

Evaluation South America Amazon River

A total of 239 Cichlid species from the Amazon River in Southern America have been evaluated in this paper. Round about 70% of them need a further study to determine their actual situation and conservation status.

Index 0:

Apistogramma amoena (Cope, 1872) and Crenicichla conibos (Castelnau, 1855) could be considered as unknown species (possible nomen dubium) and included in the status DD (Data Deficient).

Index 1:

23 species are only known from their Type Locality.

Index 2 – 5:

This species deserve a detailed study about their actual conservation status.

Index > 6:

This species could be considered as „Least Concern“ and assumedly don't need a detailed evaluation; except the species with a high standard deviation value.

Index: Arithmetic mean of D-Index and L-Index

SD: Standard Deviation of Index

Dist: Distribution range in km: Circumference with a maximum of 4.000km

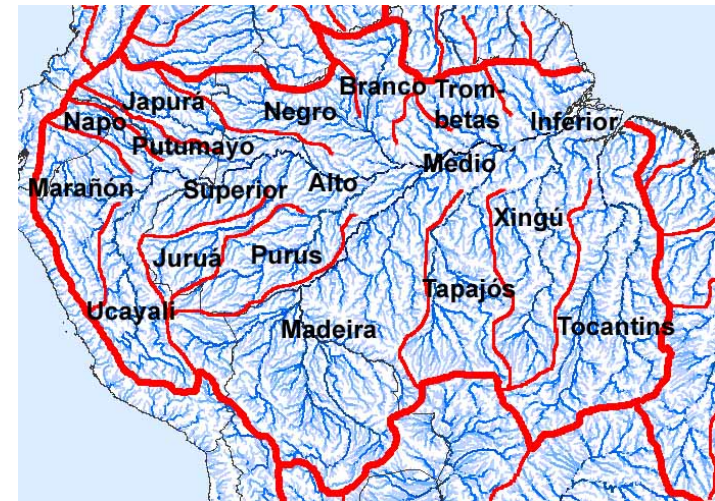
D-Index: ($X^{0,2776}$): with an Index range of 1 to 10: 1 means only one single locality known; 10 means a circumference of the distribution range of at least 4000km.

Loc: Known localities with a maximum of 50

L-Index: ($X^{0,5885}$): with an Index range of 1 to 10: 1 means only one single locality known; 10 means at least 50 localities documented.

Results

Index:	Species	in %	Status:	Index:	Species	in %	Status:
Criteria 0	2	0,84%	DD	Criteria 6	23	9,62%	LC
Criteria 1	23	9,62%	CR	Criteria 7	6	2,51%	LC
Criteria 2	33	13,81%	EN	Criteria 8	10	4,18%	LC
Criteria 3	53	22,18%	VU	Criteria 9	9	3,77%	LC
Criteria 4	37	15,48%	NT	Criteria 10	26	10,88%	LC
Criteria 5	17	7,11%	NT-LC				



Name	Author	Distribution	Index	SD	Dist.	D-Ind.	Loc.	L-Ind.
<i>Acarichthys heckelii</i>	(Müller & Troschel, 1849)	Amazonas: sup / alto / medio / inf; Juruá; Purus; Madeira; Negro; Tapajós; Trombetas; Xingu; Tocantins; NE: Essequibo?;	10,00	0,0	6800	10,00	101	10,00
<i>Acaronia nassa</i>	(Heckel, 1840)	Amazonas: sup / alto / medio / inf; Ucayali; Juruá; Purus; Madeira; Negro; Tapajós; Trombetas; Xingu; Tocantins; NE: Essequibo; Oyapock;	10,00	0,0	8200	10,00	101	10,00
<i>Acaronia vultuosa</i>	Kullander, 1989	Amazonas: Negro; Orinoco: sup / alto / med;	6,70	2,2	2600	8,87	13	4,52
<i>Aequidens diadema</i>	(Heckel, 1840)	Amazonas: Negro; Orinoco: sup / alto / med;	6,12	2,0	1900	8,13	11	4,10
<i>Aequidens epae</i>	Kullander, 1995	Tapajos	6,23	0,6	1000	6,80	19	5,66
<i>Aequidens gercillae</i>	Kullander, 1995	Madeira	3,93	1,3	400	5,28	5	2,58
<i>Aequidens mauesanus</i>	Kullander, 1997	Amazonas med	4,24	1,7	600	5,90	5	2,58
<i>Aequidens michaeli</i>	Kullander, 1995	Xingu	5,72	0,1	500	5,61	20	5,83
<i>Aequidens pallidus</i>	(Heckel, 1840)	Negro	7,88	1,1	2700	8,96	26	6,80
<i>Aequidens patricki</i>	Kullander, 1984	Ucayali	3,43	1,5	320	4,96	3	1,91
<i>Aequidens rondoni</i>	(Miranda Ribeiro, 1918)	Tapajos	8,18	0,8	2700	8,96	30	7,40
<i>Aequidens superomaculatus</i>	Hernández-Acevedo, Machado-Allison & Lasso, 2015	Orinoco; Casiquiare; Negro	4,21	2,0	700	6,16	4	2,26
<i>Aequidens tetramerus</i>	(Heckel, 1840)	Amazonas: whole; Xingu; E: Parnaíba, Mearim; Orinoco: upper; middle; NE: Essequibo, Courantyne, Maroni, Oyapock;	10,00	0,0	10000	10,00	101	10,00
<i>Aequidens tubicen</i>	Kullander & Ferreira, 1991	Trombetas	3,59	1,3	310	4,92	4	2,26
<i>Aequidens viridis</i>	(Heckel, 1840)	Madeira	5,17	2,6	1600	7,75	5	2,58
<i>Apistogramma acrensis</i>	Staeck, 2003	Purus	5,71	0,2	610	5,93	18	5,48
<i>Apistogramma agassizii</i>	(Steindachner, 1875)	Amazonas sup / alto / medio / inf; Xingu;	10,00	0,0	5500	10,00	51	10,00
<i>Apistogramma aguarico</i>	Römer & Hahn, 2013	Río Napo system in Ecuador.	1,97	0,5	25	2,44	2	1,50
<i>Apistogramma alacrina</i>	Kullander, 2004	Orteguaza (Caquetas; Amazon basin) and upper Guaviare and Meta? (Orinoco basin) river drainages in Colombia.	4,46	1,9	780	6,35	5	2,58
<i>Apistogramma allpahuayo</i>	Römer, Beninde, Duponchelle, Díaz, Ortega, Hahn, Soares,	Amazonas sup	2,86	0,3	30	2,57	7	3,14

