

Short Communication

RANGE EXTENSION OF *RAORCHESTES MANIPURENSIS* (MATHIEW & SEN, 2009) (AMPHIBIA: ANURA: RHACOPHORIDAE) IN MEGHALAYA, INDIA

INTRODUCTION

The genus *Raorchestes* was erected by Biju *et al.* (2010) and is represented by 51 species in India (Frost, 2015). In North East India, this genus is represented by 4 species (*R. annandalii*, *R. manipurensis*, *R. sahai* and *R. shillongensis*) (Mathew & Sen, 2010). Among these mentioned species, *R. manipurensis* was recently described by Mathew and Sen (2009) from Manipur from a single specimen that is deposited in the National Zoological Collection (V/A/ERS/ZSI/810) of Zoological Survey of India, Shillong. Till date this species is known from its type locality only. The current study pertains to a male frog collected from Nongkhyllem Wildlife Sanctuary located in Ri-Bhoi district of Meghalaya on 11 June, 2013.

After thorough study of the specimen, it was identified as *Raorchestes manipurensis* (V/A/NERC/1186) (Fig. 1, 2 & 3). This is the first record outside its type locality, after the species was described more than 6 years ago. While studying, the Holotype of this species was also studied for proper identification and comparison.

GENERAL DESCRIPTION

Material Examined: One male specimen of *Raorchestes manipurensis* (V/A/NERC/1186) was studied. The specimen was collected by survey team of NERC/ZSI, Shillong from the nearby Forest IB of Umtasor Reserve Forest (Nongkhyllem Wildlife Sanctuary), (N 25°49'46.8", E 91°48'17.8", 636 meters ASL) Ri-Bhoi district, Meghalaya on 11/06/2013.

Diagnosis: Head is broader than long, nostril is closer to snout. Inter-narial space less than inter-orbital. Supratympanic fold is lighter in colour and distinct; tympanum fairly distinct with small tubercles in the tympanic region. Vomerine teeth absent. Tongue is bilobed.

Dorsum is smooth. A dark chocolate brown band from the eyes continues towards the groin over the dorsum. Flanks are yellowish. A dark yellowish triangular patch from the eyes to the snout present. Ventral surface is granular, dirty white, speckled with brown around throat chest and the legs.



Fig. 1. Dorsum of *Raorchestes manipurensis* (Mathew & Sen, 2009)

Fingers, with rudiment of webs, end in swollen white discs. First finger smaller than second. Hind limbs slender and banded. Toes about 2/3rd webbed, ending in white, swollen discs. Finger and toe discs with circum marginal grooves.

TTA reaching nostrils. Inner metatarsal tubercles distinct, outer absent.



Fig. 2. Ventrum of *Raorchestes manipurensis* (Mathew & Sen, 2009)



Fig. 3. Bilobed tongue of *Raorchestes manipurensis* (Mathew & Sen, 2009)

Measurements: Since this is the second specimen ever collected of *R. manipurensis*, we have included the measurements of the same. All measurements taken were as per Mathew and Sen (2009). The measurements were taken using digital calliper (in millimetres).

Features	Specimen	Features	Specimen
SVL	21.08	SL	3.32
HL	7.93	IN	2.73
HW	8.84	EN	2.01
IUE	3.26	NS	1.49
EL	3.04	TL	11.32
TYD	1.02	FL	11.33
IFE	4.15	TRL	6.34
IBE	7.48	FOL	8.86
MBE	1.50	FLL	5.46
MFE	3.47	HAL	5.46

Remarks: This is the first record of the species from Meghalaya and outside its type locality in Manipur.

Distribution: Manipur and Meghalaya

SUMMARY

The new specimen is smaller (SVL 21.08mm) than the Holotype (SVL 25mm) of *R. manipurensis*. The dark band on the dorsum is little fainter in the new specimen (than the Holotype). The yellowish patch from the eyes to the snout is darker in the new specimen (vs. light).

ABBREVIATION

- SVL Snout-vent length
 HL Head length (from posterior corner of mandible to tip of snout)
 HW Head width
 IUE Maximum distance between upper eyelids
 EL Eye length
 TYD Maximum tympanum diameter
 IFE Distance between anterior corner of eyes
 IBE Distance between posterior corner of eyes
 EN Distance between anterior corner of eye to nostril
 NS Distance from nostril to tip of snout
 SL Distance from anterior corner of eye to tip of snout
 IN Internarial distance
 MBE Distance between posterior corner of mandible to posterior corner of eye
 MFE Distance between posterior corner of mandible to anterior corner of eye
 TL Tibia length
 Fl Femur length
 TRL Length of tarsus
 FOL Foot length
 FLL Length of forelimb (from elbow to base of paler tubercle)
 HAL Hand length

TTA Tibio-tarsal articulation measured by stretching the hind limb towards the head along the side of the body

V/A/NERC/ZSI: Vertebrate/Amphibian/North Eastern Regional Centre/Zoological Survey of India

ASL Above Sea Level

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