

Correction of the type locality of *Australoheros ipatinguensis* (Teleostei: Cichlidae)

Felipe P. Ottoni*, Axel M. Katz** and Pedro H. N. Bragança***

Australoheros ipatinguensis was described based on specimens collected in 1990 in an expedition led by the ichthyologist Wilson Costa, from the Universidade Federal do Rio de Janeiro (Brazil). The type locality was designated in the original description as follows: "Brazil: Estado de Minas Gerais: Município de Ipatinga: córrego Braúna, rio Doce basin" (Ottoni & Costa, 2008). This information was present on the jar labels of UFRJ 0035 and UFRJ 7553 (respectively paratypes and holotype of *A. ipatinguensis*) and also on UFRJ fish collection record book. However, it lacked coordinates and detailed information on the locality. Note that "Braúna", the common name of a tree in Eastern Brazil, is commonly applied to different localities, not necessarily related or close to the type locality (e.g. Cachoeira Braúnas in Serra do Cipó National Park, Braúnas municipality, localities of Braúna and São Sebastião de Braúnas, Braúna neighbourhood in Belo Horizonte municipality, all in Minas Gerais State; and Braúna municipality in São Paulo State). Therefore the type locality as designated in the original description is imprecise. The only precise information that can be obtained from the original description is that the type lo-

cality of *A. ipatinguensis* is in one affluent of the Rio Doce basin, in the Municipality of Ipatinga.

Several years after the description of *Australoheros ipatinguensis*, when Wilson Costa's students and collaborators were preparing an expedition to collect DNA samples of this species, Wilson Costa found the field notebook of his 1990 expedition. After studying the information from the expedition, he realised that the holotype of *A. ipatinguensis* could not have been collected in the municipality of Ipatinga, because that expedition had sampled along the adjacent areas of the road MG-232, between Santana do Paraíso and Braúnas municipalities, Minas Gerais State (Fig. 1). The correct type locality of *A. ipatinguensis* is: Brazil: Estado de Minas Gerais: Município de Belo Oriente: Córrego Braúna, a tributary of Rio Santo Antônio, Rio Doce basin, nearby a secondary road to the MG-232 road between Santana do Paraíso and Belo Oriente, between coordinates 19°16'10"S 42°30'48"W and 19°17'09"S 42°31'26"W (Fig. 1).

The correction of the type locality of *Australoheros ipatinguensis* is important for taxonomic and biogeographic studies. The updated information

* Laboratory of Systematics and Ecology of Aquatic Organisms, Federal University of Maranhão, Center of Agrarian and Environmental Sciences, BR-222, Km 04, S/N, Boa Vista, CEP 65500-000, Chapadinha, MA, Brazil. E-mail: fpottoni@gmail.com (corresponding author)

** Laboratory of Systematics and Evolution of Teleost Fishes, Institute of Biology, Federal University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil. E-mail: axelmk@gmail.com

*** South African Institute for Aquatic Biodiversity, Private Bag 1015, Grahamstown, 6140 South Africa. E-mail: pedrobra88@gmail.com

Literature cited

- Buckup, P. A. 2011. The eastern Brazilian shield. Pp. 203–210 in: J. S. Albert & R. E. Reis. (eds.), *Historical biogeography of Neotropical freshwater fishes*. University of California Press, Berkley/Los Angeles.
- Koerber, S. 2016. The type locality of *Laetacara dorsigera* (Heckel, 1840) and other species collected in ‘Villa Maria’ is today known as the city of Cáceres, Brazil. *Historia Natural*, 6: 141–143.
- Lima, F. C. T. & J. Géry. 2001. Correction of the type locality of *Hyphessobrycon stegemannii* Géry and *Knodus savannensis* Géry (Teleostei: Characiformes: Characidae). Comunicações do Museu de Ciências e Tecnologia da PUCRS, 14: 95–97.
- Lucinda, P. H. F. & C. A. S. Lucena. 2012. The type locality and type series of *Potamophylax pygmaeus* Myers & Carvalho, 1955 (Teleostei: Poeciliidae). Ichthyological Exploration of Freshwaters, 23: 56.
- Ottoni, F. P. & M. M. Cheffe. 2009. A new species of *Australoheros* from the upper rio das Antas, laguna dos Patos System, southern Brazil. *Spixiana*, 32: 153–159.
- Ottoni, F. P. & W. J. E. M. Costa. 2008. Taxonomic revision of the genus *Australoheros* Rícan & Kullander, 2006 (Teleostei: Cichlidae) with descriptions of nine new species from southeastern Brazil. *Vertebrate Zoology*, 58: 207–232.
- Ottoni, F. P., J. L. O. Mattos, A. M. Katz & P. H. N. Bragança. 2019. Phylogeny and species delimitation based on molecular approaches on the species of the *Australoheros auritani* group (Teleostei, Cichlidae), with biogeographic comments. *Zoosystematics and Evolution*, 95: 49–64.
- Ribeiro, A. C. 2006. Tectonic history and the biogeography of the freshwater fishes from the coastal drainages of eastern Brazil: an example of faunal evolution associated with a divergent continental margin. *Neotropical Ichthyology*, 4: 225–246.
- Rícan, O. & S. O. Kullander. 2008. The *Australoheros* (Teleostei: Cichlidae) species of the Uruguay and Paraná River drainages. *Zootaxa*, 1724: 1–51.

