

Osteocephalus subtilis Martins and Cardoso, 1987 (Anura: Hylidae): New distribution record

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ABSTRACT: *Osteocephalus subtilis* is distributed in the state of Acre, Brazil. In this note we present a new record of distribution of the species in the Reserva Natural Palmarí, in the state of Amazonas, northwest of Brazil. The species was found in two occasions, in shrubs about 1, 2 m height.

Osteocephalus subtilis Martins and Cardoso, 1987 is one of the 24 species of this genus of the family Hylidae (Frost 2011). This species is distributed in the localities of Igarapé Brasília, Campus do Projeto Rondon Avançado and Igarapé Formoso, in the city of Cruzeiro do Sul, state of Acre, Brazil (Martins and Cardoso 1987). Presumably *O. subtilis* is distributed more widely in other Brazilian states, and even in countries like Peru and Bolivia (IUCN, 2004). However, there are no published records of new localities of the species distribution. Herein we present a new report of distribution for *O. subtilis* in the state of Amazonas in

northwest Brazil.

In July 2011 and June 2012 we found two individuals of *O. subtilis* (Figure 1) in a *terra firme* forest in the Reserva Natural Palmarí (4°17'17" S, 70°17'33" W) (Figure 2). The individuals found were compared with the diagnosis and morphometric measurements (Table 1) made by Martins and Cardoso (1987). Additionally, we also requested assistance in identifying the species to the senior author of the original description paper. Individuals could not be collected due to conservation policies of the Reserva Natural Palmarí. Both individuals were found during the

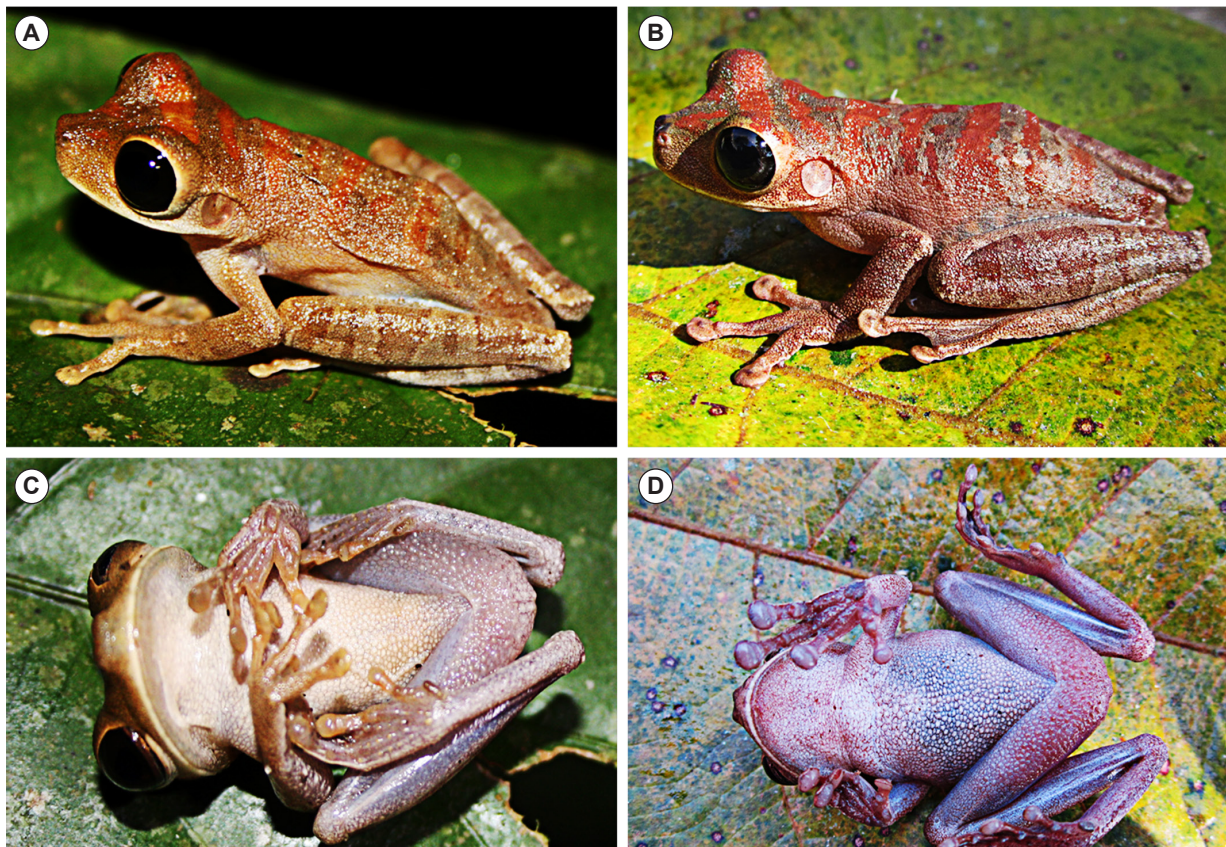


FIGURE 1. *Osteocephalus subtilis* found in the Reserva Natural Palmarí, state of Amazonas, Brazil. A and C individual, 2011 (dorsal and ventral view); B and D individual, 2012 (dorsal and ventral view).

night on leaves of shrubs at 1-2 m of height. We did not register calling males possibly by the period of year that the specimens were found.

