A new species of Nyctibatrachus Boulenger (Amphibia: Anura: Nyctibatrachidae) from the Eravikulam National Park, Kerala, India

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Abstract

A new species of Indian nyctibatrachid frog, Nyctibatrachus sholai (Amphibia: Anura), is described based on a series of 6 specimens from the Eravikulam National Park, southern Western Ghats of the State Kerala, India. The new species is compared with all known congers. It is diagnosed by the following combination of characters: skin with glandular corrugations with metallic green coloration; head wider than long; snout not projecting beyond mouth; irregular longitudinal corrugations on the dorsum and extending up to the dorsal surface of arms and thighs; faint supratympanic fold; a fold from posterior corner of eye to angle of jaw clearly defined; tympanum partially visible; webbing on toes ¼th, except that on 3rd toe reaching penultimate subarticular tubercle; tips of digits and toes flattened to form minute disks with dorsal longitudinal grooves; femoral gland present. The largest specimen in the type series has a snout-vent length of 22.1 mm. A key to the species of Nyctibatrachus is provided.

Key words: India, new species, Nyctibatrachus, Shola, Western Ghats

Introduction

The Western Ghats mountain range along the western coast of peninsular India is one of the global hotspots of biodiversity (Myers et al., 2000). Due to its distinct physiographic, edaphic and climatic gradients, this region harbors a wide array of habitats with unique geographic position and that support unique sets of flora and fauna. The zoogeographic significance of this ‘hot spot’ tract is well reflected in the richer diversity and endemism of amphibians reported from this region (Daniels, 1992). The genus Nyctibatrachus Boulenger, 1882 is the member of the family Nyctibatrachidae Blommers-Schlosser, 1993 with 12 known species and is confined to the limits of Western Ghats (Boulenger, 1882, Rao, 1920, Rao, 1937, Bhaduri and Kripalani, 1955, Inger, et al., 1984, Dubois, 1984, Ravichandran, 1997, Das and Kunte, 2005, Dinesh, et al., 2007). The typical niche conditions prevailing in the region limits the distribution of the genus, where the hill ranges act as ecological islands, providing a source for potential allopatric isolation, divergence and speciation. Due to upsurge in exploratory and documentary work in this region two new species were added to this genus in the recent past (Krishnamurthy, et al., 2001, Das and Kunte, 2005, Dinesh, et al., 2007).

Species of Nyctibatrachus are recognizable by the following suite of characters: contracted pupil rhomboidal; habitus short, squat; omosternum and sternum with a bony style; tongue free notched posteriorly; tympanum concealed; dorsum with longitudinal (transversely widened) skin corrugations; and tips of fingers and toes widened.