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Caption: Malabar Slender Loris *Loris lydekkerianus malabaricus* © Dileep Anthikkad.



First record of the Eastern Cat Snake *Boiga gocool* (Gray, 1835) (Squamata: Colubridae) from Tripura, India

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Northeastern India has a rich herpetofaunal diversity, with 102 species of snakes, represented by six families comprising 42 genera (Ahmed et al. 2009; Aengals et al. 2018) with some new snake genera and species recently discovered in, e.g., *Blythia hmuifang*, *Pareas modestus*, *Gongylosoma scriptum*, *Smithophis atemporalis*, *Hebius lacrima*, *Trimeresurus salazar*, *Trachischium aptei*, *Trimeresurus arunachalensis*, *Smithophis arunachalensis*, *Hebius pealii* (Vogel et al. 2017, 2020; Lalremsanga 2018; Bhosale et al. 2019; Captain 2019; Giri et al. 2019; Purkayastha & David 2019; Das et al. 2020; Mirza et al. 2020). Tripura is a landlocked, small, hilly state surrounded by Assam & Mizoram of India and Bangladesh on three sides (Image 1). So far, 21 species of snakes under 19 genera and six families have been reported from the state (Majumder 2012; Purkayastha et al. 2020). Earlier, only one species of the genus *Boiga*, *B. ochracea* was recorded from the state (Majumder et al. 2012; Purkayastha et al. 2020).

Boiga gocool (Gray, 1835) is a nocturnal, arboreal, mildly venomous snake that occurs in tropical semi-evergreen and degraded forests, tall grasslands, and tea gardens at lower elevations of 50–1,000 m (Das et al.

2010; Wallach et al. 2014). It feeds mainly on lizards but sometimes also on small birds and mammals. *Boiga gocool* is poorly known, has a narrow distribution, and is thus rarely reported in regional inventory reports with only a few preserved specimens in scientific collections (Das et al. 2010). This is a southern Asian species having definite distribution records from northern and eastern India, Bangladesh, and Bhutan (Ahsan et al. 2015; Das et al. 2016). Of late, a few records of this species were reported from many other places. In India, *B. gocool* is reported from Assam- Manas National Park, Guwahati (Purkayastha et al. 2011), Kaziranga National Park (Das et al. 2007), Arunachal Pradesh, Manipur, Meghalaya, Nagaland (Das et al. 2007; Bhupathy et al. 2013), Sikkim (Chettri et al. 2011), West Bengal (Das et al. 2007), northern Odisha (Mohalik et al. 2020), and Uttar Pradesh (Choure et al. 2020). It has been listed as Schedule IV species under the Indian Wildlife (Protection) Act, 1972 (Ahmed et al. 2009) whereas under IUCN Red List category, it stands as 'Not Evaluated'.

In this note, we report our sighting of *B. gocool* in Tripura state. The current survey site is situated within the Khowai district of Tripura (24.064N & 91.596E;

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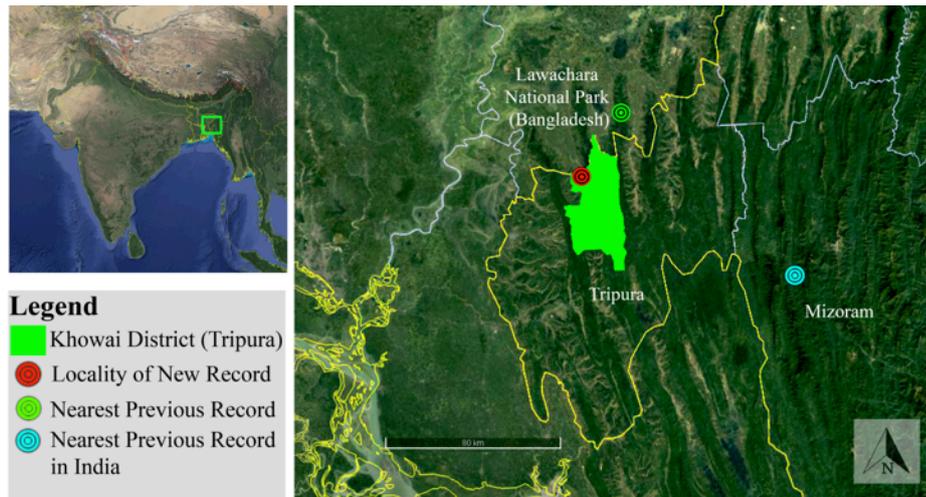


Image 1. Showing new locality record of *B. gocoool* in India and its nearest previous records. © Google maps.

