

NOTES ON GEOGRAPHIC DISTRIBUTION

Amphibia, Anura, Leptodactylidae, *Leptodactylus fragilis*: Distribution extension, Colombia

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Leptodactylus fragilis (Brocchi, 1877) was described on the basis of a female collected in Tehuantepec, Mexico. Main diagnostic characters of the species are the lack of a pair of distinct, continuous dorsolateral folds; the toes either lacking or having very weakly developed lateral ridges and basal webbing; the dorsal surface of the shank usually being covered with many white tubercles; the posterior surface of the tarsus either having many white tubercles or being smooth; the sole of the foot having many white tubercles; and the male vocal sacs being laterally expanded with a dark pigmentation. Although there are considerable morphological similarities with *L. caatingae* and *L. latinasus*, the three species have

distinct vocalizations (Heyer et al. 2006) and their ranges do not overlap.

Leptodactylus fragilis has been the subject of continued taxonomic controversy for more than fifty years, as to whether the correct name is *L. fragilis* or *L. labialis* (Heyer 2002). In Colombia, the taxon has been reported as *L. fragilis* by Ruiz-Carranza et al. (1996), Renjifo and Lundberg (1999) and Bernal et al. (2000). Later, Acosta-Galvis (2000), Cuentas-Montalvo et al. (2002), Paez et al. (2002) and Lynch and Suarez-Mayorga (2004) reported the species as *L. labialis*. Recently, Heyer et al. (2006) reported this species in Colombia with the name of *L. fragilis*.



Figure 1. Specimen of *Leptodactylus fragilis* from Caloto, Vereda Morales, Cauca, Colombia. Photo by W. Bolívar.

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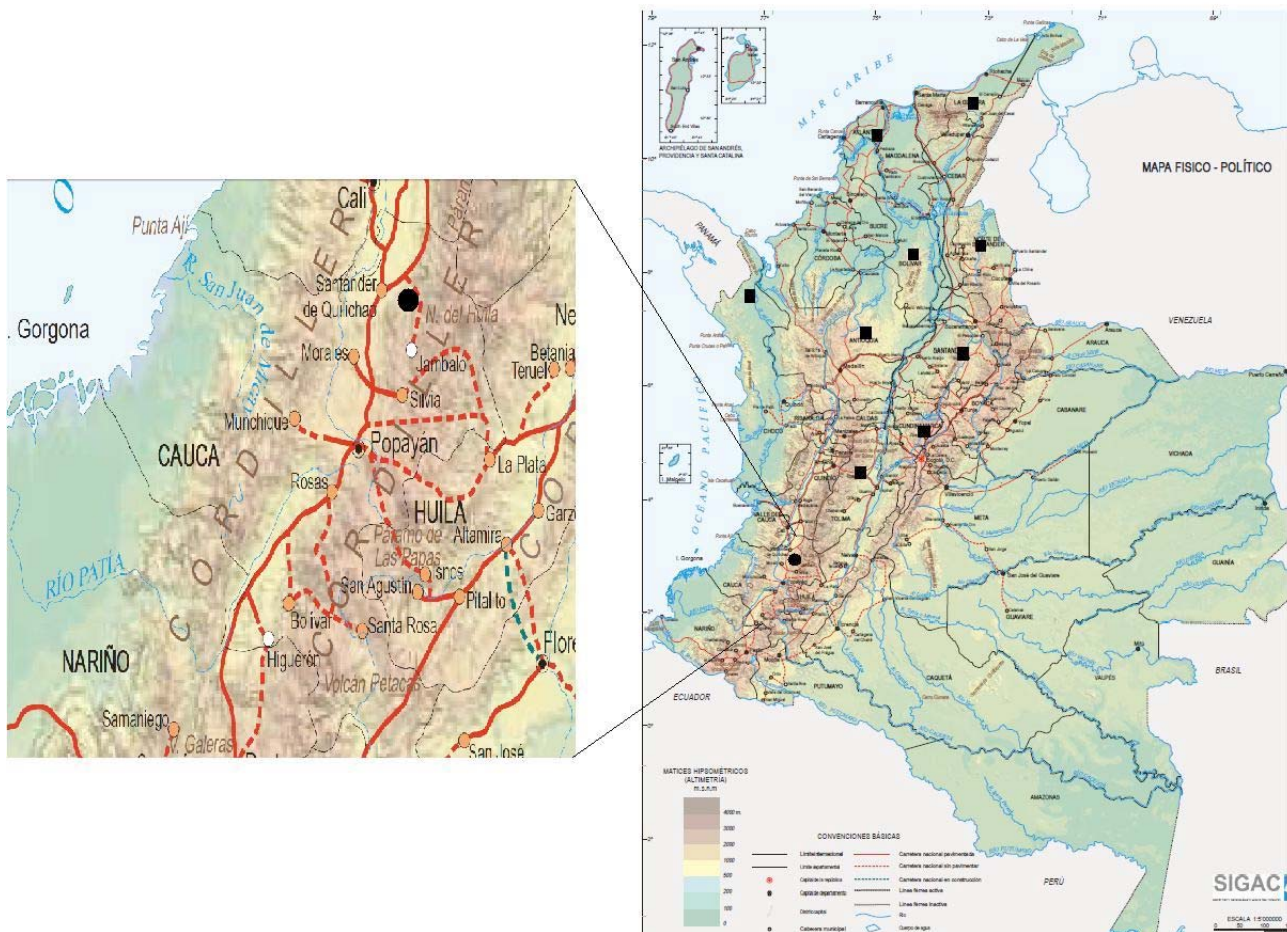


