SALAMANDRA	45	4	254-256	Rheinbach, 20 November 2009	ISSN 0036-3375

A new locality for a species considered extinct (Anura: Bufonidae: *Atelopus vogli*) raises hope for survival

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Abstract. A new locality is reported for the Venezuelan anuran *Atelopus vogli*, considered extinct, which has not been recognised from other specimens or localities apart from the type locality in Estado Aragua, Venezuela, nor found since the year of its discovery, 1933. We here report its survival to at least 1957 and recommend searching for the species along the southern slopes of the Cordillera de la Costa, Venezuela.

Key words. Amphibia, *Atelopus vogli*, Cordillera de la Costa, Venezuela.

Atelopus vogli Müller, 1934 is the only member of its genus from Venezuela to be considered extinct. Originally described as *A. cruciger vogli*, Lötters et al. (2004) raised it to species status based on size, colour, and morphological and osteological characters. The species is so far known from a single locality (Las Peñas near Hacienda la Trinidad, Estado Aragua; Fig. 1) and formerly proved to be abundant, as 415 paratopotypic specimens (at the Zoologische Sammlung des Bayerischen Staates, Munich) and at least 11 more individuals, which were exchanged with other museums (Lötters et al. 2004), were collected at the same time by C. Vogl in 1933.

Based on the alteration of original habitat and the lack of further sightings of the species since the collection of the type material, Lötters et al. (2004), using IUCN Red List criteria, considered the species to be "Critically Endangered" (CR A2; B2a) and probably extinct. The 2002-2004 IUCN 'Global Amphibian Assessment' (Young et al. 2004; www.globalamphibians.org, last accessed 1 August 2008) and La Marca et al. (2005) considered the species to be "Extinct".

Examining the scientific collection of the Museo de Ciencias Naturales de Caracas (MCNC), the authors discovered a specimen referable to *A. vogli* collected on 26 October 1957 by Isaías Rodríguez at Montalbán (10°12'N, 68°19'W; Fig. 1), Estado Carabobo, Venezuela (MCNC 72; Fig. 2). This specimen is an adult female and agrees substantially with the description (including general absence of pattern) of *A. vogli* by Lötters et al. (2004). It has the following measurements: snout-vent length: 38.9 mm, head length: 12 mm, head width: 9.4 mm, distance between anterior edge of the eye and tip of snout: 4.5 mm, distance between anterior edge of eye and nare: 2.8 mm, hand length: 8.3 mm, foot length: 14.4 mm, tibia length: 18.3 mm.

This is the second locality known for the species and confirms its survival to at least 1957. Both the type locality and Montalbán lay at the southern versant of the central Coastal Cordillera (see an overview of the biogeography of that region by Rivero 1964 and Barrio-Amorós 1998), at about 600 m above sea level. Montalbán lies at 77.5 km WSW from the type locality of *A. vogli* (Fig. 1). *Atelopus cruciger* (Lichtenstein & Martens, 1856), the other known *Atelopus* species from the central Cordillera de la Costa (e.g. Bonnacorso et al. 2003, La Marca et al. 2005, Rodríguez et al. 2008) is known from both versants from altitudes of 26-2100 m above sea level (Barrio-Amorós 2004, Rodríguez et al. 2008). This does not permit us to rule out the possibility that the two species are sympatric at some place between Montalbán and

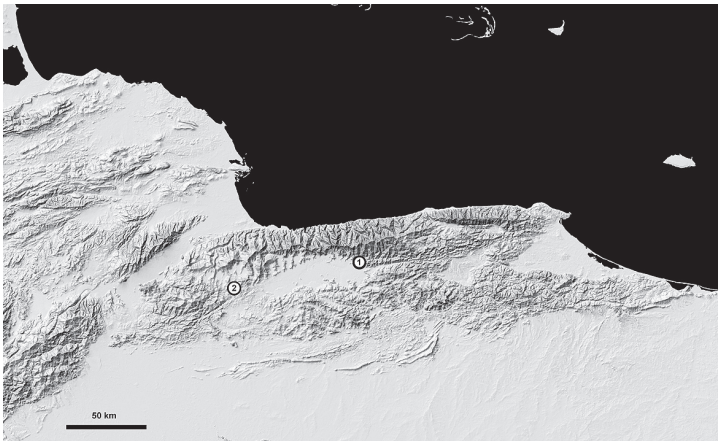

Fig. 1. Map of northern central Venezuela, showing the known distribution of *Atelopus vogli*. 1: Las Peñas near Hacienda la Trinidad, Estado Aragua (type locality); 2: Montalbán, Estado Carabobo (locality reported herein).

Fig. 2. *Atelopus vogli* (MCNC 72, adult female) from Montalbán (Estado Carabobo, Venezuela).

Palmichal, near localities where *A. cruciger* has been reported from (e.g. Bonnacorso et al. 2003), although sympatry in the genus *Atelopus* is a rare phenomenon (Lötters 1996).

We would like to encourage (local) people interested in amphibian conservation to explore Montalbán and its surroundings and also other localities in the southern foothills of the Central Cordillera de la Costa in search of possible survivors of *A. vogli*. Many *Atelopus* species at higher altitudes, including *A. cruciger* in the Venezuelan Central Cordillera de la Costa, have suffered from the fungal disease chytridiomycosis (e.g. Bonnacorso et al. 2003). The observation that a lowland population of *A. cruciger* from the northern versant of the Central Cordillera de la Costa has survived to the present day (Rodríguez et al. 2008) makes it likely that the lowland *A. vogli* may not be (entirely) affected by chytridiomycosis and has survived.

Acknowledgements

We thank Yoliana Añanguren and Hyram Moreno for allowing us to visit the MCNC. Stefan Lötters made valuable comments to the note.

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Manuscript received: 25 August 2008

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