CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Seventeenth meeting of the Conference of the Parties
Johannesburg (South Africa), 24 September – 5 October 2016

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

To list the genus *Abronia* (29 species; **Table 1**) in CITES Appendix II in accordance with Article II, Paragraph 2 (a) of the Convention and pursuant to Criterion A of Annex 2 a of Resolution 9.24 (Rev. CoP16) due to its low reproductive potential combined with the conservation status of its populations and its significance in international trade.

B. Proponent

The European Union and Mexico.*

C. Supporting statement

1. Taxonomy

1.1 Class: Reptilia

1.2 Order: Squamata

1.3 Family: Anguidae

1.4 Genus, (and taxonomic reference): *Abronia*

1.5 Species: See point 1.7

1.6 Scientific synonyms: Various *Abronia* species were originally in the genus *Gerrhonotus*.

1.7 Common names of the species in this genus:

Table 1.- List and range of species in the genus *Abronia*. The corresponding range is indicated under the species' name in **bold** (MX=Mexico, GT=Guatemala)

Species	Spanish	French/English
1. *Abronia anzuetoi* Campbell & Frost, 1993 **GT**	Escorpión Arborícola, dragoncito	*Anzuetoi Arboreal/Alligator Lizard*
2. Abronia aurita (Cope, 1869) **GT**	Escorpión Arborícola, dragoncito	*Cope's Arboreal/Alligator Lizard*
3. *Abronia bogerti Tihen, 1954* **MX**	Escorpión Arborícola de Bogert	*Bogert's Arboreal/Alligator Lizard*
4. Abronia campbelli Brodie & Savage, 1993 **GT**	Dragoncito	*Campbell's Alligator Lizard*
5. Abronia cuetzpali (Campbell, 2016) **MX**	Dragoncito de Sierra de	*Alligator Lizard*

* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

Species	Spanish	French/English
	Miahuatlán	
6. *Abronia chiszari Smith & Smith, 1981* **MX**	Escorpión de Chiszar, dragoncito	*Chiszar's Arboreal Alligator Lizard*
7. *Abronia deppii (Wiegmann, 1828)* **MX**	Escorpión Arborícola de Deppe, dragoncito	*L'Abronie de Deppe/Deppe's Arboreal Alligator Lizard*
8. *Abronia fimbriata* Cope 1884 **GT**	Escorpión Arborícola, dragoncito	
9. *Abronia frosti* Campbell, Sasa, Aceedo & Mendelson, 1998 **GT**	Escorpión Arborícola, dragoncito	*Frost's Arboreal Alligator Lizard*
10. *Abronia fuscolabialis (Tihen, 1944)* **MX**	Escorpión Arborícola de Zempoaltepec, dragoncito	*Mount Zempoaltepec Alligator Lizard*
11. *Abronia gaiophantasma* Campbell & Frost, 1993 **GT**	Escorpión Arborícola, dragoncito	*Brilliant Arboreal Alligator Lizard*
12. *Abronia graminea (Cope, 1864)* **MX**	Escorpión Arborícola de Tehuacàn, dragoncito	*Sierra de Tehuacan Arboreal Alligator Lizard*
13. *Abronia leurolepis Campbell & Frost, 1993* **MX**	Escorpión Arborícola, dragoncito	*Flat-scaled Arboreal Alligator Lizard*
14. *Abronia lythrochila Smith & Alvarez del Toro, 1963* **MX**	Escorpión Arborícola de Labios, dragoncito	*Red-lipped Arboreal Alligator Lizard*
15. *Abronia martindelcampoi Flores-Villela & Sánchez-H., 2003* **MX**	Escorpión Arborícola, dragoncito	*Martin del Campo`s Arboreal Alligator Lizard*
16. *Abronia matudai (Hartweg & Tihen, 1946)* **MX-GT**	Escorpión Arborícola de Matuda, dragoncito	*Matuda's Arboreal Alligator Lizard*
17. *Abronia meledona* Campbell & Brodie, 1999 **GT**	Escorpión Arborícola, dragoncito	
18. *Abronia mitchelli Campbell, 1982* **MX**	Escorpión Arborícola de Mitchell, dragoncito	*Mitchell's Arboreal Alligator Lizard*
19. *Abronia mixteca Bogert & Porter, 1967* **MX**	Escorpión Arborícola Mixteco, dragoncito	*Mixtecan Arboreal Alligator Lizard*
20. *Abronia montecristoi* Hidalgo,1983 **SV-HN**	Escorpión Arborícola, dragoncito	*MonteCristo Arboreal Alligator Lizard*
21. *Abronia oaxacae (Günther, 1885)* **MX**	Escorpión Arborícola Oaxaqueño, dragoncito	*Oaxacan Arboreal Alligator Lizard*
22. *Abronia ochoterenai (Martin del Campo, 1939)* **MX-GT**	Escorpión Arborícola de Ochoterena, dragoncito	*Ochoterena`s Arboreal Alligator Lizard*
23. *Abronia ornelasi Campbell, 1984* **MX**	Escorpión Arborícola de Ornelas, dragoncito	*Ornela's Alligator Lizard*
24. *Abronia ramirezi Campbell, 1994* **MX**	Escorpión Arborícola, dragoncito	*Ramirez's Alligator Lizard*
25. *Abronia reidi Werler & Shannon, 1961* **MX**	Escorpión Arborícola de Reid, dragoncito	*Reid's Arboreal Alligator Lizard*
26. *Abronia salvadorensis* Hidalgo, 1983 **HN**	Escorpión Arborícola, dragoncito	*Salvador Arboreal Alligator Lizard*
27. *Abronia smithi Campbell & Frost, 1993* **MX**	Escorpión Arborícola, dragoncito	*Smith's Arboreal Alligator Lizard*
28. *Abronia taeniata (Wiegmann, 1828)* **MX**	Escorpión Arborícola de Bandas, dragoncito	*Banded Arboreal Alligator Lizard*
29. *Abronia vasconcelosii* (Bocourt, 1871) **GT**	Escorpión Arborícola, dragoncito	(Not applicable)

Pursuant to Resolution 12.11 (Rev CoP16) letter (d) under the first "RECOMMENDS" and in consultation with the animal nomenclature specialist (Dr. Ute Grimm), it is advisable to use an extract from the reptile database as a taxonomic reference (Uetz and Jirí Hošek, 2016) as specified in **Annex 1** hereof.

2. Overview

Through a prospective analysis of international trade in Mexican species carried out between 2005 and 2010, the CITES Scientific Authority of Mexico (National Commission for Knowledge and Use of Biodiversity - CONABIO) and TRAFFIC found that international trade in arboreal lizards from the species *Abronia graminea* required more in-depth analysis. Consequently, CONABIO financed the project "Evaluation of species of the genus *Abronia* having a range in Mexico within the framework of CITES according to their conservation status, use and management and trade in them" undertaken by Teyeliz A.C. and national experts on the genus in order to compile information about Mexican species of the genus *Abronia* using the format laid out in Annex 6 of Resolution 9.24 (Rev. CoP16).

Mexico presented the results of this project at a side event during the 27th Meeting of the CITES Animals Committee (AC27; Veracruz, 2014) and the general recommendation of those present was that a formal

document should be submitted to AC28 (Tel Aviv, 2015), calling for the listing of the entire genus in CITES Appendix II. At AC28, the members of the Animals Committee congratulated Mexico for the document, inviting the four range states to submit the proposal to CoP17.

