

A blue-eyed *Leptobrachium* (Anura: Megophryidae) from Arunachal Pradesh, India

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Abstract

A new species of Megophryidae, *Leptobrachium bompu* is described from Eaglenest Wildlife Sanctuary, Arunachal Pradesh, India. It is a medium sized member of the genus *Leptobrachium*. In life, the frog is distinguished by the combination of a series of morphological characters from its congeners. Its entirely greyish-blue coloured eyes differentiate the species from all other species in the genus but *Leptobrachium waysepuntiense*. The morphological comparison is based on a table of 16 characters discriminant in *Leptobrachium* species.

Key words: *Leptobrachium*, *Leptobrachium bompu*, Megophryidae, Eaglenest, description

Introduction

The genus *Leptobrachium* described by Tschudi (1838) and belonging to the family Megophryidae Bonaparte, 1850 consists of 27 known species worldwide (Frost 2010). Traditionally this genus has been divided into two groups, either recognized as genera (Fei *et al.* 2009) or as subgenera of a single genus (Dubois & Ohler 1998). In these classifications, species with males bearing horny spines on upper lip have been allocated to *Vibrissaphora* Liu, 1945 whereas the species without such a secondary sexual character were grouped into *Leptobrachium*.

However, findings by Zheng & Fu (2008) on the phylogeny of species allocated to the subgenera *Vibrissaphora* and *Leptobrachium* have revealed that the species allocated to these two subgenera, do not form monophyletic groups; hence *Vibrissaphora* should be considered a synonym of *Leptobrachium*. The recent work of Matsui *et al.* (2010) confirms this result inasmuch as species with males bearing horny spines are part of a clade that also includes species without this character. They recognize, for the time, two groups, clade A and clade B that can be attributed the two names. But for these clades no morphological apomorphies are available, nor is a diagnosis possible. Therefore here we do not use subgeneric allocation, and if we use “*Vibrissaphora*”, we explicitly refer to the species of *Leptobrachium* bearing spines on upper lip of adult males, not to a formal taxon.

Two species from the genus *Leptobrachium* are reported to be found in India: *Leptobrachium smithi* Matsui, Nabhitabhata & Panha, 1999 (Sengupta *et al.* 2001) and *Leptobrachium hasseltii* Tschudi, 1838 (BCCP CAMP Report 1998; Chanda 2002). While *Leptobrachium smithi* has been reported from Meghalaya, India (Ahmed *et al.* 2009), neighbouring Bangladesh (Reza 2009) and Myanmar (Das & Chanda 2004), records of *Leptobrachium hasseltii* are doubtful. Chanda (2002) reports specimens under this name from Meghalaya. This name has been largely used, but in recent works it applies to a species from Java and Bali (Brown *et al.* 2009). Hence the status of the species published as *Leptobrachium hasseltii* from India clearly needs further investigation.

While most of the species belonging to the spine-bearing species (“*Vibrissaphora*”) are from China and Indo-china, those devoid of such spines (“*Leptobrachium*”) have a more southern distribution including Sunda region. Four species of *Leptobrachium* are reported from neighbouring Myanmar: *Leptobrachium chapaense*, *Leptobrachium hasseltii*, *Leptobrachium pullum* and *Leptobrachium smithi* (Zug *et al.* 2001; Das & Chanda 2004).