



Open Access

Short Communication

New Locality Record of Deccan Banded Gecko *Geckoella deccanensis* (GÜNTHER, 1864) from Saputara Hills, Dang district, Gujarat, India

Nitin Walmiki^{1,2,3}, Siddhesh Karangutkar^{1,2,3}, Bhaskar Yengal^{1,2,3}, Rishab Pillai^{1,2}, Asif Khan¹, Vishal Wagh¹ and Bhargav Parmar¹

¹Eco Echo, D/85 Meghwadi, Dr. S.S. Rao Road, Lalbaug, Mumbai- 400012

²S.A.R.R.P (Spreading Awareness on Reptile and Rehabilitation programme), P/17, plot No. 269, Shiv Smriti HSG Soc. Gorai 2, Borivali (W), Mumbai

³CON (Care of Nature) Veshvi, Uran, Raigad, Maharashtra, India

Corresponding email: nitinwalmiki007@gmail.com

Abstract:

Geckoella are terrestrial geckos with short toes that are endemic to (Western ghats) peninsular India and Sri Lanka. Genus *Geckoella* is represented with five species from India, *Geckoella collegalensis*, *Geckoella albofasciatus*, *Geckoella deccanensis*, *Geckoella jeyporensis*, *Geckoella nebulosa*. Günther (1864) described *Gymnodactylus(Geckoella) deccanensis* on the basis of a single specimen collected "in the Deccan". Dang forest range which forms the Northern most part of Western Ghats remains largely unexplored. This is the first time that the specimen (*Geckoella deccanensis*) is seen in Saputara Hill Range, Dang forest district, Gujarat. The occurrence of this species in Dang region confirms new locality record in Gujarat State and range extension of *Geckoella deccanensis* to further north in Western Ghats.

Keywords: Distribution, *Geckoella deccanensis*, Gujarat, Range extension, Northern Western Ghats

Gujarat is a state in western region of India with a geographical area of 1, 96,024 sq km of which 10% or 19,658 sq km is under Forest cover, which hosts 4 National Parks & 23 Sanctuaries. 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. Northern Western Ghats swathes through three states on its western side Southern tip of Gujarat in north, central part traversing through Maharashtra and Goa in South. Well known Saputara hill station is perched on a plateau in the

Dang forest area of the Sahyadri Range, where the habitat comprises mostly of tropical moist deciduous forest comprising of *Tectona grandis*, *Terminalia bellirica*, *Schleichera oleosa*, *Garuga pinnata*, *Bridelia hamiltoniana*, *Milliusa tomentosa*, *Haldina cordifolia*, *Mitragyna parvifolia*, *Ougeinia oojeinensis* etc. At an altitude of about 1000 m it sustains a cool bracing climate, with minimum and maximum temperature ranging between 10 - 28°C. Saputara means the 'Abode of Serpents'. Saputara has been developed as a planned hill resort with all the necessary amenities. Saputara is 172 km from Surat and 250 km from Mumbai and also being only 4 km away Maharashtra state border still remains largely unexplored considering its high Bio-diversity value as it is located in northern most tip of Western Ghats.

