype: MBUCV V-6489.

Maximum length: 37.5 cm SL

Distribution: South America: Orinoco River basin, tributaries of the Orinoco River, and the Casiquiare River in Venezuela.

Countries: Venezuela

Common names: Pavón (Venezuela)

***Cichla monoculus* Spix & Agassiz, 1831**

*Cichla monoculus* Spix & Agassiz, 1831: 100, pl. 63. Type locality: mari Brasiliae. Syntype or possible holotype: MHNN 2188 (1).

*Cichla nigro-maculata* Jardine & Schomburgk, 1843: 147, pl. 7. Type locality: [Negro and Padauri Rivers]. No types known.

*Cichla toucoumarai* Castelnau, 1855: 17, pl. 10 (fig. 1). Type locality: le lac des Perles de la province de Goyaz; le Tocantins; l' Amazone. Syntypes: MNHN A.9490 (2).

*Cichla bilineatus* Nakashima, 1941: 73, fig. [3]. Type locality: los lagos y rios de Sudamérica tropical [cercañas del Puerto de Iquitos]. No types known.

Maximum length: 33 cm SL



Distribution: South America: Amazon River basin in Peru, Colombia and Brazil; Oyapock River basin.  
 Countries: Brazil, Colombia, Peru,  
 Remarks and references: Redescription based on Peruvian material in Kullander (1986: 51), with diagnosis, description, distribution and illustrations.  
 Common names: Kounanni (French Guiana), Toukounaré (French Guiana), Tucunare (Peru), Tucunaré-açu (Brazil), Tucunari (Peru)

***Cichla ocellaris* Bloch & Schneider, 1801**

*Cichla ocellaris* Bloch & Schneider, 1801: 340, pl. 66. Type locality: India orientali. Holotype: ZMB 2839.  
*Acharnes speciosus* Müller & Troschel, 1849: 622. Type locality: Küste; Mündung des Essequibo.  
 Maximum length: 41 cm SL  
 Distribution: South America: Guianan rivers from the Marowijne drainage in Suriname and French Guiana to the Essequibo drainage in Guyana.  
 Countries: French Guiana, Guyana, Suriname  
 Common names: Kounanni (French Guiana), Lukanani (Guyana), Pavón (Venezuela), Toukounaré (French Guiana), Tucunaré açu (Brazil)

***Cichla orinocensis* Humboldt, 1821**

*Cichla orinocensis* Humboldt in Humboldt & Valenciennes, 1821: 167, pl. 45 (fig. 3). Type locality: les rives de l'Orénoque et du Guainia ou Rio Negro. No types preserved.  
*Cichla argus* Valenciennes in Humboldt & Valenciennes, 1821: 169. Type locality: [Not stated]. Holotype: MNHN A.1042.  
 Maximum length: 61.7 cm SL  
 Distribution: South America: Orinoco River basin, in tributaries of the Orinoco River in Colombia and Venezuela; Amazon River basin, in the Negro River basin.  
 Countries: Brazil, Colombia, Venezuela  
 Remarks and references: Redescription based on Venezuelan material in Machado-Allison (1971), as *C. ocellaris*.

***Cichla temensis* Humboldt, 1821**

*Cichla temensis* Humboldt in Humboldt & Valenciennes, 1821: 169. Type locality: Temi. No types known.  
*Cichla atabapensis* Humboldt in Humboldt & Valenciennes, 1821: 168. Type locality: l'Orénoque; Rio Atabapo. No types known.  
*Cichla tucunare* Heckel, 1840: 409. Type locality: Rio-branco. Types in NMW, not found.  
*Cychla flavo-maculata* Jardine, 1843: 145, pl. 6. Type locality: Rio Negro and Padauri. No types known.  
*Cychla trifasciata* Jardine, 1843: 151, pl. 9. Type locality: Rio Negro; Padauri. No types known.  
*Cichla unitaeniatus* Magalhães, 1931: 225. Type locality: Rio Negro e do Purus. No types preserved.  
 Maximum length: 75 cm TL  
 Distribution: South America: Amazon River basin in the Negro and Uatumã River drainages; Orinoco River basin in tributaries of the Orinoco River in Venezuela and Colombia.  
 Countries: Brazil, Colombia, Venezuela  
 Remarks and references: Redescription based on Venezuelan material in Machado-Allison (1971).  
 Common names: Pavón (Venezuela), Tucunaré (Brazil)

**CICHLASOMA**

*Cichlasoma* Swainson, 1839: 230. Type species: *Labrus bimaculatus* Linnaeus, 1758. Under the plenary power of the International Commission on Zoological Nomenclature (2000: 131). Gender: neuter. As *Cichlaurus* on p. 173; Swain (1882: 284) acts as first reviser selecting *Cichlasoma* (see Bailey 1957: 303). Originally as *Plesiops* (*Cichlasoma*).  
*Cichlaurus* Swainson, 1839: 173. Type species: *Labrus bimacula-*

*tus* Linnaeus, 1758. Type by being a replacement name. Gender: masculine. Without species but clear from text that this was another name for *Cichlasoma* Swainson (1839: 230); Swain (1882: 284), acts as first reviser selecting *Cichlasoma*.

*Cichlosoma* Regan, 1905a: 61. Type species: *Labrus bimaculatus* Linnaeus, 1758. Type by being a replacement name. Gender: neuter.

**'*Cichlasoma*' *aguadae* Hubbs, 1936**

*Cichlasoma urophthalmus aguadae* Hubbs, 1936: 270, pl. 14 (fig. 7). Type locality: Aguada at Tuxpeña, interior Campeche, about 90 km. south, and 40 km. east of Champoton. Holotype: UMMZ 64477.

Maximum length: 9.5 cm SL  
 Distribution: North America: Atlantic slope, Tuxpeña, Mexico.  
 Countries: Mexico

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'*Cichlasoma*' *alborum* Hubbs, 1936**

*Cichlasoma urophthalmus alborum* Hubbs, 1936: 268, pl. 13 (fig. 3). Type locality: Rio Usumacinta at Montecristo, Tobasco, Mexico. Holotype: USNM 50501.

Maximum length: 18.6 cm SL  
 Distribution: North America: Atlantic slope, in the Usumacinta River, Mexico.  
 Countries: Mexico

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'*Cichlasoma*' *amarum* Hubbs, 1936**

*Cichlasoma urophthalmus amarum* Hubbs, 1936: 272, fig. 1. Type locality: A salt or brackish water lagoon on Mujeres Island, off the east coast of Yucatan, near the tip of the peninsula. Holotype: USNM 50504.

Maximum length: 15.8 cm SL  
 Distribution: North America: Caribbean coast, Isla Mujeres, off the eastern coast of Yucatán Peninsula.  
 Countries: Mexico

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

***Cichlasoma amazonarum* Kullander, 1983**

*Cichlasoma amazonarum* Kullander, 1983a: 115, pl. 5 (fig. 2). Type locality: Peru, depto Loreto, R. Ampiyacu system, little upstreams of Pebas, Sacarita del Tuyé, right bank tributary of the R. Ampiyacu, floating meadow near mouth. Holotype: NRM 39271.

Maximum length: 11.4 cm SL  
 Distribution: South America: Amazon River basin, from the Ucayali, Huallaga, Amazon and Yavarí River drainages in Peru, along the mainstream Amazon-Solimões River in Colombia and Brazil to the mouth; also in French Guyana and Amapá State.  
 Countries: Brazil, Colombia, French Guiana, Peru

Common names: Acará (Brazil), Bujurqui (Peru), Prapra (French Guiana)

***Cichlasoma araguaense* Kullander, 1983**

*Cichlasoma araguaense* Kullander, 1983a: 252, pl. 14 (fig. 1). Type locality: Brasil, est. Mato Grosso, R. Araguaia system,

small igarapé tributary to Igarapé Sangadina, tributary to the R. das Mortes, 1 km from Xavantina. Holotype: BMNH 1980.1.9.1. Maximum length: 9.2 cm SL  
Distribution: South America: Amazon River basin, in the Tocantins and upper Xingu River basins.  
Countries: Brazil

**'Cichlasoma' atromaculatum** Regan, 1912

*Cichlasoma (Parapetenia) atromaculatum* Regan, 1912: 507. Type locality: Tado, Rio San Juan, Choco, S.W. Colombia. Syntypes: BMNH 1910.7.11.83-88 (4 of 6).

Maximum length: 17 cm SL  
Distribution: South America: Atrato, San Juan, and Baudó River basins.

Countries: Colombia

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'Cichlasoma' beani** (Jordan, 1889)

*Heros beani* Jordan, 1889: 332. Type locality: Rio Presidio, Mazatlan. Syntypes: USNM 37145 (5), 37165 (2).

Maximum length: 30 cm TL

Distribution: North America: Pacific slope of Mexico.

Countries: Mexico

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

Common names: Mojarra verde (Mexico)

***Cichlasoma bimaculatum*** (Linnaeus, 1758)

*Labrus bimaculatus* Linnaeus, 1758: 285. Type locality: M. Mediterraneo [erroneous, probably from Surinam]. Holotype: NRM 7.

*Acara gronovii* Heckel, 1840: 361. Type locality: Flüsse in Surinam. Syntypes: NMW 33651-52 (2).

*Sparus filamentosus* Gronow in Gray, 1854: 60. Type locality: Surinami. No types known.

Maximum length: 12.3 cm SL

Distribution: South America: Orinoco River basin, in the Caroni River in Venezuela; Guianas, from the Essequibo River to the Sinnamary River; Amazon River basin, in the upper Branco River basin.

Countries: Brazil, French Guiana, Guyana, Suriname, Venezuela

Remarks and references: Redescribed by Kullander (1983a: 65), with bibliography, diagnosis, description, distribution and illustrations.

Common names: Acará (Brazil), Common patwa (Guyana), Congo patwa (Guyana), Krobja (Suriname), Owroe fisi (Suriname), Pra-pira (French Guiana)

**'Cichlasoma' bocourti** (Vaillant & Pellegrin, 1902)

*Neotroplus bocourti* Vaillant & Pellegrin, 1902: 85. Type locality: Lac d'Isabal (Guatemala). Holotype: MNHN 1894-241.

Maximum length: 20 cm SL

Distribution: Central America: Atlantic slope of Guatemala and Belize.

Countries: Belize, Guatemala

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

Common names: Chisel-tooth cichlid (Belize)

***Cichlasoma boliviense*** Kullander, 1983

*Cichlasoma boliviense* Kullander, 1983a: 165, pl. 8 (fig. 2). Type locality: Bolivia, depto Santa Cruz, R. Guaporé system, R. Uru-guaito, tributary of the R. Quizer, 13 km S San Xavier. Holotype: IRSNB 677.

Maximum length: 10.7 cm SL

Distribution: South America: Amazon River basin, in the Madre de Dios drainage in Peru, and the Mamoré and Guaporé River basins.

Countries: Bolivia, Peru

**'Cichlasoma' cienagae** Hubbs, 1936

*Cichlasoma urophthalmus cienagae* Hubbs, 1936: 271, pl. 12 (fig. 4). Type locality: Slightly brackish pool, 3 km. south of Progreso. Holotype: UMMZ 102135.

Maximum length: 11.3 cm SL

Distribution: North America: Atlantic slope, Progreso, Yucatán, Mexico.

Countries: Mexico

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'Cichlasoma' conchitae** Hubbs, 1936

*Cichlasoma urophthalmus conchitae* Hubbs, 1936: 274, pl. 12 (fig. 3). Type locality: Conchita Cenote, Merida. Holotype: UMMZ 102109.

Maximum length: 6.4 cm SL

Distribution: North America: Atlantic slope, Conchita Cenote, Merida, Yucatán, Mexico.

Countries: Mexico

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

***Cichlasoma dimerus*** (Heckel, 1840)

*Acara dimerus* Heckel, 1840: 351. Type locality: Cujabà-Fluss. Holotype: NMW 33620.

*Acara marginatus* Heckel, 1840: 350. Type locality: der Nähe von Cujabà. Holotype: NMW 33673.

?*Heros centralis* Holmberg, 1891: 183. Type locality: República Argentina, Provincia de Santiago del Estero. Type lost.

Maximum length: 11.7 cm SL

Distribution: South America: Paraná River basin, in the Paraguay River drainage in Brazil, Bolivia and Paraguay, and the Paraná River drainage of Argentina.

Countries: Argentina, Bolivia, Brazil, Paraguay

Common names: Acará (Brazil)

Remarks and references: Redescribed by Kullander (1983a:193), with bibliography, diagnosis, description, distribution and illustrations.

**'Cichlasoma' ericymba** Hubbs, 1938

*Cichlasoma urophthalmus ericymba* Hubbs, 1938: 284, pl. 2 (fig. 1). Type locality: San Bulha Cenote (or Cave) at Merida, Yucatán. Holotype: UMMZ 116091.

Maximum length: 12.2 cm SL

Distribution: North America: Atlantic slope, San Bulha cenote, Mexico.

Countries: Mexico

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

Common names: Mojarra de Bulha (Mexico)

**'*Cichlasoma*' *facetum* (Jenyns, 1842)**

*Chromis facetus* Jenyns, 1842: 104. Type locality: Maldonado, Rio Plata. Types in Cambridge University Museum.

*Heros autochthon* Günther, 1862: 299. Type locality: Brazil. Syntypes: (4) ?BMNH uncat. (1).

*Heros jenynsii* Steindachner, 1869: 149. Type locality: Montevideo. Syntypes: NMW 17324-27 (4), 58722 (1).

*Heros acaroides* Hensel, 1870: 54. Type locality: Bei Porto Alegre in stagnirenden Gewässern. Syntypes: ZMB 7455 (2).

Maximum length: 18 cm TL

Distribution: South America: Coastal drainages of Uruguay and Rio Grande do Sul State; Paraná River basin, lower part of Paraná River in Argentina.

Countries: Argentina, Brazil, Chile (introduced), Uruguay

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

Common names: Castañeta (Argentina), Chanchita (Argentina), Chanchito (Argentina), Palometa (Argentina), Palometa Negra (Argentina), Peine (Argentina)

**'*Cichlasoma*' *festae* (Boulenger, 1899)**

*Heros festae* Boulenger, 1899: 6. Type locality: Rio Guayas, Guayaquil. Syntypes: BMNH 1898.12.31.36 (1), MZUT 1504 (1).

Maximum length: 25 cm TL

Distribution: South America: Pacific drainages from Esmeraldas River in Ecuador to Tumbes River in Peru.

Countries: Ecuador, Peru

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'*Cichlasoma*' *geddesi* (Regan, 1905)**

*Herichthys geddesi* Regan, 1905a: 436. Type locality: Southern Mexico. Syntypes: BMNH 1880.4.7.40-45 (6).

Maximum length: 6.5 cm TL

Distribution: North America: Southern Mexico.

Countries: Mexico

Remarks and references: The validity of this taxon needs further research. The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'*Cichlasoma*' *gephyrum* Eigenmann, 1922**

*Cichlasoma ornatum gephyrum* Eigenmann, 1922: 205, pl. 31 (fig. 4). Type locality: Cordova, Rio Dagua.

Holotype: FMNH 58614 [ex CM 7639].

Maximum length: 12 cm SL

Distribution: South America: Dagua and San Juan Rivers on the Pacific slope of Colombia.

Countries: Colombia

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'*Cichlasoma*' *grammodes* Taylor & Miller, 1980**

*Cichlasoma grammodes* Taylor & Miller, 1980: 2, fig. 1. Type locality: Rio Grande de Chiapa, about 1 km above bridge be-

tween Tuxtla Gutiérrez and Chiapa de Corzo, lat.16°44'N, long. 93°02'W, elevation ca. 500 m, Chiapas, Mexico. Holotype: UMMZ 204200.

Maximum length: 20.3 cm SL

Distribution: North and Central America: Atlantic slope, in the Grijalva River basin from the Grande de Chiapa River drainage in Mexico to Lagartero River in Guatemala.

Countries: Guatemala, Mexico

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'*Cichlasoma*' *istlanum* (Jordan & Snyder, 1899)**

*Heros istlanus* Jordan & Snyder, 1899: 144, fig. 21. Type locality: Rio Ixtla at Puente de Ixtla, Rio Balsa basin, Morelos, Mexico. Holotype: SU 6150.

*Heros mento* Vaillant & Pellegrin, 1902: 88. Type locality: Rio Négro (Mexique sud). Syntypes: MNHN 94-283-286 (3), UMMZ 203326.

*Cichlasoma (Parapetenia) leonhard-schultzei* Ahl, 1935: 109. Type locality: Tlapa, Guerreiro, Mexico. Holotype: ZMB (not found).

*Cichlasoma istlana fusca* de Buen, 1946: 121. Type locality: Río Huámito en La Huacana. Syntypes: not located.

Maximum length: 30 cm TL

Distribution: North America: Pacific slope of Mexico.

Countries: Mexico

Remarks and references: Taylor & Miller (1980: 7) suggested that the type series of *Heros mento* may not have been from the Usamacinta River, and that it may be a synonym of *Cichlasoma istlanum*. The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

Common names: Mojarra (Mexico), Mojarra criolla (Mexico)

**'*Cichlasoma*' *mayorum* Hubbs, 1936**

*Cichlasoma urophthalmus mayorum* Hubbs, 1936: 277, pl. 13 (fig. 1). Type locality: Xtolok Cenote, Chichen Itza. Holotype: UMMZ 92098.

Maximum length: 9.6 cm SL

Distribution: North America: Atlantic slope, Xtolok Cenote, Chichen Itza, Yucatán, Mexico.

Countries: Mexico

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'*Cichlasoma*' *microlepis* Dahl, 1960**

*Cichlasoma microlepis* Dahl, 1960: 480, fig. on p. 481. Type locality: Pavarandó, Baudó. Holotype: ICNMHN 95.

Maximum length: 18.7 cm SL

Distribution: South America: Baudó River basin, Pacific slope of Colombia.

Countries: Colombia

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

Common names: Mojarra rosada (Colombia)

**'*Cichlasoma*' *octofasciatum* (Regan, 1903)**

*Heros octofasciatus* Regan, 1903a: 417, pl. 13 (fig. 1). Type local-

ity: Mexique. Holotype: MHNG 665.55 (1 of 9, 50 mm TL).  
*Cichlasoma hedricki* Meek, 1904: 208, fig. 66. Type locality: Obispo, Vera Cruz. Holotype: FMNH 4673.  
*Cichlosoma biocellatum* Regan, 1909b: 234. Type locality: Mañaos, Rio Negro [obviously incorrect]. Holotype: BMNH 1908.12.5.30.  
 Maximum length: 25 cm TL  
 Distribution: North and Central America: Atlantic slope from Papaloapán River (southern Mexico) to Ulua River (Honduras).  
 Countries: Belize, Guatemala, Honduras, Mexico  
 Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.  
 Common names: Jack dempsey (Belize), Riquiraqui (Mexico)

***Cichlasoma orientale* Kullander, 1983**

*Cichlasoma orientale* Kullander, 1983a: 177, pl. 9 (fig. 1). Type locality: Brasil, est. Ceará, R. Curu system, Pentecoste, reservoir. Holotype: USNM 258642.  
 Maximum length: 13.6 cm SL  
 Distribution: South America: Atlantic coast rivers of Ceará, Pernambuco, Rio Grande do Norte and Paraíba States.  
 Countries: Brazil  
 Common names: Acará (Brazil), Acará comum (Brazil)

***Cichlasoma orinocense* Kullander, 1983**

*Cichlasoma orinocense* Kullander, 1983a: 106, pl. 4 (fig. 2-3), 5 (fig. 1). Type locality: Colombia, depto Meta, R. Meta system, Laguna Mozambique, at shoreline on N side of lake. Holotype: ANSP 127364.  
 Maximum length: 10.9 cm SL  
 Distribution: South America: Orinoco River basin, in left bank tributaries of the Orinoco River from the Meta River in Colombia to about Ciudad Bolívar in Venezuela.  
 Countries: Colombia, Venezuela  
 Common names: Mochoroca (Venezuela)

***'Cichlasoma' ornatum* Regan, 1905**

*Cichlosoma ornatum* Regan, 1905a: 330. Type locality: Rio Durango. Syntypes: (3) BMNH.  
 Maximum length: 26 cm SL  
 Distribution: South America: Patia River basin in Colombia, Durango and St. Javier Rivers in Ecuador, all draining to the Pacific Ocean.  
 Countries: Colombia, Ecuador  
 Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

***Cichlasoma paranaense* Kullander, 1983**

*Cichlasoma paranaense* Kullander, 1983a: 241, pl. 13 fig. 1. Type locality: Brasil, Est. Mato Grosso do Sul, R. Paraná superior system, mun. Tres Lagoas, varzea on the left bank of the R. Sucuriú, at Fazenda Santa Luzia, near Urubupungá dam. Holotype: MZUSP 13927.  
 Maximum length: 7.4 cm SL  
 Distribution: South America: Paraná River basin, upper Paraná River drainage above Guaira.  
 Countries: Brazil

***'Cichlasoma' pearsei* (Hubbs, 1936)**

*Herichthys pearsei* Hubbs, 1936: 279, pl. 10 (fig. 2). Type locality: Río Champoton, Campeche, 7 leagues (34 km.) east of Champoton. Holotype: UMMZ 102212.  
 Maximum length: 20 cm SL

Distribution: North and Central America: Atlantic slope of southeastern Mexico and northern Guatemala.  
 Countries: Guatemala, Mexico  
 Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.  
 Common names: Zacatera (Mexico)

***Cichlasoma portalegrense* (Hensel, 1870)**

*Acara portalegrensis* Hensel, 1870: 52. Type locality: bei Porto Alegre in stagnirenden Gewässern. Lectotype: ZMB 25107, designated by Kullander (1983a: 211).  
 Maximum length: 10.3 cm SL  
 Distribution: South America: Laguna dos Patos basin and Tramandaí River basin in Rio Grande do Sul State.  
 Countries: Brazil  
 Remarks and references: Redescribed by Kullander (1983a: 209), with bibliography, diagnosis, description, distribution and illustrations.  
 Common names: Cará (Brazil)

***Cichlasoma pusillum* Kullander, 1983**

*Cichlasoma pusillum* Kullander, 1983a: 221, pl. 12 (fig. 1). Type locality: Paraguay, depto Alto Paraná, R. Alto Paraná system, Puerto Palma. Holotype: MHNG 2131.94.  
 Maximum length: 6.6 cm SL  
 Distribution: South America: Paraná River basin, Acaray River, Paraguay.  
 Countries: Paraguay  
 Remarks and references: Specimens identified by Kullander (1983a) from Uruguay, do not belong to this species.