	Cachay, Dávila, Cornejo & Renno, 2012							
<i>Apistogramma amoena</i>	(Cope, 1872)	Rio Amazonas basin in Peru (Río Ampiyacu).	0,00	0,0		0,00		0,00
<i>Apistogramma angayuara</i>	Kullander & Ferreira, 2005	Trombetas	2,97	0,7	110	3,69	4	2,26
<i>Apistogramma arua</i>	Römer & Warzel, 1998	Amazonas med	2,04	0,5	30	2,57	2	1,50
<i>Apistogramma atahualpa</i>	Römer, 1997	Amazonas sup	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma baenschi</i>	Römer, Hahn, Römer, Soares & Wöhler, 2004	Maranon	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma barlowi</i>	Römer & Hahn, 2008	Amazonas sup	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma bitaeniata</i>	Pellegrin, 1936	Amazonas sup / alto	6,83	2,3	2900	9,14	13	4,52
<i>Apistogramma brevis</i>	Kullander, 1980	Negro	4,57	2,0	880	6,57	5	2,58
<i>Apistogramma cacatuoides</i>	Hoedeman, 1951	Amazon sup. (Ucayali; Marañón)	7,47	1,1	2332	8,61	23	6,33
<i>Apistogramma cinilabra</i>	Römer, Duponchelle, Diaz, Davilla, Sirvas, Catchay & Renno, 2011	Amazonas sup	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma cruzi</i>	Kullander, 1986	Napo River drainage of Peru and Ecuador, and the Putumayo and Caquetá River drainages of Colombia.	4,78	2,2	1100	6,99	5	2,58
<i>Apistogramma diplotaenia</i>	Kullander, 1987	middle Negro River from San Carlos to Arirará River	5,58	2,4	1800	8,01	7	3,14
<i>Apistogramma eleutheria</i>	Varela & Britzke, 2016	Xingu	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma elizabethae</i>	Kullander, 1980	Negro	3,44	0,6	150	4,02	6	2,87
<i>Apistogramma eremnopyge</i>	Ready & Kullander, 2004	Amazonas sup	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma erythrura</i>	Staeck & Schindler, 2008	Madeira	4,39	1,8	720	6,21	5	2,58
<i>Apistogramma eunotus</i>	Kullander, 1981	Ucayali and Amazonas Rivers, and in the Yavarí River in Peru, and the Japurá River in Brazil.	8,91	1,1	7200	10,00	33	7,83
<i>Apistogramma feconat</i>	Römer, Soares, García Dávila, Duponchelle, Renno & Hahn, 2015	Maranon	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma flavipedunculata</i>	Varela & Britzke, 2016	Xingu	1,00	0,0	1	1,00	1	1,00

<i>Apistogramma geisleri</i>	Meinken, 1971	Amazonas med	5,02	1,6	920	6,65	8	3,40
<i>Apistogramma gephyra</i>	Kullander, 1980	Negro	6,12	2,0	1900	8,13	11	4,10
<i>Apistogramma gibbiceps</i>	Meinken, 1969	Negro	5,64	2,5	1900	8,13	7	3,14
<i>Apistogramma hippolytae</i>	Kullander, 1982	Negro; Amazonas medio;	6,00	2,1	1900	8,13	10	3,88
<i>Apistogramma huascar</i>	Römer, Pretor & Hahn, 2006	Amazonas sup	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma juruensis</i>	Kullander, 1986	Juruá	2,77	0,2	50	2,96	5	2,58
<i>Apistogramma kullanderi</i>	Varella & Sabaj Pérez, 2014	Xingu	2,24	0,3	30	2,57	3	1,91
<i>Apistogramma linkei</i>	Koslowski, 1985	Madeira	6,29	2,2	2200	8,47	11	4,10
<i>Apistogramma luelingi</i>	Kullander, 1976	Madeira	5,17	2,6	1600	7,75	5	2,58
<i>Apistogramma martini</i>	Römer, Hahn, Römer, Soares & Wöhler, 2003	Maranon	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma megastoma</i>	Römer, Römer, Estivals, Díaz, Duponchelle, Garcia Dávila, Hahn & Renno, 2017	Amazonas sup; Yavari;	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma meinkeni</i>	Kullander, 1980	Negro	5,14	2,9	1800	8,01	4	2,26
<i>Apistogramma mendezi</i>	Römer, 1994	Negro	5,17	2,6	1600	7,75	5	2,58
<i>Apistogramma moae</i>	Kullander, 1980	Juruá	3,03	0,5	90	3,49	5	2,58
<i>Apistogramma nijsseni</i>	Kullander, 1979	Ucayali	2,35	0,4	40	2,78	3	1,91
<i>Apistogramma norberti</i>	Staeck, 1991	Amazonas sup	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma ortegai</i>	Britzke, Oliveira & Kullander, 2014	Amazonas sup	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma panduro</i>	Römer, 1997	lower Ucayali	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma pantalone</i>	Römer, Römer, Soares & Hahn, 2006	Maranon	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma paucisquamis</i>	Kullander & Staeck, 1988	Negro	5,01	2,1	1200	7,16	6	2,87
<i>Apistogramma paulmuelleri</i>	Römer, Beninde, Duponchelle, Dávila, Díaz & Renno, 2013	Amazonas sup	1,00	0,0	1	1,00	1	1,00
<i>Apistogramma</i>	Kullander, 1986	Napo	2,38	0,9	70	3,25	2	1,50

