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A new species of *Brycon* (Characiformes: Characidae) from Nicaragua and Costa Rica, with a key to the lower Mesoamerican species of the genus

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Abstract

A new species of *Brycon* is described from the Atlantic slope of Nicaragua and Costa Rica. *Brycon costaricensis* n. sp. differs from all other Central American *Brycon* species by the following combination of characters: 49 to 54 scales in the lateral line; 5 or 6 rows of scales between lateral line and pectoral fin base; 9 to 11 rows of scales between lateral line and dorsal fin base; 5 to 7 rows of scales between lateral line and anal fin base; anal fin notably longer than head, with 33 to 37 total rays; and a elongated and shallow caudal peduncle, whose length is 1.78 to 2.35 times its depth. A key to lower Mesoamerican species of the genus is also presented.

Key words: Central America, Atlantic slope, Primary freshwater fish, Teleostei, Bryconinae

Resumen

Se describe una nueva especie de *Brycon* para la vertiente Atlántica de Nicaragua y Costa Rica. *Brycon costaricensis* n. sp. difiere de todos los demás miembros Centroamericanos del género por la siguiente combinación de caracteres: 49 a 54 escamas en la línea lateral; 5 o 6 filas de escamas entre la línea lateral y la base de la aleta pélvica; 9 a 11 filas de escamas entre la línea lateral y la base de la aleta dorsal; 5 a 7 filas de escamas entre la línea lateral y la base de la aleta anal; aleta anal notablemente más larga que la cabeza, conformada por entre 33 y 37 radios totales; y pedúnculo caudal alargado y poco profundo, cuya longitud oscila entre 1.78 y 2.35 veces su profundidad. Se incluye, además, una clave dicotómica para la identificación de las especies de *Brycon* de Centroamérica.

Introduction

As presently recognized *Brycon* Müller and Troschel 1844 is one of the largest neotropical characiform genera, containing at least 67 nominal species (Lima & Castro 2000) of which about 42 are valid (Lima 2003, 2004). Species of the genus are widely distributed from Grijalva and Usumacinta basins in southern Mexico (Miller *et al.* 2006) to the La Plata basin in northern Argentina (Lima 2004). However, major diversity of *Brycon* species is found in Panama and in the trans-Andean rivers of Colombia and Ecuador (Lima 2003).

Systematics of *Brycon* is still poorly understood (Lima 2004). Traditionally, species of the genus are diagnosed from the remaining Characidae by the following combination of characters: three to four teeth rows in the premaxillary, presence of an inner symphyseal tooth in the dentary, absence of an expanded coracoid bone and presence of a relatively long anal fin with 18–38 branched rays (Howes 1982, Lima 2003, 2004).

Following Gery (1977) and Bussing (1976, 1985), on the basis of several meristic traits, and Reeves &

August 1987; IBUNAM-CNPE 5698: 3, 110.0–230.0 mm SL, México, Chiapas, Rio Lacanja, Ejido Pico de Oro, 16°24'03.96"N, 90°46'23.16"W, A. Hernández, 16 August 1987; IBUNAM-CNPE 8492: 2, 195.0–205.0 mm SL, México, Chiapas, Rio Lacanja, Montes Azules, 16°24'04.00"N, 90°46'23.00"W, Huidobro, Burgos, Palma, Rosales, 29 April 1991; IBUNAM-CNPE 8514: 3, 55.0–105.1 mm SL, México, Chiapas, Ubilio García, Rio Sto. Domingo, Burgos, Becerril, Palma, Rosales, 19 February 1992.

Brycon behreae. 30 specimens (68.3–188.2 mm SL). **Costa Rica:** UCR 0101-06, 6, 72.1–188.2 mm SL, Puntarenas, Coto drainage, Río Nuevo, 12 km E of the Río Claro village at Interamerican Highway, 8°38'54.99"N, 82°58'34.42"W, W.A. Bussing, O. Blanco, 2 January 1967; UCR 0311-01, 6, 105.2–225.6 mm SL, Puntarenas, Pirrís drainage, Quebrada Bonita, S side of Damas, 9 km NW of Quepos, 9°29'20.00"N, 84°12'34.43"W, W.A. Bussing, R. Nishimoto, J. Perry, C. Mata, 18 January 1969; UCR 393-01, 6, 77.4–97.4 mm SL, San José, Térraba drainage, Río Pedregoso, 3 km SW of San Isidro del general on Dominical road, near coffee Beneficio San Jorge, 9°21'30.00"N, 83°43'14.75"W, C. Mata, 3 February 1970; UCR 0757-04, 6, 72.0–111.4 mm SL, Puntarenas, Térraba drainage, Quebrada Angelina 0.5 km NO of Villa Briceño at Interamerican Highway, 8°43'29.99"N, 83°10'04.91"W, W.A. Bussing, M. Bussing, E. Bussing, 1 March 1973; UCR 2515-03, 6, 68.3–95.5 mm SL, San José, Térraba drainage, Río Jilguero, San Isidro del General, 9°22'10.00"N, 83°41'59.98"W, C. Gamboa, 23 June 1998.

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