***'Cichlasoma' ramsdeni* Fowler, 1938**

*Cichlasoma ramsdeni* Fowler, 1938: 145. Type locality: Arroyo Hondo, Jamaica, Yateras, Guantánamo, Cuba. Holotype: ANSP 68454.  
 Maximum length: 24 cm SL  
 Distribution: Caribbean Islands: Eastern Cuba Island.  
 Countries: Cuba  
 Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.  
 Common names: Joturo (Cuba)

***'Cichlasoma' salvini* (Günther, 1862)**

*Heros salvini* Günther, 1862: 294. Type locality: River de Santa Isabel; Lake Peten. Syntypes: (at least 5) BMNH 1864.1.26.67-69 (3), 1864.1.26.70-73 (4?).  
*Heros triagramma* Steindachner, 1864: 70, pl. 3 (fig. 2). Type locality: Central-Amerika. Holotype: NMW 76584.  
*Cichlasoma tenue* Meek, 1906: 94. Type locality: Achotal, Vera Cruz, Mexico. Holotype: FMNH 3781.  
 Maximum length: 22 cm SL  
 Distribution: North and Central America: Atlantic slope, from southern Mexico to Guatemala and Belize.  
 Countries: Belize, Guatemala, Mexico  
 Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.  
 Common names: Mango pinto (Mexico), Peine (Mexico), Yellow-belly cichlid (Belize)

***Cichlasoma sanctifranciscense* Kullander, 1983**

*Cichlasoma sanctifranciscense* Kullander, 1983a: 227, pl. 12 (fig. 2). Type locality: Brasil, Est. Bahia, R. São Francisco system, Lagoa Viana. Holotype: NMW 32714.

Maximum length: 7.9 cm SL

Distribution: South America: São Francisco River basin, also Parnaíba and Capivara River basins.

Countries: Brazil

**'Cichlasoma' stenozonum** Hubbs, 1936

*Cichlasoma urophthalmus stenozonum* Hubbs, 1936: 263. Type locality: Central America. Type based on description of *Heros urophthalmus*, Steindachner 1864: 66, p. 5 fig. 3.

Maximum length: 11 cm TL

Distribution: North America: Probably Atlantic slope of southern Mexico.

Countries: Mexico?

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

***Cichlasoma taenia*** (Bennett, 1831)

*Chromis taenia* Bennett, 1831: 112. Type locality: apud Trinidad. Holotype: BMNH 1852.9.13.123 [ex Zool. Soc.].

Maximum length: 12.8 cm SL

Distribution: South America: Trinidad Island, and adjacent north-eastern Venezuela.

Countries: Trinidad and Tobago, Venezuela

Remarks and references: Redescribed by Kullander (1983a: 90) with bibliography, diagnosis, description, distribution, and illustrations.

Common names: Brown coscarob (Trinidad and Tobago), Large coscarob (Trinidad and Tobago)

**'Cichlasoma' tembe** Casciotta, Gómez & Toresani, 1995

*Cichlasoma tembe* Casciotta, Gómez & Toresani, 1995: 194, fig. 1. Type locality: Argentina, arroyo Uruguay-í, above Salto del Uruguay-í, at 'Alto Paraná' company fields. Holotype: MLP 9059.

Maximum length: 13.4 cm SL

Distribution: South America: Paraná River basin, known only from the Arroyo Uruguay-í, above Salto del Uruguay-í, Misiones Province.

Countries: Argentina

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'Cichlasoma' trimaculatum** (Günther, 1867)

*Heros trimaculatus* Günther, 1867: 602. Type locality: Chiapas and Huamuchal. Syntypes: BMNH 1864.1.26.256 (?1).

*Cichlasoma mojarra* Meek, 1904: 217, fig. 71. Type locality: San Geronimo, Oaxaca. Holotype: FMNH 4719 [not 4718].

*Cichlasoma centrale* Meek, 1906: 94. Type locality: Caballo Blanco, Guatemala. Holotype: FMNH 5510.

*Cichlasoma gordon-smithi* Fowler, 1936: 529, fig. 44. Type locality: Small lake at Moco, 3050 feet elevation at foot of volcano of Atitlan. Holotype: ANSP 64153.

*Cichlasoma cajali* Alvarez & Gutierrez, 1953: 232, fig. 1. Type locality: Laguna de Coyuca, próxima al Puerto de Acapulco, Gro. Holotype: Originally in personal collection of J. Alvarez, searched in IPN, not found.

Maximum length: 36.5 cm SL

Distribution: North and Central America: Pacific slope rivers of the Pacific slope from Mexico to El Salvador.

Countries: El Salvador, Guatemala, Mexico

Remarks and references: *Heros trimaculatus* is described in more detail in Günther (1868: 461, pl. 76). The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

**'Cichlasoma' troschelii** (Steindachner, 1867)

*Heros Troschelii* Steindachner, 1867a: 64. Type locality: Mexico.

Syntypes: (2) not found at NMW.

Maximum length: 16 cm SL

Distribution: North America: Probably Atlantic slope of southern Mexico.

Countries: Mexico

Remarks and references: Species also appeared in more detail in Steindachner (1867b: 528, pl. 4). The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

Common names: Guapote (El Salvador), Mojarra (El Salvador)

**'Cichlasoma' ufermanni** (Allgayer, 2002)

*Vieja ufermanni* Allgayer, 2002a: 14, fig. p. 17. Type locality: Guatemala, Río Pucté, bassin du Río de La Pasión, sur la route de Florès à Sayache. Holotype: MNHN 2002-1090.

Maximum length: 25 cm SL

Distribution: North and Central America: Atlantic slope, in the Usumacinta River basin.

Countries: Guatemala, Mexico

**'Cichlasoma' urophthalmus** (Günther, 1862)

*Heros urophthalmus* Günther, 1862: 291. Type locality: Peten. Syntypes: (3) BMNH 1864.1.26.74-77.

*Cichlasoma urophthalmus trispilum* Hubbs, 1935: 18, pl. 4 (fig. 2). Type locality: Río San Pedro de Mártir, tributary of Río Usumacinta, at El Paso de los Caballos, Department of Petén, Guatemala. Holotype: UMMZ 95520.

Maximum length: 30 cm TL

Distribution: North and Central America: Atlantic drainages from Mexico to Nicaragua.

Countries: Belize, Guatemala, Honduras, Mexico, Nicaragua

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

Common names: Castarrica (Mexico), Mayan cichlid (Belize)

**'Cichlasoma' zebra** Hubbs, 1936

*Cichlasoma urophthalmus zebra* Hubbs, 1936: 275, pl. 13 (fig.2). Type locality: Xlaka Cenote, about 13 km. north of Merida. Holotype: UMMZ 102123.

Maximum length: 10.4 cm SL

Distribution: North America: Atlantic slope, Xlaka Cenote, Merida, Yucatán, Mexico.

Countries: Mexico

Remarks and references: The generic allocation of this species is still uncertain. It belongs to the tribe Heroini, but is maintained as an Incertae Sedis species of *Cichlasoma* pending a revision of heroin cichlids traditionally assigned to the cichlasomatin genus *Cichlasoma*.

***Species inquirenda***

*Chromys oblonga* Castelnau, 1855: 14. Type locality: Ie Tocantins (Province de Goyaz). Holotype: MNHN A.9485. [Species similar to *Cichlasoma facetum*, not found since in the Tocantins River drainage].

**CLEITHRACARA**

*Cleithracara* Kullander & Nijssen, 1989: 173. Type species: *Acara maronii* Steindachner, 1882. Type by original designation. Gender: feminine.

***Cleithracara maronii* (Steindachner, 1881)**

*Acara Maronii* Steindachner, 1881a: 141, pl. 2 (fig. 4). Type locality: Maroni-Fluss in Guiana. Holotype: NMW 33683.

Maximum length: 7.1 cm SL

Distribution: South America: Trinidad Island (impersistent); Orinoco River basin (delta), Guianan rivers from Barima River (Guyana) to Ouanary River (French Guyana).

Countries: French Guiana, Guyana, Suriname, Trinidad and Tobago, Venezuela

Remarks and references: Redescription in Kullander & Nijssen (1989: 175) with bibliography, diagnosis, description, distribution, and illustration.

**CRENICARA**

*Crenicara* Steindachner, 1875: 99. Type species: *Crenicara elegans* Steindachner, 1875. Type by monotypy. Gender: neuter.

*Crenacara* Regan, 1905c: 152. Type species: *Crenicara elegans* Steindachner, 1875. Type by being a replacement name (unjustified emendation of *Crenicara*). Gender: feminine.

***Crenicara latruncularium* Kullander & Staeck, 1990**

*Crenicara latruncularium* Kullander & Staeck, 1990: 163, figs. 1-3. Type locality: Brazil, state of Rondônia, Rio Mamoré drainage, Igarapé do 13 on road Palheta-Guajará-Mirim. Holotype: MZUSP 40290.

Maximum length: 8.9 cm SL

Distribution: South America: Amazon River basin, in the Guaporé and Mamoré (near Guajará-Mirim) drainages.

Countries: Bolivia, Brazil

***Crenicara punctulatum* (Günther, 1863)**

*Acara punctulata* Günther, 1863: 441. Type locality: Essequibo. Lectotype: BMNH 1864.1.21.26.

*Crenicara elegans* Steindachner, 1875: 99, pl. 1 (fig. 1). Type locality: Amazonenstrome bei Gurupa, Cudajas und Curupira. Syntypes: (several) NMW 33026 (1), 33031-35 (?), 76428 (3), 33027-33028 (?), 33029-30 (2).

*Aequidens madeirae* Fowler, 1913: 576, fig. 25. Type locality: Igarapé de Candelaria, tributary of the Madeira River, approximately two miles distant in Lat. S. 8°45', W. Long., 63°54', Brazil. Holotype: ANSP 39315.

*Aequidens hercules* Allen in Eigenmann & Allen, 1942: 394, pl. 22 (fig. 7). Type locality: creek, Rio Morona. Holotype: CAS 66926 [ex IU 17736].

Maximum length: 10 cm SL

Distribution: South America: Amazon River basin in Ecuador, Peru, Colombia and Brazil, in tributaries of the rivers Ucayali, Marañón, Solimões and Amazon from about the Pachitea River on the Ucayali River to about Gurupá; upper Mamoré River in Bolivia, and Madre de Dios River drainage in Peru; Essequibo River drainage in Guyana; Amapá Grande River in Amapá State.

Countries: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru  
Remarks and references: Redescription based on Peruvian material in Kullander (1986: 140), with bibliography, diagnosis, description, distribution, and illustrations. Compared with *C. latruncularium* in Kullander & Staeck (1990).

**CRENICICHLA**

*Crenicichla* Heckel, 1840: 416. Type species: *Crenicichla macrophthalmia* Heckel, 1840. Type by subsequent designation (Eigenmann & Bray 1894: 620). Gender: feminine.

*Batrachops* Heckel, 1840: 432. Type species: *Batrachops reticulata*

*Heckel*, 1840. Type by subsequent designation (Eigenmann & Bray 1894: 620). Gender: masculine.

*Boggiana* Perugia, 1897: 148. Type species: *Boggiana ocellata* Perugia, 1897. Type by original designation. Gender: feminine.

***Crenicichla acutirostris* Günther, 1862**

*Crenicichla acutirostris* Günther, 1862: 307. Type locality: River Cupai (800 miles from the sea) [Brazil, Cupari River]. Holotype: BMNH 1853.3.19.46.

Maximum length: 23 cm TL

Distribution: South America: Amazon River basin, in the Tapajós and Aripuanã River basins.

Countries: Brazil

***Crenicichla adpersa* Heckel, 1840**

*Crenicichla adpersa* Heckel, 1840: 421. Type locality: Rio-Guaporé. Types in NMW, not found.

*Crenicichla funebris* Heckel, 1840: 424. Type locality: Matogrosso am Rio-Guaporé. Syntypes: NMW 16406, 16451.

Maximum length: 29 cm SL

Distribution: South America: Amazon River basin, in the Guaporé River basin.

Countries: Brazil

Remarks and references: Ploeg 1991: 64 acted as first reviser in placing *C. funebris* in the synonymy of *C. adpersa*.

***Crenicichla albopunctata* Pellegrin, 1904**

*Crenicichla saxatilis* var. *albopunctata* Pellegrin, 1904: 374. Type locality: Guyane française (originally also Surinam, Guyane anglaise). Lectotype: MNHN 1898-59, designated by Ploeg (1986c: 224).

Maximum length: 14 cm SL

Distribution: South America: From the Approuague River in French Guiana to the Demerara River in Guyana.

Countries: French Guiana, Guyana, Suriname

Common names: Angoumot (French Guiana), Marane (French Guiana), Matalé (French Guiana), Mataouri (French Guiana), Ngoumote (French Guiana), Poisson-madame (French Guiana)

***Crenicichla alta* Eigenmann, 1912**

*Crenicichla alta* Eigenmann, 1912: 516, pl. 68 (fig. 3). Type locality: Gluck island. Holotype: FMNH 53777.

*Crenicichla pterogramma* Fowler, 1914: 281, fig. 20. Type locality: Rupununi River, British Guiana. Holotype: ANSP 39349.

*Crenicichla cardiostigma* Ploeg, 1991: 26, fig. 18. Type locality: Brazil, State of Roraima, Rio Negro system, Rio Branco, Igarapé Traíra Montante, at Cachoeira Peudas. Holotype: INPA 2916.

Maximum length: 16 cm SL

Distribution: South America: Amazon River basin, in the Branco River basin; Essequibo River basin.

Countries: Brazil, Guyana

***Crenicichla anthurus* Cope, 1872**

*Crenicichla anthurus* Cope, 1872: 252, pl. 10 (fig. 1). Type locality: the Ambyiacu [=Ampiyacu River, Peru]. Syntypes: ANSP 9074-76 (3).

Maximum length: 22.4 cm SL

Distribution: South America: Amazon River basin, in the Ucayali, Huallaga, Putumayo, Napo and Amazon River basins.

Countries: Ecuador, Peru

Remarks and references: Redescription in Kullander (1986: 117) with bibliography, diagnosis, description, distribution, and illustrations.

***Crenicichla brasiliensis* (Bloch, 1792)**

*Perca brasiliensis* Bloch, 1792: 84, pl. 110 (fig. 2). Type locality: Flüssen Brasiliens. No types known.

*Sparus Nhoquunda* La Cepède, 1802: 156. Type locality: [Flüssen Brasiliens]. No types known. Substitute name for *Perca brasil-*

*iensis* Bloch 1792.

Maximum length: 7.8 cm SL

Distribution: South America: Northeastern Brazil, states of Ceará, Paraíba, Rio Grande do Norte, and Pernambuco.

Countries: Brazil

Remarks and references: Species included in *Crenicichla menezesi* by Ploeg (1991: 46); additional research needed to clarify its diagnosis.

***Crenicichla britskii* Kullander, 1982**

*Crenicichla britskii* Kullander, 1982c: 642, fig. 7. Type locality: Brasil, Estado de São Paulo, mun. Promissão, R. Tietê system, km 143 on BR-153, above road in small brook. Holotype: MZUSP 16004.

Maximum length: 11.8 cm SL

Distribution: South America: Paraná River basin, in the Paraná River drainage upstream from Guaíra.

Countries: Brazil

***Crenicichla cametana* Steindachner, 1911**

*Crenicichla cametana* Steindachner, 1911: 369. Type locality: Tocantins bei Cametá. Lectotype: NMW 32816, designated by Ploeg (1986b: 63).

*Crenicichla astroblepa* Ploeg, 1986b: 58, pl. 3 (upper & middle). Type locality: Tucuruí, residual pools downstream of stowage, after closing of the stowage. Holotype: INPA 856.

Maximum length: 18.3 cm SL

Distribution: South America: Amazon River basin, in the Tocantins River basin.

Countries: Brazil

***Crenicichla celidochilus* Casciotta, 1987**

*Crenicichla celidochilus* Casciotta, 1987: 883, fig. 1. Type locality: Arroyo de la Invernada, Picada de la Negra Muerta, Dpto. Artigas, Uruguay. Holotype: ZVC P94.

Maximum length: 18.1 cm SL

Distribution: South America: Uruguay River drainage, in tributaries of the middle and upper Uruguay River basin.

Countries: Argentina (?), Brazil, Uruguay

Remarks and references: Redescription in Lucena & Kullander (1992: 107), with bibliography, diagnosis, description, distribution and illustrations.

***Crenicichla cincta* Regan, 1905**

*Crenicichla brasiliensis fasciata* Pellegrin, 1904: 383, fig. 42 (3). Type locality: Marajó (Brésil). Holotype: MNHN 1902-95.

*Crenicichla cincta* Regan, 1905c: 166. Type locality: [Marajó (Brésil)]. Holotype: MNHN 1902-95. Type by being a replacement name. Replacement name for *Crenicichla brasiliensis fasciata* Pellegrin, preoccupied in *Crenicichla* by *Cychla fasciata* Jardine, 1843.

Maximum length: 19.5 cm SL

Distribution: South America: Amazon River basin in Brazil, Peru, and Ecuador, from the Napo River to Marajó Island.

Countries: Brazil, Ecuador, Peru

Common names: Añashua (Peru)

Remarks and references: Redescription based on Peruvian material in Kullander (1986: 94).

***Crenicichla compressiceps* Ploeg, 1986**

*Crenicichla compressiceps* Ploeg, 1986b: 63, pl. 4 (upper). Type locality: rapids downstream of Jatobal. Holotype: INPA 855.

Maximum length: 5.5 cm SL

Distribution: South America: Amazon River basin, in the lower Tocantins River basin.

Countries: Brazil

***Crenicichla coppenamensis* Ploeg, 1987**

*Crenicichla coppenamensis* Ploeg, 1987: 77, pl. 1 (second & mid-

dle). Type locality: Surinam, left bank tributary to Linker Coppename River. Holotype: ZMA 107841.

Maximum length: 17.9 cm SL

Distribution: South America: Coppename and Saramacca River basins.

Countries: Suriname

***Crenicichla cyanonotus* Cope, 1870**

*Crenicichla cyanonotus* Cope, 1870: 569. Type locality: Upper Maraíon, near Pebas. Holotype: ANSP 9078.

Maximum length: 14.8 cm SL

Distribution: South America: Amazon River basin, in Peru and western Brazil.

Countries: Brazil, Peru

Remarks and references: Redescription in Kullander (1986: 89) with bibliography, diagnosis, description, distribution, and illustrations.

***Crenicichla cyclostoma* Ploeg, 1986**

*Crenicichla cyclostoma* Ploeg, 1986b: 65, pl. 4 (middle & lower). Type locality: Tucuruí, residual pools downstream of stowage, after closing the stowage. Holotype: INPA 854.

Maximum length: 9.6 cm SL

Distribution: South America: Amazon River basin, in the lower Tocantins River basin.

Countries: Brazil

***Crenicichla frenata* Gill, 1858**

*Crenicichla frenata* Gill, 1858: 386. Type locality: [western portion of the Island of Trinidad]. Holotype: USNM 1111.

Maximum length: 11.6 cm SL

Distribution: South America: Trinidad Islands and northeastern Venezuela.

Countries: Trinidad and Tobago, Venezuela

***Crenicichla gaucho* Lucena & Kullander, 1992**

*Crenicichla gaucho* Lucena & Kullander, 1992: 137, fig. 29. Type locality: Brazil, State of Rio Grande do Sul, arroio Passo do Alto, near Mineral, município of São Nicolau. Holotype: MCP 14328.

Maximum length: 12.7 cm SL

Distribution: South America: Uruguay River drainage, in the tributaries of the middle Uruguay River (Comandá, Ijuí, and Piratinim Rivers).

Countries: Brazil

***Crenicichla geayi* Pellegrin, 1903**

*Crenicichla geayi* Pellegrin, 1903: 123. Type locality: Vénézuéla. Holotype: MNHN 1898-47.

Maximum length: 13 cm SL

Distribution: South America: Orinoco River basin, in the Portuguesa River basin.

Countries: Venezuela

***Crenicichla haroldoi* Luengo & Britski, 1974**

*Crenicichla haroldoi* Luengo & Britski, 1974: 554, fig. 1. Type locality: río Paraná frente a Jupιά, Mato Grosso. Holotype: MZUSP 4022b.

Maximum length: 9.8 cm SL

Distribution: South America: Paraná River basin, in the upper Paraná River basin.

Countries: Brazil

***Crenicichla heckeli* Ploeg, 1989**

*Crenicichla heckeli* Ploeg, 1989: 163, fig. 1. Type locality: Brasilien, Staat Pará, Trombetas-System, Cachoeira Porteira. Holotype: IRSNB 768.

Maximum length: 5.2 cm SL

Distribution: South America: Amazon River basin, in the Trombetas River close to Cachoeira Porteira.

Countries: Brazil

***Crenicichla hemera* Kullander, 1990**

*Crenicichla hemera* Kullander, 1990a: 214, fig. 1. Type locality: Brazil, State of Mato Grosso, Rio Aripuanã drainage, headwater stream tributary to the Rio Cinta Larga where crossed by the road BR-174, 41 km from Juína. Holotype: MZUSP 40292.

*Crenicichla guentheri* Ploeg, 1991: 33, fig. 30. Type locality: Brazil, State of Mato Grosso, Madeira River system, Rio Aripuanã, Igarapé do Aeropuerto, Humboldt. Holotype: INPA 2884.

Maximum length: 9.7 cm SL

Distribution: South America: Amazon River basin, in the upper Aripuanã River in the Madeira River drainage.

