A new species of the Cyrtodactylus chauquangensis group (Squamata, Gekkonidae) from the borderlands of extreme northern Thailand

ABSTRACT

Phylogenetic and morphological analyses delimit and diagnose, respectively, a new population of a karst-dwelling Cyrtodactylus from extreme northern Thailand. The new species, Cyrtodactylus phamiensis sp. nov., of the chauquangensis group inhabits karst caves and outcroppings and karst vegetation in the vicinity of Pha Mi Village in Chiang Rai Province, Thailand. Within the chauquangensis group, Cyrtodactylus phamiensis sp. nov. is the earliest diverging species of a strongly supported clade composed of the granitedwelling C. doisuthep and the karst-dwelling sister species Cyrtodactylus sp. 6 and C. erythrops. The nearly continuous karstic habitat between the type locality of Cyrtodactylus phamiensis sp. nov. and its close relatives Cyrtodactylus sp. 6 and C. erythrops, extends for approximately 200 km along the border region of Thailand and the eastern limit of the Shan Plateau of Myanmar. Further exploration of this region, especially the entire eastern ~ 95% of the Shan Plateau, will undoubtably recover new populations whose species status will need evaluation. As in all other countries of Indochina and northern Sundaland, the continual discovery of new karst-dwelling populations of Cyrtodactylus shows no signs of tapering off, even in relatively well-collected areas. This only highlights the conservation priority that these unique karstic landscapes still lack on a large scale across all of Asia