

*BUFO QUADRIPORCATUS* BOULENGER, 1887,  
A TOAD NEW TO SINGAPORE ISLAND  
(AMPHIBIA: ANURA: BUFONIDAE)

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The family Bufonidae is represented by two species in Singapore, viz., *Bufo melanostictus* Schneider, 1799 and *Pelophryne brevipes* (Peters, 1867). Past collections in Singapore (see Lim, 1989: 51 for references) did not reveal the presence of other forest-dwelling bufonids, although the remaining forests of Bukit Timah Hill and the central catchment area seem to provide many promising habitats for these.

On 12th December 1989, a crew from the Singapore Broadcasting Corporation was filming a natural history documentary at the Sime Road forest, Singapore. Mr. R. Subharaj and Mr Farid Hamid, who were helping the crew, obtained an unusual toad. The toad was filmed, photographed from various angles, and later released. These photographs (Colour Plate 2B, C) were passed to the present author for identification of the toad.

The specimen they obtained is referable to *Bufo quadriporcatus* Boulenger, 1887, a species not hitherto known from Singapore. The present record represents the first report of this species, and only the third bufonid, from Singapore. From the photographs, the diagnostic features of the species are clearly visible. These are: parotoid glands narrowly elongated (maximum width seldom exceeding one fifth of length) and sharply raised; a pair of distinct continuous supraorbital-parietal ridges on the top of the head lying straight and parallel to each other; head about as wide as long; snout obtusely pointed; tympanum distinct.

The present Sime Road specimen is coarse-skinned, rust-coloured above and on the sides, with dark-grey patches on the dorsum. The specimen measured approximately 6 cm from snout to vent. *Bufo quadriporcatus* is known from Peninsular Malaysia (type locality Malacca), Borneo and Sumatra (Inger, 1966: 66; Frost, 1985: 57). According to Berry (1975: 52), this species grows to 65 mm (snout-vent length), inhabits primary forest and is "... [f]ound in forest floor or near small streams." The present example was found in

disturbed lowland secondary forest on the forest floor, about 40 m from a large man-made pond and about 30 m from the nearest stream between 2145 and 2200 hours in the night. Kiew (1984: 7) proposed the English name "Four-Ridged Toad" and the Malay name "Kodok Jambul Empat" for *Bufo quadriporcatus*.

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## THE APHELOCHEIRINAE OF TROPICAL ASIA (HETEROPTERA: NAUCORIDAE) - CORRIGENDA AND ADDENDA

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The following corrections and additions should be noted for the "Checklist of species of Aphelocheirinae of the World" included in an article recently published in this journal (D. A. & J. T. Polhemus 1989: 256-258)

Genus *Aphelocheirus* Westwood, 1833