The genus *Abronia* comprises 29 species: 19 have ranges in Mexico (18 of them endemic), 9 in Guatemala (8 endemic), 2 in Honduras (1 endemic) and 1 in El Salvador (none endemic). Several species of *Abronia* are only known by their holotype (*A. leurolepis, A. mitchelli, A. montecristoi, A. ramirezi)* or from a few specimens (*A. anzuetoi, A. bogerti, A. cuetzpali, A. chiszari, A. frosti, A. fuscolabialis, A. ochoterenai, A. ornelasi, A. reidi* and *A. salvadorensis*) (Campbell & Frost 1993; IUCN 2013; Bille 2001; Zaldívar *et al,* 2010; Campbell, *et al*., 2016).

Populations of *A. chiszari, A. deppii, A. frosti, A. fuscolabialis, A. graminea, A. oaxacae, A. taeniata, A. martindelcampoi, A. montecristoi, A. salvadorensis, A. campbelli* and *A. vasconcelosii* are considered to be in decline. In particular, *A. mixteca* was previously abundant in Tecojotes, Oaxaca, but the population has declined sharply due to over-collection for the pet trade. The populations of *A. smithi* and *A. lythrochila* are considered stable (IUCN 2013; Campbell 2013). The trends for the following 13 species are unknown: *A. anzuetoi, A. aurita, A. bogerti, A. fimbriata, A. gaiophantasma, A. leurolepis, A. matudai, A. meledona, A. mitchelli, A. ochoterenai, A. ornelasi, A. ramirezi, A. redi* (see **section 4.4**).

Using compiled international trade data, species endemic to Mexico and Guatemala have been identified (*Abronia graminea, A. anzuetoi, A. deppii, A. mixteca, A. taeniata* and *Abronia oaxacae*) that were exported between 2002 and 2012 to the United States of America. In addition Germany, China, the Czech Republic, the United Kingdom and Switzerland have recorded trade in Mexican species of the genus *Abronia* in their countries. At least, of the species legally exported from Mexico between 2005 and 2015, the species with the most traded specimens was *A. graminea*, and fewer than 10 specimens from the remaining species were exported legally during that period. Based on imports reported by China and the United States of America, between 1999 and 2012, *A. graminea* was the species for which the most imports were reported (130 specimens), followed by 82 specimens recorded generically, with fewer than 10 specimens reported for the remaining species that were exported legally in the same period (**see section 6.2**).

Moreover, based on compiled international trade data (official enquiries and Internet sales), it is clear that there is international trade in at least five species endemic to Mexico without legal export authorization (*A. martindelcampoi, A. smithi, A. deppii, A. lythrochila,* and *A. mixteca*) and in the following species *Abronia vasconcelosii, Abronia fimbriata, Abronia gaiophantasma* and *Abronia campbelli* (endemic to Guatemala).

Non-specialists may misidentify species in the genus *Abronia*. To our knowledge, there is great interspecies variability in terms of external morphological characteristics, and the differences between them can be seen by comparing scale position (Campbell and Frost, 1993). Mexico is developing an identification guide that will at least differentiate specimens of the genus *Abronia* from other specimens of the family *Anguidae*, and the final version of this Guide will be submitted as a paper to CoP17 (Johannesburg, South Africa, 2016).

3. Species characteristics

3.1 Distribution

The genus *Abronia* comprises 29 species: 19 are found in Mexico (17 of them endemic), 9 in Guatemala (8 endemic), 2 in Honduras (1 endemic) and 1 in El Salvador (none endemic) (see maps and detailed description in **Annex 2**). Species from the genus *Abronia* have relatively limited and allopatric distribution in tropical, cloud and pine-oak forests in Mexico, Guatemala, Honduras and El Salvador, which hardly overlap (Bille 2001; Townsend Peterson and Nieto-Montes de Oca 1996; Campbell & Frost 1993). The majority of populations are found on isolated mountain peaks or mountain ranges (Campbell & Brodie 1999 and; Campbell & Frost 1993; Campbell *et al*., 2016).

3.2 Habitat

These animals live at altitudes of 1,500-3,000 metres above sea level in mountainous regions, with significant temperature gradients, not only between day and night but also between seasons, with the exception of four species (*A. bogerti A. chiszari*, *A. ramirezi* and an undescribed species in the Laguna Bélgica Park in Chiapas), which live in tropical forests (IUCN 2013; Campbell 1994; Campbell & Frost 1993) or in a transition area between evergreen and cloud forests between 360 and 1372

metres above sea level. In particular, *A. deppii, A. graminea, A. lythrochila, A. martindelcampoi, A. mixteca,* and *A. oaxacae* live in pine-oak forests and montane cloud forests, some of which are at an altitude of up to 3,000 metres above sea level (IUCN 2013; Campbell & Frost 1993), with epiphytic vegetation, such as lichens, bromeliads and orchids, which provide prey and moisture (Cruz-Ruiz *et al.* 2012; Campbell & Frost 1993). *A. matudai* is found in areas of pine-cypress forests (Campbell 1994). *A. cuetzpali* lives in pine-oak forests with broad-leaf undergrowth in some places, at an altitude of 1711 to 2150 metres above sea level (Campbell *et al*., 2016). *A. cuetzpali* lives in pine-oak forests with broad-leaf undergrowth in some places, at an altitude of 1711 to 2150 metres above sea level (Campbell *et al*., 2016). They are almost exclusively tree dwelling and can be found in forest canopies at a height of 40 m. However, these lizards may descend to the ground and, on rare occasions, specimens have been found swimming and jumping into mountain streams (Campbell & Frost, 1993). Specimens of *A. graminea* have also been reported hibernating in bromeliads partially covered with ice water (Campbell & Frost 1993).

3.3 Characteristics of the species

All of the species from the genus *Abronia* are locally considered to be poisonous lizards because they have a system of mandibular glands, although there is no risk to humans (Koludarov *et al.* 2012; Solano-Zavaleta *et al.* 2007; Campbell & Frost 1993). Abronias appear to be a strictly diurnal species (Campbell & Frost 1993). They seem to be viviparous, which may be an adaptation to their cold mountainous habitat. They have a low reproductive rate. They only mate once a year, between September and December, while young are born between April and June, at the start of the rainy season. They give birth to litters of between one and 12; *A. graminea,* and *A. smithi* produce litters of four, A. *ochoteranai* produces between 3 and 5 young, *A. lytrochila* produces between 3 and 5 young, *A. matudai* from 5 to 8 (Alvarez del Toro 1982), *A. taeniata* from 4 to 7 and *A. oaxacae* only produces one offspring (Solano-Zavaleta *et al.* 2007; Campbell & Frost, 1993).In a telemetry study, one movement of 110 metres in 24 hours was observed; therefore, it is considered capable of living and reproducing in fragmented forest (Clause, 2015a; Clause, 2015b).

