



A new species of blue-eyed *Leptobrachium* (Anura: Megophryidae) from Sumatra, Indonesia

AMIR HAMIDY^{1,2} & MASAFUMI MATSUI^{1,3}

¹Graduate School of Human and Environmental Studies, Kyoto University, Kyoto 606-8501, Japan

²Museum Zoologicum Bogoriense, Research Center for Biology, Indonesian Institute of Sciences, Gd. Widyasatwaloka, Jl. Raya Jakarta Bogor km 46, Cibinong West Java, Indonesia.

³Corresponding author. E-mail: fumi@zoo.zool.kyoto-u.ac.jp

Abstract

A new megophryid species of *Leptobrachium* is described on the basis of three specimens collected from Kubu Perahu, Lampung Province, Sumatra, Indonesia. The new species, *L. waysepuntiense* **sp. nov.** is distinguished from all other congeners by the colour of iris, which is totally light bluish in adult and greyish in juvenile stages. It is similar to Bornean endemic species in the absence of dark markings around groin, and particularly to *L. gunungense* in the very small size of femoral gland. It is the fourth species of *Leptobrachium* recorded from Sumatra, and its discovery underscores the under estimated diversity of amphibians on Sumatra. Variation in the pattern of iris colour in *Leptobrachium* is discussed.

Key words: Iris colour, Lampung, *Leptobrachium hasseltii*, Southeast Asia, Sundaland, Sumatra

Introduction

Leptobrachium is a megophryid genus proposed by Tschudi with *L. hasseltii* from Java being the type species. The genus is sometimes split into two subgenera, *Vibrissaphora* Liu, a group with adult males having spines on upper lip, and *Leptobrachium*, a group without such spines (Dubois & Ohler 1998). The first group consists of about five species ranging from southern China to northern Vietnam, whereas the second group is represented by at least 17 species, widely distributed from southern China, northern India, through Indochina, Sundaland to Philippines (Fei *et al.* 2009). However, the taxonomic relationships of these two groups as different genera, subgenera, or a single genus, is an ongoing argument (e.g., Dubois 1980; Dubois & Ohler 1998; Rao & Wilkinson 2008; Zheng *et al.* 2008).

At least seven species of *Leptobrachium sensu stricto* have been described from Sundaland: *L. hasseltii* Tschudi, *L. montanum* Fischer, *L. abboti* (Cochran), *L. hendricksoni* Taylor, *L. nigrops* Berry & Hendrickson, *L. gunungense* Malkmus, and *L. smithi* Matsui, Nabhitabhata & Panha (also found in Thailand to northern India). However, information on the presence of this genus in Sumatra is still meagre. Iskandar & Colijn (2000) placed three species, *L. hasseltii*, *L. hendricksoni*, and *L. nigrops* in the faunal list of this island.

While examining the collection of *Leptobrachium* in Museum Zoologicum Bogoriense (MZB), we found a male specimen (MZB Amp 14592) labelled as *Leptobrachium* sp. collected in November 2004 by A. Ul-Hasanah and W. Eendarwin from Way Sepunti, Lampung, southwestern Sumatra. This specimen was identified as *Leptobrachium sensu stricto* because of its lack of keratinized spines on the upper lip (Dubois & Ohler 1998) but was different from three congeneric species from the island (*L. hasseltii*, *L. nigrops*, and *L. hendricksoni*) in several morphological characteristics such as lack of dark markings around groin, and a dark venter covered with white dots. Through the courtesy of A. Ul-Hasanah, we obtained a photograph of this specimen in life, taken by A. Nurcahyo of the Wildlife Conservation Society of Indonesia. In this picture it was obvious that the iris colour of MZB Amp 14592 is completely light blue, unlike other light blue-eyed species (*L. chapaense* [Bourret], *L. hainanense* Ye & Fei, *L. huansen* Fei & Ye and *Vibrissaphora* spp.), in