

Rojas-Rivera, A., Cortés-Bedoya, S., Gutiérrez-Cárdenas, P.D.A. & Castellanos, J.M. 2011. *Pristimantis achatinus* (Cachabi robber frog). Parental care and clutch size. *Herpetological Review* 42: 588-589

PRISTIMANTIS ACHATINUS (Cachabi Robber Frog). PARENTAL CARE AND CLUTCH SIZE. *Pristimantis* is the largest clade of frogs in the world with nearly 445 species, distributed mainly in northwestern South America (Amphibiaweb 2011.. [web application]. Berkeley, California. Available: <http://amphibiaweb.org/>; accessed 27 May 2011; Hedges et al. 2008. *Zootaxa* 1737:1–182). These frogs have terrestrial eggs and embryos undergo direct development (Hedges et al. 2008, *op. cit.*). To date, there are published data on clutch size, nest type, and parental care in 10 species of *Pristimantis*: *P. affinis*, *P. buccinator*, *P. caryophyllaceus*, *P. lymani*, *P. nicefori*, *P. percultus*, *P. racemus*, *P. simoterus*, *P. terraebolivaris*, and *P. verecundus* (Carrillo 2007. *Herpetol. Rev.* 38:183; Heatwole 1963. *Carib. J. Sci.* 3:17–23; Lynch and Duellman 1997. *Univ. Kansas. Nat. Mus. Spec. Publ.* 23:1–236; Lynch et al. 1996. *Caldasia* 18:329–342; Myers 1969. *Am. Mus. Novit.* 2396:1–52; Townsend 1996. *In* Powell and Henderson. *Contributions to West Indian Herpetology, a Tribute to Albert Schwartz*, pp. 229–239. *SSAR Contrib. Herpetol. Vol. 12.* Ithaca, New York; Vargas-S. and Castro-H. 1999. *Rev. Acad. Colomb. Cienc.* 23:407–410). Herein we provided the first data on nest site, clutch size, and parental care in *P. achatinus* from a premontane humid forest in the Central Andes of Colombia. This species occurs in Panama, Colombia, and Ecuador, at altitudes of 0–2330 m (Frost

2011. *Amphibian Species of the World: an Online Reference*. Version 5.5 [31 Jan 2011]. Electronic database accessible at <http://research.amnh.org/vz/herpetology/amphibia/>. American Museum of Natural History, New York; accessed 27 May 2011).

On 25 May 2011, we found an adult female *P. achatinus* (37.9 mm SVL) sitting on a clutch of 38 eggs (Fig. 1A) at Ecoparque Los Alcázares Arenillo, municipality of Manizales, Department of Caldas, Colombia (5.067°N, 75.533°W, 1730–1960 m elev.). Both the female and the egg mass were in a shallow depression (ca. 25 mm deep) on the ground beneath leaf litter, next to small shrubs. At the time of finding the nest, the female was completely covering the eggs with the body and head, so that the eggs were not visible, which could be evidence of parental care. However, minutes after being disturbed the frog moved, allowing us to see the eggs (Fig. 1A). The eggs were spherical with yellowish cream yolk and clustered in a grape bunch although not connected by a jelly or foam matrix (Fig. 1B). We examined 10 eggs that ranged from 4.1–4.6 mm diameter (mean 4.46 ± 0.17) and we estimated them to be approximately early stage 5 of development based on the limb buds elongate and attached to trunk, forelimbs round to ovoid, and hindlimbs round to ovoid-elongate, eyes prominent but unpigmented, and gill buds present (Townsend Stewart 1985. *Copeia* 1985:423–436).

Although there is a widespread lack of data on parental care *Pristimantis*, the available data and this report suggest that females attend nests. Based on the data summarized by Wells (2007. *The Ecology and Behavior of Amphibians*. University

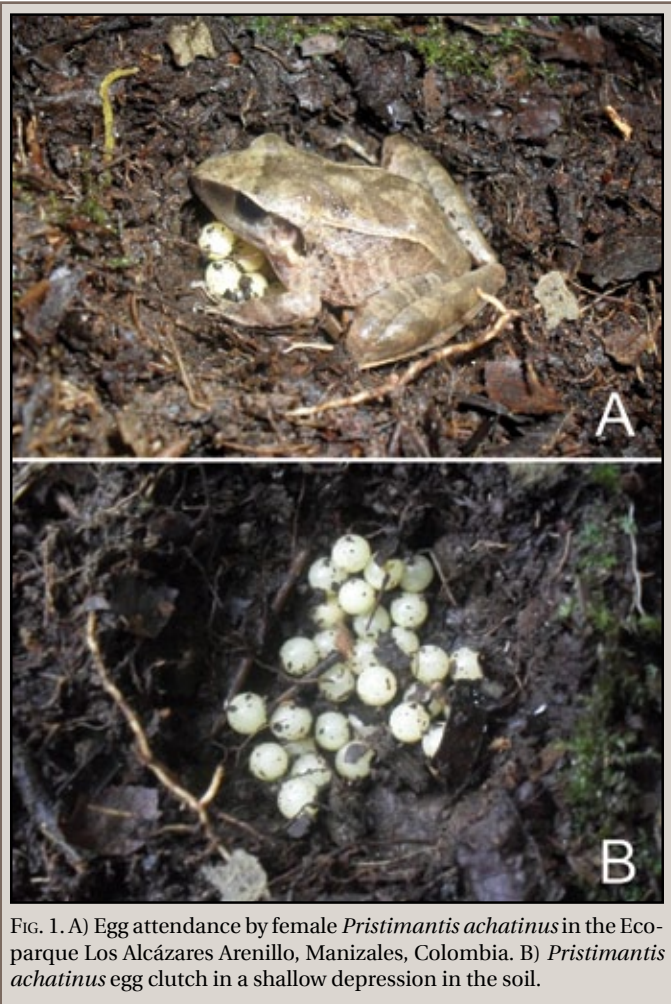


FIG. 1. A) Egg attendance by female *Pristimantis achatinus* in the Ecoparque Los Alcázares Arenillo, Manizales, Colombia. B) *Pristimantis achatinus* egg clutch in a shallow depression in the soil.

COLOR REPRODUCTION SUPPORTED BY THE THOMAS BEAUVAIS FUND

of Chicago Press, Chicago, Illinois) and others (Rodríguez and Alonso 2009. *Herpetol. Rev.* 40:204; Ryan 2005. *Herpetol. Rev.* 36:234–236; Whitfield et al. 2008. *Herpetol. Rev.* 39:76), in *Craugastor* and *Strabomantis* the females performed parental care, whereas in *Diasporus* it is the male, and in *Eleutherodactylus* the behavior is accomplished by females, males, or either parent.

We thank students M. Salazar, M. Duque and A. Vásquez from Instituto para la Ciencia, for their assistance in the field.

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