



***Limnonectes macrodon* (Duméril & Bibron, 1841) from Bali, Indonesia**

The Giant Javan Frog, *Limnonectes macrodon* (Duméril & Bibron, 1841), is a large dicroglossid with adult males reaching up to 15 cm SVL (Iskandar 1998). This species was previously thought to be widespread in Southeast Asia, but taxonomic studies have spilt the taxon into multiple species, with *L. macrodon* now considered to be restricted to Java and to Lampung province in South Sumatra (Iskandar 1998, Frost 2020). Accordingly, numerous records from elsewhere are now considered either to belong to other taxa or need further verification (Frost 2020). For example, those records from the Malay Peninsula (Berry 1975) and from the mainland of Southeast Asia are now referable to *L. blythii* (Stuart *et al.* 2008), whereas those from Borneo are referable to *L. ingeri* (Frost 2020). The record from Sikkim in northeastern India by Chanda (1987) is almost certainly in error (Dutta 1997), whereas another record for Manipur in northeastern India (Devi & Shamungou 2006) is yet to be verified. Similarly, those from New Guinea also need further investigation (Menzies 2006) and a record from the Andaman Islands in India likely belongs to an as yet undescribed species (Stuart *et al.* 2008).

While the likelihood of *L. macrodon* occurring in Bali has been mentioned before (Somaweera 2020), this is the first photographic evidence of the species from the island. On 1 March 2020 at 19:30 h, an adult specimen of *L. macrodon* with an estimated SVL of 10 cm (Fig. 1) was photographed by PS on a bank of a stream close to Pura Gunung Lebah at Ubud in Gianyar Province, Bali (8°30'12.0" S, 115°15'18.0" E). Located within a deeply carved valley, the stream had steep banks and was covered with dense-canopy vegetation (Fig. 2). The specimen was located on the wet floor covered with leaf litter close to water. The elevation of the location is approximately 190 m

a.s.l. The specimen was identified on the basis of external morphological features as per Manthey and Grossmann (1997) and Iskandar (1998), and the identity was confirmed by D. Iskandar based on images taken. Only one specimen of *L. macrodon* was observed at the site.

To date, 15 species of amphibians are known from Bali Island including four species of dicroglossid frogs (McKay 2006, Somaweera 2020). Within the known range on Java and Sumatra *L. macrodon* usually occupies flowing water bodies in densely vegetated areas up to 700 m a.s.l., which agrees with the habitat from which the Bali specimen was recorded. However, this species is also known to occur in man-made habitats such as paddy fields and ponds (Kusrini 2005). The origin of the Bali population of *L. macrodon* is unclear. While it is possible that this frog species remained unnoticed in Bali until now, there is also a possibility that it was introduced to Bali recently via the frog meat industry. American bullfrogs (*Lithobates catesbeianus*) that were used in the frog meat industry are now naturalised in Bali (Somaweera *et al.* 2018). The large-sized *Limnonectes macrodon* is widely collected for human consumption in Java (Indonesia), and can be expected to be traded across adjacent islands (Kusrini 2005).

