

TWO NEW RECORD OF THE SPECIES BELONGING TO THE
GENUS *VARANUS* MERREM, 1820 [REPTILIA : SAURIA :
VARANIDAE] FROM ORISSA

By

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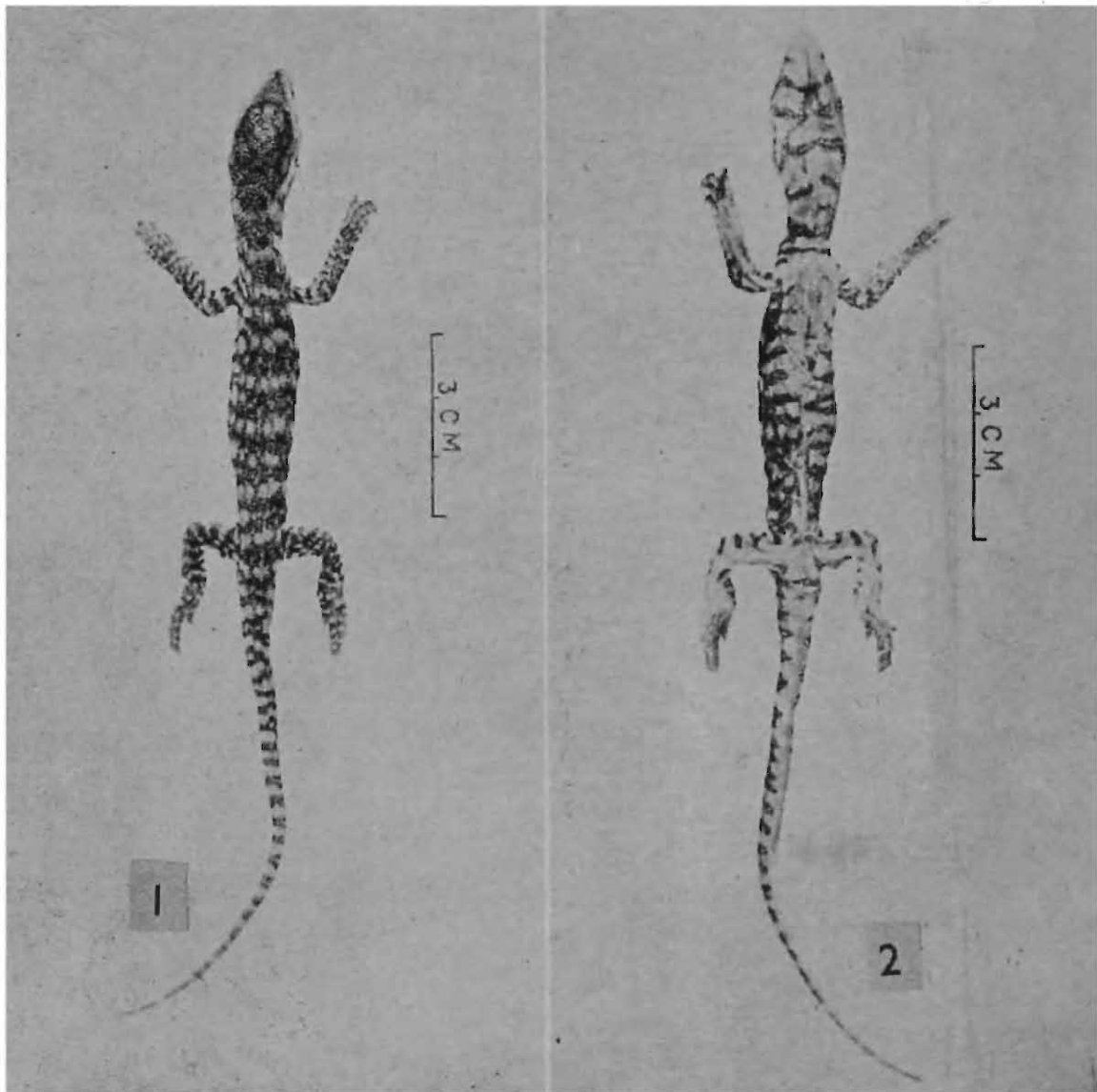
(With 2 Plates)

INTRODUCTION

We had the opportunity for examining five varanus lizards from Orissa of which two juveniles are from Bhitorkonika, one from Barang of Cuttack district and the other two from Chandraka village of Puri district. Bhitorkonika is an island in the estuary of Mahanadi Baitarani river system of Athagar forest Division. This area has now been declared crocodile sanctuary. Barang and Chandraka village is adjoining to the Chandraka Reserve Forest in the Puri Forest Division.

