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**REDESCRIPTION AND
ILLUSTRATION OF THE TADPOLE
OF *PLECTROHYLA DASYPUS*
(ANURA: HYLIDAE)**

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McCranie & Wilson (1981) described the hylid frog *Plectrohyla dasypus* and included a description of the tadpole presumed to belong to that species. In July 1996, we collected tadpoles, metamorphosing froglets, recent metamorphs, and adults that form a definite link between the tadpoles and adults of *P. dasypus*. This material was collected from a small stream and associated streamside vegetation at the species' type locality (El Cusuco, Departamento de Cortés, Honduras). Although the tadpole described as *P. dasypus* by McCranie & Wilson (1981) was correctly identified, the material is poorly preserved and several errors occur in the description. As a result of these errors, the keys purporting to identify the *P. dasypus* tadpole in Campbell & Kubin (1990), Duellman & Campbell (1992), and Wilson & McCranie (1993) will not do so. Additionally, the *P. dasypus* tadpole has not been illustrated. The purpose of this report is to redescribe and illustrate the tadpole of *P. dasypus*.

A typical tadpole (lot USNM 513859) in stage 40 (Gosner, 1960) has a body length of 15.6 mm, a tail length of 33.2 mm, and a total length of 48.8 mm. The tadpoles in this lot may be described as follows (Fig. 1): body slightly depressed, slightly wider than high; snout semicircular in dorsal aspect, rounded in profile; eyes small (eye length/body height ca. 0.24), directed dorsolaterally; interorbital distance ca. 3.8 mm; nostrils

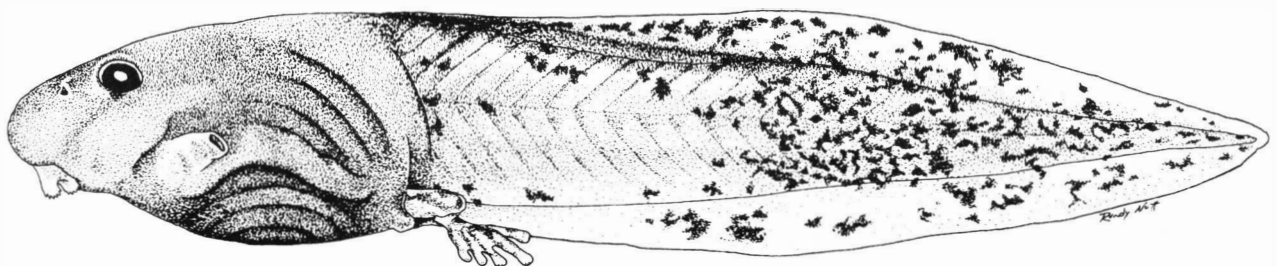


FIG. 1. Lateral view of the tadpole of *Plectrohyla dasypus* (lot USNM 513859) in Gosner stage 40. Scale bar = 5 mm.

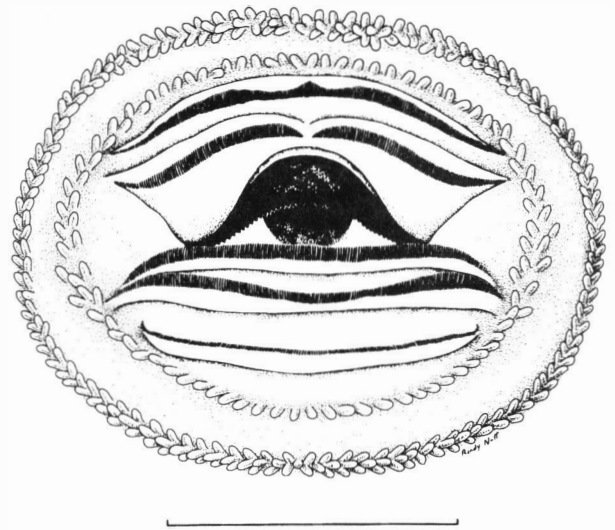


FIG. 2. Oral disc of the tadpole of *Plectrohyla dasypus* (lot USNM 513859) in Gosner stage 40. Scale bar = 3 mm.

situated at point slightly closer to eyes than tip of snout, directed anterolaterally; spiracle sinistral, directed posteriorly, situated near midline at about midbody; vent tube long, dextral; tail musculature robust, extending nearly to tip of rounded tail, with height of tail musculature much greater than height of either fin at midlength of tail; dorsal fin terminating at posterior end of body.

