

# RANGE EXTENSION AND NEW MUNICIPALITY RECORD OF *ABRONIA TAENIATA* (ANGUIDAE) FROM PINAL DE AMOLES, QUERÉTARO, MEXICO

## NUEVO REGISTRO MUNICIPAL Y EXTENSIÓN DE LA DISTRIBUCIÓN DE *ABRONIA TAENIATA* (ANGUIDAE) PARA PINAL DE AMOLES, QUERÉTARO, MÉXICO

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**Mexico: Querétaro: Municipality of Pinal de Amoles:** Rancho El Jericó, ca. 2.8 km NE (in airline) of Pinal de Amoles town square (21.144306° N, 99.600859° W°; accuracy of 3 m; datum WGS84; 2,064 m a.s.l.). November 2nd, 2017. The adult male (Snout-vent

length = 108.4 mm; Fig. 1) was sighted motionless at ground level, at approximately 13:00 h. The lizard was apparently basking in an area covered with sparse small bushes, plants, and leaf litter (Fig. 2). We describe the vegetation as a secondary cloud forest.



**Figura 1.** Macho adulto de *Abronia taeniata*, en vida, recolectado en Rancho El Jericó, ca. 2.8 km al NE (en línea aérea) de la plaza principal de Pinal de Amoles. Esta foto fue catalogada con el voucher digital SDSNH\_HerpPC\_05355. Foto: José Carlos Arenas-Monroy.

**Figure 1.** Adult male of *Abronia taeniata*, in life, collected at Rancho El Jericó, ca. 2.8 km NE (in airline) of Pinal de Amoles town square. This photo was catalogued as digital voucher SDSNH\_HerpPC\_05355. Photo: José Carlos Arenas-Monroy.





**Figura 2.** Localidad en la que se recolectó el ejemplar de *Abronia taeniata* (CAR-UAQ 185). La flecha indica el sitio aproximado en el que se encontró el espécimen. Foto tomada el 4 de enero de 2018. Foto: José Carlos Arenas-Monroy.

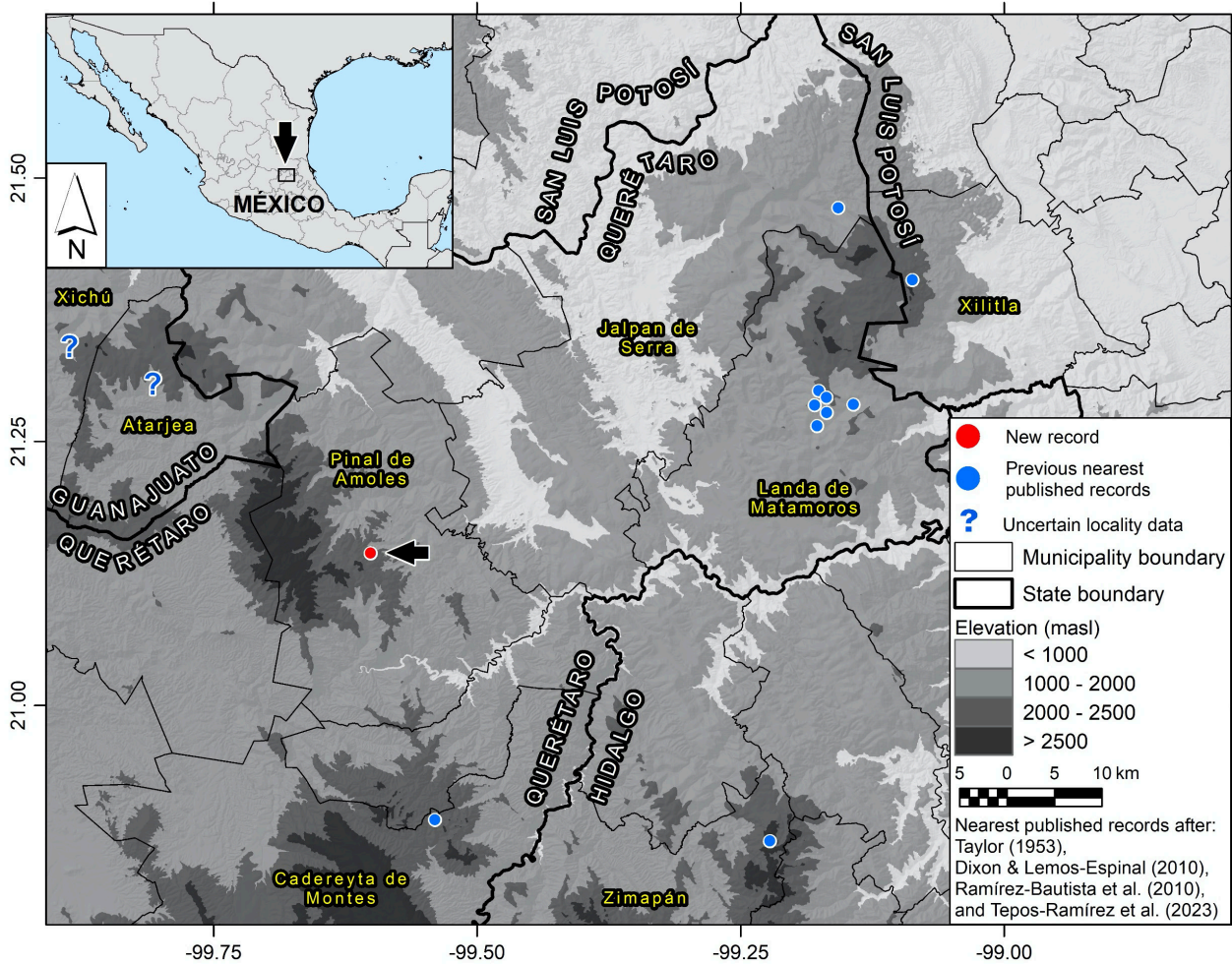
**Figure 2.** Locality at which the specimen of *Abronia taeniata* (CAR-UAQ 185) was collected. The arrow indicates approximate site at which the specimen was found. Photo taken on January 4, 2018. Photo: José Carlos Arenas-Monroy.

