

SHORT COMMUNICATION

Synonymy of two west coast *Lerista* (Reptilia: Scincidae) species

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INTRODUCTION

The taxonomic descriptions of reptiles of the late Glen M. Storr (1921–1990) are notable for both their abundance and brevity (Smith 1991; Adler 2000; Uetz and Stylianou 2018). In the 1960s, 70s and 80s, Storr was an extremely prolific pioneering reptile taxonomist in an area that would prove to be one of the most speciose reptile regions in the world, Western Australia (e.g. Powney et al. 2011). He described over 200 species and subspecies of reptiles and all of his taxonomic papers were sole author works, with a focus on morphology, colour pattern and geography, and without being informed by genetics. Also notable were the pithy, haiku-like abstracts; for example (the entire abstracts, verbatim): ‘The new species, *L. robusta*, is superficially similar to *L. ips* which is redescribed.’ (Storr 1990a, p. 439) and ‘Four taxa are recognized: *C. virgatus clarus* (Storr), *C. carnabyi* nov., *C. plagiocephalus* (Cocteau) and *C. megastictus* nov.’ (Storr 1976). Although he would typically name as paratypes nearly all of the material he consulted, sometimes numbering in the hundreds for a single taxon, on other occasions he was prepared to name new taxa based on very few specimens if they were distinctive morphologically.

Although almost all of Storr’s species and subspecies are still recognised today, several taxa published late in his career when he was finishing many descriptions for inclusion in forthcoming field guides may be suspect. In this paper, we provide arguments that two species of the scincid genus *Lerista* that were published posthumously in 1991 are referable to sympatric or nearly sympatric species. *Lerista talpina* Storr, 1991 is only known from a single pale individual and *L. maculosa* Storr, 1991 is only known from two specimens. Both species were considered to have been synonymised by Aplin and Smith (2001) in a footnote at the end of a checklist of frogs and reptiles of Western Australia (p. 72), and

this move was followed by many subsequent authors — e.g. Wilson and Swan (2003 and all subsequent editions). However, the paper which Aplin and Smith (2001) cite as ‘Aplin *et al.* (*submitted*)’ [n.b. listed as ‘in press’ in the references of Aplin and Smith (2001)] in a footnote was not resubmitted after reviews were returned and never published (MAC, pers. obs.) (the full author list and title are: Aplin, K.P., Adams, M. and Cowan, M.A. Systematics and biogeography of the herpetofauna of the Carnarvon region of Western Australia, submitted to the *Records of the Western Australian Museum*). Since no further comments on their status was provided in the Aplin and Smith (2001) checklist footnotes, the formal synonymy of these two species is best achieved through the presentation of evidence and arguments in support of the synonymy. We repeat and embellish the relevant passages from the Aplin *et al.* original unpublished manuscript to formally synonymise both taxa here.

Synonymy of *Lerista talpina* Storr, 1991 with *L. petersoni* Storr, 1976

The holotype of *L. talpina* (WAM R74947) remains the only specimen of this putative taxon (Figure 1). No further specimens have been detected, despite intensive searching at the type locality at Bullara Station by B. Maryan (pers. comm.). Members of the *L. nichollsi* species-group with records from the Western Australian Museum (WAM) from the immediate area comprise *L. uniduo* Storr, 1984a (within 2 km), *L. miopus* Günther, 1867 (within 2 km), *L. onsloviana* Storr, 1984 (38 km to the east) and *L. petersoni* Storr, 1976 (70 km to the south-east). Our examination of the type of *L. talpina* revealed the presence of four supraciliary scales (mentioned in the original description) and a lack of fusion between the prefrontal and second loreal scales. These features exclude referral to either

