

FIG. 1. *Dolomedes triton* subduing *Hyla cinerea*.

1948. *Herpetologica* 4:158; Raven 1990. *Mem. Queensland Mus.* 29:448; Stehouder 1992. *Litteratura Serpentina* 12:71). According to a cursory literature review of invertebrates and their anuran prey (Toledo 2005. *Herpetol. Rev.* 36:395–400), *Hyla cinerea* has been preyed upon by the spider species *Dolomedes okefenokensis* (Okefenokee Fishing Spider; Jeffery et al. *Herpetol. Rev.* 35:158) and *Acanthepeira stellata* (Starbellied Orbweaver). At 2150 h on 17 August 2015 a *Dolomedes triton* (Six-spotted Fishing Spider) was observed grasping a juvenile *H. cinerea* and trying to subdue it (Fig. 1). The spider was perched on a reed in a water-filled ditch alongside County Road 414, 0.2 km S of Jonesboro, Craighead Co., Arkansas, USA (35.7559°N, 90.7048°W; WGS 84). *Dolomedes triton* has been observed feeding on adult *Acris gryllus* (Southern Cricket Frog; Graham and Sorrel 2009. *Herpetol. Rev.* 40:198) and larval *Lithobates catesbeianus* (American Bullfrog; Rogers 1996. *Herpetol. Rev.* 27:75) in Alabama.

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LEPTODACTYLUS KNUDSENI (Pepper Frog). **DIET.** Leptodactylids are frogs known as sit-and-wait predators that consume several different types of arthropods (Toft 1980. *Oecologia* 47:34–38; Solé et al. 2009. *Herpetol. Notes* 2:9–15; Sugai et al. 2012. *Biota Neotrop.* 12:99–104; Camera et al. 2014. *Herpetol. Notes* 7:31–36). The prey is often swallowed whole since anurans do not chew food, limiting the size of the prey they can eat (Lima and Moreira 1993. *Oecologia* 95:93–102).

Leptodactylus knudseni is a large (SVL = 113–135 mm), nocturnal frog generally found on the forest floor in riparian habitat (Lima et al. 2008. *Guide to the Frogs of Reserva Adolpho*

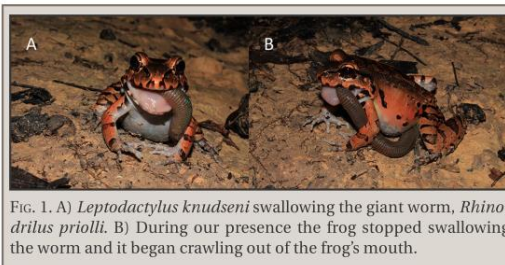


FIG. 1. A) *Leptodactylus knudseni* swallowing the giant worm, *Rhiodrilus priolli*. B) During our presence the frog stopped swallowing the worm and it began crawling out of the frog's mouth.

Ducke, Central Amazonia. Attema Design Editorial, Manaus. 168 pp.). *Rhiodrilus priolli* (Giant Earthworm) is one of the largest terrestrial invertebrates known in the world reaching over 2 m in length (Lang et al. 2012. *Am. Midl. Nat.* 167:384–395). At 0130 h on 30 April 2012 at Fazenda Experimental da UFAM (2.6589°S, 60.0660°W; WGS 84), 38 km from Manaus, Amazonas, Brazil on Hwy BR174, we observed a male *L. knudseni* (SVL = 97.8 mm), swallowing a *R. priolli* which had a total length of 210 mm (Fig. 1). While we observed the frog feeding, it became inactive and started to regurgitate the worm. At the same time, the worm was crawling out of the frog's mouth. The worm was ingested headfirst but suffered little apparent damage despite having been nearly totally swallowed by the frog. The size of the worm may have prevented the frog from swallowing it.

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PHYSALAEUMUS NATTERERI (Cuyaba Dwarf Frog). **TADPOLE DIET.** The functional roles and trophic status of generalized tadpoles are poorly understood (Altig et al. 2007. *Freshwater Biol.* 52:386–395). At 2030 h on 27 November 2014 at the Reserva Natural de Laguna Blanca, Departamento San Pedro, Paraguay (23.8127°S, 56.2949°W; WGS 84), I encountered a small ephemeral pond (ca. 3 m × 3 m) where I observed dozens of *Physalaeumus nattereri* tadpoles consuming the flesh of the seeds of a Coco Palm (Family Arecaceae). In the same pond, I also observed several of the same seeds that had already been cleared of their flesh. To my knowledge, this is the first time that *P. nattereri* tadpoles have been observed consuming the flesh of the seeds of Coco Palms. In a study of their diet in southeastern Brazil, tadpoles of *P. nattereri* that occurred in both temporary and permanent ponds had large proportions of plant fragments, euglenids, algae, and diatoms in their diet (Do Prado et al. 2009. *S. Am. J. Herpetol.* 4:275–285). While it was not specified as to the type of plant fragments found in the diet of *P. nattereri* in Brazil, my observation is consistent with the previous report that plant material is a component in the diet of *P. nattereri* tadpoles.