Countries: Brazil

***Crenicichla hummelincki* Ploeg, 1991**

*Crenicichla hummelincki* Ploeg, 1991: 35, fig. 33. Type locality: Brazil, State of Pará, Trombetas River system, Igarapé Jaramacuru, tributary to Rio Cuminá. Holotype: MZUSP 40135.

Maximum length: 10.8 cm SL

Distribution: South America: Amazon River basin, in the upper Trombetas River basin.

Countries: Brazil

***Crenicichla igara* Lucena & Kullander, 1992**

*Crenicichla igara* Lucena & Kullander, 1992: 125, fig. 23. Type locality: Brazil, State of Santa Catarina, município Campos Novos, rio Canoas at Passo do Canoas, (road SC-458), on the road Tupitinga-Celso Ramos. Holotype: MCP 12906.

Maximum length: 22.3 cm SL

Distribution: South America: Uruguay River drainage, in tributaries of the upper Uruguay River.

Countries: Brazil

***Crenicichla iguassuensis* Haseman, 1911**

*Crenicichla iguassuensis* Haseman, 1911: 352, pl. 61. Type locality: Porto União da Victoria, Rio Iguassú. Holotype: FMNH 54159.

Maximum length: 14 cm SL

Distribution: South America: Paraná River basin, in the Iguaçu River basin.

Countries: Brazil

***Crenicichla inpa* Ploeg, 1991**

*Crenicichla inpa* Ploeg, 1991: 37, fig. 35. Type locality: Brazil, State of Amazonas, Rio Amazonas system, Ilha do Careiro. Holotype: INPA 1427.

Maximum length: 16.8 cm SL

Distribution: South America: Amazon River basin, reported from a large area of the Amazon River basin in Brazil.

Countries: Brazil

***Crenicichla isbrueckeri* Ploeg, 1991**

*Crenicichla isbrueckeri* Ploeg, 1991: 39, fig. 37. Type locality: Brazil, State of Mato Grosso, Madeira River system, Rio Aripuanã, 3 km from Cachoeira de Dardanelos Humboldt (59°27'W, 10°10'S). Holotype: INPA 2883.

Maximum length: 9.5 cm SL

Distribution: South America: Amazon River basin, in the Aripuanã River basin.

Countries: Brazil

***Crenicichla jaguarensis* Haseman, 1911**

*Crenicichla jaguarensis* Haseman, 1911: 351, pl. 60. Type locality: Jaguará, Rio Grande of the Paraná, Minas. Holotype: FMNH 54157.

Maximum length: 14.8 cm SL

Distribution: South America: Paraná River basin, in the upper Paraná River basin.

Countries: Brazil

***Crenicichla jegui* Ploeg, 1986**

*Crenicichla jegui* Ploeg, 1986b: 67, pl. 5 (upper). Type locality: Itupiranga. Holotype: INPA 857.

Maximum length: 20 cm SL

Distribution: South America: Amazon River basin, in the lower Tocantins basin.

Countries: Brazil

***Crenicichla johanna* Heckel, 1840**

*Crenicichla johanna* Heckel, 1840: 425. Type locality: Rio-Guaporè. Holotype: NMW 16431.

*Cychna fasciata* Jardine, 1843: 141, pl. 4. Type locality: No locality given [probably Guyana]. No types known. Primary homonym of *Cychna fasciata* Swainson, 1839 = *Badis badis* Hamilton, 1822.

*Crenicichla obtusirostris* Günther, 1862: 305. Type locality: River Capin. Holotype: BMNH 1849.11.8.57.

*Crenicichla johanna carsevennensis* Pellegrin, 1905: 168. Type locality: Entre les rivières Carsevenne et Cachipour (contesté franco-brésilien). Holotype: MNHN 1899-113.

Maximum length: 28.3 cm SL

Distribution: South America: Amazon River basin, widespread in Peru, Brazil and Bolivia; in the Orinoco basin in Colombia and Venezuela; Essequibo drainage in Guyana; Oyapock and Approuague drainages in French Guiana; Amapá State.

Countries: Bolivia, Brazil, Colombia, French Guiana, Guyana, Peru, Venezuela

Remarks and references: Redescription based on Peruvian material in Kullander (1986: 98) with bibliography, diagnosis, description, distribution, and illustrations. Ploeg (1991: 68) claimed that *C. johanna* is based on more than one specimen, and designated the only specimen found at NMW as lectotype (NMW 16431).

Common names: Angoumot (French Guiana), Marane (French Guiana), Matalé (French Guiana), Mataouri (French Guiana), Ngoumote (French Guiana), Poisson-madame (French Guiana)

***Crenicichla jupiaensis* Britski & Luengo, 1968**

*Crenicichla jupiaensis* Britski & Luengo, 1968: 171, fig. 1. Type locality: Rio Paraná, no Salto de Urubupungá, entre os Estados de Mato Grosso e São Paulo. Holotype: MZUSP 4363.

Maximum length: 8.2 cm SL

Distribution: South America: Paraná River basin, in the upper Paraná River basin.

Countries: Brazil

***Crenicichla jurubi* Lucena & Kullander, 1992**

*Crenicichla jurubi* Lucena & Kullander, 1992: 128, fig. 25. Type locality: Brazil, State of Rio Grande do Sul, rio Marombas at bridge Irineu Bornhausen. Holotype: MCP 14326.

Maximum length: 17.8 cm SL

Distribution: South America: Uruguay River basin, in tributaries of the upper Uruguay River.

Countries: Brazil

***Crenicichla labrina* (Spix & Agassiz, 1831)**

*Cychna labrina* Spix & Agassiz, 1831: 99, pl. 62 (fig. 1, as *Cychna labrina*). Type locality: mare Brasiliae. Lectotype: MHNN 599, designated by Ploeg (1986b: 69).

Maximum length: 16 cm SL

Distribution: South America: Amazon River basin, in the lower Tocantins River basin.

Countries: Brazil

***Crenicichla lacustris* (Castelnau, 1855)**

*Cychna lacustris* Castelnau, 1855: 19, pl. 8 (fig. 3). Type locality: Dique, ou étang près de Bahia. Syntypes: MNHN A9501 (2).

*Crenicichla dorsocellata* Haseman, 1911: 355, pl. 63. Type local-



ity: Campos, R. Parahyba. Holotype: FMNH 54155.  
*Crenicichla biocellata* Ihering, 1914: 333. Type locality: Rio Doce, Est. do Espírito Santo. Holotype: MZUSP 1167.  
 Maximum length: 29 cm SL  
 Distribution: South America: Coastal drainages of southeastern and eastern Brazil.  
 Countries: Brazil

***Crenicichla lenticulata* Heckel, 1840**

*Crenicichla lenticulata* Heckel, 1840: 419. Type locality: Rio-negro, bei Marabitanas. Holotype: NMW 59417.  
*Crenicichla ornata* Regan, 1905c: 167, pl. 15 (fig. 2). Type locality: Rio Negro. Lectotype: BMNH 1893.4.24.6, designated by Ploeg (1991: 71).  
 Maximum length: 30 cm SL  
 Distribution: South America: Amazon River basin, in the Negro River basin.  
 Countries: Brazil  
 Remarks and references: Redescription in Ploeg (1991: 70). Ploeg places the type locality in Venezuela, Orinoco River system, although all known evidence suggests that it is the Negro River. The correct catalog number for the lectotype is BMNH 1893.4.24.6 (not 1893.2.24.6 as stated in Ploeg, 1970: 70, fig. 81) and the correct number for the paralectotypes is BMNH 1893.4.24: 7-8 (not 1893.4.34: 7-8, as stated in Ploeg, 1970: 72).

***Crenicichla lepidota* Heckel, 1840**

*Crenicichla lepidota* Heckel, 1840: 429, pl. 30 (fig. 13). Type locality: Rio-Guaporè. Lectotype: NMW 33101, designated by Ploeg (1991: 42).  
*Crenicichla edithae* Ploeg, 1991: 29, fig. 24. Type locality: Paraguay, Río Paraguai system, Arroyo Itabu-Guazu. Holotype: MHNG 2028.45.  
 Maximum length: 18 cm SL  
 Distribution: South America: Paraná River basin, widespread in the Paraguay River drainage in Brazil and Paraguay and the lower Paraná (below Guaíra) in Paraguay and Argentina, and also along the coast of Rio Grande do Sul State. Also found in the middle and lower Uruguay River in Brazil and Uruguay. Amazon River basin in the Guaporé River drainage in Brazil and Bolivia.  
 Countries: Argentina, Bolivia, Brazil, Paraguay, Uruguay  
 Remarks and references: Species monograph in Kullander (1982c); description of material from Uruguay River in Lucena & Kullander (1992: 101).  
 Common names: Guensa-verde (Brazil)

***Crenicichla lucius* Cope, 1870**

*Crenicichla lucius* Cope, 1870: 570. Type locality: Perú, R. Ucayali drainage: Loreto, Quebrada Abrahancillo, left bank tributary of R. Aucayacu, 4 km S. Supay Cocha [originally tributaries of the Upper Marañon, in Ecuador]. Neotype: NRM 25662, designated by Kullander (1986: 116).  
 Maximum length: 16.8 cm SL  
 Distribution: South America: Amazon River basin, in Peru and western Brazil.  
 Countries: Brazil, Peru  
 Remarks and references: Redescription in Kullander (1986: 112), with bibliography, diagnosis, description, distribution, and illustrations.

***Crenicichla lugubris* Heckel, 1840**

*Crenicichla lugubris* Heckel, 1840: 422. Type locality: Rio-negro. Holotype: NMW 61148.  
*Cychla ? rutilans* Jardine, 1843: 142, pl. 5. Type locality: Rio Branco. No types known.  
 Maximum length: 24 cm SL  
 Distribution: South America: Amazon River basin, in the Branco, Negro, and Uatumã Rivers in Brazil; Essequibo River and

Branco River in Guyana; Corantijn River in Suriname.  
 Countries: Brazil, Guyana, Suriname

***Crenicichla macrophthalmia* Heckel, 1840**

*Crenicichla macrophthalmia* Heckel, 1840: 427, pl. 30 (fig. 9).  
 Type locality: Rio-negro. Syntypes: NMW 33082 (1) and NMW 77820 (1)  
*Crenicichla santaremensis* Haseman, 1911: 354, pl. 62 (fig. 1).  
 Type locality: lagoon along the margin of the Amazon, three miles above Santarém. Holotype: FMNH 54153.  
 Maximum length: 20 cm SL  
 Distribution: South America: Amazon River basin, in the Negro, Uatumã, Tapajós, Xingu, and Trombetas River basins.  
 Countries: Brazil  
 Common names: Jacundá (Brazil)

***Crenicichla marmorata* Pellegrin, 1904**

*Crenicichla brasiliensis marmorata* Pellegrin, 1904: 383, fig. 42 (4). Type locality: [No locality]. Holotype: MNHN A.9496.  
 Maximum length: 28 cm SL  
 Distribution: South America: Amazon River basin, in southern tributaries of the Amazon River in Brazil, from the Madeira River to Tocantins River.  
 Countries: Brazil

***Crenicichla menezesi* Ploeg, 1991**

*Crenicichla menezesi* Ploeg, 1991: 45, fig. 47. Type locality: Brazil, State of Maranhão, Caieira. Holotype: NMW 33292.  
 Maximum length: 14.6 cm SL  
 Distribution: South America: Rivers of the state of Maranhão State.  
 Countries: Brazil

***Crenicichla minuano* Lucena & Kullander, 1992**

*Crenicichla minuano* Lucena & Kullander, 1992: 116, fig. 12.  
 Type locality: Brazil, State of Rio Grande do Sul, rio Comandá, on the road Porto Xavier-Porto Lucena. Holotype: MCP 14321.  
 Maximum length: 17.2 cm SL  
 Distribution: South America: Uruguay River drainage, in tributaries of the middle an upper Uruguay River.  
 Countries: Brazil

***Crenicichla missioneira* Lucena & Kullander, 1992**

*Crenicichla missioneira* Lucena & Kullander, 1992: 113, fig. 9.  
 Type locality: Brazil, State of Rio Grande do Sul, rio Comandá, on the road Porto Xavier-Porto Lucena. Holotype: MCP 14324.  
 Maximum length: 20.9 cm SL  
 Distribution: South America: Uruguay River drainage, in tributaries of the upper and middle Uruguay River basin.  
 Countries: Brazil

***Crenicichla mucuryna* Ihering, 1914**

*Crenicichla mucuryna* Ihering, 1914: 335. Type locality: Theophilus Ottoni, rio Todos os Santos, affl. do Mucury, Est. de Minas Geraes. Lectotype: MZUSP 2526, designated by Britski (1969: 210).  
 Maximum length: 11.3 cm SL  
 Distribution: South America: Mucuri River basin in eastern coast of Brazil.  
 Countries: Brazil

***Crenicichla multispinosa* Pellegrin, 1903**

*Crenicichla multispinosa* Pellegrin, 1903: 124 [5]. Type locality: Guyane française. Lectotype: MNHN 9542, designated by Ploeg (1986c: 230).  
 Maximum length: 22.5 cm SL  
 Distribution: South America: Maroni and Mana River basins of Suriname and French Guiana.  
 Countries: French Guiana, Suriname

Common names: Angoumot (French Guiana), Marane (French Guiana), Matalé (French Guiana), Mataouri (French Guiana), Poson madanm (French Guiana)

***Crenicichla nickeriensis* Ploeg, 1987**

*Crenicichla nickeriensis* Ploeg, 1987: 81, pl. 1 (fourth & lower). Type locality: Surinam, right bank tributary to Nickerie River, 12 km W.S.W. of Stondansie Fall. Holotype: ZMA 107843.

Maximum length: 19.1 cm SL

Distribution: South America: Nickerie and Corantijn River basins.

Countries: Suriname

***Crenicichla niederleinii* (Holmberg, 1891)**

*Acharnes niederleinii* Holmberg, 1891: 181. Type locality: Rio Pequiri, en Misiones, y en otros inmediatos. Holotype: Museo de la Escuela Normal de Profesoras de la Capital, lost.

Maximum length: 23.5 cm SL

Distribution: South America: Paraná River basin, in tributaries of the upper Paraná River in Argentina, Brazil and Paraguay.

Countries: Argentina, Brazil, Paraguay

Remarks and references: Brief review with illustration in Kullander (1981b: 684).

***Crenicichla notophthalmus* Regan, 1913**

*Crenicichla notophthalmus* Regan, 1913a: 502. Type locality: the Amazon at Manaus. Lectotype: BMNH 1913.4.15.4, designated by Ploeg (1989: 166).

Maximum length: 7.6 cm SL

Distribution: South America: Amazon River basin, in the lower Negro River basin.

Countries: Brazil

***Crenicichla pellegrini* Ploeg, 1991**

*Crenicichla pellegrini* Ploeg, 1991: 48, fig. 53. Type locality: Brazil, State of Mato Grosso, Madeira River system, Rio Aripuanã, Igarapé do Porto. Holotype: INPA 2885.

Maximum length: 15.7 cm SL

Distribution: South America: Amazon River basin, in the Aripuanã River basin.

Countries: Brazil

***Crenicichla percna* Kullander, 1991**

*Crenicichla percna* Kullander, 1991a: 356, fig. 4. Type locality: Brazil, State of Pará, Rio Xingu drainage, Cachoeira do Espelho. Holotype: MZUSP 36880.

Maximum length: 22 cm SL

Distribution: South America: Amazon River basin, in the Xingu River at Cachoeira do Espelho and Altamira, Brazil.

Countries: Brazil

***Crenicichla phaiospilus* Kullander, 1991**

*Crenicichla phaiospilus* Kullander, 1991a: 353, fig. 1. Type locality: Brazil, State of Pará, Rio Xingu drainage, município de São Felix do Xingu, Rio Fresco, Aldeia Gorotire. Holotype: MZUSP 35997.

Maximum length: 24 cm SL

Distribution: South America: Amazon River basin, in the Xingu River drainage at Cachoeira von Martius and Gorotire.

Countries: Brazil

***Crenicichla prenda* Lucena & Kullander, 1992**

*Crenicichla prenda* Lucena & Kullander, 1992: 140, fig. 32. Type locality: Brazil, State of Santa Catarina, rio Jacutinga, on the road BR 283 Seara-Concórdia. Holotype: MCP 13016.

Maximum length: 8.7 cm SL

Distribution: South America: Upper Uruguay River basin.

Countries: Brazil

***Crenicichla proteus* Cope, 1872**

*Crenicichla proteus* Cope, 1872: 252. Type locality: Ambyiacu

River [=Ampiyacu River, Peru]. Lectotype: ANSP 9050, designated by Kullander (1986: 110).

*Crenicichla proteus argynnis* Cope, 1872: 253. Type locality: Ambyiacu River [=Ampiyacu River, Peru]. Syntypes: ANSP 9059 (1), 14375 (1).

*Batrachops nemopterus* Fowler, 1940: 283, fig. 64. Type locality: Ucayali River basin, Contamana, Peru. Holotype: ANSP 68684.

*Crenicichla nijsseni* Ploeg, 1991: 47, fig. 41. Type locality: Brazil, State of Acre, Rio Japurá system, Rio Branco, Açude Carlos Simão. Holotype: MZUSP 40163.

Maximum length: 15.5 cm SL

Distribution: South America: Amazon River basin, in the Napo and Putumayo drainages in Ecuador, in the Ucayali-Amazon drainage from Chicosa to Pebas in Peru, and upper Purus basin.

Countries: Brazil, Ecuador, Peru

Remarks and references: Redescription in Kullander (1986: 107), with bibliography, diagnosis, description, distribution, and illustrations. Synonymy of *Crenicichla nijsseni* based on unpublished observation (Kullander, MS).

***Crenicichla punctata* Hensel, 1870**

*Crenicichla punctata* Hensel, 1870: 57. Type locality: aus dem Guahyba bei Porto Alegre [originally also: Bächen des Urwaldes.. Waldbächen von der deutschen Colonie Sta. Cruz in Rio Grande do Sul]. Lectotype: ZMB 7459, designated by Lucena & Azevedo (1989: 90).

*Crenicichla polysticta* Hensel, 1870: 58. Type locality: Rio Cadea des Urwaldes von Rio Grande do Sul. Syntypes: ZMB 7461(1), uncat. (3) not found).

Maximum length: 22.3 cm SL

Distribution: South America: Laguna dos Patos and Lagoa Mirim basins in Rio Grande do Sul State and Uruguay.

Countries: Brazil, Uruguay

Remarks and references: Species revised by Lucena & Azevedo (1989).

***Crenicichla pydanielae* Ploeg, 1991**

*Crenicichla pydanielae* Ploeg, 1991: 52, fig. 57. Type locality: Brazil, State of Pará, Trombetas River system, Igarapé at km 10 of BR 163 at level of bridge. Holotype: INPA 3078.

Maximum length: 17.8 cm SL

Distribution: South America: Amazon River basin, in the Trombetas River drainage above Cachoeira Porteira.

Countries: Brazil

***Crenicichla regani* Ploeg, 1989**

*Crenicichla regani* Ploeg, 1989: 164, fig. 2. Type locality: Brasilien, Staat Pará, Trombetas-System, linksseitiger Zufluss bei Cachoeira Porteira. Holotype: IRSNB 766.

Maximum length: 7.9 cm SL

Distribution: South America: Amazon River basin, in the Trombetas River at Cachoeira Porteira.

Countries: Brazil

***Crenicichla reticulata* (Heckel, 1840)**

*Batrachops reticulatus* Heckel, 1840: 433, pl. 30 (fig. 17). Type locality: Rio-negro. Holotype: NMW 35783.

*Crenicichla elegans* Steindachner, 1881b: 15. Type locality: Hoch-Peru. Syntypes: NMW 32835 (2).

*Batrachops punctulatus* Regan, 1905c: 156, pl. 14 (fig. 1). Type locality: R. Essequibo. Holotype: BMNH 1864.1.21.24.

Maximum length: 21.6 cm SL

Distribution: South America: Amazon River basin in Colombia, Peru, and Brazil; Essequibo River in Guyana.

Countries: Brazil, Colombia, Guyana, Peru

Common names: Añashua (Peru), Jacundá (Brazil), Peixe sabão (Brazil)

***Crenicichla rosemariae* Kullander, 1997**

*Crenicichla rosemariae* Kullander, 1997b: 280, fig. 1. Type locality: Brazil, State of Pará, Rio Xingu drainage, Córrego do Gato. Holotype: MZUSP 40300.

Maximum length: 24.4 cm SL

Distribution: South America: Amazon River basin, upper Xingu River drainage (Suiá-Missu River).

Countries: Brazil

Common names: Rubanana (Brazil)

***Crenicichla santosi* Ploeg, 1991**

*Crenicichla santosi* Ploeg, 1991: 53, fig. 59. Type locality: Brazil, State of Rondônia, Rio Madeira system, Rio Machado, Jiparaná: Rio Urupa. Holotype: INPA 2889.

Maximum length: 12 cm SL

Distribution: South America: Amazon River basin, in the Machado River of Rondônia State.

Countries: Brazil

***Crenicichla saxatilis* (Linnaeus, 1758)**

*Sparus saxatilis* Linnaeus, 1758: 278. Type locality: Surinam. Lectotype: NRM 5583, designated by Ploeg (1986a: 49).

*Sparus biocellatus* Walbaum, 1792: 298. Type locality: Surinam. Holotype: Based on Gronovius (1763, *Sparus rufescens*; 1754, *Sparus rostro plagiplateo*); represented by BMNH 1853.11.2.24.

*Sparus Pavo* La Cépède, 1802: 49, 151. Type locality: [Suriname]. Unnecessary replacement name for *Sparus saxatilis* Linnaeus.

*Scarus pavoninus* Gray, 1854: 63. Type locality: Surinam. Holotype: BMNH 1853.11.2.24.

Maximum length: 20 cm SL

Distribution: South America: Atlantic coast drainages of Suriname, French Guiana, Guyana, Venezuela and Trinidad Island.