3.4 Morphological characteristics

These lizards are perfectly adapted to living in trees. They have a sturdy body, flat, triangular head, well-developed extremities and a prehensile tail, which is generally longer than its body and can be regrown if lost. Its common name reflects the species' wide and strong jaw and the thick scales on its back, head and tail. In general, it has a snout-to-vent length of 50 to 140 mm, the tail is approximately 1.5 times the length of the body. *A. anzuetoi* (up to 135 mm snout to vent) and *A. mixteca (*148 mm snout to vent) are the largest species in the genus, *A. matudai, A. cuetzpali* and *A. oaxacae* are the smallest (Campbell & Frost 1993; Campbell 1982; Tihen 1954). *A. graminea* presents morphometric differences according to sex, where females are smaller in size than males (Cázares-Hernández, 2015) as well has having different colouring. Females are pale green in colour with markings or stripes while males are a uniform bright green; a difference has also been noted in the colouring of juveniles (Gonzáles-Porter *el al,* 2015).

A number of species exhibit green and grey colours (for example, *A. graminea, A. matudai, A. smithi, A. mixteca*), with variations verging on blue or turquoise in *A. graminea*; others exhibit more creamy yellow colours with dark stripes (e.g., A*. taeniata, A. martindelcampoi*) and some species are brown with dark patterns and mimetic patches, imitating lichens or mosses (for example, *A. oaxacae*). The number and intensity of transverse stripes, the length and number of rows of ventral and dorsal scales as well as the number of lateral scales on the neck vary among the different species of the genus (Flores-Villela & Sanchez-H. 2003; Campbell & Frost 1993; Campbell *et al.* 1998; Campbell 1982; Tihen 1954). *A. taeniata* is characterized by eight black stripes and *A. cuetzpali* by seven pale brown stripes. A number of species exhibit spiny scales above the ears (Campbell & Brodie 1999; Campbell & Frost 1993). Some specimens of *A. graminea* may have a round ring around the eye while some have black or blue eyes, which appear to be local variations. *A. cuetzpali* is characterized by seven light brown stripes together with other diagnostic characteristics (Campbell, *et al*., 2016). **Annex 2** contains a brief description of each species.

3.5 Role of the species in its ecosystem

Arboreal alligator lizards are predators of crustaceans, insects, arachnids and small lizards/skinks (the family *Scincidae*; Koludarov *et al*., 2012). They feed on some insects reported to be pine and oak pests, thereby controlling their populations (Carabias *et al.,* 2000). Other authors and local inhabitants report that they primarily feed on arthropods and, occasionally, other small lizards, both of the same

genus and of the genus *Sceloporus* (Schmidt, personal communication 2015; Pérez *et al*., 2015). Arboreal alligator lizards may contribute towards the pollination of bromeliads since they use them to protect themselves from high temperatures and as a source of food and water. *A oaxacae* shows a preference for several species of bromeliad (Cruz-Ruiz *et al*, 2012), which heightens this effect.

4. Status and trends

4.1 Habitat trends

There are high rates of montane forest deforestation across the range area of species of this genus due to the change in land use to agriculture and ranching (IUCN 2013; Campbell & Frost 1993). Around one third of Mexico and Guatemala are covered in forest, of which 52.9% and 44.3%, respectively, are classified as primary forest. Mexico is among the five most heavily-deforested countries in the world (0.52% per year) (FAO, 2010). Between 1990 and 2010, Mexico lost an average of 274,450 hectares or 0.39% per year, amounting to a total loss of 7.8% of its forest cover or nearly 5,489,000 ha. in 20 years. Within the same period, Guatemala lost an average of 54,550 hectares or 1.15% per year and, all in all, lost 23% of its plant cover or around 1,091,000 hectares. (FAO, 2010; Mongabay, 2013).

4.2 Population size

The population size has not been assessed for most of the species precisely because of its arboreal habits. Currently, there is a preliminary estimate of the population size of *A. graminea* (61.63 ind with a density of 0.51 ind/m^2) and *A. taeniata* (40.85 ind with a density of 0.000064 ind/m^2) in Veracruz and Hidalgo, respectively (Pérez *et al*., 2015) but, in both cases, estimates are limited to a special, reduced window coinciding with the breeding season (between August and October, 2015). A number of *Abronia* species are only known from the holotype (*A. leurolepis, A. mitchelli, A. montecristoi, A. ramirezi*) or from a few specimens (*A. anzuetoi, A. bogerti, A. cuetzpali, A. chiszari, A. frosti, A. fuscolabialis, A. ochoterenai, A. ornelasi, A. reidi, A. salvadorensis*) (Campbell & Frost, 1993; IUCN, 2013; Bille, 2001; Zaldívar *et al.,* 2010, Campbell, *et al*., 2016). *A. deppii* and *A. fuscolabialis* are described as rare species, *A. smithi* and *A. chiszari* as uncommon, *A. graminea, A. mixteca* and *A. oaxacae* are quite common, *A. lythrochila* and *A. taeniata* are considered common and *A. martindelcampoi* is moderately abundant (IUCN evaluations, 2013).

Díaz-Velasco (2005) reported the capture of 59 specimens of *Abronia graminea* over the course of two years in an area of 1.9 hectares. The site known as Puerto del Aire in the municipality of Acultzingo, Veracruz, within the Cañón del Rio Blanco National Park was visited every month for three days to search for the species. Density is considered low given that the results were equivalent to finding one specimen every six trees, and personal reports from local inhabitants indicate that they could previously find up to five specimens on one bromeliad (Díaz-Velasco, 2005). The specimens were captured on the roadside and near bodies of water. These conditions might have influenced the incidence of sightings. Between August and October 2015, a team of four people visited that same site on three outings of 5 days each, capturing 159 specimens of *A. graminea* along a transect 1.7 km long, looking at trees 10 m from the road. In the case of *A. taeniata*, using the same methodology in the municipality of Meztitlán, Hidalgo, the capture of 16 specimens was reported (Pérez, *et al*., 2015).

4.3 Population structure

There is scattered information about some species. In sampling carried out in 2015, 93% of *A. graminea* specimens were adults (Puerto del Aire, Veracruz) with a sexual ratio of 1.89 males per female (Pérez *et al*., 2015). Another sampling of this species also found that most specimens were adults (Atlahuilco, Veracruz) with a sexual ratio of 3.1 females for every male (Cázares-Hernández, 2015). In addition, for *A. taeniata* (Meztitlán, Hidalgo), 76% were adults with a sexual ratio not varying from 1:1 (Pérez *et al*., 2015). For this same species in Tamaulipas, 19 specimens were recorded, but only 2 were females (Martin, 1955). Díaz-Velasco (2005) reports that for *Abronia graminea* the proportion of males was greater than that of females and, during January, March, April, November and December, the proportion of females was zero.

4.4 Population trends

The populations of *A. chiszari, A. deppii, A. frosti, A. fuscolabialis, A. graminea, A. oaxacae, A. taeniata, A. martindelcampoi, A. montecristoi, A. salvadorensis, A. campbelli* and *A. vasconcelosii*

are considered to be in decline. Sumicrast (1882) states that *A. mixteca* was abundant in Tecojotes, but the population has gravely declined due to over-collection for the pet trade, and *A. graminea* was considered a common species in the alpine region of Orizaba Veracruz. The populations of *A. smithi* and *A. lythrochila* are considered stable (IUCN 2013; Campbell 2013). The trends of the following 13 species are unknown: *A. anzuetoi, A. aurita, A. bogerti, A. fimbriata, A. gaiophantasma, A. leurolepis, A. matudai, A. meledona, A. mitchelli, A. ochoterenai, A. ornelasi, A. ramirezi, A. reidi*, as is the trend for the recently-described *A. cuetzpali* (Campbell, *et al*., 2016). In 2015, a group of seven Mexican experts evaluated 15 species based on their experience in the field and with specimens from museum collections. This group agreed that all species studied have limited ranges, are sensitive to extrinsic factors and have declining populations. *A. martindelcampoi*, *A. mixteca, A. oaxacae* and *A. lythrochila* are known from more than 10 specimens, while *A. bogerti, A. chizari, A. fuscolabialis, A. smithi, A. matudai, A. leurolepis*, *A. mitchelli*, *A. ochoterenai*, *A. ramirezi* and *A. reidi* are known from fewer than 10 specimens; moreover, the last five species mentioned have not been seen again in the field since their initial description (Schmidt *et al.,* 2015).

