

Record and Morphometric Study of *Geckoella deccanensis* (Günther, 1864) from Matheran, Raigad District, Maharashtra, India.

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ABSTRACT

The objectives of the present study were to record and study of *Geckoella deccanensis*. *Geckoella deccanensis* is also called Deccan banded gecko. *Geckoella* are terrestrial geckos with short toes that are endemic to (Western ghats) Maharashtra, India and SriLanka. Genus *Geckoella* is represented with five species from India, *Geckoella albofasciatus*, *Geckoella collegalensis*, *Geckoella deccanensis*, *Geckoella jeyporensis* and *Geckoella nebulosa*. Günther (1864) described *Gymnodactylus* (*Geckoella*) *deccanensis* on the basis of a single specimen collected “in the Deccan”, Maharashtra. Present study is an attempt to record and morphometric study of *Geckoella deccanensis* from Matheran, Raigad, Maharashtra, India.

KEYWORDS - *Geckoella deccanensis*, Morphometric study, Matheran, Maharashtra, Record.

The Deccan banded gecko, *Geckoella deccanensis*, is a medium-sized terrestrial, nocturnal, forest dwelling, secretive gecko that is endemic to India. The species was originally described by Günther (1864) as *Gymnodactylus deccanensis*, on the basis of a single specimen collected “in the Deccan” (without any specific locality). The Western Ghats of India are one of the hottest Biodiversity hotspots of the world (Myers et al., 2000). Only 9% area of Western Ghats is protected under National parks and Sanctuaries (Gunawardene et al., 2007). Therefore, management of biological resources which are diminishing at a rapid rate is critical in the Western Ghats.

authors visited the Matheran site on 1st May 2017, and after a few hours of searching during the night, at 8.00pm the adult gecko was found coming out from its hideout in search of insects. The specimen was collected for voucher. We examined the gecko specimen with the help of literature (Smith 1935; Bauer and Giri, 2004). Our specimen from Matheran had five yellow bands on the tail and three yellow bands on the trunk region, along with a one yellow band on the nape. The dorsal scales are not flattened. It can be positively confirmed as an adult specimen of *G. deccanensis*. (Figure.1)



Figure 1: Deccan Banded Gecko (*Geckoella deccanensis*) sighted at Matheran, Raigad District, Maharashtra.

According to our literature survey, *G. deccanensis* is distributed in northern Western Ghats, and most of the recorded localities are from a Matheran, Raigad districts of Maharashtra State only. Our collection site i.e. Matheran. Matheran is a hill station and a municipal council in Karjat Tehsil in the Raigad district in the Indian state of Maharashtra. Matheran is part of the Mumbai Metropolitan Region. It is one of the smallest hill stations in India. It is located on the Western Ghats range at an elevation of around 800m (2625 feet) above the sea level. It is 90 km from Mumbai, and 120 km from Pune. (Figure, 2 and 3)



Figure 2: Map of study site, Matheran.



Figure 3: Matheran, hill station area.

From Maharashtra *G. deccanensis* is reported from Vihar Lake area in Sanjay Gandhi National Park, Matheran, Khandala, Tungreshwar, Koyna Wildlife Sanctuary, Phansad Wildlife Sanctuary (Bauer and Giri, 2004) and also from Tamhini Ghat, Trimbakeshwar near Nasik. As far as Western Ghats is concerned *Geckoella deccanensis* is comparatively common in Northern Western Ghats of Maharashtra state especially in Matheran, Phansad Wildlife Sanctuary and Tamhini Ghat but had never been reported from Northern most tip Western Ghats that comes under Gujarat State.



Figure.4 Showing nape band of *Geckoella deccanensis*

Morphological characters

The head of *Geckoella deccanensis* is large, oviform, snout longer than the diameter of the orbit. Forehead and loreal region are concave, ear-opening is sub-oval. Body is moderately elongated, depressed. Limbs are long, digits moderately elongate, cylindrical in basal, compressed in the distal portion; the plates under the basal pharynx are very small. The head is covered with convex granules, largest on the snout and temples; rostral quadrangular, not quite twice as broad as deep with median cleft above; nostril pierced between the rostral, the first labial and three nasals; 9 to 11 upper and as many lower labials, mental triangular or pentagonal. The body covered above the large juxtaposed subequal tubercles arranged in more or less regular transvers series; these tubercles flat, generally with a small raised point in the centre. Abdominal scale round, smooth, much smaller than dorsal. Male with enlarged preanal and femoral scales, but without pores. Tail cylindrical, tapering, covered with smooth scales arranged in rings. Lower surface of the body is whitish. Ring like yellowish or whitish band present on the body. Whole body covered with scales.



Figure.5 *Geckoella deccanensis* from Matheran, Raigad, Maharashtra, India.

Table No. 1. Morphometric details of *Geckoella deccanensis* from Matheran, Maharashtra, India.

Sr. No.	Characters	Measurement (mm)
1	Total body length	61.45
2	From tip of snout to vent	34.25
3	From the cloaca to the tip of the tail	27.50
4	The distance between the angle of the jaw and snout tip	9.60
5	Head width – distance between angles of jaws	9.58
6	The distance between the forelimbs and the hindlimbs	17.50
7	The greatest diameter of the eyes	2.88
8	The distance between the anterior-most point of eye and the nostrils	4.1
9	The distance between the anterior -most point of the eye and the tip of the snout	5.20
10	The anterior edge of the ear opening to the posterior-most point of the eyes	06
11	The greatest diameter of the ear opening	01
12	The distance between the nostrils	1.9
13	Upper labials R/L	11
14	Lower labials R/L	11
15	Dorsal body tubercles rows	24
16	Dorsal body tubercles rows (neck to joint of hind feet)	44
17	Sex	Male

The species was identified with help of, The Book of Indian Reptiles and Amphibians by (Daniel, J. C. 2002, and Bauer and Giri, 2004). Proper identification photographs were taken at different angles. The measurements were done with the help of medium size Vernier Caliper (Table 1). After proper identification the species was released back at the same place. The genus *Geckoella* is poorly studied or known in India. This study is only record and morphometry of *Geckoella deccanensis*. More study is important in future to behaviour of *Geckoella deccanensis*.

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