

Supplementary Material to “Spatial and seasonal variation of benthic fish assemblages in whitewater rivers of Central Amazon”

Table S2. Number of individuals of each species sampled per river and season. In parenthesis, the species used in the dbRDA analysis, with respective acronyms. Total abundance (N) and number of species (S) are shown at the end of the table. Asterisks indicate species with their SCBD values (species contributions to beta diversity) above the overall mean (0.0093) and bold shows the three species with the highest values (SCBD). The letters on the side SCBD values refers to categorization of species into resident (R) or migratory (M).

	Japurá		Madeira		Purus		Total	SCBD
	Rising	Receding	Rising	Receding	Rising	Receding		
SILURIFORMES								
LORICARIIDAE								
<i>Apistoloricaria ommation</i> Nijssen & Isbrücker, 1988 (Apom)	1	1	-	-	-	-	2	0.0252*R
<i>Planiloricaria cryptodon</i> (Isbrücker, 1971)	1	-	-	-	1	-	2	0.0082
<i>Pseudohemiodon</i> sp.	-	-	-	-	1	-	1	0.0008
<i>Spatuloricaria</i> sp.	1	-	-	-	-	-	1	0.0037

	Japurá		Madeira		Purus		Total	SCBD
	Rising	Receding	Rising	Receding	Rising	Receding		
PIMELODIDADE								
<i>Brachyplatystoma capapretum</i> Lundberg & Akama, 2005	-	-	-	-	-	1	1	0.0003
<i>Brachyplatystoma platynemum</i> Boulenger, 1898 (Brpl)	2	-	-	-	-	1	3	0.0132*M
<i>Calophysus macropterus</i> (Lichtenstein, 1819) (Cama)	-	-	-	-	38	1	39	0.0596*M
<i>Duopalatinus peruanus</i> Eigenmann & Allen, 1942	-	-	-	1	-	-	1	0.0007
<i>Exallodontus aguanai</i> Lundberg, Mago-Leccia & Nass, 1991 (Exag)	3	1	5	-	52	26	87	0.0228*M
<i>Hypophthalmus marginatus</i> Valenciennes, 1840 (Hyma)	-	-	-	12	1	93	106	0.0257*M
<i>Megalonema amaxanthum</i> Lundberg & Dahdul, 2008 (Meam)	9	-	2	-	-	-	11	0.0538*M
Pimelodidae sp. (Piesp)	3	3	3	25	21	-	55	0.0283*M
<i>Pimelodina flavipinnis</i> Steindachner, 1876	-	1	-	-	-	37	38	0.0056
<i>Pimelodus blochii</i> Valenciennes, 1840 (Pibl)	-	-	-	2	44	602	648	0.0546*M
<i>Pimelodus</i> sp.	-	-	-	-	1	40	41	0.0077
<i>Pinirampus pirinampu</i> (Spix & Agassiz, 1829)	-	-	1	3	-	-	4	0.0044
<i>Platynemichthys notatus</i> (Jardine, 1841)	-	1	-	1	-	-	2	0.0048
<i>Platysilurus mucosus</i> (Vaillant, 1880)	-	-	-	-	-	10	10	0.0011
<i>Platystomatichthys sturio</i> (Kner, 1858)	1	-	-	-	-	-	1	0.0011

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<i>Propimelodus caesius</i> Parisi, Lundberg & DoNascimento, 2006	1	-	-	1	-	-	2	0.0015
<i>Propimelodus</i> sp1 (Pr1)	-	-	9	2	-	-	11	0.0114*M
<i>Propimelodus</i> sp2	1	-	-	-	-	-	1	0.0011
HEPTAPTERIDAE								
<i>Imparfinis</i> sp. (Imsp)	1	-	-	-	-	-	1	0.0112*M
<i>Mastiglanis asopos</i> Bockmann, 1994	1	3	-	-	3	7	14	0.0048
<i>Pimelodella</i> cf. <i>crystata</i>	-	-	-	-	-	1	1	0.0002
DORADIDAE								
<i>Astroedoras</i> sp.	-	-	-	-	-	1	1	0.0002
<i>Centroedoras brachiatus</i> (Cope, 1872) (Cebr)	-	-	4	-	-	-	4	0.0224*M
<i>Hemidoras morrisi</i> Eigenmann, 1925 (Hemo)	-	-	-	-	-	668	668	0.0112*M
<i>Hemidoras stenopeltis</i> (Kner, 1855) (Hest)	-	4	-	18	-	833	855	0.0232*M
<i>Leptodoras</i> cf. <i>cataniai</i>	2	-	-	-	-	-	2	0.0044
<i>Leptodoras copei</i> (Fernández-Yépez, 1968) (Leco)	-	2	-	-	-	-	2	0.0117*M
<i>Leptodoras juruensis</i> Boulenger, 1898	1	1	-	-	-	-	2	0.0057
<i>Nemadoras elongatus</i> (Boulenger, 1898)	-	1	-	-	-	2	3	0.0071

