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A new locality record of Orissa Cricket Frog, *Fejervarya orissaensis* (Dutta, 1997) from Purba Medinipur District, West Bengal State, India

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#### **Abstract**

Orissa Cricket Frog *Fejervarya orissaensis* was first describe by Dutta (1997). Later this species reported from only few pockets of eastern India and recently reported from some countries of South-east Asia. Here, we provide the first occurrence report for this species from State West Bengal, India.

**Keywords:** Cricket Frog, Duttaphrynus melanostictus, Fejervarya orissaensis, Limnonectes orissaensis.

## Report

Dutta (1997) described this species as *Limnonectes orissaensis* from Bhubaneswar, Khurda District, Orissa, India, later this species was named as Orissa cricket frog (*Fejervarya orissaensis*) by Chanda et al., (2001) from Orissa, India. Although this species was reported from Simlipal Biosphere Reserve, Orissa (Dutta et al., 2009), Karlapat and Konarak-Balukhand Wildlife Sanctuaries, Orissa (Deuti & Raha, 2010), Bhitarkanika National Park, Kendrapara district, Orissa (Deuti et al., 2016). Deuti et al., (2014) collected two specimens in 2010 and 2011 from Renigunta, Andhra Pradesh and this species was also reported from Bastar, Chattisgarh (Dutta, 2015).

Outside of India this species is reported from across Bangladesh and southeastern Myanmar into western Thailand (Köhler et al., 2019). Here we are reporting a new locality of Orissa cricket frog (*Fejervarya orissaensis*) from state West Bengal, India.

It inhabits temporary water pools, lakes and ponds, grasslands, on the banks of the mangrove creeks, near hill streams, adjacent to rice fields and sometimes they prefer disturbed habitat (Jena et al., 2013; Deuti et al., 2016 and Köhler et al., 2019). During winter season they are commonly found under rocks, boulders, below logs and leaf litter. Breeding occurs in monsoon (Dutta et al., 2009).

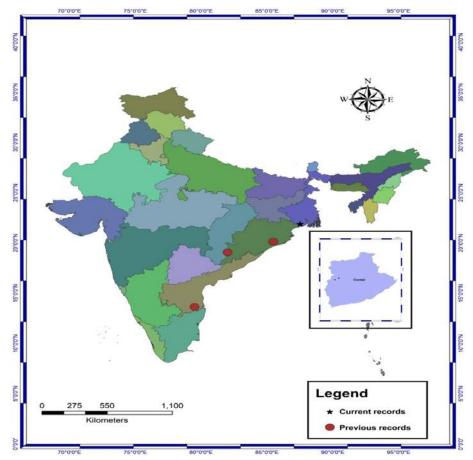


Fig. 1. Distribution map of *F. orissaensis* in India, showing the known distribution according to literature, with a star for the new locality and red dots for previous localities.





Fig. 2. Dorso-lateral view of female F. orissaensis.

Fig. 3. Dorso-lateral view of male *F. orissaensis*.

During an extensive survey on 29<sup>th</sup> June, 2018 at 22.34 hr we recorded a call of a medium-sized male frog near a temporary water-pool in Aklabad village (21°54'36.6"N, 87°32'26.6"E elevation 11m), Egra subdivision, Purba Medinipur District, West Bengal, India (Fig 1). Later many specimens were found during field survey. Phenotypic variations in this species were highly noticed and species were identified on the based on morphological characters following Dutta (1997); Deuti and Raha (2010); Köhler et al., (2019) descriptions. A single specimen was collected and deposited at Estuarine Biology Regional Centre, Zoological Survey of India, Gopalpur, Voucher ID-EBRC/ZSI/Am-11456.

Following are the morphological characters of the specimen investigated: Medium-sized frog, head usually longer than width, snout sub elliptical in dorsal view projected beyond lower jaw, obtuse in profile; nostril dorsolateral, canthus rounded, slightly constricted behind nostrils, lores concave and oblique, pineal body visible, distinct tympanum, slightly depressed relative to skin of temporal region, tympanic rim weakly elevated relative to tympanum, tips of all four fingers rounded, not expanded into webbing, distinct subarticular discs, no tubercles, palmer tubercle distinct, thinner tubercle large, tips of toes rounded, not expanded into discs, elongate, oval inner metatarsal tubercle, small round outer metatarsal tubercle present, dorsum grayishbrown, a V-shaped marking between eyes, yellowish of greenish vertebral band, extending from the tip of snout to vent or sometimes vertebral band absent, skin on dorsum and flank usually granular with varying density of tubercles and often also with short longitudinal ridges, skin on side of head granular, skin on venter smooth, Margins of jaws are with black vertical bars, skin on upper surface of forelimbs smooth, that of hind limbs granular, skin on anterior and posterior surface of thigh smooth; distinct, Limbs with complete or incomplete dark crossbars. The sides of the thighs are yellowish-white with black speckles. Glandular supra-tympanic fold from posterior edge of upper eyelid along upper margin of tympanum and then obliquely down to shoulder, obscuring dorsoposterior margin of tympanum, no dorsolateral fold (Fig 2 & 3).

The natural history of this species is poorly known. The tadpole's morphology is well defined by Köhler et al., (2019). They provided the following description of tadpole at Gosner stage 36: Total length 24.1 mm, body and tail musculature grayish brown with dark brown blotches, body ovoid in dorsal view, snout round in dorsal view and blunt in lateral view, Oral disc not emarginated, dorsal and ventral fins rise at base of tail, Tip of tail pointed. The predation of F. orissaensis tadpoles are reported by common Asian toad (Duttaphrynus melanostictus) (Mahapatra et al., 2017). The F. orissaensis tadpoles represent benthic adaptations and mainly feed on phytoplankton species belonging to family Cyanophyceae, Chlorophyceae Bacillariophyceae, and Euglenophyceae respectively. Adults are Nocturnal and terrestrial in habit and predates on large number of invertebrates (Köhler et al., 2019). The nearest known population found in Similipal Biosphere Reserve, Orissa which is situated at a distance of 226 km to the west from our observation locality. According to IUCN Red List of Threatened species (Dutta and Inger, 2004) the conservation status of F. orissaensis as Least Concern. We believe that increasing sampling efforts in this area will

improve our understanding of the actual distribution of this species. Detailed study is essential for understanding the habitat, ecology, behavior, reproduction etc.

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