



Third time's the charm: nomenclatural availability provided to the nomina of two Bornean *Cyrtodactylus* (Squamata, Gekkonidae)

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Davis *et al.* (2023a) published the descriptions of two new Bornean species of the highly speciose gekkonid genus *Cyrtodactylus* Gray, 1827 in the journal *Zoologica Scripta*. The descriptions themselves actually appeared in the online supplementary information to this paper as Appendix S1, accessible as a link under “Supporting Information” on the Wiley Online Library page associated with the paper’s DOI. Life Science Identifiers (LSIDs) for *ZooBank* registration entries for the new nomina were provided in this Appendix but were not given in the body of the main paper, which was published electronically on 1 February 2023. As noted by Davis *et al.* (2023b), however, the Appendix is a separate document from the main paper and it exists only in an editable Word format, not in a fixed PDF/A format, and as such, the conditions of Article 8.1.3.2 of the amended *Code* (Anonymous 2012), that nomenclatural acts be available as “widely accessible electronic copies with fixed content and layout”, were not met. Because of this lack of *ZooBank* registration in the online version of the paper, it cannot be considered as validly promulgated, nor can the nomina therein (Article 8, as amended in 2012). The subsequent publication of the print version of the manuscript in the May 2023 issue of *Zoologica Scripta* (actual date of publication not stated) did meet the criteria for the promulgation of the nomina *C. kapitensis* and *C. hutan*, but did not meet the requirement of Article 13.1.1 that “a new nomen published after 1930 must be accompanied by a description or definition that states in words characters that are purported to differentiate the taxon”, as the diagnostic and

descriptive data supporting the recognition of these two taxa were present only in the ephemeral Appendix S1, leaving these nomina nomenclaturally unavailable. This situation is illustrative of some of the numerous previously identified problems with the inclusion of nomenclatural acts in online supplements (see also Dubois *et al.* 2013, 2022).

Davis *et al.* (2023b) provided the formal redescrptions for both species in a subsequent publication in *Bionomina*, thus making all type data, diagnoses, full descriptions and photographs of the type series available in the main body of a paper simultaneously published in print and electronically, and thereby avoiding the *Code*-compliance issues plaguing the original proposition of the new nomina (Davis *et al.* 2023a). Unfortunately, Davis *et al.* (2023b) inadvertently overlooked the critical issue, that “every new name published after 1999, including new replacement names (nomina nova), must be explicitly indicated as intentionally new” (Article 16.1; Anonymous 1999). Although Davis *et al.* (2023b) referred to *C. kapitensis* and *C. hutan* as “new taxa”, this was in the context of their appearance in Davis (2023a), thus there was no explicit reference to their being proposed as new in the “corrective” publication.

In order to provide nomenclatural availability to the nomina designating two new species of geckos from Sarawak, we here present a third and final version of the descriptions of the two species of geckos of the *Cyrtodactylus consobrinus* (Peters, 1871) complex that were invalidly described in Davis *et al.* (2023a) and Davis *et al.* (2023b). The first “corrective” redescription appeared in the same calendar year as the original publication. Although the descriptions presented here may engender some subsequent confusion, as the nomina will take 2024 as their date of first valid publication and promulgation, this is unavoidable under the circumstances.

Davis *et al.* (2023a–b) already presented extensive information regarding these new taxa, including detailed descriptions of the holotypes, comparisons with congeners, natural history and distributional data, and permitting details, we, therefore, here provide only the minimal information necessary in order to provide availability to these nomina.

Cyrtodactylus kapitensis sp. nov.

Holotype (Davis *et al.* 2023b, Fig. 1). Adult male, UNIMAS (Universiti of Malaysia Sarawak) 9649; collected by Hayden R. Davis and Izneil Nashriq; Pelagus National Park, Kapit Division, Sarawak, East Malaysia (2.1877°N, 113.0575°E); June 2018.

Paratypes. FMNH (Field Museum of Natural History) 221433, FMNH 221440, FMNH 221446, FMNH 221449; collected by Robert F. Inger and Paul Walker; Sungai Segaham camp, Belaga District, Kapit Division, Sarawak, East Malaysia (precise coordinates unavailable); April–May 1984.

Diagnosis. *Cyrtodactylus kapitensis* can be distinguished from other *Cyrtodactylus* by a combination of the following characters: maximum snout-vent length of at least 112.4 mm; 9–12 supralabials; 8–10 infralabials; moderate tuberculation on dorsal surface of body; no keels on ventral surface of body; 43–54 paravertebral tubercles; 16–20 longitudinal tubercle rows; 47–63 longitudinal rows of ventral scales; 21–24 subdigital lamellae on fourth toe; 0–9 femoral pores in males (absent in females); femoral scales almost always enlarged; 4–10 precloacal pores (6–10 in males, 4–8 in females); pit-like precloacal depression present; indistinct dorsal body bands; a rostral chevron; and a single row of enlarged median subcaudal scales.

Cyrtodactylus hutani sp. nov.

Holotype (Davis *et al.* 2023b, Fig. 2). Adult female, UNIMAS 9647; collected by Hayden R. Davis and Izneil Nashriq; Camp 5, Gunung Mulu, Miri District, Sarawak, East Malaysia (4.1366° N, 114.8933° E); July 2017.

Paratypes (Davis *et al.* 2023b, Fig. 2). CAS (California Academy of Sciences) 262987–262988; collected by Hayden R. Davis and Izneil Nashriq; Gua Lang, Gunung Mulu, Miri District, Sarawak, East Malaysia (4.0224° N, 114.8232° E); July 2017.

Diagnosis. *Cyrtodactylus hutani* can be distinguished from other *Cyrtodactylus* by a combination of the following characters: maximum snout-vent length of at least 116 mm; 11–13 supralabials; 8–10 infralabials; moderate tuberculation on dorsal surface of body; no keels on ventral scales; 40–49 paravertebral tubercles; 13–20 longitudinal tubercle rows; 45–80 longitudinal rows of ventral scales; 21–27 subdigital lamellae on fourth toe; 0–2 femoral pores in males (absent in females); femoral scales often enlarged; 0–11 precloacal pores (8–11 for males, 0–9 for females); pit-like precloacal depression present; distinct to indistinct dorsal body bands (Davis *et al.* 2023b, Fig. 2); a rostral chevron; and a single row of transversely enlarged subcaudal scales.

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