Countries: French Guiana, Guyana, Suriname, Trinidad and Tobago, Venezuela

Common names: Angoumot (French Guiana), Booto (Suriname), Marann (French Guiana), Matalé (French Guiana), Mataouri (French Guiana), Ngoumote (French Guiana), Poisson-madame (French Guiana)

***Crenicichla scottii* (Eigenmann, 1907)**

*Batrachops scottii* Eigenmann, 1907: 455, pl. 23 (fig. 8). Type locality: Buenos Aires. Holotype: in Princeton University, apparently lost.

*Crenicichla (Batrachops) multidentis* Steindachner, 1915: 347. Type locality: La Plata. Holotype: NMW, not found.

*Labrus amarus* Larrañaga, 1923: 383. Type locality: Uruguay. No types known.

*Crenicichla lacustris semifasciata* Devincenzi, 1939: 34, fig. 11 (no. 3). Type locality: Rio Uruguay (Paysandú). No types known.

Maximum length: 16.9 cm SL

Distribution: South America: Uruguay River drainage, middle and lower parts, in Argentina, Uruguay and Brazil.

Countries: Argentina, Brazil, Uruguay

Remarks and references: Redescription in Lucena & Kullander (1992: 131), with bibliography, diagnosis, description, distribution and illustrations.

***Crenicichla sedentaria* Kullander, 1986**

*Crenicichla sedentaria* Kullander, 1986: 83, pl. 4-6 (fig. 3). Type locality: Peru, departamento Pasco, Río Pachitea drainage system, in Río Yamushimas, tributary to Río Palcazú, near San Pedro de Longin. Holotype: USNM 229057.

Maximum length: 22.1 cm SL

Distribution: South America: Amazon River basin, in the upper Ucayali River drainage, upper Huallaga River drainage (Tingo María) in Peru, and the Napo and Putumayo River drainages in Ecuador.

Countries: Ecuador, Peru

***Crenicichla semicineta* Steindachner, 1892**

*Crenicichla saxatilis* var. *semicineta* Steindachner, 1892: 376 [20]. Type locality: Bolivia, Provinz Yuracares, im oberen Chaparé bei Puerto de San Mateo. Syntypes: NMW 33482-84 (3).

*Crenicichla clancularia* Ploeg, 1991: 27, fig. 20. Type locality: Bolivia, State of Mato Grosso[sic], Río Mamore system, Sta. Cruz, Buenavista. Holotype: BMNH 1927.10.4.49.

Maximum length: 17.1 cm SL

Distribution: South America: Amazon River basin, in the Madre de Dios River drainage in Peru, and in the Mamoré River basin.

Countries: Bolivia, Peru

Remarks and references: Redescription based on Peruvian material in Kullander (1986: 101), with bibliography, diagnosis, description, distribution, and illustrations. The synonymy of *C. clancularia* is based on unpublished observations (Kullander, MS).

***Crenicichla semifasciata* (Heckel, 1840)**

*Batrachops semifasciatus* Heckel, 1840: 436. Type locality: Flusse Paraguay bei Caiçara. Types in NMW, not found.

*Acharnes chacoensis* Holmberg, 1891: 182. Type locality: Formosa. No types known.

*Boggiana ocellata* Perugia, 1897: 148. Type locality: Puerto 14 de Mayo, departamento di Bahia Negra, nel Chaco boreale. Holotype: MSNG 33700.

*Crenicichla simoni* Haseman, 1911: 345, pl. 59. Type locality: Rio Paraguay at São Luiz de Cáceres. Holotype: FMNH 54097.

Maximum length: 15 cm SL

Distribution: South America: Paraná River basin, in the Paraguay River in Paraguay and Brazil, and the Paraná drainage in Argentina.

Countries: Argentina, Brazil, Paraguay

***Crenicichla sipaliwini* Ploeg, 1987**

*Crenicichla sipaliwini* Ploeg, 1987: 90, pl. 2 (upper). Type locality: Corantijn River system, Sipaliwini River near Sipaliwini airstrip. Holotype: RMNH 30561.

Maximum length: 17.3 cm SL

Distribution: South America: Sipaliwini River, upper Corantijn basin.

Countries: Suriname

***Crenicichla stocki* Ploeg, 1991**

*Crenicichla stocki* Ploeg, 1991: 108, fig. 141. Type locality: Brazil, State of Pará, Río Tocantins system, Capuaraná. Holotype: INPA 2851.

Maximum length: 25 cm TL

Distribution: South America: Amazon River basin, in the Tocantins River basin.

Countries: Brazil

***Crenicichla strigata* Günther, 1862**

*Crenicichla johanna strigata* Günther, 1862: 306. Type locality: River Capin; River Cupai (800 miles from the sea). Lectotype: BMNH 1849.11.8.79-82 (1 of 4), designated by Ploeg (1991: 78).

Maximum length: 30 cm SL

Distribution: South America: Amazon River basin, in southern tributaries of the Amazon River basin.

Countries: Brazil, Guyana

***Crenicichla sveni* Ploeg, 1991**

*Crenicichla sveni* Ploeg, 1991: 58, fig. 68. Type locality: Colombia, Río Orinoco system, Río Meta, along road Villavicencio-Puerto López, Puerto Gaitán. Holotype: RMNH 31622.

Maximum length: 15 cm SL

Distribution: South America: Orinoco River basin, in the Llanos of Venezuela and Colombia.

Countries: Colombia, Venezuela

***Crenicichla tendybaguassu* Lucena & Kullander,**

1992

*Crenicichla tendybaguassu* Lucena & Kullander, 1992: 121, figs. 19-20. Type locality: Brazil, State of Rio Grande do Sul, município Santo Angelo, rio Piratinim, Fazenda dos Hinz, Coimbra. Holotype: MCP 10876.

Maximum length: 15.2 cm SL

Distribution: South America: Uruguay River drainage, in tributaries of the middle and upper Uruguay River basin.

Countries: Brazil

### *Crenicichla ternetzi* Norman, 1926

*Crenicichla ternetzi* Norman, 1926: 97. Type locality: Oyapock River at "Sant" Cafesoca, French Guiana. Lectotype: BMNH 1926.3.2.860, designated by Ploeg (1986c: 228).

Maximum length: 24.5 cm SL

Distribution: South America: Oyapock River drainage in French Guiana and Brazil.

Countries: French Guiana

Common names: Angoumot (French Guiana), Marann (French Guiana), Matalé (French Guiana), Mataouri (French Guiana), Poson madanm (French Guiana)

### *Crenicichla tigrina* Ploeg, Jégu & Ferreira, 1991

*Crenicichla tigrina* Ploeg, Jégu & Ferreira, 1991: 3, fig. 2. Type locality: Brésil, Est. Pará, Rio Trombetas, au niveau de l'embouchure de l'Igarapé Caxipacoré. Holotype: INPA 1800.

Maximum length: 28 cm SL

Distribution: South America: Amazon River basin, in the Trombetas River near Cachoeira Porteira.

Countries: Brazil

### *Crenicichla urosema* Kullander, 1990

*Crenicichla urosema* Kullander, 1990c: 86, fig. 1. Type locality: Brazil, State of Pará, Rio Tapajós, rocky pool at São Luiz upstream of Itaituba. Holotype: MZUSP 40289.

Maximum length: 6.8 cm SL

Distribution: South America: Amazon River basin, in the lower Tapajós River at São Luiz.

Countries: Brazil

### *Crenicichla vaillanti* Pellegrin, 1903

*Crenicichla vaillanti* Pellegrin, 1903: 124. Type locality: La Mana (Guyane française); Essequibo (Guyane anglaise). Syntypes: MNHN 4050, 2993.

Maximum length: 12.6 cm SL

Distribution: South America: Essequibo and Mana River basins.

Countries: French Guiana, Guyana

Remarks and references: The type series of *Crenicichla vaillanti* is a composite, and the species must be treated as valid until a lectotype is designated.

### *Crenicichla virgatula* Ploeg, 1991

*Crenicichla virgatula* Ploeg, 1991: 94, fig. 119. Type locality: Brazil, State of Roraima, Río Negro, Río Branco, Río Uraricoera, Ilha de Maracá. Holotype: INPA 2909.

Maximum length: 6.6 cm SL

Distribution: South America: Amazon River basin, in the upper Branco River basin.

Countries: Brazil

### *Crenicichla vittata* Heckel, 1840

*Crenicichla vittata*, Heckel 1840: 417. Type locality: Flusse Cuyaba; Flusse Paraguay. Lectotype: NMW 77815, designated by Ploeg (1991: 81). Status as syntype is, however, not supported by collection data. NMW 77770 probable holotype.

Maximum length: 26 cm SL

Distribution: South America: Paraná River basin, in the Paraguay River in Brazil and Paraguay, and in the Paraná River drainage in Argentina; also in the middle Uruguay River drainage in Brazil.

Countries: Argentina, Brazil, Paraguay, Uruguay

Remarks and references: Brief review by Lucena & Kullander (1992: 105), based on material from Uruguay River.

### *Crenicichla wallacii* Regan, 1905

*Crenicichla wallacii* Regan, 1905c: 163, pl. 14 (fig. 2). Type locality: Essequibo. Holotype: BMNH 1864.1.21.93.

*Crenicichla nanus* Regan, 1913a: 502. Type locality: British Guiana. Syntypes: BMNH 1911.10.31.125-126 (2).

Maximum length: 8.5 cm TL

Distribution: South America: Essequibo River basin.

Countries: Guyana

### *Species inquirendae*

*Cyca conibos* Castelnau, 1855: 18, pl. 10 (fig. 3). Type locality: l'Ucayale. No types known.

*Cyca multifasciata* Castelnau, 1855: 18, pl. 10 (fig. 2). Type locality: l'Ucayale. No types known.

## DICROSSUS

*Dicrossus* Steindachner, 1875: 102. Type species: *Dicrossus maculatus* Steindachner, 1875. Type by monotypy. Gender: masculine.

### *Dicrossus filamentosus* (Ladiges, 1958)

*Crenicara filamentosa* Ladiges, 1958: 204, fig. p. 204. Type locality: möglicherweise vom Amazonas. Lectotype: ZMH 343, designated by (Wilkins 1977: 160); also by Kullander (1978: 268).

Maximum length: 3.8 cm SL

Distribution: South America: Amazon River basin, in the Negro River drainage; Orinoco River basin from the Inírida River in Colombia to Maripa in Venezuela.

Countries: Brazil, Colombia, Venezuela

Remarks and references: Species monograph in Kullander (1978); also described by Ladiges (1959).

### *Dicrossus maculatus* Steindachner, 1875

*Dicrossus maculatus* Steindachner, 1875: 102. Type locality: Lago maximo und José Assu sowie in Nebenarmen des Amazonenstromes bei Tocantins, im Rio Hyauary und im Rio Tajapurú. Syntypes: NMW 77916 (3).

*Crenicara praetoriusi* Weise in Praetorius, 1935: 179, fig. 4. Type locality: [No locality].

*Crenicara praetoriusi* Ahl, 1936b: 265. Type locality: Igarapé-Iruá-Mapiry. Syntypes: (3) ZMB 32383-84 (2).

Maximum length: 5.3 cm SL

Distribution: South America: Amazon River basin, in the Tapajós River drainage, Maués River, and near Parintins.

Countries: Brazil

## GEOPHAGUS

*Geophagus* Heckel, 1840: 383. Type species: *Geophagus altifrons* Heckel, 1840. Type by subsequent designation by Eigenmann & Bray (1894: 621). Gender: masculine.

### *Geophagus altifrons* Heckel, 1840

*Geophagus altifrons* Heckel, 1840: 385, pl. 29 (fig. 21-25). Type locality: Manaus, Brazil. Syntypes: NMW 17007-08 (2).

Maximum length: 22.5 cm SL

Distribution: South America: Amazon River basin, in tributaries of the Amazon River.

Countries: Brazil

### *Geophagus argyrostictus* Kullander, 1991

*Geophagus argyrostictus* Kullander, 1991b: 130, fig. 1. Type locality: Brazil, State of Pará, Rio Xingu drainage, Belo Monte, rocky pool near cachoeira. Holotype: MZUSP 32906.

Maximum length: 18 cm SL

Distribution: South America: Amazon River basin, in the Xingu River from Cachoeira von Martius to Belo Monte, and in the Curuá River basin.  
Countries: Brazil

***Geophagus brachybranchus* Kullander & Nijssen, 1989**

*Geophagus brachybranchus* Kullander & Nijssen, 1989: 48, fig. 26. Type locality: Suriname, Distr. Nickerie, Nickerie R. system, rocky pool just above Blanche Marie Vallen. Holotype: RMNH 30974.

Maximum length: 13.8 cm SL  
Distribution: South America: Corantijn and Nickerie River drainages in Suriname; probably ranges westward to the Essequibo River basin.  
Countries: Guyana, Suriname

***Geophagus brasiliensis* (Quoy & Gaimard, 1824)**

*Chromis brasiliensis* Quoy & Gaimard, 1824: 286. Type locality: baie de Rio de Janeiro. Holotype: MNHN A.9503.

*Chromys unimaculata* Castelnau, 1855: 13, pl. 7 (fig. 2). Type locality: eaux douces des environs de Rio-de-Janeiro. Holotype: MNHN A.9506.

*Acara gymnopoma* Günther, 1862: 278. Type locality: [None stated]. Holotype: BMNH 1842.8.18.8.

*Geophagus brasiliensis* Kner, 1865: 266, pl. 10 (fig. 3). Type locality: Rio Janeiro. Syntypes: NMW 23044-45 (2).

*Acara minuta* Hensel, 1870: 53. Type locality: Kleinen Tümpeln bei Porto Alegre. Syntypes: (5) ZMB 7453.

Maximum length: 28 cm TL  
Distribution: South America: Coastal drainages of eastern and southern Brazil and Uruguay.  
Countries: Brazil, Uruguay  
Common names: Acará-topete (Brazil)

***Geophagus brokopondo* Kullander & Nijssen, 1989**

*Geophagus brokopondo* Kullander & Nijssen, 1989: 41, figs. 23-25. Type locality: Suriname, Distr. Brokopondo, Suriname R. system, Brokopondomeer along N shore at Afobaka. Holotype: ZMA 119530.

Maximum length: 12.3 cm SL  
Distribution: South America: Suriname River basin.  
Countries: Suriname

***Geophagus camopiensis* Pellegrin, 1903**

*Geophagus camopiensis* Pellegrin, 1903: 123. Type locality: Riv. Camopi (Guyane française). Lectotype: MNHN 1901-456.

Maximum length: 12 cm SL  
Distribution: South America: Oyapock and Approuague River basins.  
Countries: Brazil, French Guiana  
Common names: Prapra soléy (French Guiana), Prapra-roche (French Guiana), Prapra-saut (French Guiana)

***Geophagus crassilabris* Steindachner, 1876**

*Geophagus (Satanoperca) crassilabris* Steindachner, 1876: 65, pl. 7. Type locality: einem Bache des Isthmus von Panama, wahrscheinlich in der Nähe von Candelaria. Holotype: NMW 58794.

Maximum length: 24 cm SL  
Distribution: Central America: Pacific and Atlantic slopes of central and eastern Panama.  
Countries: Panama

***Geophagus grammepareius* Kullander & Taphorn, 1992**

*Geophagus grammepareius* Kullander & Taphorn in Kullander, Royero & Taphorn, 1992: 366, fig. 7. Type locality: Venezuela, Bolivar State, Río Caroní drainage, middle Río Claro in Vuelta El Susto, ca 5 km downstream from Quebrada Mojacasabe

(7°40'40"N, 63°08'05"W). Holotype: MCNG 25480.

Maximum length: 10.3 cm SL  
Distribution: South America: Orinoco River basin, in the upper Caura and lower Caroní River basins.  
Countries: Venezuela

***Geophagus harreri* Gosse, 1976**

*Geophagus harreri* Gosse, 1976: 88, fig. 21. Type locality: rivière Ouauqui à Saut Bali (Affluent du Tampok, bassin du Maroni), Guyane française. Holotype: IRSNB 525.

Maximum length: 18.3 cm SL  
Distribution: South America: Marowijne River basin.  
Countries: French Guiana, Suriname  
Common names: Prapra roche (French Guiana), Prapra so (French Guiana)

***Geophagus iporangensis* Haseman, 1911**

*Geophagus brasiliensis iporangensis* Haseman, 1911: 364, pl. 71. Type locality: Iporanga ... a mountain stream of the Rio Ribeira da Iguapé. Holotype: FMNH 54202 [ex CM 2792a].

Maximum length: 10 cm SL  
Distribution: South America: Ribeira de Iguape River basin.  
Countries: Brazil

***Geophagus itapicuruensis* Haseman, 1911**

*Geophagus brasiliensis itapicuruensis* Haseman, 1911: 365, pl. 72. Type locality: Queimadas, Rio Itapicuru. Holotype: FMNH 54365 [ex CM 2793a].

Distribution: South America: Itapicuru River, on the coast of Bahia State.  
Countries: Brazil

***Geophagus megasema* Heckel, 1840**

*Geophagus megasema* Heckel, 1840: 388. Type locality: einer grossen Lache Juquiã genannt, bei Mattogrosso am Fluss Guaporè. Syntypes: NMW 16246 (1), 90309 (1), 92453 (1); SMF 3125 [ex NMW in 1844] (1).

Maximum length: 17.5 cm SL  
Distribution: South America: Amazon River basin, in the Guaporé River basin.  
Countries: Bolivia, Brazil

***Geophagus obscurus* (Castelnau, 1855)**

*Chromys unipunctata* Castelnau, 1855: 13, pl. 8 (fig. 2). Type locality: rio Paraguassu, dans la province de Bahia. Syntypes: MNHN A.9505 (3).

*Chromys obscura* Castelnau, 1855: 14, pl. 6 (fig. 3). Type locality: rio Paraguassu, province de Bahia. Syntypes: MNHN A.9511 (2).

Maximum length: 10 cm SL  
Distribution: South America: Paraguaçu River, on the coast of Bahia State.  
Countries: Brazil

***Geophagus pellegrini* Regan, 1912**

*Geophagus pellegrini* Regan, 1912: 505. Type locality: Tado, Río San Juan, Chocó, S.W. Colombia. Lectotype: BMNH 1910.4.11.89.

Maximum length: 15.2 cm SL  
Distribution: South America: Atrato, San Juan, and Baudó River basins.  
Countries: Colombia

***Geophagus proximus* (Castelnau, 1855)**

*Chromys proxima* Castelnau, 1855: 14, pl. 7 (fig. 1). Type locality: un lac près de l'Ucayale, dans la mission de Sarayacu, au Pérou. Syntypes: MNHN A.9510 (1), B.3001 [ex MNHN A.9510] (1).

Maximum length: 22.5 cm SL  
Distribution: South America: Amazon River basin, in the Ucayali River drainage of Peru, and along the Solimões-Amazon River to

the Trombetas River.

Countries: Brazil, Peru

Remarks and references: Redescription in Kullander (1986: 122), with bibliography, description, diagnosis, distribution, and illustration.

Common names: Acará roi roi (Brazil), Acará tinga (Brazil)

***Geophagus steindachneri* Eigenmann & Hildebrand, 1910**

*Geophagus steindachneri* Eigenmann & Hildebrand in Eigenmann, 1910: 478. Type locality: Magdalena basin. Holotype: NMW 23289-90 (larger specimen) [from Cauca River, Colombia].

*Geophagus honda* Regan, 1912: 506. Type locality: Honda, Colombia. Lectotype: BMNH 1909.7.23.51.

*Geophagus magdalena* Brind, 1943: 42. Type locality: Lake at El Banco, Columbia. Syntypes: USNM 120207 (1), 120299 (1). Also spelt *G. Magdalenae* in same paper.

Maximum length: 19.8 cm TL

Distribution: South America: Magdalena, Cauca, and Sinú River basins in Colombia, Limón River (Lake Maracaibo drainage) in Venezuela.

Countries: Colombia, Venezuela

Remarks and references: Gosse & Kullander (1981) clarified the nomenclature of the species.

Common names: Mojarra (Colombia), Mula (Colombia)

***Geophagus surinamensis* (Bloch, 1791)**

*Sparus surinamensis* Bloch, 1791: 112, pl. 277 (fig. 2). Type locality: Surinam. Holotype: ZMB 2825.

*Sparus trimaculatus* Shaw in Shaw & Nodder, 1809: pl. 867. Type locality: American Seas.

Maximum length: 14.8 cm SL

Distribution: South America: Saramacca and Suriname Rivers in Suriname; Marowijne River in Suriname and French Guiana.

Countries: French Guiana, Suriname

Remarks and references: Redescription in Kullander & Nijssen (1986: 31), with bibliography, diagnosis, description, distribution, and illustrations.

Common names: Prapra roche (French Guiana), Prapra soléy (French Guiana)

***Geophagus taeniopareius* Kullander & Royero, 1992**

*Geophagus taeniopareius* Kullander & Royero in Kullander, Royero & Taphorn, 1992: 360, fig. 1. Type locality: Venezuela, Territorio Federal Amazonas, Río Orinoco, Raudales de Ature, eastern shore (5°36'N, 67°37'W). Holotype: MBUCV-V 21744.

Maximum length: 14.3 cm SL

Distribution: South America: Orinoco River basin, in the lower Caura River and along the middle and upper Orinoco River basin.

Countries: Venezuela

**GUIANACARA**

*Guianacara* Kullander & Nijssen, 1989: 90. Type species: *Guianacara owroewefi* Kullander & Nijssen, 1989. Type by original designation. Gender: feminine.

*Oelemaria* Kullander & Nijssen, 1989: 92. Type species: *Guianacara oelemariensis* Kullander & Nijssen, 1989. Type by original designation. Gender: feminine. Originally as *Guianacara (Oelemaria)*.

***Guianacara (Guianacara) geayi* (Pellegrin, 1902)**

*Acara geayi* Pellegrin, 1902: 417. Type locality: Rivière Camopi (Guyane française).

Maximum length: 8.5 cm SL

Distribution: South America: Approuague River in French Guiana, Oyapock River drainage in French Guiana and Brazil.

Countries: Brazil, French Guiana

Common names: Prapra (French Guiana)

***Guianacara (Oelemaria) oelemariensis* Kullander & Nijssen, 1989**

*Guianacara oelemariensis* Kullander & Nijssen, 1989: 126, fig. 70. Type locality: Suriname, Distr. Marowijne, Marowijne R. drainage, small right bank tributary to the upper Oelemari R. Holotype: IRSNB 750.

