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NOTE

NEW DISTRIBUTION RECORD OF NAGARJUNASAGAR RACER

PLATYCEPS BHOLANATHI (REPTILIA: SQUAMATA: COLUBRIDAE) IN
SIGUR, NILGIRIS LANDSCAPE, INDIA

Arockianathan Samson, Palanisamy Santhoshkumar, Balasundaram Ramakrishnan, Sivaraj Karthick & Chandrashekaruni Gnaneswar

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The Nagarjunasagar Racer or Sharma's Racer *Platyceps bholanathi* (Sharma, 1976) is a poorly-known snake endemic to southern India (Sharma 2003). *Platyceps bholanathi* was first described from Nagarjuna Hills (16°31'N & 79°14'E; 105m) in Guntur District, Andhra Pradesh, Eastern Ghats, southern India

(Sharma 1976). Subsequently, this species was reported from other parts of southern India (Smart et al. 2014). It is classified under genus *Platyceps* Blyth, 1860 currently (Wallach et al. 2014). According to Sharma (1976 & 2003) this species is diurnal and found in rocky habitats covered with deciduous vegetation and its diet consists of *Hemidactylus brookii* geckos. In this note, we report for the first time, the occurrence of *P. bholanathi* from Nilgiris Landscape, Tamil Nadu, India. On 3 September 2016 at 15.30hr, we came across a dead snake on a rock in the Sigur (11.531270°N & 76.769731°E, elevation 945m) a rain-shadow area in the Nilgiris landscape, Tamil Nadu, India (Images 1 & 2). We measured the total body length (TBL), snout-vent length (SVL) and tail length (TaL) using an inch tape to the nearest mm.

The total body length (TBL) of the Sigur specimen was 246mm with a snout to vent length (SVL) of 176mm and tail length (TaL) of 70mm. It had 19:19:13 dorsal scale, 208 ventral scales and 110 pairs of subcaudal scales. This specimen is confirmed to be *Platyceps bholanathi* following major key characters with available literature (Sharma 1976; Guptha et al. 2012; Seetharamaraju &

New distribution record of Nagarjunasagar Racer *Platyceps BHOLANATHI* (REPTILIA: SQUAMATA: COLUBRIDAE) IN SIGUR, NILGIRIS LANDSCAPE, INDIA

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Srinivasulu 2013; Ganesh et al. 2013; Sharma et al. 2013; Smart et al. 2014), scalation like ventral scales 208; subcaudal scales 110; scale rows 19:19:13; preocular 1, presubocular 1, postoculars 2, loreal 1, supralabials 9 (5th and 6th touching the eye) and temporal 2+2. Morphology characters such as head broader than the neck, eye has round pupil, pointed snout. Top of head is light brown witha number of irregular shaped markings of dark brown, margined by black (Image 1b). One black streak starts from the lower part of the eyes and reaches till the posterior lip. One dark brown patch starts from

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the temporal and reaches the posterior lower temporal (Image 1a,c). A long slender body, with a longer tail with a pointed end. Dorsal side has light grayish-brown color bands, black edged, starting from the neck, the bands become faint mid body and are completely absent on tail parts (Image 1a).

Platyceps gracilis (Günther, 1862) is another Indian species of Coluber, reported only from a few localities from four Indian states, Rajasthan, Gujarat, Madhya Pradesh and Maharashtra (Smart et al. 2014). P. gracilis scalation, morphology characters and habitat type is similar to Platyceps bholanathi (Ganesh et al. 2013; Smart et al. 2014); however, based on the following three major comparison characters with available literature clearly indicates that the Sigur specimen (P. bholanathi) differs from P. gracilis in: (i) Sigur specimen has 19:19:13 dorsal scale rows vs. 21:21:15 in P. gracilis (Ganesh et al. 2013); (ii) Sigur specimen has a nuchal blotch that has a round posterior margin (Image 1a,b) vs. P. gracilis, the blotch usually appears to have an inverse V at its posterior margin (Smart et al. 2014); (iii) Sigur specimen has a dark brown parietal bar that is interrupted laterally by light coloration at the posttemporal area adjacent to the parietal scales (Image 1a,b) vs. In P. gracilis, dark parietal bar widens towards the last two supralabials, typically forming an inverted "Y" (Smart et al. 2014).

