

## SUPPLEMENTARY MATERIAL S1

TABLE S1 | Bibliographic review and Alimentary Index (IAi) for classification on trophic guilds.

| Species  | Trophic guild | References  | n   | Obs   | Most consumed items                                    | n (IAi) | IAi (%)   |
|--|---------------|---|-----|---|--|---------|---|
| <i>Astyanax brevirostris</i> Eigenmann, 1908         | Herbivore     | Luiz EA, Agostinho AA, Gomes LC, Hahn NS. Ecologia trófica de peixes em dois riachos da bacia do rio Paraná. Rev Bras Biol. 1998; 58(2):273–85.   | 67  |   | Plant remains  | 10      | Filamentous Algae – 59.93   |
| <i>Brycon devillei</i> (Castelnau, 1855)             | Omnivore      | Azevedo PG, Melo RMC, Young RJ. Feeding and social behavior of the piabanha, <i>Brycon devillei</i> (Castelnau, 1855) (Characidae: Bryconinae) in the wild, with a note on following behavior. Neotrop Ichthyol. 2011; 9(4):807–14. <a href="https://doi.org/10.1590/S1679-62252011005000046">https://doi.org/10.1590/S1679-62252011005000046</a> |     | Observations of feeding in loci                         |  | –       | –   |
| <i>Brycon howesi</i> Lima, 2017                      | Omnivore      | Gomiero LM, Manzatto AG, Braga FMS. The role of riverine forests for food supply for the omnivorous fish <i>Brycon opalinus</i> Cuvier, 1819 (Characidae) in the Serra do Mar, Southeast Brazil. Braz J Biol. 2008; 68(2):321–28. <a href="https://doi.org/10.1590/S1519-69842008000200013">https://doi.org/10.1590/S1519-69842008000200013</a>   | 256 | Study with congeneric species ( <i>B. opalinus</i> )    | Insects, fruit and seeds                               | –       | –   |
| <i>Delturus brevis</i> Reis & Pereira, 2006          | Detritivore   | –   | –   |   | -  | 10      | Detritus – 99.93  |
| <i>Geophagus brasiliensis</i> (Quoy & Gaimard, 1824) | Insectivore   | Moraes MFPG, de Freitas Barbola I, Duboc LF. Feeding habits and morphometry of digestive tracts of <i>Geophagus brasiliensis</i> (Osteichthyes, Cichlidae), in a lagoon of high Tibagi River, Paraná State, Brazil. Publ UEPG Ciências biológicas e da saúde. 2004; 10(1):37–45.  | 83  |   | Ephemeroptera, Odonata, Trichoptera and Diptera larvae | 10      | Diptera – 28.40<br>Insect Fragments – 17.79<br>Trichoptera – 6.75 |
| <i>Gymnotus carapo</i> Linnaeus, 1758                | Insectivore   | Rocha FC, Casatti L, Pereira DC. Structure and feeding of a stream fish assemblage in Southeastern Brazil: evidence of low seasonal influences. Acta Limnol Bras. 2009; 21(1):123–34.   | 15  |   | Aquatic insect debris                                  | 4       | Odonata – 94.36<br>Hemiptera – 5.64                               |
| <i>Harttia garavelloii</i> Oyakawa, 1993             | Detritivore   | Sá-Oliveira JC, Angelini R, Isaac-Nahum VJ. Diet and niche breadth and overlap in fish communities within the area affected by an Amazonian reservoir (Amapá, Brazil). An Acad Bras Cienc. 2014; 86(1):383–406. <a href="http://dx.doi.org/10.1590/0001-3765201420130053">http://dx.doi.org/10.1590/0001-3765201420130053</a>                     | 12  | Study with congeneric species ( <i>H. duriventris</i> ) | Detritus   | 6       | Detritus – 100  |
| <i>Hoplias brasiliensis</i> (Spix & Agassiz, 1829)   | Piscivore     | Carvalho LN, Fernandes CHV, Moreira VSS. Alimentação de <i>Hoplias malabaricus</i> (Bloch, 1794) (Osteichthyes, Erythrinidae) no rio Vermelho, Pantanal Sul Mato-Grossense. Rev Bras Zool. 2002; 4(2):227–36.   | 40  | Study with congeneric species ( <i>H. malabaricus</i> ) | Fish Remains   | 4       | Fish remains – 99.41  |
| <i>Hoplias malabaricus</i> (Bloch, 1794)             | Piscivore     | Carvalho LN, Fernandes CHV, Moreira VSS. Alimentação de <i>Hoplias malabaricus</i> (Bloch, 1794) (Osteichthyes, Erythrinidae) no rio Vermelho, Pantanal Sul Mato-Grossense. Rev Bras Zool. 2002; 4(2):227–36.   | 40  |   | Fish Remains   | 3       | Fish remains – 99.57  |
| <i>Hypostomus</i> sp.                                | Detritivore   | Villares-Junior GA, Cardone IB, Goitein R. Comparative feeding ecology of four syntopic <i>Hypostomus</i> species in a Brazilian southeastern river. Braz J Biol. 2016; 76(3):692–99. <a href="https://doi.org/10.1590/1519-6984.00915">https://doi.org/10.1590/1519-6984.00915</a>   | 582 |   | Particulate Organic material                           | 8       | Detritus – 98.46  |
| <i>Hypomasticus steindachneri</i> (Eigenmann, 1907)  | Omnivore      | Hahn NS, Agostinho AA, Gomes LC, Bini LM. Estrutura trófica da ictiofauna do reservatório de Itaipu (Paraná-Brasil) nos primeiros anos de sua formação. Interciencia. 1998; 23(5):299–305.  |     | Study with congeneric species                           | Vegetal items  | –       | –   |
| <i>Megaleporinus elongatus</i> (Valenciennes, 1850)  | Insectivore   | Balassa GC, Fugli R, Hahn NS, Galina AB. Dieta de espécies de Anostomidae (Teleostei, Characiformes) na área de influência do reservatório de Manso, Mato Grosso, Brasil. Iheringia Ser Zool. 2004; 94(1):77–82. <a href="http://dx.doi.org/10.1590/S0073-47212004000100014">http://dx.doi.org/10.1590/S0073-47212004000100014</a>                | 24  |   | Chironomidae larvae                                    | –       | –   |
| <i>Megaleporinus garmani</i> (Borodin, 1929)         | Herbivore     | Araújo RTN. Alimentação da ictiofauna da região de influência de um reservatório do Alto Jequitinhonha, MG. [Master Dissertation]. Belo Horizonte: Pontifícia Universidade Católica de Minas Gerais; 2015.  | 89  |   | Vegetal remains  | 10      | Algae – 51.93<br>Macrophyte – 37.12                               |



