

New occurrence record of *Coronella brachyura* (Gunther, 1866) (Reptilia- Squamata) from Kolhapur districts of Western Maharashtra, India.

A. R. Bhusnar and Abhijit Patil

Department of Zoology, Yashwantrao Chavan Warana Mahavidyalaya, Warananagar- Kolhapur.

Abstract: Smooth snake (*Coronella brachyuran*) is endemic to India and included in IUCN red list of threatened species. It is terrestrial; and lives under stones, brick piles, trees and also found in open areas and grasses. It is non-venomous and calm snake, but hunts rapidly using constriction. It was reported from northern part of Madhya Pradesh, dry regions of Maharashtra (excluding the Western Ghats), centraleastern and southern Gujarat, and also rarely reported from Chattisgarh and Telangana. We are reporting *C. brachyuran* for the first time from Panhala tehsil of Kolhapur district. Panhala is western tehsil of Kolhapur, located at 16° 49'12''N 74°7'12''E it has an average elevation of 754 m.

Key words: *Coronella brachyuran*, smooth snake, threatened, endemic.

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I. Introduction

The smooth snake is a rare and included IUCN red list of threatened species (IUCN. 2013). It is endemic to India and included in Schedule IV of the Wildlife (Protection) Act, 1972. *Coronella brachyuran* is a Latin word for “small crown” in reference to the pattern around the head of the snake. Brachys “short” and oura, “tail” (Wiktionary 2017). Members of Colubrid snakes of genus *Coronella* Laurenti, 1768 are among the least studied snakes across the world. The genus is represented by three species, viz. *Coronella austriaca*, *Coronella girondica* and *C. brachyuran* (Gunther, 1866). *C. brachyuran* is a terrestrial as well as climber, crepuscular burrowing snake. It probably feeds on geckos, skinks and garden lizards (Whitaker and Captain 2004). It uses to lives under stones, brick piles, and trees, also found in open ground aired areas and grasses. Though a mild-tempered snake, it hunts the prey quickly, as an active hunter, by constricting habit, i.e., kills the prey by coiling around its body before consume. This snake is active throughout year, but it more active from late winter to early monsoon season, in hotter days between February and June (D.S. Parmar 2019).

This species is earlier reported from the northern part of Madhya Pradesh, dry regions of Maharashtra (excluding the Western Ghats), Central-eastern and southern Gujarat, and also rarely recorded from Chattisgarh and Telangana. It has been mainly reported from dry and semi-evergreen forest of central India. It is known from several localities in Maharashtra Pune District; Wani in Yavatmal District; Kurduwadi and Chink Hills in Sholapur District; Andheri (West) in Mumbai; Ahmednagar and Nasik District.

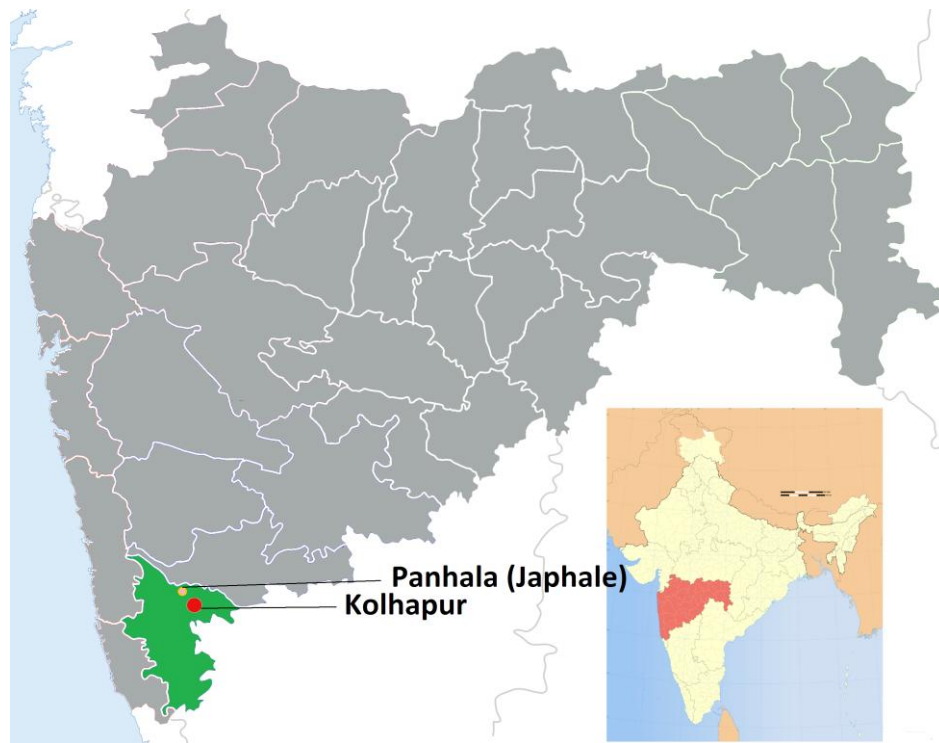
II. Materials and Methods

The second author collected the smooth snake from Japhale village, Panhala tehsil in Kolhapur district on 4th May 2019, as he informed by farmers. We examined the specimen: took morphological measurements; taxonomical observations, took photographs photographed it and then released it back at the captured location. Photographs were taken by using Canon super shot camera. The species was identified by using book ‘Snakes of India’. (Whitaker and Captain 2004) and conformed from Dr. Varad Giri (Herpetologist).

