# Distribution of *Lygosoma guentheri* (Peter, 1879) (Reptilia: Scincidae) in Andhra Pradesh, India

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Family Scincidae is the largest among lizards, comprising more than 1300 species (Bauer 1998). Of the five subfamilies recognized, the subfamily Lygosominae is the most speciose containing over 600 species in 45 genera (Griffith et al. 2000). The genus *Lygosoma* Gray, 1828 includes forms that are terrestrial and semi-fossorial and belong to *Mabuya* group. In India, the genus *Lygosoma* Gray, 1828 includes nine species, of which Günther's Supple Skink *Lygosoma guentheri* (Peter, 1879) was reported only from the Western Ghats from Gujarat to Kerala (Smith 1935; Daniel 1962). Rao et al. (2005) reported its presence in the Eastern Ghats based on a specimen collected in the central Nallamalai Hills, Andhra Pradesh. Recently, Srinivasulu & Das (2008) recognized its presence in the Nallamalai Hills. This paper provides information on the distribution, habits and habitat of *L. guentheri* in Andhra Pradesh

One adult specimen (106mm) of *L. guentheri* was captured, examined and released by SMMJ from the Bhimaram (18°50'N & 79°42'E), Adilabad District on 15 June 2007, around 1300hr. A juvenile (dead) specimen (measurement not taken, as the specimen was shriveled) was collected on 12 June 2008, around 1400hr by MS from Gandhavaari Gudem (17°01'N & 79°14'E), Nalgonda District. On 07 May 2008, around 1645hr, this species was recorded by KTR near Isukagundem (15°36'N & 78°48'E) in Gundla Brahmeswaram Metta (GBM) Wildlife Sanctuary, Prakasham District. Only the specimen of Gandhavaari Gudem, Nalgonda District has been deposited in the Natural History Museum, Osmania University (NHM. OU.REP.1-2008). Data on the morphometry of Bhimaram specimen is given in Table 1. Details of distribution have been provided in Image 1.

**Diagnosis:** *Lygosoma guentheri* (Peter, 1879) is closely allied to *Lygosoma punctata* Gmelin, 1799, but distinctly differs as follows (*L. guentheri* vs. *L. punctata*): Distance between the axilla and groin measures three to three-and-a-half times the length between snout to fore-limb (vs. distance between the axilla and groin measures two to two and three-quarter times the length between snout to fore-limb); ear-opening is small without lobules (vs. ear-opening is half of the eye-opening with one or two small lobules anteriorly); 24 to 26 scales round the body and 87 to 100 scales on mid-dorsal region (vs. 24 to 28 scales round the body and 62 to 76 scales on mid-dorsal region); the ad-pressed limbs fail to meet by three to four times of the length of the fore-limb (vs. ad-pressed limbs fail to meet by twice the length of the fore-limb) (Boulenger 1890; Smith 1935).

**Description:** Body is slender, elongate and depressed at the mid dorsal region from the back of the head to the base of a tail (Image 2). Limbs are well developed with five fingers and five toes. Snout obtuse, supranasals are entire and in contact with one another behind the rostral. Lower eyelid possesses an undivided semitransparent

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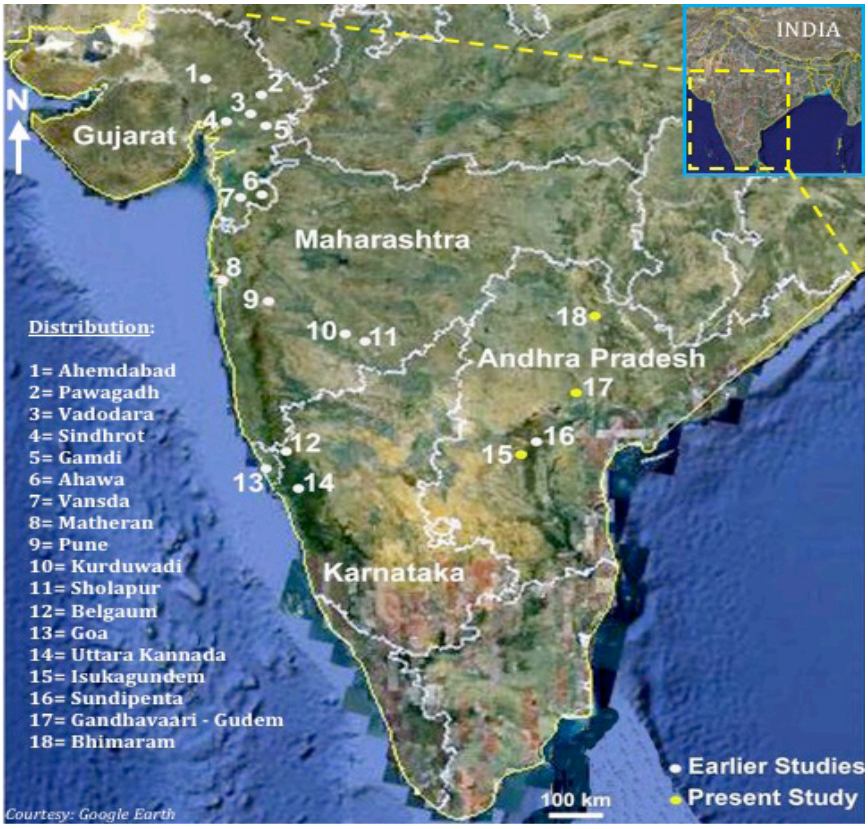