Oral disc (Fig. 2) large (oral disc width/snout width ca. 0.83), ventral, completely bordered by two to three rows of large marginal papillae (ca. 10/mm); single row of larger submarginal papillae present on both labia just inside marginal papillae; few additional submarginal papillae present laterally; oral disc not emarginated; keratinized jaw sheaths medium-sized, bearing short, somewhat pointed to blunt serrations; upper jaw sheath widely arched with long, slender lateral processes; lower jaw sheath widely V-shaped; labial tooth rows 2/3 with second anterior row narrowly interrupted medially; anterior tooth rows long, subequal, extending to lateral portion of oral disc; posterior tooth rows slightly shorter than anterior rows; first and third posterior tooth rows subequal, second posterior row slightly longer than first and third posterior rows; third posterior tooth

row sometimes with smaller teeth than first and second posterior rows. Variation in oral features is negligible.

Colour in life (stage 40): dorsum of head and body Citrine (colour 51 in Smithe, 1975); tail musculature Olive-Yellow (52) with Citrine (51) spots; tail fins transparent with Citrine (51) spots; iris coppery red.

Colour in life of a tadpole (lot USNM 513861) in stage 41: dorsum of head and body Citrine (51) with heavy Greenish Olive (49) mottling; dorsum of limbs Greenish Olive (49) with Olive-Yellow (52) mottling; tail musculature Olive-Yellow (52) with Citrine (51) spotting; iris coppery red.

Colour in life for two nearly metamorphosed froglets (lot USNM 513862) in stage 44: dorsum of head, body, and limbs bronze with Greenish Olive (49) spots; iris coppery red.

Colour in life for a frog that is clearly *P. dasypus* and had recently completed metamorphosis (snout-vent length 16.3 mm; lot USNM 513862): dorsum of head, body, and limbs bronze with Greenish Olive (49) spots; iris coppery red.

Metamorphosing froglets and a recently metamorphosed frog (lots USNM 513860, 513862) of *P. dasypus* were collected at night sitting on low vegetation immediately above a small tributary of the Rio de Cusuco at 1550 m elevation. A search of the leaves on the bottom of the stream below the point where these metamorphs were sitting revealed the tadpoles in lots USNM 513859, 513861.

Plectrohyla dasypus tadpoles are very similar morphologically to those of *P. guatemalensis*. In fact, McCranie & Wilson (1981) identified several lots of *P. dasypus* tadpoles as *P. guatemalensis*. The most reliable way to distinguish *P. dasypus* tadpoles from those of *P. guatemalensis* is iris colour in life (coppery red in *dasypus*, pale brown in *guatemalensis*). Additionally, *P. guatemalensis* does not occur at any of the known *P. dasypus* localities located in a small area of the Sierra de Omoa in the western portion of Departamento de Cortés, Honduras, nor is *P. guatemalensis* known from any locality in Cortés.

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REFERENCES

- Campbell, J. A. & Kubin, T. M. (1990). A key to the larvae of *Plectrohyla* (Hylidae), with a description of the tadpole presumed to be *Plectrohyla avia*. *Southwestern Naturalist* **35**, 91-94.
- Duellman, W. E. & Campbell, J. A. (1992). Hylid frogs of the genus *Plectrohyla*: systematics and phylogenetic relationships. *Misc. Publ. Mus. Zool., Univ. Michigan* **181**, i-vi, 1-32.
- Gosner, K. L. (1960). A simplified table for staging anuran embryos and larvae with notes on identification. *Herpetologica* **16**, 183-190.
- McCranie, J. R. & Wilson, L. D. (1981). A new hylid frog of the genus *Plectrohyla* from a cloud forest in Honduras. *Occas. Pap. Mus. Nat. Hist., Univ. Kansas* **92**, 1-7.
- Smithe, F. B. (1975). *Naturalists color guide*. New York: American Museum of Natural History.
- Wilson, L. D. & McCranie, J. R. (1993). Preliminary key to the known tadpoles of anurans from Honduras. *Royal Ontario Mus. Life Sci. Occas. Pap.* **40**, 1-12.

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