

Report on peninsular rock agama female *Psammophilus dorsalis* at Mahalingam hills, Tirunelveli district, Tamilnadu, India

¹Selvaraj Selvamurugan and ²Usha Balasubramanian

¹Institute of Forest Genetics and Tree breeding, Coimbatore, Tamilnadu-642 002.

²Sri Parasakthi College for Women, Courtallam, Tamilnadu-627802.

*Corresponding author email: selva199420@yahoo.in

Article Info

Received: 04-10-2019,

Revised: 16-12-2019,

Accepted: 22-12-2019

Keywords: Reptile,
Mahalingam hills,
Psammophilus dorsalis.
Tirunelveli district.

Abstract

The field study conducted in the month of October 2019, at the Mahalingam Hills around 75 km from Thirunelveli, Tami Nadu, one specimens of reptile species surveyed in this region is identified as *Psammophilus dorsalis*, which is known as Peninsular rock agama female gecko. The distribution pattern and conservation status of the species are discussed in this report.

INTRODUCTION

The Peninsular Rock Agama (*Psammophilus dorsalis*) is a common rock dwelling lizard with a widespread distribution throughout the Indian peninsula of elevations up to 1829 m (Daniel, 2002). The Peninsular rock agama (*Psammophilus dorsalis*) is, as its name suggests, an agamid lizard associated with rocky terrain in hilly areas of Southern India (Das, 2002; Daniel, 2002). The Indian rock agama inhabits holes, crevices etc near water streams, ditches and rivers. It has been observed to hibernate in the holes during winter. These are known to breed from April to August (Sarkar and Shivaanandappa 1989, Shanbhag, 2002). However, information on the ovipositional behavior of *Psammophilus dorsalis* is nonexistent. This note provides a detailed description of the ovipositional behavior of a single gravid female *Psammophilus dorsalis* observed in Savandurga Forest area, southwestern Karnataka, India. The female was observed digging a burrow between two rocks between 1115-1305 h on July 1st 2012. The rocky formations were in the midst of a dry deciduous forest within the Savandurga forest

areas, Karnataka (12° 55.16' N, 77° 18.25' E; 851 m elevation) Reported by Shashank Balakrishna. The Peninsular rock agama *P. dorsalis* (Gray, 1831) occurs in most of Peninsular India, Madhya Pradesh and along the hills of the Eastern Ghats (Smith, 1935; Daniel, 2002; Chandra and Gajbe, 2005). Its food was considered to consist almost entirely of insects (Daniel, 2002; Radder et al., 2005). However, given the lack of good evidence for thermoregulatory behaviour (2 body temperature measurements; Veeranagoudar et al., 2010). Further studies are therefore needed to determine if the behaviour of *Psammophilus dorsalis* involves water uptake rather than thermoregulation as indicated by Veeranagoudar et al., (2010) or both. It is very rare to see this species associating with water with only one previous reported observation. This concerned a lizard observed entering water at Hampi, Karantaka by Veeranagoudar et al., (2010). These authors concluded that entering water was a way of reducing body temperature since the difference between the body temperature of the lizard in water was almost 4°C lower than when it was out of water.

Mahalingam malai kambli is geographically located at latitude 8 ° 59'0" and longitude 8 ° 59'0". Mahalinga hills is a mountain region located in tenkasi , Tirunelveli district. It is situated in Kambli, Ayakudi. Giant rocks present in the mountain looks like lord mahalinga , so that the mountain got it name as Mahalinga malai. There is a famous lord of shiva temple. Special poojas are conducted during Chitra Povarnami. Shreekant Deodhar(2017) reported by Indian reptiles even more so, are very

rare. Ectotherms like reptiles and amphibians need such detailed studies, especially in the face of climate change, since these taxa are at a high risk from changes in temperature and precipitation patterns. Further study carrion descriptive ecological studies on the habitat quality/sustainability, diet composition, effects of anthropogenic disturbance and habitat modification on this species.

Table.1: Shows species of Indian rock agama found in and around Mahalinga hills (Kambli village) of Thirunelveli district, Tamilnadu. India.

| Common Name | Species | Class | IUCN status |
|-------------------|------------------------------|----------|--------------------|
| Indian rock agama | <i>Psammophilus dorsalis</i> | Reptilia | Least concern (LC) |



Figure.1: Peninsular rock agama *Psammophilus dorsalis* Female.

