

The Ceylonese Tree Frog *Polypedates cruciger* Blyth, a New Record for India

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Abstract. -The Ceylonese tree frog *Polypedates cruciger* was considered endemic to the island of Sri Lanka. However, recent surveys in the Western Ghats, India has revealed that the species is widespread outside its originally reported range. *P. cruciger* differs from both the Indian species *P. maculatus* and *P. leucomystax* in morphology and ecology. *P. cruciger* is an addition to the amphibian fauna of India.

Key words: Amphibia, Anura, *Polypedates cruciger*, India, Western Ghats, distribution.



FIG. 1. *Polypedates cruciger* from the Western Ghats of India.

Introduction

During a recent survey of amphibians in the Western Ghats and southwestern India, three specimens of tree frogs were obtained in June 1990 from a private estate in the hills

of Kanyakumari district (c. 8°15' N; 77°25' E). Later in the year, two more specimens of the same species were observed in parts of Karnataka State around 14° N; 75° E. The specimens have been deposited in the ZSI (Madras) and BNHS (Bombay) museums.

Discussion

Based on the extent of webbing between the toes and fingers, the specimens were assigned to the genus *Polypedates* (Liem, 1970; Daniel and Sekar, 1989). In India, only two specimens of *Polypedates* have been hitherto reported. These are *P. leucomystax* (Gravenhorst) and *P. maculatus* (Gray) (Inger and Dutta, 1986). The examples from the Western Ghats differed from both *leucomystax* and *maculatus* in the skin of the head adhering to the nasal and frontoparietal bones, the tympanum being two-thirds the diameter of the orbit, the three-fourth webbing on toes and in the hour-glass shaped marking on the dorsum. These characters agree well with *Rhacophorus* (= *Polypedates*) *cruciger* of Boulenger (1890) described from Sri Lanka. Further, the hour-glass marking on the dorsal side commencing from the middle level of eyes to mid-body terminating in the form of a trident is unmistakably similar to that in *Rhacophorus cruciger* illustrated by Kirtisinghe (1957). Considering the above characteristics, we confirm the identity of

our specimens as *Polypedates cruciger* (Fig. 1).

These specimens mark the first record of this species in India outside its range (Sri Lanka). The first three animals were located within a clove plantation at an elevation of 400 m above MSL. These hills receive an average annual rainfall of about 2000 mm. Several males were observed calling on a rainy night in June, perched on low branches (c. 1 m above ground). The calls consisted of a harsh *tre...chuck* repeated by rival males followed by a series of *chucks* of low intensity. In captivity, the males continued to call during overcast and rainy days. They fed well on a variety of live insects including grasshoppers and cockroaches.

The specimens observed in southwestern Karnataka were in evergreen forests in regions of 3000-6000 mm rainfall. One individual was observed on October 1990 crossing a forest road and moving towards a stream at midday. A second individual was observed on November 1990 in a patch of dense forest, resting on a tree trunk at c. 2 m above ground in the company of a few smaller *Philautus* spp. Specimens of *Polypedates cruciger* observed in Karnataka were found at lower elevations between 50 and 250 m above MSL.

The habitat preference, altitudinal and geographical range, of this species in southwest India suggest that this species may be widespread in the Western Ghats and has been overlooked by surveys until recently. This species seems to be most active during the rains and much of the Western Ghats are inaccessible at this time. This partly explains why the species has not been reported from nearly 500 km of intervening hills in its known range in India.

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