Rec. zool. Surv. India: Vol. 118(1)/ 53-55, 2018 DOI: 10.26515/rzsi/v118/i1/2018/123036 ISSN (Online) : (Applied for) ISSN (Print) : 0375-1511

# Notes on specimens of the Glossy Mangrove Snake (*Gerarda prevostiana*) in the collection of the Zoological Survey of India, Kolkata along with past records from India

#### Probhat Bag\*, Sujoy Raha and Kaushik Deuti

Zoological Survey of India, FPS Building, 27 JL Nehru Road, Kolkata – 700016, West Bengal, India

#### **Abstract**

Based on six specimens of the Glossy Mangrove Snake (*Gerarda prevostiana*) present in the collection of the Zoological Survey of India, Kolkata the species is redescribed with scalation and morphometric measurements and compared with data of six other specimens lodged in other museums.

**Keywords**: Infra-labial, Loreals, Post-ocular, Pre-ocular, Sub-caudals, Supra-labial

Gerarda prevostiana was described as Coluber (Homalopsis) prevostianus Eydoux and Gervais (1837) based on a specimen (currently untraced) from "Manile" (=Manila, 14°37'N, 120°58'E, Luzon, Phillipines). The species is secretive and is known from isolated localities (mainly mangrove swamps of estuaries and tidal rivers) along both the coasts of India (Maharashtra, Kerala, Andhra Pradesh, Odisha, West Bengal and Andamans), coastal Sri Lanka, Bangladesh, Myanmar, Thailand, the Malay Peninsula and Sumatra and also the Phillipines (Tweedie, 1983; Murphy, 2007).

Its dietary habits, unique amongst snakes, include tearing out bite-sized pieces of recently molted soft-shelled crabs (Murphy, 2007). Small fishes and shrimps are also eaten (Das, 2002). They appear to co-occupy mounds of mud lobsters, *Thalssinia anomala* and *T. Gracilis* (Murphy, 2007) that also form part of their diet. However, there are few published records from India. One reason for the absence of records and the apparent rarity of this species within its overall distribution range may be due to its difficult to sample mangrove habitats (Das *et al.*, 2013).

We examined all the specimens of this species present in the collection of the Reptilia Section at Zoological Survey of India, Kolkata and based on that provide here a description of the species along with its morphological details and also mention about past records from India.

Description based on specimens in ZSI, Kolkata (Registration Numbers: 13659, 22653, 23179, 24212, 25351 and 26145).

## **Description**

Body is cylindrical with smooth scales. Head is slightly distinct from neck. Eyes are small situated high on the head with vertical pupil. Frontal scale much broader than supra-oculars. Loreal scale not in contact with the inter-nasal; a single inter-nasal separates the nasals. Seven supra-labials present, the eighth when present is very small, the fourth supra-labial touches the eye. Eight infra-labials present, the ninth when present is very small, the fourth infra-labial contacts the first chin shield, which is much larger than the posterior chin shield. Anal divided. Tail short and terminating in a sharp tip.

Article Received on: 26.05.2016 Accepted on: 13.04.2018

#### PLATE 1



Figure 1. Gerarda prevostiana.

#### **Scalation**

The scalation of the ZSI specimens are given below in left/right order as follows:

Registration Number	ZSI 13659	ZSI 22653	ZSI 23179	ZSI 24212	ZSI 25351	ZSI 26145
Locality	Howrah near Kol- kata	Digha beach, East Midnapurdistrict,West Bengal	Uppetera, Salt Canal, Kakinada, Andhra Pradesh	Kakdwip, South 24 Parganas dis- trict, West Bengal	Cheepoo, North Anda- man	Bichitrapur man- groves, Balasore district, Odisha
Date of Collection		04.ix.1964	22.xi.1964	07.xi.1980	29.vi.2011	24.ix.2014
Name of Collector	Murray	A.K. Dutta	N.V. Subba Rao	N.C. Banerjee	Sameer Ghodke	Kaushik Deuti
Number of mid- body scales	17	17	17	17	17	17
Number of ventral scales	152	151	157	150	150	148
Number of sub-caudal scales	35	34	34	31	32	33
Loreals	1/1	1/1	1/1	1/1	1/1	1/1
Pre-oculars	1/1	1/1	1/1	1/1	1/1	1/1
Post-oculars	2/2	2/2	2/2	2/2	2/2	2/2
Anterior loreals	1/1	1/1	1/1	1/1	1/1	1/1
Posterior loreals	2/2	2/2	3/3	2/2	2/2	2/2
Supra-labials	8/8	8/8	7/8	8/8	7/7	8/8
Infra-labials	9/9	9/9	8/8	9/9	8/8	9/9