Maximum length: 8.1 cm SL

Distribution: South America: Marowijne River drainage, in the Oelemari River in Suriname.

Countries: Suriname

***Guianacara (Guianacara) owroewefi* Kullander & Nijssen, 1989**

*Guianacara owroewefi* Kullander & Nijssen, 1989: 97, fig. 43. Type locality: Guyane française, R. Maroni system, R. Marouini below first rapids. Holotype: IRSNB 749.

Maximum length: 10.7 cm SL

Distribution: South America: Marowijne, Suriname, Saramacca, and Coppename River basins in Suriname, and Marowijne River basin in French Guiana.

Countries: French Guiana, Suriname

Common names: Krobja (Suriname), Orooe wefi (Suriname), Ooru muje (Suriname), Ooru wefee (Suriname), Owroe wefi (Suriname), Owroe wiffi (Suriname), Prapra (French Guiana)

***Guianacara (Guianacara) sphenozona* Kullander & Nijssen, 1989**

*Guianacara sphenozona* Kullander & Nijssen, 1989: 120, fig. 66. Type locality: Suriname, Distr. Nickerie, Corantijn R. drainage, Sipaliwini. Holotype: RMNH 31047.

Maximum length: 8.5 cm SL

Distribution: South America: Sipaliwini and middle Corantijn River drainages, Suriname; probably the Essequibo River basin.

Countries: Guyana, Suriname

Common names: Ooru muje (Suriname), Ouruwefee (Suriname)

**GYMNOGEOPHAGUS**

*Gymnogeophagus* Miranda Ribeiro, 1918a: 790. Type species: *Gymnogeophagus cyanopterus* Miranda Ribeiro, 1918. Type by monotypy. Gender: masculine.

***Gymnogeophagus australis* (Eigenmann, 1907)**

*Geophagus australe* Eigenmann, 1907: 454, p. 23 (fig. 7). Type locality: Buenos Aires. Holotype: Princeton University (whereabouts unknown).

Maximum length: 15.5 cm TL

Distribution: South America: Lower Paraná River basin, in Argentina.

Countries: Argentina

Remarks and references: Redescription in Reis & Malabarba (1988).

***Gymnogeophagus balzanii* (Perugia, 1891)**

*Geophagus balzanii* Perugia, 1891: 623. Type locality: Villa Maria (Matto Grosso), Rio Paraguay a 15°. Holotype: MSNG 7683.

*Geophagus duodecimspinosus* Boulenger, 1895: 524. Type locality: Paraguay. Holotype: BMNH 1895.5.17.12.

*Gymnogeophagus cyanopterus* Miranda Ribeiro, 1918a: 790. Type locality: Itaquí, Rio Grande do Sul. Holotype: MZUSP 2549.

Maximum length: 12 cm SL

Distribution: South America: Paraná River basin, in the Paraguay drainage in Brazil and Paraguay, the Paraná drainage in Argentina; the lower Uruguay drainage in Uruguay and Brazil.

Countries: Argentina, Brazil, Paraguay, Uruguay

Remarks and references: Redescription in Reis & Malabarba

(1988).

***Gymnogeophagus che*** Casciotta, Gómez & Toresanni, 2000

*Gymnogeophagus che* Casciotta, Gómez & Toresanni, 2001: 55, fig. 1. Type locality: Arroyo Urugua-í y ruta provincial 19 frente a la pasarela en parque provincial Islas Malvinas [Misiones, Argentina]. Holotype MLP.

Maximum length: 11.6 cm SL

Distribution: South America: Paraná River basin, in the Paraná River drainage in Argentina, known only from the Arroyo Urugua-í.

Countries: Argentina

***Gymnogeophagus gymnogenys*** (Hensel, 1870)

*Geophagus pygmaeus* Hensel, 1870: 68. Type locality: Rio Guahyba bei Porto Alegre. Syntypes: ZMB 7469 (2).

*Geophagus gymnogenys* Hensel, 1870: 61. Type locality: Gebirgsbächen des Urwaldes von Rio Grande do Sul. Lectotype: ZMB 7465.

*Geophagus camurus* Cope, 1894: 104, pl. 9 (fig. 17). Type locality: Jacuhy river. Syntypes: (7) ANSP 21749-50 (2), 21885-88 (4).

Maximum length: 15 cm SL

Distribution: South America: Laguna dos Patos and Lagoa Mirim drainages in Brazil and Uruguay.

Countries: Brazil, Uruguay

Remarks and references: Redescription in Reis & Malabarba (1988). Type locality of *Geophagus camurus* restricted to Laguna dos Patos system by Malabarba (1989).

***Gymnogeophagus labiatus*** (Hensel, 1870)

*Geophagus bucephalus* Hensel, 1870: 63. Type locality: Rio Cadea und seinen Zuflüssen. Lectotype: ZMB 31373 [ex ZMB 7466], designated by Reis & Malabarba (1988: 280).

*Geophagus labiatus* Hensel, 1870: 64. Type locality: Rio Santa Maria des Urwaldes von Rio Grande do Sul. Holotype: ZMB 7467.

*Geophagus scymnophilus* Hensel, 1870: 65. Type locality: [None stated]. Lectotype: ZMB 22293, designated by Reis & Malabarba (1988: 280).

Maximum length: 12 cm SL

Distribution: South America: Laguna dos Patos and Lagoa Mirim drainages in Brazil.

Countries: Brazil

Remarks and references: Redescription in Reis & Malabarba (1988). Type locality of *Geophagus scymnophilus* restricted to Laguna dos Patos system by Malabarba (1989).

***Gymnogeophagus lacustris*** Reis & Malabarba, 1988

*Gymnogeophagus lacustris* Reis & Malabarba, 1988: 282, fig. 24. Type locality: Lagoa da Cerquinha at Pinhal, Tramandai, RS, Brazil. Holotype: MZUSP 28462.

Maximum length: 14.6 cm SL

Distribution: South America: Coastal drainages in northern Rio Grande do Sul State.

Countries: Brazil

***Gymnogeophagus meridionalis*** Reis & Malabarba, 1988

*Gymnogeophagus meridionalis* Reis & Malabarba, 1988: 273, fig. 19. Type locality: Headwaters of Rio Negro at road at BR-153, (Uruguay River system), Bagé, Rio Grande do Sul, Brazil. Holotype: MZUSP 28461.

Maximum length: 8.8 cm SL

Distribution: South America: Uruguay River drainage in Uruguay and Brazil, and smaller drainages in nearby Argentina.

Countries: Argentina, Brazil, Uruguay

***Gymnogeophagus rhabdotus*** (Hensel, 1870)

*Geophagus rhabdotus* Hensel, 1870: 60. Type locality: Cadea. Lectotype: ZMB 7461.

*Geophagus brachyurus* Cope, 1894: 105, pl. 9 (fig. 18). Type locality: Jacuhy River. Syntypes: ANSP 21751 (1), 21880-83 (4). Maximum length: 12 cm SL

Distribution: South America: Uruguay River drainage in Uruguay, and the Laguna dos Patos basin.

Countries: Brazil, Uruguay

Remarks and references: Redescription in Reis & Malabarba (1988). Type locality of *Geophagus brachyurus* restricted to Laguna dos Patos system by Malabarba (1989).

***Gymnogeophagus setequedas*** Reis, Malabarba & Pavanelli, 1992

*Gymnogeophagus setequedas* Reis, Malabarba & Pavanelli, 1992: 267, fig. 2. Type locality: Río Iguazú reservoir at Juan E. O'Leary, Rio Paraná drainage, Province of Alto Paraná, Paraguay (approximately 55°30'S 25°20'W). Holotype: MHNG 2518.19.

Maximum length: 9.8 cm SL

Distribution: South America: Paraná River basin, in tributaries of the Paraná River between the Monday River and Guafra, Paraguay and Brazil.

Countries: Brazil, Paraguay

**HERICHTHYS**

*Herichthys* Baird & Girard, 1854: 25. Type species: *Herichthys cyanoguttatus* Baird & Girard, 1854. Type by monotypy. Gender: masculine.

***Herichthys bartoni*** (Bean, 1892)

*Acara bartoni* Bean, 1892: 286, pl. 44 (fig. 3). Type locality: Hautteca Potosina, a region situated north of the State of Guanajuato, in the State of San Luis Potosi, Mexico. Lectotype: USNM 43765, designated by Jordan & Evermann (1900, pl. 232, p. 3281).

Maximum length: 18 cm SL

Distribution: North America: Atlantic slope, endemic to the upper Verde River and the Laguna de la Media Luna systems of the Panuco River basin, San Luis Potosi, Mexico.

Countries: Mexico

Common names: Mojarra caracolera (Mexico)

***Herichthys carpintis*** (Jordan & Snyder, 1899)

*Neetroplus carpintis* Jordan & Snyder, 1899: 146, fig. 22. Type locality: Laguna del Carpinte, near Tampico, Tamaulipas, Mexico. Holotype: SU 6162.

*Heros teporatus* Fowler, 1903: 321. Type locality: Victoria, Victoria Río, trib. of the Río Soto la Marina, Tamaulipas, Mexico. Holotype: ANSP 24242.

*Cichlosoma laurae* Regan, 1908c: 223. Type locality: Tampico. Syntypes: BMNH 1908.7.6.20-21 (2).

Maximum length: 17 cm SL

Distribution: North America: Atlantic slope, Panuco River drainage, and Soto La Marina River.

Countries: Mexico

Remarks and references: Reviewed by Taylor & Miller (1983). The status of *Heros teporatus* needs further analysis.

***Herichthys cyanoguttatus*** Baird & Girard, 1854

*Herichthys cyanoguttatus* Baird & Girard, 1854: 25. Type locality: Brownsville, Texas (freshwater). Syntypes: ANSP 9097 (1); MCZ 15415 [ex USNM 852]; UMMZ 92113 (1); USNM 851 (?), 852 (now 4).

*Heros pavonaceus* Garman, 1881: 93. Type locality: Spring near Monclova, Coahuila, Mexico. Syntypes: MCZ 24877 (5), UMMZ 95837 (1).

*Parapetenia cyanostigma* Hernández-Rolón, 1990: 4, fig. p. 7. Type locality: Playa Bruja, Tequesquitengo [Mexico]. Holotype: MNHN 1990-465.

Maximum length: 30 cm TL

Distribution: North America: Originally restricted to the lower Rio Grande drainage in Texas, USA and south to northeastern Mexico. Introduced on Edwards Plateau of central Texas and central peninsular Florida, USA, and Verde River basin (La Media Luna region), Mexico

Countries: Mexico, USA

Remarks and references: Reviewed by Taylor & Miller (1983).

***Herichthys deppii* (Heckel, 1840)**

*Heros Montezuma* Heckel, 1840: 383. Type locality: Mexico. Holotype: NMW 17359.

*Heros Deppii* Heckel, 1840: 382. Type locality: Mexico. Holotype: NMW, lost.

Maximum length: 12 cm TL

Distribution: North America: Atlantic slope, in the Nautla and Misantla River basins.

Countries: Mexico

Remarks and references: Implied identification of material in ZMB collected with the holotype, suggests that *H. deppii* is valid, according to Stawikowski & Werner (1998: 333). The status of *Heros montezuma* is uncertain, pending examination of the holotype.

***Herichthys labridens* (Pellegrin, 1903)**

*Heros (Cichlasoma) labridens* Pellegrin, 1903: 122. Type locality: Huasteca Potosina (Mexico). [=Verde River drainage near Rioverde, San Luis Potosí]. Syntypes: MNHN 1889-19-20.

Maximum length: 25 cm SL

Distribution: North America: Atlantic slope, in the Panuco River basin.

Countries: Mexico

Remarks and references: See Miller (1956: 15) for information on type locality.

Common names: Mojarra (Mexico)

***Herichthys minckleyi* (Kornfield & Taylor, 1983)**

*Cichlasoma minckleyi* Kornfield & Taylor, 1983: 254, fig. 1. Type locality: Posos de la Becerra, 15.7 km by road SSW of Cuatro Ciénegas de Carranza, Coahuila, Mexico. Holotype: UMMZ 209434.

Maximum length: 17.5 cm SL

Distribution: North America: Atlantic slope, endemic to Cuatro Ciénegas.

Countries: Mexico

Common names: Mojarra caracolera de Cuatro Ciénegas (Mexico)

***Herichthys pantostictus* (Taylor & Miller, 1983)**

*Cichlasoma pantostictum* Taylor & Miller, 1983: 15, fig. 5. Type locality: Laguna de Chairel at the mouth of the Río Tamesí, Tampico, lat. 22°15'N., long. 96°04'W., elevation ca. 2 m near Tampico, Tamaulipas, Mexico.

Holotype: UMMZ 207699.

Maximum length: 12.6 cm SL

Distribution: North America: Atlantic slope of northern Mexico, in the Panuco River drainage from the Sabinas River to the coastal Laguna Tamiahua.

Countries: Mexico

Common names: Mojarra (Mexico)

***Herichthys steindachneri* (Jordan & Snyder, 1899)**

*Cichlasoma steindachneri* Jordan & Snyder, 1899: 143, fig. 20. Type locality: Rio Verde, near Rascon, San Luis Potosí, Mexico. Holotype: SU 6164.

Maximum length: 40 cm SL

Distribution: North America: Atlantic slope of northern Mexico,

endemic to the Tamasopo, Gallinas, and Ojo Frio Rivers in the Panuco River basin.

Countries: Mexico

Common names: Mojarra (Mexico)

***Herichthys tamasopoensis* Artigas Azas, 1993**

*Herichthys tamasopoensis* Artigas Azas, 1993: 66, fig. p. 67. Type locality: Type locality: "Las Cascadas" (99°23'47" W. Long., 21°56'47" N. Lat.) in the Río Tamasopo. Holotype: UMMZ 221577.

Maximum length: 18 cm TL

Distribution: North America: Atlantic slope, in the Tamasopo River of Panuco River basin.

Countries: Mexico

**HEROINA**

*Heroína* Kullander, 1996b: 151. Type species: *Heroína isonycterina* Kullander, 1996. Type by original designation. Gender: feminine.

***Heroína isonycterina* Kullander, 1996**

*Heroína isonycterina* Kullander, 1996b: 153, fig. 3. Type locality: Ecuador, Provincia Napo, Río Napo drainage, upper Río Tiputini upstream of bridge on road to Coca (0°44.5'S 76°53'W). Holotype: FMNH 105181.

Maximum length: 10.2 cm SL

Distribution: South America: Amazon River basin, in the Napo (Ecuador), Caquetá (Colombia), and Tigre, Corrientes, and Pastaza (Peru) River basins.

Countries: Colombia, Ecuador, Peru

**HEROS**

*Heros* Heckel, 1840: 362. Type species: *Heros severus* Heckel, 1840. Type by subsequent designation by Jordan & Gilbert 1883: 608. Gender: masculine.

***Heros efasciatus* Heckel, 1840**

*Heros efasciatus* Heckel, 1840: 372. Type locality: Rio-negro. Holotype: NMW 33341.

*Chromys appendiculata* Castelnau, 1855: 15, pl. 7 (fig. 3). Type locality: l'Ucayali, (Pérou). Holotype: MNHN A.9483.

*Chromys fasciata* Castelnau, 1855: 17, pl. 9 (fig. 2). Type locality: l'Araguay. No types known.

*Uarus centrarchoides* Cope, 1872: 253, pl. 11 (fig. 2). Type locality: Ambyiacu River [=Ampiyacu River, Peru]. Holotype: ANSP 9049.

*Cichlasoma severum perpunctatum* Miranda Ribeiro, 1918b: 18, pl. 16. Type locality: Manáos. Holotype: MNRJ 1263.

Maximum length: 14 cm SL

Distribution: South America: Amazon River basin, in tributaries of the Ucayali and Amazon Rivers in Peru, and Solimões-Amazon River in Brazil.

Countries: Brazil, Peru

Remarks and references: Redescription, as *Heros appendiculatus*, in Kullander (1986: 219), based on Peruvian material, with bibliography, diagnosis, description, distribution and illustration. Oldest available name now applied. Status of the included nominal species needs further analysis.

Common names: Acará-peba (Brazil), Acará-preto (Brazil), Bujurqui acha vieja (Peru)

***Heros notatus* Jardine, 1843**

*Centrarchus notatus* Jardine in Schomburgk, 1843: 160, pl. 13. Type locality: [Locality not stated]. No types known.

Maximum length: 15 cm SL

Distribution: South America: Amazon River basin, in the Negro River basin.

Countries: Brazil



***Heros severus* Heckel, 1840**

*Heros severus* Heckel, 1840: 362. Type locality: bei Marabitanas im Rio-negro. Syntypes: ?NMW 17354 (1), ?17638 (1), ?17656 (1).

Maximum length: 20 cm SL

Distribution: South America: Orinoco River basin, in the upper Orinoco River drainage in Colombia and Venezuela; Amazon River basin, in the upper Negro River basin.

Countries: Brazil, Colombia, Venezuela

***Heros spurius* Heckel, 1840**

*Heros spurius* Heckel, 1840: 368. Type locality: Rio Guaporè ... Sümpfen. Syntypes: ?NMW 17656 (1), 17939 (1).

*Heros coryphaeus* Heckel, 1840: 364. Type locality: Rio-Guaporè ... Morästen um Matogrosso. Holotype: NMW 17358.

*Heros modestus* Heckel, 1840: 366. Type locality: Rio Guaporè. Syntypes: NMW 17354 (1), ?92454 (1).

Maximum length: 12 cm SL

Distribution: South America: Amazon River basin, in the Guaporè River drainage, Brazil and Bolivia.

Countries: Bolivia, Brazil

**HEROTILAPIA**

*Herotilapia* Pellegrin, 1904: 247. Type species: *Heros multispinosus* Günther, 1869. Type by monotypy. Gender: feminine.

***Herotilapia multispinosa* (Günther, 1867)**

*Heros multispinosus* Günther, 1867: 601. Type locality: Lake of Managua. Holotype: BMNH 1865.7.20.34.

Maximum length: 9 cm SL

Distribution: Central America: Atlantic slope, from the Patuca River (Honduras) to the Matina River (Costa Rica); Pacific slope, from the Guasaule River (Nicaragua) to the Tempisque and Bebedero Rivers (Costa Rica).

Countries: Costa Rica, Honduras, Nicaragua

Remarks and references: Described in more detail in Günther (1868: 453, pl. 74, fig. 2). Reviewed by Bussing (1998: 351), with key, diagnosis, geographical distribution, and figures.

Common names: Cholesca (Costa Rica), Mojarrita (Costa Rica), Zarzapala (Costa Rica)

**HOPLARCHUS**

*Hoplarchus* Kaup, 1860: 128. Type species: *Hoplarchus pentacanthus* Kaup, 1860. Type by subsequent designation. Gender: masculine.

***Hoplarchus psittacus* (Heckel, 1840)**

*Heros psittacus* Heckel, 1840: 369. Type locality: Rio-negro, nördlich von Marabitanas am Fusse des Berges Cocui. Syntypes: ?NMW 17641-42 (1, 1).

*Centrarchus cychla* Jardine in Schomburgk, 1843: 157, pl. 11. Type locality: Rio Negro. No types known.

*Hoplarchus pentacanthus* Kaup, 1860: 129, pl. 6 (fig. 1). Type locality: ? Südamerika. Holotype in ZSM, lost.

Maximum length: 23.5 cm SL

Distribution: South America: Amazon River basin, in the Negro, Preto da Eva, Urubu, and Jamari Rivers in Brazil; Orinoco River basin, in tributaries of the upper Orinoco River basin.

Countries: Brazil, Venezuela

**HYPSELECARA**

*Hypselecara* Kullander, 1986: 232. Type species: *Heros temporalis* Günther, 1862. Type by original designation. Gender: feminine.

***Hypselecara coryphaenoides* (Heckel, 1840)**

*Heros coryphaenoides* Heckel, 1840: 373, pl. 29 (fig. 9-12). Type

locality: Rio-negro ... bei Maribitana. Holotype: NMW 17376.

*Heros niger* Heckel, 1840: 375. Type locality: Rio-negro. Holotype: NMW 17358.

*Centrarchus niger* Jardine in Schomburgk, 1843: 159, pl. 12. Type locality: Rio Negro. No types known.

*Cichlasoma arnoldi* Ahl, 1936a: 138. Type locality: Amazonas. Holotype: ZMB 32382.

*Chuco axelrodi* Fernández-Yépez, 1972: 15, fig. 16. Type locality: Aguaro River, Venezuela. Holotype: USNM 206097.

Maximum length: 16 cm SL

Distribution: South America: Amazon River basin, in the Negro, Trombetas, Tapajós, Maués, and Uatumã Rivers; Orinoco River basin in tributaries of the upper Orinoco River, and in the Aguaro River basin.

Countries: Brazil, Venezuela

***Hypselecara temporalis* (Günther, 1862)**

*Heros temporalis* Günther, 1862: 286. Type locality: No locality. Holotype: BMNH 1855.12.26.638 [ex Zool. Soc.].

*Acara (Heros) crassa* Steindachner, 1875: 88, pl. 5. Type locality: Amazonenstrom bei Teffé, Tonantins, Cudajas, Coary, Villa bella und Obidos, im See Hyuanary und Saraca, so wie im Rio Hyutay. Syntypes: (several) NMW 17373-17374 (2) Codajás, 33617 (1) Silves, 33618 (1) Villa Bella.

*Heros goeldii* Boulenger, 1897: 298. Type locality: Upper Cunani River, French Guiana, south of the Oyapok River. Syntypes: BMNH 1897.7.17.9 (1), NMB 2488 (1).

*Cichlasoma Hellabrunni* Ladiges, 1942: 199, fig. 1. Type locality: Gefangenschaftsnachzucht Hellabrunn (originally: entweder die Umgebung von Rockstone am Essequibo in Britisch-Guiana oder aber die Umgebung von Leticia. Lectotype: ZMH H70, designated by Ladiges et al. (1958: 164).

