

Phylogenetic relationships of the genus *Amolops* and its allies (Amphibia, Ranidae)

Abstract

We investigated the phylogenetic relationships among 20 species of Oriental torrent frogs in the genus *Amolops* and its allies from China and Southeast Asia based on 1346-bp sequences of the mitochondrial 12S and 16S rRNA genes. Oriental species of the tribe Ranini form a monophyletic group containing 11 clades (*Rana temporaria* + *Pseudoamolops*, *R. chalconota*, four clades of *Amolops*, *Meristogenys*, three clades of *Huia* species, and *Staurois*) for which the phylogenetic relationships are unresolved. The genus *Amolops* consists of southern Chinese, southwestern Chinese, Thai, and Vietnamese–Malaysian lineages, but their relationships are also unresolved. The separation of southern and southwestern lineages within China conforms to previous morphological and karyological results. Species of *Huia* do not form a monophyletic group, whereas those of *Meristogenys* are monophyletic. Because *P. sauteri* is a sister species of *R. temporaria*, distinct generic status of *Pseudoamolops* is unwarranted.