Figure 2. Right: Map of Colombia showing historical locations (black square) and the new localities for *Leptodactylus fragilis* (black dots). Left: Map of the enlarged areas showing the Department of Cauca with the exact locality where the specimens were collected (black dots), corresponding to *vereda* Morales, municipio Caloto. Map from IGAC (<http://www.ssiglims.igac.gov.co/wps/portalmapascolombia>)

Leptodactylus fragilis is distributed from Texas in the United States of America, throughout Mexico and Middle America to northern and west - central Colombia and Venezuela (Heyer 2002; Heyer et al. 2006). In Colombia, *L. fragilis* was previously known in the departments of Norte de Santander, Santander, La Guajira, Cundinamarca, Magdalena, north of Chocó, Antioquia, Tolima, Bolívar and Atlántico (Heyer 1978; Renjifo and Lundberg 1999; Bernal et al. 2000; Cuencas-Montalvo et al. 2002; Paez et al. 2002).

Between October 2006 and March 2007 specimens of *Leptodactylus fragilis* (Figure 1), *Dendropsophus columbianus* (Boettger, 1892) and

Leptodactylus colombiensis (Heyer, 1994) were collected in the department of Cauca, Vereda Morales, municipality of Caloto, Colombia (02°59'49.1" N, 76°24'25.2" W: 1300 m elevation) (Figure 2).

We collected specimens of *Leptodactylus fragilis* in the habitat shared with another leptodactylid frog, *L. colombiensis*. The latter is larger than *L. fragilis*, has two medial black thumb spines, and has distinctive fringes on the toes (Heyer 1994). Moreover, we found *L. fragilis* to be more abundant than *L. colombiensis* in drier areas, whereas the latter was common in swampy areas.

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We herein thus report on the first record for *L. fragilis* in the department of Cauca in Colombia and the southernmost record in the Rio Cauca Valley, based on the identification of 20 adult specimens; 15 females (SVL mean 35.7 mm) and 5 males (SVL mean 36.2 mm). The specimens

were deposited in the *Museo de Herpetología* at the *Universidad del Valle*, Cali-Colombia (UV-C 15672-15686) and in the collection of Docencia (CD-UV 1601-1605), Zoology section, both in Cali, Colombia.

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