

**ON A RARE TOAD, *BUFO HOLOLIUS* GUNTHER FROM
NAGARJUNASAGAR, ANDHRA PRADESH**

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While examining the Amphibia collection at the Fresh Water Biological station, Zoological Survey of India, Hyderabad, the senior author came across a single example of interesting toad which on closer study turned out to be *Bufo hololius* Gunther.

The authors are thankful to Dr Babu Rao, the then Officer-in-Charge of the Station for kindly making the specimen available for study.

There does not appear to be any record of collection of *Bufo hololius* since its original description by Gunther from Malabar in 1875. The present collection of this rare toad from Nagarjunasagar, Andhra Pradesh, after a gap of 115 years thus constitutes an important record.

Amphibian taxonomy has undergone considerable changes during the last hundred years; more and more characters of taxonomic importance have been discovered to supplement the rather brief descriptions which were in vogue then. The purpose of this paper is to highlight the present record of this rare toad along with a full description. The type material of this species being deposited in the British Museum of Natural History, London, by Gunther, makes this the only specimen available in India.

MATERIAL EXAMINED

A single male specimen, 35.5mm from the tip of snout to vent, collected from Nagarjuna Sagar on 18.9.1980 by D.M.Mahato, Reg.No.A/F.B.S/Z.S.I./361.

DIAGNOSIS

Medium-sized robust toad without cranial ridges, parotoid glands large, tympanum about as large as eye, toes webbed at base, skin with large, flat glandular patches on the dorsum.

DESCRIPTION

(Figs. 1 & 2)

Head :- Depressed, 1.4 times broader than long. Snout a little produced forwards, truncated at tip and projecting well beyond lower jaw; its length from its tip to the anterior border of eye equal to length of upper eyelid. Nares laterally placed, its distance from the anterior border of eye a little longer than its distance from the tip of the snout. Canthal ridge clearly defined, slightly concave; loreal region vertical. Cranial ridges absent. Interorbital region slightly depressed, a little broader than width of the upper eyelid. Eye with circular pupil. Tympanic annulus distinct, circular, tympanum depressed, its diameter slightly less