The individuals found are characterized by the following characteristics: brown dorsal coloration with brown stripes on the hind limbs and the back, venter whitish creamy and granular, eyes large and prominent with black iris, supraocular white patch, glandular anal line and developed webbing of the toes.

Our record is the first in the municipality of Atalaia do Norte (Brazil) and it represents the northernmost geographic record of *Osteocephalus subtilis*, extending its distribution range approximately 457 Km from Cruzeiro do Sul to Atalaia do Norte. We assume that the species is more widely distributed within Brazil and through the Amazon basin; however, to know more about their biology, distribution and conservation status is necessary to carry out more research on this species.

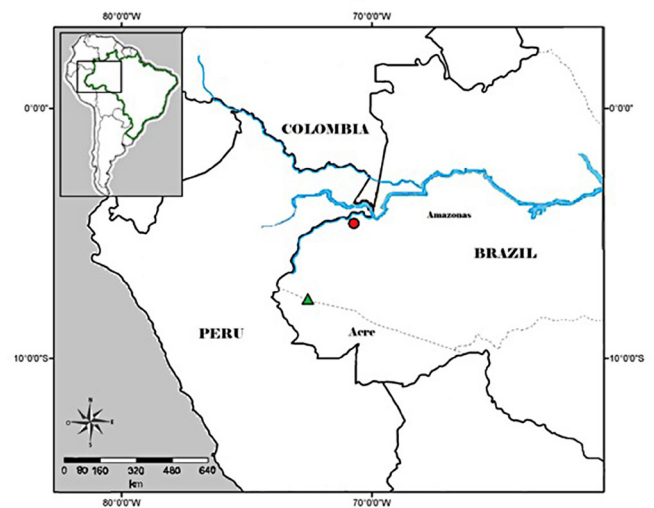


FIGURE 2. Distribution map of *Osteocephalus subtilis*, showing the known distributional records (green triangle) and the new records in the Reserva Natural Palmarí (red circle).

TABLE 1. Comparison between morphometric measurements, in millimeters, of new records of *O. subtilis* individuals in state of Amazonas (Ind. 1 and Ind. 2) and the individuals collected in the state of Acre (taken and modified from Martins and Cardoso 1987).

| | Ind. 1 2011 | Ind. 2 2012 | MZUSP 60561 | ZUEC 4684 | ZUEC 5503 | ZUEC 5504 | WCAB 49637 | WCAB 49638 |
|------------------------|----------------|----------------|----------------|--------------|--------------|--------------|---------------|---------------|
| Snout vent length | 36.7 | 51.2 | 36.2 | 36.4 | 35.8 | 38.8 | 38.4 | 37.8 |
| Head length | 10.6 | 7.6 | 13.1 | 12.9 | 12.8 | 13.2 | 14.7 | 13.4 |
| Head width | 13.2 | 15.5 | 12.9 | 12.8 | 12.8 | 13.8 | 13.5 | 13.6 |
| Eye diameter | 5.0 | 5.0 | 5.0 | 4.4 | 4.7 | 4.9 | 4.8 | 5.0 |
| Interocular length | 3.9 | 4.7 | 4.1 | 4.8 | 4.1 | 4.5 | 4.9 | 5.0 |
| Eye – nostril Distance | 4.7 | 5.3 | 3.6 | 3.5 | 3.7 | 3.9 | 3.7 | 4.0 |
| Tympanum diameter | 1.9 | 3.5 | 3.0 | 3.1 | 3.1 | 3.5 | 3.4 | 3.5 |
| Femur length | 19.2 | 23.9 | 18.8 | 19.3 | 19.4 | 20.7 | 19.8 | 19.6 |
| Tibia length | 19.9 | 25.9 | 19.8 | 20.4 | 19.9 | 21.0 | 20.7 | 20.4 |
| Foot length | 15.5 | 17.3 | 14.9 | 15.6 | 14.3 | 16.0 | 15.6 | 14.8 |

ACKNOWLEDGMENTS: We thank the Reserva Natural Palmarí for allowing us research there and Marcio Martins by the corroboration of the species identification.

LITERATURE CITED

IUCN 2012. *IUCN Red List of Threatened Species. Version 2012.1.* Electronic Database accessible at <http://www.iucnredlist.org/>. Captured on 20 October 2012.

Frost, D.R. 2012. *Amphibian Species of the World: an Online Reference.* Version 5.5. Electronic database accessible at <http://research.amnh.org/herpetology/amphibia/index.php>. American Museum of Natural History, New York, USA. Captured on 20 October 2012.

Martins, M., and A.J. Cardoso. 1987. Novas espécies de hílideos do Estado do Acre (Amphibia: Anura). *Revista Brasileira de Biologia* 47: 549-558.

RECEIVED: September 2012

ACCEPTED: November 2012

PUBLISHED ONLINE: March 2013

EDITORIAL RESPONSIBILITY: Pedro M. S. Nunes