Cyrtodactylus hikidai sp. nov. (Squamata: Gekkonidae): a new bent toed gecko from Mount Ranai, Bunguran island, Indonesia

AWAL RYANTO1

1Museum Zoologicum Bogoriense, Research Center For Biology - The Indonesian Institute of Sciences (LIPI), Widyanawatoloka Building, Jl. Raya Jakarta Bogor Km.46 Cibinong 16911, Indonesia
E-mail: awal_lizards@yahoo.com and awal.riyanto@lipi.go.id

Abstract

Cyrtodactylus hikidai sp. nov. is a new gekkonid species described on the basis of 13 specimens collected from Mount Ranai, Bunguran Island, Indonesia. This large Cyrtodactylus (female SVL up to 102.2 mm, male SVL up to 100.6 mm) differs from all other Sunda Shelf species of Cyrtodactylus by the combination of a reticulated color pattern on the dorsum of the head, body banded, enlarged precloacal scales, six pore-bearing precloacal scales in a deep groove in both males and females, tubercles on forelimbs, hind limbs and occiput, absence of enlarged femoral scales, and absence of femoral pores.

Key words: new species, Cyrtodactylus hikidai sp. nov., Mount Ranai, Bunguran Island

Introduction

The genus Cyrtodactylus ranges 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 (Youmans & Grismer 2006). With over 170 recognized species, Cyrtodactylus is the most speciose genus of gekkonid lizards (Hayden et al. 2008; Rösler & Glaw 2008; Uetz & Hallerman 2010). Since 2008, at least four new species have been described from the Indonesian Archipelago (Hayden et al. 2008; Linkem et al. 2008; Oliver et al. 2009; Iskandar et al. 2011).

Bunguran (formerly Great Natuna) Island sits in the South China Sea, east of the Malay Peninsula and north of Borneo (Fig. 1). The presence of Cyrtodactylus on Bunguran Island was noted for the first time by Leong et al. (2003) who reported it as Cyrtodactylus cf. consobrinus. During field research in 2011, a series of Cyrtodactylus was collected from Mt. Ranai, Bunguran Island, Indonesia. Prior to this expedition, the only gekkonid lizard reported from Mt. Ranai was Cnemaspis kendallii ( Günther 1895). The newly collected Cyrtodactylus specimens may be distinguished from all other Sunda Shelf species in having unique suites of morphological and color pattern characteristics, and are herein described as a new species.

Material and methods

The following measurements were made to the nearest 0.1 mm using digital calipers following Bauer (2002): snout–vent length (SVL), crus length (Crl), tail length (TL), tail width (TW), head length (HL), head width (HW), head height (HH), auricular opening length (EaL), forearm length (FaL), orbital diameter (OD), naris to eye distance (NE), snout to eye distance (SL), eye to ear distance (EaEy), internarial distance (IN), and interorbital distance anterior and posterior (IOa, IOp) and Hikida (1990): axilla to groin length (AGL). Meristic characters follow Grismer (2005): precloacal pores (PP), enlarged precloacal scales (EPS), enlarged femoral scales (EFS), supralabials (SuL, to midpoint of orbit), infralabials (InL, including largest discernable scale up to rictus), longitudinal rows of tubercles on dorsum beginning at right lateral fold and ending at left (DT), paravertebral