<i>Apistogramma payaminonis</i>									
<i>Apistogramma personata</i>	Kullander, 1980	Negro	3,81	2,3	680	6,11	2	1,50	
<i>Apistogramma pertensis</i>	(Haseman, 1911)	lower Negro River and Amazonas medio: from Manacapuru to Monte Alegre along the Amazon-Solimões River. (also in Amazonas alto??; SL / FB)	9,93	0,1	3800	9,86	51	10,00	
<i>Apistogramma playayacu</i>	Römer, Beninde & Hahn, 2011	Napo	3,09	1,6	260	4,68	2	1,50	
<i>Apistogramma pulchra</i>	Kullander, 1980	Madeira	6,27	1,7	1800	8,01	13	4,52	
<i>Apistogramma regani</i>	Kullander, 1980	Negro	7,12	1,1	2000	8,25	21	6,00	
<i>Apistogramma resticulosa</i>	Kullander, 1980	Madeira	7,99	0,1	1700	7,88	35	8,10	
<i>Apistogramma rositae</i>	Römer, Römer & Hahn, 2006	Maranon	1,00	0,0	1	1,00	1	1,00	
<i>Apistogramma rubrolineata</i>	Hein, Zarske & Zapata, 2002	Madeira	4,29	1,4	530	5,71	6	2,87	
<i>Apistogramma rupununi</i>	Fowler, 1914	Branco River; Rupununi River basin; upper Essequibo	7,92	2,1	580	5,85	50	10,00	
<i>Apistogramma salpinction</i>	Kullander & Ferreira, 2005	Trombetas	3,19	1,3	220	4,47	3	1,91	
<i>Apistogramma similis</i>	Staeck, 2003	Madeira	3,07	1,6	250	4,63	2	1,50	
<i>Apistogramma sororcula</i>	Staeck & Schindler, 2016	Madeira	3,95	2,4	800	6,40	2	1,50	
<i>Apistogramma staecki</i>	Koslowski, 1985	Madeira	4,78	2,2	1100	6,99	5	2,58	
<i>Apistogramma taeniata</i>	(Günther, 1862)	Tapajós; Xingu	6,70	1,0	1600	7,75	19	5,66	
<i>Apistogramma tucurui</i>	Staeck, 2003	Tocantins	2,72	1,2	140	3,94	2	1,50	
<i>Apistogramma uaupesi</i>	Kullander, 1980	Negro; upper Orinoco??	4,42	2,2	890	6,59	4	2,26	
<i>Apistogramma urteagai</i>	Kullander, 1986	Madeira	3,75	0,3	160	4,09	8	3,40	
<i>Apistogramma wapisana</i>	Römer, Hahn & Conrad, 2006	Branco; Essequibo	4,09	1,2	410	5,31	6	2,87	
<i>Apistogramma wollii</i>	Römer, Soares, García Dávila, Duponchelle, Renno & Hahn, 2015	Napo (Amazonas)	1,00	0,0	1	1,00	1	1,00	
<i>Apistogrammoides pucallpaensis</i>	Meinken, 1965	Amazonas sup; Ucayali	5,64	2,2	1700	7,88	8	3,40	
<i>Astronotus crassipinnis</i>	(Heckel, 1840)	Paraguay sup; Paraná sup (alloc.); Guaporé (Amazonas)	7,05	2,7	3700	9,78	12	4,32	
<i>Astronotus ocellatus</i>	(Agassiz, 1831)	gesamter Hauptstrom des Amazonas; Xingu; Orinoco; Oyapock;	10,00	0,0	8700	10,00	51	10,00	

