

T54853A11216183.en; 28 Mar 2017) because it is only known from two localities. Although this species is common on the summit of the Roraima tepui and its population is apparently stable, their behavior and ecology remained virtually unknown.

Here, we report on an opportunistic observation on the use of a bush as a night shelter by *O. quelchii*. This record was made at the summit of Roraima tepui (5.161255°N, 60.781025°W, WGS 84; 2277 m elev.) on 19 November 2015 at 1936 h. We observed an adult *O. quelchii* lodged within a small tangle of lichen attached to a small *Bonnetia roraimae* bush, at approximately 50 cm above the ground (Fig. 1). The toad remained immobile during the 20 min we stayed observing it.

Our observation confirms the ability of *O. quelchii* to climb in vegetation. While the species inhabiting the sandstone summits of the tepuis are primarily rock dwellers (McDiarmid and Gorzula 1989, *op. cit.*), we believe that the capacity of *O. quelchii* to climb bushes at night could be a way to reduce predation by terrestrial spiders (Theraphosidae). Theraphosid spiders are the only known potential predator for *O. quelchii* so far (McDiarmid and Gorzula 1989, *op. cit.*). This predator is nocturnal and may easily predate *O. quelchii* in the terrestrial environment, both on top of or beneath the sandstone rocks where this species is generally found. This is the first record of diurnal *O. quelchii* climbing bushes to refuge at night probably to protect themselves from predation by nocturnal, terrestrial theraphosid spiders at the ground level in open bare rocky areas.

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**PHYLLOMEDUSA VENUSTA (Lovely Leaf Frog). DIET.** *Phyllomedusa venusta* is an arboreal frog found in northern Colombia, the valley of Magdalena, the Darién on both sides of the Colombia-Panamá border, and western Venezuela. The species is common, but populations are decreasing due to deforestation by agricultural and livestock activities, illegal plantations, human establishments, and use of agrochemicals (Rodríguez-Mahecha et al. 2008. Guía Ilustrada de Fauna del Santuario de Vida Silvestre Los Besotes, Valledupar, Cesar, Colombia. Editorial Panamericana, Formas e Impresos, Bogotá, Colombia. 574 pp.). The food habits and many other aspects of its biology and ecology are unknown.

Herein we describe the diet of *P. venusta* in the dry tropical forest of Colombia at three sites: 1) The Natural Reserve of Civil Society Campoalegre, Municipality Los Cordobas, Department of Córdoba (8.48502°N, 76.19520°W, WGS84; elev. 120 m); 2) Finca Los Mameyales, Municipality Piojó, Department of Atlántico (10.74480°N, 75.09279°W, WGS84; elev. 206 m); 3) Las Delicias farm, Municipality Aracataca, Department of Magdalena (10.58694°N, 74.14224°W, WGS84; elev. 197 m).

We examined 28 stomachs of *P. venusta* collected during 0800–1200 h and 1600–1800 h within forests and disturbed areas. Samples were obtained during 2007 in the dry season (January–March), first rains (April–June), and heavy rains (September–December). SUL (mm), and maximum mouth width (mm) were recorded for each individual. We identified prey to lowest

TABLE 1. Composition of arachnid prey in the diet of *Phyllomedusa venusta* in tropical dry forest of northern Colombia. Volume in mm<sup>3</sup>. L = larvae.

Prey	Number (%)	Volume (%)	Frequency of occurrence
Acarina	5 (31.25)	0.61 (0.02)	0.07
Archezogozetes	4 (25)	0.55 (0.02)	0.04
Euzetes	1 (6.25)	0.06	0.04
Opiliones	1 (6.25)	11.76 (3.98)	0.04
Phryniidae	1 (6.25)	111.76 (3.98)	0.04
Insecta			
Orthoptera	4 (25)	1694.67 (60.30)	0.14
Acrididae sp1	1 (6.25)	47.09 (1.68)	0.04
Tettigonidae sp1	1 (6.25)	1255.03 (44.66)	0.04
Tettigonidae sp1	1 (6.25)	342.00 (12.17)	0.04
Gryllidae sp1	1 (6.25)	50.54 (1.80)	0.04
Blattodea	2 (12.5)	864.60 (30.76)	0.07
Blattellidae sp1	1 (6.25)	370.38 (13.18)	0.04
Blattellidae sp2	1 (6.25)	494.21 (17.59)	0.04
Coleoptera	1 (6.25)	27.52 (0.98)	0.04
L.Coleoptera sp1	1 (6.25)	27.52 (0.98)	0.04
Lepidoptera	1 (6.25)	110.88 (3.95)	0.04
L.Lepidoptera sp1	1 (6.25)	110.88 (3.95)	0.04
Hymenoptera	2 (12.5)	0.32 (0.01)	0.04
Solenopsis	2 (12.5)	0.32 (0.01)	0.04

