



## Research paper

### Occurrence of common trinket snake *Coelognathus helena helena* (Daudin, 1803) (Colubridae: Colubrinae) in residential area, Dehradun, Uttarakhand, India

Akhlaq Husain<sup>1</sup>, Ashwani Kumar Dubey<sup>2</sup> and Gurprit Singh<sup>1</sup>

<sup>1</sup>Zoological Survey of India, 41, Hari Vihar, Vijay Park, Chakrata Road, Dehradun, Uttarakhand, India

<sup>2</sup>Department of Zoology, Shri Krishna University, Chhatarpur, Madhya Pradesh, India

<sup>1</sup>Wildlife Institute of India, Chandrabani, Dehradun, Uttarakhand, India

Corresponding author Email: [drakhlaqhusain@gmail.com](mailto:drakhlaqhusain@gmail.com)

Received: 21/11/2019

Revised: 28/11/2019

Accepted: 25/12/2019

**Abstract:** The present communication deals with the occurrence of Common Trinket Snake *Coelognathus helena helena* (Daudin, 1803) belonging to family Colubridae in Sirmor residential area of western Dehra Dun city and its systematic account, distribution, habitat, food & feeding, breeding, behaviour and conservation status. It is beautifully coloured non-venomous constrictor snake, brownish with black cross bars lodged with white ocelli on anterior part, two longitudinal blackish stripes on sides of posterior part, two parallel black stripes on neck, a black streak each below and behind eye and whitish below.

**Keywords:** Common Trinket snake in Dehra Dun city.

## INTRODUCTION

The general reptilian fauna of Dehra Dun and around, has attracted the attention of various workers during the past (Bhatnagar, 1972; Husain & Ray, 1995; Husain & Tilak, 1995; Husain, 2003;

Bahuguna, 2010, 2014; Dhalve, 2013). Recently, the authors (AH; GS) came across a snake each at Ballupur area, Chakrata Road and another at Sirmour Marg residential area (Rajender Nagar-Krishna Nagar) in western part of Dehra Dun city which on study were found to belong to *Coelognathus helena Helena* (Daudin, 1803), the Common Trinket Snake, belonging to family Colubridae. It is a beautifully coloured non-venomous constrictor snake and was not recorded earlier from these areas in Dehra Dun city and hence this find, being the first record from these areas, is interesting.

Its systematic account, distribution, habitat, food & feeding, breeding, behaviour, conservation status, etymology and other subspecies has been provided here for the benefit of the workers in this field and general awareness.

## DEHRADUN CITY

Dehra Dun city (Lat. 30°31'65" N, Long. 78°03'22"E) is located in Doon Valley on Himalayan foothills, nestled between

rivers Ganga on the east, Yamuna on west and Siwaliks on south. The city of Dehra Dun is famous for its greenery, picturesque landscape and slightly milder climate with good rainfall. It also harbours good wild animals (mammals, birds, reptiles, amphibians, spiders, butterflies, moths, dragonflies etc.) in some pockets, besides rich floral cover.

### **COELOGANTHUS HELENA HELENA (DAUDIN, 1803)**

Common Trinket Snake

*Coluber helena* Daudin, 1803. *Hist. Nat. Rept.*, 6: 227 (type-locality: Vizagapatam= Vishakapatnam, Andhra Pradesh, SE India); Boulenger, 1894. *Catalogue of Snakes in the British Museum (Natural History)*, 2: 36; Wall, 1921. *Ophidia Taprobanica of the snakes of Ceylon*: 197. *Herpetodryas helena*, Schlegel, 1837. *Essai sur la physionomie des serpens*, Part-1: 192. M. H. Schonekat, Libraire-Editeur, Amsterdam.  
*Cyanophis bistrigatus* Gray, 1849. *Ann. Mag. Nat. Hist.* (2) 4: 246.  
*Herpetodryas malabaricus* Jerdon, 1854: 530 (vide Boulenger, 1894. *Catalogue of snakes in the British Museum (Natural History)*, Vol. 2: 382 pp) (nec *Cyanophis malabaricus* Beddome, 1862).  
*Plagiodon helena*, Dumeril & Bibron, 1854.  
*Cyanophis helena*, Gunther, 1858. : 95; 1859. *Ann. Mag. Nat. Hist.* (3) 3: 231; Anderson, 1871. *Proc. Zool. Soc. London*, 1871: 174.  
*Elaphe helena*, Smith, 1943. *Faun. Brit. India*, Reptilia and Amphibia, 3 (Serpentes): 149; Das, 1996: 56; Schulz, 1996. *Bushmaster, Berg (CH)*:1-460.  
*Elaphe helena*, Smith, 1943. *Faun. Brit. India*, 3: 149; Adadhani, 2005. *Snakes of India*. Reptilia (GB) (41): 32-37.  
*Coelognathus helena*, Helfenberger, 2001. *Russ. J. Herpetol.* (Suppl): 1-56; Utiger *et al.*, 2002. *Russ. J. Herpetol.* (Suppl): 9 (2): 105-124; Wallach *et al.*, 2014. *Snakes of*

