

## Interspecific amplexus between *Ingerophrynus philippinus* and *Megophrys ligayae* on Palawan Island, Philippines

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**Photograph by:** Antonio N. Lorenzo II.

**Subjects identified by:** Antonio N. Lorenzo II, Nikki Dyanne C. Realubit.

**Location:** Cleopatra's Needle Critical Habitat (CNCH), Barangay Binduyan, Puerto Princesa City, Palawan Island, Philippines.

**Elevation:** 150 metres ASL.

**Habitat:** Rocky riverine edge in a lowland, secondary forest.

**Date and time:** 02 February 2019, 22:00 hrs.

**Identity of subjects:**

- (i) Philippine Toad, *Ingerophrynus philippinus* (Amphibia: Anura: Bufonidae)
- (ii) Palawan Horned Frog, *Megophrys ligayae* (Amphibia: Anura: Megophryidae)

**Description of record:** An interspecific amplexus between a male Philippine toad (SVL=68 mm) and a female Palawan Horned frog (SVL=73 mm) was documented (Fig. 1). The unusual pair was observed on a river bank during a herpetological survey. They were not immersed in water and the female frog did not produce any eggs during the time of observation.



Fig. 1.

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**Remarks:**

The two anuran species observed are both endemic to the Palawan Island Group. The male Philippine Toad *Ingerophrynus philippinicus* was identified based on the prominence of two cranial crests resembling a crown (Inger, 1954). The female Palawan Horned Frog *Megophrys ligayae* was identified based on the presence of its orbital appendages resembling horns (Inger, 1954), hence its common name. The former species looks similar to another bufonid *Rhinella marina* which was introduced in the country during the early 20th century as a biological control agent. The latter species, *Megophrys ligayae*, which is restricted in terms of its distribution, is present only in the Palawan Island group and closely resembles its congeneric, the Mindanao Island endemic *M. stejnegeri*.

During breeding season, male and female anurans communicate through visual, chemical and acoustic signals and one of the ways to successfully breed is through amplexus (Wells, 2007; Belanger and Corkum, 2009). Anuran amplexus is characterized by the male frog grasping on the female forcing it to release eggs and external fertilization immediately follows (Vivek et al., 2014). However, interspecific amplexus is a rare occurrence among anurans with a relatively low number of published observations (Groffen et al., 2019). This kind of interaction between two different anuran species happens due to the inability of the male to detect and recognize conspecific females especially during times of active breeding among different anuran species in the same area or habitat (Londero et al., 2018). This kind of interaction also happens due to the absence of niche segregation among anuran species with overlapping breeding periods and habitats combined with increased pressure to breed (Beranek, 2017). To our knowledge, this is the first record of interspecific amplexus between the endemic Philippine Toad and the Palawan Horned Frog.

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