



A new species of *Leptolalax* (Anura: Megophryidae) from Laos

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Abstract

We describe a new species of megophryid frog in the genus *Leptolalax* from southern Laos. *Leptolalax aereus* **sp. nov.** is distinguished from its congeners by a combination of size (25.1–28.9 mm in 28 adult males, 27.1–38.6 mm in 12 adult females), absence of distinct black or dark brown dorsolateral markings on head, near immaculate white chest and belly, head length greater than head width, no webbing or lateral fringing on fingers, rudimentary webbing between toes I–IV and no webbing between toes IV–V, toes with weak lateral fringing, and a call consisting of an average of 3–4 notes containing 1–2 pulses, and with a dominant frequency of 6187.5–7875 Hz. The new species is associated with rocky streams in semi-evergreen and evergreen forest between 284–511 m elevation.

Key words: Acoustics, Anura, *Leptolalax aereus* **sp. nov.**, Laos, Southeast Asia, Indochina

Introduction

The genus *Leptolalax* (Dubois 1983) is a group of relatively small, cryptic frogs associated with rocky streams in hilly evergreen forests (Frost 2010; Rowley *et al.* 2010a; Rowley *et al.* 2010b). Distributed throughout Southeast Asia, southern China and northeastern India, the genus *Leptolalax* currently includes 28 species (Frost 2010; Rowley *et al.* 2010a; Rowley *et al.* 2010b). Additional regional field surveys and the incorporation of acoustic and molecular data to more rigorously assess the delineation of species boundaries has resulted in more than an eight-fold increase in the number of known *Leptolalax* species since the genus was described by Dubois (1983) (Frost 2010; Rowley *et al.* 2010a; Rowley *et al.* 2010b).

Ten species of *Leptolalax* have been reported to occur in Indochina; *L. applebyi*, *L. bourreti*, *L. croceus*, *L. melicus*, *L. nahangensis*, *L. oshanensis*, *L. pelodytoides*, *L. pluvialis*, *L. sungi* and *L. tuberosus* (Frost 2010; Rowley *et al.* 2010a; Rowley *et al.* 2010b). To date, only two species of *Leptolalax*, *L. bourreti* and *L. oshanensis*, have been reported from Laos (Stuart 2005; Frost 2010). Here we describe a new species of *Leptolalax* collected during recent herpetological surveys in southern Laos.

Material and methods

We recorded morphological data from specimens fixed in 10% formalin and then stored in 70% ethanol. Specimens were deposited at the North Carolina Museum of Natural Sciences (NCSM) and the South Australian Museum (SAMA). Morphometric data were taken (to the nearest 0.1 mm) with digital calipers. Measurements include snout-vent length (SVL); head length from tip of snout to rear of jaws (HDL); head