4.5 Geographic trends

Although geographic trends of species in the genus are unknown, maps of potential ranges areas have been developed, for which more than four georeferenced records of occurrence can be taken. To model the potential range, a database of georeferenced records was taken from various collections (MZFC, UNAM, and other national and international scientific collections). Altitude and bioclimatic layers from WorldClim and Bioclimas Neotropicales were used. An accessible area was defined (M) based on Biogeographical Regions (CONABIO, 1997), biotic regions with an emphasis on morphotectonic features, physiographic regions, and the neotropical regionalization of Morrone (2014) digitized by Löwenberg-Neto (2015). To model the geographical range, the program MaxEnt, with "random seed" processing (30%), was used with bootstrap and a threshold of the tenth percentile for species having more than 10 records with cross-validation using the same number of runs as data and a minimum training presence threshold for species having fewer than 10 records (Jiménez-Velázquez, et al., 2016). As a result, there are maps for 15 species from Mexico and Central America with area values under the curve (AUC) of operating characteristics greater than 0.94 (where 0.05 = precision no greater than random and 1.0 = perfect discrimination): *A. anzuetoi, A. boguerti, A. fimbriata, A. fuscolabialis, A. gaiophantasma, A. graminea, A. lythorchila, A. martindelcampoi, A. matudai, A. mixteca, A. oaxacae, A. salvadorensis, A. smithi* and *A. taeniata*. The models were validated and published manually based on comments from national experts on the genus (Oscar Flores Villela and Walter Schmidt, personal communication; Jiménez-Velázquez *et al.*, 2016). (see **Annex 2**).

5. Threats

Deforestation caused by gathering firewood and changing land use from forest to agriculture and livestock is one of the most serious threats to species of the genus *Abronia* (Ariano-Sánchez *et al.* 2011; IUCN 2013). *A fuscolabialis, A mixteca* and *A oaxacae* are species whose specimens cannot travel large distances, besides their having a restricted range. Therefore, any change in habitat can seriously affect them (Carabias *et al.,* 2000). In addition to the loss of habitat, collection for the international pet trade is another, very significant, threat for at least *A. deppii, A. graminea (*Zaldívar Riverón *et al*., 2002)*, A. mixteca*, and *A. taeniata* (IUCN Red List, 2013).

In Mexico, the 18 native species of *Abronia* have the highest Environmental Vulnerability Scores (EVS) (ranging from 15 to 18 points out of a total of 20). Eight species have a score of 18 points, four have 17 points, two have 16 and four have 15 (Wilson *et al*., 2013, see **Annex 3**) and, in Guatemala, all *Abronia* species are at the top of the scale (ranging from 15 to 17 points) (Acevedo *et al.,* 2010). *A. lythrochila* is the species of herpetofauna most affected by the removal of bromeliads for religious celebrations in the forests of Chanal, Chiapas (Aranda-Coello *et al*., 2012). In the States of Guerrero, Oaxaca and Puebla, the collection of *Tillandsia usneoides* for Christmas nativities is damaging due to the fact that these animals are perceived to be extremely dangerous. People believe that their venom can be harmful to humans, that their bites can result in the loss of an affected limb or even death (Álvarez del Toro, 2010). This misguided opinion represents a threat to the species (personal communication Schmidt, 2015; Wagner, 2010). For *Abronia fimbriata* and *Abronia gaiophantasma*, the export trade of ornamental plants, *Chamaedaphne calyculata*, to Japan and Europe is a threat (IUCN, 2015). Global warming could affect these species in the long term since their thermoregulation is characterized by their conformist response (Fierro-Estrada, 2013)

On the IUCN Red List, A. campbelli and A. frosti are listed as "Critically Endangered"; *A. aurita, A. chiszari, A. deppii, A. fimbriata, A. fuscolabialis, A. gaiophantasma, A. graminea, A. meledona, A. martindelcampoi,*

A. matudai, A. montecristoi and *A. salvadorensis* are listed as "Endangered"; *A. anzuetoi, A. mixteca, A. oaxacae, A. vasconcelosii,* and *A. taeniata* are listed as "Vulnerable." Another seven species are listed as having "Insufficient Data," and two species are classified as "Least Concern."

6. Utilization and trade

6.1 National utilization

These animals are sold as live specimens on the pet market (LEMIS 1999-2012, SEMARNAT 2014). In Mexico, there is a captive handling register (Intensive Management Units or UMAs) for three native species of the genus *Abronia* (*A. deppii, A. graminea, A. lythrochila)* and one exotic species (*A. campbelli)* through *Unidades de Manejo y Conservación de Vida Silvestre* [Wildlife Conservation and Management Units] (UMA), legally registered with the General Wildlife Directorate of the *Secretaría de Medio Ambiente y Recursos Naturales* [Mexican Ministry of Environment and Natural Resources] (DGVS-SEMARNAT). However, based on information on UMAs registered for 2015, there are currently only two UMAs with a presence of *Abronia graminea*, but they do not handle or exploit the species (SEMARNAT, 2015, see **Annex 4**).

6.2 Legal trade

To learn the magnitude and frequency of international trade in Mexican species of *Abronia* spp., the CITES Scientific Authority of Mexico (CONABIO), in collaboration with national experts, governmental institutions and non-profit organizations, studied legal trade in the genus in Mexico. From 2005 to 2015, DGVS-SEMARNAT authorized the exploitation of three endemic species: *A. graminea, A. deppii*, and *A. lythrochila* and one species not native to Mexico (*Abronia campbelli*) having a range in Guatemala. It also authorized the export to the United States of America of specimens of *A. graminea* for commercial and scientific purposes and of *A. taeniata*, *A. oaxacae,* and *A. ornelasi* for scientific purposes (see **Table 2**).

Table 2 Authorizations for exploitation and export of specimens from Mexico of the genus *Abronia* for the period 2005-2015 (SEMARNAT 2014).

Species	Authorized exploitation		Legal exports		
	TOTAL specimens	Origin of specimens (UMA #)	**TOTAL** specimens	Origin*	Purpose*
Abronia deppii	27	1			
Abronia graminea	249	4	94	55 C, 33 U, 6 W	53 T, 6 S, 35 B
Abronia lythrochila	28	1			
Abronia campbelli	12	1			
Abronia taeniata			9	W	S
Abronia oaxacae			6	W	S
Abronia ornelasi			6	W	S
GRAND TOTAL	**316**		**115**		

*****The origin codes are: C = Bred in captivity, W = Wild and U = Unknown; the purpose codes are: T = Trade, S = Scientific and B = Breeding in captivity

To gather more information regarding trade in these species, an Internet search was carried out for sites offering specimens of this genus. The search identified the web site's country of origin, the species involved and the seller's nationality (see **Annex 5**). Overall, sellers of the following nationalities were identified: Mexico, France, Sweden, the Netherlands, the United Kingdom, the United States of America and the Czech Republic, who were offering specimens from the genus on websites from Germany, the United States of America and France and on social networks.