<i>Biotodoma cupido</i>	(Heckel, 1840)	Amazon River basin in Peru, Bolivia and Brazil; Essequibo River in Guyana.	10,00	0,0	8100	10,00	51	10,00
<i>Biotodoma wavrini</i>	(Gosse, 1963)	in the middle and upper Negro River drainage in Brazil and Venezuela; Orinoco River basin in Colombia and Venezuela.	8,34	0,8	2900	9,14	31	7,55
<i>Biotocus opercularis</i>	(Steindachner, 1875)	Branco, Negro bis lower Trombetas (Urubu River, Lake Saracá, Parintins, Lake Carauaçu, lower Trombetas River).	9,23	0,2	2800	9,06	45	9,40
<i>Bujurquina apoparuana</i>	Kullander, 1986	Amazon River basin, in Ucayali River tributaries between Pucallpa and Shahuaya	4,13	1,3	430	5,38	6	2,87
<i>Bujurquina cordemadi</i>	Kullander, 1986	Madeira	5,20	2,9	1900	8,13	4	2,26
<i>Bujurquina eurhinus</i>	Kullander, 1986	Madeira	4,09	1,0	340	5,04	7	3,14
<i>Bujurquina hophrys</i>	Kullander, 1986	Ucayali	3,03	1,1	170	4,16	3	1,91
<i>Bujurquina huallagae</i>	Kullander, 1986	Maranon	5,28	1,9	1200	7,16	8	3,40
<i>Bujurquina labiosa</i>	Kullander, 1986	Ucayali	1,00	0,0	1	1,00	1	1,00
<i>Bujurquina megalospilus</i>	Kullander, 1986	Ucayali	3,57	1,3	300	4,87	4	2,26
<i>Bujurquina moriorum</i>	Kullander, 1986	Amazon River basin, in the Ucayali, Carahuayte, Mazán and lower Napo River basins; upper Napo?; Maranon??	6,00	2,1	1900	8,13	10	3,88
<i>Bujurquina ortegai</i>	Kullander, 1986	Maranon	2,14	0,6	40	2,78	2	1,50
<i>Bujurquina pardus</i>	Arbour, Barriga Salazar & López-Fernández, 2014	Maranon	1,00	0,0	1	1,00	1	1,00
<i>Bujurquina peregrinabunda</i>	Kullander, 1986	lower Ampiyacu River basin and at Codajás (Brazil). Rio Japurá / Caqueta? (Kullander 1986; Species Link)	5,86	2,7	2300	8,57	7	3,14
<i>Bujurquina robusta</i>	Kullander, 1986	Chinipo (upper Ucayali)	3,56	1,6	380	5,20	3	1,91
<i>Bujurquina syspilus</i>	(Cope, 1872)	Amazon River basin, from the Pacaya River basin (Ucayali River drainage) to the lower Yavarí River.	5,75	2,6	2100	8,36	7	3,14
<i>Bujurquina tambopatae</i>	Kullander, 1986	Madeira	3,97	2,1	650	6,04	3	1,91
<i>Bujurquina zamorensis</i>	(Regan, 1905)	Zamora; Nangaritza (Maranon)	2,38	0,9	70	3,25	2	1,50
<i>Caquetaia myersi</i>	(Schultz, 1944)	Putumayo and Napo	4,23	1,4	490	5,58	6	2,87
<i>Caquetaia spectabilis</i>	(Steindachner, 1875)	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; Xingu; in the Branco River drainage in Brazil and Guyana.	10,00	0,0	5100	10,00	51	10,00
<i>Chaetobranhopsis</i>	(Steindachner, 1875)	lower Amazonas; Madeira??	7,74	2,3	4500	10,00	18	5,48

<i>orbicularis</i>								
<i>Chaetobranchius flavescens</i>	Heckel, 1840	Amazon River basin, in Peru and Brazil; Orinoco River basin in Venezuela (Rio Apure); rivers of Guyana, Suriname, French Guiana, and Amapá State. Widespread.	10,00	0,0	9000	10,00	51	10,00
<i>Chaetobranchius semifasciatus</i>	Steindachner, 1875	middle Amazonas	7,57	1,9	3300	9,48	19	5,66
<i>Cichla jariina</i>	Kullander & Ferreira, 2006	Amazonas inf	1,90	0,4	20	2,30	2	1,50
<i>Cichla kelberi</i>	Kullander & Ferreira, 2006	Tocantins; Paraná sup (alloc.)**; Paraguay sup** (alloc.); Iguazú** (alloc.); Rio Paraíba do Sul** (alloc.); São Francisco** (alloc.);	10,00	0,0	7500	10,00	51	10,00
<i>Cichla melaniae</i>	Kullander & Ferreira, 2006	lower Xingu	5,43	0,5	610	5,93	15	4,92
<i>Cichla mirianae</i>	Kullander & Ferreira, 2006	upper Tapajós; upper Xingu	6,29	1,2	1400	7,47	16	5,11
<i>Cichla monoculus</i>	Agassiz, 1831	Rio Solimões-Amazonas along the main channel and lower courses of tributaries, Xingu; in Peru from Yarina Cocha on the Ucayali north to the lower Napo in Peru and Ecuador; in Colombia at Leticia, in Brazil from Tabatinga to the Marajó island, including lower parts of the Tefé, Trombetas and Tapajós rivers. Also present in the Araguari and lower Oyapock rivers north of the Amazon. The species is probably much more widespread in the lowland Amazon basin than our records show. (Kullander 2006)	10,00	0,0	7200	10,00	51	10,00
<i>Cichla nigromaculata</i>	Jardine & Schomburgk, 1843	upper Orinoco; Casiquare; Negro	5,08	3,2	2000	8,25	3	1,91
<i>Cichla ocellaris</i>	Bloch & Schneider, 1801	Marowijne, Suriname, Saramacca, Nickerie, Corantijn, Berbice, Essequibo, and Branco drainages	9,34	0,7	2400	8,68	51	10,00
<i>Cichla orinocensis</i>	Humboldt, 1821	Orinoco; Negro	9,38	0,6	4200	10,00	40	8,77
<i>Cichla pinima</i>	Kullander & Ferreira, 2006	Lower Rio Tapajós, Rio Curuá-Una, lower Rio Xingu, lower Rio Tocantins, and Rio Capim (Fig. 75); uncertain localities in southern Amapá and Rio Arapiuns, introduced in Rio Paraguaçu in eastern Brazil, and probably elsewhere in northeastern Brazil.	7,82	1,7	3300	9,48	22	6,17
<i>Cichla piquiti</i>	Kullander & Ferreira, 2006	Tocantins; Paraná sup (alloc.); Paraguay sup (alloc.); Rio São Francisco (alloc.); Paranaíba (alloc.);	10,00	0,0	5300	10,00	51	10,00
<i>Cichla pleiozona</i>	Kullander & Ferreira, 2006	Madeira (Amazonas)	7,20	1,4	2300	8,57	20	5,83