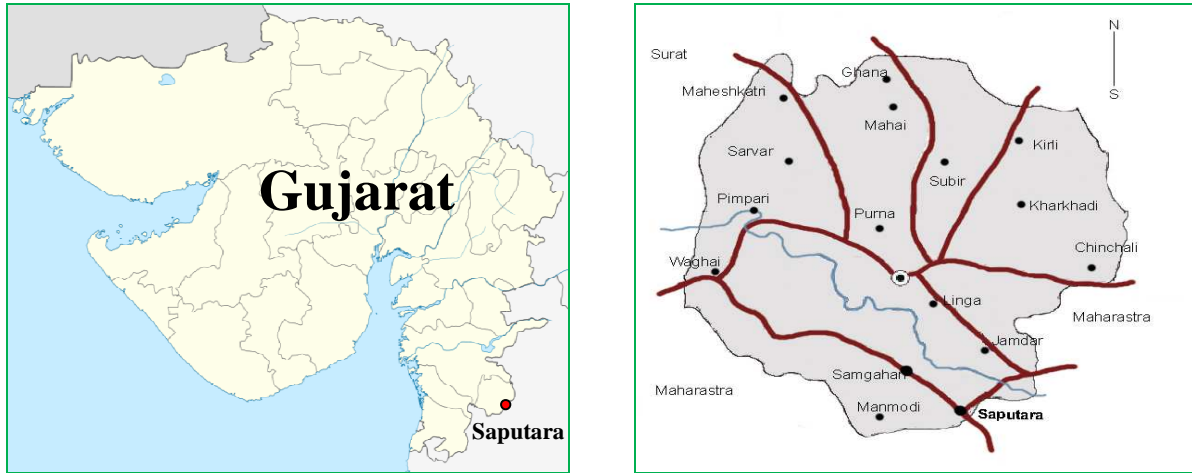


Fig 1.1: Map of Gujarat state showing Saputara



Fig 1.2 Saputara , Dang district, Gujarat showing record of *Geckoella deccanensis* (Deccan Banded Gecko)



Fig 1.3 Deccan banded gecko *Geckoella deccanensis*(GÜNTHER, 1864) from Trimbakeshwar, Nasik

Geckoella are terrestrial geckos with short toes that are endemic to Western Ghats, Peninsular India and Sri Lanka. Genus *Geckoella* is represented with five species from India viz. *Geckoella collegalensis*, *Geckoella albofasciatus*, *Geckoella deccanensis*, *Geckoella jeyporensis*, *Geckoella nebulosa*. Günther (1864) described *Gymnodactylus* (*Geckoella*) *deccanensis* on the basis of a single specimen collected “in the Deccan”. They are mostly nocturnal forest dwelling terrestrial insectivores and are uncommonly encountered due to their secretive

habits (Tikader and Sharma, 1992). According to the available literature until now only a single species of *Geckoella* recorded and reported from Gujarat State, i.e. *Geckoella collegalensis* (Vyas, 2000). In 2000 and 2004, Vyas reported *Geckoella collegalensis* from Girforest, and Vandsa National Park, Gujarat. More recently R.Vyas has reported *Geckoella deccanensis* from Dang. The note itself suggests that this is the second record of this species from Gujarat and also highlights the range extension of this species towards north.



Fig1.4: *Geckoella deccanensis*(GÜNTHER, 1864) from Saputara, Dang district, Gujarat.



Fig 1.5 *Geckoella deccanensis* from Tamhini Ghat

Table 1: Characteristic chart for *Geckoella deccanensis* (GÜNTHER, 1864) from Saputara, Dang district, Gujarat

Characters	Measurement (mm)
Snout-vent length (SVL)	70.60
Tail length (TL)	61
Axilla to groin length(AG)	31
Body width	15.20
Head length(HL)	22
Head depth(HD)	7.60
Head width(HW)	14.20
Eye to ear distance(EE)	6.10
Eye to snout distance(ES)	7.00
Eye diameter(ED)	4.30
Supralabials left_right	10/9
Infralabials left_right	9/9

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 (Fig 1.4), Trimbakeshwar near Nasik (Fig 1.2). 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. It is possible that distribution range of *G. deccanensis*

extends northern part of Maharashtra border into extreme southern Gujarat, which is northern extent of the Western Ghats, but it has not yet been recorded from this state (Gayen 1999; Sharma 2000; Vyas 2000, Aaron 2004).