### Colour

Dorsum unpatterned brown in four of our specimens preserved in alcohol, only specimen numbers ZSI 24212 and ZSI 26145 are with grey dorsum. Ventrum creamish.

#### Measurements

Measurements of specimens in Zoological Survey of India are given below (all measurements in millimetres):

Registration	ZSI 13659	ZSI 22653	ZSI 23179	ZSI 24212	ZSI 25351	ZSI 26145
Number						
Snout-vent length	445	466	467	332	380	365
Tail length	66	66	84	54	54	64
Head length	10.31	11.98	12.04	9.40	9.33	9.81
Head width	8.54	10.92	12.02	8.03	8.65	8.99
Snout length	4.31	6.38	6.20	4.67	4.78	5.32
Eye-nostril length	2.55	3.58	3.53	2.65	2.52	2.73
Nostril-snout tip length	1.62	2.84	2.39	1.40	1.98	1.97
Eye diameter	1.99	2.48	2.56	1.84	1.53	2.05
Inter-narial length	2.06	2.76	3.13	2.13	2.31	2.08
Inter-orbital length	4.63	6.35	6.10	4.77	5.02	5.20

Details of specimens with past records from India (all measurements in millimetres):

Registration							
Number							
Locality	Bandaora,	Cannanore	Backbay, Bom-	Versova, Salsette,	Chaupati	Sion, Bom-	
	Bombay coast,	(now Kannur),	bay, Maharashtra	Maharashtra	Sands, Bom-	bay	
	Maharashtra	Kerala			bay		
Date of Collection		08.xi.1903	1923	1923	1923	1923	
Name of Collector	H.M. Phipson	Ferdinand	J. Mann		J.P. Mullan	J.P. Mullan	
		Wall					
Lodged in Museum British Museum, Bombay Natural History Society, Mumbai				ımbai			
	London						
Reference	Boulenger	Wall (1905)	Prater (1924)				
	(1896)						
Number of mid-body scales	NA	NA	NA	NA	NA	NA	
Number of ventral scales	154	151	146-158				
Number of sub-caudal scales	33	31	31-34				
Snout-vent length		498					
Tail length		63.5					

# Acknowledgements

The authors are grateful to Director, ZSI and Officer-In-charge, FPS Building, ZSI, Kolkata for laboratory facilities.

#### References

Boulenger, G.A. 1896. Catalogue of the snakes in the British Museum (Natural History). Taylor and Francis, London. Volume 3. 721

Das, I. 2002. Snakes and other reptiles of India. New Holland publishers, United Kingdom. 144 pp.

Das, I., Breuer, H. and Shonleben, S. 2013. Gerarda prevostiana (Eydoux and Gervais, 1837) (Squamata: Serpentes: Homalopsidae), a new snake from Borneo. Asian Herp Research., 4(1): 76-78.

Murphy, J.C. 2007. Homalopsid snakes: Evolution in the mud. Krieger Publishing Company, Florida. 249 pp.

Prater, S.H. 1924. The snakes of Bombay Island and Salsette. J. Bombay Nat Hist Soc., 30: 151-176.

Tweedie, M.W.F. 1983. The snakes of Malaya. 3rd edition. Singapore National printers. 167 pp.

Wall, F. 1905. Notes on snakes collected in Cannanore from 5th November, 1903 to 5th August, 1904. J. Bombay Nat Hist Soc., 16: 292-317.

Whitaker, R and Captain, A. 2004. Snakes of India - the field guide. Drace books, Chennai, India. 253 pp.