Maximum length: 15 cm SL

Distribution: South America: Amazon River basin, in the Ucayali and Amazon River drainages in Peru, the Amazon River drainage in Colombia, the Solimões-Amazon River in Brazil, east to Cametá, also rivers of Amapá State and the Oyapock River basin in Brazil.

Countries: Brazil, Colombia, Peru

Common names: Acará açai (Brazil), Bufurque (Peru), Bujurqui (Peru)

**HYPHOPHRYS**

*Hypsophrys* Agassiz, 1859: 408. Type species: *Hypsophrys unimaculatus* Agassiz, 1859. Type by monotypy. Gender: feminine.

*Copora* Fernández-Yépez, 1969: [4]. Type species: *Heros nicaraguensis* Günther, 1864. Type species by original designation. Gender: feminine.

***Hypsophrys nicaraguensis* (Günther, 1864)**

*Hypsophrys unimaculatus* Agassiz, 1859: 408. Type locality: Lake Nicaragua. Types in MCZ, not found.

*Heros nicaraguensis* Günther, 1864c: 153. Type locality: Lake of Nicaragua. Holotype: BMNH 1867.9.23.37.

*Heros balteatus* Gill in Gill & Bransford, 1877: 184. Type locality: Lake Nicaragua. Syntypes: BMNH 1905.3.27.3 [ex USNM] (1).

*Cichlasoma spilotum* Meek, 1912: 73. Type locality: Victoria, Costa Rica. Holotype: FMNH 7686.

Maximum length: 16.5 cm SL

Distribution: Central America: Atlantic slope, from the San Juan drainage, including Lake Nicaragua, in Costa Rica and Nicaragua, to the Matina River drainage in Costa Rica.

Countries: Costa Rica, Nicaragua

Remarks and references: Species monograph by López (1974), well illustrated. Kullander & Hartel (1997) discussed the nomenclature of *Hypsophrys unimaculatus*. Reviewed by Bussing (1998: 354), with key, diagnosis, geographical distribution, and figures.

Common names: Moga amarilla (Costa Rica)

**KROBIA**

*Krobia* Kullander & Nijssen, 1989: 148. Type species: *Acara guianensis* Regan, 1905. Type by original designation. Gender: feminine.

***Krobia guianensis* (Regan, 1905)**

*Acara guianensis* Regan, 1905b: 340. Type locality: Guiana. Holotype: BMNH 1851.5.2.8 [ex ZMB].

Maximum length: 12.8 cm SL

Distribution: South America: Guianan coastal drainages, from the Demerara River in Guyana, eastward to the Cottica River in Suriname.

Countries: Guyana, Suriname

Remarks and references: Redescribed by Kullander & Nijssen (1989: 151), with bibliography, diagnosis, description, distribution, and illustrations.

Common names: Krobia (Suriname), Ooroe wefi (Suriname), Ouwe wefi (Suriname)

***Krobia itanyi* (Puyo, 1943)**

*Aequidens itanyi* Puyo, 1943: 146, fig. 4. Type locality: Suriname, Distr. Marowijne, Marowijne R. system, kreek on left bank of Marowijne R., W Manbari Val, 6 km N Stoelmanseland (originally: crique du haut Itany). Neotype: ZMA 119531, designated by Kullander & Nijssen (1989: 166).

Maximum length: 12.5 cm SL

Distribution: South America: Marowijne River drainage in Suriname and French Guiana.

Countries: French Guiana, Suriname

Remarks and references: Redescribed by Kullander & Nijssen (1989: 166), with bibliography, diagnosis, description, distribution, and illustrations.

Common names: Prapra (French Guiana)

**LAETACARA**

*Laetacara* Kullander, 1986: 321. Type species: *Acara flavilabris* Cope, 1870. Type by original designation. Gender: feminine.

***Laetacara curviceps* (Ahl, 1923)**

*Acara curviceps* Ahl, 1923: 44, fig. 5. Type locality: Amazonenstrom. Holotype: ZMB 31324.

Maximum length: 4.6 cm SL

Distribution: South America: Amazon River basin, in lower portions of tributaries of the Amazon River in Brazil.

Countries: Brazil

***Laetacara dorsigera* (Heckel, 1840)**

*Acara dorsiger* Heckel, 1840: 348. Type locality: Sümpfe in der Nähe des Paraguay-Flusses bei Villa Maria. Holotype: NMW 33669.

Maximum length: 4.5 cm SL

Distribution: South America: Amazon River basin, in the Guaporé River drainage; Paraná River basin, in the Paraguay River drainage in Brazil and Paraguay, middle Paraná River drainage in Argentina.

Countries: Argentina, Bolivia, Brazil, Paraguay

***Laetacara flavilabris* (Cope, 1870)**

*Acara flavilabris* Cope, 1870: 570. Type locality: Near Pebas, Ecuador [currently Peru]. Holotype: ANSP 9156.

*Acara freniferus* Cope, 1872: 255. Type locality: the Ambyiacu [=Ampiyacu River, Peru]. Lectotype: ANSP 9157.

Maximum length: 8.2 cm SL

Distribution: South America: Amazon River basin, in the Napo and Putumayo river drainages in Ecuador, in the Huallaga, Ucayali, Amazon, Putumayo and Yavarí River basins in Peru, and in

the upper Solimões and Juruá River basins in Brazil.

Countries: Brazil, Ecuador, Peru

Remarks and references: Redescription in Kullander (1986: 328), with bibliography, diagnosis, description, distribution, and illustrations.

Common names: Bujurqui (Peru)

***Laetacara thayeri* (Steindachner, 1875)**

*Acara thayeri* Steindachner, 1875: 68, pl. 1 (fig. 2). Type locality: Im Amazonenstrom und dessen Ausständen bei Cudajas, in den See Hyanuary bei Manaus und im Lago Maximo bei Alemquer. Syntypes: (many) NMW 33723 (3), 33726-38 (13), 33739-45 (15), 33746 (?), 33752 (1).

Maximum length: 6.5 cm TL

Distribution: South America: Amazon River basin, in the Tigre, Ucayali, Yavarí and Amazon River basins in Peru, and along the Solimões, Amazon (to lower Trombetas River), and lower Negro River basins.

Countries: Brazil, Peru

**MAZARUNIA**

*Mazarunia* Kullander, 1990b: 4. Type species: *Mazarunia mazarunii* Kullander, 1990. Type by original designation. Gender: feminine.

***Mazarunia mazarunii* Kullander, 1990**

*Mazarunia mazarunii* Kullander, 1990b: 5, fig. 1. Type locality: Guyana: Upper Mazaruni River near Kamarang. Holotype: MHNG 1553.96.

Maximum length: 5.3 cm SL

Distribution: South America: Essequibo River drainage, in the upper Mazaruni River near Kamarang.

Countries: Guyana

**MESONAUTA**

*Mesonauta* Günther, 1862: 300. Type species: *Heros insignis* Heckel, 1840. Type by monotypy. Gender: masculine.

***Mesonauta acora* (Castelnau, 1855)**

*Chromys acora* Castelnau, 1855: 17, pl. 9 (fig. 1). Type locality: lacs de l' Araguay. No types known.

Maximum length: 7.1 cm SL

Distribution: South America: Amazon River basin, in the Tocantins and Xingu River basins.

Countries: Brazil

Remarks and references: Redescription by Kullander & Silfvergrip (1991: 424), with bibliography, diagnosis, description, distribution, and illustrations.

***Mesonauta egregius* Kullander & Silfvergrip, 1991**

*Mesonauta egregius* Kullander & Silfvergrip, 1991: 429, fig. 21. Type locality: Colombia, Departamento Vichada, Rio Vichada drainage, laguna no. 1 on Finca Boca de Guarrojo at the mouth of the Rio Guarrojo. Holotype: ICN-MNH 1686.

Maximum length: 8.2 cm SL

Distribution: South America: Orinoco River basin, in the Meta and Vichada River basins.

Countries: Colombia

***Mesonauta festivus* (Heckel, 1840)**

*Heros festivus* Heckel, 1840: 376. Type locality: Fluss Guaporé und dessen nahe gelegenen Moräste. No types known.

Maximum length: 8.2 cm SL

Distribution: South America: Paraná River basin, in the Paraguay River drainage in Brazil and Paraguay; Amazon River basin, in the Guaporé (Brazil and Bolivia), Madre de Dios (Peru), Mamoré (Bolivia), Jamari and Tapajós (Brazil) River drainages.

Countries: Bolivia, Brazil, Paraguay, Peru

Remarks and references: Redescription by Kullander & Silfvergrip (1991: 420), with bibliography, diagnosis, description, distribution, and illustrations.

**Mesonauta guyanae** Schindler, 1998

*Mesonauta guyanae* Schindler, 1998: 5, fig. 2. Type locality: Rockstone, Essequibo River, Guyana. Holotype: ZMB 32779.

Maximum length: 10 cm SL

Distribution: South America: Amazon River basin, in the Negro River drainage, Brazil; Essequibo River drainage in Guyana.

Countries: Brazil, Guyana

**Mesonauta insignis** (Heckel, 1840)

*Heros insignis* Heckel, 1840: 379. Type locality: waldlache bei Marabitanas am Rio-negro. Lectotype: NMW 24415, designated by Kullander & Silfvergrip (1991: 420).

Maximum length: 9.4 cm SL

Distribution: South America: Amazon River basin, in the upper Negro River drainage in Brazil; Orinoco River basin, along the Orinoco River in Colombia and Venezuela.

Countries: Brazil, Colombia, Venezuela

Remarks and references: Redescription by Kullander & Silfvergrip (1991: 418), with bibliography, diagnosis, description, distribution, and illustrations.

**Mesonauta mirificus** Kullander & Silfvergrip, 1991

*Mesonauta mirificus* Kullander & Silfvergrip, 1991: 430, fig. 22. Type locality: Peru, Departamento Loreto, Rio Napo, Cayapoza, small laguna on left bank island. Holotype: NRM 20001.

Maximum length: 9.7 cm SL

Distribution: South America: Amazon River basin in Peru and Colombia, in tributaries of the Ucayali and Amazon Rivers, from Yarina Cocha to Mocagua Island near Leticia.

Countries: Colombia, Peru

Common names: Bufurqui (Peru), Bujurqui (Peru)

**MIKROGEOPHAGUS**

*Mikrogeophagus* Meulengracht-Madsen in Schiötz & Christensen, 1968: 370. Type species: *Apistogramma ramirezi* Myers & Harry, 1948. Type by monotypy. Gender: masculine.

*Papiliochromis* Kullander, 1977: 253. Type species: *Apistogramma ramirezi* Myers & Harry, 1948. Type by original designation. Gender: feminine.

**Mikrogeophagus altispinosus** (Haseman, 1911)

*Crenicara altispinosa* Haseman, 1911: 344, pl. 58. Type locality: Along a sand-bank in the Río Mamoré, below the mouth of the Río Guaporé. Holotype: FMNH 54090.

Maximum length: 5.6 cm SL

Distribution: South America: Amazon River basin, in the Guaporé River drainage in Brazil and Bolivia, and in the Mamoré River drainage in Bolivia.

Countries: Bolivia, Brazil

Remarks and references: Species reviewed by Kullander (1981c).

**Mikrogeophagus ramirezi** (Myers & Harry, 1948)

*Apistogramma ramirezi* Myers & Harry, 1948a: 77. Type locality: evidently from one of the tributaries of the Rio Apuré or Rio Meta in the states of Guárico, Portuguesa, or Apuré. Syntypes: CAS-SU 14845(2), 14846(1), 14847(1).

Maximum length: 3.4 cm SL

Distribution: South America: Orinoco River basin, in the llanos of Venezuela and Colombia.

Countries: Colombia, Venezuela

Remarks and references: Species monographed by Kullander (1980c); also described by Myers & Harry (1948b).

**NANDOPSIS**

*Nandopsis* Gill, 1862: 238. Type species: *Chromis tetracanthus* Poey [= *Centrarchus tetracanthus* Valenciennes, 1831]. Type by monotypy. Gender: feminine.

*Parapetenia* Regan, 1905a: 324. Type species: *Acara adspersa* Günther, 1862. Type by subsequent designation. Type designated by Eigenmann (1910: 476). Gender: feminine.

**Nandopsis haitiensis** (Tee-Van, 1935)

*Cichlasoma haitiensis* Tee-Van, 1935: 294, fig. 270. Type locality: Étang Saumâtre, near Maneville, Cul-de-Sac Plain, Haiti, West Indies. Holotype: USNM 170907 [ex NYZS 7302].

Maximum length: 21.5 cm SL

Distribution: Caribbean Islands: Hispaniola Island.

Countries: Dominican Republic, Haiti

**Nandopsis tetracanthus** (Valenciennes, 1831)

*Centrarchus tetracanthus* Valenciennes in Cuvier & Valenciennes, 1831: 460. Type locality: Havane [=Habana, Cuba]. No types known; based on a drawing.

*Chromis fusco-maculatus* Guichenot, 1853: 78, pl. 2 (fig. 3). Type locality: Cuba. Holotype: MNHN A.9482.

*Acara adspersa* Günther, 1862: 282. Type locality: Barbadoes. Holotype: BMNH 1961.7.7.1.

*Heros tetracanthus cinctus* Eigenmann, 1903: 234, fig. 16. Type locality: Paso Real. Holotype: CAS 78971 [ex IU 9671].

*Heros tetracanthus latus* Eigenmann, 1903: 234, fig. 15. Type locality: San Juan. Holotype: CAS 78972 [ex IU 9669].

*Heros tetracanthus griseus* Eigenmann, 1903: 233, fig. 14. Type locality: San Antonio. Holotype: CAS 78974 [ex IU 9670].

*Heros tetracanthus torralbasi* Eigenmann, 1903: 230, fig. 11. Type locality: Calabazar. Holotype: CAS 78975 [ex IU 9672] (1 of 2).

*Heros nigricans* Eigenmann, 1903: 235, fig. 17. Type locality: Pinar del Rio. Holotype: CAS 78973 [ex IU 9668].

Maximum length: 20 cm SL

Distribution: Caribbean Islands: Cuba Island.

Countries: Cuba

Remarks and references: Hubbs (1920) presented a nomenclatural revision establishing the present synonymy.

**Nandopsis vombergi** (Ladiges, 1938)

*Cichlosoma Vombergi* Ladiges, 1938: 18, fig. 1. Type locality: Unterlauf des Rio Yague del Sur. Holotype: ZMH H401.

Maximum length: 19.4 cm SL

Distribution: Caribbean Islands: Eastern Hispaniola, in the Yaqui River basin.

Countries: Dominican Republic

**NANNACARA**

*Nannacara* Regan, 1905b: 344. Type species: *Nannacara anomala* Regan, 1905. Type by monotypy. Gender: feminine.

**Nannacara adoketa** Kullander & Prada-Pedrerros, 1993

*Nannacara adoketa* Kullander & Prada-Pedrerros, 1993: 359, fig. 1. Type locality: Brazil, State of Amazonas, Igarapé do Cumaru, a tributary of Paraná Atauí, in the middle Rio Negro. Holotype: MZUSP 44685.

Maximum length: 4.9 cm SL

Distribution: South America: Amazon River basin, in the middle Negro River basin.

Countries: Brazil

**Nannacara anomala** Regan, 1905

*Nannacara anomala* Regan, 1905b: 344. Type locality: R. Essequibo [Guyana]. Syntypes: BMNH 1864.1.21.27-28 (2).

Maximum length: 5.6 cm SL

Distribution: South America: Guianan rivers from the Aruka River in Guyana east to the lower Marowijne River in Suriname.  
 Countries: Guyana, Suriname  
 Remarks and references: Redescribed in Kullander & Nijssen (1989: 199), based on Surinamese material, with bibliography, diagnosis, description, distribution, and illustrations.

***Nannacara aureocephalus*** Allgayer, 1983  
*Nannacara aureocephalus* Allgayer, 1983: 13. Type locality: "Carière Chambaut" localit   A. [French Guiana]. Holotype: MNHN 1983-523.  
 Maximum length: 6.7 cm SL  
 Distribution: South America: Approuague River basin.  
 Countries: French Guiana  
 Common names: Ti prapra (French Guiana)

***Nannacara bimaculata*** Eigenmann, 1912  
*Nannacara bimaculata* Eigenmann, 1912: 488, pl. 66 (fig. 1). Type locality: Erukin [Guyana]. Holotype: FMNH 53799 [ex CM 2304].  
 Maximum length: 4.5 cm SL  
 Distribution: South America: Potaro River and nearby in the Essequibo River basin.  
 Countries: Guyana

***Nannacara taenia*** Regan, 1912  
*Nannacara taenia* Regan, 1912: 505. Type locality: the Amazon at Manaos. Holotype: BMNH 1912.2.2.15.  
 Maximum length: 5 cm SL  
 Distribution: South America: Near Bel  m, Par   State.  
 Countries: Brazil

### **NEETROPLUS**

*Neetroplus* G  nther, 1867: 603. Type species: *Neetroplus nematopus* G  nther, 1867. Type by monotypy. Gender: masculine.

***Neetroplus nematopus*** G  nther, 1867  
*Neetroplus nematopus* G  nther, 1867: 603. Type locality: Lake Managua [Nicaragua]. Holotype: BMNH 1865.7.20.35.  
*Neetroplus nicaraguensis* Gill in Gill & Bransford, 1877: 186. Type locality: Lake Nicaragua. Syntypes: (3).  
*Neetroplus fluviatilis* Meek, 1912: 74. Type locality: Costa Rica River near Guapilis, Costa Rica. Holotype: FMNH 7685 [not 7585].  
 Maximum length: 14 cm SL  
 Distribution: Central America: Atlantic slope of Nicaragua and western Costa Rica, in the San Juan River drainage, including Lake Nicaragua and Lake Managua.  
 Countries: Costa Rica, Nicaragua  
 Remarks and references: *Neetroplus nematopus* described in more detail in G  nther (1868: 470, pl. 74 (fig. 4)). Reviewed by Bussing (1998: 357), with key, diagnosis, geographical distribution, and figures.  
 Common names: Moga (Costa Rica)

### **PARACHROMIS**

*Parachromis* Agassiz, 1859: 408. Type species: *Parachromis gulosus* [= *Heros managuensis* G  nther, 1867]. Agassiz, 1859. Type by monotypy. Gender: masculine.

***Parachromis dovii*** (G  nther, 1864)  
*Heros dovii* G  nther, 1864c: 154. Type locality: Lake of Nicaragua. Syntypes: BMNH 1864.1.26.195-196 (2).  
 Maximum length: 50 cm SL  
 Distribution: Central America: Atlantic slope, from the Aguan River (Honduras) to the Mo  n River (Costa Rica); Pacific slope from the Yeguar   River (Honduras) to the Bebedero River (Costa Rica).

Countries: Costa Rica, Honduras, Nicaragua  
 Remarks and references: Reviewed by Bussing (1998: 360), with key, diagnosis, geographical distribution, and figures.  
 Common names: Guapote (Costa Rica), Guapote blanco (Honduras), Lagunero (Nicaragua)

***Parachromis friedrichsthalii*** (Heckel, 1840)  
*Heros Friedrichsthalii* Heckel, 1840: 381. Type locality: Central-Amerika. Holotype: NMW 35322.  
*Cichlosoma multifasciatum* Regan, 1905a: 335. Type locality: Lake Peten. Syntypes: BMNH 1864.1.26.65-66 (2).  
 Maximum length: 28 cm SL  
 Distribution: North and Central America: Atlantic slope, in Mexico (Usumacinta River), Belize, Honduras and Guatemala.  
 Countries: Belize, Guatemala, Honduras, Mexico  
 Common names: Castarrica (Mexico), Guapote (Belize), Molula (Mexico), Mus mus (Belize), Yellowjacket cichlid (Belize)

***Parachromis loisellei*** (Bussing, 1989)  
*Cichlasoma loisellei* Bussing, 1989: 153, fig. 1. Type locality: R  o San Miguel, a tributary of R  o Matina on road to Puerto Lim  n, Lim  n (elevation 12 m), Lim  n Province, Costa Rica. Holotype: LACM 44405-1 [ex UCR 1126-8].  
 Maximum length: 18.5 cm SL  
 Distribution: Central America: Atlantic slope from the Ulua River (Honduras) to the Cricamola River (Panama); Pacific slope, in the Tamarindo River (Nicaragua).  
 Countries: Costa Rica, Guatemala, Honduras, Nicaragua, Panama  
 Remarks and references: Reviewed by Bussing (1998: 364), with key, diagnosis, geographical distribution, and figures.  
 Common names: Guapote amarillo (Guatemala)

***Parachromis managuensis*** (G  nther, 1867)  
*Parachromis gulosus* Agassiz, 1859: 408. Type locality: Lake Nicaragua. Lectotype: MCZ 16086, designated by Kullander & Hartel (1997: 196).  
*Heros managuensis* G  nther, 1867: 602. Type locality: Lake of Managua. Holotype: BMNH 1865.7.20.32.  
 Maximum length: 22 cm SL  
 Distribution: Central America: Atlantic slope from the Ulua River (Honduras) to the Matina River (Costa Rica).  
 Countries: Costa Rica, Cuba (introduced), El Salvador (introduced), Guatemala (introduced), Honduras, Mexico (introduced), Nicaragua, Panama (introduced)  
 Remarks and references: Reviewed by Kullander & Hartel (1997), with redescription and photo, and lectotype designation of *P. gulosus*. *Heros managuensis* described in more detail in (G  nther 1868: 463, pl. 77 (fig. 3)). Reviewed by Bussing (1998: 367), with key, diagnosis, geographical distribution, and figures.  
 Common names: Guapote barcino (Costa Rica, Nicaragua), Guapote tigre (Costa Rica), Pinta (Mexico)

***Parachromis motaguensis*** (G  nther, 1867)  
*Heros motaguensis* G  nther, 1867: 602. Type locality: R  o Motagua. Syntypes: (5) BMNH 1865.4.29.68-70 (3 or 4), 1865.6.10.12 (1).  
 Maximum length: 30 cm TL  
 Distribution: Central America: Atlantic slope of Guatemala and Honduras in the Motagua River basin; Pacific slope from Naranjo River (Guatemala) to Choluteca River (Honduras).  
 Countries: El Salvador, Guatemala, Honduras  
 Remarks and references: Described in more detail in G  nther (1868: 462, pl. 77 (fig. 2)).  
 Common names: False yellowjacket cichlid (Belize), Guapote (El Salvador), Moro (El Salvador), Pando (El Salvador)

### **PARANEETROPLUS**

*Paraneetroplus* Regan, 1905a: 436. Type species: *Paraneetroplus*

*bulleri* Regan, 1905. Type by monotypy. Gender: masculine.