In order to have more clarity on international trade in the species of this genus, on 31 January 2014, CONABIO consulted the CITES Authorities of countries that reported international trade (whether in databases or on web pages) and of Range States and representatives of all CITES regions. Parties (16) consulted were: Austria, Canada, the Czech Republic, France, Germany, Guatemala, Honduras, Hong Kong, Japan, Spain, Switzerland, Thailand, Ukraine, the United Kingdom and the United States of America. Responses were obtained from eight of these and from two regional representatives as a State Party (Israel and New Zealand).

Four Parties responded that there is no known trade in the species in their country (Austria, Israel, New Zealand and Thailand), and six responded that there is trade in one or more of the species of

the genus *Abronia* in their country: Germany (*A. deppii, A. graminea, A. lytrhochila, A. mixteca* and *A. taeniata*), China (*A. anzuetoi* and *A. graminea*), the United States of America (*A. deppii, A. graminea, A. lythrochila, A. mixteca, A. oaxacae* and *A. taeniata*), the Czech Republic (*A. graminea* and *A. vasconcelosii*), Switzerland (*A. anzuetoi, A. deppii, A. graminea* and *A. taeniata*) and the United Kingdom (*A. graminea, A. smithi* and *A. taeniata)*. The United Kingdom also mentioned that low numbers of *A. oaxacae, A. lythrochila, A. deppii, A. vasconcelosii* and *A. bogerti* are likely, although the presence of these species cannot be confirmed. With regard to the origin of species, the United Kingdom indicated that they are bred in captivity and come from Europe, with prices around €1400. Only China and the United States of America provided quantifiable information about the volume of their international trade (see **Table 3**).

Table 3. Information on international trade from the United States of America (US) and China (CN) received in response to the enquiry of the Scientific Authority of Mexico. The abbreviations indicate: Ind = Specimens, Imp = Imported, Exp = Exported. The codes for country, purpose and origin are those used by UNEP-WCMC.[1]

Country responding	Species traded (Native range is indicated)	Countries of origin, destination; source and purpose of international trade							
		Period	Country of origin	Source	Importing country	Imp. Ind.	Exporting country	Exp. Ind.	Purpose
CN	*A. graminea (MX)*								T and P (pet)
US	*A. graminea (MX)*	1999-2012	GT, MX	C, W	JP, CA, HK	130	US	80	T, S, Z, B
CN (HK)	*A. anzuetoi (GT)*	2010-2013			HK	3	DE		
US	*A. deppii (MX)*	1999-2012			US			1	
US	*A. lythrochila (MX)*	1999-2012		C	US	11	DE		T, B
US	*A. mixteca (MX)*	1999-2012			US			1	
US	*A. oaxacae (MX)*	1999-2012			US	2		1	
US	*Abronia spp*	1999-2012				82		62	
US	*A. taeniata (MX)*	1999-2012	MX, ZA, FR, UA	C, W	DE, CA, FR	15	US	10	T, S, B
					TOTAL	*243*		*155*	

It should be made clear that the United States of America mentioned that it does not have a register of sites authorized to breed these species in captivity. However, it indicated that, at the very least, "Project Abronia" was breeding *Abronia graminea*, *A. taeniata* and *A. vasconcelosii*. For its part, Germany reported that, apparently, *A. graminea* and *A. taeniata* are found in zoos and that other species of the genus are regularly sold on the Internet and at national reptile fairs. In addition, it indicated that publications on captive breeding methods for *Abronia graminea* and *A. lythrochila* were available. Finally, on 1 April 2016, the European Union contributed additional information about two international trade events in 2014 that involved: 7 specimens of *A. graminea* imported live to Germany and originating from Mexico and 4 more of the same species exported by the United States of America and imported by the United Kingdom.

6.3 Parts and derivatives in trade

Arboreal alligator lizards are mainly marketed as live animals, although there are records of sporadic trade in bones and skins (2002-2012 US. LEMIS database; SEMARNAT 2014).

6.4 Illegal trade

Based on compiled international trade data (official consultations and Internet sales), there is clearly international trade in at least five species endemic to Mexico without legal authorization for exploitation or export (*A. martindelcampoi, A. smithi, A. deppii, A. lythrochila,* and *A. mixteca)*.

Moreover, there are anecdotal references on the Internet to various sources that affirm the existence of illegal trade in species of this genus, among which should be highlighted: the seizure in the United Kingdom in 2009 of three specimens of *A. aurita* hidden in a video cassette, (Anon. 2009a), the sale

1 http://www.unep-wcmc-apps.org/citestrade/docs/EN-CITES_Trade_Database_Guide.pdf, *v.8*

of two specimens of *Abronia graminea* from a non-existent UMA ("La Grillera") in Veracruz to the European Union (Wagner 2012) and the sale in online forums of specimens of *A. vasconcellosii* from the wild in Guatemala (Wagner 2009).

Furthermore, Fitzgerald *et al.* (2004) claim that there is illegal international trade in species of the genus *Abronia*. Schmidt (personal communication 2015) remarks that the most trafficked species are *A. mixteca, A. lythrochila, A. taeniata, A. graminea, A. martindelcampoi* and *A. deppii* and that the majority of trafficking in *Abronia* is carried out in Puerto del Aire. In 2010, 47 specimens of *Abronia campbelli* were confiscated from the illegal pet market (Ariano-Sánchez *et al*. 2013).

A report by Pro Wildlife (Altherr, 2014) shows the timeline of trade in species from the genus *Abronia*:

- 2011: 6 species, 3 dealers (*deppii, graminea, martindelcampoi, mixteca, reidi* and *taeniata)*
- 2012: 8 species, 11 dealers (new in trade: *A. campbelli, lythrochila* and *smithii*)
- 2013: 12 species, 31 dealers (new in trade: *chiszari, fimbriata* and *oaxacae*)
- 2014: 12 species, 34 dealers (new in trade: *frostii* and *gaiophantasma*)
- 2015: 7 species and 19 dealers

In consultation with the *Procuraduría Federal de Protección al Ambiente* [Federal Attorney's Office for Environmental Protection] (PROFEPA), in the 2005-2015 period, information was obtained about the seizure of 64 specimens of *Abronia graminea*, 13 specimens of *A. taeniata*, and 3 specimens of *A. deppii* (**Table 4 and Figure 1**).

