Revision of the Limnonectes kuhlii-like Fanged Frogs from Malaysian Borneo (Amphibia: Anura: Dicroglossidae)

ABSTRACT

A group of fanged frogs from Southeast and East Asia has long been considered a single widespread species Limnonectes kuhlii, but occurrence in this group of many cryptic species has recently been demonstrated mainly in the continent through molecular phylogenetic analyses. This led to similar analyses of populations from other parts of the known range, and phylogenetic relationships inferred for frogs from the island of Borneo through mitochondrial and nuclear DNA resulted in the presence of nearly 20 distinct lineages. We studied morphological variation in 13 of these lineages from the Malaysian part and confirmed their taxonomically distinct statuses. We applied existing names to three of them, L. conspicillatus, L. kong, and L. mocquardi, and described 10 remaining ones as new species.