<i>Cichla temensis</i>	Humboldt, 1821	Restricted to blackwater rivers and their tributaries (Fig. 75), recorded from many localities along the Rio Negro in Brazil and Venezuela, many localities in the Rio Orinoco drainage, a few localities only in the Rio Branco drainage. Along the Rio Solimões- Amazonas recorded from Tefé, Rio Puraquequara, lower Rio Uatumã, Rio Preto da Eva, and Lago Saracá, all black-water habitats. Reported by Lowe-McConnell (1969) from the Rio Branco drainage in Guyana.	9,38	0,6	4200	10,00	40	8,77
<i>Cichla thyrorus</i>	Kullander & Ferreira, 2006	Trombetas	3,41	0,5	140	3,94	6	2,87
<i>Cichla vazzoleri</i>	Kullander & Ferreira, 2006	Amazonas med	5,13	1,5	900	6,61	9	3,64
<i>Cichlasoma amazonarum</i>	Kullander, 1983	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; Oyapock; Amapá;	10,00	0,0	7000	10,00	51	10,00
<i>Cichlasoma araguaiense</i>	Kullander, 1983	Tocantins; upper Xingu	9,38	0,6	4400	10,00	40	8,77
<i>Cichlasoma bimaculatum</i>	(Linnaeus, 1758)	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.	6,32	2,9	3000	9,23	8	3,40
<i>Cichlasoma boliviense</i>	Kullander, 1983	Madeira	7,28	2,4	3500	9,63	15	4,92
<i>Crenicara latruncularium</i>	Kullander & Staeck, 1990	Madeira	4,76	1,9	920	6,65	6	2,87
<i>Crenicara punctulatum</i>	(Günther, 1863)	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.	8,70	1,3	6000	10,00	30	7,40
<i>Crenicichla acutirostris</i>	Günther, 1862	Tapajós	4,93	1,3	720	6,21	9	3,64
<i>Crenicichla adspersa</i>	Heckel, 1840	Madeira	5,25	3,0	2000	8,25	4	2,26
<i>Crenicichla alta</i>	Eigenmann, 1912	Branco; Essequibo	6,48	1,0	1400	7,47	18	5,48
<i>Crenicichla anamiri</i>	Ito & Rapp Py-Daniel, 2015	Middle rio Xingu and rio Bacajá, upstream of Volta Grande do Xingu in Brazil.	4,37	1,5	590	5,88	6	2,87
<i>Crenicichla anthurus</i>	Cope, 1872	Ucayali, Huallaga, Putumayo, Napo and Amazon River basins	7,39	2,1	3300	9,48	17	5,30
<i>Crenicichla cametana</i>	Steindachner, 1911	Tocantins	7,08	2,0	2800	9,06	16	5,11
<i>Crenicichla cardiostigma</i>	Ploeg, 1991	Branco	3,39	1,5	300	4,87	3	1,91
<i>Crenicichla chicha</i>	Varella, Kullander &	Tapajós	4,49	1,6	680	6,11	6	2,87

