

**A survey of morphological variation in adult *Meristogenys amoropalamus* (Amphibia, Anura, Ranidae), with a description of a new cryptic species**

**Abstract**

Previous analyses of molecular and larval morphology have suggested that *Meristogenys amoropalamus* is composed of two cryptic species, but no diagnostic characters of their adult morphology have been reported. Here, we compared adult characters of these two species and found that they differed in iris colour (yellowish-green and sandy brown), tympanum size and relative limb length. Based on the results of analysis of DNA sequences of the type specimens and a discriminant analysis using 18 morphological variables, we conclude that the lineage with green irises is the true *M. amoropalamus*, and that the lineage with sandy brown irises is a new species, *M. dyscritus* sp. nov. In northern Sabah, *M. dyscritus* is distributed in altitudes lower than those of *M. amoropalamus*, but the distributional ranges of their larvae overlap in some streams. *Meristogenys amoropalamus* has larger and lighter-coloured ova, smaller clutch sizes and a more interstitial larval life than *M. dyscritus*. These differences suggest that *M. amoropalamus* has a more cryptic life during its larval period than *M. dyscritus*.