*the World: A Catalogue of Living and Extinct Species*: 172.

*Coelognathus helenae*, Burbrink & Lawson, 2007. *Molecular Phylogenetics and Evolution*, 43 (1): 173-189.

*Coelognathus helenus*, Janzen *et al.*, 2007. *Draco*, 7 (30): 56-64.

*Coelognathus helena helena*, Thakur, 2011. *Reptile Rep* (11): 2-4; Ganesh *et al.*, 2018. *Asian Journal of Conservation Biology*, 7 (1): 28-45.

*Coelognathus helena helenium*, Bhattarai *et al.*, 2018 (in error)

**Local Names:** *Alankrat Samp* (Hindi), *Taskar* (Marathi).

**Classification:** Class: Reptilia Laurenti, 1768, Order: Squamata Oppel, 1811, Suborder: Serpentes Linnaeus, 1758, Family: Colubridae Oppel, 1811, Subfamily: Colubrinae Oppel, 1811, Genus: *Coelognathus* Fitzinger, 1843.

#### **Sightings:**

1 example, Ballupur area, Chakrata Road, Dehra Dun, 10.10.2018, by Dr. Akhlaq Husain (1<sup>st</sup> author).

1 example, a residence on Sirmour Marg (Rajender Nagar-Kishan Nagar area), Kaulagarh road, Dehra Dun, 14.10.2018, by Gurprit Singh (3<sup>rd</sup> author).

**Diagnostic Features:** Narrow-headed and slender-bodied snake.

Colouration: Adults dark brownish (juveniles paler) above with blackish cross bars lodged with 4-6 white ocelli and two longitudinal black stripes that continue onto tail; two black stripes on neck; a black vertical streak below eye and an oblique one behind; belly pearl white or yellowish, with or without a few small black spots and sometimes with more or less distinct festooned or string-like markings on sides.

Scalation: Scales glossy/smooth; scales on posterior part of body and tail, sometimes keeled.

Dorsals 23-27 (rarely 29) rows at mid-body (smooth, feebly keeled on posterior part of the body and on tail), ventrals

broad, 210-265, angulate laterally; anal entire (rarely divided); sub-caudals 73-100 paired; rostral little broader than long; suture between the inter-nasals is much shorter than that between the pre-frontals; frontal is as long as its distance from the end of the snout, but shorter than the parietals; loreal somewhat longer; supra-labials 8-9, rarely 10-11 (5-6, 6-7 or rarely 4-5, 4-6 or 5-7 touching eye; last supra-labial below eye touching temporal); 5 or 6 lower labials in contact with anterior chin shields, anterior chin shields as long as or little longer than posterior chin shields; preocular 1 large; postoculars 2 (rarely 1); temporals 2+2 or 2+3 (rarely 2+4).

Length: 1.6 m, males shorter than females (Husain & Tilak, 1995); 70 cm -1.68 m (Whitaker & Captain, 2008); 1.68 cm (Bahuguna, 2010); 1.4 m with 25 cm tail (Boulenger, 1890).

**Altitudinal Range:** Altitude range 500-2000 m (Husain & Tilak, 1995); 900 m (Reptile Database).

**Distribution:**

Dehra Dun: Ballupur area, Chakrata Road and Sirmour Marg (Rajender Nagar-Krishna Nagar area), Kaulagarh Road, Western Dehra Dun City (present new records).

Elsewhere in Dehra Dun District: Dehra Dun (locality not mentioned, Husain & Ray, 1995); Sabhawala village in Vikasnagar Block- 26 km west of Dehra Dun (Bahuguna, 2010); Forest Research Institute Campus, 8.4 km from ISBT, Dehra Dun (Dhalve, 2013).

