



## Redescription of the tadpole of *Kaloula taprobanica* (Anura: Microhylidae) from Sri Lanka

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According to Frost (2013), the genus *Kaloula* currently contains 15 species. It has a wide distribution ranging from Korea, northern China to lesser Sunda and Philippines; Bangladesh, India, and Sri Lanka; controversially in Nepal (Frost, 2013). So far, only one species is recorded from Sri Lanka, namely *Kaloula taprobanica* as originally described by Parker (1934). During a recent field trip, we found a large amount of tadpoles of this species in the environments of the city of Galle, Southern province, of Sri Lanka. Tadpoles were collected from 26/November/2010 up to 01/January/2011, from a rainwater dripped pond in a human settlement (06°03'29.7" N, 80°12'19.5" E, 17 m above sea level) and 18 calling males were observed in this pond. In the same pond also *Polypedates cruciger* (Blyth, 1852) was present. After the mating of *K. taprobanica*, large numbers of eggs were observed (n=1300). This water body was situated in an open area and the maximum depth of the pond was about 2.5 m. At the time of collection, the tadpoles were in different Gosner (1960) stages. Live specimens reared through metamorphosis (n=9) were used for the identification, and identification was based on various morphological characters (specimens largely agreed with the description provided by Dutta & Manamendra-Arachchi, 1996 and Manamendra-Arachchi & Pethiyagoda, 2006). Specimens were released at the site of capture after conclusive identification. A previous collection of four tadpoles of *K. taprobanica* was made by Kirtisinghe (1958) in the Western Province. Although the tadpole is thus not unknown to science, the previous description lacks important information and a re-description is therefore warranted. The following larval redescription of *K. taprobanica* is based on a single tadpole in Gosner stage 39.

The description, measurements and morphological characters follow McDiarmid & Altig (1999). Measurements were taken with a digital caliper (precision of 0.1 mm). Drawings were done with the aid of camera lucida. In total, nine specimens were fixed and preserved in 10% formalin, for the use of further developmental studies.

**Colour in life** (Figure 1A). Overall, color greenish black with scattered black dots over body and tail. Distinct markings around the eyes were absent. Blackish dots present from anterior margin of body to mouth. Tail musculature dull, with scattered black patches. Fins translucent with small, scattered melanophores. Venter translucent. Iris black. Limbs same color as body, with melanophores mainly on toes. In preserved specimens, body appears blackish to the naked eye, with scattered black dots on dorsum. Venter, fins and limbs translucent. Black coloration is maintained as in life.

**Description of tadpole stage 39** (Figure 1A, 1B). Lateral shape of body ovoid, dorsally rounded, depressed; total length mean 31.5 mm, body length mean 13.0 mm, body height mean 5.9 mm, body width mean 9.7 mm; eyes rounded oriented dorsally positioned, visible in both dorsal and lateral view, eye diameter mean 1.2 mm. Inter-orbital distance mean 5.7mm, internarial distance mean 0.9 mm. Nares circular, oriented dorsally; snout broadly rounded. Tail elongated with slightly convex dorsal and ventral margins, both tapering gradually to a rounded tip. Dorsal fin originating at tail base; ventral fin originating immediately posterior to opening of vent tube, hidden by vent tube; tail length 18.6mm, dorsal fin height 2 mm, ventral fin height 2.3 mm. External nares originating from nearer to tip of snout than to eye, narial openings dorsally positioned.

**External mouth opening** (Figure 1C). Lack of external oral disc with keratinized parts, marginated papillae, labial teeth and hard beaks absent. Upper lip U-shaped, slightly protruding medially and emarginated on both lingual and distal sides, covering lower lip in resting position.