

be regarded as the great exception among Anura taken as a whole?

If it be permissible to speculate on the phylogeny of *Alytes*, I would suggest that it is the large size of the eggs that has enabled its direct ancestors to take to oviposition on land, and not that the character of the eggs has been modified to that effect*. I have already expressed the opinion †, based on the assumption that batrachians were derived from fishes related to the Crossopterygians and Dipnoans, which produce eggs of a type similar to those of *Cryptobranchus* and *Alytes*, viz., intermediate between the meroblastic and holoblastic, that *Bufo* (extreme reduction of the food-yolk) and *Hylodes* (suppression of the larval life) are extreme and divergent examples evolved out of a condition such as we still find in the thoroughly aquatic Urodeles *Cryptobranchus* and *Megalobatrachus*.

XVII.—*On a Second Species of the Batrachian Genus Amphodus.* By G. A. BOULENGER, F.R.S.

(Published by permission of the Trustees of the British Museum.)

THE remarkable genus *Amphodus* was proposed by Peters ‡ for a small tree-frog from Bahia which, being provided with teeth in the lower jaw and having cylindrical diapophyses to the sacral vertebræ, has been referred to the family Hemiphractidæ, from the other genera of which it is separated by the presence of teeth on the parasphenoid. Peters suggested at the time that his *Amphodus wuchereri* might be closely related to, if not the same as, *Hyla luteola*, described by Wied from specimens observed on the east coast of Brazil living mostly between the leaves of Bromelias.

I am now able to add a second species to the genus, which was previously only known to me from the description and figure. This species is so near to *A. wuchereri* that when

* As one might feel inclined to adduce, in opposition to my argument, the case of the Solomon Islands frogs, which, deprived of suitable water for larval existence, dispense with the metamorphoses, I may mention that I have recently described a frog from Siam—*Rana pileata*—which in all probability breeds in water, the female of which measures 52 mm. in length and the uterine eggs 3 mm. in diameter, exactly as in *Alytes obstetricans*.

† 'Les Batraciens' (Paris, 1910), p. 49.

‡ Mon. Berl. Ac. 1872, p. 768.

Mr. R. R. Mole submitted to me three specimens obtained from Bromelias in Trinidad by his friend Capt. F. W. Urich, I at once thought of *Amphodus*, and this guess at the genus was confirmed on opening the mouth of the frog, which showed large widely spaced teeth in the lower jaw, decreasing in size from the symphysis, and small teeth on the parasphenoid bone. This little frog, measuring only 32 mm. from snout to vent, is specifically different from *A. wuchereri*, the tympanum being completely hidden; but as it agrees tolerably well with the rather unsatisfactory description and figure of *Hyla aurata*, Wied *, from Bahia, stated to live in the same surroundings as *H. luteola*, I am disposed to refer it, provisionally at least, to the species so named, on account of the golden-yellow colour of the three stripes on the back. Should, however, *Hyla aurata*, Wied, prove to be a *Hyla*, the name *Amphodus auratus*, Blgr., would nevertheless stand for the Trinidad frog.

Capt. Urich intends to give an account of the habits of this frog, as observed by him, and in the meantime he has requested me to draw up a definition of the species.

Amphodus auratus.

Head much depressed, a little broader than long; snout truncate, as long as the orbit, with distinct canthus and nearly vertical loreal region; nostril near the tip of the snout; interorbital space broader than the upper eyelid; tympanum hidden; a strong ridge above the temple. Fingers and toes moderately long, the tips dilated into well-developed disks, the subarticular tubercles very feeble; fingers free, first shorter than second; toes slightly webbed at the base. The tibio-tarsal articulation reaches the eye; tibia half the length of head and body, longer than the foot. Skin smooth, coarsely granular on the belly and under the thighs. Brown above, with three golden-yellow longitudinal streaks on the back, the outer bifurcating on the head, the branches ending between and behind the upper eyelids; or head yellow, with brown spots and three brown streaks, the outer following the canthus rostralis and the supratemporal ridge.

The three specimens described were obtained on Mount Tucutche, a little above 3000 feet altitude.

* Reise Bras. ii. p. 249 (1821), Naturg. Bras. i. p. 531 (1825), and Abbild. pl. —. fig. 3 (1831).



Boulenger, George Albert. 1917. "On a second species of the batrachian genus *Amphodus*." *The Annals and magazine of natural history; zoology, botany, and geology* 20, 184–185.

View This Item Online: <https://www.biodiversitylibrary.org/item/61654>

Permalink: <https://www.biodiversitylibrary.org/partpdf/58047>

Holding Institution

University of Toronto - Gerstein Science Information Centre

Sponsored by

University of Toronto

Copyright & Reuse

Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.