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## A new *Hyphessobrycon* (Ostariophysi: Characiformes: Characidae) from the middle Amazon basin, Brazil

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### Abstract

*Hyphessobrycon montagi*, new species, is described from tributaries of the Rio Arapiuns, a left margin affluent of the lower Rio Tapajós, Amazon basin, Pará, Brazil. The new species can be diagnosed from all its congeners by the possession of a combination of two well-defined humeral blotches, connected by a narrow stripe, and a caudal peduncle blotch. A putatively monophyletic *Hyphessobrycon heterorhabdus* species-group, restricted to *H. heterorhabdus*, *H. amapaensis*, and *H. eschwartzae*, is herein proposed based on shared derived features of color pattern. Alternative proposals of a “*Hyphessobrycon heterorhabdus* group” presented in the recent literature are evaluated and criticized.

**Key words:** *Hyphessobrycon heterorhabdus*, Rio Arapiuns, Rio Tapajós, terra firme, species groups

### Resumo

*Hyphessobrycon montagi*, nova espécie, é descrita de tributários do rio Arapiuns, um afluente de margem esquerda do rio Tapajós, bacia amazônica, Pará, Brazil. A nova espécie pode ser diagnosticada de todos os seus congêneres por possuir uma combinação de duas manchas umerais bem definidas, conectadas por uma listra estreita e uma mancha escura no pedúnculo caudal. Um presumivelmente monofilético grupo de espécies *Hyphessobrycon heterorhabdus*, restrito a *H. heterorhabdus*, *H. amapaensis* e *H. eschwartzae* é proposto aqui baseado em caracteres derivados de padrão de colorido. Propostas alternativas recentes de um “grupo *Hyphessobrycon heterorhabdus*” apresentados na literatura são avaliadas e criticadas.

**Palavras-chave:** *Hyphessobrycon heterorhabdus*, Rio Arapiuns, Rio Tapajós, terra firme, grupos de espécies

### Introduction

The genus *Hyphessobrycon* is one of the most speciose genera in the family Characidae, comprising 136 species currently recognized as valid (Lima *et al.*, 2003; Teixeira *et al.*, 2014; Zarske, 2014; Dagosta *et al.*, 2014). The genus has been long recognized as being probably not monophyletic (e.g., Weitzman & Fink, 1983; Weitzman & Palmer, 1997), a hypothesis that has been supported by both molecular (Javonillo *et al.*, 2010) and morphological (Mirande, 2010) phylogenetic studies of the family Characidae. In addition, the alpha-taxonomy of most species included in *Hyphessobrycon* and related genera is still poorly understood.

Intensive fish collecting at Juruti, a locality situated at the right bank of the Rio Amazonas, a little above the rio Tapajós mouth, has been conducted since 2004 by the third author and associates within a large biological inventory as part of the environmental studies aiming to evaluate the impact of a large bauxite-ore mining operation which was implanted in the area. During the course of this survey, fish sampling was conducted at the streams and rivers draining the low-lying plateaus into the Rio Arapiuns basin, a left-margin tributary of the lower

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