



## A second species of *Gegeneophis* Peters (Amphibia: Gymnophiona: Caeciliidae) lacking secondary annular grooves

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### Abstract

A new species of caecilian amphibian, *Gegeneophis pareshi* sp. nov., is described based on a series of 16 type specimens from the Western Ghats region of southern Goa, India. This species differs from all other congeners except *G. seshachari* Ravichandran, Gower & Wilkinson, 2003 in lacking secondary annular grooves and possessing an unsegmented terminal ‘shield’. It differs from *G. seshachari* in having many more primary annuli and a distinct colour pattern with a largely unpigmented head and pale anterior body.

**Key words:** caecilians, Goa, herpetology, India, taxonomy, Western Ghats

### Introduction

The recent substantial increase in nominal species of caecilians in the Western Ghats region of peninsular India (e.g., Dinesh *et al.*, 2009; Gower *et al.*, 2004) has been dominated by newly described species of caeciliids (of the Indian endemic genera *Gegeneophis* Peters and *Indotyphlus* Taylor) from the states of Karnataka, Goa and Maharashtra. Among these new species, Ravichandran *et al.* (2004) described *G. seshachari*, which necessitated a rediagnosis of the genus by virtue of it being the only *Gegeneophis* (and only Indian caeciliid) to lack scales and secondary annular grooves, and to possess an unsegmented terminal ‘shield’. Here we describe a second species of *Gegeneophis* with these features, based on 16 recently collected specimens from southern Goa.

### Material and methods

All specimens were fixed in 5–10% formalin following lethal anaesthesia (MS222), washed in water and stored in 70% ethanol in the collections of the Bombay Natural History Society, Mumbai, India (BNHS). Following Kamei *et al.* (2009) and Wilkinson & Kok (2010) we use the following abbreviations for anatomical features and ratios of measurements: AG = annular groove; AM = anteromedial limit of the mouth on the upper jaw; CM = corner of the mouth; C1 = first collar; C2 = second collar; IM = inner mandibular (= “splenial”) tooth; NG1 = first nuchal groove (between head and collars); NG2 = second nuchal groove (between first and second collars); NG3 = third nuchal groove (between collars and anteriormost annulus); PA = primary annulus; ST = snout tip; TA = tentacular aperture; TG = transverse groove (on dorsal surface of collar); L/H = total length divided by head length (the latter = distance between ST and NG1 directly behind CM); L/W = total length divided by midbody width. All measurements were taken to the nearest 0.1 mm using dial callipers except total length and circumference, which were measured to the nearest mm with ruler and string.