



# Atypical Bronzebacks, *Dendrelaphis* sp. (Squamata: Colubridae), from Mumbai, Maharashtra, India

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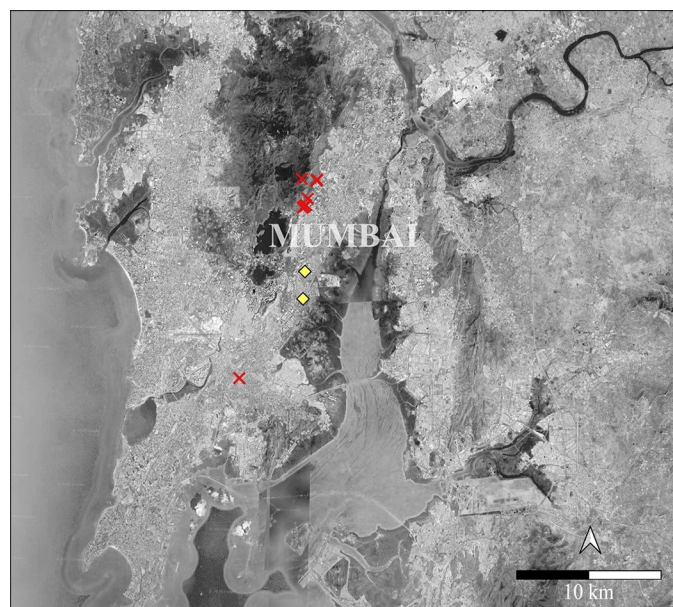
The 54 currently recognized species of Bronzebacks in the genus *Dendrelaphis* (Uetz et al. 2025) range from Pakistan in the west to the northern and eastern coasts of Australia in the south and east and southern China in the north (Ziegler and Vogel 1999). These snakes are primarily arboreal, diurnally active, and feed mainly on lizards and small amphibians (Vogel and van Rooijen 2011b). They have long, slender bodies, smooth scales, and comparatively long prehensile tails (Wallach et al. 2014). The revelation of cryptic diversity within the genus *Dendrelaphis* has occurred over the course of the past decade, during which numerous new species have been identified and described in southern and southeastern Asia (Jiang et al. 2020). The Common Indian Bronzeback (*D. tristis*) is the only species in the genus known to occur in Mumbai, India (Prater 1924; Upadhye et al. 2012; Walmiki et al. 2012; Kasambe 2022; Bhide 2025).

In the period from 4 February 2021 to 2 February 2023, RAWW (Resqink Association for Wildlife Welfare) activists rescued ten adult Bronzebacks from various locations in Mumbai, Maharashtra, India (Fig. 1). Eight were typical Common Indian Bronzebacks (Fig. 2) (hereafter designated SP1) but two rescued from Kanjurmarg (19.12958, 72.93333) on 4 February 2021 (SP2; Fig. 3) and Vikhroli (19.11250, 72.93250) on 29 March 2022 (SP3; Fig. 4) were atypical. Copies of digital photographs were deposited in the University of Kansas Digital Archive (KUDA 13860–6) and the identity of the specimens was verified by Dr. Rishab Pillai.

Prior to reintroducing these snakes into suitable habitat, we recorded morphometric measurements and meristic and color attributes and compared those of the atypical snakes to the typical *D. tristis* that were rescued (Table 1). We also compared the atypical snakes to Giri's Bronzeback

(*Dendrelaphis girii*) and Ashok's Bronzeback (*D. ashoki*), which are endemic to the Western Ghats (Uetz et al. 2025), and Boulenger's Bronzeback (*D. bifrenalis*), which occurs in southern India (Aengals et al. 2022), all of which superficially resemble the rescued snakes (Vogel and van Rooijen 2011a, 2011b; Aengals et al. 2022).

The two atypical snakes were essentially similar to one another (Table 1) but both differed from the typical *D. tristis* in having a bright red tongue (vs. bluish-black in *D. tristis*); a bright coppery bronze dorsal ground color (vs. dull bronze/



**Figure 1.** A map of Mumbai, Maharashtra, India, showing the geographic locations where snakes were rescued. Red X's indicate sites where typical Common Indian Bronzebacks (*Dendrelaphis tristis*) were found; the yellow diamonds mark sites where atypical individuals were encountered.





**Figure 2.** A Common Indian Bronzeback (*Dendrelaphis tristis*) (SP1) collected in Mumbai, Maharashtra, India. Photographs by Mahesh Ithape.