This finding represents a new municipality record, and fills a distribution gap between eastern records of *Abronia taeniata* in the state of Querétaro and a northeastern record in Guanajuato. It extends the distribution of *A. taeniata* in the state of Querétaro ca. 46 km WSW (in airline) from the nearest Querétaro records (museum vouchers CM 73256 to CM 73259), collected at 3.8 mi W and 2.3 mi S El Lobo, Municipality of Landa de Matamoros, Querétaro (Dixon & Lemos-Espinal, 2010), and ca. 28.7 km NNW (in airline) from a recent photographic record of an individual found by Tepos-Ramírez et al. (2023) at La Esperanza, Municipality of Cadereyta de Montes, Querétaro (20.8916° N, 99.5399° W). It also represents an intermediate locality between the aforementioned records and unvouchered records published in Hernández-Árciga et al. (2018), northwest of our finding.

These last records lack precise locality data other than mention of the presence of this species in the municipalities of Atarjea and Xichú in Guanajuato state. We provide a map (Fig. 3) showing the location of our finding and previous nearest published records extracted from: Taylor (1953), Dixon & Lemos-Espinal (2010), Ramírez-Bautista et al. (2010), and Tepos-Ramírez et al. (2023). Verbatim localities with absent coordinates were georeferenced.

The specimen was handled, euthanized, preserved, and a tissue sample retrieved following the procedures of Simmons (2002), Beaupre et al. (2004), and Gamble (2015). The specimen was deposited at Colección de Anfibios y Reptiles, Facultad de Ciencias Naturales, Universidad Autónoma de Querétaro (voucher CAR-UAQ 185). The taxonomic identity of the specimen





**Figura 3.** Mapa que muestra nuestro nuevo registro y los registros anteriores más cercanos publicados de *Abronia taeniata* en un cuadrante abarcando parte de los estados de Querétaro, Hidalgo, San Luis Potosí y Guanajuato. Los signos de interrogación denotan municipios con datos de localidad incierta (sin localidad exacta o coordenadas) para la especie.  
**Figure 3.** Map depicting our new record and previous nearest published records of *Abronia taeniata* in a quadrant encompassing parts of Querétaro, Hidalgo, San Luis Potosí, and Guanajuato states. Question marks denote municipalities with uncertain locality data (without exact locality or coordinates) for the species.

was verified by Adam G. Clause. Additionally, we deposited a pair of photographs of the specimen in life, at San Diego Natural History Museum, Herpetology Collection (Photo voucher SDSNH\_HerpPC\_05354, and SDSNH\_HerpPC\_05355).

The arboreal stratum at the locality was mainly composed of *Alnus acuminata* in association with *Tilia mexicana*, and *Cornus disciflora*. These are trees commonly found in perturbed cloud forests in northeastern Querétaro (Zamudio et al., 1992). Whereas downhill, we observed a dry oak forest whose arboreal stratum was dominated by *Quercus mexicana*, *Q. affinis*, and *Q. laurina*; the oaks were scantily covered with moss. According to local inhabitants, approximately 25 years prior to our finding, the area's land-use was mainly field crops and grazing lands.

Interestingly, the vegetation at this locality apparently has regenerated during the past three decades. Should it be the case, our finding adds support to the hypothesis of Clause et al. (2018), that *A. taeniata* is resilient, and that habitat perturbation might not be a paramount threat for the survival of this species.

Finally, we noticed eight observations (not shown in map) in the iNaturalist platform (GBIF, 2024) of individuals referable to *A. taeniata* across the same mountain range of our finding. These observations, despite having coordinate obfuscation, suggest that our record is not an isolated specimen in the Sierra de Pinal de Amoles. Further sampling could reveal the existence of a previously undocumented large population of this lizard



across this isolated mountain range located in the northeastern portions of Querétaro and Guanajuato states.

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