Two new species of the genus *Goniurosaurus* (Squamata: Sauria: Eublepharidae) from southern China

JIAN-HUAN YANG¹ & BOSCO PUI-LOK CHAN

Kadoorie Conservation China, Kadoorie Farm and Botanic Garden, Lam Kam Road, Tai Po, Hong Kong, P.R. China

¹Corresponding author. E-mail: jhyang@kfbg.org

Abstract

Two new species of large geckos in the genus *Goniurosaurus* are described based on specimens collected from karst areas of Guangxi Zhuang Autonomous Region, southern China: *Goniurosaurus kadoorieorum* sp. nov. and *Goniurosaurus kwangsiensis* sp. nov. Data on natural history of the new species are provided, as well as discussions on the current conservation status of *Goniurosaurus* species in southern China. Due to the popularity of this genus as novelty pets, and recurring cases of scientific descriptions driving herpetofauna to near-extinction by commercial collectors, we do not disclose the collecting localities of these restricted-range species in this publication. However, such information has been presented to relevant government agencies, and is available upon request by fellow scientists.

Key words: Eublepharidae, *Goniurosaurus*, new species, taxonomy, Guangxi, Southern China

Introduction

The eublepharid genus *Goniurosaurus* occurs throughout southern East Asia with disjunct geographic distribution; species are known from northeastern Vietnam including Cat Ba Island, southern China including Hainan Island, and the Ryukyu Archipelago of Japan (Wang et al. 2014). Herpetofaunal surveys in northern Vietnam and southern China resulted in the discovery of eight new *Goniurosaurus* species in the past two decades (Grismer et al. 1999, 2002; Orlov et al. 2008; Ziegler et al. 2008; Wang et al. 2010, 2013, 2014), and in a phylogenetic study of *Goniurosaurus* species in the Ryukyu Archipelago, Honda et al. (2014) reported the presence of two undescribed taxa within the *Goniurosaurus kuroiwae* species group; these studies indicate species diversity of the genus *Goniurosaurus* is still underestimated. Based on morphological and phylogenetic studies, 15 taxa within four major species groups are widely recognized at present (Grismer et al. 1999, 2002; Honda et al. 2014; Wang et al. 2013, 2014): (1) the *G. lichtenfelderi* group composed of *G. lichtenfelderi* (Mocquard) from northern Vietnam and *G. hainanensis* from Hainan Island; (2) the *G. kuroiwae* group composed of five taxa from the Ryukyu Archipelago of Japan; (3) the *G. luii* group composed of *G. araneus* Grismer, Viets & Boyle from northeastern Vietnam and southwestern Guangxi, *G. bawanglingensis* Grismer, Shi, Orlov & Ananjeva from Hainan Island, *G. catbaensis* Ziegler, Nguyen, Schmitz, Stenke & Rösler from Cat Ba Island of Vietnam, *G. huuliensis* Orlov, Ryabov, Nguyen, Nguyen & Ho from northern Vietnam, *G. liboensis* Wang, Yang & Grismer from the border region between Guangxi and Guizhou Provinces and *G. luii* Grismer, Viets & Boyle from southwestern Guangxi; and (4) the *G. yingdeensis* group composed of *G. yingdeensis* Wang, Yang & Cui and *G. zhelongi* Wang, Jin, Li & Grismer from southwestern Guangdong. As listed, seven species are hitherto recorded from China.

The first record of the genus *Goniurosaurus* from Guangxi was reported by Wen (1983), which was identified as “*G. lichtenfelderi*” in all early accounts of the genus from China (Li et al. 1995; Zhao & Adler 1993; Zhao et al. 1999). But it is now believed that *G. lichtenfelderi* only occurs in northern Vietnam (Ziegler et al. 2008; Wang et al. 2014). Two new species, *G. luii* and *G. liboensis*, were later described from Guangxi by Grismer et al. (1999) and Wang et al. (2013), respectively. With the discovery of *G. araneus* from Guangxi by Chen et al. (2014), three members of *Goniurosaurus*, all karst specialists, are now confirmed to occur in Guangxi. During our field surveys