TABLE S1 | (Continued)

| Species  | Trophic guild | References   | n   | Obs  | Most consumed items                     | n (IAi) | IAi (%)                                      |
|--|---------------|--|-----|--|---|---------|--|
| <i>Moenkhausia intermedia</i><br>Eigenmann, 1908         | Omnivore      | Esteves KE, Galetti Jr. PM. Feeding ecology of <i>Moenkhausia intermedia</i> (Pisces, Characidae) in a small oxbow lake of Mogi-Guaçu river, São Paulo, Brazil. <i>Int Vereinigung für Theor und Angew Limnol Verhandlungen</i> . 1994; 25(4):2198–204. <a href="https://doi.org/10.1080/03680770.1992.11900596">https://doi.org/10.1080/03680770.1992.11900596</a>                          | 179 |  | Organic matter, insects and zooplankton | –       | –  |
| <i>Moenkhausia costae</i><br>(Steindachner, 1907)        | Omnivore      | Esteves KE, Galetti Jr. PM. Feeding ecology of <i>Moenkhausia intermedia</i> (Pisces, Characidae) in a small oxbow lake of Mogi-Guaçu river, São Paulo, Brazil. <i>Int Vereinigung für Theor und Angew Limnol Verhandlungen</i> . 1994; 25(4):2198–204. <a href="https://doi.org/10.1080/03680770.1992.11900596">https://doi.org/10.1080/03680770.1992.11900596</a>                          | 179 | Study with congeneric species ( <i>M. intermedia</i> ) | Organic matter, insects and zooplankton | 6       | Fish scale – 61.51<br>Insect remains – 35.15 |
| <i>Oligosarcus macrolepis</i><br>(Steindachner, 1877)    | Piscivore     | Nunes DM, Hartz SM. Feeding dynamics and ecomorphology of <i>Oligosarcus jenynsii</i> (Günther, 1864) and <i>Oligosarcus robustus</i> (Menezes, 1969) in the Lagoa Fortaleza, southern Brazil. <i>Braz J Biol</i> . 2006; 66(1):121–32. <a href="https://doi.org/10.1590/S1519-69842006000100016">https://doi.org/10.1590/S1519-69842006000100016</a>  | 405 | Study with congeneric species ( <i>O. robustus</i> )   | Fishes                                  | –       | –  |
| <i>Pareiorhaphis</i> sp.                                 | Detritivore   | Dias TS, Fialho CB. Comparative dietary analysis of <i>Eurycheilichthys pantherinus</i> and <i>Pareiorhaphis hystrix</i> : two Loricariidae species (Ostariophysi, Siluriformes) from Campos Sulinos biome, southern Brazil. <i>Iheringia Ser Zool</i> . 2011; 101(1-2):49–55. <a href="https://doi.org/10.1590/S0073-47212011000100006">https://doi.org/10.1590/S0073-47212011000100006</a> | 60  | Study with congeneric species ( <i>P. hystrix</i> )    | Detritus                                | –       | –  |
| <i>Pareiorhaphis stephana</i> (Oliveira & Oyakawa, 1999) | Detritivore   | Dias TS, Fialho CB. Comparative dietary analysis of <i>Eurycheilichthys pantherinus</i> and <i>Pareiorhaphis hystrix</i> : two Loricariidae species (Ostariophysi, Siluriformes) from Campos Sulinos biome, southern Brazil. <i>Iheringia Ser Zool</i> . 2011; 101(1-2):49–55. <a href="https://doi.org/10.1590/S0073-47212011000100006">https://doi.org/10.1590/S0073-47212011000100006</a> | 60  | Study with ( <i>P. hystrix</i> )                       | Detritus                                | 9       | Detritus – 89.64                             |