129m), the forest patch of the survey area was primarily mixed moist deciduous type (Choudhary et al. 2019) having tree species like *Tectona grandis*, *Shorea robusta*, *Dalbergia sissoo*, *Bombax ceiba*, *Phayllanthus emblica*, and *Mangifera indica* spread over an undulating terrain with moderate canopy cover.

The observation made by us was based on opportunistic sightings in the field. On 12 July 2020, during a field visit to Khowai, we noticed a snake passing by near the Khowai river bridge at evening 1539 h. The snake was restrained using a snake hook with utmost safety for making morphological observations and measurements. Photographs were taken using DSLR camera. The length of the individual from snout to vent (SVL) was measured by measuring tape. Gender was confirmed by observing everted hemipenis of the individual and subsequently, the snake was released where it was initially observed.

The recorded individual showed morphological characters as follows: triangular head, distinctly broader than the neck; dorso-laterally compressed body consisting of yellowish-brown dorsal colour with paired dorsolateral series of 45 black vertical Y-shaped markings on the either side which was separated from one another only by the light yellowish vertebral scale row; black markings edged with white; anterior-most six Y-shaped markings fused to form small black lines; markings broken down to small black spots posteriorly; tail with a few small irregular brownish spots, but without markings towards the tip; a large dark brownish arrow-shaped mark with darker edges begins at the posterior part of the inter-nasals, covering the top of the head; an arrow shaped mark followed by black, round spot on nape (Image 2a); a black postocular stripe

extending from jaw angle to neck, ending at lower 3rd dorsal scale row; supra-labials and infra-labials white, with small black markings on sutures; pupil black with yellow iris; ventral yellowish-white with small black spots at the lateral edges (Image 2b). The gender of the individual was confirmed as male, by observing everted hemipenis. The length of the individual from snout to vent (SVL) measured 652 mm and tail length (TL) was 165 mm. Comparing the above data with the identification keys and descriptions specified in standard literature (Whitaker & Captain 2008; Ahmed et al. 2009; Das et al. 2010; Mohalik et al. 2020) the snake was positively identified as *Boiga gocoool*.

Comparing the morphological characteristics between the known *Boiga* species in northeastern India, it is evident that the dorsolateral series of 45–50 dark brownish and whitish edged Y or T shaped marks, divided by distinct light vertebral scale row and a narrow black diamond or circular shaped nuchal dot, that never reaches to the sides of the body were major distinguishing characteristics of *B. gocoool* (Table 1). In the past, much confusion existed regarding distinguishing between *B. gocoool* and its closely related and one of the most widely distributed yet poorly studied congener in Indian subcontinent, *B. t. trigonata* (Das et al. 2010). Regardless, *B. gocoool* has a lot in common with *B. t. trigonata* in terms of habits, body proportions, and skin colour, but *gocoool* can be differentiated from *trigonata* by strongly enlarged vertebral scales and an entirely distinct head and dorsal body colour pattern, and dorsolateral series of 45–50 dark brownish and whitish edged Y-shaped marks which are prominently divided by a light vertebral scale row; whereas *B. trigonata* has yellow to whitish, dark edged, angular markings,

Table 1. Morphological comparisons of body (dorsal and ventral), head and tail morphology between *B. gocool* and other congeneric species from the Indo-Burma hotspot.