Regarding the earlier work on the varanus lizards of Orissa work of Annandale (1907, 1917 & 1921) is very useful but concerning the Varanidae of India Smith's (1932 & 1935) work are very important and essential. Annandale (1907) reported the occurrence of the common Indian Monitor, *Varanus bengalensis* (Dandin) and one clouded Monitor, *V. nebulosus* (Gray) from Orissa but the latter species had been collected only once by Hadgart from the Gopkuda island of Chilka lake. Now it can be definitely stated that four species of *Varanus* are occurring in Orissa.

The distribution of *V. bengalensis* (Dandin) and *V. salvator* (Laurenti) are interesting as the former species though occurs throughout India its eastern range is limited upto Henzada Dist., Burma (Lat 17°39' N) and the latter species though widely distributed in the south east Asia it is confined only in India in the eastern region and absent in Peninsular India.

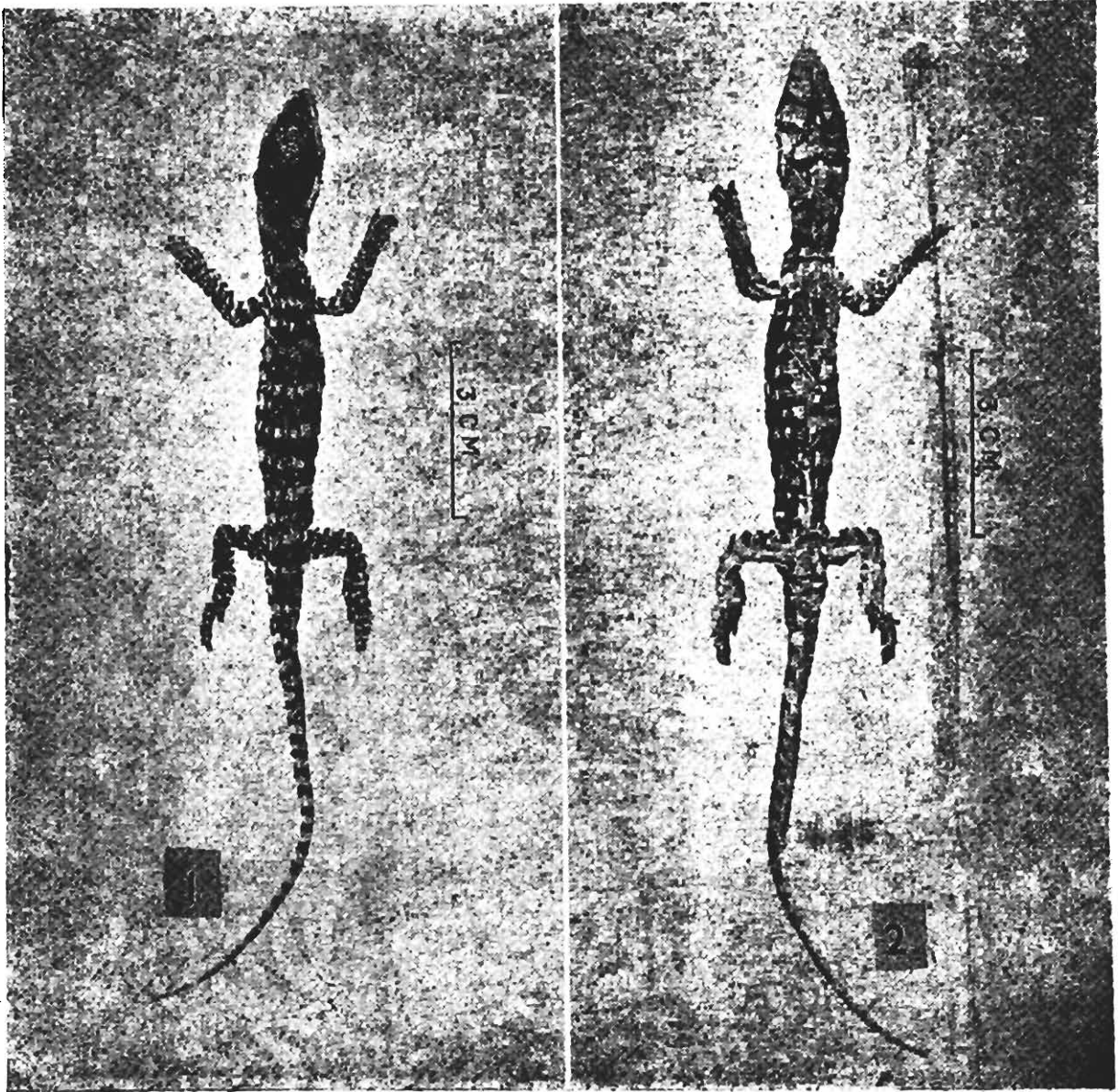


Varanus flavescens (Gray)

1. Dorsal view of a juvenile.
2. Ventral view of the same specimen.

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PLATE XIV



Varanus salvator (Laurenti)

1. Dorsal view of a juvenile.
2. Ventral view of the same specimen.

SYSTEMATIC ACCOUNT

Order SQUAMATA

Suborder SAURIA

Family VARANIDAE

Varanus flavescens (Gray)

(Pl. XIII, Figs. 1 & 2)

1827. *Monitor flavescens* Gray, *Zool. Journ.* iii, p. 226 and Ill. Ind. Zool. ii, pl. 67 [1834]

1935. *Varanus flavescens*, Smith, *Fauna of Brit. India*, Vol. II, pp. 404-405.

Material.—1 ex., Dangmal vill., Bhitorkonika, Dist., Cuttack ; 24. vii. 78, *S. Kar.* 4 exs., Serogarh, Ca 8 km. E of Nilgiri, Dist., Balasore, 27. x. 71 and 27. xi. 71 ; 13 exs., From jungle around Nandankanan Biological Park, Barang, Dist., Cuttack. 29. x. 71, *D. P. Sanyal*.

