

ON A NEW SPECIES OF TOAD (ANURA : BUFONIDAE) FROM CAMORTA
ANDAMAN AND NICOBAR, INDIA

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ABSTRACT

A new species of toad *Bufo camortensis* sp. nov. from Camorta, Andaman and Nicobar was described in this paper.

INTRODUCTION

While working out amphibian fauna of Andaman and Nicobar Islands, the authors came across eleven examples of toads collected from Camorta and Nancowry Islands (Latitude 8°.00'N approx. and Longitude 93°30' E approx.) by Dr. A. G. K. Menon, Ex-Deputy Director, Zoological Survey of India, Calcutta in 1972, and another lot consisting of four examples of toads collected from Camorta by Shri Humayun Abdulali of 15, Abdul Rehman Street, Bombay 400003 in 1976. All these fifteen examples proved to be difficult to determine upto species. After closer and perfect study in details these toads differentiated themselves from all other species of *Bufo* described, henceforth, and proved to be new to science.

Bufo camortensis sp. nov.
(pl. III)

MATERIAL EXAMINED

Holotype : An adult ♂, Reg. No. A6955 (in spirit) collected from the compound of

Camorta Guest House, Camorta, Andaman and Nicobar Islands, India on 22.3.1972 by Dr. A. G. K. Menon.

Paratypes : 14 adults (5 ♂♂ and 9 ♀♀), 7 examples (Reg. Nos. A 6956 to A 6962) collected from Camorta on 17—26.3.1972, 3 examples (Reg. Nos. A 6963 to A 6965) collected from Nancowry on 17.3.1972 by Dr. A. G. K. Menon and 4 examples collected from Camorta on 30.3.1976 by Shri Humayun Abdulali. All the type-specimens excepting those of Mr. Abdulali, have been incorporated and deposited in the National Zoological Collections of Zoological Survey of India, Calcutta.

Diagnosis : Medium-sized species of *Bufo* (adults measure less than 90 mm. from snout to vent) with prominent cranial ridges ; snout blunt, length of snout almost equal or less than that of eye ; nostril nearer to tip of snout ; tympanum conspicuous, more or less round, less than two-third in diameter than that of eye ; parotoids clearly visible, elongated, kidney-shaped ; fingers free, slender, blunt-tipped, subarticular tubercles of fingers prominent and

double ; toes long, slender, blunt-tipped, half webbed (three phalanges of fourth toe free) ; subarticular tubercles of toes inconspicuous, single ; both inner and outer metatarsal tubercles prominent, tarsal fold present. Dorsal skin with irregular, prominent, less spiny warts, ventral skin wrinkled with microscopic granules ; upper surface dark brownish, throat, belly and lower surface of limbs light brownish ; shape of the body slender, not stout.

DESCRIPTION OF HOLOTYPE

A medium-sized toad with the body length of 67 mm. from snout to vent ; head with prominent bony ridges,—a canthal, a praeorbital, a supraorbital, a postorbital and an orbito-tympanic, head slightly broader than long (*i.e.*, head length is more than $\frac{3}{4}$ of head breadth) ; snout short, blunt, slightly rounded in profile, shorter than eye ; Canthus rostralis angular, prominent, almost straight ridge formed of a single row of rounded tubercles ; loreal region concave ; nostril lateral, slightly swollen, nearly twice as near to the tip of snout as to the eyes ; interorbital width slightly broader than that of upper eyelid which is bordered with thick lining outwardly ; tympanum conspicuous, semi-circular (vertically longer than broad), in diameter about half of that of the eye ; Parotoid glands well developed, elongated, slightly narrower at the posterior ends. Fingers free, tips blunt, not dilated, first finger slightly longer than second ; subarticular tubercles double but prominent ; a small inner and a large middle palmar tubercles. Toes half-webbed, nearly two and a half phalanges of the fourth toe free ; subarticular tubercles single but not very prominent ; two moderate metatarsal tubercles, the outer one slightly larger, an inner tarsal fold lined with spiny tubercles present ; heels do not meet but come

nearer when the hind limbs are folded at right angle to the body-axis ; tibiotarsal articulation reaches to the middle of the parotoids ; tarsometatarsal articulation reaches to the middle of the eye. Skin of upper surface and exposed sides of limbs rough with scattered less spiny warts, warts in the middle of back and exposed areas of femur and tibia are well developed, skin on parotoids slightly rough with no wart, head rugose and smooth. Ventral skin wrinkled.