| <i>Pimelodella</i> sp.                                   | Omnivore      | Viana LF, Santos SL, Lima-Junior SE. Variação sazonal na alimentação de <i>Pimelodella</i> cf. <i>gracilis</i> (Osteichthyes, Siluriformes, Pimelodidae) no rio Amambai, Estado de Mato Grosso do Sul. <i>Acta Sci Biol Sci</i> . 2006; 28(2):123–28. <a href="https://doi.org/10.4025/actascibiolsci.v28i2.1028">https://doi.org/10.4025/actascibiolsci.v28i2.1028</a>                      | 232 | Study with congeneric species ( <i>P. gracilis</i> )   | Terrestrial insects, plants             | –       | –  |
| <i>Prochilodus argenteus</i><br>Spix & Agassiz, 1829     | Detritivore   | Bowen SH. Detritivory in neotropical fish communities. <i>Environ Biol Fishes</i> . 1983; 9:137–44. <a href="https://doi.org/10.1007/BF00690858">https://doi.org/10.1007/BF00690858</a>  |     |  | Detritus                                | –       | –  |
| <i>Prochilodus costatus</i><br>Valenciennes, 1850        | Detritivore   | Bowen SH. Detritivory in neotropical fish communities. <i>Environ Biol Fishes</i> . 1983; 9:137–44. <a href="https://doi.org/10.1007/BF00690858">https://doi.org/10.1007/BF00690858</a>  |     |  | Detritus                                | –       | –  |
| <i>Prochilodus hartii</i><br>Steindachner, 1875          | Detritivore   | Bowen SH. Detritivory in neotropical fish communities. <i>Environ Biol Fishes</i> . 1983; 9:137–44. <a href="https://doi.org/10.1007/BF00690858">https://doi.org/10.1007/BF00690858</a>  |     |  | Detritus                                | 10      | Detritus – 99.78                             |
| <i>Prochilodus</i> sp.                                   | Detritivore   | Bowen SH. Detritivory in neotropical fish communities. <i>Environ Biol Fishes</i> . 1983; 9:137–44. <a href="https://doi.org/10.1007/BF00690858">https://doi.org/10.1007/BF00690858</a>  |     |  | Detritus                                |         |  |
| <i>Psalidodon</i> cf. <i>fasciatus</i> (Cuvier, 1819)    | Omnivore      | Vilella FS, Becker FG, Hartz SM. Diet of <i>Astyanax</i> species (Teleostei, Characidae) in an Atlantic Forest River in Southern Brazil. <i>Brazilian Arch Biol Technol</i> . 2002; 45(2):223–32. <a href="https://doi.org/10.1590/S1516-89132002000200015">https://doi.org/10.1590/S1516-89132002000200015</a>  | 34  |  | Algae, insect remains, plant remains    | –       | –  |
| <i>Pseudoplatystoma</i> sp.                              | Piscivore     | Barbarino Duque A, Winemiller KO. Dietary segregation among large catfishes of the Apure and Arauca Rivers, Venezuela. <i>J Fish Biol</i> . 2003; 63(2):410–27. <a href="https://doi.org/10.1046/j.1095-8649.2003.00163.x">https://doi.org/10.1046/j.1095-8649.2003.00163.x</a>  | 575 |  | Fish                                    |         |  |
| <i>Rhamdia jequitinhonha</i><br>Silfvergrip, 1996        | Omnivore      | Pagotto JPA, Goulart E, Oliveira EF, Yamamura CB. Trophic ecomorphology of Siluriformes (Pisces, Osteichthyes) from a tropical stream. <i>Braz J Biol</i> . 2011; 71(2):469–79. <a href="https://doi.org/10.1590/S1519-69842011000300017">https://doi.org/10.1590/S1519-69842011000300017</a>  | 14  |  | Plants and terrestrial insects          | –       | –  |