	Lima, 2012							
<i>Crenicichla cincta</i>	Regan, 1905	Amazon River basin in Brazil, Peru, and Ecuador, from the Napo River to Marajó Island.	6,64	3,0	3500	9,63	9	3,64
<i>Crenicichla compressiceps</i>	Ploeg, 1986	lower Tocantins	4,23	1,4	490	5,58	6	2,87
<i>Crenicichla conibos</i>	(Castelnau, 1855)	Ucayali	0,00	0,0		0,00		0,00
<i>Crenicichla cyanonotus</i>	Cope, 1870	Amazon River basin, in Peru and western Brazil.	5,86	2,7	2300	8,57	7	3,14
<i>Crenicichla cyclostoma</i>	Ploeg, 1986	lower Tocantins	4,14	1,9	640	6,01	4	2,26
<i>Crenicichla heckeli</i>	Ploeg, 1989	Trombetas (Amazonas)	1,25	0,3	1	1,00	2	1,50
<i>Crenicichla hemera</i>	Kullander, 1990	Madeira	5,82	1,5	1300	7,32	12	4,32
<i>Crenicichla hummelincki</i>	Ploeg, 1991	lower Trombetas, Amazonas inf	4,62	2,4	1100	6,99	4	2,26
<i>Crenicichla inpa</i>	Ploeg, 1991	Amazon River basin, reported from a large area of the Amazon River basin in Brazil; Xingu	9,38	0,6	5900	10,00	40	8,77
<i>Crenicichla isbrueckeri</i>	Ploeg, 1991	Madeira	4,56	1,7	740	6,26	6	2,87
<i>Crenicichla jegui</i>	Ploeg, 1986	lower Tocantins	3,95	2,0	630	5,99	3	1,91
<i>Crenicichla johanna</i>	Heckel, 1840	Amazonas (whole); Xingu	10,00	0,0	8400	10,00	51	10,00
<i>Crenicichla labrina</i>	(Spix & Agassiz, 1831)	lower Tocantins	8,44	1,0	3300	9,48	30	7,40
<i>Crenicichla lenticulata</i>	Heckel, 1840	Negro	6,49	2,4	2600	8,87	11	4,10
<i>Crenicichla lucius</i>	Cope, 1870	Amazon River basin, in Peru and western Brazil.	7,04	1,9	2700	8,96	16	5,11
<i>Crenicichla lugubris</i>	Heckel, 1840	Amazon River basin, in the Branco, Negro, and Uatumã Rivers, Xingu?; Essequibo River; Corantijn River;	4,85	1,5	760	6,31	8	3,40
<i>Crenicichla macrophthalmia</i>	Heckel, 1840	Negro, Uatumã, Tapajós, Xingu, and Trombetas River basins.	7,26	2,7	4400	10,00	13	4,52
<i>Crenicichla marmorata</i>	Pellegrin, 1904	Amazon River basin, in southern tributaries of the Amazon River in Brazil, from the Madeira River to Tocantins River. Xingu;	7,91	2,1	4600	10,00	20	5,83
<i>Crenicichla monicae</i>	Kullander & Varella, 2015	Negro	3,82	1,9	540	5,73	3	1,91
<i>Crenicichla notophthalmus</i>	Regan, 1913	lower Negro	5,51	2,4	1700	7,88	7	3,14
<i>Crenicichla pellegrini</i>	Ploeg, 1991	Madeira	4,16	1,9	660	6,06	4	2,26
<i>Crenicichla percna</i>	Kullander, 1991	Xingu	4,55	1,2	530	5,71	8	3,40
<i>Crenicichla phaiospilus</i>	Kullander, 1991	Xingu	4,56	3,1	1500	7,62	2	1,50
<i>Crenicichla proteus</i>	Cope, 1872	Napo and Putumayo drainages in Ecuador, in the Ucayali-Amazon	9,05	0,9	5300	10,00	35	8,10

		drainage from Chicosa to Pebas in Peru, and upper Purus basin							
<i>Crenicichla pydanielae</i>	Ploeg, 1991	Trombetas; Amazonas med	3,57	1,3	300	4,87	4	2,26	
<i>Crenicichla regani</i>	Ploeg, 1989	Trombetas; Amazonas alto / med / inf; Tocantins; Tapajos; Madeira; Negro; Purus;	10,00	0,0	6500	10,00	50	10,00	
<i>Crenicichla reticulata</i>	(Heckel, 1840)	Amazon River basin in Colombia, Peru, and Brazil; Xingu; Essequibo River in Guyana.	10,00	0,0	7400	10,00	50	10,00	
<i>Crenicichla rosemariae</i>	Kullander, 1997	Xingu	1,00	0,0	1	1,00	1	1,00	
<i>Crenicichla santosi</i>	Ploeg, 1991	Madeira	8,12	0,6	1400	7,47	40	8,77	
<i>Crenicichla sedentaria</i>	Kullander, 1986	upper Ucayali River drainage, upper Huallaga River drainage (Tingo María) in Peru, and the Napo and Putumayo River drainages in Ecuador.	6,35	2,7	2800	9,06	9	3,64	
<i>Crenicichla semicineta</i>	Steindachner, 1892	Madeira	8,18	1,5	3600	9,71	25	6,65	
<i>Crenicichla stocki</i>	Ploeg, 1991	Tocantins	4,20	1,6	570	5,82	5	2,58	
<i>Crenicichla strigata</i>	Günther, 1862	Amazon River basin, in southern tributaries of the Amazon River basin. Xingu	8,70	1,3	6800	10,00	30	7,40	
<i>Crenicichla tigrina</i>	Ploeg, Jégu & Ferreira, 1991	Trombetas (Amazonas)	3,85	1,9	560	5,79	3	1,91	
<i>Crenicichla urosema</i>	Kullander, 1990	Tapajós (Amazonas)	4,36	1,8	690	6,14	5	2,58	
<i>Crenicichla virgatula</i>	Ploeg, 1991	upper Branco River basin.	4,14	1,6	530	5,71	5	2,58	
<i>Dicrossus filamentosus</i>	(Ladiges, 1958)	Amazon River basin, in the Negro River drainage; Orinoco River basin from the Inírida River in Colombia to Maripa in Venezuela.	7,04	1,2	2000	8,25	20	5,83	
<i>Dicrossus foirni</i>	Römer, Hahn & Vergara, 2010	Rio Negro,	1,90	0,0	10	1,89	3	1,91	
<i>Dicrossus maculatus</i>	Steindachner, 1875	Tapajós River drainage, Maués River, and near Parintins.	4,97	1,1	660	6,06	10	3,88	
<i>Dicrossus warzeli</i>	Römer, Hahn & Vergara, 2010	endemic to the Tapajos River, Amazon River system in Brazil.	4,61	2,0	920	6,65	5	2,58	
<i>Geophagus altifrons</i>	Heckel, 1840	Amazon River basin, in tributaries of the Amazon River. Xingu	10,00	0,0	5800	10,00	51	10,00	
<i>Geophagus argyrostictus</i>	Kullander, 1991	Xingu River from Cachoeira von Martius to Belo Monte, and in the Curuá River basin.	7,73	1,2	2700	8,96	24	6,49	
<i>Geophagus megasema</i>	Heckel, 1840	Madeira; Guaporé	7,07	1,1	1900	8,13	21	6,00	
<i>Geophagus mirabilis</i>	Deprá, Kullander, Pavanelli & Graça, 2014	Madeira	2,99	1,5	220	4,47	2	1,50	
<i>Geophagus neambi</i>	Lucinda, Lucena & Assis,	Tocantins	8,32	0,9	3000	9,23	30	7,40	