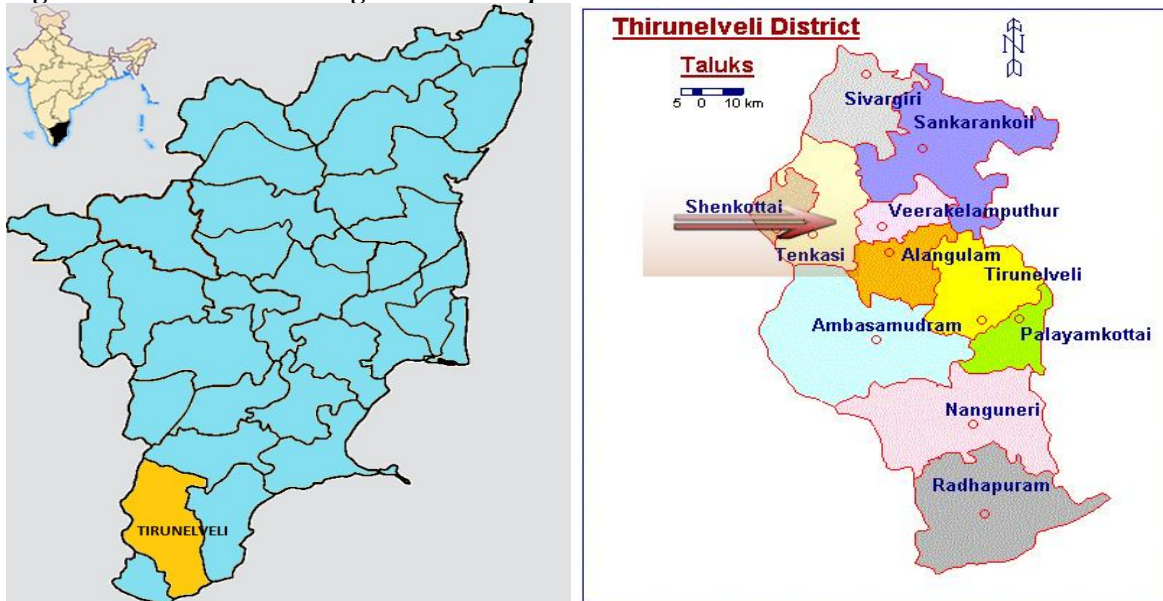


Figure 2. Map showing record of *Psammophilus dorsalis* (Female) at Tenkasi Thirunelveli district, Tamilnadu state, India.



Figure 3. Mahalingam hills kambli, tenkasi, tirunelveli district.tamilnadu state in india.

REFERENCES

Golusu Babu Rao, Buddi Laxmi Narayana & Kummari Swamy, 2014. A Note On Behaviour Of The Peninsular Rock Agama (*Psammophilus Dorsalis*) At Yellampet, In Telangana, India. The Herpetological Bulletin **130**: 24-25.

Hiremath K. G., 2019., Habitat And Ecology Of Indian Rock Agama (*Psammophilus Dorsalis*) In Shrub Lands At Narayanpur, Karnataka, India. *Review Of Research* **8**(9):6.

Rachakonda Sreekar, Shreekant Deodhar And Yashada Kulkarni, 2010. Predation On *Hemidactylus Treutleri* (Squamata: Gekkonidae) By The Peninsular Rock Agama *Psammophilus*

Dorsalis (Squamata: Agamidae) In Rishi Valley, Andhra Pradesh, India. *Herpetology Notes*. **3**:33-035.

Shashank Balakrishna And Nitin Achari, 2014, Preliminary Observations On The Ovipositional Behavior Of The Peninsular Rock Agama *Psammophilus Dorsalis* (Gray, 1831) From Savandurga Forest Area Of Southwestern Karnataka, India. *Herpetology Notes*, **7**: 319-322.

Shreekant Deodhar And Kavita Isvaran, 2017. Breeding Phenology Of *Psammophilus Dorsalis*: Patterns In Time, Space And Morphology. *Current Science*, **113**(11):10.

How to cite this article

Selvaraj Selvamurugan and Usha Balasubramanian, 2020. Report on peninsular rock agama female *Psammophilus dorsalis* at Mahalingam hills, Tirunelveli district, Tamilnadu, India. *Bioscience Discovery*, **11**(1):64-66.

Google Scholar citation: <https://scholar.google.co.in/citations?user=vPzEyC8AAAAJ&hl=en>