**Image 1. Satellite image depicting distribution sites of *L. guentheri* in India**

**Table 1. Morphometry of *L. guentheri* based on a specimen from Bhimaram, Adilabad District, Andhra Pradesh**

| Particulars | Measurements (in mm) |
|---|---|
| Head | 8 W & 12 L |
| Eye diameter | 1.8 |
| Distance between Nostril & Eye | 5.1 |
| Distance between Eye & Ear | 9.8 |
| Ear opening | 1.1 W & 2.2 L |
| Neck | 10 W |
| Abdomen | 12 W |
| Fore limb length | 5 FL & 6 TL = 11 TFLL |
| Hind limb length | 8 FL & 9 TL = 17 THLL |
| Fore limb digits length (Starting from smallest digits) | 2, 4, 6, 6.5, 4 |
| Hind limb digits length (Starting from smallest digits) | 2, 4, 7, 7.5, 6.5 |
| Snout to vent length | 106 L |
| Tail Length<br>Total Body Length | 113 L & 9.5 W (at base)<br>219 L |
| Saclation | 7 SL & 6 IL<br>96 (down the middle of the dorsal side)<br>26 (round the middle of the body) |

W - Width; L - Length; FL - Femur length; TL - Tibia length; TFLL - Total fore limb length; THLL - Total hind limb length; SL - Supralabials & IL - Infralabials. All measurements were taken by standard vernier calipers

disc. Frontal is about as long as the fronto-parietals and inert-parietals together (Image 4). Ear opening is small without projecting lobules. Fronto-nasal is little broader than long and connected with frontal. Prefrontals are small, widely separated with one another. Seven supra labials are present, the fifth below the middle of the eye is longer than the adjacent labials (Image 3). About 96 scales are present down the middle of the dorsal side and 26 scales are present round the middle of the body, dorsal scales are largest. The ad-pressed limbs fail to meet by three times of the length of the fore-limb. Digits short with well developed nails; fourth toe is slightly longer than the third and possessing 14 feebly keeled lamellae beneath. Tail is thick and slender at the base. This is a dark brown skink, uniform plain without any markings or streaks. Dark basal spot is present in all the scales on the dorsal and lateral side including tail. Ventral side yellowish-white and only few scales possess black spot at the base. In the juveniles these spots are confluent into longitudinal lines (Boulenger 1890; Smith 1935).

*L. guentheri* is a terrestrial, insectivorous and diurnal in habit (Molur & Walker 1998). Most of the specimens were found under tightly fixed stones in the habitats with thick ground vegetation (Image 6). During the survey at one of the aforesaid locations a *L. guentheri* was observed feeding on the ants of *Camponotus* genus (Image 7). *L. guentheri* is recorded from three locations and found occupying variety of micro habitats close to water sources




**Images 2-4. Dorsal, Lateral & Front view of *L. guentheri* (in life).**

with plenty of shade (Image 5) and humidity. The habitat at Bhimaram and Isukagundem location composes a pure *Tectona grandis* (teak) plantation near a seasonal stream surrounded by a southern tropical dry deciduous to thorny dry deciduous forests type and the ground floor was full of leaf litter and condition of soil is sandy. While at Gandhavaari Gudem, a dead juvenile specimen was found under a Tamarind tree very close to human settlements.

*L. guentheri* was until recently considered endemic to the Western Ghats; known locality records of this species are Ahemdabad, Ahawa, Pawagadh, Vansda, Vadodara, Gamdi and Sindhrot in Gujarat (Vyas 2006), Matheran, Sholapur, Kurduwadi and Pune in Maharashtra (Smith 1935; Chopra 1964; Sharma 2002), Goa (Sharma 2002), Belgaum and Uttara Kannada in Karnataka (Smith 1935; Sharma 2002; Ali et al. 2006), and also reported from Kerala (Smith 1935; Sharma 2002). Further surveys are needed to confirm the occurrence of this species in Kerala. The species seems to be more widely distributed than currently known (Image 1).

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**Images 5-7. 5 - Habitat at one of the localities from where *L. guentheri* is recorded showing big boulders surrounded with thick vegetation adjacent to a water body; 6 - A microhabitat showing the base of a rock covered with thick growth of a pteridophyte species *Selaginella indica*; 7 - A *Camponotus* sp. nest with ants & brood.**

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