



<http://dx.doi.org/10.11646/zootaxa.3869.4.5>

<http://zoobank.org/urn:lsid:zoobank.org:pub:CB38DF91-EC70-4B17-9B9A-18C949431C1D>

Apistogramma ortegai (Teleostei: Cichlidae), a new species of cichlid fish from the Ampiyacu River in the Peruvian Amazon basin

RICARDO BRITZKE¹, CLAUDIO OLIVEIRA¹ & SVEN O. KULLANDER²

¹Universidade Estadual Paulista, Instituto de Biociências, Departamento de Morfologia, Rubião Jr. s/n. CEP 18618-970. Botucatu, SP, Brazil. E-mail: britzker@gmail.com

²Department of Zoology, Swedish Museum of Natural History, PO Box 50007, SE-104 05 Stockholm, Sweden

Abstract

Apistogramma ortegai, new species, is described from small streams tributaries of the Ampiyacu River near Pebas, in eastern Peru. It belongs to the *Apistogramma regani* species group and is distinguished from all other species of *Apistogramma* by the combination of contiguous caudal spot to bar 7, presence of abdominal stripes, short dorsal-fin lappets in both sexes, absence of vertical stripes on the caudal fin, and reduced number of predorsal and prepelvic scales.

Key words: Geophaginae, Geophagini, Amazonia, Freshwater, Morphology, Taxonomy

Resumen

Apistogramma ortegai, nueva especie, es descrita desde pequeños tributario del río Ampiyacu cerca de Pebas, en el este del Perú. Pertenece al grupo de especies de *A. regani* y es distinguido de todas las otras especies de *Apistogramma* por la combinación de la barra 7 conectada con una mancha en la aleta caudal, presencia de líneas abdominales, membranas de la aleta dorsal cortas en ambos sexos, ausencia de líneas verticales en la aleta caudal, y reducido número de escamas predorsales y prepélvicas.

Introduction

The South American cichlid genus *Apistogramma* Regan (1913) comprises 84 valid species (Schindler & Staeck, 2013) distributed in the basins of the Amazon, Orinoco, Paraguay, lower Paraná and Uruguay, and coastal rivers of the Guianas (Kullander, 2003). Kullander (1980) characterized the genus based on the combination of gill-rakers on the sides of the lower pharyngeal tooth-plate; a compressed lobe on the first epibranchial bone bearing gill-rakers on the margin; three, rarely four anal-fin spines and 14–18 dorsal-fin spines. All species are of small size, the largest species not exceeding 60 mm in body length. They are sex dimorphic. Males grow larger than females and often have relatively larger fins, prolonged rays in the dorsal and caudal fins, and a filamentous extension of the first pelvic-fin ray, while sexually active females have species specific patterns consisting of black blotches and stripes against intense yellow background.

Eighteen valid species of *Apistogramma* have been described on the basis of material from the Peruvian Amazon basin, viz., *A. allpahuayo* Römer, Beninde, Duponchelle, Díaz, Ortega, Hahn, Soares, Cachay, Dávila, Cornejo & Renno, 2012 (Nanay River); *A. atahualpa* Römer, 1997 (Nanay River); *A. baenschi* Römer, Hahn, Römer, Soares & Wöhler, 2004 (Huallaga basin); *A. barlowi* Römer & Hahn, 2008 (Ampiyacu River); *A. cinilabra* Römer, Duponchelle, Römer, Duponchelle, Diaz, Davilla, Sirvas, Catchay & Renno, 2011 (Itaya River); *A. cruzi* Kullander, 1986 (Mazán River); *A. eremnopyge* Ready & Kullander, 2004 (Pintuyacu River, Itaya River drainage); *A. eunotus* Kullander, 1981 (Ucayali River); *A. huascar* Römer, Pretor & Hahn, 2006 (Nanay River); *A. luelingi* Kullander, 1976 (Madre de Dios and Mamoré River basins); *A. martini* Römer, Hahn, Römer, Soares & Wöhler,

Comparative material

Apistogramma caetei: LBP 9437, 5, 28.7–38.7 mm SL, Brazil, Pará, Caeté River basin, Tracuateua, Igarape Cajueirinho, Tracuateua. *Apistogramma cinilabra*: LBP 12567, 2, 30.4–44.7 mm SL, Peru. *Apistogramma cruzi*: NRM 16664, holotype, 25.9 mm SL, Peru, tributary to the Mazán River. *Apistogramma commbrae*: LBP 11493, 1, 25.5 mm SL, Brazil, Mato Grosso, Poconé; LBP 5233, 5, 24.5–26 mm SL, Brazil, Paraná, Porto Rico. *Apistogramma eunotus*: LBP 17750, 1, 44.6 mm SL, Peru, Loreto, quebrada on the Carretera Campo Verde to Tournavista. *Apistogramma inconspicua*: MZUSP 38944, 1, paratype, 23.5 mm SL, Bolivia, Santa Cruz, Candelaria River. *Apistogramma linkei*: MZUSP 28726, 8, paratypes, 17.7–25.7 mm SL, Bolivia, Beni, NW Santa Cruz. *Apistogramma megaptera*: IAvH 11714, 1, holotype, 38.1 mm SL, Colombia, Guainía, caño Matadero. *Apistogramma personata*: MZUSP 81489, 5, 38.1–51.7 mm SL, Brazil, Amazonas, Tiquié River basin, Igarapé Mipiriyopotemakaya. *Apistogramma regani*: LBP 17856, 2, 18.9–25.2 mm SL, Brazil, Amazonas, Iranduba. *Apistogramma resticulosa*: LBP 11468, 5, 25.4–38.7 mm SL, Brazil, Amazonas, Humaitá. *Apistogramma steindachneri*: ROM 82022, 1, 37.5 mm SL, Guiana, Berbice River basin. *Apistogramma taeniata*: LBP 14255, 5, 13.1–25 mm SL, Brazil, Pará, Itaituba. *Apistogramma urteagai*: ROM 82818, 1, 24.5 mm SL, Peru, Madre de Dios, Tambopata Natural Reserve, Kati Cocha.