Species	Dorsal body	Ventral body	Head and tail	Distribution in Indo-Burma	References
<i>gocool</i>	Dorsal colour yellowish-brown; dorsolateral series of 45–50 dark brownish and whitish edged Y or T shaped marks.	Light yellowish- brown ventral colour with small dark brown margins or pattern less.	Head noticeably larger than neck; wide eye with vertical pupil, long tail.	Arunachal Pradesh, Assam, Nagaland, Manipur, Mizoram, Bhutan, and Bangladesh.	Das et al. 2010; Das et al. 2016; Lalremsanga & Lalronunga 2017; Whitaker & Captain 2008
<i>cyanea</i>	Dorsal colour uniform green or greyish- or bluish-green; black interscale colour, same colour on the head and few dorsal scales.	Greenish- or yellowish-white belly; subcaudal scales are paired in a zig-zag pattern.	Head triangular with rounded tip, distinctly wider than body. Top of the head is normally same colour as the dorsal or has a brownish hue. Like other arboreal snakes, long thin tail with pointed tip.	Arunachal Pradesh, Assam, Meghalaya, Mizoram, Sikkim, Bangladesh, and Bhutan.	Das et al. 2010; Lalremsanga & Lalronunga 2017; Whitaker & Captain 2008
<i>multifasciata</i>	Dorsal pattern made up of narrow black irregular transverse bands separated by reddish-brown vertebral scale lines.	Ventral surface greyish-to reddish-brown.	Head wider than neck; large eye has vertical pupil. Long tail. Two black lines run across the top of the head; another runs down the neck, a black stripe runs behind the eye.	Arunachal Pradesh and Sikkim.	Tshewang, & Letro 2018; Das et al. 2010; Whitaker & Captain 2008
<i>multomaculata</i>	Dorsal colour is greyish-brown with dark brown markings, black edges, and brown; double series of conspicuous spots present.	Ventral colour is greyish-brown or impure white, marked with brown spots.	Head noticeably larger than neck; eye with vertical pupil; long tail.	Arunachal Pradesh, Assam, Nagaland, and Bangladesh.	Das et al. 2010; Whitaker & Captain 2008
<i>ochracea</i>	Dorsal body coral red, reddish- or yellowish-brown.	Scales on the anterior belly are yellow, while those on the mid-body and tail tip are light brown.	Head larger than neck; wide eye with vertical pupil; tail long and thin.	Sikkim, Assam, Tripura, Mizoram, Bhutan, and Bangladesh.	Das et al. 2010; Lalremsanga & Lalronunga 2017; Majumder et al. 2012; Whitaker & Captain 2008
<i>quincunciata</i>	Fine dark brown spots and a dark brown vertebral series make up the dorsal pattern.	Outer edges of the ventral surface are yellowish-white with white or brown spots	Three longitudinal stripes on the nape; head and neck distinct; body slender and elongated; eyes wide with vertical pupil.	Arunachal Pradesh, Assam, Mizoram, and Bhutan.	Chaida et al. 2020; Das et al. 2010; Lalremsanga & Lalronunga 2017
<i>siamensis</i>	Dorsal body yellowish-brown; many large black or dark brown oblique bands or V-shaped markings.	Ventral surface yellowish- or greyish-brown, with small dark brown spots present sometimes.	Head wider than neck; large eye has vertical pupil; tail long.	Arunachal Pradesh, Assam, Mizoram, Meghalaya, Sikkim, Nagaland, and Bangladesh.	Das et al. 2010; Lalremsanga & Lalronunga 2017; Whitaker & Captain 2008
<i>trigonata</i>	Dorsal colour brown or tan; darker zigzag markings that are possibly connected.	Underside of each belly scale white or tan, small black spots on the outer edges.	Head wider than neck; Large eye with vertical pupil; tail long; distinct pale Y-shaped mark appears on top of the head, which often black-edged.	Sikkim.	Das et al. 2010

with irregular branching across the vertebral scale row, often connected in a zigzag manner. The sole congener of *B. gocool* recorded from the state was *B. ochracea* (Majumder et al. 2012; Purkayastha et al. 2020) which can be readily distinguished without confusion from *B. gocool* by its patternless or indistinct dark transverse dorsolateral bands or coral red, reddish- or yellowish-brown dorsal body (Table 1).

With the centre of radiation of *B. gocool* lying in the

plains and low hills of north and south of the Brahmaputra valley, Assam, (Das et al. 2010), recent records of *B. gocool* from Odisha (Mohalik et al. 2020) and Uttar Pradesh (Choure et al. 2020), extend its known distribution range further to the south and west, respectively. The current record of *B. gocool* from Tripura eventually fills the void in its northeastern Indian distribution. The present survey site is about 40 km north-east from Agartala, the state capital and about 35 km south to the



Image 2. *Boiga gocoool* with identification marks: a—Black Y-shaped vertical markings with white edges on either side separated from one another only by pale yellowish vertebral scale row; anterior most Y-shaped markings fused to form small black lines; dark brownish arrow-shaped mark covering the top of the head followed by a black, somewhat round-shaped spot on the nape | b—Black postocular stripe; white supralabials and infralabials with small black markings on their sutures; black pupil with yellow coloured iris; yellowish-white ventral with small black spots at the outer lateral edges. (© Sumit Nath).

