



A new *Leptobrachium* (Anura: Megophryidae) from the highlands of southeastern Laos

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Abstract

Twelve species of *Leptobrachium* are known from Vietnam, Laos and Cambodia, most of which have been described to science in the past twelve years. Our fieldwork on the Dakchung Plateau of southeastern Laos discovered a small *Leptobrachium* with a yellow upper iris that resembled *L. buchardi*, a species known only by the female holotype from the Bolaven Plateau of southern Laos. We use our new collections to expand the original description of *L. buchardi*, and describe the Dakchung species as new. *Leptobrachium xanthops* **sp. nov.** is distinguished from its congeners by having small body size (males with SVL 44.7, females with SVL 38.8–45.2), the upper one-half of iris and scleral arc pale yellow, a dark venter, and sexually active males without spines on the upper lip.

Key words: Bolaven Plateau; Dakchung Plateau; Laos; *Leptobrachium buchardi*

Introduction

Twelve species of the megophryid frog genus *Leptobrachium* are known from Indochina, consisting of the countries of Vietnam, Laos, and Cambodia (Ohler *et al.* 2004; Stuart 2005; Bain *et al.* 2009; Nguyen *et al.* 2009; Stuart *et al.* 2011), of which nine have been described since 1998. Most *Leptobrachium* have conspicuously colored eyes, with a colored upper iris and scleral arc, and these prominent features are often used to diagnose species (e.g., Dubois & Ohler 1998; Lathrop *et al.* 1998; Matsui *et al.* 1999; Ohler *et al.* 2004; Brown *et al.* 2009; Matsui *et al.* 2010).

Our fieldwork in 2011 on the Dakchung Plateau of southeastern Laos revealed a small *Leptobrachium* species with a yellow upper iris and scleral arc that was similar in size to *L. buchardi*, a species known only by the single female holotype from the nearby Bolaven Plateau of southern Laos and reported to have a green upper iris (Ohler *et al.* 2004). We collected *L. buchardi* at its type locality in 1999 and 2010, and we use those collections to expand its original description and show that it is distinct from the Dakchung species, which is described here as new.

Material and methods

Specimens were collected on the Bolaven Plateau, Pakxong District, Champasak Province, Laos, by Bryan L. Stuart and Harold Heatwole in September 1999 and Bryan L. Stuart, Niane Sivongxay, and Sengvilay Seateun in July 2010, and on the Dakchung Plateau, Phou Ajol Mountain, Dakchung District, Xe Kong Province, Laos, by Bryan L. Stuart, Somphouthone Phimmachak, and Sengvilay Seateun in May 2011 (Figure 1). Specimens were fixed in 10% buffered formalin after preserving liver in 20% DMSO-salt saturated storage buffer and RNAlater (Ambion). Specimens were later transferred to 70% ethanol. Specimens and tissue samples were deposited at the Field