Table 4. Seizures of specimens from the genus *Abronia* 2005-2015

Scientific name	Quantity	State	Year
Abronia deppii	2	FEDERAL DISTRICT	2011
	1	FEDERAL DISTRICT	2014
Abronia graminea	21	FEDERAL DISTRICT	2009
	3	FEDERAL DISTRICT	2011
	4	FEDERAL DISTRICT	2011
	19	VERACRUZ	2012
	4	FEDERAL DISTRICT	2012
	4	NUEVO LEÓN	2013
	1	FEDERAL DISTRICT	2014
	8	FEDERAL DISTRICT	2014
Abronia taeniata	11	FEDERAL DISTRICT	2011
	2	PUEBLA	2014

Source: PROFEPA 2015

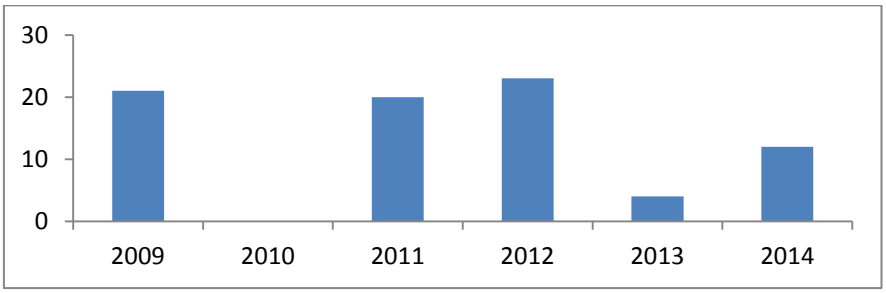


Figure 1. Seizures (number of specimens/year) of *Abronia* spp. in Mexico based on information provided by PROFEPA for the 2005-2015 period (prior to 2009 there are no seizure data).

Furthermore, during the forum "*Conservación de las Abronias de Mexico*" [Conservation of Abronias of Mexico] (26-27 November 2015, Mexico City), information was presented from a project monitoring supply of and demand for specimens from the genus *Abronia* on social networks as well as in the markets of Mexico City between 2011 and 2015 (Padilla, 2015). This project reported the trade in eleven species of the genus in various Facebook social groups with members claiming residence in Germany, the Czech Republic, France, the Netherlands, Spain, Russia, the United States of America,

Mexico and Latin America. During the study period, the illegal international trade of specimens was documented based on direct observation of cargo. However, a complete count was not possible: *A. graminea* 300 specimens, *A. deppii* 110 specimens, *A. taeniata* 70 specimens, *A. lythochila* 140 specimens, *A. mixteca* 7 specimens, *A. oaxacae* 2 specimens, *A. martindelcampoi* 20 specimens, *A. campbellii* 9 specimens, *A. chizari* 3 specimens, *A. reidi* 2 specimens. The principal destination of these specimens was the Terraristika Hamm fair in Hannover, Germany. Specimens are transported as part of traveler's luggage as well as in domestic packaging since international commercial packages dispatched are scanned. Prior to the date of the fair, packages are kept in Spain and France. Another destination is the United States of America, where specimens are distributed from Texas and California, originating from the principal borders at Monterrey and Tijuana. In Mexico, specimens are transported on public buses and private automobiles to the Federal District, Puebla and Tuxtla Gutiérrez. In Guatemala, specimens travel from Vera Paz to Tapachula, ending at Tuxtla Gutiérrez from where they are distributed further (Padilla, 2015).

6.5 Actual or potential trade impacts

Trade in specimens from the genus *Abronia* seems to be increasing, compared to the 1990s when these animals were very rarely offered for sale (Wagner 2008b). Given the low reproduction rates of the species, their restricted range, loss of habitat and international demand for the pet trade (IUCN, 2013; Campbell, 2013; Campbell & Frost, 1993), we believe that unregulated harvest from the wild of species such as *A. oaxacae* and *A. graminea, A. taeniata* and *A. smithi* could endanger their survival.

7. Legal instruments

7.1 National

In Mexico, 14 of the 19 native species are covered by the *Norma Oficial Mexicana* [Mexican Official Standard] NOM-059-SEMARNAT-2010 (SEMARNAT, 2010), in the following categories:

(a) Endangered (P): *A. bogerti, A. chiszari, A. ochoterenai, A. ornelasi*, and *A. reidi*

(b) Threatened (A): *A. deppii, A. fuscolabialis, A. graminea, A. lythrochila, A. matudai, A. mixteca*, and *A. oaxacae*

(c) Subject to special protection (Pr): *A. mitchelli* and *A. taeniata*

Once listed in the aforementioned Standard, exploitation of these species will be regulated by the *Ley General de Vida Silvestre* [General Wildlife Act] (SEMARNAT, 2000) which, in turn, is implemented by the *Dirección General de Vida Silvestre* [General Wildlife Directorate] of SEMARNAT.

7.2 International

No species from this genus is listed in the CITES Appendices.

8. Species management

8.1 Management measures

In Mexico, wildlife are exploited within the official system (SUMA) of Management Units for Conservation of Wildlife (UMAs), which is based on five elements: (1) registration with the General Wildlife Directorate (DGVS-SEMARNAT, the CITES Management Authority), (2) proper management of habitat, (3) monitoring of wild populations of exploited species, (4) controlled use (periodic inventories and reports from each UMA), (5) a management plan approved and registered with the DGVS. SEMARNAT conducts technical visits to oversee the UMAs on a random basis or if inconsistencies are found in the management plan, population studies, samples, periodic reports or inventories.

8.2 Population monitoring

In both Mexico and Guatemala, field studies of a number of *Abronia* species are being carried out. In Mexico, the National Commission of Natural Protected Areas (CONANP), through the Conservation Programme for Endangered Species (PROCER), with the collaboration of CONABIO, is

implementing the Conservation Action Programme for the *Abronia* species (PACE:*ABRONIA*S), whose main aim is to increase knowledge of the species, strengthen measures for sustainable exploitation, prevent and mitigate possible threats to the species and their habitats using the following conservation strategies: (1) Population management and protection, (2) Integrated habitat management, (3) Social and cultural participation, (4) Conservation economy and (5) Programme evaluation and operation.

8.4 Captive breeding and artificial propagation

Currently in Mexico, three of the 18 endemic species and one exotic species (*Abronia campbelli*) are bred in captivity (SEMARNAT 2015 see **Annex 4**), in five UMAs registered with the DGVS.

Moreover, the "Abronia Project," a private initiative of the organization Zootropic, reports the captive breeding of *A. graminea, A. taeniata* and *A. vasconcelosii*, which it launched in 2008, and that it has a group of 19 adults of *A. graminea* in its breeding colonies in Veracruz. The Project also reports that they have registered with and have received permission from SEMARNAT in Mexico (Project Abronia, 2008).

In an enquiry carried out by the Scientific Authority of the United Kingdom using the International Species Information System (ISIS), records were found of captive specimens of four species from the genus *Abronia* in zoos in the United States of America (see **Table 5**).

Table 5. Species of the genus *Abronia* in captivity in zoos in the United States of America based on the International Species Information System (ISIS) reported by the United Kingdom during consultations with the Scientific Authority of Mexico.

Scientific name	Captive specimens	Number of zoos keeping them in captivity
Abronia graminea	40	5
Abronia mixteca	2	1
Abronia oaxacae	1	1
Abronia taeniata	2	1
TOTAL	45	

It is important to mention that keeping *Abronia* species in captivity requires parameters specific to their species, age, sex and individual characteristics; therefore, they are not considered easy to keep (Wagner, 2010). This means that the survival of specimens is also at risk if they are not kept under proper conditions (for example, having little or no ultraviolet light reduces or entirely eliminates sexual behaviour) (Gonzáles-Porter *et al*., 2015).

8.5 Habitat conservation

According to the Food and Agriculture Organization of the United Nations (FAO) (2010), 13% of forests in Mexico (8.5 million hectares) are in protected natural areas.