In the literature, observations of juveniles were reported in the month of July during the southwest monsoon (TL 295mm) (Guptha et al. 2012) and November in the northeast monsoon (TL 320mm) (Ganesh et al. 2013). But in the present case, we observed this juvenile specimen in the month of September (northeast monsoon). Our individual was smaller in size (TL 246mm) compared to earlier reports. This finding indicates that this season is possibly the breeding season of *Platyceps bholanathi* in this region and more observations are required for better understanding of the breeding season of this endemic snake species.

The habitat type was determined by referring to Champion & Seth (1968). The specimen was found in a rocky habitat with dry thorn forests (Image 3), which is similar to earlier reported habitat of deciduous vegetation (Sharma 1976, 2003), deciduous forest patch (Guptha et al. 2012), rocky boulders or hillocks intermixed with sparsely scattered scrublands (Ganesh et al. 2013), semi desert scrub forest containing evergreen thorny vegetation (Sharma et al. 2013), scattered scrub vegetation and rocky outcrops (Seetharamaraju & Srinivasulu 2013) and mixture of dry deciduous scrub forest and thorn scrub (Smart et al. 2014). This







Image 1. *Platyceps bholanathi* sighted in Sigur region of the Nilgiris landscape, Tamil Nadu

a - Full body dorsal view of *P. bholanathi*; b - Round posterior markings of head on top; c - Lateral view of head (Right side) (© Palanisamy Santhoshkumar & Arockianathan Samson)

result clearly indicates the role of dry and rocky hills in supporting such species. Protection of this habitat in future conservation plans will be useful to conserve such a poorly known endemic species.

According to previous studies, the distribution of *Platyceps bholanathi* encompasses the discontinuous Eastern Ghats mountains in southern India, including the states of Andhra Pradesh and Telangana (Sharma 1976; Guptha et al. 2012; Ganesh et al. 2013; Seetharamaraju & Srinivasulu 2013), Karnataka (Sharma et al. 2013) and Tamil Nadu (Ganesh et al. 2013; Smart et al. 2014)

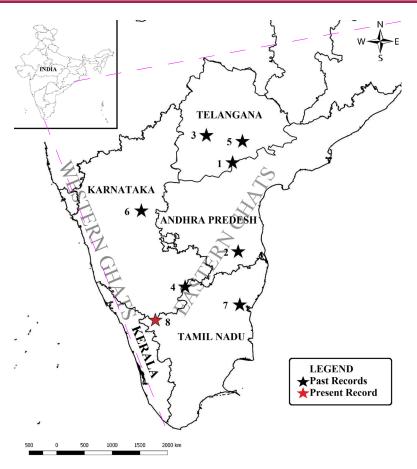


Image 2. Distribution map of *Platyceps bholanathi* (source: Google earth).

Type Locality 1. Nagarjuna Hills, Guntur District, Andhra Pradesh (Sharma 1976); 2. Kapilatheertham, Seshachalam Hills, Andhra Pradesh (Guptha et al. 2012); 3. Hyderabad, Nalgonda District (Seetharamaraju & Srinivasulu 2013); 4. Thally, Krishnagiri District, Tamil Nadu (Ganesh et al. 2013); 5. Devarakonda, Nalgonda District, Andhra Pradesh (Ganesh et al. 2013); 6. Bellary Gudda, Bellary District, Karnataka (Sharma et al. 2013); 7. Gingee Hills, Villupuram District, Tamil Nadu (Smart et al. 2014); 8. Sigur, Nilgiri District, Tamil Nadu (current work).

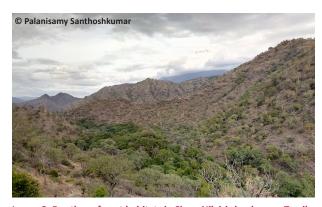


Image 3. Dry thorn forest habitats in Sigur, Nilgiris landscape, Tamil Nadu.

(Image 2). Our new record significantly extends the range from all earlier records (nearest previous record 160km northeast) (Image 2). Moreover, past records of the distribution of this snake were only in the Eastern

Ghats regions of southern India. The Sigur Plateau is the connective junction of the Western Ghats and the Eastern Ghats region (Samson et al. 2016); therefore this species extends its distribution to the Western Ghats landscape also. Our record is important because it not only significantly extends the range from earlier records (Image 2) but it is also the first report of this species from the Nilgiri Landscape. We however suggest further studies on more sightings / collections of this taxon from the dry forests of Nilgiris landscape to conclusively prove its occurrence in Mudumalai. Elsewhere in the Western Ghats, cases of uncertain snake identification-based range extensions have been reported with caution (Harikrishnan et al. 2007), a stance that we too follow here. We believe that our present note will encourage further studies on this group and throw open prospects to resolve such issues.

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