***Paraneetroplus bulleri* Regan, 1905**

*Paraneetroplus Bulleri* Regan, 1905a: 436. Type locality: Rio de Sarabia, Mexico. Holotype: BMNH 1890.10.10.94.

Maximum length: 25.5 cm SL

Distribution: North America: Atlantic slope, in the Coatzacoalcos River drainage.

Countries: Mexico

Common names: Corriertero (Mexico)

***Paraneetroplus gibbiceps* (Steindachner, 1864)**

*Heros gibbiceps* Steindachner, 1864: 66, pl. 5 (fig. 1-2). Type locality: Mejico, im Teapa-Flusse (Staat Tabasco). Syntypes: NMW 17360-61 (2), 17367 (1), 58799 (1).

*Cichlasoma teapae* Evermann & Goldsborough, 1902: 156, fig. 6. Type locality: Rio Teapa at Teapa, Tabasco, Mexico. Holotype: USNM 50005.

*Paraneetroplus omonti* Allgayer, 1988: 13, fig. p. 15. Type locality: près du pont, sur le Rio Tulija traversé par la route Palenqué-Ococingo, Chiapas, Mexique. Holotype: MNHN 1987-1474.

Maximum length: 23 cm SL

Distribution: North America: Atlantic slope, in the Usumacinta River basin.

Countries: Mexico

Common names: Corriertero verde (Mexico), Roquera (Mexico)

***Paraneetroplus nebuliferus* (Günther, 1860)**

*Chromis nebulifera* Günther, 1860a: 318. Type locality: Fresh waters of Mexico. Syntypes: BMNH 1860.6.17.31-33 (3).

*Cichlasoma eigenmanni* Meek, 1902: 119, pl. 30. Type locality: Rio Tehuacan, Venta Salada, Pueblo, Mexico. Holotype: FMNH 3712.

Maximum length: 20 cm TL

Distribution: North America: Atlantic slope, in the Papaloapán River basin.

Countries: Mexico

Common names: Chonga (Mexico), Playero (Mexico)

**PETENIA**

*Petenia* Günther, 1862: 301. Type species: *Petenia splendida* Günther, 1862. Type by monotypy. Gender: feminine.

***Petenia splendida* Günther, 1862**

*Petenia splendida* Günther, 1862: 301. Type locality: Lake Peten. Syntypes: BMNH 1864.1.26.103-105 (3).

Maximum length: 50 cm SL

Distribution: North and Central America: Atlantic slope of Grijalva River to Usumacinta River (Mexico), Usumacinta River (Guatemala), and Belize.

Countries: Belize, Guatemala, Mexico

Common names: Bay snook (Belize), Blanco (Belize), Tenguajagua (Mexico), Tenguayaca (Mexico)

**PTEROPHYLLUM**

*Pterophyllum* Heckel, 1840: 334. Type species: *Platax scalaris* Cuvier, 1831. Type by monotypy. Gender: neuter.

*Plataxoides* Castelnau, 1855: 21. Type species: *Plataxoides dumerilii* Castelnau, 1855. Type by monotypy. Gender: masculine.

***Pterophyllum altum* Pellegrin, 1903**

*Pterophyllum altum* Pellegrin, 1903: 125. Type locality: Atabapo (Orénoque). Syntypes: BMNH 1904.6.28.2-3 [ex MNHN] (2 spms.); MHNLR P.261 (1); MNHN 1887-571 to 574 (4), 1887-579 and 580 (14 spms.)

Maximum length: 6.5 cm SL

Distribution: South America: Amazon River basin, in the upper Negro River drainage; Orinoco River basin, in tributaries of the

upper Orinoco River (Inírida and Atabapo Rivers) to Puerto Ayacucho.

Countries: Colombia, Venezuela

***Pterophyllum leopoldi* (Gosse, 1963)**

*Plataxoides leopoldi* Gosse, 1963: 4, pl. 1 (fig. 2). Type locality: Furo du village de Cuia (rive gauche du Solimões à environ 90 km en amont de Manacapuru). Holotype: IRSNB 459.

Maximum length: 5 cm SL

Distribution: South America: Amazon River basin, along the Solimões-Amazon River between about Manacapuru and Santarém; Rupununi River in the Essequibo River drainage in Guyana.

Countries: Brazil, Guyana

***Pterophyllum scalare* (Schultze, 1823)**

*Zeus scalaris* Schultze in Lichtenstein, 1823: 114. Type locality: Or. Brazil. Types: No types located with certainty, ZMB 1347 possibly part of type series; ZMB 2833 selected as lectotype by Paepke & Schindler (2002: 181).

*Platax scalaris* Cuvier in Cuvier & Valenciennes, 1831: 237. Type locality: None stated. Holotype: ZMB 1347.

*Plataxoides dumerilii* Castelnau, 1855: 21, pl. 11 (fig. 3). Type locality: Para. Holotype: MNHN A.254.

*Pterophyllum eimekei* Ahl, 1928: 31, fig. p. 31. Type locality: Mündung des Rio Negro in den Amazonenstrom. Syntypes: ZMB uncatalogued (4) and MNHN 29-12 (1).

Maximum length: 7.5 cm SL

Distribution: South America: Amazon River basin, in Peru, Colombia, and Brazil, along the Ucayali, Solimões and Amazon rivers; rivers of Amapá State, Oyapock River in French Guiana; Essequibo River in Guyana.

Countries: Brazil, Colombia, French Guiana, Guyana, Peru, Suriname (introduced)

Remarks and references: Redescription based on Peruvian material in Kullander (1986: 210), with bibliography, diagnosis, description, distribution, and illustrations. Paepke & Schindler (2002) discuss the authorship and putative types of *Z. scalaris* Schultze.

Common names: Acará bandeira (Brazil), Cara bandeira (Brazil), Pez angel (Peru), Poson lavwèl (French Guiana)

**RETROCOLUS**

*Retroculus* Eigenmann & Bray, 1894: 614. Type species: *Retroculus boulengeri* Eigenmann & Bray, 1894. Type by monotypy. Gender: masculine.

***Retroculus lapidifer* (Castelnau, 1855)**

*Chromys lapidifera* Castelnau, 1855: 16, pl. 12 (fig.1). Type locality: Rio das Mortes, Xaventina Island Matto Grosso Brazil (originally: la grande cascade de l'Araguay (Caxoeira grande)). Holotype: MNHN A.8321 (dry, lost). Name spelled *lapidifera* in text (pp. viii and 16) and index (p. 108); *lapidifer* in figure caption and list of figures (p. xi). Neotype BMNH 1970.10.28:58, designated by (Gosse 1971: 5).

*Retroculus boulengeri* Eigenmann & Bray, 1894: 614. Type locality: Brazil. Holotype: USNM 152111.

Maximum length: 20.3 cm SL

Distribution: South America: Amazon River basin, in the Tocantins and Capim River basins.

Countries: Brazil

Remarks and references: Redescription in Gosse (1971) with bibliography, diagnosis, description, and illustration.

***Retroculus septentrionalis* Gosse, 1971**

*Retroculus septentrionalis* Gosse, 1971: 11, p. 5. Type locality: Guyane française dans le fleuve Oyapock à Saut-Alikoto (en amont du village de Camopi). Holotype: IRSNB 515.

Maximum length: 19 cm SL

Distribution: South America: Oyapock River drainage in Brazil and French Guiana, Araguari River drainage in Brazil.  
 Countries: Brazil, French Guiana  
 Common names: Prapra (French Guiana)

***Retroculus xinguensis* Gosse, 1971**

*Retroculus xinguensis* Gosse, 1971: 7, pl. 4. Type locality: Brésil dans le Rio Xingu aux Cachoeira von Martius (à la limite Nord de l'Etat du Mato Grosso). Holotype: IRSNB 512.  
 Maximum length: 14.4 cm SL  
 Distribution: South America: Amazon River basin, in the Xingu and Tapajós River basins.  
 Countries: Brazil

**SATANOPERCA**

*Satanoperca* Günther, 1862: 312. Type species: *Geophagus daemon* Heckel, 1840. Type by subsequent designation by Jordan & Evermann (1898, p. 1542). Gender: feminine.

***Satanoperca acuticeps* (Heckel, 1840)**

*Geophagus acuticeps* Heckel, 1840: 394. Type locality: Barra do Rio-negro [=Manaus]. Holotype: NMW 23429.  
 Maximum length: 17 cm SL  
 Distribution: South America: Amazon River basin, in the Branco River, lower Negro River, and along the Solimões-Amazon River in Brazil between Tonantins and the lower Trombetas River.  
 Countries: Brazil  
 Common names: Acará bicudo (Brazil), Acará papa terra (Brazil)

***Satanoperca daemon* (Heckel, 1840)**

*Geophagus daemon* Heckel, 1840: 389, pl. 29 (fig. 26-29). Type locality: Rio-Negro. Holotype: NMW 23123.  
 Maximum length: 17 cm SL  
 Distribution: South America: Amazon River basin, in the upper Negro River in Brazil and Venezuela; Orinoco River basin, in Colombia and Venezuela.  
 Countries: Brazil, Colombia, Venezuela

***Satanoperca jurupari* (Heckel, 1840)**

*Geophagus jurupari* Heckel, 1840: 392. Type locality: an der Mündung des Rio-negro in den Amazonenstrom. Syntypes: NMW 23580-81 (2).  
 Maximum length: 18.5 cm SL  
 Distribution: South America: Amazon River basin, from Peru, Ecuador and Colombia to the mouth of Amazon River in Brazil, in Amapá State and eastern French Guiana, also in the Bolivian Amazon drainage except Guaporé River.  
 Countries: Bolivia, Brazil, Colombia, Ecuador, French Guiana, Peru  
 Remarks and references: Redescription, based on Peruvian material, in Kullander (1986: 147), with bibliography, diagnosis, description, distribution and illustration.  
 Common names: Acará-chibante (Brazil), Cara bicudo (Brazil), Prapra djab (French Guiana), Prapra roch (French Guiana), Prapra so (French Guiana)

***Satanoperca leucosticta* (Müller & Troschel, 1849)**

*Geophagus leucostictus* Müller & Troschel, 1849: 625. Type locality: See Amucu; Sümpfen der Savanne. Holotype: ZMB 2331.  
*Satanoperca macrolepis* Günther, 1862: 314. Type locality: Demerara, British Guiana. Syntypes: (3) BMNH 1962.1.8.1 (1).  
 Maximum length: 15 cm SL  
 Distribution: South America: Essequibo River in Guyana and Nickerie River in Suriname.  
 Countries: Guyana, Suriname  
 Remarks and references: Redescription based on Surinamese material in Kullander & Nijssen (1989: 66), with bibliography, diagnosis, description, distribution, and illustration.

***Satanoperca lilith* Kullander & Ferreira, 1988**

*Satanoperca lilith* Kullander & Ferreira, 1988: 344, fig. 1. Type locality: Brazil, Estado do Amazonas, Rio Negro drainage, Urumari, praia (0°03'S, 63°30'W). Holotype: MZUSP 33003.  
 Maximum length: 25.5 cm SL  
 Distribution: South America: Amazon River basin, along the Solimões-Amazon River from the Japurá River to the Trombetas River, also Negro River from the Curicuriari River to the mouth, and in the Branco River basin.  
 Countries: Brazil

***Satanoperca mapiritensis* (Fernández-Yépez, 1950)**

*Geophagus mapiritensis* Fernández-Yépez, 1950: 117, fig. p. 117. Type locality: Río Mapirito al Sur de Maturín, Estado Monagas, Venezuela. Holotype: MHNLS 153 [ex AFY 49422].  
 Maximum length: 14 cm SL  
 Distribution: South America: Orinoco River basin, along the lower Orinoco River and in rivers north of the lower Orinoco River.  
 Countries: Venezuela

***Satanoperca pappaterra* (Heckel, 1840)**

*Geophagus pappaterra* Heckel, 1840: 396. Type locality: Rio-Guapore. Syntypes: 23684-23685 (2).  
 Maximum length: 17.4 cm SL  
 Distribution: South America: Amazon River basin, in the Guaporé River in Brazil and Bolivia; Paraná River basin, in the Paraguay River drainage in Brazil and northern Paraguay (to the Aquidabán River).  
 Countries: Bolivia, Brazil, Paraguay

**SYMPHYSODON**

*Symphysodon* Heckel, 1840: 332. Type species: *Symphysodon discus* Heckel, 1840. Type by monotypy. Gender: masculine.

***Symphysodon aequifasciatus* Pellegrin, 1904**

*Symphysodon discus* var. *aequifasciata* Pellegrin, 1904: 250. Type locality: Teffé (Brésil); Santarém (Bresil). Syntypes: MNHN 1902-130 (1) Santarém, 1902-134 (1) and 1902-135 (1) Teffé.  
*Symphysodon discus tarzoo* Lyons, 1959: 6, fig. p. 7. Type locality: Leticia, Columbia. No types known.  
*Symphysodon aequifasciata axelrodi* Schultz, 1960: 14, fig. (p. 9). Type locality: Belem, Brazil, Amazon River. Holotype: USNM 179831.  
*Symphysodon aequifasciata haraldi* Schultz, 1960: 11, fig. (p. 8). Type locality: Benjamin Constant, Brazil in the Amazon. Holotype: USNM 179829.  
 Maximum length: 13.7 cm SL  
 Distribution: South America: Amazon River basin in tributaries along the Solimões-Amazon River from the Putumayo River in Colombia and Peru to the Tocantins River basin.  
 Countries: Brazil, Colombia, Peru  
 Remarks and references: Popular review in Kullander (1996a).

***Symphysodon discus* Heckel, 1840**

*Symphysodon discus* Heckel, 1840: 333, pl. 30 (fig. 21). Type locality: bei Barra do Rio Negro [=Manaus], im Flusse selbst. Holotype: NMW 35612.  
*Symphysodon discus willischwartzi* Burgess, 1981: 37, fig. p. 37. Type locality: Rio Abacaxis (a tributary of the Rio Madeira), Brazil. Holotype: MZUSP 15375.  
 Maximum length: 12.3 cm SL  
 Distribution: South America: Amazon River basin in Brazil, near the mouth of the Negro River, in the lower Abacaxis River, and in the lower Trombetas River.  
 Countries: Brazil  
 Remarks and references: Popular review in Kullander (1996a).  
 Common names: Acará-moreré (Brazil)

**TAENIACARA**

*Taeniacara* Myers, 1935: 11. Type species: *Taeniacara candidi* Myers, 1935. Type by original designation. Gender: feminine.

***Taeniacara candidi* Myers, 1935**

*Taeniacara candidi* Myers, 1935: 11. Type locality: in the Amazon (middle). Holotype: USNM 93579.

*Apistogramma weisei* Ahl, 1936b: 268. Type locality: Santarem. Holotype: ZMB 32385.

Maximum length: 3.3 cm SL

Distribution: South America: Amazon River basin, in the lower Negro River, and along the Amazon River to the Tapajós River.

Countries: Brazil

**TAHUANTINSUYOA**

*Tahuantinsuyoa* Kullander, 1986: 308. Type species: *Tahuantinsuyoa macantatzta* Kullander, 1986. Type by original designation. Gender: feminine.

***Tahuantinsuyoa chipi* Kullander, 1991**

*Tahuantinsuyoa chipi* Kullander, 1991c: 4, fig. 2. Type locality: Perú, departamento Huánuco, pools of unnamed creek close to lower Río Lullapichis, 1.8 km east of Panguana station (9°37'90"S, 74°55'90"W), 260 masl. Holotype: ROM 58275.

Maximum length: 8.2 cm SL

Distribution: South America: Amazon River basin, in the Pachitea River basin in Peru.

Countries: Peru

***Tahuantinsuyoa macantatzta* Kullander, 1986**

*Tahuantinsuyoa macantatzta* Kullander, 1986: 309, pl. 34 (fig. 1). Type locality: Perú, departamento Ucayali, Río Aguaytía drainage system, Río Huacamayo. Holotype: MZUSP 16212.

Maximum length: 7.4 cm SL

Distribution: South America: Amazon River basin, in the Aguaytía River basin in Peru.

Countries: Peru

**TELEOCICHLA**

*Teleocichla* Kullander, 1988: 196. Type species: *Teleocichla centrarchus* Kullander, 1988. Type by original designation. Gender: feminine.

***Teleocichla centisquama* Zuanon & Sazima, 2002**

*Teleocichla centisquama* Zuanon & Sazima, 2002: 374, fig. 1. Type locality: Brazil: Pará: rio Xingu: Furo do Zé Pinheiro (3°27'26"S 51°55'03"W). Holotype: INPA 14934.

Maximum length: 4 cm SL

Distribution: South America: Amazon River basin, in the Xingu River drainage around Altamira.

Countries: Brazil

***Teleocichla centrarchus* Kullander, 1988**

*Teleocichla centrarchus* Kullander, 1988: 198, fig. 2. Type locality: Brésil, Rio Xingù, Cachoeira von Martius, Haut Xingù. État du Mato Grosso. Holotype: IRSNB 649.

Maximum length: 6 cm SL

Distribution: South America: Amazon River basin, in the Xingu River drainage at Cachoeira von Martius.

Countries: Brazil

***Teleocichla cinderella* Kullander, 1988**

*Teleocichla cinderella* Kullander, 1988: 204, fig. 6. Type locality: Brazil, State of Pará: R. Tocantins, Tucurui, jusante de represa, poços. Holotype: INPA 802.

Maximum length: 5.4 cm SL

Distribution: South America: Amazon River basin, in the lower Tocantins River basin.

Countries: Brazil

***Teleocichla gephyrogramma* Kullander, 1988**

*Teleocichla gephyrogramma* Kullander, 1988: 205, fig. 7. Type locality: Brésil, Rio Xingù, Cachoeira von Martius, Haut Xingù. État du Mato Grosso. Holotype: IRSNB 647.

Maximum length: 4.6 cm SL

Distribution: South America: Amazon River basin, in the Xingu River drainage at Cachoeira von Martius.

Countries: Brazil

***Teleocichla monogramma* Kullander, 1988**

*Teleocichla monogramma* Kullander, 1988: 207, figs. 1, 8. Type locality: Brésil, Rio Xingù, Cachoeira von Martius, Haut Xingù. État du Mato Grosso. Holotype: IRSNB 646.

Maximum length: 6.3 cm SL

Distribution: South America: Amazon River basin, in the Xingu River drainage at Cachoeira von Martius.

Countries: Brazil

***Teleocichla prionogenys* Kullander, 1988**

*Teleocichla prionogenys* Kullander, 1988: 203, fig. 5. Type locality: Brazil, State of Pará: Rio Tapajós, São Luis, acima de Itaituba, pedral. Holotype: MZUSP 36951.

Maximum length: 5.7 cm SL

Distribution: South America: Amazon River basin, in the Tapajós River at São Luis.

Countries: Brazil

***Teleocichla proselytus* Kullander, 1988**

*Teleocichla proselytus* Kullander, 1988: 201, fig. 4. Type locality: Brazil, State of Pará: Rio Tapajós, São Luis, acima de Itaituba, pedral. Holotype: MZUSP 33065.

Maximum length: 5.7 cm SL

Distribution: South America: Amazon River basin, in the Tapajós River at São Luis.

Countries: Brazil

**THERAPS**

*Theraps* Günther, 1862: 284. Type species: *Theraps irregularis* Günther, 1862. Type by monotypy. Gender: masculine.

***Theraps coeruleus* Stawikowski & Werner, 1987**

*Theraps coeruleus* Stawikowski & Werner, 1987: 499, fig. p. 499. Type locality: einem kleinen Zufluss zum Rio Mizol Há bei Francesco Madero westlich der Strasse von Palenque nach Ocosingo, etwa 30 Kilometer südlich von Palenque. Holotype: ZFMK 15501.

Maximum length: 12 cm SL

Distribution: North America: Atlantic slope, upper Tuliya River in the Usumacinta River drainage.

Countries: Mexico

***Theraps irregularis* Günther, 1862**

*Theraps irregularis* Günther, 1862: 284. Type locality: Guatemala. Holotype: BMNH 1861.8.12.15.

*Theraps belone* Allgayer, 1989: 6, fig. p. 7. Type locality: "La Culebra" sur le Rio Chocolja, Chiapas (Mexique). Holotype: MNHN 1989-581.

Maximum length: 19 cm SL

Distribution: North and Central America: Atlantic slope of Mexico and Guatemala (Usumacinta, Sarstun, and Dulce River basins).

Countries: Guatemala, Mexico

***Theraps lentiginosus* (Steindachner, 1864)**

*Heros lentiginosus* Steindachner, 1864: 62, pl. 3 (fig. 1). Type locality: Mejico. Syntypes: NMW 17381-82 (2).

*Theraps rheophilus* Seegers & Staeck, 1985: 500, fig. p. 500-504. Type locality: etwa sechs Kilometer südlich von Palenque im Rio

Nututun unter der Brücke der Strasse nach Ocosingo in Chiapas, Mexico. Holotype: ZFMK 13928.  
Maximum length: 25 cm TL  
Distribution: North and Central America: Atlantic slope, in the Grijalva and Usumacinta River drainages in Mexico and Guatemala.  
Countries: Guatemala, Mexico

***Theraps wesseli* Miller, 1996**

*Theraps wesseli* Miller, 1996: 180, fig. 1. Type locality: Río Bel-leaire at CA 13 bridge (near Entelina), 8 km south of the Río Jutiapa crossing, in the Río Papaloteca drainage, Departamento de Atlántida; 15° 41' 30" W. Lat., 86° 30' N. Long. Holotype: UMMZ 231103.  
Maximum length: 8 cm SL  
Distribution: Central America: Atlantic slope, in the Papaloteca River basin.  
Countries: Honduras

**THORICHTHYS**

*Thorichthys* Meek, 1904: 222. Type species: *Thorichthys ellioti* Meek, 1904. Type by original designation. Gender: masculine.

