

Article



Small-sized dicroglossids from India, with the description of a new species from West Bengal, India

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Abstract

A new small-sized species of dicroglossid frog from West Bengal is described as *Minervarya chilapata* **sp. nov.** and compared to *Minervarya sahyadris*. It differs from all *Fejervarya* species by its smaller size, by the presence of a distinct white band on upper lip and by the presence of a rictal gland. The new species is separable from its congener in showing a more pointed snout, smaller tympanum and more developed webbing. Its advertisement call is described and compared to that of *M. sahyadris*. Generic allocation is discussed. In the *Fejervarya* lineage, a trend towards small-sized species may exist. The species allocated to *Minervarya* show an important morphological shift, presumably reflecting occupation of a different adaptive niche which might indicate generic distinctiveness.

Key words: Anura, Dicroglossidae, Minervarya chilapata sp. nov., morphometry

Introduction

Amphibian species described recently show decrease in genetic divergence between taxa compared to those described until 1991, but a significant increase if considering species described from 1992 to 2004 (Köhler *et al.* 2005). Size seems to be decreasing since the early days of taxonomy: the first 440 frogs described in 18th and early 19th century measured 10 to 150 mm with a mean of 68.4 mm whereas the last 440 species described before 2000 measured 9.6 to 132 mm with a mean of 35.8 mm (Alain Dubois, unpublished data).

Discovery of new frog species is an ongoing activity. In fact new methods and concepts, explorations of new territories, closed for scientists previously, open the door to new discoveries. Nevertheless, species are also discovered in relatively well explored places, such as West Bengal State, in eastern India. This state is one of the first explored on the Indian subcontinent by the British. Though the north-eastern part of India is considered one of the earth's biodiversity hotspots (Myers *et al.* 2000), and underexplored, holding numerous discoveries, the Brahmaputra and Ganges plain is not considered of particular interest for biodiversity.

South-western India is a region of high endemism in frogs holding several unique ranoid lineages due to a considerable period of isolation (Bossuyt *et al.* 2006). Its contact with Laurasia is considered secondary. Distribution pattern of many Indian taxa are either of south-western or of north-eastern type. It is mostly

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