New species of Luperosaurus (Squamata: Gekkonidae) from the Crocker Range Park, Sabah, Malaysia (Borneo)

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Abstract

A new species of Luperosaurus is described from the Crocker Range Park, Sabah, northern Borneo (East Malaysia). The new species is known only from the holotype (SVL 34.7 mm), and is diagnosable from congeneric species by possession of the following combination of characters: body robust; head narrower than body; auricular opening oval-squarish; subrictal tubercles present; two intersupranasals contacting rostral; rostral in contact with nares; nine supralabials at midorbital position; 14/15 (R/L) supralabials to posterior edge of orbit of eye; 11 infralabials to posterior edge of orbit; dorsal body scales rounded, convex and granular; ca. 104 dorsal scale rows; 45 ventral scale rows; ca. 149 midbody scale rows; 1–3 anteriormost chin scales subequal, larger than those to their posterior; ventrolateral body tubercles spinose; three distal scanners deeply notched; tail fringe with distinct serrations; and pale rounded spots on middorsum.

Key words: Luperosaurus, new species, systematics, Malaysia, Borneo

Introduction

Derived from the Greek, meaning "difficult" or "vexing", the genus Luperosaurus Gray (1845) contains arguably some of the rarest gekkonid lizards in the tropics. The members of the genus, the largest member (L. kubli Brown, Diesmos & Duya, 2007) of which attains 105.4 mm in SVL, are united by the following suite of characters: chin shields undifferentiated; digits dilated, half-webbed; first digit clawless; cutaneous lobes present on posterior margins of limbs; and subcaudals undifferentiated (R. M. Brown et al., 2000; 2007; Russell, 1979). Nonetheless, the monophyly of the genus is questionable (R. M. Brown et al., 2000). At present, 10 nominal species are recognized from the Philippines (six species), Peninsular Malaysia, Sumatra and Borneo (three species) and Sulawesi (one species). A number of the recognized species have been described in the past decade, a majority on the basis of a single or a few specimens (e.g., R. M. Brown and Diesmos, 2000; R. M. Brown et al., 2000; 2007; Gaulke et al., 2007; Ota et al., 1996). Little is known of their ecology (R. M. Brown and Diesmos, 2000), and indeed, until recently, the generic name was under nomenclatural threat through alternative spelling in the original description (Das, 2005).

Two species are known from the Sundaic island of Borneo: Luperosaurus yasumai Ota et al., 1996 from eastern Kalimantan, and L. browni Russell, 1979 from Sarawak and Kalimantan (Das, 2004). We report here a third Bornean species, on the basis of a single specimen collected from Crocker Range Park, Sabah, northern Borneo. We allocate the unique specimen to the genus Luperosaurus on the basis of the following characters: presence of interdigital webbing; distinct cutaneous expansions on posterior edges of fore and hindlimbs;