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## A new species of *Hemigrammus* Gill, 1858 (Characiformes: Characidae) from the central and western Amazon and rio Paraná-Paraguai basins

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### Abstract

A new species of *Hemigrammus* is described from the middle rio Solimões/Amazonas and tributaries, upper and middle rio Madeira, and rio Paraná-Paraguai basins in Brazil and Paraguay. The new species is most similar among congeners with *Hemigrammus marginatus*, with which it shares similar caudal-fin pigmentation pattern. The new species can be distinguished from *Hemigrammus marginatus* by possessing two conspicuous dark patches of pigmentation on caudal fin, occupying most of caudal-fin lobes, except the tips, by having two dark narrow stripes along anal-fin base, and by possessing 5–8 pored lateral line scales. The new species differs from *Hyphessobrycon diancistrus*, which is similar in color pattern and general body shape, by the presence of small scales on caudal-fin lobes, occupying approximately its basal third, by the presence of two narrow stripes along anal fin base, and by the absence of bony hooks on anal fin in mature males. The occurrence of the new species in both Amazon and rio Paraná-Paraguai basins is discussed in order to clarify and expand recent discussions on the biogeographical relationships between both river systems.

**Key words:** *Hyphessobrycon otrynus*, *Hemigrammus marginatus*, *Hyphessobrycon diancistrus*, biogeography

### Resumo

Uma nova espécie de *Hemigrammus* descrita do médio rio Solimões/Amazonas e afluentes, bem como da bacia do médio e alto rio Madeira, e bacia dos rios Paraná-Paraguai, no Brasil e Paraguai. A nova espécie entre as congêneres é mais similar a *Hemigrammus marginatus*, com a qual compartilha um padrão de pigmentação da nadadeira caudal similar. A nova espécie pode ser diferenciada de *Hemigrammus marginatus* por possuir duas áreas de pigmentação escuras nos lobos da nadadeira caudal muito conspícuas, ocupando a maior parte dos lobos da nadadeira caudal, exceto pelas extremidades, por possuir duas faixas escuras estreitas ao longo da base da nadadeira anal, e por possuir 5–8 escamas perfuradas na linha lateral. A nova espécie difere de *Hyphessobrycon diancistrus*, similar em padrão de colorido e forma geral do corpo, pela presença de escamas pequenas nos lobos da nadadeira caudal, ocupando aproximadamente o terço basal da mesma, pela presença de duas faixas estreitas ao longo da base da nadadeira anal e pela ausência de ganchos ósseos na nadadeira anal de machos maduros. A ocorrência da nova espécie tanto na bacia amazônica como na bacia do rio Paraná-Paraguai discutida com vista a esclarecer e expandir discussões recentes sobre as relações biogeográficas entre ambos sistemas hidrográficos.

### Introduction

*Hemigrammus* Gill, 1858 is one of the most speciose genera in Characidae, with 56 species currently considered valid, including the one described herein (Lima *et al.*, 2003; Ota *et al.*, 2014; Marinho *et al.*, 2014). As several other genera in Characidae, *Hemigrammus* is not defined by synapomorphies and, as a matter of fact, is not deemed

Amazonas, rio Solimões basin; NUP 8033, 7, 25.6–41.3 mm SL, Amazonas, rio Solimões basin. *Thrissobrycon pectinifer*; INPA 17503, 3, 25.7–27.9 mm SL, Amazonas, rio Negro basin.

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