***Thorichthys affinis* (Günther, 1862)**

*Heros affinis* Günther, 1862: 292. Type locality: Lake Peten. Syntypes: BMNH 1864.1.26.83-86 (4).  
Maximum length: 14 cm SL  
Distribution: Central America: Atlantic slope, in the upper Usumacinta River basin in Guatemala, and Belize.  
Countries: Belize, Guatemala

***Thorichthys aureus* (Günther, 1862)**

*Heros aureus* Günther, 1862: 292. Type locality: Guatemala. Holotype: BMNH 1864.1.26.51.  
Maximum length: 15 cm SL  
Distribution: Central America: Atlantic slope from Golden Creek (Belize) to Motagua River basin (Honduras).  
Countries: Belize, Guatemala, Honduras  
Common names: Golden firemouth cichlid (Belize)

***Thorichthys callolepis* (Regan, 1904)**

*Heros (Heros) callolepis* Regan, 1904: 258. Type locality: Santo Domingo de Guzman, Mexico. Syntypes: BMNH 1890.10.10.112-113 (2).  
Maximum length: 14 cm SL  
Distribution: North America: Atlantic slope, in the Coatzacoalcos River drainage, Mexico.  
Countries: Mexico

***Thorichthys ellioti* Meek, 1904**

*Heros maculipinnis* Steindachner, 1864: 69, pl. 4 (fig. 2). Type locality: Mejico im Xamapa-Flusse. Syntypes: NMW 17368-17370 (3).  
*Thorichthys ellioti* Meek, 1904: 223, fig. 72. Type locality: Motzorongo, Vera Cruz. Holotype: FMNH 4627 [not 4727].  
Maximum length: 15 cm SL  
Distribution: North America: Atlantic slope, in the Papaloapán River basin.  
Countries: Mexico  
Remarks and references: Identity of *Heros maculipinnis* and *T. ellioti* requires further analysis; whereas *T. maculipinnis* has priority, *T. ellioti* may be in prevailing usage.

***Thorichthys helleri* (Steindachner, 1864)**

*Heros Helleri* Steindachner, 1864: 64, pl. 4 (fig. 1). Type locality: Mejico, im Teapa-Flusse (Staat Tabasco). Syntypes: NMW 17344-17349 (6).  
*Cichlasoma champotonis* Hubbs, 1936: 257, pl. 11 (fig. 1). Type locality: Río Champoton, Janateya, Campeche, 7 leagues (34 km)

east of the mouth, Yucatán, Mexico. Holotype: UMMZ 102203.  
Maximum length: 14.5 cm SL  
Distribution: North America: Atlantic slope, from the Coatzacoalcos River to the Usumacinta River drainage.  
Countries: Mexico

***Thorichthys meeki* Brind, 1918**

*Thorichthys helleri meeki* Brind, 1918: 119. Type locality: Near Progreso, Yucutan, Mexico. Holotype: USNM 79243.  
*Cichlasoma hyorhynchum* Hubbs, 1935: 15, pl. 3 (fig. 2). Type locality: Río San Pedro de Mártir, a tributary of Río Usumacinta, at El Paso de los Caballos, Department of Petén, Guatemala. Holotype: UMMZ 95519.  
Maximum length: 17 cm TL  
Distribution: North and Central America: Atlantic slope, in the Usumacinta River drainage, the Belize River drainage, and near Progreso, in Mexico, Guatemala and Belize.  
Countries: Belize, Colombia (introduced), Guatemala, Mexico  
Common names: Castarrica (Mexico), Firemouth cichlid (Belize), Panya gial (Belize), Rojita (Mexico)

***Thorichthys pasionis* (Rivas, 1962)**

*Cichlasoma pasionis* Rivas, 1962: 148, fig. 1. Type locality: Río de la Pasión, of the Río Usumacinta system, at Sayaxche, Department of El Petén, Guatemala. Holotype: USNM 203156 [ex UMIM 4872].  
Maximum length: 17 cm SL  
Distribution: North and Central America: Atlantic slope, in the Usumacinta River drainage in Mexico and Guatemala.  
Countries: Guatemala, Mexico  
**Common name:** Mojarra amarilla (Mexico)

***Thorichthys socolofi* (Miller & Taylor, 1984)**

*Cichlasoma socolofi* Miller & Taylor, 1984: 933, fig. 1. Type locality: Río Misalá (tributary to R. Tulija of R. Grijalva basin) below bridge at Adolfo Ruiz Cortines (17°23' N lat., 92°01' W long.), on highway from Palenque to Agua Azul, 19.6 km S of the "Maya Head" turnoff to Palenque, Chiapas, Mexico. Holotype: UMMZ 210819.  
Maximum length: 7.9 cm SL  
Distribution: North America: Atlantic slope, in the Grijalva River basin.  
Countries: Mexico

**TOMOCICHLA**

*Tomocichla* Regan, 1908a: 463. Type species: *Tomocichla underwoodi* Regan, 1908. Type by monotypy. Gender: feminine.

***Tomocichla asfraci* Allgayer, 2002**

*Tomocichla asfraci* Allgayer, 2002b: 32, fig. p. 33. Type locality: Panama, Boca-del-Toro, Rio Guarumo. Holotype MNHN 2002-1093).  
Maximum length: 25 cm SL  
Distribution: Central America: Atlantic slope, Laguna de Chiriqui basin in the Guarumo River.  
Countries: Panama

***Tomocichla sieboldii* (Kner, 1863)**

*Heros sieboldii* Kner, 1863: 223. Type locality: Panama an der Südseeseite. Syntypes: (11) NMW 22012 (1).  
*Herichthys underwoodi* Regan, 1906a: 30, pl. 3 (fig. 5). Type locality: Costa Rica. Holotype: BMNH 1907.6.28.48.  
*Cichlasoma punctatum* Meek, 1909: 210. Type locality: Buenos Aires de Terraba, Costa Rica. Holotype: FMNH 6478.  
*Cichlasoma frontale* Meek, 1909: 210. Type locality: Turrubales, Costa Rica. Holotype: FMNH 6358.  
*Theraps terrabae* Jordan & Evermann, 1927: 507. Type locality: [Buenos Aires de Terraba.] Holotype: FMNH 6478. Replacement for *Cichlasoma punctatum* Meek, preoccupied in *Cichlasoma* by



*Labrus punctatus* Bloch.  
Maximum length: 25 cm SL  
Distribution: Central America: Pacific slope, from Esparza (Costa Rica) to Río Sta María (Panama).  
Countries: Costa Rica, Panama  
Remarks and references: Redescription by Bussing (1975), as *Cichlasoma sieboldii*. Reviewed by Bussing (1998: 372), as *Theraps sieboldii*, with key, diagnosis, geographical distribution, and figures. Molecular analysis suggests that *T. sieboldii* is not closely related to *T. tuba* (Martin & Bermingham, 1998), but the species is maintained in *Tomocichla* pending a more general revision of heroin cichlids.  
Common names: Mojarra (Costa Rica)

**Tomocichla tuba** (Meek, 1912)  
*Tomocichla underwoodi* Regan, 1908a: 463. Type locality: Río Iroquois [Costa Rica]. Syntypes: (13) BMNH 1909.3.13.99-108 (10), UMMZ 167297 [ex BMNH] (1).  
*Cichlasoma tuba* Meek, 1912: 73. Type locality: Victoria, Costa Rica. Holotype: FMNH 7681 (missing).  
Maximum length: 30 cm TL  
Distribution: Central America: Atlantic slope, from the Escondido River (Nicaragua) to the Cricamola River (Panama).  
Countries: Costa Rica, Nicaragua, Panama  
Remarks and references: Redescription by Bussing (1975), as *Cichlasoma tuba*. Reviewed by Bussing (1998: 376, as *Theraps underwoodi*), with key, diagnosis, geographical distribution, and figures.

### UARU

*Uaru* Heckel, 1840: 330. Type species: *Uaru amphiacanthoides* Heckel, 1840. Type by monotypy. Gender: masculine.  
*Uarus* Cope, 1872: 254. Type species: *Uaru amphiacanthoides* Heckel, 1840. Gender: masculine. Unjustified emendation of spelling of *Uaru* Heckel.

**Uaru amphiacanthoides** Heckel, 1840  
*Uaru amphiacanthoides* Heckel, 1840: 331, pl. 29 (fig. 13-16). Type locality: Rio-negro oberhalb Airao. Holotype: NMW 24808.  
*Pomotis ? fasciatus* Jardine, 1843: 169, p. 17. Type locality: Rios Padauri and Negro. No types known.  
*Uaru obscurum* Günther, 1862: 302. Type locality: River Cupari [=Cupari River, Brazil]. Holotype: BMNH 1853.3.19.39.  
*Acara (Heros) imperialis* Steindachner, 1879a: 161. Type locality: Ausstände des Amazonenstromes zunächst der Mündung des Rio Negro. Syntypes: (several) NMW 79185-86 (7).  
Maximum length: 25 cm SL  
Distribution: South America: Amazon River basin, along the Amazon-Solimões River drainage from the Japurá River to the Tapajós River, and in the middle and lower Negro River basin.  
Countries: Brazil

**Uaru fernandezyepezi** Stawikowski, 1989  
*Uaru fernandezyepezi* Stawikowski, 1989: 21, fig. 1. Type locality: Seitenarm des Río Atabapo, fünf Kilometer oberhalb dessen Mündung in den Río Orinoco. Holotype: ZFMK 15757.  
Maximum length: 19 cm SL  
Distribution: South America: Orinoco River basin, in the Atabapo River basin.  
Countries: Venezuela  
Common names: Run Runá (Venezuela)

### VIEJA

*Vieja* Fernández-Yépez, 1969: [4]. Type species: *Vieja panamensis* Fernández-Yépez, 1969. Type by original designation. Gender: feminine.  
*Chuco* Fernández-Yépez, 1969: [4]. Type species: *Cichlasoma*

*milleri* Meek, 1907. Type species by original designation. Gender: neuter.  
*Paratheraps* Werner & Stawikowski, 1989: 10. Type species: *Paratheraps breidohri* Werner & Stawikowski, 1987. Type species by original designation. Gender: masculine.

**Vieja argentea** (Allgayer, 1991)  
*Cichlasoma (Theraps) argentea* Allgayer, 1991: 3. Type locality: Río San Roman à l'embouchure avec le Río Salinas, Chiapas, Mexique. Holotype: MNHN 1991-6831.  
Maximum length: 27 cm TL  
Distribution: North America: Atlantic slope, in the Usumacinta River basin.  
Countries: Mexico

**Vieja bifasciata** (Steindachner, 1864)  
*Heros bifasciatus* Steindachner, 1864: 60, pl. 2. Type locality: Mejico. Holotype: NMW 74138.  
Maximum length: 30 cm SL  
Distribution: North and Central America: Atlantic slope, in the Grijalva and Usumacinta River basins, Mexico and Guatemala.  
Countries: Guatemala, Mexico  
Common names: Colorada (Mexico)

**Vieja breidohri** (Werner & Stawikowski, 1987)  
*Paratheraps breidohri* Werner & Stawikowski, 1987: 20, fig. p. 20. Type locality: Presa von Angostura, unterhalb der Staumauer, in Chiapas/Südmexiko. Holotype: ZFMK 15524.  
Maximum length: 16.8 cm SL,  
Distribution: North America: Atlantic slope, in the Grijalva River basin.  
Countries: Mexico

**Vieja fenestrata** (Günther, 1860)  
*Chromis fenestrata* Günther, 1860a: 318. Type locality: Río de la Lana (Mexico). Syntypes: BMNH 1857 [or 1887].7.31.13-14 (2).  
*Heros parma* Günther, 1862: 285. Type locality: Mexico, Guatemala. Syntypes: BMNH (7).  
*Cichlosoma sexfasciatum* Regan, 1905a: 230. Type locality: Guapote, Mexico. Holotype: BMNH 1894.12.19.2.  
*Cichlosoma gadovii* Regan, 1905a: 232. Type locality: Motozorongo. Syntypes: BMNH 1906.6.1.402-403 (2).  
Maximum length: 25 cm SL  
Distribution: North America: Atlantic slope, from the Papaloapán River to the Chachalacas River basin.  
Countries: Mexico  
Remarks and references: Regan (1905a) removed 4 syntypes of *Heros parma* to become syntypes of his *Cichlosoma maculicauda*; remaining 3 syntypes were referred to the synonymy of *Vieja fenestrata*; no lectotype has been selected.  
Common names: Mojarra negra (Mexico), Testa colorada (Mexico)

**Vieja godmanni** (Günther, 1862)  
*Heros godmanni* Günther, 1862: 296. Type locality: River of Cahabon [=Cajabon River, Guatemala]. Syntypes: BMNH 1864.1.26 [or 2].49-50 (2).  
Maximum length: 30 cm TL  
Distribution: Central America: Atlantic slope, in the Polochic River basin.  
Countries: Guatemala

**Vieja guttulata** (Günther, 1864)  
*Heros guttulatus* Günther, 1864c: 152. Type locality: Pacific coast of Guatemala. Syntypes: BMNH 1864.1.26.348 (1), MSNG 13009 [ex BMNH] (1, poor condition, not found in 1995).  
Maximum length: 30 cm TL  
Distribution: Central America: Pacific slope of Guatemala.  
Countries: Guatemala

***Vieja hartwegi*** (Taylor & Miller, 1980)

*Cichlasoma hartwegi* Taylor & Miller, 1980: 8, fig. 2. Type locality: Río Grande de Chiapa, between Tuxtla Gutiérrez and Chiapa de Corzo, lat. 16°44'N, long. 93°02'W, elevation ca. 500 m, Chiapas, Mexico. Holotype: UMMZ 207701.

Maximum length: 13.1 cm SL

Distribution: North America: Atlantic slope, in the Grijalva River basin.

Countries: Mexico

***Vieja heterospila*** (Hubbs, 1936)

*Cichlasoma heterospilum* Hubbs, 1936: 255, pl. 10, (fig. 3). Type locality: Río Usumacinta at Montecristo, in southern Mexico. Holotype: USNM 52959.

Maximum length: 24 cm SL

Distribution: North and Central America: Atlantic slope, in the Candelaria and Usumacinta Rivers, Mexico and Guatemala.

Countries: Guatemala, Mexico

Common names: Colorado (Mexico), Pozolera (Mexico)

***Vieja intermedia*** (Günther, 1862)

*Heros intermedius* Günther, 1862: 298. Type locality: Guatemala. Syntypes: (orig. at least 3) BMNH 1864.1.26.87-91.

*Heros angulifer* Günther, 1862: 298. Type locality: River de Santa Isabel, Guatemala. Syntypes: BMNH 1864.1.26.60-61 (2).

*Acara rectangularis* Steindachner, 1864: 57, pl. 1 (fig. 1). Type locality: Mejico. Holotype: NMW 33346.

Maximum length: 20 cm SL

Distribution: North and Central America: Atlantic slope, in the Grijalva and Usumacinta drainages in Mexico, Guatemala and Belize.

Countries: Belize, Guatemala, Mexico

Remarks and references: Pellegrin (1904), as first reviser, gave priority to *Heros intermedius* over *H. angulifer*.

Common names: Northern checkmark cichlid (Belize)

***Vieja maculicauda*** (Regan, 1905)

*Cichlosoma maculicauda* Regan, 1905a: 227. Type locality: Lake Yzabal. Syntypes: BMNH 1864.1.26.56-69 (4).

*Cichlasoma globosum* Miller, 1907: 114, fig. 4. Type locality: brackish water, Puerto Barrios. Holotype: CAS [ex IU 11382] not present in 1995.

*Cichlasoma nigratum* Meek, 1907b: 128. Type locality: Lago Nicaragua, Granada, Nicaragua. Holotype: FMNH 5979.

*Cichlasoma mañana* Miller, 1907: 115, fig. 5. Type locality: Tenedores River, Tenedores. Holotype: CAS 78970 [ex IU 11385].

*Vieja panamensis* Fernández-Yépez, 1969: [5], fig. 9. Type locality: Panama. Holotype: MCZ 33281.

Maximum length: 25 cm SL

Distribution: Central America: Atlantic slope, from the Usumacinta River drainage in Guatemala to the Chagres River in Panama.

Countries: Belize, Costa Rica, Guatemala, Honduras, Nicaragua, Panama

Remarks and references: Reviewed by Bussing (1998: 380), with key, diagnosis, geographical distribution, and figures.

Common names: Blackbelt cichlid (Belize), Boca colorada (Honduras), Machaca (Honduras), Palometa (Nicaragua), Pis pis (Costa Rica), Vieja (Costa Rica)

***Vieja melanurus*** (Günther, 1862)

*Heros melanurus* Günther, 1862: 288. Type locality: Lake Petén. Syntypes: BMNH 1864.1.26.78-82 (5).

*Heros melanopogon* Steindachner, 1864: 72, pl. 1 (fig. 3). Type locality: Central-Amerika. Syntypes: NMW 17351 (1), 17353 (1).

Maximum length: 19 cm TL

Distribution: Central America: Atlantic slope, in the De la Pasión

River and Lake Petén basins.

Countries: Guatemala

***Vieja microphthalmus*** (Günther, 1862)

*Heros microphthalmus* Günther, 1862: 295. Type locality: Río Motagua, Guatemala. Syntypes: BMNH 1864.1.26.275 (1), 1865.6.10.8-9 (2); ZMB 6839 (1).

*Heros oblongus* Günther, 1867: 602. Type locality: Río Motagua. Syntypes: (2) ?BMNH 1865.6.10.11 (1), 1865.4.29.71-72 (2).

*Cichlasoma Güntheri* Pellegrin, 1904: 215. Type locality: As for *Heros oblongus* Günther, 1867. Syntypes: (2) ?BMNH 1865.6.10.11 (1), 1865.4.29.71-72 (2). Replacement name for *Heros oblongus* Günther 1869 [= *H. oblongus* Günther, 1867], secondarily preoccupied in *Heros* by *Chromys oblonga* Castelnau 1855.

*Cichlasoma milleri* Meek, 1907a: 142. Type locality: El Rancho, Guatemala. Holotype: FMNH 5529.

*Cichlasoma caeruleogula* Fowler, 1936: 525, fig. 43. Type locality: Tributary of Río Motagua about 20 miles west of El Rancho. Holotype: ANSP 64148.

Maximum length: 25 cm SL

Distribution: Central America: Atlantic slope, in the Motagua River basin in Guatemala and Honduras.

Countries: Guatemala, Honduras

***Vieja regani*** (Miller, 1974)

*Cichlasoma regani* Miller, 1974: 466, fig. 1. Type locality: Río Almoloya where crossed by the Trans-Isthmian Highway about 33 km north of southern terminus of that road, at 95°01" long., 16°45'N lat., Oaxaca, Mexico. Holotype: UMMZ 184756.

Maximum length: 23 cm SL

Distribution: North America: Atlantic slope, in the Coatzacoalcos River basin.

Countries: Mexico

Common names: Mojarra pinto (Mexico)

***Vieja synspila*** (Hubbs, 1935)

*Cichlasoma synspilum* Hubbs, 1935: 13, pl. 3 (fig. 1). Type locality: Río San Pedro de Mártir, a tributary of Río Usumacinta, at El Paso de Caballos, Department of Petén, Guatemala. Holotype: UMMZ 95518.

*Cichlaurus hicklingi* Fowler, 1956: 1, fig. 1. Type locality: Central Farm, Baking Pot, Belize River, British Honduras. Holotype: ANSP 73891.

Maximum length: 35 cm TL

Distribution: North and Central America: Atlantic slope, in the Usumacinta River drainage in Mexico, Guatemala and Belize.

Countries: Belize, Guatemala, Mexico

Common names: Redhead cichlid (Belize)

***Vieja tuyrensis*** (Meek & Hildebrand, 1913)

*Cichlasoma tuyrense* Meek & Hildebrand, 1913: 89. Type locality: Río Tuyra, Boca de Cupe, Panama. Holotype: FMNH 7599.

Maximum length: 23.5 cm SL

Distribution: Central America: Pacific slope of Panama (Tuira and Bayano River basins).

Countries: Panama

Common names: Mojarra (Panama)

***Vieja zonata*** (Meek, 1905)

*Cichlasoma zonatum* Meek, 1905: 245. Type locality: Niltepec, Oaxaca. Holotype: FMNH 3776.

Maximum length: 25 cm TL

Distribution: North America: Pacific slope, Tehuantepec River basin.

Countries: Mexico

Remarks and references: Listed as a synonym of *Vieja guttulata* (as *Cichlasoma guttulatum*) by Miller (1966). The validity of *V. zonata* rests uncertain.

Common names: Mojarrá prieta (Mexico)

## GENUS INQUIRENDUM

*Baiodon* Agassiz, 1859: 408. Type species by monotypy: *Baiodon fasciatus* Agassiz, 1859.

## SPECIES INQUIRENDAE

*Perca bimaculata* Bloch, 1792: 82, pl. 310, fig. 1. Type locality: Flüßen von Brasilien [rivers of Brazil]. Types: No types known, based on '*Acara brasiliensis*' in Marcgravius (1648)

*Sparus acara* La Cèpède, 1802: 156. Substitute name for *Perca bimaculata* Bloch

*Acara margarita* Heckel, 1840: 338. Substitute name for *Perca bimaculata* Bloch

*Pomotis ? bono* Jardine, 1843: 171 [pl. 18; apparently not published]. Type locality: all the rivers of Guiana, and in pools and marshes. Types: No types known.

*Baiodon fasciatus* Agassiz, 1859: 408. Type locality: Lake Nicaragua. Types lost. Kullander & Hartel (1997) examined Agassiz' description and searched in vain for type material. The name is available but the species cannot be identified on the basis of the description.

*Hoplarchus planifrons* Kaup, 1860: 131. Type locality: [unknown]. Holotype: ZSM, probably lost.

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