Acknowledgements

We thank Jonathan S. Ready (UFPA) for comments and suggestions on the manuscript, and anonymous reviewers provided constructive comments that significantly improved the original manuscript. Hernán López-Fernández, Don Stacey and Erling Holm (ROM), Osvaldo Oyakawa and Michel Gianeti (MZUSP) for the loan part of the material used in this study, Claudia Medina and Carlos Montaña (IAvH) for allowing access to the collection of the Instituto Humboldt, Martin Taylor (University of East Anglia) for pictures of live specimens, Jorge Mori and Martin Taylor for help in the field. RB is financially supported by FAPESP (Proc. 2011/00269-4).

Literature cited

- Cope, E.D. (1872) On the fishes of the Ambyiacu River. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 23, 250–294.
- Kosłowski, I. (1985) Descriptions of new species of *Apistogramma* (Teleostei: Cichlidae) from the Rio Mamoré system in Bolivia. *Bonner Zoologische Beiträge*, 36, 145–162.
- Kosłowski, I. (2002) *Die Buntbarsche Amerikas. Vol. 2. Apistogramma & Co.* Eugen Ulmer, Stuttgart, 320 pp.
- Kullander, S.O. (1980) A taxonomical study of the genus *Apistogramma* Regan, with a revision of Brazilian and Peruvian species (Teleostei: Percoidae: Cichlidae). *Bonner Zoologische Monographien*, 14, 1–152.
- Kullander, S.O. (1981) Description of a new species of *Apistogramma* (Teleostei: Cichlidae) from the upper Amazonas basin. *Bonner Zoologische Beiträge*, 32, 183–194.
- Kullander, S.O. (1982) Cichlid fishes from the La Plata basin. Part II. *Apistogramma commbrae* (Regan, 1906). *Revue suisse de Zoologie*, 89, 33–481.
- Kullander, S.O. (1983) Cichlid fishes from the La Plata basin. Part IV. Review of the *Apistogramma* species, with description of a new species. *Zoologica Scripta*, 11, 307–313.
<http://dx.doi.org/10.1111/j.1463-6409.1982.tb00541.x>
- Kullander, S.O. (1986) *Cichlid Fishes from the Amazon River Drainage of Peru*. Swedish Museum of Natural History, Stockholm, 431 pp.
- Kullander, S.O. (1990) *Mazarunia mazarunii* (Teleostei: Cichlidae), a new genus and species from Guyana, South America. *Ichthyological Exploration of Freshwaters*, 1 (1), 3–14.
- Kullander, S.O. (2003) *Family Cichlidae (Cichlids)*. In: Reis, R.E., Kullander, S.O. & Ferraris, C.J. Jr. (Eds.), *Check list of the freshwater fishes of South and Central America*. EDIPUCRS, Porto Alegre, pp. 605–654. [729 pp]
- Kullander, S.O. & Staeck, W. (1988) Description of new *Apistogramma* species from the Rio Negro in Brazil. *Cybium*, 12, 189–201.
- Ready, J.S., Sampaio, I., Schneider, H., Vinson, C., Dos Santos, T. & Turner, G.F. (2006) Colour forms of Amazonian cichlid fish represent reproductively isolated species. *Journal of Evolutionary Biology*, 19, 1139–1148.
<http://dx.doi.org/10.1111/j.1420-9101.2006.01088.x>
- Regan, C.T. (1906) A revision of the South-American cichlid genera *Retroculus*, *Geophagus*, *Heterogramma* and *Biotoecus*.

Annals and Magazine of Natural History, 17 (7), 49–66.

<http://dx.doi.org/10.1080/00222930608562489>

Regan, C.T. (1913) Fishes from the River Ucayali, Peru, collected by Mr. Mounsey. *Annals and Magazine of Natural History*, 12 (8), 281–283.

<http://dx.doi.org/10.1080/00222931308693400>

Römer, U. (1994): *Apistogramma mendezi* nov. spec. (Teleostei:Perciformes; Cichlidae): Description of a New Dwarf Cichlid from the Rio Negro System, Amazonas State, Brazil. *Aqua Journal of Ichthyology and Aquatic Biology*, 1 (1), 1 – 12.

Schindler, I. & Staeck, W. (2013) Description of *Apistogramma helkeri* sp. n., a new geophagine dwarf cichlid (Teleostei: Cichlidae) from the lower río Cuao (Orinoco drainage) in Venezuela. *Vertebrate Zoology*, 63, 301–306.

Steindachner, F. (1875) Beiträge der Kenntniss der Chromiden des Amazonenstromes. Sitzungsberichte der kaiserlichen Akademie der Wissenschaften. *Mathematisch-naturwissenschaftliche Classe*, 71, 61–137.

Taylor, W.R. & Van Dyke, G.C. (1985) Revised procedures for staining and clearing small fishes and other vertebrates for bone and cartilage study. *Cybium*, 9, 107–119.