The forest range at Dang district belongs to the category of tropical moist deciduous forests and the terrain represents northern and western limits of the Western Ghats (Walmiki et al. 2011). During our regular field visit at Saputara hills, on 13.00hr (1.00 AM) of 7th February 2013, *Geckoella deccanensis* was spotted in Saputara hill forests amidst the forest

litter at Lat. 20°35'38.07"N and Long. 73°46'09.51"E between Mangalider and Malegoan villages (Fig 1.2, Table 1). 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 is new locality of *Geckoella deccanensis* reported from Saputara in Dang district, Gujarat and as well as its first northern range extension record of species

Acknowledgements:

Authors are thankful to Parimal Patel, Mayank Desai, Rupesh Sagvekar, Niraj Singh, Amar Patil, Benny Fernandes, Pawan Sharma, Bharatsinh Rathod, Dharamsinh Rathod, Santosh Shinde for their help during field work and are highly indebted to Shri. Anil Kubal, Mr. Ishan Agarwal, Shri. Raju Vyas and Dr. Jiyalal Ram Jaiswar (Former - Senior Principal Scientist from National Institute of Oceanography). Authors especially thank to our mentor Dr. Vaishali Somani along with Zoology staff of M.D College, Dr. Jafer Palot and Dr. C Radhakrishnan from ZSI (Zoological survey of India) for their valuable support and motivation.

References:

- 1) Annandale, N. 1913. The Indian geckos of the genus *Gymnodactylus*. *Rec. Indian Mus.* 9: 309-326, pls. XVI-XVII.
- 2) Bauer & Giri 2004. On The Systematic Status of *Geckoella deccanensis* (GÜNTHER, 1864) And *G. albofasciata* (BOULENGER, 1885) (SQUAMATA: GEKKONIDAE). *Hamadryad*, Vol. 28:1 & 2, pp. 51-58.
- 3) Boulenger, G. A. 1885. Catalogue of the lizards in the British Museum (Natural History), Second Edition. Vol. I. Geckonidae, Eublepharidae, Uroplatidae, Pygopodidae, Agamidae. Trustees of the British Museum (Natural History), London. xii + 436 pp.
- 4) Daniel, J. C. 2002. The book of Indian Reptiles and Amphibians. Bombay Natural History Society and Oxford University Press. Mumbai, 45pg.
- 5) Gunawardene, N.R., A.E.D. Daniels, I.A.U.N. Gunatilleke, C.V.S. Gunatilleke, P.V. Karunakaran, K.G. Nayak, S. Prasad, P. Puyravaud, B.R. Ramesh, K.A. Subramanian & G. Vasanthi (2007). A brief overview of the Western Ghats - Sri Lanka biodiversity hotspot. *Current Science* 11: 1567-1572.
- 6) Myers, N., R.A. Mittermeier, C.G. Mittermeier, G.A.B. Da Fonseca & J. Kents (2000). Biodiversity hotspots for conservation priorities. *Nature* 403: 853-858.
- 7) Sharma, R. C. 2000. Reptilia. *In: State Fauna Series No. 8. Fauna of Gujarat (Part 1) Vertebrates.* pp: 243-297. J. R. B. Alfred (Ed). Zoological Survey of India, Calcutta.
- 8) Smith, M. A. 1935. The fauna of British India, including Ceylon and Burma. Reptilia and Amphibia. Vol. II. Sauria. Taylor and Francis, London. xiii + 440 pp.
- 9) Tikader B. K. & R. C. Sharma. 1992. Handbook Indian lizards. Zoological Survey of India, Calcutta. xv + 250 pp.
- 10) Venugopal, P.D. 2010. An updated and annotated list of Indian lizards (Reptilia: Sauria) based on a review of distribution records and checklists of Indian reptiles. *Journal of Threatened Taxa* 2 (3): 725-738.
- 11) Vyas R. 2000. A review of reptile studies in Gujarat state, *Zoo's print journal* 15(12):386-390
- 12) Vyas R. 2004. Herpetofauna of Vansda National Park, Gujarat, *ZooS' print journal* 19(6): 1512-1514
- 13) Walmiki et al., 2011. New locality record of Montane Trinket snake *Coelognathus helena monticollaris* (Schulz, 1992) from Vansda National Park, Navsari, Gujarat, India. *Universal Journal of Environmental Research and Technology*, Volume 1, Issue 4, 571-573.
- 14) <http://www.gekkota.com/Journal/journal.html>