

Amphibia, Anura, Dendrobatidae, *Allobates femoralis* (Boulenger, 1884): First confirmed country records, Venezuela

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ABSTRACT: The presence of the dendrobatid frog *Allobates femoralis* in Venezuela is herein confirmed though recorded and analyzed advertisement calls taken at two Venezuelan localities.

Allobates femoralis is a common dendrobatid frog widely distributed throughout the Amazon and Guianas in Colombia, Ecuador, Peru, Bolivia, Brazil, French Guiana, Suriname and Guyana (Lötters *et al.* 2007). The first report of this species from Venezuela (Duellman 1997) was in error, based on KU (Natural History Museum, University of Kansas, Lawrence, Kansas, USA) 167335. This specimen was later recognized as *Ameerega guayanensis* (Barrio-Amorós 2004). *Ameerega guayanensis* was described for populations of eastern Venezuela and some authors considered it as valid (Schulte 1999; Barrio-Amorós 2004). Today however, this taxon validity is questionable (J.C. Santos unpublished data). Since no nomenclatural act was yet performed, we herein use the combination *A. (picta) guayanensis* because it is the valid available name for those populations. As a consequence, *Allobates femoralis* was removed from the Venezuelan checklist of amphibians (Barrio-Amorós 2004; 2009). However, Lötters *et al.* (2007) considered its distribution to include Venezuela, although not based on empirical data.

During field work by the authors in eastern Venezuela in July 2007, while searching for dendrobatid frogs at El Palmar, Sierra de Imataca, Estado Bolívar (8°20' N, 61°40' W, 185 m elevation), we heard and recorded a call that was recognized as that of *A. femoralis* (Figure 1A). Due to the lack of time, we could not stay much time looking for specimens, and therefore, we only provide the advertisement call as a proof of the presence of the species in Venezuela. Similar calls were also registered by CLBA at Las Claritas, Estado Bolívar (6°15' N, 61°00' W, 195 m elevation) in November 2006, where a call (Figure 1B) was recorded but the specimen was not seen nor collected.

The *Allobates femoralis* advertisement call is one of the most studied anuran vocalizations (Amézquita *et al.* 2005; 2006, 2009; Göd *et al.* 2007; Hödl *et al.* 2004; Narins *et al.* 2003; Lescure and Marty 2000; Simões *et al.* 2008). The call is a trill composed of three or four whistle-like notes with ascending frequency modulation. The duration of one

series of four notes at Las Claritas is 0.52 sec; the dominant frequency is at 2954 Hz and the fundamental frequency is

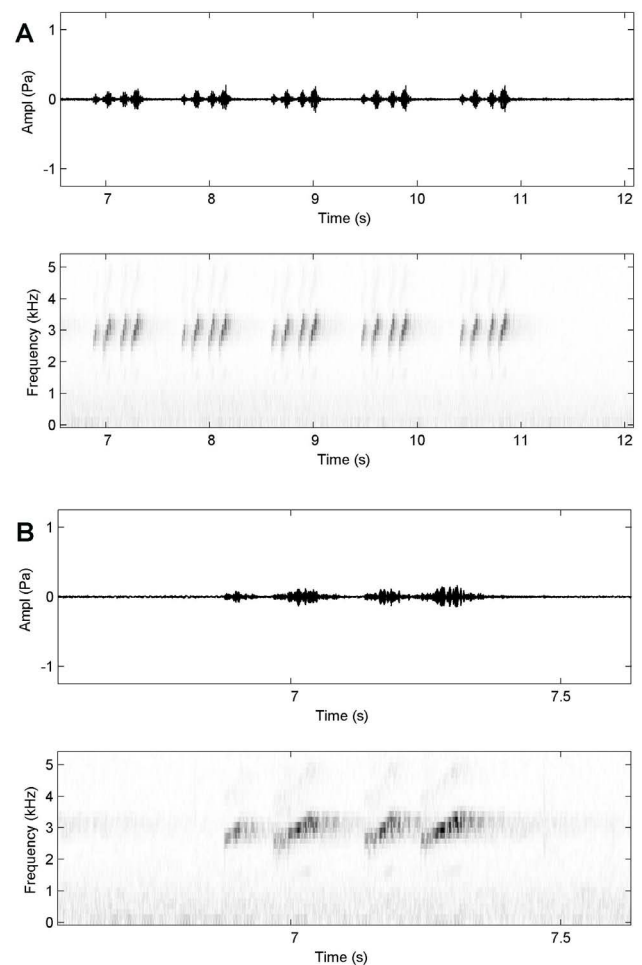


FIGURE 1. Advertisement call (above oscillogram, below sonogram) of *Allobates femoralis* from (A) Las Claritas, Estado Bolívar, Venezuela, recorded at 26 °C and (B) Imataca, Estado Bolívar, Venezuela, recorded at 28 °C.

at 2637 Hz (Figure 1A). The call from Imataca is 0.54 sec the four notes series, the dominant frequency is at 2853 Hz and the fundamental is at 2756 Hz (Fig 1B). This is consistent with calls from other localities through its distribution in Colombia, Brazil, French Guiana and Ecuador (Amézquita *et al.* 2006). We therefore consider *Allobates femoralis* as part of the Venezuelan batrachofauna, occurring at least in two eastern Venezuelan localities, Imataca and Las Claritas (Figure 2). At both localities, *A. femoralis* occurs sympatrically with *Ameerega (picta) guayanensis*, and at Imataca is also sympatric with *A. trivittata*.

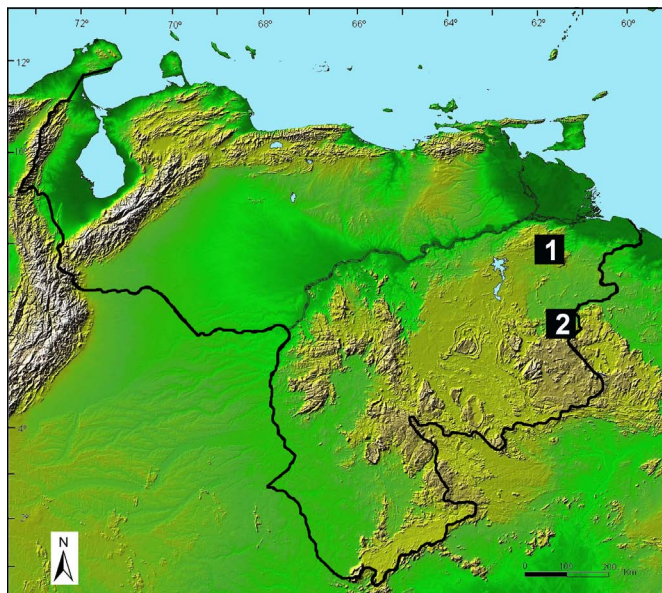


FIGURE 2. Distribution of *Allobates femoralis* in Venezuela, based on recorded calls. 1: Reserva Forestal Imataca, Estado Bolívar, Venezuela. 2: Las Claritas, Estado Bolívar, Venezuela.

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