Measurement and count of the 1st. juvenile example.—S. V. L. 803 mm., T. 807 mm., abdominal scales in 68 transverse rows from axilla to groin.

Distribution.—The range of distribution is Northern India, from Punjab (Pakistan) to West Bengal.

Smith (1932) recorded the species from Ambala (Punjab), Agra (U.P) Saran (Bihar), Goalbathan, Pakur and Midnapore (W. Bengal). So far there is no record of this species from Orissa but there are earlier collections from Balasore and Cuttack Dists. respectively in the collection of Zoological Survey of India. This species is common in jungles of Chandraka Reserve Forest of Cuttack Dist. and Nilgiri hills of Balasore Dist.

About the status of the species Smith (1935) mentioned that it is common in many places but according to d' Abreu (1932) it is common monitor of Bihar.

Remarks.—The colour description of young specimen described in the literature broadly conforms with that of the present specimen. The specimen is dark brown above with white spots transversely arranged but in first two rows these are confluent into bars and in other subsequent rows spots are prominent. The temporal streak is present. On the lip and throat cross bars, some incomplete, are there. On the belly the dark brown marking are like *V. salvator*, vertical and V-shaped eleven marks extend on the sides. On the tail the bars are 24 (Pl. XIII).

According to Smith (*loc. cit*) the above mentioned colours pattern changes to alternating transverse bars of reddish-brown and dirty yellow

but d' Abreu (*loc. cit.*) states that adult changes colour yellow with red cross-bars only in the rainy season which is the breeding season.