<i>Geophagus proximus</i>	2010 (Castelnau, 1855)	Amazon River basin, in the Ucayali River drainage of Peru, and along the Solimões-Amazon River to the Trombetas River	8,40	1,6	5000	10,00	26	6,80
<i>Geophagus sveni</i>	Lucinda, Lucena & Assis, 2010	Tocantins	6,40	1,5	1700	7,88	15	4,92
<i>Guianacara dacrya</i>	Arbour & López-Fernández, 2011	upper Branco; upper Essequibo;	6,04	0,6	900	6,61	18	5,48
<i>Heroina isonycterina</i>	Kullander, 1996	Napo (Ecuador), Caquetá (Colombia), and Tigre, Corrientes, and Pastaza (Peru) River basins.	4,69	2,1	1000	6,80	5	2,58
<i>Heros appendiculatus</i>	(Castelnau, 1855)	Ucayali	5,70	2,6	2000	8,25	7	3,14
<i>Heros efasciatus</i>	Heckel, 1840	Amazonas alto to inf; Negro; Oyapock?; Kourou?;	6,54	3,4	3900	9,93	7	3,14
<i>Heros notatus</i>	(Jardine, 1843)	Negro; Essequibo	4,96	3,1	1800	8,01	3	1,91
<i>Heros severus</i>	Heckel, 1840	Orinoco River basin, in the upper Orinoco River drainage in Colombia and Venezuela; Amazon River basin, in the upper Negro River basin.	4,69	2,1	1000	6,80	5	2,58
<i>Heros spurius</i>	Heckel, 1840	Madeira	5,81	2,7	2200	8,47	7	3,14
<i>Hoplarchus psittacus</i>	(Heckel, 1840)	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.	7,31	1,8	2900	9,14	18	5,48
<i>Hypselecara coryphaenoides</i>	(Heckel, 1840)	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.	7,91	2,1	5300	10,00	20	5,83
<i>Hypselecara temporalis</i>	(Günther, 1862)	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; Xingu; and the Oyapock River basin in Brazil.	9,70	0,3	6800	10,00	45	9,40
<i>Ivanacara adoketa</i>	(Kullander & Prada-Pedreras, 1993)	Negro	3,92	1,7	490	5,58	4	2,26
<i>Krobia xinguensis</i>	Kullander, 2012	Xingu	5,47	3,2	2400	8,68	4	2,26
<i>Laetacara araguaiae</i>	Otoni & Costa, 2009	Río Verde im Stromgebiet des Río Araguaia beschrieben. Aus dem Río Tapajós, dem Río Xingu und dem Río Tocantins melden Linke & Staeck (2001) Vorkommen der Art. <i>Laetacara araguaiae</i> tritt in farblich unterschiedlichen Populationen auf. Bei geschlechtsreifen Exemplaren aus dem Río Tocantins/Araguaia herrschen blaue und rote Töne vor. Fische aus dem Río Tapajós zeigen ein kräftiges Türkisgrün (Stawikowski 2005).	8,84	1,2	4869	10,00	32	7,69

<i>Laetacara curviceps</i>	(Ahl, 1923)	Amazonas med	6,14	1,6	1600	7,75	13	4,52
<i>Laetacara flamannellus</i>	Otoni, Bragança, Amorim & Gama, 2012	Amazonas inf.	4,21	1,6	580	5,85	5	2,58
<i>Laetacara flavilabris</i>	(Cope, 1870)	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	7,22	2,5	3600	9,71	14	4,73
<i>Laetacara fulvipinnis</i>	Staeck & Schindler, 2007	upper and middle río Orinoco, the río Casiquiare and the upper and middle rio Negro	6,23	2,8	2800	9,06	8	3,40
<i>Laetacara thayeri</i>	(Steindachner, 1875)	Tigre, Ucayali, Yavarí and Amazon River basins in Peru, and along the Solimões, Amazon (to lower Trombetas River), and lower Negro River basins.	8,70	1,3	4600	10,00	30	7,40
<i>Mesonauta acora</i>	(Castelnau, 1855)	Tocantins and Xingu	5,91	2,8	2400	8,68	7	3,14
<i>Mesonauta festivus</i>	(Heckel, 1840)	Paraguay sup / inf; Guaporé (Amazonas); Mamoré (Amazonas); Madeira (Amazonas); unterer Tapajos (Amazonas); Xingu?	7,88	2,0	3900	9,93	20	5,83
<i>Mesonauta guyanae</i>	Schindler, 1998	Branco; Essequibo; Oyapock?; Amapá?	5,81	2,7	2200	8,47	7	3,14
<i>Mesonauta insignis</i>	(Heckel, 1840)	upper Negro River drainage in Brazil; Orinoco River basin	4,63	3,1	1600	7,75	2	1,50
<i>Mesonauta mirificus</i>	Kullander & Silfvergrip, 1991	upper Amazonas	6,34	1,4	1600	7,75	15	4,92
<i>Mikrogeophagus altispinosus</i>	(Haseman, 1911)	Madeira	5,15	2,0	1200	7,16	7	3,14
<i>Nannacara taenia</i>	Regan, 1912	Amazonas inf	3,21	0,9	170	4,16	4	2,26
<i>Pterophyllum altum</i>	Pellegrin, 1903	upper Negro (Amazonas); upper Orinoco River (Inírida and Atabapo Rivers) to Puerto Ayacucho.	5,44	2,0	1400	7,47	8	3,40
<i>Pterophyllum leopoldi</i>	(Gosse, 1963)	along the Solimões-Amazon River between about Manacapuru and Santarém; Rupununi River in the Essequibo River drainage in Guyana.	4,24	2,0	720	6,21	4	2,26
<i>Pterophyllum scalare</i>	(Schultze, 1823)	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.	10,00	0,0	7400	10,00	51	10,00
<i>Retroculus acherontos</i>	Landim, Moreira & Figueiredo, 2015	Tocantins	3,75	0,6	200	4,35	7	3,14
<i>Retroculus lapidifer</i>	(Castelnau, 1855)	Tocantins and Capim River	9,96	0,0	3900	9,93	51	10,00
<i>Retroculus xinguensis</i>	Gosse, 1971	Xingu; Tapajos	7,15	1,3	2200	8,47	20	5,83
<i>Rondonacara hoehnei</i>	(Miranda Ribeiro, 1918)	Tocantins	3,84	1,6	440	5,42	4	2,26
<i>Satanoperca acuticeps</i>	(Heckel, 1840)	Branco River, lower Negro River, and along the Solimões-Amazon River	9,16	0,4	3400	9,56	40	8,77

