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A new species of *Cnemaspis* (Sauria: Gekkonidae) from Northern Karnataka, India

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Abstract

A new species of rupicolous gecko of the genus *Cnemaspis* is described from Hampi, Karnataka, southern India. *Cnemaspis adii* **sp. nov.** is diagnosable from all the Indian congeners in possessing the following suite of characters: medium-sized *Cnemaspis*, SVL less than 35 mm (31.7–34.9). Dorsal scales on the trunk homogeneous, small, granular and feebly keeled. Spine-like tubercles absent on the flanks. Mental subtriangular, two pairs of postmentals, primary pair separated by a single chin shield. Ventral scales on the trunk smooth, imbricate; 22–26 scales across the belly. Supralabial I narrowly in contact with nasal. Dorsal aspect of forelimbs and hindlimbs are weakly uncarinate. Lamellae under the digit IV of pes 20–22. Males with two precloacal pores, two femoral pores on each side of the thigh. The existence of the species in a World Heritage Site with continuous anthropogenic interference ascertains the robustness of the species and need for additional herpetofaunal explorations to reveal the total diversity of species of the genus *Cnemaspis* in peninsular India.

Key words: *Cnemaspis*, description, Hampi, Gekkonidae, Karnataka, India

Introduction

The Old World gecko genus *Cnemaspis* Strauch is one of the most speciose paleotropical gekkonid genera, comprising more than 100 species in tropical Africa, South Asia and South-east Asia (Ganesh *et al.* 2011; Smith 1935; Wickramasinghe 2006; Wickramasinghe & Munindradasa 2007; Uetz & Hošek 2014; Vidanapathirana *et al.* 2014). Most geckos of the genus *Cnemaspis* are cryptically-coloured, microhabitat specialists, mainly showing diurnal behavior, characterized by a diminutive, slender body, large forward- and upwardly- directed eyes with rounded pupils, and slender digits which are elongated, bent at an angle with the entire subdigital lamellae (Das 2005; Bauer *et al.* 2006, 2007; Giri *et al.* 2009; Grismer *et al.* 2009). Although the known species diversity is currently grouped under one genus, recent molecular studies suggests that they belong to separate clades indicating polyphyletic origin (Bauer *et al.* 2007; Gamble *et al.* 2012).

Among the most diverse areas for the Asian *Cnemaspis* are the hill ranges of southern India (Western Ghats, Shevaroy Hills, Southern Eastern Ghats) and the central hills of Sri Lanka (Smith 1935; Das & Bauer 2000; Bauer 2002). The genus *Cnemaspis* is represented by 23 species in mainland India: *C. boiei* (Gray); *C. indica* (Gray); *C. mysoriensis* (Jerdon); *C. littoralis* (Jerdon); *C. jerdoni* (Theobald); *C. wynadensis* (Beddome); *C. gracilis* (Beddome); *C. ornata* (Beddome); *C. sisparensis* (Theobald); *C. beddomei* (Theobald); *C. goaensis* Sharma; *C. nairi* Inger, Marx & Koshy; *C. assamensis* Das & Sengupta; *C. otai* Das & Bauer; *C. yercaudensis* Das & Bauer; *C. heteropholis* Bauer; *C. indraneildasii* Bauer; *C. australis* Manamendra-Arachchi *et al.*; *C. monticola* Manamendra-Arachchi *et al.*; *C. nilagirica* Manamendra-Arachchi *et al.*; *C. kolhapurensis* Giri *et al.*; *C. girii* Mirza *et al.* and *C. kottiyorensis* Cyriac & Umesh (Manamendra-Arachchi *et al.* 2007; Giri *et al.* 2009; Cyriac & Umesh, 2013, 2014; Mirza *et al.* 2014). Of these, 19 species are endemic to the Western Ghats, three are restricted to the Eastern Ghats

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APPENDIX 1. Comparative material.

- Cnemaspis andersonii*: Holotype (male) ZSI 15012; India.
- Cnemaspis anaikattiensis*: Holotype (male) ZSI 25601, ZSI 25602; Anaikatti Hills, Tamil Nadu.
- Cnemaspis beddomei*: Syntype ZSI 5859; S Tirunelveli, Tamil Nadu.
- Cnemaspis girii*: Holotype (male) BNHS 2299; Kaas plateau (17°43'25.57"N, 73°49'9.44"E, elevation 1,203m), Satara district, Maharashtra; paratypes BNHS 2081 (male) and BNHS 2078 (female); other details same as holotype.
- Cnemaspis goaensis*: Holotype (male) ZSI 22110, ZSI 22213–22216 (four paratypes); “ca. 3 km S. of Forest Rest House, Canacona (Poinguinim), Goa”.
- Cnemaspis gracilis*: Voucher specimen (male) BNHS 1182; Goa.
- Cnemaspis indica*: Voucher specimens BNHS 1252-10 (male) & BNHS 1252-1 (female); Parson valley, Nilgiris, Tamil Nadu.
- Cnemaspis jerdonii*: ZSI 6179, 6180 (Syntypes); India. (Specimens badly damaged).
- Cnemaspis kolhapurensis*: Holotype (male) BNHS 1855; Dajipur, Kolhapur district, Maharashtra.
- Cnemaspis littoralis*: Voucher specimen BNHS 1150 (Male); Nilambur, Malabar.
- Cnemaspis mysorensis*: Neotype (male) BNHS 1830; Agara village near Bangalore, Karnataka.
- Cnemaspis sisparensis*: Voucher specimen ZSI 17970 (labeled as holotype of *Gonatodes bireticulatus* Annandale, 1915); from “Kavalai, 1300–3000 feet, Cochin State” (in Kerala State, south-western India).
- Cnemaspis wicksii*: Paralectotype ZSI 5866 (female), ZSI 5867 (female) & ZSI 5868 (male); Preparis Island, Andaman Archipelago, Bay of Bengal.
- Cnemaspis wynadensis*: Voucher specimen BNHS 1042 (male) & BNHS 1043 (male); Mannarghat, Palghat, Kerala.