

# **Phylogenetic relationships of Oriental torrent frogs in the genus *Amolops* and its allies (Amphibia, Anura, 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.