taxonomic level possible (family and genus), and their length and width were measured (complete prey only) using a digital caliper (nearest 0.1 mm). The individual volume of each prey item and the number of prey items per stomach for each prey category were recorded. Volume of each prey item was estimated using the formula of a prolate spheroid.

Of the captured frogs, six were females and 22 were males (mean SUL = 67.60 ± 8.76 mm; mean mouth width = 21.76 ± 2.10 mm). The diet consisted of 16 types of prey and was dominated in volume and frequency by orthopterans. Acarina showed the highest numerical contribution (Table 1).

It has been suggested that acariphagia occurs in small anurans in terrestrial habits. However, *P. venusta* is large and arboreal, suggesting that acariphagia is a trophic phenomenon not limited to the species defined by Simon and Toft (1991. Oikos 61:263–278). The large numbers of orthopterans and blattarians consumed are congruent with that reported for other *Phyllomedusa* spp. (Parmelee 1999. Sci. Pap. Nat. His. Mus. Univ. Kansas 11:1–59; Vaz-Silva et al. 2004. Herpetol. Rev. 35:160; Freitas et al. 2008. Biota Neotrop. 8:101–110). Considering the type and prey proportion, *P. venusta* appears to be a generalist predator with a sit-and-wait foraging strategy.

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**PROCERATOPHRYS SCHIRCHI** (Sapo-de-chifres; Smooth Horned Frog). **ANTIPREDATOR BEHAVIOR.** *Proceratophrys schirchi* is a medium (SVL = 39–50 mm) frog endemic to the Atlantic Forest, occurring in Rio de Janeiro, Espírito Santo, Minas Gerais and Bahia states in eastern Brazil (Haddad et al. 2013. Guia de anfibios da Mata Atlântica: Diversidade e Biologia. Editora Anolis Books, São Paulo, São Paulo. 544 pp.). Species of the genus *Proceratophrys* usually inhabit the leaf-litter after the metamorphosis (Giaretta et al. 2000. J. Herpetol. 34:173–178; Kwet and Faivovich 2001. Copeia 2001:203–215). Few studies deal with aspects of the natural history, ecology, and behavior of *Proceratophrys* species.

At 1930 h on 21 May 2016, we captured a male *P. schirchi* at Reserva Biológica Augusto Ruschi, Santa Teresa, Espírito Santo, southeastern Brazil (19.9103°S, 40.5502°W, WGS 84; 650 m elev.). The frog was sitting on top of the leaves (Fig. 1A), and remained motionless until we hand-captured it, it displayed the behavior of thanatosis or death feigning in hand (Fig. 1B). When placed on the ground the individual remained in this position for ca. one minute. After returning it to leaf-litter, the frog displayed stiff-legged behavior (Fig. 1C). This latter behavior was reported for *P. moehringi* (Weygoldt 1986. Zool. Jahrb. Syst. 113:429–454); for *P. appendiculata* (Sazima 1978. Biotropica 10:158); for *P. renalis* (Peixoto et al. 2013. Herpetol. Notes 6:479–430); for *P. boiei* and *P. melanopogon* (Toledo et al. 2010. J. Nat. Hist. 44:1979–1988).

Once captured, the individual was transported in a wet plastic bag to the laboratory. On site, it displayed the behavior of puffing-up the body (Fig. 1D). The same behavior was reported for *P. cristiceps* (Mângia and Garda 2015. Herpetol. Notes 8:11–14). The similarity in behavior between the congeners may be indicative of convergence among leaf-litter anurans (Sazima 1978, *op. cit.*; Garcia 1999. Herpetol. Rev. 30:224).

We report for the first time a detailed repertoire of antipredator mechanisms of *P. schirchi*, contributing to the knowledge on behavioral ecology of this species.