Colour : Dorsal surface including the exposed areas of limbs brownish ; Cranial ridges, parotoids, tips of dorsal warts, tips of fingers and toes, margin of upper lip slightly darker. Ventral surface including the unexposed areas of limbs uniform reddish brown ; warts near the vent and behind the thighs reddish brown.

Variation : Holotype varies from few other paratypes by having more brighter colouration and less number of warts on back. Skin of the specimens, altogether three examples, from Nancowry is more smooth and the warts on the body show no spinosity.

Remarks : This species is closely allied to *Bufo melanostictus* Schneider (type locality "Ex India orientali") but can be differentiated by its less broader head, less broader interorbital space, more webbing of toes, less cornification of cranial ridges, jaws, tubercles and tips of fingers and toes, and different integument. In *Bufo camortensis* $2\frac{1}{2}$ —3 phalanges of the 4th toe free whereas more than $3\frac{1}{2}$ phalanges of *Bufo melanostictus* do not have webbing. Both dorsal and ventral skin of *melanostictus* are covered with numerous well developed spiny warts, whereas upper skin of *Bufo camortensis* is with a few less developed, less spiny warts

PARATYPES							
Regd. No.	A6963	A6964	A6965	—	—	—	—
From snout to vent	77	73	70	80	90	71	71
Head Length	20	21	21	21.5	26	20	21
Width of head	24	25	23	26	30	22	25
Snout	8	8	9	8.5	9	7.5	8
Snout to nostril	3	3	2.5	2.5	2.5	2.5	2.5
Eye	8	9	9	9.5	9	8.5	9.5
Interorbital width	6	8	9	8.5	10	8	8
U. Eyelid	6	6	5	5	6	6	6
Tympanum	4	4.5	4.5	5	5.5	5	5
Fore limb	46	46	45	47	52	46	45
First finger	6	6	6	6	6	6	6
Second finger	5.5	5	5	5	5.5	5	4.5
Third finger	9	9	8	9	9	8	7
Fourth finger	4.5	6	5	4	5	4.5	4
Hind limb	90	90	88	96	100	86	85
Tibia	24	25	23	26	26	24.5	24.5
Foot	26	25	23	25	25	24	24
First toe	3	3.5	3	4	4	3.5	3.5
Third toe	8	8	7	6.5	9	8	8
Fourth toe	13	14	12	13	15	14	14
Fifth toe	7	8	7	7	8.5	7	7
In. Metatarsal tub.	2.5	3	2.5	2.5	3	2	2
Out. Met. tub. present	2.5	2.5	2.5	2.5	2.5	2	2
Tarsometatarsal art.	Mid/eye	Ant./eye	Ant./eye	Mid/eye	Mid/eye	Ant./eye	Ant./eye
Sex	♂	♂	♂	♀	♀	♂	♀
Loc.	Nancowry	Nancowry	Nancowry	Camorta	Camorta	Camorta	Camorta

