## Abronia chiszari (Reptilia, Anguidae), A Second Specimen From The "Los Tuxtlas" Region, Veracruz, México

Two species of Abronia have been reported from the "Los Tuxtlas" region of Veracruz: A. reidi Werler and Shannon and A. chiszari Smith and Smith (Pérez-Higareda et al. 1987). Abronia reidi is known from two specimens collected in the cloud forest at the rim of Volcan San Martín (Werler and Shannon 1961). Abronia chiszari was described from a single juvenile specimen collected on the rear bumper of a car in low cloud forest near Cuetzalapan, in the Santa Marta volcanic range (Smith and Smith 1981). Because A. chiszari is very similar to A. bogerti it has been suggested that A. chiszari could be conspecific with A. bogerti except for their difference in distribution and habitat (Good 1988; Smith and Smith 1981). The purpose of this note is to validate A. chiszari and provide morphological and ecological information on an additional individual.

The specimen reported here was collected on 4 June 1986, just after it fell onto the windshield of a moving truck, in the transition between tropical rain forest and cloud forest (Benabib and Congdon, in press) in Bastonal, Santa Marta volcanic range, Municipality of Catemaco, Veracruz, ca. 800 m elevation. On 17 July one of us (RCV) returned to the site and climbed 20 m into a large *Ulmus mexicanus*. Two other Abronia were seen at about 10 and 18 m, but were not captured. The general habitat where the specimen was collected was similar to that described by Smith and Smith (1981) for the holotype. Our specimen, a mature male, has a SVL of 74.4 mm, a tail length of 115 mm (tail tip regenerated), a head width of 9.7 mm, and weighed 5.25 g in life. The specimen is deposited in the Herpetological Collection at the Biological Station of Los Tuxtlas (UNAM-LT 3151).

Table 1. Selected characters of A. chiszari (data from Smith and Smith 1981), compared with A. bogerti (data from Tihen 1954), its closest relative.

	o <i>gerti</i> holotype)	chiszari (holotype)	chiszari (UNAM-LT 3151)
Transverse rows of dorsal scales	41	41	46
Longitudinal dorsal scale rows	14	16	15-16
Scales on nape region fewer than	8	7	8
Anterior temporals	2	3-3	3-3
Anterior internasal	s 2	2 .	2
Supraoculars	5-3,5-4	5-3	5-3
Supralabials .	9-10	9-9	9-9
Infralabials	?	8-8	9 <b>-9</b> .
Scale whorls on tai	1 105	?	99*
Dark bands on bod	y 10-11	11	` <b>11</b>
Bands on tail	?	?	14-15

<sup>\*</sup>regenerated tail

This specimen resembles the holotype illustrated by Smith and Smith (1981), and all of the diagnostic characters agree with those given in the type description. A comparison of characters between the holotype specimens of A. chiszari and A. bogerti and the specimen reported here are given in Table 1.

Smith and Smith (1981) discussed the similarity of A. chiszari to A. bogerti in several characters. Our specimen possesses characters that clearly separate it from A. bogerti. For example, our specimen of A. chiszari has the cantholoreal separated from the frontonasal by contact of the prefrontal and canthal, and the upper two primary temporals are relatively smaller than those of A. bogerti, as predicted by Smith and Smith (1981, p.54). Also, the specimen from Los Tuxtlas has prefrontal-anterior superciliary contact on both sides, a characteristic that could be diagnostic of the species (Good 1988). The number of longitudinal dorsal scale rows and scale whorls on tail may be other differences (see Table 1). Besides the dark bands on body and tail, the ventral surface is white with small dark marks, the ventral surface of the head is immaculate, and

the dorsal head scales are gray with dark edges. Although this pattern is similar to that of *A. bogerti*, our specimen is an adult; we do not know if the coloration in the juvenile *A. cliszari* is different. Other characters are similar to *A. bogerti* as discussed by Smith and Smith (1981) and Good (1988).

In the context of other Abronia species A. chiszari seems to be a good member of the deppji species group as defined by Good (1988). The characters that clearly separate A. chiszari from other Abronia species are the higher count on transverse dorsal scale rows, 41 and 46 in the two known specimens, and the prefrontal-anterior superciliary contact. The habitat where A. chiszari occurs also is very atypical for a member of the genus (see below).

All known Abronia species are allopatric (Good and Schwenk 1985), and are associated with pine-oak and cloud forest communities. It is not surprising to find two species of the genus within the Los Tuxtlas region, one at San Martín and the other on Santa Marta. Although the two localities are only 20 km apart, they are separated by low elevations and 🗈 different vegetation structure. Smith and Smith (1981) also discussed the possible distribution of A. duszari within the Sierra de Los Tuxtlas. We do not believe that this species ranges beyond the Sierra de Santa Marta, where the transition between tropical rain forest and cloud forest seems to be restricted to lower elevations; further, rainfall is higher than in other localities (>8000 mm/yr, Benabib and Congdon, in press) within the Los Tuxtlas range. We are convinced that there is a complete segregation of both species of Abronia in the Sierra de Los Tuxtlas. Other differences exist in the herpetofauna at the two localities. For instance, each range has distinct and different species of the genera Lepidophyma, Sibon, and Eleutherodactylus.

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## LITERATURE CITED

Benabis, M., and J. D. Congdon. In press. Energy and water flux rates of free-ranging tropical lizards (Sceloporus variabilis). Physiol. Zool.

Good, D. A. 1988. Phylogenetic relationships among gerrhonotine lizards: an analysis of external morphology. Univ. California Publ. Zool, 121:1-139.

, and K. Schwenk. 1985. A new species of Abronia (Lacertilia: Anguidae) from Oaxaca, Mexico. Copeia 1985(1):135-141.

Pérez-Higadera (sic), G., R. C. Vogt, and O. Flores-Villela. 1987. Lista anotada de los antibios y reptiles de la región de los Tuxtlas, Veracruz, México. Instituto de Biología UNAM, México. 23 pp.

Sмгтн, H. M., and R. B. Sмгтн. 1981. Another epiphytic alligator lizard (*Abronia*) from Mexico. Bull. Maryland Herp. Soc. 17(2):51-60.

Tihen, J. A. 1954. Gerrhonotine lizards recently added to the American Museum collection, with further revisions of the genus *Abronia*. Am. Mus. Novit. (1687):1-26.

Werler, J. E., and F. A. Shannon. 1961. Two new lizards (genera *Abronia* and *Xenosaurus*) from the Los Tuxtlas range of Veracruz, Mexico. Trans. Kansas Acad. Sci. 64(2):123-132.

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