



## A new species of *Leptolalax* (Anura: Megophryidae) from southern Vietnam

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### Abstract

We describe a new species of small megophryid frog from the Langbian Plateau in southern Vietnam, the southernmost record of *Leptolalax* from Vietnam. *Leptolalax bidoupensis* **sp. nov.** is distinguished from its congeners by a combination of a dark brownish red ventral surface with white speckling on entire ventral surface including throat, arms and legs, small size (23.6–24.6 mm in four adult males and 29.2–29.4 mm in two adult females), bicoloured iris (coppery red upper half, fading to pale silver ventrally), a mostly smooth skin texture with no skin ridges, and relatively short tibia (male TIB:SVL 0.44–0.46). The male advertisement call of the new species, consisting of 6–9 single-pulsed notes with a dominant frequency of 1.9–3.8 kHz, is also unique among *Leptolalax* species for which calls are known. From the morphologically similar *L. applebyi* and *L. melicus*, *L. bidoupensis* **sp. nov.** differs by 9.3% and 9.6% sequence divergence at the 16S mtDNA gene. At present, the new species is known from montane evergreen forest between 1620–1730 m elevation, within an area of 1 km<sup>2</sup>. We suggest the species should be considered Data Deficient following IUCN's Red List categories.

**Key words:** Acoustics, Anura, Da Lat Plateau, *Leptolalax bidoupensis* **sp. nov.**, Lam Dong Province, Langbian Plateau, Southeast Asia, Vietnam

### Introduction

The genus *Leptolalax* (Dubois 1983) currently contains 29 species of small frogs of the forest floor, distributed in rocky streams in hilly evergreen forest throughout Southeast Asia, southern China and northeastern India (Frost 2010, Rowley *et al.* 2010a, 2010b, 2010c). There has been a rapid increase in the number of known *Leptolalax* species in recent years, resulting from a combination of increased field surveys in the region and the incorporation of acoustic and molecular data in delineating species boundaries (eg. Das *et al.* 2010; Rowley *et al.* 2010a, 2010b, 2010c; Sengupta *et al.* 2010).

To date, eleven species of *Leptolalax* have been reported from Indochina; *L. aereus*, *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, 2010b, 2010c). All but *L. aereus* and *L. melicus* have been reported from Vietnam (Nguyen *et al.* 2009; Rowley *et al.* 2010a, 2010c). Within Vietnam, *Leptolalax* are known throughout suitable habitat in northern and central Vietnam, with the southernmost record of *Leptolalax* to date from the Kon Tum Plateau in central Vietnam (Gia Lai Province; Nguyen *et al.* 2009).

Here we describe a new *Leptolalax* species collected during recent herpetological surveys on the Langbian Plateau in southern Vietnam. Although important amphibian collections were made on the Langbian Plateau by Smith (1921, 1924), *Leptolalax* were not reported from the Plateau, and the new species represents the southernmost record of *Leptolalax* from Vietnam. The new species is most morphologically similar to *L. applebyi* and *L. melicus*, both recently discovered from the Kon Tum Plateau to the north, but can be distinguished from these and all other *Leptolalax* species on the basis of morphological, acoustic and molecular differences.