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The tadpole of *Ecnomiohyla sukia* Savage & Kubicki, 2010 (Amphibia: Hylidae)

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Near the village of Guayacán de Siquirres, Limón province, Costa Rica (N 10°02”, W 83°31’) the call of a frog revealed a breeding hole about 15 m high in a *Guarea* tree. An adult was taken from this water-filled cavity along with some tadpoles. The adult tree frog was identified by B. Kubicki as *Ecnomiohyla sukia* Savage and Kubicki, 2010. Its sex was not determined. Ten tadpoles were extracted from the water-filled tree hole and it appeared they had only a few days of larval development, but the exact age was undeterminable. The conspecificity of the tadpoles found with the adult frog *E. sukia* was established by rearing them to metamorphic stages and froglets. The following description is based on tadpoles from stages 25, 36–37, and 41 (Gosner 1960).

Because Savage (2002) supposed that conspecifics eggs could be a possible food for the tadpoles of the genus *Ecnomiohyla*, at first we experimented with eggs of *Hyalinobatrachium fleischmanni* (Centrolenidae) due to the lack of conspecific eggs, but these eggs were refused by the tadpoles. Dried brine shrimp and dried algae flakes were accepted and used for rearing. The largest tadpole grew to 42.3 mm total length at stage 36. In the laboratory rearing sites, froglets died within 15 days after metamorphosis, refusing to eat *Drosophila* spp., *Musca domestica*, and *Acheta domesticus*. All specimens were first anaesthetized for description in live with a minimal dose of 3-Aminobenzoic Acid Ethyl Ester (SIGMA Corp.) and then measured.

Tadpole at stages 36–37. This description is based on two tadpoles at stages 36 and 37 respectively (Gosner 1960; Fig. 1). Both tadpoles were raised in captivity for approximately 40 days. Considering that the stages of these larvae are very close, they were unified in one group and the range of measurements and proportions are given. The specimen at stage 36 is deposited in the Museo de Zoología de la Universidad de Costa Rica (UCR 20998). The two tadpoles had body lengths of 13.2 and 15.0 mm and total lengths of 37.5 and 42.3 mm, respectively. Body slight compressed, with ratios of body width to body height of 1.18–1.21. Nearly perfect oval shape in dorsal outline with greatest body width in the center (Fig. 1B); snout bluntly rounded in profile; in dorsal view the snout have a concave retraction that forms an undulated outline. Ratio of interorbital distance to maximal body width 0.26; ratio of interorbital distance to the distance between eye-axis to the snout tip 0.48–0.53. The big eyes (1.52 – 1.68 mm diameter) are directed dorsolaterally, with a slight forward deviation of about 15 degrees; distance between anterolateral nostrils to eye border 1.3 times longer than distance between nostril and snout tip. Opening of the sinistral spiracle is located ventrally at middle of the body (at 50–55 over the length axis); along the transverse axis, the center of the spiracle opens ventrally at about 60 % of the distance from the ventral longitudinal midline toward the left body side. The spiracle is nearly imperceptible; it is very flexible and camouflages itself on the body wall. A small border of a delicate velum emerges from the spiracle opening, and might be interpreted as the outer border of the operculum; this velum is externally fused on the body wall. In live tadpoles this velum forms an angle with the body wall and makes the spiracle opening an inverted broad U-shape (Fig. 2A). In preserved tadpoles the spiracle appears as a crescent-shaped clinging fold (Fig. 2B). Vent tube short, unattached, oriented downwards and opens medial.

Tail amounts 62.9–64.8 % of total length of the tadpoles; ratios of tail height to tail length 0.29–0.30; both fins start at the end of the body; muscle core on the highest part of the tail takes 43.1–45.5 % of total tail height; remaining tail height is split into equal parts for both fins (Fig. 1A).

Overall body color of living tadpoles brown, but overlie by fine reticular structures of melanophores; dark brown pigment patches over spinal cord and two triangular dark brown fields between eyes and nares. These darker pigmented skin sections are strengthened, especially in the flat body parts. Because the flattened parts of the skin are more rigid, they do not follow the general outline of the otherwise soft body parts. On the lateral and lateral-ventral regions the dark brown skin pigments are clustered together to form spots. Such composed spots are also situated on the venter, except for in a triangular region that starts near the level of the heart and widens towards the vent. This unpigmented ventral section

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