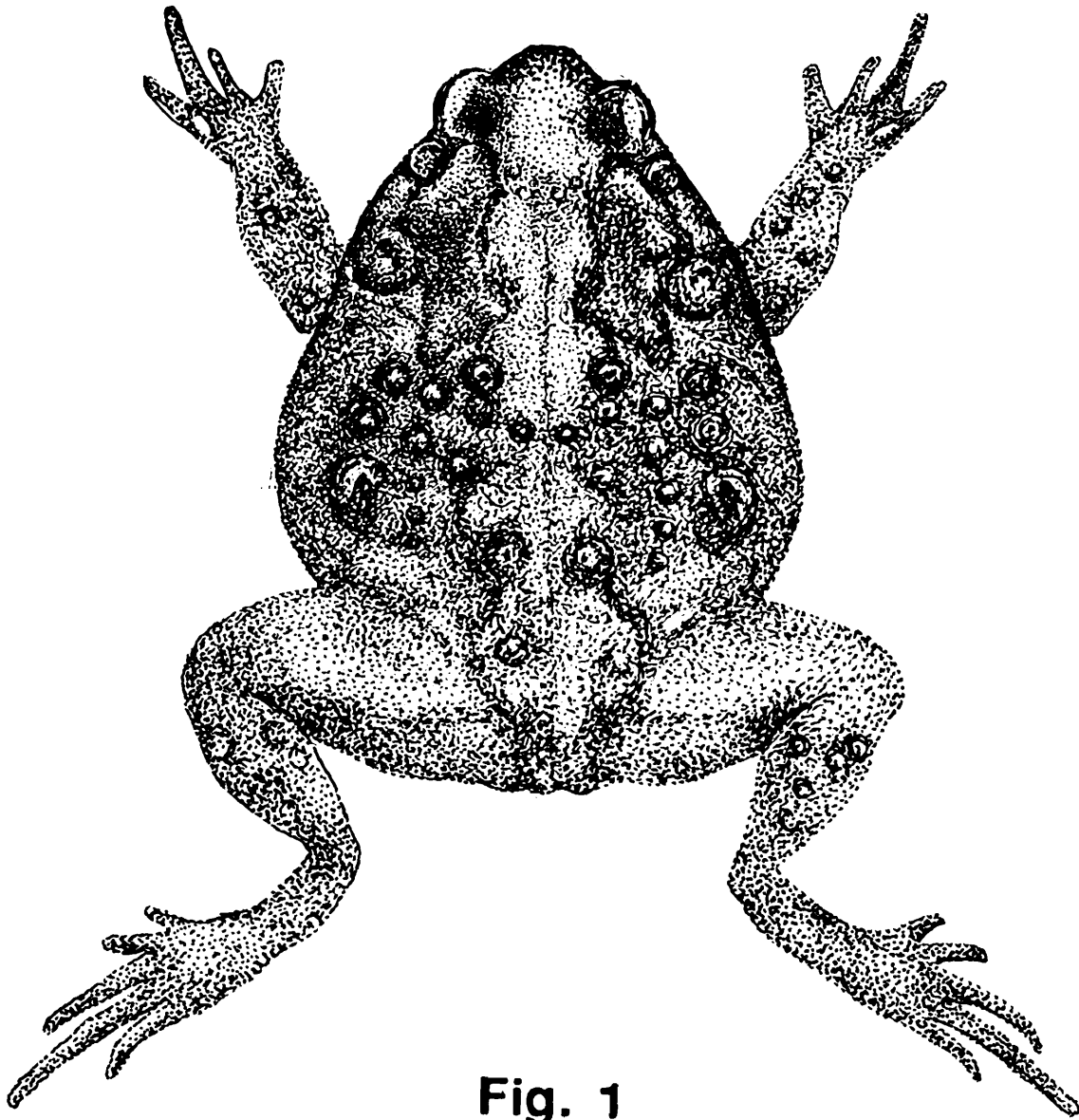


Fig. 1



Fig. 2

Fig. 1. Dorsal view of *Bufo hololius* . Fig. 2. Lateral view of the head of *Bufo hololius*.

than that of the eye. Upper eyelid flat, longer than broad, almost covering the eye from above. Parotoid glands, large, flat, irregular in shape with another smaller gland lateral to it, the peduncle of which joins the tympanum at its ventral margin. Jaws toothless; vomerines absent. Tongue entire, Pyriform, its tip narrower than base.

Forelimbs : Moderately short, fingers free. First finger longer than second, shorter than third. Subarticular tubercles indistinct, digits depressed, tips blunt, rounded.

Hindlimbs : Short, moderately stout, tibio-tarsal articulation of a depressed limb not reaching tympanum. Tibia one-third in length from tip of snout to vent and a little over 2.5 times as long as broad. Toes depressed, tips blunt, fourth toe much longer. Slightly webbed at base. Subarticular tubercles not very conspicuous. Two metatarsal tubercles, inner elongated, larger than the outer which is placed almost at the middle of the fleshy foot.

Skin : Dorsum beset with large, flat circular glandular patches. Snout, interorbital and inter - parotoid areas smooth. The glandular patches with nipple-like elevations, with or without tiny, black tips. The black-tipped spines are more abundant on the anterior parts viz snout, outer margin of upper eyelid, upper jaw, tympanic annulus and parotoid. Upper surface of limbs also with smaller tubercles. Ventral surface rough except for the throat which is smooth.

Colour : Olive brown (in the preserved state) marbled with lighter brown. Two lighter patches, one between the eyes and other between the parotoids. Glandular patches with orange tips. Lower parts buff-coloured.

Measurements :

			<i>mm</i>
Total length (from tip of snout to vent)	..	..	35.5
Length of head (from tip of snout to angle of jaws)	..	..	10.0
Width of head (at angle of jaws)	..	..	14.0
Length of snout	..	..	3.5
Diameter of eye	..	..	4.0
Width of upper eyelid	..	..	4.0
Interorbital distance	..	..	4.0
Diameter of tympanum	..	..	3.0
Length of forelimb	..	..	15.0
Length of hindlimb	..	..	27.0
Length of tibia	..	..	12.0

Murthy (1968) has reported six species of Amphibia from Nagarjun Valley viz. *Rana cyanophlyctis*, *R. limnocharis*, *R. tigrina*, *Microhyla ornata*, *Bufo melanostictus*, and *Bufo andersoni*. The present record of *Bufo hololius* not only adds to the list but also extends range of its earlier distribution far eastwards to the Eastern Ghats. The single example described earlier by Gunther (1875) was from the Western Ghats region (Malabar).

The depressed body, protective eyelids and flat glands are all suggestive of a life in crevices among rocks. Nothing is known of its habits or larvae.

REFERENCES

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