

## Short Communication

# On a report of *Pterorana khare* Kiyasetuo and Khare, 1986 (Amphibia: Anura: Ranidae) from Bandarkhal, Southern Assam, India

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### Abstract

Report of any threatened taxon is important from both taxonomic and conservation point of view. *Pterorana khare* is a vulnerable species of frog. It has been reported from a few disjunctive pockets of all the North-East India states, except Tripura. Besides, there are single reports of this species from Bangladesh and Myanmar. In Assam, this species was previously reported from Nameri National Park on the north bank of River Brahmaputra, while from the south bank, we are reporting it for the first time, based upon specimens collected from Barail Wildlife Sanctuary.

**Keywords:** Barail, Eco-Sensitive Zone, Range Extension, North-East India

### Introduction

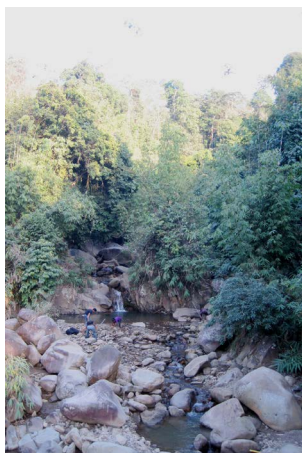
The genus *Pterorana* is represented by only one species (Frost, 2017). This genus was erected by Kiyasetuo and Khare in 1986 when describing a new ranid frog, *Pterorana khare* based upon two male specimens collected from Sanuoru and Rukhroma rivers, Kohima, Nagaland. They erected the genus on the basis of the large, well developed dermal skin flaps on the lateral sides of the body and the thighs presuming it to be used for gliding. Chanda (2002) also supported this gliding hypothesis. As per Chanda *et al.* (2000), Dubois (1992) considered *Pterorana* as a sub-genus of genus *Rana* without studying the types. They reassigned *P. khare* to the genus *Pterorana* based upon the distinct 'patagium'. Sen and Mathew (2006) reported a female *P. khare* from Arunachal Pradesh, and noted that the female does not possess the 'distinct dermal skin flaps' on the sides of the body or on thighs. As per Mathew and Sen (2006), the female of *P. khare* shared many characters of *Rana* and, hence, were of the opinion that this species could be retained under genus *Rana*. Ao *et al.* (2006) re-described the holotype with additional description of the female (N=7) and tadpole. They also reported the female

of *P. khare* of "normal" ranid shape with the presence of smooth skin and dorso-lateral folds and the absence of dermal skin flaps and hence retained the species under genus *Rana*. Frost *et al.* (2006) however, put *P. khare* under genus *Pterorana* due to its distinct fleshy folds on the flanks of male.

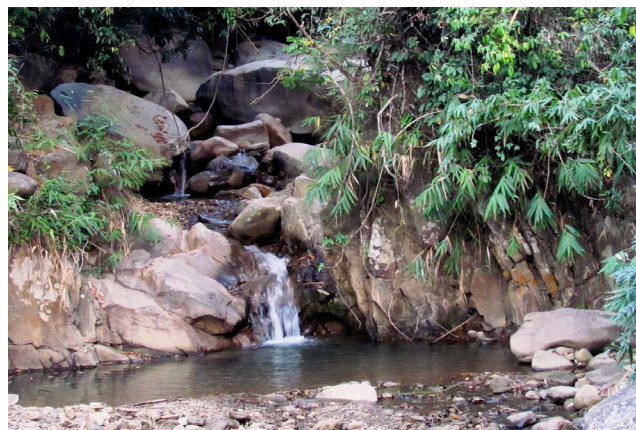
The range of *P. khare* extends from the northeastern part of India to Myanmar (Wogan, 2008) and Bangladesh (Khan, 2013). In India, it is found in Arunachal Pradesh (Sen and Mathew, 2006), Assam (Dutta, 2004), Nagaland (Kiyasetuo and Khare, 1986), Manipur (Devi and Shamungou, 2006), Mizoram (Dey and Ramanujam, 2003; Sen and Mathew, 2003), and Meghalaya (Rangad *et al.* (2007).

The first record of *P. khare* from Assam was from Nameri National Park, located in the northern bank of river Brahmaputra and close to the interstate border with Arunachal Pradesh. In this paper, we report the availability of this species in areas south of the river Brahmaputra. On the 4<sup>th</sup> February, 2017, during a field survey to the Eco-Sensitive Zones of the Barail Wildlife Sanctuary, Assam, two specimens of *P. khare* (V/A/NERC/ZSI/1283) were collected from a torrent stream, near the Forest Sub-Beat Office at Bandarkhal, Dima Hasao District (Figure 1).

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**Figure 1.** Habitat at Bandarkhal.



**Figure 2.** Micro-Habitat of *P. khare* at Bandarkhal.



**Figure 3.** Dorsal & Ventral views of *P. khare* (male).



**Figure 4.** Dorsal & Ventral views of *P. khare* (female).

The specimens were found 'sitting' on a huge boulder by a low-flow pool of water of a torrential/montane river locally called as 'Forest Nala' (Figure 2). The specimens were collected along with a few *Amolops* sp. with which they, apparently, shared their ecological niche. Both the specimens [one male (SVL-57.61 mm, Figure 3) and one female (SVL-56.12, Figure 4)] match with the diagnostic characters of *P. khare* (both male and female).

Dutta *et. al.* (2004) put *P. khare* as Vulnerable [B1ab (iii)] in the Red List Category of IUCN due to the limited extent of occurrence of this species in an area of less than 20,000 km<sup>2</sup>, with fragmented distribution. They reported its distribution from Nagaland and two Protected Areas - one from mid-northern Assam (Nameri National

Park) and another from eastern Arunachal Pradesh (Pakhui WLS). However, *P. khare* has been reported from Mizoram (Dey and Ramanujam, 2003; Sen and Mathew, 2003), Manipur (Devi and Shamungou, 2006), Eastern Arunachal Pradesh [(Tirap district) Mathew and Sen (2006)], Meghalaya (Rangad *et. al.* (2007), Southern Assam [Cachar district (reported in this paper)] in the Northeastern India, and from Myanmar (Wogan, 2008) and Bangladesh (Khan, 2013). Although, this species has a wide range of distribution across three countries, their area of occurrence is highly fragmented. However, we are of the opinion that *P. khare* warrants a re-evaluation of the threatened category assigned to it in the light of newer distributional reports.

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