



A colorful new species of insular rock gecko (*Cnemaspis* Strauch 1887) from southern Vietnam

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Abstract

A new species of endemic, insular *Cnemaspis* is described from Hon Khoai Island, Ca Mau Province, Ngoc Hien District, 18 km off the southern tip of the Ca Mau Peninsula in southern Vietnam. *Cnemaspis psychedelica* **sp. nov.** is the most uniquely colored of all southeast Asian *Cnemaspis* in that both sexes and all age classes have bright orange forelimbs, forelegs, hands and feet; a bright orange tail; a dense, yellow reticulum on the neck overlying thick, black, longitudinal lines; and a blue-gray to light purple trunk bearing yellow transverse bars on bright-orange flanks. It also differs from all other species of *Cnemaspis* in aspects of size and squamation. *Cnemaspis psychedelica* is the third insular endemic species of *Cnemaspis* from Vietnam and brings the total number of species in Vietnam to six. Its occurrence on one of the 92 islands in Rach Gia Bay underscores the necessity for continued surveys of these poorly known islands that are beginning to show a surprising degree of endemism and diversity.

Key words: *Cnemaspis*, *psychedelica*, Vietnam, Rach Gia Bay, insular endemic, new species, taxonomy

Introduction

Within just the last six years, field research and taxonomic studies on the Southeast Asian rock geckos of the genus *Cnemaspis* (*sensu* Bauer *et al.* 2007) have resulted in the description of four new species from Vietnam (Grismer and Ngo 2007); one new species from Cambodia (J. Grismer *et al.* 2010); one new species from Borneo (Grismer & Chan 2009), and 11 new species from Peninsular Malaysia and its associated archipelagos (Chan & Grismer, 2008; Das & Grismer 2003; Grismer & Chan, 2008; Grismer & Das, 2006; Grismer *et al.* 2008a,b; Grismer *et al.* 2009). Descriptions of at least 14 additional species from Laos, Thailand, and Peninsular Malaysia are currently underway (Grismer *et al.*, in prep.). Prior to 2007, there had only been one species of *Cnemaspis*, *C. boulengeri* Strauch 1887, known from Vietnam. Grismer and Ngo (2007) added four additional species from southern Vietnam: the insular endemic *C. caudanivea* from Hon Tre Island, in Rach Gia bay and three species restricted to rocky, habitat islands of the Lower Mekong Delta Region; *C. aurantiacopes* from Hon Dat Hill, *C. nuicamensis* from Nui Cam Hill, and *C. tucludupensis* from Tuc Dup Hill (Fig. 1). We report here on a remarkably colored, new, insular population from Hon Khoai Island in Rach Gia Bay, 18 km off the southern tip of the Ca Mau Peninsula in Ca Mau province, Vietnam. We ascribe this new population to the genus *Cnemaspis* (*sensu* Bauer *et al.* 2007) being that its members have broad, flattened heads; large, somewhat forward and upwardly directed eyes with round pupils and no eyelids; flattened bodies; long, widely splayed limbs with long, inflected digits; and no femoral pores. However, we are unable to assign these lizards to any known species of *Cnemaspis* given that they have a remarkably unique color pattern and bear a combination of unique squamation characteristics. Therefore they are described below as a new species.