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<i>Nemadoras humeralis</i> (Kner, 1855)	-	1	1	-	-	8	10	0.0053
<i>Opsodoras boulengeri</i> Steindachner, 1915	-	-	-	106	-	-	106	0.0077
<i>Ossancora fimbriata</i> (Kner, 1855)	-	-	-	-	-	12	12	0.0014
<i>Oxydoras niger</i> (Valenciennes, 1821)	-	-	-	-	-	1	1	0.0015
<i>Pterodoras granulatus</i> (Valenciennes, 1821)	-	-	-	10	1	17	28	0.0088
<i>Rhinodoras boehlkei</i> Glodek, Whitmire & Orcés V., 1976	-	-	-	-	2	-	2	0.0013
<i>Trachydoras brevis</i> (Kner, 1853)	-	-	-	21	-	-	21	0.0017
<i>Trachydoras microstomus</i> (Eigenmann, 1912)	-	-	-	4	-	-	4	0.0009
<i>Trachydoras nattereri</i> (Steindachner, 1881)	-	-	-	-	-	5	5	0.0009
<i>Trachydoras</i> sp.	-	-	-	-	-	302	302	0.0051
<i>Trachydoras steindachneri</i> (Perugia, 1897) (Trst)	-	-	-	11	-	89	100	0.0111*M
AUCHENIPTERIDAE								
<i>Ageneiosus</i> sp1	-	-	-	4	-	-	4	0.0016
<i>Ageneiosus</i> sp2	-	1	-	-	-	-	1	0.0006
<i>Ageneiosus</i> sp3	-	-	-	-	-	12	12	0.0011
<i>Ageneiosus</i> sp4	-	-	-	-	-	12	12	0.0021

	Japurá		Madeira		Purus		Total	SCBD
	Rising	Receding	Rising	Receding	Rising	Receding		
<i>Ageneiosus</i> sp5	-	-	-	-	-	5	5	0.0007
<i>Ageneiosus</i> sp6	-	-	-	-	-	1	1	0.0005
<i>Ageneiosus ucayalensis</i> Castelnau, 1855	-	-	-	2	3	3	8	0.0079
<i>Ageneiosus uranophthalmus</i> Ribeiro & Rapp Py-Daniel, 2010 (Agur)	1	1	1	1	-	-	4	0.0226*M
<i>Auchenipterus</i> aff. <i>britskii</i>	2	-	-	-	-	-	2	0.0053
<i>Centromochlus heckelii</i> (De Filippi, 1853)	-	-	-	-	1	-	1	0.0025
<i>Tympanopleura atronasus</i> (Eigenmann & Eigenmann, 1888)	-	-	-	-	-	8	8	0.0010
<i>Tympanopleura brevis</i> (Steindachner, 1881)	-	-	-	-	-	19	19	0.0037
TRICHOMYCTERIDAE								
<i>Megalocentor echthrus</i> de Pinna & Britski, 1991	-	-	-	3	-	-	3	0.0020
<i>Pseudostegophilus nemurus</i> (Günther, 1869)	-	-	1	1	-	-	2	0.0018
<i>Vandellia cirrhosa</i> Valenciennes, 1846	-	-	-	1	-	-	1	0.0004
<i>Vandellia</i> sp.	-	-	-	-	-	1	1	0.0004
CETOPSIDAE								
<i>Cetopsis coecutiens</i> (Lichtenstein, 1819)(Ceco)	10	3	10	2	3	-	28	0.0525*M
<i>Cetopsis oliveirai</i> (Lundberg & Rapp Py-Daniel, 1994) (Ceol)	1	-	9	2	-	-	12	0.0223*M

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	Rising	Receding	Rising	Receding	Rising	Receding		
GYMNOTIFORMES								
APTERONOTIDAE								
<i>Adontosternarchus balaenops</i> (Cope, 1878)	-	-	-	1	1	24	26	0.0065
<i>Adontosternarchus clarkae</i> Mago-Leccia, Lundberg & Baskin, 1985 (Adcl)	2	13	-	52	-	459	526	0.0177*M
<i>Adontosternarchus duartei</i> de Santana & Vari, 2012	-	-	-	-	-	43	43	0.0054
<i>Adontosternarchus nebulosus</i> Lundberg & Cox Fernandes, 2007	-	-	-	-	-	12	12	0.0022
<i>Apteronotus bonaparti</i> (Castelnau, 1855)	1	3	-	-	-	6	10	0.0035
<i>Apteronotus</i> sp.	-	2	-	1	-	1	4	0.0037
<i>Compsaraia</i> cf. <i>compsa</i> (Coco)	12	45	7	9	-	34	107	0.0339*M
<i>Magosternarchus duccis</i> Lundberg, Cox Fernandes & Albert, 1996	-	-	-	-	-	1	1	0.0002
<i>Magosternarchus raptor</i> Lundberg, Cox Fernandes & Albert, 1996	-	-	-	2	-	1	3	0.0023
<i>Orthosternarchus tamandua</i> (Boulenger, 1898) (Orta)	1	1	4	-	3	1	10	0.0159*R
<i>Pariosternarchus amazonensis</i> Albert & Crampton, 2006 (Paam)	1	1	-	-	-	-	2	0.0110*M
<i>Platyurosternarchus macrostoma</i> (Günther, 1870)	-	-	-	-	-	1	1	0.0002
<i>Porotergus gimbeli</i> Ellis, 1912	-	-	-	-	-	18	18	0.0027
<i>Porotergus</i> sp.	1	-	-	-	-	-	1	0.0037

