

SHORT COMMUNICATION

A replacement name for *Gehyra punctulata* Doughty, Bauer, Pepper & Keogh, 2018 (Reptilia: Squamata: Gekkonidae) and the nomenclatural status of *Phyria punctulata* Gray, 1842

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In the recent revision of the *Gehyra punctata* (Fry, 1914) species complex, Doughty et al. (2018a, published 25 July) proposed the name *Gehyra punctulata* for a newly described species therein from the Pilbara region of Western Australia, Australia with the type locality of ‘Mount Minnie’ (p. 19). However, the name *Gehyra punctulata* is a junior secondary homonym of *Phyria punctulata* Gray, 1842 from the type locality of ‘Port Essington’ Northern Territory, Australia with a distribution described by Gray as ‘North coast of New Holland [Australia]’ (Gray 1842, p. 53). The genus *Phyria* Gray, 1842 is treated as a junior synonym of *Gehyra* Gray, 1834 (see Chrapliwy et al. 1961; Cogger et al. 1983; Bauer 1994) and the name *Phyria punctulata* is itself currently treated as a *nomen oblitum* and subjective synonym of *Gehyra australis* Gray, 1845 (see Chrapliwy et al. 1961; Cogger et al. 1983; Kluge 1991; Bauer 1994). However, due to the absence of an extant type specimen (presumed lost *fide* Boulenger 1885; Kluge 1965; Cogger et al. 1983), it is not possible to definitively allocate *Phyria punctulata* Gray, 1842 to any known species or populations of *Gehyra* Gray, 1834 and the interpretation of *P. punctulata* as a synonym of *G. australis* has been based on the limited diagnostic information and the type locality of ‘Port Essington’ provided by Gray (1842, p.53).

Although first described by Gray (1842), *Phyria punctulata* was not included by Gray (1845) in his comprehensive *Catalogue of the Specimens of Lizards in the Collection of the British Museum*, where the description of *Gehyra australis* was published. Gray (1842) noted that the majority of specimens described in

this paper were ‘chiefly from a collection made by Mr. Gilbert, Mr. Gould’s collector, at Port Essington’ (p. 54). Gray (1845), in turn, reported the origin of his specimen ‘b.’ of *G. australis* as ‘Port Essington. From Mr. Gilbert’s collection’ (p. 163). This is circumstantial evidence that at least one syntype of *G. australis* is conspecific with the holotype of *P. punctulata*. Were this the case, the fact that the synonymy was not noted by Gray (1845) would not be unexpected as he sometimes substituted new names for taxa he described or carelessly described the same specimen more than once, often in different genera. However, Boulenger (1885) referred to the genus and species as *incertae sedis* as he was unable to locate the type specimen with the limited information provided by Gray. Chrapliwy et al. (1961) hesitantly treated *P. punctulata* as *G. australis*; however, Kluge (1965) identified some inconsistencies between Gray’s description of *P. punctulata* and that of *G. australis* and treated the species as a *nomen dubium*, highlighting Gray’s characters ‘two series of diverging subdigital lamellae and ventral surfaces yellow’ (Kluge 1965, p. 122) which is not typical of the *Gehyra australis* group which typically possesses undivided or grooved lamellae. Cogger et al. (1983) treated *P. punctulata* as a *nomen oblitum* and listed it as a synonym of *G. australis* but did not provide any reasoning for the decision. Bauer (1994) also treated *P. punctulata* as a *nomen oblitum*, noting that the name was tentatively referable to and placed in synonymy with *G. australis* on the basis of type locality following Chrapliwy et al. (1961), Cogger et al. (1983) and Kluge (1991). Bauer (1994) also noted that the identify of

P. punctulata will never be satisfactorily resolved in the absence of a type specimen.

Although *P. punctulata* is currently treated as a *nomen oblitum* and subjective synonym of *G. australis*, some characters described by Gray for the genus *Phyria* and *P. punctulata* are inconsistent with what is commonly referred to as *G. australis* in the Port Essington area. While the description of *Phyria* and *P. punctulata* broadly conform with the genus *Gehyra*, Kluge (1965) noted Gray's reference to 'two series of diverging plates beneath' the toes (Gray 1842, p. 53), presumably referring to divided subdigital lamellae, in the description of *Phyria* differs from *G. australis* which possesses a single series of undivided lamellae under each toe. This character is consistent with other *Gehyra* known to occur in the vicinity of the type locality, including *G. nana* Storr, 1978 and *G. paranana* Bourke, Doughty, Tedeschi, Oliver & Moritz in Doughty et al. (2018b); however, these species are more prominently marked on the dorsum. With consideration that the type locality may be in error, and the locality merely reflects the port from which the specimens were shipped to the British Museum, it is possible the type of *P. punctulata* may represent a species not known to occur within the vicinity of Port Essington. Kluge (1965) also highlighted Gray's description of colouration of *P. punctulata*, 'lips, side of throat, chest, belly and underside of tail, yellow' (Gray 1942, p. 53), which differs from common colouration of *G. australis* in the Port Essington area; however, this may be attributed to preservation and storage of the specimen. Gray (1842), however, did mention 'olive grey, in spirits' (p. 53) and made no mention of any dorsal patterning, which is consistent with *G. australis*, particularly after capture and preservation and it is possible the specimen represented a more distinctly marked species such as *G. nana* or *G. paranana* and fading or loss of dorsal patterning had occurred as a result of preservation and storage in ethanol.

In the absence of a type specimen, the inability to determine with certainty to which species the name applies and limited information in the description of *Phyria* and *Phyria punctulata* by Gray (1842), we regard the name *Phyria punctulata* as a *nomen dubium* and remove it from the synonymy of *G. australis*. Despite the *nomen dubium* status of the name *Phyria punctulata*, the name *punctulata* is nonetheless considered unavailable for new species within the genus *Gehyra* in accordance with Article 59 of the Code (International Commission on Zoological Nomenclature [ICZN] 1999).

Consequently, under Articles 59–60 of the International Code of Zoological Nomenclature (the Code) (International Commission on Zoological Nomenclature [ICZN] 1999) a replacement name is required for *Gehyra punctulata* Doughty, Bauer, Pepper & Keogh, 2018 because both nomina are currently referred to the genus *Gehyra* Gray, 1834. The name *Gehyra finipunctata* nom. nov. Doughty, Bauer, Pepper, Keogh & Ellis, 2018 [ZooBank: urn:lsid:zoobank.org:act:55C1B633-86BA-4FFE-B400-D151BC69AF60] is proposed as a

replacement name for *Gehyra punctulata* Doughty, Bauer, Pepper & Keogh, 2018. The species epithet *finipunctata* is derived from the Latin words *finis* (fine) and *punctata* (punctate or bearing small spots), as in bearing fine spots or finely spotted, in reference to the dorsal pattern which forms part of the species diagnosis, described by Doughty et al. (2018a) as 'background colour light reddish to greyish-brown with small dark and pale spots not in contact and evenly spaced' (pp. 19–20). The name *finipunctata* is an adjective formed in the nominate feminine singular.

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