nearest previously recorded locality for the species from Lawachara National Park, Sylhet District, Bangladesh (Rahman et al. 2013). The nearest occurrence of *B. gocoool* from the present survey site, within northeastern India, is that of Mizoram (Lalremsanga & Lalronunga 2017; Choure et al. 2020). Despite being situated in the Indo-Burma biodiversity hotspot, Tripura is rather poorly studied from the herpetofauna assessment viewpoint. Most of the herpetofaunal studies were limited to a few taxa and locations of the state (Majumder et al. 2012; Purkayastha et al. 2020). Before the current record, only one species of the genus *Boiga* (*B. ochracea*) was reported from Tripura, whereas eight representatives of the genus have been reported and found to be occurring in northeastern India, partly sympatric with *B. gocoool* (Table 1). Hence, the first record of *B. gocoool* from this state will contribute towards updating the checklist of the herpetofauna of Tripura. Future studies on the genus *Boiga* and other snake species sympatric with *B. gocoool* throughout the state is much needed.

References

- Aengals, R., V.S. Kumar, M.J. Palot & S.R. Ganesh (2018). A checklist of reptiles of India. Zoological Survey of India. Date of Download : 27/12/2020. <https://zsi.gov.in/checklist/Reptiles>
- Ahmed, M.F., A. Das & S.K. Dutta (2009). *Amphibians and Reptiles of Northeast India: A Photographic Guide*. Aaranyak, Guwahati, xiv+170pp.
- Ahsan, M.F., I.K.A. Haidar & M.M. Rahman (2015). Status and diversity of snakes (Reptilia: Squamata: Serpentes) at the Chittagong University Campus in Chittagong, Bangladesh. *Journal of Threatened Taxa* 7(14): 8159–8166. <https://doi.org/10.11609/jott.2431.7.14.8159-8166>
- Bhosale, H.S., G.G. Gowande & Z.A. Mirza (2019). A new species of fossorial natricid snakes of the genus *Trachischium* Günther, 1858 (Serpentes: Natricidae) from the Himalayas of northeastern India. *Comptes Rendus - Biologies* 342(9–10): 323–329. <https://doi.org/10.1016/j.crvi.2019.10.003>
- Bhupathy, S., S.R. Kumar, J. Paramanandham, P.T. Nathan & S.P. Kumar (2013). Conservation of reptiles in Nagaland, India. Bioresources and Traditional Knowledge of Northeast India. Mizo Post Graduate Science Society (MIPOGRASS), Sikulpuikawn, Aizawl, 181–186pp.
- Captain, A., V. Deepak, R. Pandit, B. Bhatt & R. Athreya (2019). A new species of pitviper (Serpentes: Viperidae: *Trimeresurus* Lacepède, 1804) from west Kameng District, Arunachal Pradesh, India. *Russian Journal of Herpetology* 26(2): 111–122. <https://doi.org/10.30906/1026-2296-2019-26-2-111-122>
- Chaida, L., A. Das, U. Tshering & D. Wangdi (2020). Assamese Cat Snake *Boiga quincunciata* (Wall, 1908) (Reptilia: Squamata: Colubridae)-new country record for Bhutan. *Journal of Threatened Taxa* 12(5): 15664–15667. <https://doi.org/10.11609/JoTT.5597.12.5.15664-15667>
- Choudhary, B. K., Majumdar, K., & Datta, B. K. (2019). Potential Biomass Pools and Edaphic Properties of Plantation Forest in Tripura, India. *International Journal of Ecology and Environmental Sciences* 45(4): 369–381.
- Choure, G., P. Kashyap, S. Adhikari & H.T. Lalremsanga (2020). First Record of the Arrowback Tree Snake, *Boiga gocoool* (Gray 1835) (Reptilia: Squamata: Colubridae), from Uttar Pradesh, India. *Reptiles & Amphibians* 27(3): 436–437.
- Das, A., V. Deepak, A. Captain, E.O.Z. Wade & D.J. Gower (2020). Description of a new species of *Smithophis* Giri et al. 2019 (Serpentes: Colubridae: Natricinae) from Arunachal Pradesh, India. *Zootaxa* 4860(2): 267–283. <https://doi.org/10.11646/zootaxa.4860.2.8>