Reported area

Kolhapur district is spread in an area of 7585 sq km of which 1672 sq km is covered with subtropical evergreen and dry deciduous forests; 563 sq km is reserved and 417 sq km is a protected forests. The total area under forest is about 22%. Maximum temperature of Kolhapur district in summer is 41.68°C (in April) whereas minimum temperature in winter is 14.44°C (in December). The average humidity of district is 58%. The Kolhapur district receives an average rainfall of 1600 mm (minimum-500mm and maximum-4000mm) during South-West monsoon, from June to September on.

Panhala is western tehsil of Kolhapur District, located at 16° 49'12''N and 74°7'12''E. it has an average elevation of 754 m. Japhale is a small village situated at northeastern region of Panhala.



Distribution

Coronella brachyuran is reported and redescribed by Gunther in 1866 from Pune Districts of Maharashtra. This species was reported from four states in of India, viz. Maharashtra, Gujarat, Chhattisgarh and Madhya Pradesh. It was reported from several localities in Maharashtra: Barshi and Kurduwadi in Solapur District (Lindberg 1932); Visapur in Ahmednagar District (Gharpurey 1935); Salsette Islands of Mumbai (Abdulali 1935); Nashik (Mistry 2005); Melghat and Amravati District (Nande and Deshmukh 2007) ; Latur District (Kamble 2010); Western region of Khed tahasil, Pune district (Ghadage et al. 2013); Nanded Districts (Jadhav et al. 2018); and Whitaker and Captain (2004) mentioned the distribution range of this species as “few localities in Maharashtra. Whereas in Gujrat the species was reported from Surat Districts (Vyas and Patel 2007) and in Madhya Pradesh it was recorded from Ujjain(Ingle and Sarsavan 2011).

III. Discussion

Olive gray and dark gray patches present over the anterior half of the dorsal surface of anterior half; and scales are smooth. Belly was white with large ventral. Head elongated and slightly differentiated from the neck; eyes prominent with the rounded pupil; and circular nostril. There were total nine supralabial scales, first five are small and last four are comparatively broad; seventh supralabial scale long and quadrate shaped. Nostril scales were irregular shaped. Loreal scale were like half circle; preocular scale slightly broad and upper part touches to internasal and prefrontal scales. Black strike present in between nostril and eyes. Over supralabial scales, two parietal scales were long and triangular in shape, the single triangular frontal scale at the central position, prefrontal scales were slightly broader than mantel scales; supraocular scale flat and laterally touches to pre and postocular scales. Rostral scale triangular and covered front part of the head (Fig.-1&2). Body smooth tubular with short tail 1 (Fig.-3). A similar observation has been made by Whitaker and Captain (2004), Vyas, and Patel (2007), Patel, et. al. (2015) and Parmar, (2019).

Whitaker and Captain (2004) mentioned that Indian smooth snake is a crepuscular and burrowing species and it feeds on geckos, newborn garden lizard and skinks. Similarly, Sarsavan (2011) also reported that *C. brachyuran* feeds on Juvenile geckos. Dikansh Parmar (2019) noted that smooth snake is terrestrial, it can climb well, and lives under stone, brick, piles and trees and also found in open areas and grasses. It is mild-tempered snake, but it is active hunter and hunts fiercely by constricting, coiling around, prey body. Though the snake is found throughout the year, it mostly active from late winter to early monsoon. Patel et al. (2015) rectified the occurrence records and map of this species using literature, museum specimens and distributional records. Additionally, information on taxonomy, morphology, microhabitat, and behavior of the species was provided based on three live specimens and voucher specimens in the collection of the Bombay Natural History

Society (BNHS), Mumbai. D. S. Parkar (2019) was first confirmed the record of the *C. brachyuran* from Gujrat, he mentioned presence of nine supralabials on both sides, , along with other taxonomic and morphological details, also highlighted information on on etymology, behavior, diet, hemipenis, report of gravid female with eggs and distribution of the species.



Fig.-1 Smooth snake lateral view



Fig.-2 Dorsal view of head



Fig.-3 Smooth snake in its natural habitat from Kolhapur district, Maharashtra State, India.

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