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### First live record of *Pelobates varaldii* PASTEUR & BONS, 1959 in the Oualidia area (Morocco)

The Moroccan Spadefoot *Pelobates varaldii* PASTEUR & BONS, 1959 is the only African member of the family Pelobatidae. It is endemic in Morocco, where its distribution is limited and its habitats are probably localised, but there is no precise evaluation of its conservation status. The major part of its known distribution is included in a triangle delimited by the towns of Larache in the north, Khemisset in the east and Mohammedia in the south (BONS & GENIEZ 1996). Outside this area, the Moroccan Spadefoot has been reported from two localities by DESTRE et al. (1989) as bone remains in pellets of the Barn Owl (*Tyto alba*) and African Marsh Owl (*Asio capensis*): 5 km south-west of Bir-Jdid and near the north-eastern part of the salt marshes of Oualidia (fig. 1). This latter locality marks the southernmost known record of *P. varaldii*. The cranial characteristics of *P. varaldii* make their skulls unmistakable among Moroccan anurans but one cannot exclude with certainty the possibility that these cranial remains underwent transportation through the owls and came from other localities.

This question will remain unresolved, however, one of us (PAC, together with Alban GUILLAUMET) observed and photographed an adult female of *P. varaldii* on the road 1337, 15 km south-east of Oualidia (fig. 2). The animal has not been collected. This observation was made on 9 May, 2001, at night, shortly after a rain shower during a humid and mild period. The surrounding habitat was made up of meadows and degraded oak (*Quercus*) forests or *Cistus* matorral with small streams in the bottoms.

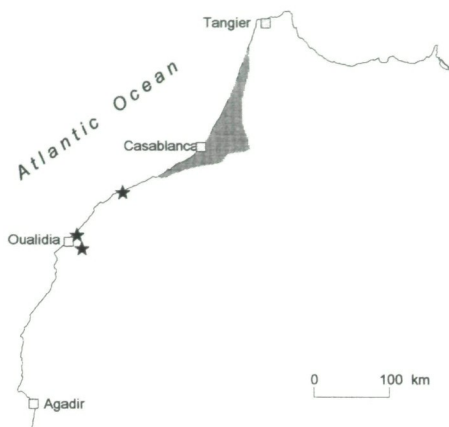


Fig. 1: Known geographical distribution of *Pelobates varaldii* PASTEUR & BONS, 1959 according to BONS & GENIEZ (1996) and personal observations.

The asterisks indicate the three southernmost populations (Bir Jdid, salt marshes of Oualidia, and 15 km south-east of Oualidia).

Other amphibian species observed nearby during the same night and the following morning were *Bufo mauritanicus* SCHLEGEL, 1841, *Bufo viridis* LAURENTI, 1768 and *Hyla meridionalis* BOETTGER, 1874. This observation confirms the presence of this rare species 190 km south-west of the nearest populations where living specimens of *P. varaldii* had been observed in the past. Moreover, it stresses the exceptional but seriously threatened biodiversity of the area between El Jadida and Cape Beddouza.



Fig. 2: *Pelobates varaldii* PASTEUR & BONS, 1959 female, 15 km south-east of Oualidia (Morocco). Photograph by P.-A. CROCHET.

REFERENCES: BONS, J. & GENIEZ, PH. (1996): Amphibiens et reptiles du Maroc (Sahara Occidental compris). Atlas biogéographique. Barcelona (Asociación Herpetológica Española), 320 pp. DESTRE, R. & ROUX, PH. & GENIEZ, PH. & THÉVENOT, M. & BONS, J. (1989): Nouvelles observations sur l'herpétofaune marocaine. – Bull. Soc. Herpetol. France, Paris; 51: 19-26.

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## Two new country records of salamanders of the Genus *Bolitoglossa* from Colombia and Venezuela

The lungless salamanders of the genus *Bolitoglossa* occur from Mexico to Bolivia and southern Brazil (WAKE & LYNCH 1976). In South America few more than 20 species are recognized at present, with the highest species diversity occurring in the northern Andes; most species of *Bolitoglossa* in this continent inhabit humid forests at lower and medium elevations of the Andes, and only one species is widespread in lowland Amazon rain forest (WAKE & LYNCH 1976). WAKE & LYNCH (1976) discussed the patterns of geographic distribution of diversity of plethodontid salamanders in the Neotropics from an evolutionary and ecological standpoint. However, our knowledge of the geographic and ecological distribution of South American salamanders is still very poor, mainly due to lack of proper surveys for many regions. The only major works on South American salamanders are those of BRAME & WAKE (1963, 1972) and CRUMP (1977); most other contributions are limited to descriptions of new species. Species geographic distribution information is very important for studies of ecological and historical biogeography and is also essential for planning conservation efforts. While engaged in the description of a new species of salamander from Venezuela (SCHARGEL et al. 2002), the senior author examined specimens of *Bolitoglossa* that represent noteworthy records for the amphibian fauna of Colombia and Venezuela. It is the purpose of

this note to report these new country records and also provide data on the morphological variation in the voucher salamanders.

The museum specimens were measured to the nearest 0.1 mm with dial calipers under a dissecting scope. We used standard measurements as defined by BRAME & WAKE (1963) and these are presented in table 1. The color descriptions are based on formalin fixed specimens stored in 70% ethanol).

### *Bolitoglossa altamazonica* (COPE, 1874)

We examined one specimen of *B. altamazonica*, deposited at the Colección de Anfíbios y Reptiles del Laboratorio de Biogeografía, Universidad de Los Andes, Mérida, Venezuela (ULABG). The single specimen was collected on August 16, 1990, in Quebrada Doradas, 650 m, Distrito Uribante, Táchira, Venezuela and constitutes the first country record (LA MARCA 1997; SCHARGEL et al. 2002). The specimen (ULABG 3392) is probably a juvenile, and could not be sexed. Its dorsum has a broad cream band extending from the snout to the tip of the tail. The flanks and the venter are brown with some small cream spots. The limbs are mostly brown, except for the hands which are cream. Due to poor preservation of the specimen it was not possible to determine the number of premaxillary and maxillary teeth without causing further damage to it. Vomerine teeth, however, were exposed and we counted 12 in total. Hands and feet are completely webbed.

The specimen was collected in a pit-fall trap that was set in the forest. The ecological unit in this region has been classified as "Tropofilous Semicaducifolious Premontane Forest" (HUBER & ALARCÓN 1988) or "Very Humid Premontane Tropical Forest" in HOLDRIDGE's (1967) classification and in EWELL et al. (1976). LA MARCA (1998) was the first to suggest the presence of Amazonian elements like *Hyla lanciformis* (COPE, 1870) and *Lithodytes lineatus* (SCHNEIDER, 1799), or species with Amazonian relationships like those described and undescribed species in the groups of *Bufo guttatus* SCHNEIDER, 1799, *Hyla parviceps* BOULENGER, 1882 and *Eleutherodactylus conspiciellatus* (GÜNTHER, 1858), in

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