

Synapturanus rabus Pyburn, 1977 in Peru (Amphibia: Anura: Microhylidae): filling gap

Jhon J. López-Rojas 1* and Diego F. Cisneros-Heredia 2

- 1 Universidad Nacional de la Amazonia Peruana, Facultad de Ciencias Biológicas. Calle Pevas 5ta Cuadra, Iquitos, Perú.
- 2 Universidad San Francisco de Quito, Colegio de Ciencias Biológicas & Ambientales, Campus Cumbayá, Edif. Darwin, of. DW-010A, calle Diego de Robles y Vía Interoceánica, Casilla Postal 17-1200-841, Quito, Ecuador.
- * Corresponding author. E-mail: lopezrojasjj@gmail.com

ABSTRACT: We report herein the second locality of *Synapturanus rabus* Pyburn, 1977 in Peru, based on specimens collected at Reserva Forestal Santa Cruz, department of Loreto. In addition, a general description of the call is provided.

The microhylid genus *Synapturanus* Carvalho, 1954 currently includes three species distributed across the Guiana region and Amazonia: *Synapturanus mirandaribeiroi* Nelson and Lescure, 1975; *S. rabus* Pyburn, 1977; and *S. salseri* Pyburn, 1975. *Synapturanus rabus* is known to occur in Colombia, Ecuador, and Peru (Pyburn 1977; Wild 1995; Gordo *et al.* 2006). In Peru it was reported for the first time from the Matses region (Itia Tëbu, in the headwaters of the River Gálvez, close to the River Blanco, 05°51'30" S, 73°45'37" W, *ca.* 100-180 m, department of Loreto) (Gordo *et al.* 2006). We are pleased to report the second locality of *Synapturanus rabus* from Peru.

During herpetological surveys at Reserva Forestal Santa Cruz, district of Mazán, province of Maynas, department of Loreto, Peru (03°32′01" S, 73°10′30" W, 110 m), one individual of *Synapturanus rabus* (MZ-UNAP 01.000899; deposited at Universidad Nacional de la Amazonia Peruana, Peru; Figure 1-2) was collected on



FIGURE 1. Synapturanus rabus in life (MZ-UNAP 01.000899) from Reserva Forestal Santa Cruz, Loreto, Peru.

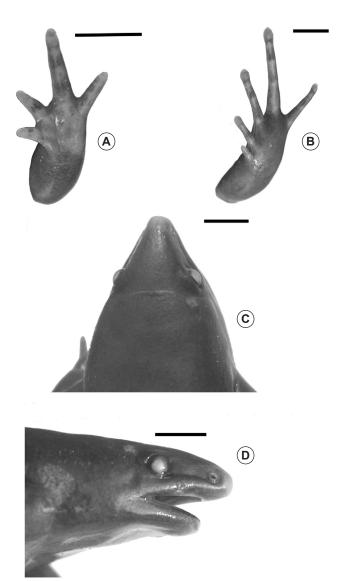
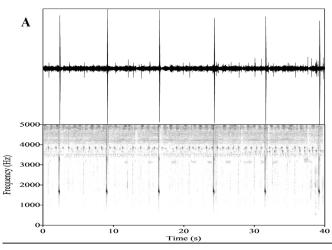


FIGURE 2. Synapturanus rabus in preservative (MZ-UNAP 01.000899). A: left hand, ventral view; B: left foot, ventral view; C: head, dorsal view; D: head, lateral view. Line = 2 mm.

20th June 2009 at 23:00 h. It was first heard calling from beneath ground, and found after excavating approximately 0.2 m under the surface. The specimen has all the diagnostic characteristics described by Pyburn (1977) for the species, including: small body size (18.9 mm in SVL), throat, dorsum, upper surfaces of limbs and sides of head and body dark brown; pale cream line along *canthus rostralis*; median, unpigmented notch at anterior end of lower jaw; eyes relatively large; tympanum visible; snout sharp (Figures 1 and 2).