		in Brazil between Tonantins and the lower Trombetas River.							
<i>Satanoperca daemon</i>	(Heckel, 1840)	Amazon River basin, in the upper Negro River in Brazil and Venezuela; Orinoco River basin, in Colombia and Venezuela.	10,00	0,0	4600	10,00	50	10,00	
<i>Satanoperca jurupari</i>	(Heckel, 1840)	Amazon River basin, from Peru, Ecuador and Colombia to the mouth of Amazon River in Brazil; Xingu; in Amapá State and eastern French Guiana, also in the Bolivian Amazon drainage except Guaporé River.	10,00	0,0	8400	10,00	51	10,00	
<i>Satanoperca lilith</i>	Kullander & Ferreira, 1988	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.	8,70	1,3	4000	10,00	30	7,40	
<i>Symphysodon aequifasciatus</i>	Pellegrin, 1904		5,64	2,5	1900	8,13	7	3,14	
<i>Symphysodon discus discus</i>	Heckel, 1840		4,76	2,9	1500	7,62	3	1,91	
<i>Symphysodon discus willischwartzi</i>			3,61	1,7	410	5,31	3	1,91	
<i>Symphysodon</i> sp "BLUE"			4,28	2,0	760	6,31	4	2,26	
<i>Symphysodon</i> sp "XINGU / TOCANTINS"			3,62	2,1	542	5,74	2	1,50	
<i>Symphysodon tarzoo</i>	Lyons, 1959		4,95	2,4	1300	7,32	5	2,58	
<i>Taeniacara candidi</i>	Myers, 1935	lower Negro River, and along the Amazon River to the Tapajós River.	6,94	1,8	2500	8,78	16	5,11	
<i>Tahuantinsuyoa chipi</i>	Kullander, 1991	Ucayali	3,52	0,9	220	4,47	5	2,58	
<i>Tahuantinsuyoa macantatzata</i>	Kullander, 1986	Ucayali	2,44	0,5	50	2,96	3	1,91	
<i>Teleocichla centisquama</i>	Zuanon & Sazima, 2002	Xingu	4,58	1,2	550	5,76	8	3,40	
<i>Teleocichla centrarchus</i>	Kullander, 1988	Xingu	5,19	1,8	1100	6,99	8	3,40	
<i>Teleocichla cinderella</i>	Kullander, 1988	Tocantins	1,00	0,0	1	1,00	1	1,00	
<i>Teleocichla gephyrogramma</i>	Kullander, 1988	Xingu	5,18	1,5	950	6,71	9	3,64	
<i>Teleocichla monogramma</i>	Kullander, 1988	Xingu	4,93	1,5	830	6,46	8	3,40	
<i>Teleocichla preta</i>	Varella, Zuanon, Kullander & López-Fernández, 2016	Xingu	4,01	0,9	300	4,87	7	3,14	
<i>Teleocichla prionogenys</i>	Kullander, 1988	Tapajós	1,00	0,0	1	1,00	1	1,00	

<i>Teleocichla proselytus</i>	Kullander, 1988	Tapajós	5,31	2,4	1600	7,75	6	2,87
<i>Teleocichla wajapi</i>	Varella & Moreira, 2013	Amazonas inf	2,61	0,4	50	2,96	4	2,26
<i>Uaru amphiacanthoides</i>	Heckel, 1840	Amazon River basin, along the Amazon-Solimões River drainage from the Japurá River to the Tapajós River; Xingu; and in the middle and lower Negro River basin	9,38	0,6	4200	10,00	40	8,77
<i>Crenicichla ploegi</i>	Varella, Loeb, Lima & Kullander, 2018	Juruena / Paraguay	8,40	1,6	1000	6,80	65	10,00
<i>Satanoperca curupira</i>	Ota, Kullander, Deprá, Graça & Pavanelli, 2018	Madeira	5,95	1,0	1100	6,99	15	4,92
<i>Crenicichla dandara</i>	Varella & Ito, 2018	Xingu	6,49	0,7	1200	7,16	20	5,83

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