

Interspecific Amplexus by a Male Terai Treefrog, Polypedates teraiensis (Dubois 1987) (Anura: Rhacophoridae), and a Female Serchhip Horned Frog, Xenophrys serchhipii Mathew and Sen 2007 (Anura: Megophryidae), from Mizoram, India

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The Terai Treefrog (*Polypedates teraiensis*) occurs at elevations of 40–1,800 m asl in Nepal, India, Bangladesh, and Myanmar (Frost 2021). Frequently encountered around human habitation (Barooah and Sarma 2016) as well as in tropical and subtropical forests, males call from overhanging vegetation or the banks of temporary pools, ditches, ponds, or slow-flowing water streams (Purkayastha 2021).

The Serchhip Horned Frog (*Xenophrys serchhipii*) is distributed in low to mid-elevation tropical evergreen and semideciduous broadleaf forests with varying degrees of anthropogenic disturbance (Mahony et al. 2020) in northeastern India (Assam, Manipur, Tripura, Nagaland, Meghalaya, and Mizoram), Bangladesh, and Myanmar (Frost 2021). These toad-like frogs can exploit heavily disturbed situations ranging from areas mostly cleared of forest cover except for narrow strips of dense vegetation along streams to dense bamboo groves and mature teak monoculture plantations (Mahony et al. 2020).

Male anurans often fail to discriminate between receptive conspecific females and males or spent females and indiscriminate males might even attempt to mate with frogs of other species (Duellman and Trueb 1986). However, amplexus between two different species (interspecific or heterospecific) is not a commonly observed behavior (Beranek 2017; Mudrek et al. 2017; Groffen et al. 2019) and can trigger negative demographic consequences (Amore et al. 2009). Communication and recognition among amphibians occur via visual, chemical, or acoustic signals (Belanger and Corkum 2009) but these can be affected by noisy environments and by sharing microhabitats with other frog species (Shahrudin 2016). Various factors might contribute to inter-

specific amplexus, including low numbers of females (Wogel et al. 2005), high numbers of competing males and noisy





Fig. 1. A male Terai Treefrog (*Polypedates teraiensis*) and a female Serchhip Horned Frog (*Xenophrys serchhipii*) on a rock (top) and after the female leapt toward a stream (bottom) at Sihhmui, Mizoram, India. Photographs by Hmar Tlawmte Lalremsanga.

environments (Wells 2007), confusion of chemical signals (Mollov et al. 2010), low selectivity (Machado and Bernarde 2011), long-term absence of conspecific females and explosive breeding strategies (Vivek et al. 2014). Muansanga et al. (2021a, 2021b) reported interspecific amplexus between a male *P. teraiensis* and a female White-lipped Treefrog (*P. braueri*) and between a male *P. teraiensis* and female Cope's Assam Frog (*Hydrophylax leptoglossa*), respectively. In the family Megophryidae, interspecific amplexus has been recorded between a Palawan Horned Frog (*Pelobatrachus ligayae*) and a Philippine Toad (*Ingerophrynus phillippinicus*) (Lorenzo and Realubit 2019).

Between 1900–2000 h on 12 April 2019, we observed a male *P. teraiensis* and a female *X. serchhipii* in axillary amplexus on a rock (Fig. 1) about 1.5 m from a stream passing through secondary forest at Sihhmui, Aizawl District, Mizoram, India (23°47'56.79"N, 92°39'2.67"E; elev. 186 m asl). Possibly disturbed by our presence, the female frog leapt ca. 65 cm toward the stream. The streambed consisted of sand and gravel covered by dry leaves and twigs and scattered temporary pools. Low vegetation (< 1.5 m tall) and creeping plants bordered the stream. Air temperature and relative humidity at the site were 28 °C and 79%, respectively.

The chin and venter of the male *P. teraiensis* were in contact with the head and dorsum of the female *X. serchhipii* and the cloaca of the male frog was directly above that of the female. With the aid of photographs, we estimated the snout-vent lengths of the *P. teraiensis* and *X. serchhipii* as 65 mm and 50 mm, respectively. This is the third documented case of amplexus between a male *P. teraiensis* and a female of another anuran species in Mizoram (Muansanga et al. 2021a, 2021b). We suggest that the apparent frequency of this otherwise rarely documented behavior is a result of Terai Treefrog abundance in a variety of habitats that also support a plethora of other sympatric anuran species.

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