**Figure 3.** A Bronzeback (*Dendrelaphis* sp.) (SP2) collected in Mumbai, Maharashtra, India. Photographs by Mahesh Ithape.



**Figure 4.** A Bronzeback (*Dendrelaphis* sp.) (SP3) collected in Mumbai, Maharashtra, India. Photographs by Vinayak Puranik (left) and Mahesh Ithape (right).

dark brown); dark dorsolateral lines (extensions of the postocular/temporal lines) that extended beyond the neck onto the dorsal scales above the eighth ventral, after which they progressively faded away (vs. not extending onto the body); and dark ventrolateral lines (vs. no dark ventrolateral lines) (Table 1; Figs. 2–4). Other differences included proportionately larger eyes, greater eye-snout distances, a somewhat more pointed snout, 3 postoculars on at least one side (vs. always 2), slightly higher number of ventrals and subcaudals, 3 supralabials in contact with the eyes on both sides (vs. 2),

5 infralabials in contact with the first sublabial on both sides (vs. 4), and an undivided cloacal scale (vs. divided) (Table 1).

When compared to *D. girii* (Vogel and van Rooijen 2011b), our atypical snakes (SP2 and SP3) had dorsolateral lines that extended well beyond the neck (vs. barely extending onto the neck in *D. girii*), dark ventrolateral lines (vs. absent or pale), single loreals (vs. 2), 3 supralabials touching the eyes (vs. 2), 191 and 194 ventrals (vs. 166–173), proportionately shorter tails (0.32 and 0.33 of SVL vs. 0.36–0.37), and an undivided cloacal scale (vs. divided).

**Table 1.** A comparison of Common Indian Bronzebacks (*Dendrelaphis tristis*) (SP1) and two atypical individuals (SP2 & SP3) collected in Mumbai, Maharashtra, India.

Characteristics	SP1 (n = 8)	SP2 (n = 1)	SP3 (n = 1)
Snout–vent length (mm)	830–839	820	818
Head length (mm)	23.2–24.1	20.8	19.8
Horizontal diameter of eye	4.8–5.0	5.55	5.24
Eye–snout distance (mm)	5.10–7.50	7.06	8.89
Shape of snout	Bluntly rounded	More pointed than SP1	More pointed than SP1
Postoculars	2/2	2/3	3/3
Ventrals	182–190	191	194
Subcaudals	121–135	142	143
Dorsal scale rows	15/15/9–11	15/15/11	15/15/11
Supralabials in contact with the eye	2/2	3/3	3/3
Infralabials in contact with 1st sublabial	4/4	5/5	5/5
Cloacal scale	Divided	Undivided	Undivided
Dorsal ground color	Dull bronze/dark brown	Coppery bronze	Coppery bronze
Color of tongue	Bluish black	Bright red	Bright red
Dorsolateral lines	Absent	Present	Present
Ventrolateral lines	Absent	Present & dark	Present & dark

When compared to *D. ashoki* (Vogel and van Rooijen 2011a), our atypical snakes (SP2 and SP3) had dorsolateral lines that extended well beyond the neck (vs. extending only onto the neck in *D. ashoki*), dark ventrolateral lines (vs. pale ventrolateral lines), 191 and 194 ventrals (vs. 164–180), 142 and 143 subcaudals (vs. 151–162), proportionately shorter tails (0.32 and 0.33 of SVL vs. 0.37–0.40), and an undivided cloacal scale (vs. divided).

When compared to *D. bifrenalis* (Aengals et al. 2022), our atypical snakes (SP2 and SP3) had dorsolateral lines that extended well beyond the neck (vs. extending onto the anterior body as a series of broken black dots in three Indian specimens of *D. frenalisis*), single loreals (vs. 2), 191 and 194 ventrals (vs. 167–173), 142 and 143 subcaudals (vs. 145–155), proportionately shorter tails (0.32 and 0.33 of SVL vs. 0.35–0.40), and an undivided cloacal scale (vs. divided).

The two atypical snakes clearly differ in some elements of pattern and scalation from typical *D. tristis*, the only species in the genus known to inhabit Mumbai, as well as three other congeners (*D. girii*, *D. ashoki*, and *D. bifrenalis*) with ranges that could conceivably extend into the area. However, limited by the very small sample size and a lack of access to sophisticated tools and methods, we are unable at this time to definitively identify those snakes.

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