TABLE S1 | (Continued)

| Species  | Trophic guild | References  | n   | Obs  | Most consumed items   | n (IAi) | IAi (%)  |
|--|---------------|---|-----|--|---|---------|--|
| <i>Serrasalmus brandtii</i> Lütken, 1875                         | Piscivore     | Pompeu PDS. Dieta da pirambeba <i>Serrasalmus brandtii</i> Reinhardt (Teleostei, Characidae) em quatro lagoas marginais do rio São Francisco, Brasil. Rev Bras Zool. 1999; 16(2):19–26. <a href="https://doi.org/10.1590/S0101-81751999000600003">https://doi.org/10.1590/S0101-81751999000600003</a> | 212 |  | Fish, fin, and fish scales  | 10      | Fish remains – 86.96   |
| <i>Steindachneridion amblyurum</i> (Eigenmann & Eigenmann, 1888) | Piscivore     | Agostinho AA, Gomes LC, Suzuki HI, Júlio-JR HF. Migratory fishes of the upper Paraná River basin. In: Carolsfeld J, Harvey B, Ross C, Baer A, editors. Migratory Fishes of South America. 2003. p.23–78.  |     |  | Fish  | –       | –  |
| <i>Steindachnerina elegans</i> (Steindachner, 1875)              | Detritivore   | Amorim Teixeira JL, Gurgel HCB. Dinâmica da nutrição e alimentação natural de <i>Steindachnerina notonota</i> (Miranda-Ribeiro, 1937) (Pisces, Curimatidae), Açude de Riacho da Cruz, Rio Grande do Norte, Brasil. Rev Bras Zool. 2004; 6(1):19–28.   | 33  | Study with congeneric species ( <i>S. notonota</i> ) | Detritus, sediment  | –       | –  |
| <i>Trachelyopterus galeatus</i> (Linnaeus, 1766)                 | Omnivore      | Santin M, Lopes TM, Baggio MM <i>et al.</i> Mudanças ontogenéticas no trato digestório e na dieta de <i>Trachelyopterus galeatus</i> . Bol do Inst Pesca. 2015; 41(1):57–68.  | 61  |  | Aquatic insects, microcrustaceans, plant remains, fish larvae                                     | 10      | Plant remains – 45.11<br>Fish remains – 36.68  |
| <i>Wertheimeria maculata</i> Steindachner, 1877                  | Omnivore      | Vono V, Birindelli JLO. Natural history of <i>Wertheimeria maculata</i> , a basal doradid catfish endemic to eastern Brazil (Siluriformes: Doradidae). Ichthyol. Explor. Freshwaters. 2007; 18(2):183–91.   | 106 |  | Plant material, terrestrial insects, aquatic macroinvertebrates, fish scales and macrozooplankton | 10      | Plant Remains – 33.85<br>Odonata – 25.47<br>Fish remains – 15.40<br>Fish scale – 12.49 |

## Neotropical Ichthyology



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Official Journal of the Sociedade Brasileira de Ictiologia

### HOW TO CITE THIS ARTICLE

- Fráguas PS, Pompeu PS. Hydropower affects fish trophic structure both downstream of the dam and upstream of the reservoir. Neotrop Ichthyol. 2021; 19(1):e200071. <https://doi.org/10.1590/1982-0224-2020-0071>