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A new species of *Anilios* (Scolecophidia: Typhlopidae) from Central Australia

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Abstract

Anilios fossor **sp. nov.** is described from a single specimen collected in 1989 from Ruby Gap Nature Park, Northern Territory. The species differs from all other *Anilios* species in the combination of 20 midbody scales, 514 dorsal scales, a rounded, non-angulate snout in lateral and dorsal profile, a nasal cleft contacting the second supralabial and not extending to the head dorsum, and a large round rostral shield in dorsal view. It is unclear whether the paucity of material of this species represents a limited distribution, or poor sampling in a remote, sparsely settled part of the continent. Evidence for the recognition of the Australian typhlopid fauna as a distinct genus *Anilios* is critically reviewed, and the genus is found to be recognizable only on genetic evidence. Some other recent nomenclatural and taxonomic changes in the Australian typhlopid fauna are considered and rejected.

Key words: Reptilia, Squamata, Serpentes, morphology, systematics, nomenclature, Northern Territory

Introduction

Modern knowledge of the typhlopid snake fauna of Australia began almost a century ago with a monographic treatment by Waite (1918). With few exceptions, knowledge of Australian typhlopid diversity since then has proceeded by the description of new species from small numbers of specimens, often only a single specimen (Kinghorn 1929, 1942; Loveridge 1945; Robb 1972; Storr 1981, 1983, 1984; Shea & Horner 1997; Aplin 1998; Couper *et al*. 1998; Venchi *et al*. 2015). However, a recent genetic survey by Marin *et al.* (2013) found evidence that even the more broadly distributed species described by Waite or earlier workers contain unresolved lineages likely to represent additional species, and hence that the diversity of the Australian typhlopid fauna is much greater than presently described. This paper continues the trend in recent typhlopid research by describing yet another species from a single specimen—a very distinctive new species from central Australia discovered misidentified in a museum collection.

Material and methods

Nomenclature of head scales follows Waite (1918), with the exception of the nomenclature of the median dorsal series, which adopts the arguments of Wallach (2003). Dorsal scale counts were taken from the frontal scale to the last scale anterior to the terminal caudal spine, inclusive. Subcaudal scales were counted from the first single normally sized scale posterior to the vent, to the last scale anterior to the terminal caudal spine, inclusive. Estimates of dorsal body scales (those of the body alone) were made by subtracting the subcaudal scale count from the total dorsal scale count. When describing the position of a longitudinal scale row on dorsal or ventral body surface, the azygous median ventral or dorsal scale row is counted as row 1. Snout-vent length (SVL) was measured with a metal ruler, with the specimen gently straightened along the ruler, from tip of snout to anterior margin of vent, to the nearest millimetre. Tail length was measured to the nearest 0.5 mm by a metal ruler viewed under a dissecting microscope, from the anterior margin of the vent (posterior margin of medial precloacal scales) to the tip of the terminal spine. Midbody width was measured to the nearest 0.1 mm with a dial caliper positioned by viewing under

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