



A new small karst-dwelling species of *Cyrtodactylus* (Reptilia: Squamata: Gekkonidae) from Java, Indonesia

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Abstract

A new small karst-dwelling species of the genus *Cyrtodactylus* is described from East Java and Special Province of Yogyakarta, Indonesia. *Cyrtodactylus semiadiei* **sp. nov.** is a small species (SVL to 47.1 mm in females, 42.1 mm in males) distinguished from all other congeners by unique characters combination: short, robust, cylindrical tail, indistinct ventrolateral folds, absence of precloacal groove, absence of enlarged femoral scales, absence of precloacal and femoral pores and lack of enlarged median subcaudal scales. It is the third member of the genus recorded from Java.

Key words: Indonesia, Java, Yogyakarta, Reptilia, Gekkonidae, *Cyrtodactylus semiadiei* **sp. nov.**, new species, karst-dwelling species

Introduction

Bent-toed geckos of the genus *Cyrtodactylus* Gray are the most species-rich of all gekkotan genera, with approximately 180 species distributed throughout most of tropical Asia, from India to the Philippines and south through the Indo-Australian Archipelago, northern Australia, New Guinea, and the Solomon Islands (Uetz 2013). New species of *Cyrtodactylus* have been described at an ever increasing rate, especially from mainland Southeast Asia, including Myanmar, Thailand, Malaysia, Laos, and Vietnam (e.g., Schneider *et al.* 2011; Grismer *et al.* 2012; Nazarov *et al.* 2012; Ngo & Grismer 2012; Nguyen *et al.* 2013). Numerous new species have also been described from Australia (Shea *et al.* 2011; Bauer & Doughty 2012) and from insular localities, including Sri Lanka (Batuwita & Bahir 2005), the Philippines (Welton *et al.* 2009, 2010a, b), and New Guinea (both Papua New Guinea: Kraus & Allison 2006; Kraus 2007, 2008; Rösler *et al.* 2007; Oliver *et al.* 2011 and the Indonesian provinces of Papua and Papua Barat: Rösler 2001; Oliver *et al.* 2008, 2011). Recent descriptions from Indonesia, exclusive of Papua, have been limited, but are likely to increase rapidly as more intensive field work and more comprehensive revisionary studies are undertaken (Iskandar *et al.* 2011; Koch 2011; Tapley & Muurmans 2011).

In recent years new species have been described from the Riau Archipelago (Grismer *et al.* 2012), Bunguran Island in the South China Sea (Riyanto 2012), Seram (Oliver *et al.* 2009), and particularly Sulawesi (Hayden *et al.* 2008; Linkem *et al.* 2008; Iskandar *et al.* 2011). New *Cyrtodactylus* have also been discovered in Timor-Leste (Kaiser *et al.* 2011; Sanchez *et al.* 2012) and may be expected in West Timor and elsewhere in the Lesser Sundas. Interestingly, no new *Cyrtodactylus* have been described from Java, the fifth largest island in Indonesia and the most populous island in the world, since *C. marmoratus* (Gray; see Kluge 1985 for attribution of authorship) and only one additional species, *C. aff. fumosus* (Müller) has been recorded from Java, despite its relatively large size and long history of herpetological study.

During a biodiversity inventory survey of a karst area in Tuban, East Java Province and Bantul, Special Province of Yogyakarta in 2012, five unusual specimens referable to the genus *Cyrtodactylus* were collected. These

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APPENDIX 1. Comparative material examined.

- Cyrtodactylus jellesmae*: MZB.Lace.5680, MZB.Lace.5683; Sulawesi, Indonesia.
- Cyrtodactylus laevigatus laevigatus*: MZB.Lace.979 (paratype); Komodo Island, Indonesia.
- Cyrtodactylus kimberleyensis*: WAM R164144 (holotype); East Montalivet Island, Western Australia.