

SHORT COMMUNICATION

Rediscovery of *Centrolene solitaria* (Anura: Centrolenidae) from Colombia

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Palavras-chave: Caquetá, Florencia, novos registros, pererecas-de-vidro.

The description of *Centrolene solitaria* (Ruiz-Carranza and Lynch, 1991) is based on a single adult male (holotype ICN 24298) collected by John D. Lynch on 26 June 1991 on the eastern flank of the Cordillera Oriental in Florencia Municipality, Caquetá Department, Colombia, at an elevation of 1410 m (39.3 km North of Florencia Municipality on Alto de Gabinete–Florencia Road). According to Rueda and Lynch (2004), *C. solitaria* is endemic to a small area on the Eastern Colombian Cordillera, and it is considered by the IUCN red list as data deficient (DD) (AmphibiaWeb 2015). However, since the description, there have been no new reports of this species until our fieldwork in 2012.

We collected two adult males of *Centrolene solitaria* during four explorations in the vicinity

of the type locality, as follow: ICN 55740 (Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá) collected on 09 October 2014; and CML 1078 (César Malambo Lozano field numbers; deposited at the ICN but not yet cataloged), collected on 20 December 2012. John D. Lynch and Marco Rada confirmed the identity of CML 1078. Both specimens were found in La Cabaña, Farm on the Tarqui Vereda [= path or lane] in Florencia Municipality, Caquetá Department (01°50'6.5" N, 75°39'54.6" W, 1468 m a.s.l.). These new records are near the type locality and extend the distribution of the species 2.5 airline km (Figure 1).

The additional specimens conform to the overall original description and diagnostic characters provided by Ruiz-Carranza and Lynch (1991), as follow: (1) vomerine teeth present; (2) bones green pale in life; (3) parietal peritoneum 1/3 anterior white, white pericardium, visceral stomach and large intestine white; (4) color in life, dark green with white and yellow

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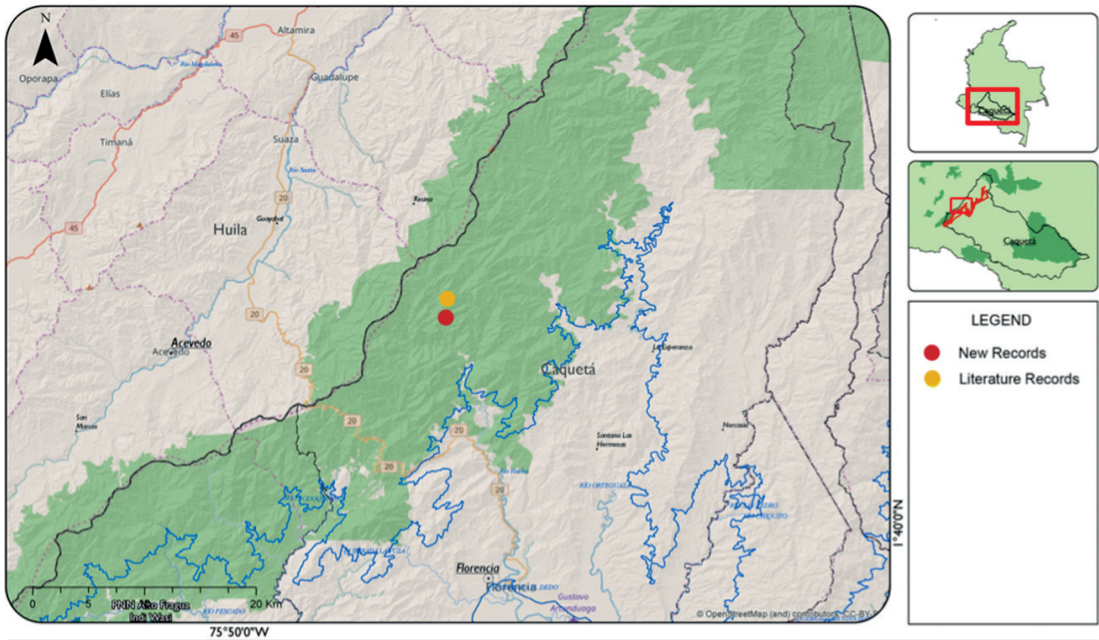