Received 15 October 2019

Revised 3 January 2020

Accepted 3 April 2020

The whole contribution can be purchased as PDF file.

Availability

Generally all our publications are available as PDF files; full publications as a general rule after the printed version is out of print. If you have questions concerning particular contributions please contact us by e-mail:
pdf@pfeil-verlag.de.

The PDF files are protected by copyright.

The PDF file may be printed for personal use. The reproduction and dissemination of the content or part of it is permitted. It is not allowed to transfer the digital personal certificate or the password to other persons.

Prices

Books: Prices are to be found in the catalog.

Articles in journals and single contributions or chapters in books:

10 EURO basic price per order (including the first 10 pages),
and

0,50 EURO per page, beginning with the 11th page.

Page numbers are found in the contents of the publications.

Orders

Use our order form for PDF files or send your order informal per e-mail (pdf@pfeil-verlag.de). The only accepted payment is by credit card. While using the order form for PDF files, your data will be transmitted by secure link (ssl). You also may send the informations informally by e-mail, fax, phone or mail.

Handling

As soon as possible, depending on our business hours and your order, you will receive your PDF file together with the certificate and password by e-mail.

Larger PDF files can be downloaded from our webspace, if necessary.

Your invoice will be sent out by e-mail after we charged your credit card.

To open the encrypted PDF files you have to install your personal certificate after your first order. All PDF files with the same certificate can be opened from that time on.

Dieser Beitrag kann als PDF-Datei erworben werden.

Verfügbarkeit von PDF-Dateien

Prinzipiell sind von allen unseren Publikationen PDF-Dateien erhältlich. Komplette Publikationen in der Regel erst nachdem die gedruckte Version vergriffen ist. Anfragen bezüglich bestimmter Beiträge richten Sie bitte per E-Mail an pdf@pfeil-verlag.de.

Die PDF-Dateien sind urheberrechtlich geschützt.

Ein Ausdruck der PDF-Dateien ist nur für den persönlichen Gebrauch erlaubt.

Die Vervielfältigung von Ausdrucken, erneutes Digitalisieren sowie die Weitergabe von Texten und Abbildungen sind nicht gestattet.

Das persönliche Zertifikat und das Passwort dürfen nicht an Dritte weitergegeben werden.

Preise

Bücher: Die Preise sind dem Katalog zu entnehmen. Zeitschriftenbeiträge und einzelne Kapitel aus Sammelbänden bzw. Büchern:

10 EURO Grundbetrag pro Bestellung (einschließlich der ersten 10 Seiten),
und

0,50 EURO pro Seite ab der 11. Seite.

Den Umfang der Beiträge entnehmen Sie bitte den Inhaltsverzeichnissen.

Bestellungen

Bestellungen sind mit dem PDF-Bestellformular oder formlos per E-Mail (pdf@pfeil-verlag.de) an uns zu richten. Die Bezahlung ist ausschließlich per Kreditkarte möglich. Bei Verwendung unseres Bestellformulars werden die Kreditkartendaten über eine gesicherte Verbindung (ssl) übermittelt. Sie können die Daten aber auch formlos per E-Mail, Fax, Post oder telefonisch übermitteln.

Abwicklung

So bald wie möglich, aber abhängig von unseren Bürozeiten und der gewünschten Bestellung, schicken wir Ihnen die PDF-Datei(en) zusammen mit Ihrem persönlichen Zertifikat und dem zugehörigem Passwort per E-Mail. Größere Dateien bieten wir Ihnen gegebenenfalls zum Herunterladen an.

Der fällige Betrag wird von Ihrer Kreditkarte abgebucht und Sie erhalten die Rechnung ebenfalls per E-Mail.

Um die verschlüsselten PDF-Dateien öffnen zu können, muss bei der ersten Bestellung das passwortgeschützte persönliches Zertifikat installiert werden, welches anschließend auf dem Rechner verbleibt. Alle mit diesem Zertifikat verschlüsselten Dateien können anschließend auf diesem Rechner geöffnet werden.