In Mexico, various populations of 9 species of *Abronia* live in protected natural areas managed by the National Commission of Natural Protected Areas (CONANP) (**Table 6**).

Table 6. Species having potential ranges within the Natural Protected Areas (ANPs) based on potential range maps.

Species	Potential range (km^2)	ANP No.	Km^2 in ANP	% of Potential Range in ANP
Abronia deppii	7650.22	121	2259.61	29.54
Abronia graminea	7497.34	16	798.71	10.65
Abronia lytrochila	3894.51	7	76.95	1.98
Abronia martindelcampoi	1370.84	1	0.24	0.02

Species	Potential range (km^2)	ANP No.	Km^2 in ANP	% of Potential Range in ANP
Abronia matudai	2081.61	9	125.59	6.03
Abronia mixteca	3638.49	37	87.69	2.41
Abronia oaxacae	6048.36	7	261.83	4.33
Abronia smithi	1540.38	43	937.96	60.89
Abronia taeniata	6737.30	87	2358.76	35.01

In Guatemala, *Abronia fimbriata* and *A. gaiophantasma* can be found in protected areas such as the Mario Dary Rivera University Biotope and the Sierra de Las Minas Biosphere Reserve and some private reserves; *A. vasconcelosii* can be found in a number of reserves*; A. montecristoi* (IUCN, 2015) is found in the Monte Cristo National Park and hear the Cerro Azul de Copan National Park. The Atlanta Zoo is associated with the foundation for endangered species in Guatemala and works in the "Abronia Conservation" programme for the conservation of *Abronia campbelli* (http://www.zooatlanta.org/home/conservation_efforts/alligator_lizards_project_Abronia). Although several species from the genus are found within Natural Protected Areas, a large part of their range lies outside (Ponce-Reyes, 2004).

8.6 Safeguards

Mexico is developing an identification guide that will at least make it possible to differentiate specimens from the genus *Abronia* from the other specimens from the family *Anguidae*. The final version of this document will be submitted as an information document to CoP17 (Johannesburg, South Africa, 2016).

9. Information on similar species

Species of the genus *Abronia* possess great inter-species variability in external morphological characteristics, and the differences between them can be seen by comparing the positions of their scales (Campbell and Frost, 1993). To identify them, one must examine the pattern that distinguishes them from other genera. For example, *Mesaspis* do not have a notably depressed head or tubercular scales on the rear lateral aspect, presenting granular scales on the front of its back feet. Both for *Mesaspis* and *Elgaria*, the tail is not prehensile, which makes it easy to distinguish them among arboreal alligator lizards. With *Barisia, Broadleysaurus* and *Gerrhosaurus, Zonosaurus, Tetradactylus* and *Tracheloptychus*, the lateral fold is quite developed and, unlike *Abronia*s, continues along the neck; also the dorsal scales present pronounced keeling at the end. *Gerrhonotus* has a notably depressed face with a long tail as well as five or more rows of temporal scales between its eye and its ear. *Anadia*, and the family *Scincidae*, lack the lateral fold and have a fold on their throats that the arboreal alligator lizards do not have (Sánchez-Herrera, in progress).

10. Consultations

Based on the recommendation issued at a side event during the Animals Committee meeting (AC27, Veracruz, 2014), the CITES Scientific Authority of Mexico (CONABIO) sent official enquiries to El Salvador, Honduras and Guatemala (range states for all of the species of the genus) **Annex 6**. We received responses from Honduras and Guatemala confirming their intention to list the genus in CITES Appendix II.

Within the framework of Resolution 8.21 (Rev.CoP16), the CITES Scientific Authority of Mexico (CONABIO) again consulted El Salvador, Honduras and Guatemala in an official letter in January 2016 regarding the draft proposal for amendment from Mexico for listing the species of the genus *Abronia* in Appendix II. On 18 March, Mexico held a teleconference with all of the range states of this genus, in which Guatemala, Honduras and El Salvador reported that they would submit a proposal for listing *Abronia* in CITES Appendices, and Honduras and El Salvador reported that, within the framework of the Seventeenth Meeting of the Conference of the Parties to the Convention (CoP17; Johannesburg, South Africa, 2016), they would be able to support Mexico's proposal.

11. Additional remarks

    N/A.

12. References

    See **Annex 7**

Taxonomic Checklist of the Species of the Genus *Abronia*

Species information extracted from

UETZ, P. & Jirí Hŏsek (2015)
"The Reptile Database"
(downloaded April 21 2016)

Abronia anzuetoi CAMPBELL & FROST, 1993

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	Anzuetoi Arboreal Alligator Lizard
Synonym	Abronia (Auriculabronia) anzuetoi CAMPBELL & FROST 1993 Abronia anzuetoi — KÖHLER 2000: 38
Distribution	SC Guatemala, elevation 1219-2286 m Type locality: “in cloud forest at 1219 m (4000 feet) elevation on the south slope of Volcán de Agua, Finca Rosario Vista Hermosa, Department of Escuintla, Guatemala. This site is about 12 km (airline) NNE Escuintla at approximately 14° 25' N, 90° 44' W." Habitat: cloudforest
Types	Holotype: UMMZ 129013, University of Michigan Museum of Zoology
Comment	

Abronia aurita (COPE, 1869)

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	Cope's Arboreal Alligator Lizard
Synonym	Gerrhonotus auritus COPE 1869: 306 Gerrhonotus auritus — O’SHAUGHNESSY 1873: 45 Barisia fimbriata COPE 1885: 306 Gerrhonotus auritus — BOULENGER 1885: 271 Gerrhonotus auritus — HARTWEG & TIHEN 1946: 2 Abronia aurita - TIHEN 1949 Auriculabronia aurita Abronia aurita — KÖHLER 2000: 37 Abronia aurita — KÖHLER 2008: 60
Distribution	Guatemala (Alta Verapaz), SE Mexico ? Type locality: vast forests of Vera Paz, in the neighborhood of the ancient cities of Peten and Coban.
Types	Holotype: USNM 6769 Syntypes: MNHN 1189 (1868.14, 2553 alpha), 285 (178) mm; 1189A, 314 (193) mm; 1189B, 217 (131) mm [fimbriata]
Comment	Not listed in LINER 1994. Not listed by KÖHLER (2000) for Mexico.

Abronia bogerti TIHEN, 1954

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	E: Bogert's Arboreal Alligator Lizard S: Escorpión Arborícola de Bogert
Synonym	Abronia bogerti TIHEN 1954: 3 Abronia (Scopaeabronia) bogerti - CAMPBELL & FROST 1993 Abronia bogerti — LINER 1994 Abronia bogerti — KÖHLER 2000: 38 Abronia bogerti — MATA-SILVA et al. 2015
Distribution	Mexico (E Oaxaca), elevation: 760-1500 m Type locality: Sierra Atravesada, north of Niltepec, between Cerro Atravesada and Sierra Madre, Oaxaca, Mexico, elevation probably between 2500 and 4500 feet.
Types	Holotype: AMNH 68887
Comment	Distribution: Not listed for Mexico by KÖHLER (2000) but by KÖHLER 2008.