Figure 1. Geographic distribution of *Centrolene solitaria* in Colombia. Yellow circle = literature record, red circle = new records.

flecks and black spotting; parietal peritoneum white, covering anterior third of abdomen (heart not visible); pericardial, stomach and rectus peritonea white; hepatic peritoneum clear; bones green; and white labial and lateral stripe present; (5) webbing formula on hand III 2-2 IV; (6) webbing formula on foot I ¼-2 II 1-2 III 1-2 IV 2 ¼-1 ¼ V; (7) snout blunt and rounded in dorsal aspect, inclined forward in lateral profile; (8) dorsal skin finely granulated with small warts that coincide with white spots; (9) dermal folds with a series of small tubercles on the ventrolateral edges of the Finger IV, forearms, elbows, Toe V, tarsi, and heels; (10) humeral spine absent in males; (11) tympanum rounded, large, oriented laterally; (12) small males adults, SVL 19.3 mm; and (13) absent nuptial excrescences, *sensu* Lynch and Duellman (1973) (Figure 2).

The first male collected was vocalizing on the top of a leaf, 3 m above a stream, near a

waterfall. We heard more than 10 individuals calling during the subsequent 3 days. Unfortunately, those males were difficult to locate as they called about 4 m above the stream bed. We collected the second male in the same stream 2 years later (9 October 2014). Advertisement calls of the species comprise groups of four or five highly pitched “peeps”; calls are irregular and separated by long intervals (ca. 5–10 min). We also heard males of this species in larger, fast-flowing streams in the same area.

Contrary to the observation of Rueda and Lynch (2004) that *Centrolene solitaria* was threatened by habitat loss caused by the expansion of cattle grazing and the cultivation of illegal crops, we noted that human disturbance minimal and scarce and at the habitat near the type locality. The Florencia–Alto Gabinete Road has been almost abandoned by farmers and authorities; therefore, the Andean forest in a

wide area between 1200 to 2050 m a.s.l. remains almost undisturbed.

Since the expedition of Pedro M. Ruiz-Carranza and John D. Lynch in the beginnings of the 1990s, no inventories have been carried out in the vicinity of the Florencia–Alto Gabinete Road. However, in February 2008, March 2010, November and December 2012, and October 2014, we and other colleagues visited some new and historical localities of glassfrogs in Caquetá department (between 800 and 2050 m a.s.l.) (Malambo *et al.* 2013). We did not find “*Centrolene*” *medemi* (Cochran and Goin, 1970) (*incertae sedis*), *C. geckoideum* Jiménez de la Espada, 1872, *C. hybrida* Ruiz-Carranza and Lynch, 1991, *C. sanchezi* Ruiz-Carranza and Lynch, 1991, and *Nymphargus nephelophila* (Ruiz-Carranza and Lynch, 1991) on any of those field trips, but we collected other centrolenid species such as *C. solitaria*, *Cochranella resplendens* (Lynch and Duellman, 1973), *Espadarana* cf. *audax* (Lynch and Duellman, 1973), *Hyalinobatrachium pellucidum* (Lynch and Duellman, 1973), *Nymphargus oreonympha* (Ruiz-Carranza and Lynch, 1991), *Rulyrana* cf. *flavopunctata* (Lynch and Duellman, 1973), *Teratohyla midas* (Lynch and Duellman, 1973) and an unidentified species of *Centrolene*. These data reveal the importance of additional inventories. We think that the absence of records of *C. solitaria* reflects a lack of fieldwork. Therefore, we advise to carry out explorations in large, fast-flowing streams, where the most individuals were heard calling.

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Figure 2. An adult male *Centrolene solitaria* (ICN 55740) from Caquetá, Colombia. Photo by Y. Gonzalez-Ibarra.

Becas para la Iniciativa de Species’ Amenazadas IEA “Jorge Hernandez Camacho” to John Jairo Sarria and Marco Rada (convenios CO 522 and 02 2011). 🐸

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