

A record of *Scutigera nyingchiensis* Fei, 1977 (Amphibia: Anuran: Megophryidae) in the Eastern Himalaya, North East India

The ecologically and geographically diverse region of North East (NE) India is set within two global biodiversity hotspots, namely, the Himalayan and the Indo-Burma. Arunachal Pradesh, a state in NE India, falls under the Himalayan biodiversity hotspot, which is among the 34 biodiversity hotspots of the world¹. However, its rich biodiversity is poorly understood with regard to the species-level identification of many of its extant amphibians and reptiles². A total of 126 amphibian species are reported from NE India, out of which 45 species are endemic to this region³. Recently, three new

species of horned frogs, namely *Megophrys vegrandis*, *Megophrys anrae* and *Megophrys oropedion* have been reported from NE India, viz. Arunachal Pradesh and Meghalaya².

In the recent survey of high-altitude areas in Arunachal Pradesh, we recorded eight live individuals of *Scutigera* species from the alpine zone of the Sela Pass area (27°30'–25.40"N and 92°6'–18.30"E; altitude 4169 m amsl), in Tawang district. One individual of *Scutigera* species was recorded on 24 November 2013. Furthermore, an aggregate of seven individuals along with their fertilized egg

masses was recorded on 4 June 2014. They were photographed for the study of morphological characteristics and released later in their natural habitat. The morphological characteristics of the species were examined with the available literature on *Scutigera* species^{4,5}. The morphological characteristics were matched and confirmed with the diagnostic morphologies of *Scutigera nyingchiensis* Fei, 1977 (Figure 1), commonly known as Nyingchi Alpine Toad, belonging to the family Megophryidae. So far, there is no authentic report of distribution of *S. nyingchiensis* in the Eastern

