Copyright © 2011 · Magnolia Press





A new species of bent-toed gecko (*Cyrtodactylus*, Gekkonidae) from the North Papuan Mountains

PAUL OLIVER^{1,2,6}, KELIOPAS KREY³, MUMPUNI⁴ & STEPHEN RICHARDS^{1,5}

¹Terrestrial Vertebrates, South Australian Museum, North Terrace, Adelaide, S.A, 5000, Australia

²Center for Environmental and Evolutionary Biology, Adelaide University, Adelaide, S.A., 5005, Australia

³Department of Biology, University of Manokwari, Papua, Indonesia

⁴Herpetology Division, Museum Zoologicum Bogoriense, Research Center for Biology, Indonesian Institute of Sciences (LIPI),

Widyasatwaloka Building-LIPI, Jalan Raya Cibinong Km 46, Cibinong 16911, West Java, Indonesia

⁵Conservation International, Atherton, QLD, 4883, Australia

⁶Corresponding author. E-mail: paul.oliver@adelaide.edu.au

Abstract

We describe a new species of *Cyrtodactylus* from lower montane forests on the Torricelli and Foja Mountain ranges of northern New Guinea. *Cyrtodactylus boreoclivus* **sp. nov.** can be distinguished from all other described *Cyrtodactylus* by the combination of moderately large size (SVL 104–109 mm), males with pores extending to the knee and arranged in independent precloacal and femoral series, transversely enlarged subcaudal scales, and dorsal pattern consisting of five to seven indistinct transverse dark bands. The known distribution of this species is similar to many other vertebrate taxa apparently restricted to isolated ranges within the North Papuan Mountains, and supports the biogeographic association of these poorly known upland areas.

Key words: Foja Mountains, Indonesia, Papua New Guinea, Torricelli Mountains

Introduction

The North Papuan Mountains (or northern coastal ranges) of New Guinea are a series of relatively low (generally less than 2000m high) ranges located to the north of and isolated from the much larger, higher and continuous main Central Cordillera of the island (Stattersfield 1998; Beehler 2007). Ongoing survey work has revealed a wealth of described and undescribed species endemic to these areas (e.g. Diamond 1982; Kraus and Allison 2000, 2006a; Helgen 2007; Beehler *et al.* 2007; Richards *et al.* 2009). Perhaps the most poorly known of the North Papuan Mountains is the Foja Mountains in northern Papua Province of Indonesian New Guinea. Until as recently as 2004 the montane slopes of this range remained completely unexplored by scientists (Diamond 1982; Beehler *et al.* 2007), but recent expeditions organised by Conservation International and the Indonesian Institute of Sciences (LIPI) and supported by National Geographic have provided a first picture of biodiversity on the upper slopes of the Fojas. This work has revealed a suite of new mammal, bird, reptile, frog and butterfly species (Van Mastrigt 2006; Beehler *et al.* 2007; Richards *et al.* 2009).

The reptile diversity documented at montane sites in the Fojas was relatively low but included a moderately large and distinctive undescribed species of bent-toed gecko of the genus *Cyrtodactylus*. *Cyrtodactylus* is the most species-rich genus of geckos on New Guinea and surrounding islands (and the most species-rich gekkonid genus in the world) (Uetz and Hallerman 2008). Twenty-one species are recognised from Melanesia, of which 12 have been described in the last decade (Rösler 2000; Günther and Rösler 2003; Kraus and Allison 2006b; Rösler *et al.* 2007; Oliver *et al.* 2008, 2009; Kraus 2007, 2008). Despite this high number of recent descriptions, many additional undescribed species are already present in existing collections from New Guinea (Kraus 2007; Rösler *et al.* 2007; Oliver pers obs). Not surprisingly then, examination of museum material subsequent to the Foja Mountains expedition identified a specimen of this distinctive new *Cyrtodactylus* from another North Papuan Range, the Torricelli