

Developmental aberration in *Leptobrachium lumadorum* from Davao Oriental Province, Philippines

Antonio N. LORENZO II & Arvin C. DIESMOS
antoniolorenzo6792@gmail.com (Lorenzo), arvin.diesmos@gmail.com (Diesmos)

Observer: Antonio N. Lorenzo II.
Photographs by: Antonio N. Lorenzo II.
Subject identified by: Antonio N. Lorenzo II, Arvin C. Diesmos.

Location: Mount Hamiguitan Range Wildlife Sanctuary, Municipality of San Isidro, Davao Oriental Province, Mindanao Island, Philippines (6.731583°N, 126.1660833°E; WGS 84).

Elevation: 1013 metres.

Habitat: Two-metre wide stream in old secondary growth forest.

Date and time: 07 July 2016, noon.

Identity of subject: Mindanao Litter Frog larvae, *Leptobrachium lumadorum* (Amphibia: Anura: Megophryidae).

Description of record: We collected tadpoles of *L. lumadorum* during a herpetological survey of Mount Hamiguitan Range Wildlife Sanctuary. Of the total sample of 103 tadpoles that were collected during the field survey, one individual (NMPH EL-72; Gosner Stage 28) was found to have a dextral location of the spiracle and a sinistral orientation of the vent tube (Figs. 1A and 1B).

In contrast, the rest of *L. lumadorum* tadpoles in the collection exhibit sinistral spiracle and dextral vent tube; such spiracle and vent tube position is typical in tadpoles of the genus *Leptobrachium* (Grosjean, 2001, Inger, 1983).

NMPH EL-72 exhibited no other peculiarity compared with three other tadpoles in the lot collected from the same site, and are of the same Gosner Stage. All, including the aberrant tadpole, have a labial tooth row formula of 6(2-6)/6(1-5) and have accessory tooth rows and serrated massive jaw sheaths with non-emarginate oral discs. Prior to collection, this tadpole appeared to behave normally along with its conspecifics in spite of the observed aberration.

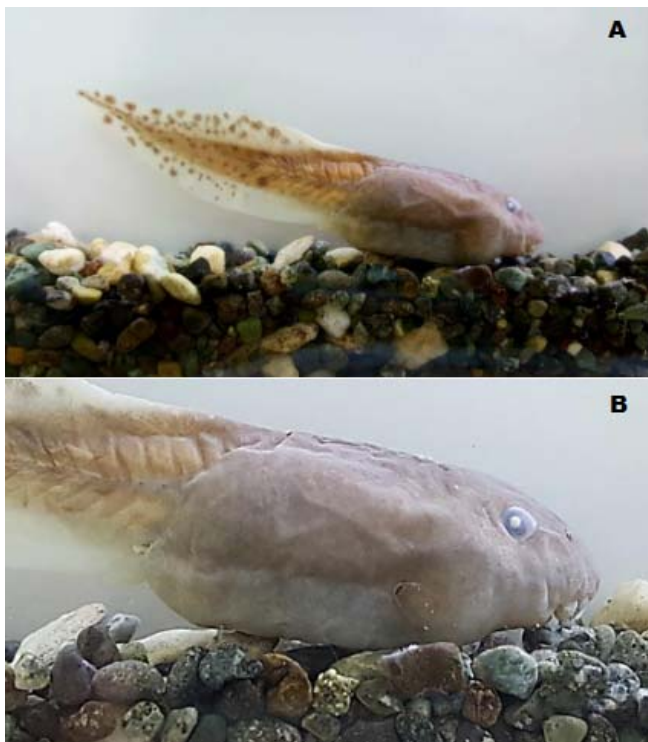


Fig. 1.

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Remarks: *Leptobrachium lumadorum* (Brown, Siler, Diesmos & Alcala, 2009) is a megophryid frog endemic to the Philippines. This species is known to inhabit primary and secondary lowland and montane forests and freshwater swamps on the islands of Dinagat, Mindanao, and Basilan (Diesmos *et al*, 2015). This frog is commonly seen on the forest floor sitting on leaf litter or on top of rocks, roots, and buttresses near mountain streams, puddles or ponds (Brown *et al*. 2009). However, a larval description for this anuran is still lacking as well as with its congeners in Palawan and Mindoro Islands.

References:

- Brown, R., Siler, C., Diesmos, A. & Alcala, A. (2009). Philippine frogs of the genus *Leptobrachium* (Anura: Megophryidae): Phylogeny-based species delimitation, taxonomic review, and descriptions of three new species. *Herpetological Monographs* 23: 1-44.
- Diesmos, A., Watters, J., Huron, N., Davis, D., Alcala, A., Crombie, R., Afuang, L., Gee – Das, G., Sison, R., Sanguila, M., Penrod, M., Labonte, M., Davey, C., Leone, E., Diesmos, M., Sy, E., Welton, L., Brown, R. & Siler, C. (2015). Amphibians of the Philippines, Part I: Checklist of the Species. *Proceedings of the California Academy of Sciences* 62(20): 457–539.
- Grosjean, S. (2001). The tadpole of *Leptobrachium* (*Vibrissaphora*) *echinatum* (Amphibia, Anura, Megophryidae). *Zoosystema* 23(1):143-156.
- Inger, R. (1983). Larvae of Southeast Asian species of *Leptobrachium* and *Leptobrachella* (Anura: Pelobatidae). In Rhodin & Miyata [eds.], *Advances in Herpetology and Evolutionary Biology*, pp 13–22. Museum of Comparative Zoology, Cambridge.