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First record of Termite hill gecko, *Hemidactylus triedrus* (Daudin, 1802) from Odisha, India

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ABSTRACT

A report of *Hemidactylus triedrus* first time from Odisha state. As the genus *Hemidactylus* is the second most species rich genus in geckos which are widely spread to the tropical regions of the world. The *Hemidactylus triedrus* is also known as Termite hill gecko, Dakota's leaf-toed gecko & blotched house gecko, which belongs to the family *Gekkonidae*. This species of gecko are found in Southern regions of Asia.

Key words: Termite hill gecko, First record, Forests, Odisha.

INTRODUCTION

Termite hill gecko (*Hemidactylus triedrus*, **Fig. 1**) is endemic to Southern Asia basically found in Srilanka and India (Allen and Richard 1996). The species was described by Daudin (1802) based on species collected from Southern India. Recently the species has been reported from Pench Tiger Reserve on 13th December 2019 (TOI 2019). India represents about twentyfive recognized *Hemidactylus* species (Venu 2016) and about five Hemidactylus species are reported from Odisha as *Hemidactylus fleviviridis*, *Hemidactylus frenatus*, *Hemidactylus brookii*, *Hemidactylus leschenaultia* and *Hemidactylus sp*. (Pradhan et al. 2014; Dutta et al. 2009).

SURVEY AND SPECIMEN COLLECTION

At about 17:30 hours during our field survey on 15^{th} July 2020 at Bulajhar reserve forest of Angul, Odisha, India (21° 06' 40.85" N, 85° 10' 43.68" E; Elevation-340 ft, Fig. 5), we encountered a lizard species on a Sal tree near a termite mount. Afterwards the

specimen was collected, examined, measured and photographed.

OBSERVATIONS AND RESULTS

Results obtained after observation of collected specimen of lizard species are given bellow. The measurements (in mm) were taken with Vernier calliper, scale and micro photographs were taken by Nikon camera. Snout to vent length (SVL)- 60.30mm, Tail length (TL)- NA cut tail, Tail width (TW)-4.55mm, Length from axilla to groin measure from posterior edge of forelimb insertion to anterior edge of hind limb (TRL)- 33.20mm, Body width (BW)-11.98mm, Head length (HL)- 12.80mm, Head depth (HD)- 7.29mm, Head width (HW)- 10.20mm, Eye to ear length (EE)- 4.98mm, Eye to snout distance (ES)-6.35mm, Base heel to knee length (HK)- 6.8mm, Base of palm to elbow (PE)- 4.42mm, Orbital distance (OD)- 3.20mm, Nostril to eye length (NE)- 5.30mm. Lamellae on fore limb & hind limb is between 8 to 10

(Fig. 2), Supralabials left/right- 7/8, Infralabials left/right- 7/8, Ear opening wide, oval and oblique (Fig. 3), digits are dilated with two rows of lamellae, body consists of narrow faded bands, each broken distinctly into two by white tubercles with black margins, tubercles on the dorsum and tail are dense, trihedral and posteriorly slanting. By the above characters we came to a conclusion that, this is gecko Termite hill (Hemidactvlus triedrus) (www.reptile-database.org; Javed et al. 2009) (Fig. 4). Hemidactylus triedrus is being reported for the first time from Bulajhar reserve forest of Angul, Odisha. This find of Hemidactylus triedrus in Bulajhar reserve forest confirms its occurrence and establishes new locality record in state Odisha and the range extension of this species. Hemidactylus triedrus was recorded previously from localities of Andhra Pradesh, Karnataka, Maharastra, Pondicherry & Tamil Nadu (Khandekar et al. 2020).

Forest covers throughout these areas range with two prime vegetation such as Semi-evergreen forests and Tropical dry deciduous forests. However, the localities documented in the present study are basically dry deciduous forests (Champion and Seth 1968). Some major tree species of this area are Sal (Sorea robusta), Piasal (Pterocarpus marsupium), Sissoo (Dalbergia latifolia), Jamun (Suzygium cuminii), Arjuna (Terminalia tomentosa) and Asan (Terminalia latifolia). The presence of this species in this area suggests that Hemidactylus triedrus can occur in habitats that include variable elements of arid and semiarid ecosystem.

Conversion forests into agricultural lands, habitat loss and road kill are the major deleterious effects on the local population of geckos. However, the documented habitat suffers from high industrial activities which bring about high pollution and high anthropogenic pressure. Additional field surveys are necessary for the harmony of this habitat and our study establishes the existence of this species in the state of Odisha.



Fig. 1. Termite hill gecko Hemidactylus triedrus



Fig. 2. Lamellae of Hemidactylus triedrus



Fig. 3. Head portion of Hemidactylus triedrus



Fig. 4. Dorsal side of Hemidactylus triedrus



Fig. 5. Location map of *Hemidactylus triedrus* spotted from Bulajhar reserve forest of Angul, Odisha.

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