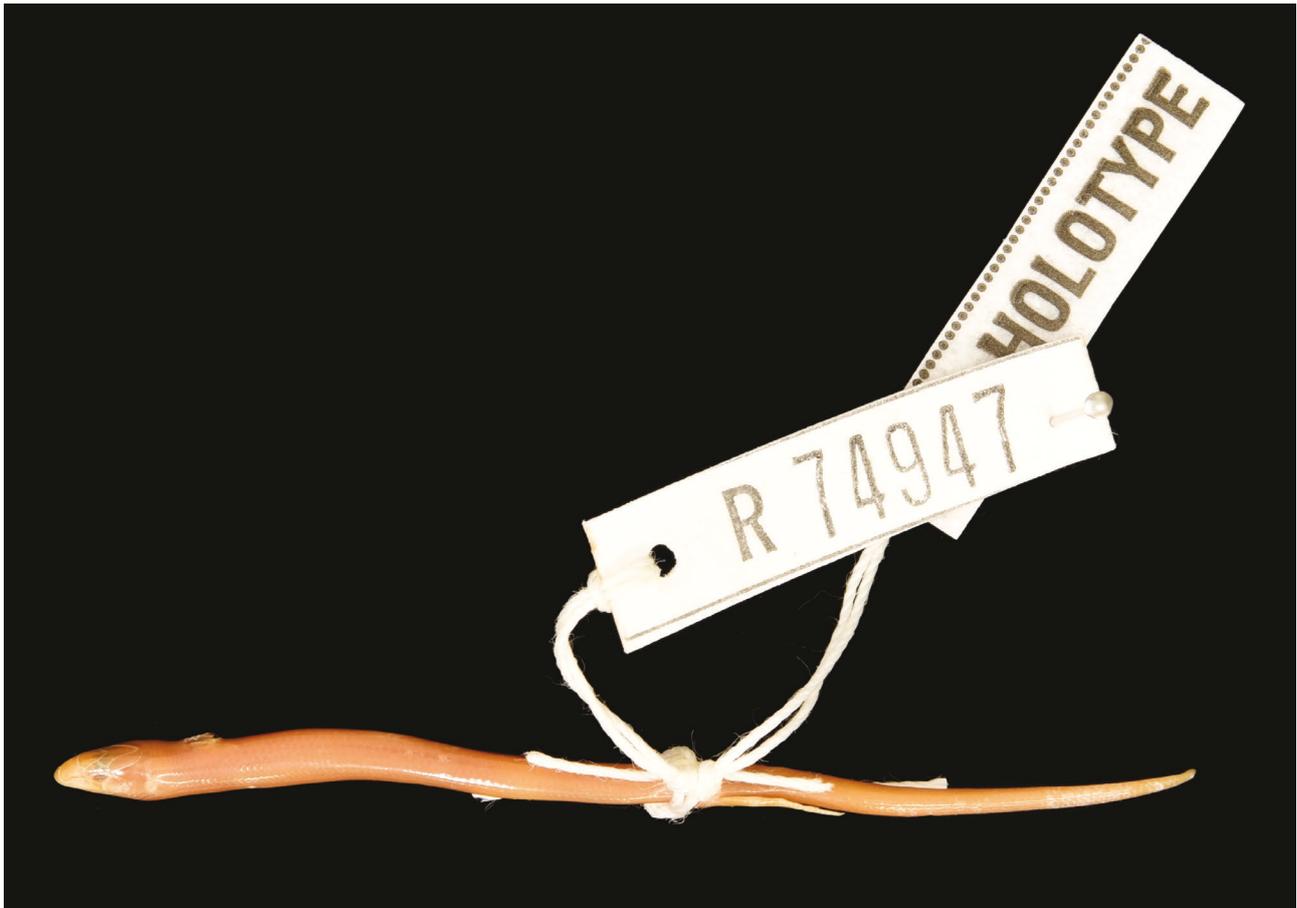


FIGURE 1 Holotype of *Lerista talpina* Storr. Note the lack of any pattern elements, a diagnostic character for this putative species.

L. uniduo (three supraciliaries) or *L. onsloviana* (two supraciliaries; prefrontal and second loreal fused) but are consistent with *L. petersoni*. A paravertebral count of 74 is far lower than northern populations of *L. miopus* (usually > 90) but is just below the (as yet poorly defined) range of values for *L. petersoni*. There is a single postsubocular scale on both sides, consistent with *L. petersoni*.

Storr (1984a: 113) initially distinguished WAM R74947 from typical *L. petersoni* on account of its lack of stripes, but later noted its small size, ‘small deep-set eyes’ and ‘lack of ear aperture’ (1991a: 145). We have examined the gonads of the holotype and determined that they are very small and macroscopically undifferentiated gonads; thus, the individual is sexually immature. The ear aperture is distinct and strikes us as no more reduced than in many other species of the *L. nichollsi* group, including *L. petersoni*, while the ‘deep-set’ eyes are most likely attributable to desiccation during preservation (Figure 2). The apparent lack of pattern is intriguing, but by itself is insufficient grounds to maintain this taxon. Accordingly, we relegate *Lerista talpina* Storr, 1991 to a junior synonym of *L. petersoni* Storr, 1976.



FIGURE 2 Left and right views of the head of the holotype of *Lerista talpina*. Note the appearance of the ‘sunken eyes’ — presumably a diagnostic character but also potentially from desiccation during the preservation process.

**Synonymy of *Lerista maculosa* Storr, 1991
with *L. uniduo* Storr, 1984**

Lerista maculosa was described from two specimens, the holotype (WAM R95921) from 5 km west of Overlander Roadhouse and a paratype (WAM R92182) from 16 km south of Hamelin Station Homestead. Both localities are on the margin of the Victoria Plateau, but they differ substantially in soil type and vegetation associations.

Storr (1991) distinguished *L. maculosa* from other members of his '*L. nichollsi* complex' only by its heavily spotted pattern (Figure 3). Other members of the *L. nichollsi* species-group with records from the WAM found in sympatry or near *L. maculosa* are *L. uniduo* (in sympatry at both locations), *L. kendricki* Storr, 1991 (in sympatry at Hamelin Station and 30 km south-west of the Overlander Roadhouse site), *L. connivens* Storr, 1972 (in sympatry at both sites), *L. miopus* (in sympatry at Hamelin Station and 17 km south-east of the Overlander Roadhouse site) and *L. praepedita* Boulenger, 1887 (the same occurrence as for *L. miopus*). The holotype and paratype of *L. maculosa* are most like *L. uniduo* in body proportions and in having a 1+2 supraciliary formula and the second loreal fused to the

prefrontal scale. Indeed, apart from having the unusual pattern consisting solely of longitudinal series of spots, they are indistinguishable from sympatric or parapatric *L. uniduo*. In an unpublished PhD thesis, Kendrick (1991: 38) found the paratype to be genetically identical to southern populations of *L. uniduo*, which had been collected within 1 km of the Hamelin locality and also at Overlander Roadhouse (Storr 1984: 116).

In agreement with Kendrick (1991), we consider it most likely that the two specimens of *L. maculosa* are uncommon pattern variants of *L. uniduo*. Other possibilities are that the two *L. maculosa* specimens are products of a rare hybridisation event between *L. uniduo* and another member of this species complex. In either case, we consider it prudent to regard *L. maculosa* as a junior synonym of *L. uniduo*.

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FIGURE 3 Holotype of *Lerista maculosa*. Note spotted appearance — the only presumed diagnostic character of this species.

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