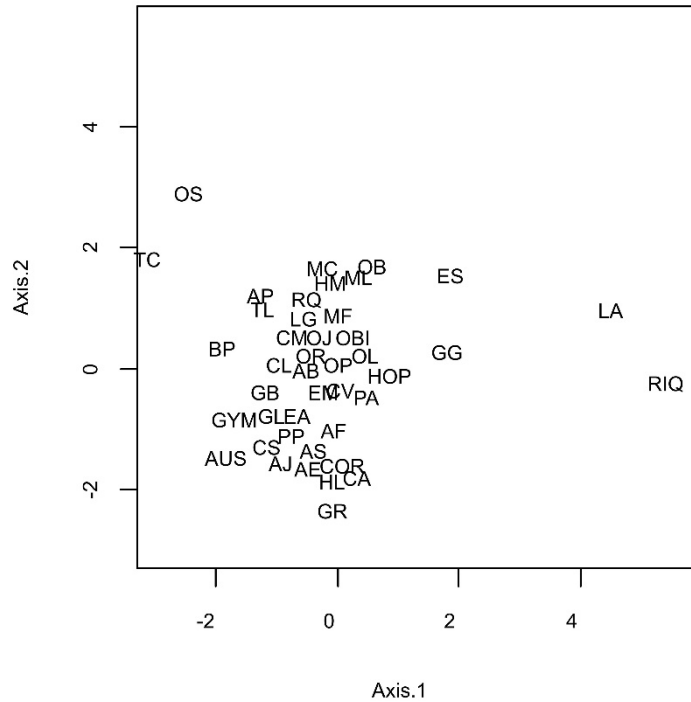




Supplementary File S4. Bidimensional chart from PCoA (Principal Coordinate Analysis) that represents the position between species described by the functional traits indicated in the Table 1. Singletons and doubletons were excluded. Species code: *Atherinella brasiliensis*, AB, *Acestrorhynchus pantaneiro*, AP, *Astyanax eigenmanniorum*, AE, *Astyanax fasciatus*, AF, *Astyanax jacuhiensis*, AJ, *Astyanax* sp, AS, *Australoheros facetus*, AUS, *Brevoortia pectinate*, BP, *Charax stenopterus*, CS, *Corydoras paleatus*, COR, *Crenicichla lepidota*, CL, *Crenicichla maculate*, CM, *Cyanocharax alburnus*, CA, *Cyphocharax voga*, CV, *Eucinostomos argenteus*, EA, *Eucinostomos melanopterus*, EM, *Elops saurus*, ES, *Genidens genidens*, GG, *Geophagus brasiliensis*, GB, *Gymnogeophagus gymnogenys*, GYM, *Gymnogeophagus lacustris*, GL, *Gymnogeophagus rhabdotus*, GR, *Hoplias malabaricus*, HM, *Hoplosternum litoralle*, HOP, *Hyphessobrycon luetkenii*, HL, *Loricariichthys anus*, LA, *Lycengraulis grossidens*, LG, *Micropogonias furnieri*, MF, *Mugil liza*, ML, *Mugil curema*, MC, *Odontesthes bonariensis*, OB, *Odontesthes bicudo*, OBI, *Odontesthes piquava*, OP, *Odontesthes ledae*, OL, *Oligosarcus jenynsii*, OJ, *Oligosarcus robustus*, OR, *Pimelodella australis*, PA, *Platanichthys platina*, PP, *Pomatomus saltatrix*, OS, *Rhamdia quelen*, RQ, *Rineloricaria quadrensis*, RIQ, *Trachelyopterus lucenai*, TL, *Trachinotus carolinus*, TC.