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Article



A new bent-toed gecko of the genus *Cyrtodactylus* Gray, 1827 (Reptilia, Gekkonidae) from Mount Tompotika, eastern peninsula of Sulawesi, Indonesia

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Abstract

Cyrtodactylus batik is a new species described on the basis of seven specimens collected from Mount Tompotika, in the Balantak Mountains, eastern peninsula of Central Sulawesi, Indonesia. This large *Cyrtodactylus* (up to 115 mm snout-vent length), differs from all other congeners by the combination of striking velvety black dorsal coloration with four irregular dark bands and yellow markings, enlarged tubercles not differently colored from other parts of the dorsum except on the flanks, and the absence of precloacal and femoral pores. The new species, together with *C. wallacei* and *C. jellesmae* appear to form an exclusive lineage in Sulawesi.

Key words: morphology, systematics, new species, evolution, biogeography, Balantak Mountains, Wallacea

Introduction

The genus *Cyrtodactylus*, which comprises more than 130 species, is the fastest growing genus in the family Gekkonidae with more than 80 species being added just during the last two decades (see Uetz & Hallerman 2010 and references therein). In 2010 alone, several new species have been described from all over Southeast Asia (Bauer *et al.*, 2010; Chan & Ahmad 2010; Grismer *et al.* 2010; Lei & Hui 2010; Nasarov *et al.* 2010; Ngo & Chan 2010; Ngo & Grismer 2010; Nguyen *et al.* 2010; Shi & Zhao 2010; Siler *et al.* 2010; Sumontha *et al.* 2010; Welton *et al.* 2010; Ziegler *et al.* 2010).

At present, four described species are known to occur in Sulawesi, *C. fumosus* (Müller, 1895), recorded from Northern Sulawesi, Sangihe Island, and Java; *C. jellesmae* (Boulenger, 1897), a widespread species from all over Sulawesi; *C. spinosus* (Linkem *et al.*, 2008) from Central Sulawesi and *C. wallacei* (Hayden *et al.*, 2008) also from Central Sulawesi and Kabaena Island. The current low number of species in Sulawesi is certainly an underestimate based on the diversity of this genus elsewhere, as in addition to the discovery of new species, *C. jellesmae* is found to be composed of several sibling species (Linkem *et al.*, 2008; this study).

In 2009, we obtained a series of two forms of *Cyrtodactylus* from Mount Tompotika, the highest point in the Balantak Mountains, eastern peninsula of Sulawesi, which consisted of a small and a large species. The small form was compared with a large sample of specimens from the island considered morphologically very similar to the widespread and variable *C. jellesmae* complex. The large form is morphologically similar to *C. wallacei*, but very distinctive in its size, coloration, and other details of squamation. Comparison of this large form with samples from all over the island indicated that it represents an undescribed species and easily distinguished from *C. wallacei*.

Material and methods

We consider as new species, morphologically distinguishable forms, based on the interpretation that morphologically distinct populations are unlikely to be sharing genes with other *Cyrtodactylus* species and are thus independent lineages, conformed with the general lineage species concept of de Queiroz (1998, 1999) or evolutionary species concept (Wiley 1978).