- Das, A., D.J. Gower & V. Deepak (2020). Lost and found: Rediscovery and systematics of the Northeast Indian snake *Hebius pealii* (Slater, 1891). *Vertebrate Zoology* 70(3): 305–318. <https://doi.org/10.26049/VZ70-3-2020-04>
- Das, A., P.P. Mohapatra, J. Purkayastha, S. Sengupta, S.K. Dutta, M.F. Ahmed & F. Tillack (2010). A Contribution to *Boiga gokoool* (Gray, 1835) (Reptilia: Squamata: Colubridae). *Russian Journal of Herpetology* 17(3): 161–178.
- Das, A., P. Sharma, H. Surendran, A. Nath, S. Ghosh, D. Dutta, J. Mondal & Y. Wangdi (2016). Additions to the herpetofauna of Royal Manas National Park, Bhutan, with six new country records. *Herpetology Notes* 9(November): 261–278.
- Giri, V.B., D.J. Gower, A. Das, H.T. Lalremsanga, S. Lalronunga, A. Captain & V. Deepak (2019). A new genus and species of natricine snake from northeast India. *Zootaxa* 4603(2): 241–264. <https://doi.org/10.11646/zootaxa.4603.2.2>
- Lalremsanga, H.T. & S. Lalronunga (2017). *Mizoram rul Chanchin. Biodiversity and Nature Conservation Network (BIOCON) B-27, Mission Veng, Aizawal, Mizoram, 129pp.*
- Lalremsanga, H.T. (2018). First Record of the Species *Gongylosoma scriptum* (Theobald, 1868) (Squamata: Colubridae) From India. *Hamadryad* 38(1): 12–19.
- Majumder, J., P.P. Bhattachajee, K. Majumdar, C. Debnath & B.K. Agarwala (2012). Documentation of herpetofaunal species richness in Tripura, northeast India. *NeBio* 3(1): 60–70.
- Mirza, Z.A., H.S. Bhosale, P.U. Phansalkar, M. Sawant, G.G. Gowande & H. Patel (2020). A new species of green pit vipers of the genus *Trimeresurus* Lacepede, 1804 (Reptilia, Serpentes, Viperidae) from western Arunachal Pradesh, India. *Zoosystematics and Evolution* 96(1): 123–138. <https://doi.org/10.3897/ZSE.96.48431>
- Mohalik, R.K., P.P. Mohapatra, P. Mardaraj, S. Sahoo, A.K. Bhilala, N.B. Kar & S.K. Dutta (2020). First record of *Boiga gokoool* (Gray, 1835)(Reptilia: Squamata: Colubridae) from Northern Odisha with notes on morphology and natural history. *Records of the Zoological Survey of India-A Journal of Indian Zoology* 120(2): 189–192.
- Purkayastha, J. & P. David (2019). A new species of the snake genus *hebius thompson* from northeast India (Squamata: Natricidae). *Zootaxa* 4555(1): 79–90. <https://doi.org/10.11646/zootaxa.4555.1.6>
- Purkayastha, J., N. Khan & S. Roychoudhury (2020). *A preliminary checklist of herpetofauna occurring in Rowa Wildlife Sanctuary, Tripura, India. Environmental Science and Engineering*. Springer International Publishing, 225–233pp.
- Rahman, S.C., S.M.A. Rashid, K. Das & L. Luiselli (2013). Composition and structure of a snake assemblage in an altered tropical forest-plantation mosaic in Bangladesh 34: 41–50. <https://doi.org/10.1163/15685381-00002867>
- Sheht, C. & A. Zambre (2012). A new Record of *Boiga gokoool* (Gray, 1835) (Reptilia: Colubridae) from western Arunachal Pradesh, India. *Sauria* 34(3): 51–54.
- Vogel, G., H.T. Lalremsanga & A. Vanlalhrima (2017). A second species of the genus *Blythia* Theobald, 1868 (Squamata: Colubridae) from Mizoram. *Zootaxa* 4276(4): 569–581. <https://doi.org/10.11646/zootaxa.4276.4.8>
- Vogel, G., T. van Nguyen, H.T. Lalremsanga, L. Biakzuala, V. Hrima & N.A. Poyarkov (2020). Taxonomic reassessment of the *Pareas margaritophorusmacularius* species complex (Squamata, Pareidae). *Vertebrate Zoology* 70(4): 547–569. <https://doi.org/10.26049/VZ70-4-2020-02>
- Wallach, V., K.L. Williams & J. Boundy (2014). *Snakes of the world: a catalogue of living and extinct species*. CRC press, USA, 1237 pp.
- Whitaker, R. & A. Captain (2008). *Snakes of India: The Field Guide*. Draco Books, Chennai, India, 273pp.

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