Acknowledgements

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Plate 60

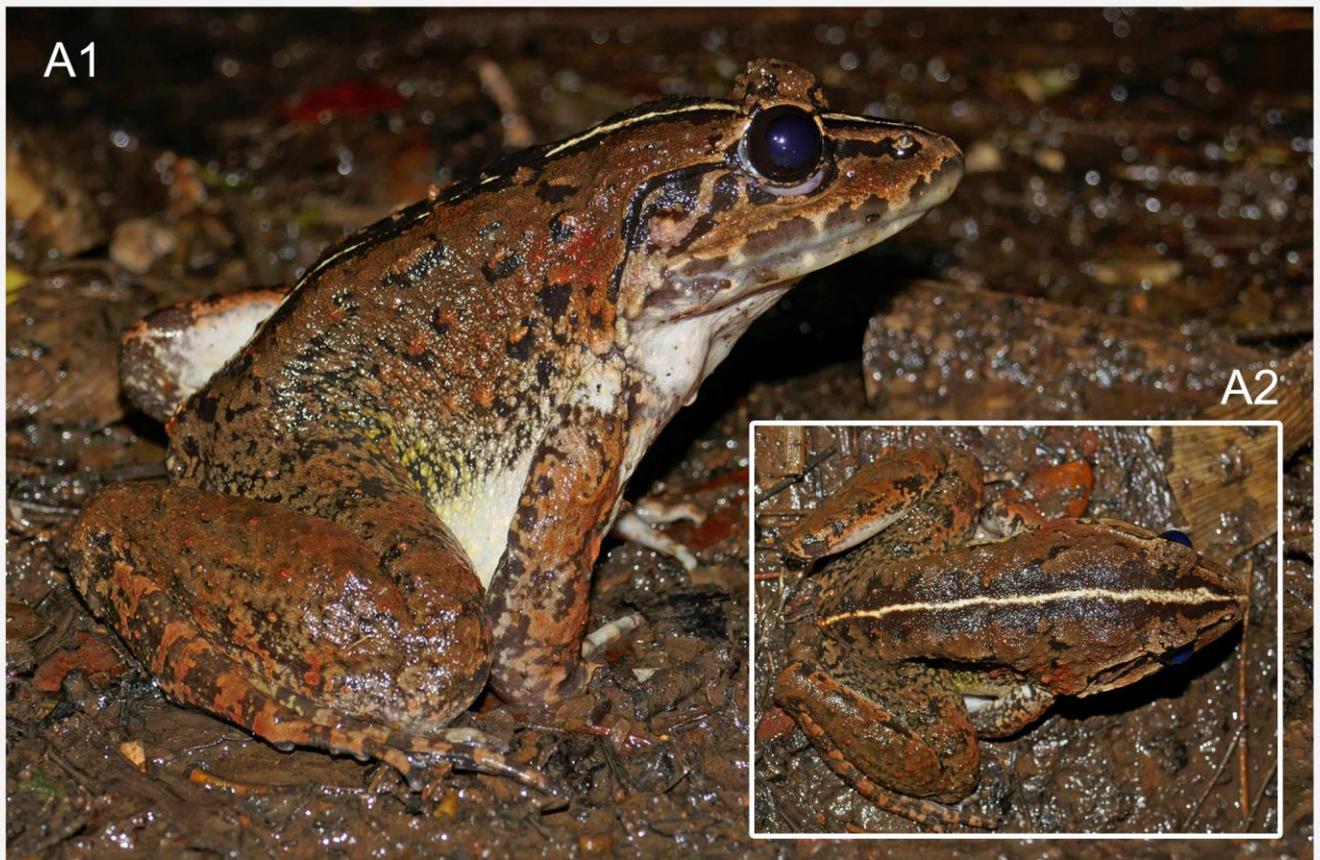


Figure 1. (A1) Lateral and (A2) dorsal aspects of the body of *Limnonectes macrodon* specimen from Bali

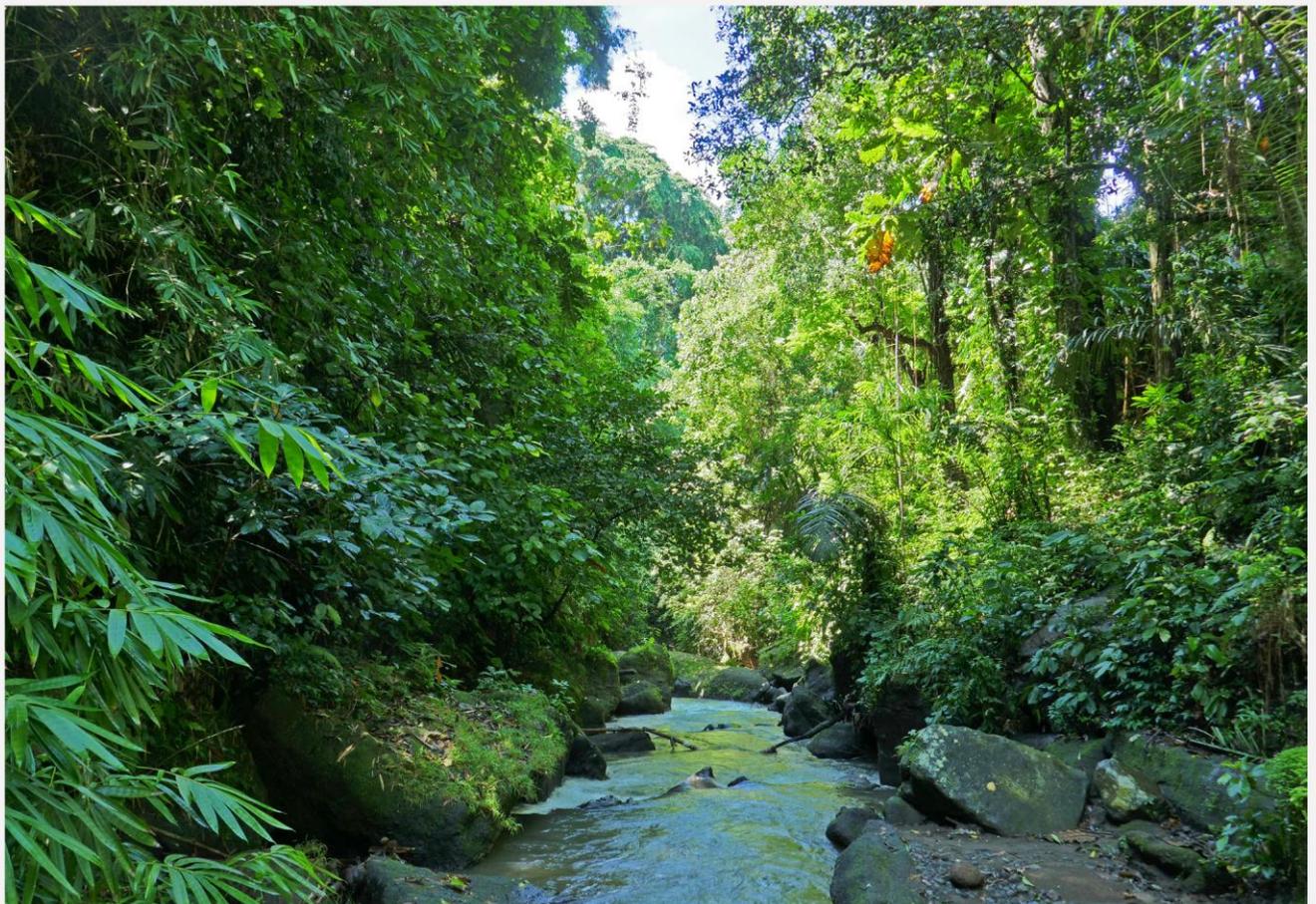


Figure 2. Stream in the closed-canopy forest where the *Limnonectes macrodon* specimen was observed