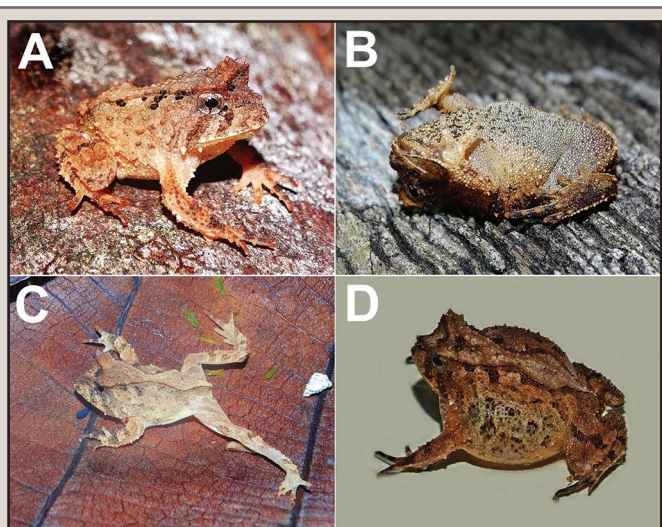


FIG. 1. Antipredator postures of *Proceratophrys schirchi* (MBML9677): A) natural posture; B) thanatosis; C) stiff-legged behavior; and D) puffing-up the body.

The specimen is deposited in the Zoological Collection of Instituto Nacional da Mata Atlântica (MBML 9677; Museu de Biologia Mello Leitão), Santa Teresa, Espírito Santo, Brazil.

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**PSEUDIS PLATENSIS. ENDOPARASITES.** Three species of the genus *Pseudis* are known to occur in Argentina (Vaira et al. 2012. Cuad. Herpetol. 26:131–159). Tadpoles are large, reaching total lengths of 170 mm (Guzmán and Raffo, 2011. Guía de los anfibios del Parque Nacional y la Reserva Natural El Palmar Otamendi. Administración de Parques Nacionales, Buenos Aires. 104 pp.). In Argentina, *P. platensis* is distributed across Buenos Aires, Chaco, Corrientes, Entre Ríos, Formosa, Santa Fe, Santiago del Estero and Salta Provinces (Vaira et al. 2012, *op. cit.*). *Pseudis platensis* hosts the nematodes *Gyrinicola* sp. (Kehr and Hamann 2003. Herpetol. Rev. 34:336–341), *Spiroxyx* sp. (González and Hamann 2010. Brazil. J. Biol. 71:1089–1092), and *Brevimulticaecum* sp. (González and Hamann 2013. Brazil. J. Biol. 73:451–452) from Corrientes Province, Argentina and *Cosmocerca podicipinus*, *Rhabdias* sp., *Brevimulticaecum* sp., and *Physocephalus* sp. (Campião et al. 2010. Parasitol. Res. 106:747–751; Campião et al. 2016. Comp. Parasitol. 83:92–100) from Corumbá, Mato Grosso do Sul, Brazil.

In this note we provide a new host record of *Gyrinicola chabaudi* occurring in *P. platensis*. Six tadpoles of *P. platensis* (mean body length = 101.1 mm ± 9.0 SD) were collected from Bañado de Viñalito (24.406639°S, 63.02925°W, WGS 84; 218 m elev.), Salta Province, Argentina and deposited in the herpetology collection of the Universidad Nacional de San Juan, San Juan, Argentina as UNSJ 3000. The body cavity was opened by a mid-ventral incision, the digestive tract was removed and its contents examined for helminths using a dissecting microscope. Fifty-three nematodes (21 males, 32 females) were removed and identified as *G. chabaudi*. Infection prevalence (number tadpoles infected/number tadpoles examined × 100) was 100%; mean intensity (mean number of nematodes per infected tadpole) was 8.83 ± 4.45 SD, range = 5–16. All of the nematodes were deposited in the Helminthological Collection, Fundación Miguel Lillo as (CH-N-FML 07710).

*Gyrinicola chabaudi* was described from specimens recovered from the gut of *Leptodactylus ocellatus* tadpoles from Santo Amaro, São Paulo, Brazil (Araujo and Artigas 1982. Mem. Inst. Butantan 44/45:383–390) and *Scinax nasicus* from Corrientes, Argentina (González and Hamann 2005. Facena 21:145–148). The males were found later from the intestine of tadpoles of *S.*