The present record extends the known distribution of *Synapturanus rabus* in western Amazonia to a point about 230 km north of the first known Peruvian locality (Itia Tëbu, Gordo *et al.* 2006), 640 km southwestern of the type locality (Pyburn 1977), and 470 km southeastern of the closest Ecuadorian locality (Tiputini Biodiversity Station, province of Orellana, DFCH-USFQ SYR101, deposited at Universidad San Francisco de Quito, Ecuador). This record partially fills the gap among the Colombian, Ecuadorian, and Peruvian localities.



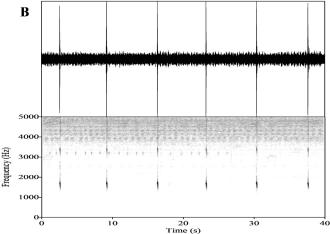


FIGURE 3. Similitary of oscilogram and audiospectrogram of six advertismente calls of *Synapturanus rabus* of this paper (A) and by the Read (2000).

The call of *Synapturanusrabus*at Reserva Forestal Santa Cruzwas recorded at 0.1 m on the surface from ground, using a Canon PowerShot A610, each call were edited and analysed with the software Praat v. 5.1.25, then compared with the call presented by Read (2000) for the species. Statistical analysis was carried out with Past v.1.34. Both recordings showed similar characteristics (Figure 3), with the call consisting of short pulsations regularly repeated at intervals between 6.80 and 7.50 seconds (average \pm SD, 7.16 \pm 0.32 seconds, N=5), with repetitions between 8-16 notes per minute (average \pm SD, 12.62 \pm 3.89 seconds, N=7) and a mean dominant frequency of 1723 Hz.

Each call occurred had note length between 0.08-0.09 (average \pm SD, 0.09 \pm 4-3 seconds, N=10, Figure 4), a single pulse group of 29-48 pulses (mean= 39), and the number of pulses per second varied between 32 and 46 (mean= 39). Activity calling is sporadic throughout night but more frequent after and during of a rain at temperatures between 24.3-25.8 °C.

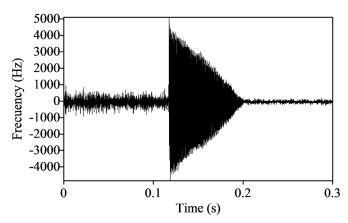


FIGURE 4. Oscilogram of a single advertisement call of *Synapturanus rabus*, showing amplitude modulation.

ACKNOWLEDGMENTS: We are grateful to Devon Graham and Carol Terceira for his contributions to the development of JJL's fieldwork and to Roberto Pezo and Pedro Perez for their support. The library of Universidad San Francisco de Quito provided access to bibliographic databases.

LITERATURE CITED

Gordo, M., G. Knell and D.E. Rivera-Gonzáles. 2006. Amphibians and Reptiles; p. 191-196 *In C. Vriesendorpx*, N. Pitman, J.I. Rojas-Moscoso, B.A. Pawlak, L. Rivera-Chavez, L. Calixto-Mendez, M. Vela-Collantes and P.F. Fasabi-Rimachi (ed.). *Rapid biological inventory 16: Peru: Matses.* Chicago: The Field Museum.

Pyburn, W.F. 1977. A new fossorial frog from the Colombian rain forest (Anura: Microhylidae). *Herpetologica* 32(4): 367–370.

Read, M. 2000. Frogs of the Ecuadorian Amazon, A guide to their calls. Compact Disk. Cornwall: Morley Read Productions.

Wild, E.R. 1995. New genus and species of Amazonian microhylid frog with a phylogenetic analysis of New World genera. *Copeia* 1995(4): 837–849.

RECEIVED: August 2011 ACCEPTED: January 2012 PUBLISHED ONLINE: May 2012 EDITORIAL RESPONSIBILITY: Juliana Zina