Rest of Uttarakhand: Haridwar, Pauri and Tehri districts in Garhwal Division and Almora and Nainital districts in Kumaon Division; Rajaji Tiger Reserve; Corbett Tiger Reserve.

Rest of India: Himachal Pradesh, Jammu & Kashmir, Manipur, Nagaland and Uttarakhand.

Elsewhere: Bangladesh, Nepal and Sri Lanka.

**Habitat:** Forest areas, trees, bushes, wood piles, termite mounds, rock, crevices and around human habitation.

**Food & Feeding:** Adults mainly feed on small rodents (rats, mice, squirrels) but also on other reptiles (lizards, snakes) and amphibians (frogs and toads); juveniles subsist on insects and small lizards.

**Breeding:** Breeds mostly during summer months when female lays 6-8 (Husain & Tilak, 1995) or 6-12 (Whitaker & Captain, 2008) elongated eggs.

**Behaviour:** Non-venomous, diurnal and nocturnal both. If molested, it coils, opens mouth and strikes repeatedly. Its bites may be injurious due to inwardly pointed teeth. The males are generally more aggressive than the females.

**Conservation Status:** Indian Wildlife (Protection) Act, 1972- Schedule III.

**Etymology:** The specific name '*helena*' is considered after Helen of Troy, said to be the most beautiful woman in the world (Beolens et al., 2011).

**Remarks:** Other subspecies *Coelognathus helena monticollaris* (Schulz, 1992) (type-locality: Mountain areas between 600-1950 m, Mangalore, Karnataka, SW India), elsewhere from Goa, Gujarat, Kerala, Maharashtra and Tamil Nadu and *C. h. nigriangularis* Mohapatra et al., 2016 (type-locality: A limestone cave near Gupteswar Temple, Koraput district, Odisha, India), elsewhere from Andhra Pradesh, Chhattisgarh, Madhya Pradesh and Maharashtra).

**ACKNOWLEDGEMENT**

Authors feel thankful to their respective organisational authorities for encouragement.

**REFERENCES**

Bahuguna A. (2010) Reptilia. In: Fauna of Uttarakhand. *State Fauna Series*, 18 (Part-1), 445-503. Zoological Survey of India Publication.

Bahuguna A. (2014) Reptilia. In: Fauna of Jhilmil Jheel Conservation Reserve. *Conservation Area Series*, 50, 77-81 (65-83). ZSI Publication.

Beolens B., Watkins M. and Grayson M., (2011) *The Eponym Dictionary of Reptiles*. Baltimore: Johns Hopkins University Press, Baltimore: 120 (*Elaphe helena*) (xiii + 296 pp).

Bhatnagar R. K. (1972) Reptile fauna of Dehra Dun district (Uttar Pradesh). *Cheetal*, 15 (4), 15-23.

Boulenger G. A. (1890) *The Fauna of British India, Including Ceylon and Burma. Reptilia and Batrachia*: 331-332 (*Coluber helena*), xviii + 541 pp. Taylor and Francis, London.

Chopra R. N. (1995) Lizards (Reptilia: Sauria). In: Fauna of Rajaji National Park. *Fauna of Conservation Areas*, 5, 87-90. ZSI Publication.

Dhavale O. (2013) Herpetofauna Inventory of the Forest Research Institute, New forest, Dehradun Uttarakhand, India. *Indian Forester*, 139 (10), 956-958, figs. A-F.

Husain A. (2003) Reptilia. In: Fauna of Asan Wetland. *Wetland Ecosystem Series*, 5, 29-30. ZSI Publication.

Husain A. and Ray, P. (1995) Reptilia. In: Fauna of Western Himalaya, Part 1, Uttar Pradesh. *Himalayan Ecosystem Series*: 164 (159-167). ZSI Publication.

Husain A. and Tilak, R. (1995) Snakes (Reptilia: Serpentes). In: Fauna of Rajaji National Park. *Fauna of Conservation Areas*, 5, 98-99 (91-113). ZSI Publication.

Whitaker R. and Captain A. (2008) *Snakes of India: The Field Guide*: 204, 4 figs. Draco Books.



**Figure 1. *Coelognathus helena helena* (Daudin, 1803), the Common Trinket Snake (anterior region).**



**Figure 2. *Coelognathus helena helena* (Daudin, 1803), the Common Trinket Snake (in natural habitat).**



**Figure 3. *Coelognathus helena helena* (Daudin, 1803), the Common Trinket Snake (in natural habitat).**