Taxonomy of *Hyphessobrycon boulengeri* (Eigenmann, 1907) and *Hyphessobrycon reticulatus* Ellis, 1911 Populations (Characiformes: Characidae)

Fernando Rogério de Carvalho

Abstract

A taxonomic revision of Hyphessobrycon boulengeri (Eigenmann, 1907) and H. reticulatus Ellis, 1911 populations is presented with the description of a new species. A total of 600 specimens from southeastern and south Brazil were examined, ranging from Espírito Santo to Rio Grande do Sul. Morphometric multivariate analysis, osteologic characters, and color pattern allowed to recognition of H. boulengeri as valid species, occurring in coastal drainages from Rio de Janeiro to Rio Grande do Sul, and upper Paraná, Iguaçu, and Uruguay rivers, and a new species was found from rio Doce and rio da Prata in Espírito Santo State. H. boulengeri is diagnosed by presenting a humeral spot vertically elongate and relatively rounded; a narrow midlateral dark stripe in flank, weakly joined to caudal-peduncle blotch; caudal peduncle spot usually diamond shaped, with rounded edges; body with reticulated pattern formed by cromatophores concentration on posterior margin of scales; a narrow stripe on anal fin base and bony hooks strongly curved and very conspicuous on anal fin of males larger than 32.1 mm. Hyphessobrycon sp1. n. differs from the majority of congeners by the following combination of characters: a rounded humeral spot, sometimes with diffuse vertical tips: caudal peduncule blotch slightly rounded, extending onto middle caudal fin rays in few specimens; midlateral dark stripe absent in flank; body scales with intense pigmentation on their margins, forming a reticulated pattern; narrow lateral stripe along anal fin base, and 3rd and 4th infraorbitals co-ossified. Furthermore *Hyphessobrycon* sp1. n. is separated from H. boulengeri by the absence of midlateral dark stripe on flank and the co-ossification of infraorbitals 3rd and 4th. A short comment about biogeographic distribution of species in coastal and continental drainages of southeast and south Brazil is made.

Key-words: coastal rivers, headwaters continentals, biogeography, geographic variation, Neotropical, southern and south of Brazil

FICHA CATALOGRÁFICA

Carvalho, Fernando Rogério de.

Taxonomia das Populações de *Hyphessobrycon boulengeri* (Eigenmann, 1907) e *Hyphessobrycon reticulatus* Ellis, 1911 (Characiformes: Characidae) / Fernando Rogério de Carvalho. – São José do Rio

Preto: [s.n.], 2006 147 f.: il.; 30 cm.

Orientador: Francisco Langeani Dissertação (mestrado) – Universidade Estadual Paulista. Instituto de Biociências, Letras e Ciências Exatas

Peixe - Nomenclatura.
Ostariophysi.
Characiformes.
Characidae.
Hyphessobrycon.
Peixe - Taxonomia.
Langeani, Francisco.
Universidade Estadual Paulista. Instituto de
Biociências. Letras e Ciências Exatas.
III. Título.

CDU - 597.554