

NOTES ON AMPHIBIANS COLLECTED FROM BASTAR DISTRICT, MADHYA PRADESH, INDIA

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INTRODUCTION

Amphibian fauna of the sparsely populated tribal district of Bastar is poorly known. The works of Annandale (1909), Boulenger (1882, 1890, and 1920) and Parker (1934) contain no information of the amphibians of Bastar. Keeping this in view, a survey of Bastar district was undertaken by the Herpetology Division of the Zoological Survey of India from 1979 to 1981. 1047 examples of amphibians were collected from different ecological habitats like muddy drains, tanks, lakes, bushes, trees, litter, and village huts.

DESCRIPTION OF BASTAR DISTRICT

Bastar district is situated between latitudes 17° 46' N. and 20° 34' N. and longitudes 80° 15' E. and 82° 1' E., and its area is about 39,060 Sq. km.

The land is undulating, rocky and infertile. For this reason cultivation is poor, and as a consequence, the standard of living is also very poor. The district can be divided into five main physiographic divisions, viz., Kotri-Mahanadi plain in the north ; Abujhmar Hills ; northeastern plateau (Indrawati Plain) ; southern plateau which include Bailadila Hills, Tikanpalli Hills and Dantewara Plain ; and Godavari-sabari lowland.

This district is very hot during summer (46.1°C in May) because of hot winds that blow all day and night. During winter the cold is severe (4.4°C in December). Monsoon prevails from the middle of June to middle of October. It is more (150-160 cm) in the southwestern and less (130-150 cm) in the northeastern and southern parts.

Bastar is a forest district. Here trees like Sal (*Shorea robusta*), Teak (*Tectona grandis*), Bija (*Pterocarpus marsupium*), Saja (*Terminalia tomentosa*), Dhanra (*Anogeissus latifolia*), Dhobin (*Dalbergia planiculata*), Munid (*Mitragyna parviflora*), Mohua (*Madhuca indica*), Mango (*Mangifera indica*), Gab (*Diospyros peregrine*), Amloki (*Emblica officinalis*), Haritaka (*Terminalia chebula*), Baher (*Terminalia abelerica*), Jaiphal (*Myristica fragrans*), Tendu (*Diospyros melanoxylon*), etc. are found in good numbers. Sal forests are concentrated in the northeastern part while the teak in the southwestern corner of the district.

SYSTEMATIC ACCOUNT

Class AMPHIBIA

Order ANURA

Family RANIDAE

1. *Tomopterna breviceps* Schneider
(Indian Burrowing Frog)

1799. *Rana breviceps* Schneider, *Hist. Amph.* 1 : 40

1920. *Rana breviceps* Boulenger, *Rec. Indian Mus.*, 20 : 103-105

Material examined: 3 frogs. 1 ex., Kondagaon, 20.x.1981; 1 ex., Pharasgaon. 21.ix.1981; 1 ex., Kotapad, 16.ix.1981; Coll. D.P. Sanyal & party.

Measurements : Snout to vent length, 23-28 mm.

Distribution : Bastar : As above. Elsewhere : Gujarat, Maharashtra, Rajasthan, Himachal Pradesh, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Uttar Pradesh, West Bengal in India. Also Sri Lanka, Nepal and Upper Burma.

2. *Rana cyanophlyctis* Schneider (Skipper Frog)

1799. *Rana cyanophlyctis* Schneider, *Hist. Amph.* 1 : 137

1920. *Rana cyanophlyctis*, Boulenger, *Rec. Indian Mus.*, 20 : 12-15.

Material examined : (a) 187 frogs and (b) 7 tadpoles. (a) 4 ex., Dantwara, 27-28. ii. 1979 ; 6 ex., bank of Indravati river, near Jagdalpur, 17. ii. 1979; 8 ex., Konta, 24.ii.1979; 6 ex., Durnapal, 23.ii.1979 (All have been Collected by Dr. R. C. Sarma & D. P. Sanyal). 46 ex., Barsoor, 2. vi. 1980 ; Bailadila, 4. vi. 1980; 10 ex., Jagdalpur, 16. vi. 1980 ; 8 ex., Barsoor, 31. v. 1980 ; 5 ex., Pali, 1. vi. 1980 ; 8 ex., Geedam, 5. vi. 1980 ; 4 ex., Chitrakut, 13. ix. 1981 ; 3 ex., Chhotedonger, 25. ix. 1981 ; 2 ex., Jagdalpur, 12. ix. 1981 ; 28 ex., Kotapad, 16-17. ix. 1981 ; 20 ex., Narayanpur, 28. ix. 1981 ; 8 ex., Benoon, 17. ix. 1981. Coll. D. P. Sanyal & Party.

(b) 6 ex., Dantwara, 26.ii.1979; 1 ex., Bailadila, 4.vi.1980.Coll. R.C. Sharma & D.P Sanyal.

Measurements : Snout to vent length 22-65 mm.

Distribution : Bastar : As above. Elsewhere: It is common throughout India from the base of the Himalaya to the Southern part of the country. Also Nepal, Sri Lanka and Thailand.

3. *Rana Limnocharis* Boie (Paddy-field Frog)

1835. *Rana Limnocharis* (Boie) Wiegmann, *N. Acta. Ac. Leop. Carol.*, 17 (i) : 255.

1920. *Rana Limnocharis*, Boulenger, *Rec. Indian Mus.*, 20 : 28-35.