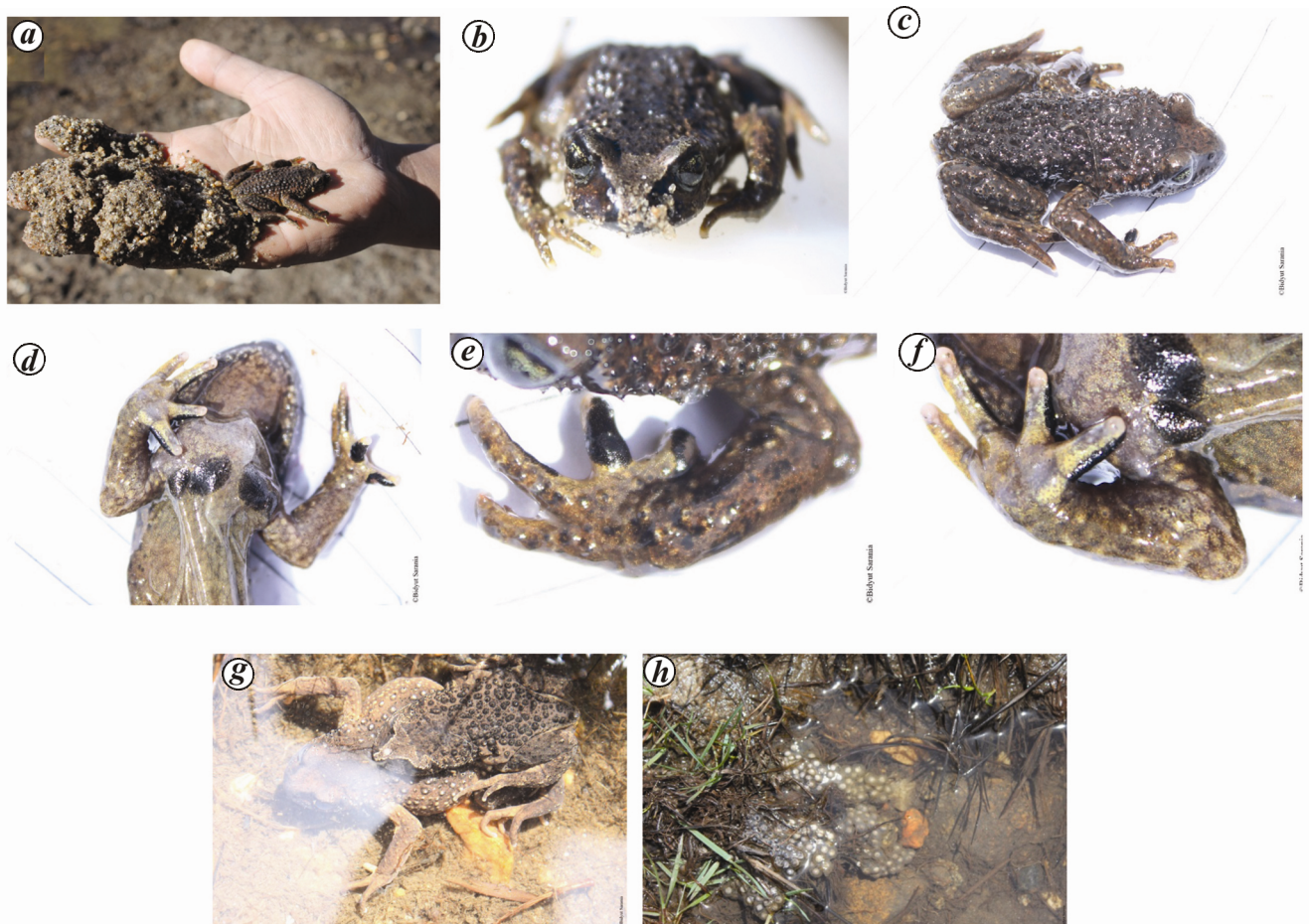


Figure 1. Male *Scutigera nyingchiensis* recorded from Sela Lake, Tawang district, Arunachal Pradesh, India. *a*, Dorsal view (24 November 2013). *b*, Head profile (24 November 2013). *c*, Dorsal view (4 June 2014). *d*, Ventral view: two pairs of dark brown cornified patches (4 June 2014). *e*, Left hand: nuptial dark-brown cornified patch on dorsal surface of the first and second fingers and inner side of the third finger (4 June 2014). *f*, Right hand: ventral view, first and second fingers equal in length (24 November 2013). *g*, A breeding pair (4 June 2014). *h*, Cluster of eggs attached to aquatic substratum (4 June 2014).

SCIENTIFIC CORRESPONDENCE

Himalaya in general and Arunachal Pradesh in particular.

The key morphological characteristics of the male *S. nyingchiensis* observed are listed below:

(I) Body long and narrow, head wider than long; no tympanum.

(II) Dorsal skin rough; dorsal warts raised and elongated, with numerous spines on each wart. Warts around cloaca and the bases of the outer thighs present.

(III) Toes half-webbed; the first and second finger equal in length. Nuptial dark brown cornified pads on the dorsal surface of the first and second fingers and the inner side of third finger.

(IV) Two pairs of dark brown cornified patches and one pair of axillary gland on the male chest, with the outer cornified patch smaller than the inner patch. No cornified patches on the abdomen.

(V) Dorsal dark greyish-olive, lateral body light yellowish-brown; ventral greenish-yellow. An inverted triangular mark from the upper eyelid to the snout.

(VI) Snout-vent length measured 52 mm (male) and 60 mm (female).

There are 19 known species of the genus *Scutigera*; most of them are endemic to China^{6,7}. The genus *Scutigera* is reported from India, the Tibetan Plateau in southwestern China, Burma, Nepal, northern Pakistan and Bhutan at an alti-

tudinal range 1000–5000 m amsl, whereas distribution of *S. nyingchiensis* is known from northern Pakistan, Tibet and the northern most part of India^{3,8}. Two species of genus *Scutigera* reported from India till date are *S. nyingchiensis* and *S. sikimensis*; the former is found in Jammu and Kashmir whereas the latter is distributed in West Bengal, Sikkim and Meghalaya⁸.

Although *S. nyingchiensis* is categorized as a least concern species by IUCN, its population abundance within Arunachal Pradesh is still unknown. Therefore, further population assessments of the species within this fragile ecological range is required to determine its current population status and conservation strategy.

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