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PRISTIMANTIS REICHLI. EYE COLORATION. Among anurans, eye color is used as a reliable taxonomic character (Lynch and Duellman 1997. Univ. Kansas Nat. Hist. Mus. Spec. Publ. 23:1–236). This is a useful tool for the frogs in the genus *Pristimantis* where external morphology is highly variable across species groups and conservative in assemblages, and few reports show eye color variation (Duellman and Lehr 2009. Terrestrial-breeding frogs (Strabomantidae) in Peru. NTV Science, Münster, Germany. 382 pp.). *Pristimantis reichlei* was first described as having a metallic yellow-to-orange iris with a transverse bold black stripe (Padial and De la Riva 2009. Zool. J. Linn. Soc. 155:97–122) and this pattern is commonly found throughout its range (Melo-Sampaio and Souza 2009. Check List 6:385–386).

On 11 September 2009 at Fazenda Experimental Catuaba, municipality of Senador Guiomard, Acre, Brazil (10.0822°S, 67.0626°W, WGS 84; 180 m elev.), I observed, photographed, and collected an individual of *P. reichlei* (UFAC-RB 4594) with an unusual pattern of eye coloration. The eye was metallic silver in upper half of the iris, the center was tan, with less silver coloration in the lower part (Fig. 1). Other individuals from this site displayed typical diurnal and nocturnal eye coloration as described in Padial and De la Riva (2009, *op. cit.*) and Melo-Sampaio and Souza (2009, *op. cit.*). Although eye coloration is a useful diagnostic character in the genus *Pristimantis* and this variation appears to be rare, this fact should be evaluated within species accounts and/or descriptions.



FIG. 1. *Pristimantis reichlei* showing unusual eye coloration.

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RHINELLA ARENARUM (Argentine Toad). EGG PREDATION BY LEECHES. Leech predation on amphibians has been previously reported (Moore 1953. Not. Nat. Acad. Nat. Sci. Philadelphia 250:1–13; Cargo 1960. Chesapeake Sci. 1:119–120; Loebmann et al. 2008. Amphibia 7:31–34; Alvarez 2010. Bol. Asoc. Herpetol.



FIG. 1. Specimens of *Oxytychus striatus* collected in the observation area.

Esp. 21:25–26; Tiberti and Gentili 2010. Acta Herpetol. 5:255–258). Amphibian egg predation by leeches has been reported in North and South America, Southeast Asia, Australia, and Europe (Burgin and Schell 2005. Acta Zool. Sinica 51:349–353; Gunzburg and Travis 2005. J. Herpetol. 39:547–571; Romano and Di Cerbo 2007. Acta Zool. Sinica 53:750–754; Soler et al. 2014. Cuad. Herpetol. 28:39–41). Previous reports of anuran eggs being predated by leeches in Argentina include an unidentified *Oxytychus* feeding on eggs of *Rhinella dorbignyi* (Dorbigny's Toad) and *Hypsiboas pulchellus* (Montevideo Treefrog; Soler et al. 2014. *op. cit.*).

Herein we report a case of egg predation on at least two clutches of *Rhinella arenarum* by the leech *Oxytychus striatus* (Ringuelet 1945. Fauna de agua dulce de la Republica Argentina. Volumen XVII Annulata, Fasciculo 1 Hirudinea. pp. 225–232; Fig. 1). The observations were made in a very slow flowing stream in San Luis, Departamento Conlara, Ruta Provincial 5, 15 KM NW Santa Rosa del Conlara, Argentina (32.2567°S, 65.3214°W, WGS 84, 717 m elev.), at ~2300 h on 19 January 2013. Several leeches (reference voucher specimens MACN-In 40169) were attached with their sucker to the gelatinous egg strings, surrounding and penetrating them with their mouths at the point where each egg was found (Fig. 2). After the eggs were consumed, the string was left completely empty (Fig. 3). Once each egg was consumed, the leech left a characteristic cylindrical projection perpendicular to the longitudinal axis of the string, as if the jelly was everted by the leech's mouth once it finished feeding on the egg (Fig. 3).

Oxytychus is a hirudiniform genus of leeches with seven species distributed in Puerto Rico, Panama, Ecuador, and east of the Andes to the north of the extra-Andean Patagonia. Though they feed mainly on the blood of their hosts (Ringuelet 1945. *op. cit.*), recent observations suggest that they also prey on their eggs (Soler et al. 2014. *op. cit.*; present observation). Several similar cases have been observed among hirudiniforms: *Macrobdella ditetra* consumes blood and eggs of frogs (Moore 1953. *op. cit.*), and *M. diploteria* has been observed attacking tadpoles and simultaneously consuming the eggs of *Lithobates clamitans* (Green Frog) and *L. sphenoccephalus* (Southern Leopard Frog) (Turbeville and Briggler 2003. J. Fresh. Ecol. 18:155–159). Hirudiniform leeches lack a proboscis, and to feed they employ their jaws to tear the skin of the host. In the case of egg predation, they manage to bypass the gelatinous capsules surrounding the eggs, perforating them with their jaws. There are different known ways to achieve this: (a) the leech *Bassianobdella fusca* specializes on this type of food, for which it enters the foam nest, then surrounds the egg using its ventral surface and swallows it