Though the species is stated by the earlier workers apparently common in many places or in a area of North India it is poorly represented even in the recent collection of Zoological Survey of India. Smith (1932) mentioned the cause of its rare distribution, "As its distribution coincides with one of the most densely populated parts of India, it may be that it is gradually exterminated". Even though the species has been declared protected by the Board of Indian Wild Life the species has no bright future in North India. But in the Bhitorkonika crocodile sanctuary it is now well protected and flourishing. The present collection is a hatchling collected by the village boys by throwing a hand net on it when several of them were found coming out of their nest after hatching. This fact indicates that the month of July is the month of hatching out time for the hatchlings of this species, (Biswas & Kar 1979).

Varanus salvator (Laurenti)

1968. *Stellio salvator* Laurenti, *Sny. Rept.* (based on Seba's Illustr. ii, pl. 88, fig. 2).

1935. *Varanus salvator* Smith, *Fauna Brit. India*, Vol. II, pp. 406 & 407. (pl. 11, Figs. 1 & 2).

Material.—1 ex., from Dangmal vill., Bhitorkonika, Dist. Cuttack, 24. viii. 78, S. Kar.

Measurement and scale count.—S. V. L. 150 mm., T. 220 mm., Abdominal scales in 83 transverse rows.

Distribution.—The species is widely distributed in South east Asia, viz. India including Andaman & Nicobar Is. (Biswas & Sanyal, 1971), Sri Lanka, Indochina, Southern China and E. Indian Archipelago.

Occurrence of this species in the eastern India is an example of extention of Indochinese species. Smith (*loc. cit.*) mentioned its distribution in the eastern India as, "extreme north-east, eastern Bengal and eastern Himalayas (upto 6000 ft.), said to be common in the Sunderban".

It is common as well in the lower West Bengal and its part of Sunderban and particularly well adopted in the esturine condition as it is found at home also in the Mahanadi estuary of Orissa extending its distribution further south-eastern part of India.

Remarks.—The present record disproves the earlier opinion of Biswas and Acharjyo (1977) that the species may not likely to occur in Orissa. The specimen is a juvenile. It is 80 days old after it hatched

out. Therefore, the colour description of this preserved specimen tallies with the colour pattern of a juvenile. It is blackish above, with its small yellow spots and larger round spots or ocelli arranged in transverse series. These yellow spots are very prominent on the legs and tail and also arranged transversely on tail but distally these spots marged producing alternate bands of white and black. The ocelli are white with black spots. Ventrally there are 9 black bands on the throat and chest some of which are incomplete and two in numbers on the snout (Pl. XIV).

In Bhitorkonika Water Monitor nest in June (Biswas and Kar, 1979). They usually select termitarium on a high ground as their nest for laying eggs due to the reason may be that the esturine area is innundated by tide twice daily.

Varanus bengalensis (Daudin)

1802. *Tapinambis bengalensis* Daudin, *Nat. Rept.*, iii, p. 67.

1935. *Varanus monitor* Smith, *Fauna Brit. India*, Vol. II, p. 402-404.

Material.—2 exs., from the campus of Veterinary Dispensary, Chandraka vill., Dist. Puri ; July, 1966, L. N. Acharjyo. ; 1 ex., Barang, Dist., Cuttack ; 3. ii. 74.

Measurement and scale count.—Two juvenile S. V. L. 140 & 150 mm., T. 225 & 213 mm., abdominal scales in transverse rows 90. One adult S.L.V. 330 mm., T. 435 mm., abdominal scales in 94 transverse rows.

Distribution.—The range of its distribution is eastern Persia, Waziristan, whole of India, Nepal, Sri Lanka and Burma as far south as Lat. 17° 13' N.

Remarks.—The difference of colour pattern between young or juvenile and adult specimens is very clear in the present lot consisting of two young specimens and one adult as has been mentioned by Smith (1932). In the two young specimens the characteristic ocelli, yellow spot or spots surrounded by dark brown, are transversely arranged alternating with dark spots or bars. As the specimen grows with age these ocelli start to disappear gradually from anterior part first leaving only the black spots and finally in the adult these dark spots turn into black dots.

Eggs containing fully developed embryos were collected in the end of March from the Megapod mound in Great Nicobar, Biswas & Sanyal (1977).

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