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	Rising	Receding	Rising	Receding	Rising	Receding		
<i>Sternarchella calhamazon</i> Lundberg, Cox Fernandes, Campos da Paz & Sullivan, 2013 (Stca)	18	353	3	31	13	974	1392	0.0512*M
<i>Sternarchella schotti</i> (Steindachner, 1868) (Stsc)	-	5	-	1	-	30	36	0.0097*M
<i>Sternarchella</i> sp.	-	-	-	-	1	-	1	0.0025
<i>Sternarchogiton nattereri</i> (Steindachner, 1868) (Stna)	4	29	-	5	1	112	151	0.0166*M
<i>Sternarchogiton preto</i> de Santana & Crampton, 2007	-	-	-	-	-	2	2	0.0005
<i>Sternarchorhamphus muelleri</i> (Steindachner, 1881)	-	6	-	2	-	12	20	0.0093
<i>Sternarchorhynchus</i> sp.	-	-	-	-	-	16	16	0.0009
STERNOPYGIDAE								
<i>Distocyclus conirostris</i> (Eigenmann & Allen, 1942)	-	16	-	-	-	29	45	0.0075
<i>Eigenmannia macrops</i> (Boulenger, 1897)	-	-	-	15	-	369	384	0.0084
<i>Eigenmannia</i> sp1	-	1	-	-	-	-	1	0.0006
<i>Eigenmannia</i> sp2	-	-	-	1	-	-	1	0.0014
<i>Rhabdolichops cf. caviceps</i>	-	-	-	-	-	31	31	0.0047
<i>Rhabdolichops cf. eastwardi</i> (Rhea)	-	-	-	25	1	354	380	0.0194*M
<i>Rhabdolichops cf. stewarti</i>	1	4	-	-	-	-	5	0.0037
<i>Rhabdolichops electrogrammus</i> Lundberg & Mago-Leccia, 1986	-	7	-	-	-	59	66	0.0090

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	Rising	Receding	Rising	Receding	Rising	Receding		
<i>Rhabdolichops lundbergi</i> Correa, Crampton & Albert, 2006	-	-	-	2	-	-	2	0.0006
<i>Rhabdolichops</i> sp.	1	-	-	-	-	-	1	0.0011
<i>Rhabdolichops troscheli</i> (Kaup, 1856)	-	-	-	-	-	1	1	0.0005
RHAMPHICHTHYIDAE								
<i>Gymnorhamphichthys rondoni</i> (Miranda Ribeiro, 1920)	-	1	-	-	-	-	1	0.0006
<i>Rhamphichthys marmoratus</i> Castelnau, 1855	-	-	-	-	-	29	29	0.0011
HIPOPOMIDAE								
<i>Hypopygus lepturus</i> Hoedeman, 1962	-	-	-	1	-	-	1	0.0025
<i>Steatogenys elegans</i> (Steindachner, 1880) (Stel)	2	175	-	22	-	62	261	0.0642*M
CHARACIFORMES								
CURIMATIDAE								
<i>Potamorhina latior</i> (Spix & Agassiz, 1829)	-	-	-	-	1	-	1	0.0049
CHARACIDAE								
<i>Odontostilbe fugitiva</i> Cope, 1870 (Odfu)	-	-	8	2	-	-	10	0.0143*M
<i>Serrasalmus</i> cf. <i>eigenmanni</i>	-	-	-	-	-	3	3	0.0004
HEMIODONTIDAE								

	Japurá		Madeira		Purus		Total	SCBD
	Rising	Receding	Rising	Receding	Rising	Receding		
<i>Anodus elongatus</i> Agassiz, 1829	-	-	-	-	2	-	2	0.0041
<i>Anodus</i> sp. (Ansp)	1	-	-	-	-	-	1	0.0112*M
PLEURONECTIFORMES								
ACHIRIDAE								
<i>Apionichthys seripierriae</i> Ramos, 2003	-	-	-	-	-	1	1	0.0002
PERCIFORMES								
SCIAENIDAE								
<i>Plagioscion squamosissimus</i> (Heckel, 1840) (Plsq)	-	-	-	77	-	265	342	0.0235*M
TETRAODONTIFORMES								
TETRAODONTIDAE								
<i>Colomesus asellus</i> (Müller & Troschel, 1849)	-	-	-	-	-	1	1	0.0004
CHONDRICHTHYES								
POTAMOTRYGONIDAE								
<i>Plesiotrygon iwamae</i> Rosa, Castello & Thorson, 1987	1	-	-	1	-	-	2	0.0035
	N	88	686	68	483	195	5769	7289
	S	31	30	15	40	22	60	-

