

First record of the Indian smooth snake *Wallophis brachyura* from Karnataka, India

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The Indian Smooth Snake *Wallophis brachyura* Günther, 1866, is a non-venomous, slender, crepuscular snake endemic to India (Whitaker & Captain, 2004; Parmar, 2019). Despite the snake being rare, it has been listed as ‘Least Concerned’ (IUCN, 2021) due to its wide ranging distribution. The species has been recorded across a variety of habitats in central India such as arid scrub, dry deciduous forests, semi-evergreen forests, small hillocks, farmlands, and human settlements. It is an agile and non-aggressive snake that has displayed burrowing behaviour and has been found on open ground, on trees, and under piles of rocks. It feeds on juveniles of geckos, skinks, and garden lizards, and kills its prey by constricting them (Whitaker & Captain, 2004). It is a species that is active throughout the year, but most active between February and September (Parmar, 2019; Ghadage et al., 2013; Jadhav et al., 2018).

The snake was described by Günther in 1866 from the present-day Pune district in Maharashtra and since then has been reported from four states namely Maharashtra, Gujarat, Madhya Pradesh, and Chhattisgarh (Table 1S, see Supplementary Material), with most records from Gujarat and Maharashtra. This species was reported from many localities in 12 districts of Maharashtra since 1866, and from Ahmedabad, Surat, and Tapi districts of Gujarat since 2006 (Patel et al., 2015; Parmar, 2019). It has been recorded once

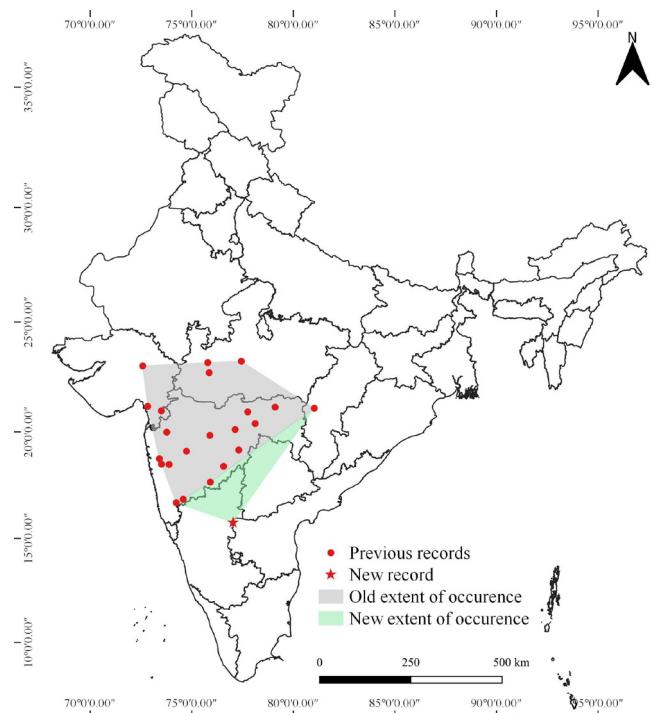


Figure 1. Published and verified distribution records of the *Wallophis brachyura* in India



Figure 1. Indian Smooth Snake *Wallophis brachyura* in Siruguppa taluk of Bellary district in Karnataka

from both Bhopal and Ujjain districts in Madhya Pradesh (Ingle & Sarsavan, 2011; Patel et al., 2015), and once from Rajnandgaon district in Chhattisgarh (Parmar, 2019). The species has been described as endemic to central and western India, as it was believed that its range is restricted only to the four states in which it had been recorded in the past.

Herein, we report the first record of this species from the southern Indian state of Karnataka. The current record of this species is from Siruguppa taluk of Bellary district, and it marks the southernmost record of the species in the country. Siruguppa taluk lies in the north-eastern part of the Bellary district, covering an area of 1,034 km² situated between 14° 51' and 15° 50' latitude and between 76° 21' and 77° 09' longitude. Siruguppa has a vast expanse of flat agricultural landscapes containing mostly black cotton soil, with red soil being present in the south-western parts of the taluk. The tree density in the landscape is very low, so the entire area is almost open, except for the few small hillocks present in the

mid-western parts of the taluk. The average annual rainfall in the area is 683 mm (District Census Handbook, 2011).

On 14 November 2020 at 07:50 h, a snake was sighted in the north-eastern part of Siruguppa taluk (at an altitude of 370 m a.s.l. at 22 °C). It was crossing a dirt path that was bordered by an agricultural area with black soil and cotton crops. It was photographed without being disturbed. The individual measured ~1 m in length. The snake was later identified from the photograph to be an individual of the species *W. brachyura* (Fig. 1.).

The Extent of Occurrence (EOO) derived by using all the past distribution records is ~370,000 km². The new sight record extends the EOO further south and increases the area by ~100,000 km². As of now, our current observation is the southernmost distribution limit of the species.

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