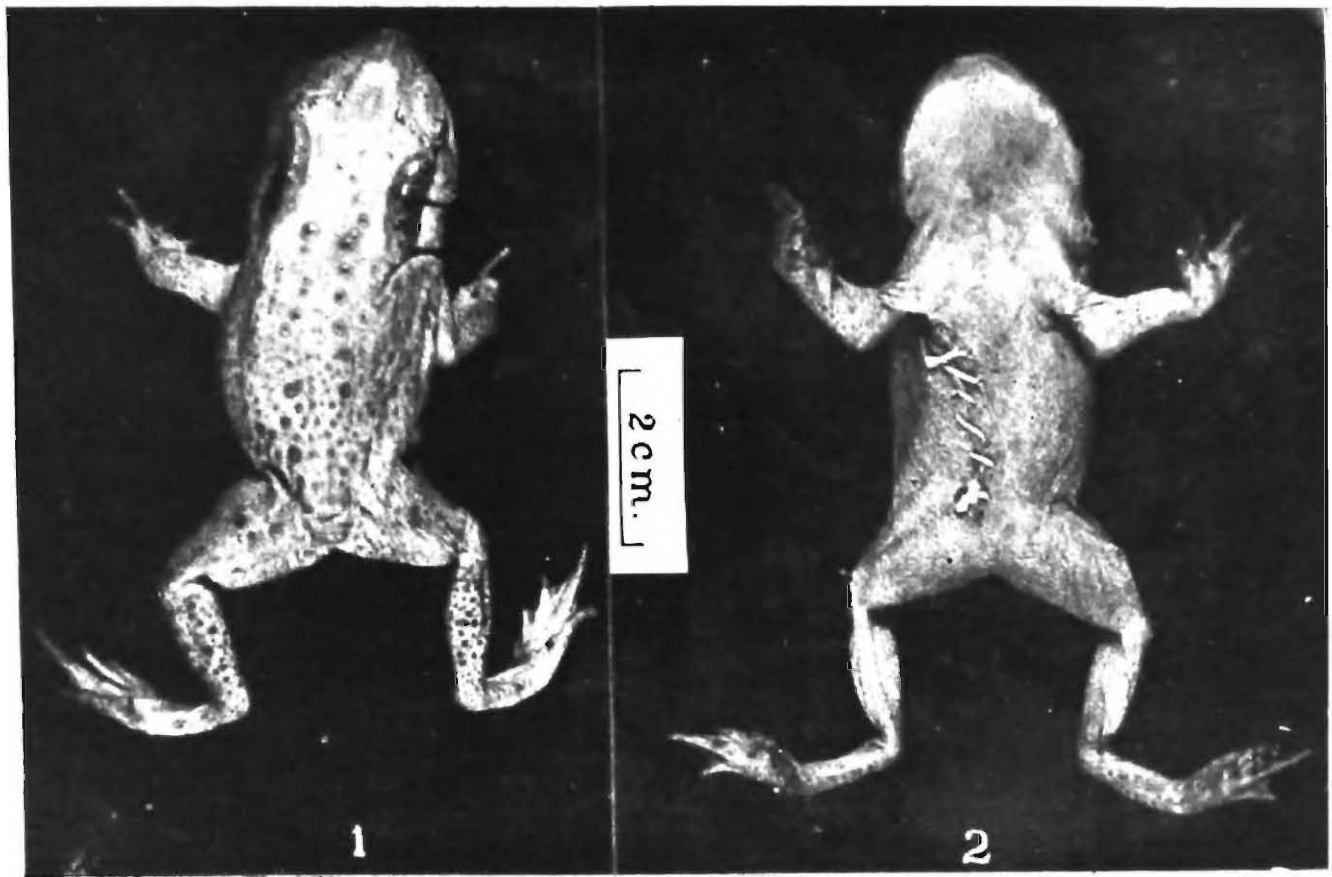
and that of ventral is smooth or with microscopic tubercles.

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REFERENCES

- BOULENGER, G. A. 1890. The Fauna of British India, including Ceylon and Burma, Reptilia and Batrachia, London, pp. xviii+541.
- DANIEL, J. C. 1963. Field Guide to the Amphibians of Western India, part 1—*J. Bombay nat. Hist. Soc.*, **60**(2) : 415-438.
- NIEDEN, FR. 1923. Das Tierreich, Berlin and Leipzig (Walter de Greeyter & Co.) **46**, Anura I, pp. vii+584.



Bufo camortensis sp. n.
1. Dorsal view. 2. Ventral view.