Material examined : 802 frogs. 28 ex., Charama, 5.iii.1979; 8 ex., Kondagaon, 7.iii.1979; 7 ex., Dantwara, 27. ii. 1979; 21 ex., Jagdalpur, 17. ii. 1979; 11 ex., Sukma, 17.ii.1979; 1 ex., Konta, 27. ii. 1979; 39 ex., Durnapal, 23.ii.1979; 3 ex., Konta, 22. ii. 1979. (All have been Collected by Dr. R. C. Sharma & D. P. Sanyal). 3 ex., Barsoor, 2. vi. 1980 ; 38 ex., Chintapalli, 10. vi. 1980 ; 2 ex., Bailadila, 4. vi. 1980 ; 4 ex., Salkapara, 6. vi. 1980 ; 53 ex., Avapalli, 11. vi. 1980 ; 6 ex., Bijapur, 8. vi. 1980 ; 28 ex., Geedam, 5. vi. 1980 ; 24 ex., Jagdalpur, 12. ix. 1981 ; 31 ex., Chitrakut, 13. ix. 1981 ; 36 ex., Kotapad, 18. ix. 1981 ; 47 ex., Chhotedonger, 25. ix. 1981 ; 36 ex., Narayanpur, 25. ix. 1981 ; 27 ex., Kondagaon, 20. ix. 1981 ; 59 ex., Sancepur, 26. ix. 1981 ; 31 ex., Jagdalpur, 12. ix. 1981 ; 48 ex., Phasargaon, 21. ix. 1981 ; 26 ex., Kodlapad, 16. ix. 1981 ; 32 ex., Narayanpur, 28. ix. 1981 ; 96 ex., Kondagaon, 22.ix.1981; 52 ex., Narayanpur, 17. ix. 1981. Coll. D. P. Sanyal & Party.

Measurement : Snout to vent length 10 to 35 mm.

Distribution : Bastar : as above. Elsewhere : The species is widely distributed in India and found in almost all the biotopes of the country. Also Eastern Asia from Pakistan, Nepal, Sri Lanka and China to Japan.

4. **Rana tigerina Daulin** (Indian Bull Frog)

1803. *Rana tigerina* Daulin, *Hist. Rain. Gren. Crap.*, : 64.

1920. *Rana tigrina*, Boulenger, *Rec. Indian Mus.*, 20 : 17-23.

Material examined : 17 frogs. 3 ex., Konta, 24. ii. 1979 ; 1 ex., Durnapal, 23. ii. 1979; 8 ex., Konta, 24. ii. 1979. (All have collected by Dr. R. C. Sharma & D. P. Sanyal). 1 ex., Geedam, 5. vi. 1980 ; 3 ex., Chintapalli, 10. vi. 1980; 1 ex., Barsoor, 31. v. 1980. Coll. D. P. Sanyal & Party.

Measurments : Snout to vent length 16 to 161 mm.

Distribution : Bastar : As above. Elsewhere : it is common throughout India from the base of Himalaya to South India. Also Nepal, Sri Lanka, Burma, Thailand, South China and Taiwan.

Family RHACOPHORIDAE

5. **Polypadates maculatus (Gray)** (The Chunam Frog or Tree Frog)

1832. *Hyla maculata* Gray III. *Indian Zool.* I, pl. 82. Fig. 1.

1931. *Rhacophorous maculatus*, Ahl, *Das Tierreich*, 55, Anura III : 133-134.

Material examined : 18 Frogs. 1 ex., Jagdalpur, 19. iv. 1979 ; 2 ex., Sukma, 19. iv. 1979. (All have been Collected by Dr. R. C. Sharma & D. P. Sanyal). 12 ex., Geedam, 5. vi. 1980 ; 1 ex., Pali, 1. vi. 1980 ; 1 ex., Bailadila, 4. vi. 1980., 1 ex., Jagdalpur, 12. ix. 1981. Coll. D. P. Sanyal & Party.

Measurments : Snout to vent length 43 to 68 mm.

Distribution : Bastar : As above. Elsewhere : South India and Plains of North India in general. Also Sri Lanka.

Family MICROHYLIDAE

6. **Microhyla ornata (Dumeril & Bibron)** (Ornate Microhylid Frog)

1841. *Engystoma ornatum* Dumeril & Bibron, *Erpet. Gen.*, 8 : 745

1934. *Microhyla ornata*, Parker, *Monogr. of the Microhylidae* : 139-141.

Material examined: 7 frogs. 4 ex., Banapur, 14.ix.1980: 2 ex., Bodearpur, 15.vi.1980; 1 ex., Jagdalpur, 12.ix.1981. coll. D.P. Sanyal & Party.

Measurements : Snout to vent length 11 to 22 mm.

Distribution : Bastar : As above. Elsewhere : The species is widely distributed in India and found all over the plains of the country upto an altitude of 1524 metre. Also Srilanka, Burma, South China, South-east Asia and Taiwan.

Family BUFONIDAE

7. *Bufo melanostictus* Schneider (Common Indian Toad)

1799. *Bufo melanostictus* Schneider. *Hist. Amph.* 1 : 216.

1890. *Bufo melanostictus*, Boulenger, *Fauna Brit. India, Rept. & Batr.* : 505-507.

Material examined : 6 toads. 1 ex., Sukma; 1 ex., Geedam, 5.vi.1980; 1 ex., Suklapara, 6.vi.1980; 1 ex., Bijapur, 8.vi.1980; 1 ex., Geedam, 5.vi.1980; 1 ex., Jagdalpur, 12.ix.1981. Coll. D.P. Sanyal & Party.

Measurements: Snout to vent length 18 to 87 mm.

Distribution: Bastar: As above. Elsewhere : This is the commonest toad found all over the Indian plains. Also Sri Lanka and Burma. Its range extends to Southern China, Malay Peninsula and Archipelago.

SUMMARY

The paper deals with the Amphibia collected by various parties of the Zoological Survey of India from Bastar District, M.P. It consists of 1047 examples belonging to four families, four genera and seven species. All the species are recorded for the first time from Bastar District.

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