TABLE S3 | Ecomorphological indices and their ecological meaning. Codes: standard length (SL), maximum body height (MBH), body midline height (BMH), maximum body width (MBW), caudal peduncle length (CPdL), caudal peduncle height (CPdH), caudal peduncle width (CPdW), head length (HdL), head height (HdH), head width (HdW), eye height (EH), mouth height (MH), mouth width (MW), caudal fin height (CH), anal fin length (AL), pectoral fin length (PtL), pelvic fin length (PvL), eye area (EA), dorsal fin area (DA), caudal fin area (CA), anal fin area (AA), pectoral fin area (PtA), and pelvic fin area (PvA).

Ecomorphological indices		
Indices	**Formulas**	**Meaning**
Compression index	CI = MBH/MBW	Higher values indicate lateral compression of the fish, which is expected for fish that explore habitats with slower water velocity habitats (Gatz Jr., 1979; Watson, Balon, 1984).
Relative width of caudal peduncle	RWPd = CPdW/MBW	Higher relative values indicate better continuous swimmers (Winemiller, 1991).
Relative area of dorsal fin	RAD = DA/$(SL)^2$	Dorsal fins with larger relative areas have a better capacity for stabilization in deflections (Gosline, 1971).
Aspect ratio of caudal fin	ARC = $(CH)^2$/CA	Fishes showing a higher aspect ratio of the caudal fin are active and continuous swimmers. These fish tend greater caudal fin bifurcation and reduction of area (Keast, Webb, 1966; Gatz Jr., 1979; Balon *et al.*, 1986).
Aspect ratio of anal fin	ARA = $(AL)^2$/AA	Anal fins with a larger aspect ratio indicate a higher capacity to make rapid progression and regression movements (Breda, 2005).
Aspect ratio of pectoral fin	ARPt = $(PtL)^2$/PtA	A higher ratio indicates long and narrow pectoral fins, which is more expected on fish that are continuous high-speed swimmers and prefer pelagic regions (Wainwright *et al.*, 2002).
Aspect ratio of pelvic fin	ARPv = $(PvL)^2$/PvA	Larger values for the aspect ratio of the pelvic fin are found for pelagic fish and indicate a higher capacity to balance. The lower ratio is associated with benthic fishes because helps to maintain the body on the rocky bottoms of lotic habitats (Gatz Jr., 1979).
Relative height of head	RHHd = HdH/MBH	High values of these four ratios indicate fish capable of handling and feeding on relatively larger prey (Gatz Jr., 1979; Watson, Balon, 1984; Hugueny, Pouilly, 1999; Pouilly *et al.*, 2003).
Relative width of the head	RWHd = HdW/MBW	
Relative height of the mouth	RHM = MH/MBH	
Relative width of the mouth	RWM = MW/MBW	
Eye relative position	ERP = EH/HdH	This index is related to food detection, and it provides information on visual predation activities (Pouilly *et al.*, 2003). It can indicate the preferential position of the species in the water column.
Fineness ratio	FC = SL/$(MBH)^2$* MBW	This index indicates the influence of body shape on the ability to swim; values from 2 to 6 indicate low drag, and the optimum ratio for swimming efficiency is 4.5 (Blake, 1983).

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