Abronia campbelli BRODIE & SAVAGE, 1993

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	Campbell's Alligator Lizard
Synonym	Abronia (Auriculabronia) campbelli BRODIE & SAVAGE 1993 Abronia campbelli — KÖHLER 2000: 37
Distribution	E Guatemala (elevation 1800-1900 m) Type locality: Cerro Tablón de las Minas near La Pastoría, Jalapa, Guatemala Habitat: dry oak forest
Types	Holotype: UTA R-32000
Comment	Member of the subgenus Auriculabronia and most similar to A. aurita and A. anzuetoi. Conservation: threatened, close to extinction.

Abronia chiszari SMITH & SMITH, 1981

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	E: Chiszar's Arboreal Alligator Lizard S: Escorpión Arborícola de Chiszar
Synonym	Abronia chiszari SMITH & SMITH 1981 Abronia (Scopaeabronia) chiszari - CAMPBELL & FROST 1993 Abronia chiszari — LINER 1994 Abronia chiszari — LINER 2007
Distribution	Mexico (Veracruz) Type locality: Veracruz: 2.5 mi E Cuetzalapan, 360 m elevation (CAMPBELL 1982 doubts that this is the exact provenance).
Types	Holotype: UTA R-3195, immature male, coll. 18 Aug. 1962, WiIliiam F. Pyburn
Comment	

Abronia cuetzpali CAMPBELL, SOLANO-ZAVALETA, FLORES-VILLELA, CAVIEDES-SOLIS & FROST, 2016

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	
Synonym	Abronia cuetzpali CAMPBELL, SOLANO-ZAVALETA, FLORES-VILLELA, CAVIEDES-SOLIS & FROST 2016
Distribution	Mexico (Oaxaca) Type locality: near San Miguel Suchixtepec, Sierra de MiahuatlEan, approximately 2 km west of the REio Molino, Sierra Madre del Sur, Oaxaca, Mexico, 2,150 m elevation (16.08439°N, 96.49042°W).
Reproduction	
Types	Holotype: MZFC 28761, an adult male, found by I. Caviedes-Solis on 4 November 2011 (Figs. 1–2). The individual was found at 1020 hasitcrawledacrossatrail.TheheadwatersoftheR´ıoMolino occur just to the east of San Miguel Suchixtepec. Suitable habitat occurs throughout the region between 1,500 and 2,500 m. Paratypes (2).—UTA R-61670, an adult female from 5.4 km eastof Juquila, Sierra de Miahuatla´n, Sierra Madre del Sur, Oaxaca, Mexico, 1,711 m (16.232048N 97.255358W), found by Oscar Olivares on 8 July 2012 (Fig. 3). The individual was found during the late morning as it crawled on the forest floor. The northward-facing slope on which the holotype was collected drains into the R´ıo Grande, an upper tributary of the R´ıo Verde. UCM 41057, an adult male from near San Miguel Suchixtepec, Oaxaca, Sierra Madre del Sur, Mexico, collected by Thomas MacDougal in May 1967. The specimen was reported by the collector to be from the R´ıo Molino drainage.
Comment	Diagnosis: A species of Abronia in the subgenus Abronia defined by Campbell and Frost

	(1993). Within this subgenus A. cuetzpali clearly falls within the A. deppii group, containing A. deppii, A. martindelcampoi, A. mixteca, and A. oaxacae, all of which have the unique condition in the genus Abronia of having scales oriented in oblique rows relative to the ventrolateral fold. Abronia cuetzpali differs from A. deppii (which occurs along the southern edge of the Mexican Plateau) and A. martindelcampoi (which occurs in the western highlands of Guerrero) in having two primary temporals contacting the postocular series (vs. one), an anterior superciliary contacting the cantholoreal (vs. usually no contact), the first postorbital supralabial not enlarged (vs. enlarged), two to three occipitals (vs. one), and 32–35 transverse rows of dorsal scales (vs. 27–29 in A. deppii and 24–28 in A. martindelcampoi). Abronia oaxacae (Fig. 4) and A. mixteca (Fig. 5) both occur in Oaxaca, but A. cuetzpali may be distinguished from these species by having six to eight nuchals in a transverse row across the nape (vs. four in A. oaxacae); relatively small lateral neck scales—minimally seven to eight scales between ventral scales and nuchals (vs. five to six in A. mixteca, three to four in A. oaxacae; see Fig. 6); the anterior superciliary contacting the cantholoreal (usually no contact in A. oaxacae); 32–35 dorsal transverse scale rows (vs. 28–31 in A. mixteca, 27–29 in A. oaxacae); 39–40 ventral transverse scale rows (vs. 34–37 in A. oaxacae); and a more strongly developed ventrolateral fold, containing more granular scales than in A. mixteca or A. oaxacae [CAMPBELL et al. 2016]. Similar species: Using the key in Campbell and Frost (1993), A. martindelcampoi will key to ‘‘Abronia species ‘Guerrero’’’ and A. cuetzpali will key to A. mixteca. Characteristics differentiating the latter two species are provided in the Diagnosis.

Abronia deppii (WIEGMANN, 1828)

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	S: Escorpión Arboricola de Deppe E: Deppe's Arboreal Alligator Lizard
Synonym	Gerrhonotus deppii WIEGMANN 1828: 379 Abronia deppii — GRAY 1838: 389 Gerrhonotus Deppii — DUMÉRIL & BIBRON 1839: 398 Gerrhonotus Deppii — O'SHAUGHNESSY 1873: 45 Gerrhonotus deppii — GÜNTHER 1885: 35 Gerrhonotus deppii — BOULENGER 1885: 269 Abronia deppii — SMITH & TAYLOR 1950: 196 Gerrhonotus deppii — WERMUTH 1969 Abronia deppei — LINER 1994 Abronia deppii — LINER 2007
Distribution	Mexico (N Guerrero, Mexico, N Morelos) Type locality: Mexico. Restricted to Omilteme, Guerrero, by SMITH & TAYLOR 1950, later restricted to Temascaltepec-Real de Arriba, in the State of Mexico, by SÁNCHEZ-HERRERA & LÓPEZ-FORMENT 1980.
Types	Lectotype: ZMB 1149 (see also GOOD et al. 1993)
Comment	Distribution: Map in Bogert and Porter 1967: 16. Has been confused with what is now called Abronia martindelcampoi FLORES-VILLELA & SÁNCHEZ-HERRERA 2003 who also redescribed A. deppii. Hence not in the Sierra Madre del Sur, as reported by FLORES-VILLELA & SÁNCHEZ-HERRERA 2003. Type species: Abronia deppii is the type species of the genus Abronia GRAY 1838. Note that there is also a plant genus of the same name.

Abronia fimbriata (COPE, 1884)

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	
Synonym	Gerrhonotus auritus BOCOURT (not COPE) Barissia fimbriata COPE 1884 (nom. nov.) Gerrhonotus fimbriatus — BOULENGER 1885: 271 Abronia (Auriculabronia) fimbriata — CAMPBELL & FROST 1993 Abronia fimbriata — KÖHLER 2000: 36
Distribution	NE Guatemala (Northeastern Guatemalan highlands; known with certainty from the cloud forests of the western portion of the Sierra de las Minas, Department of Baja Verapaz, at elevations of 1500 to 2100 m, and from the Sierra de Xucaneb (MontañaUlpán), Department of Alta Verapaz, at elevations of 1400 m to 2000 m. These localities are in the Quecchian Area and the Sierra de las Minas Sierran Subarea, as defined by Campbell and Vannini (1989). Type locality: "les forèts de pins de la haute Vera Paz (Guatemala oriental)" (Bocourt, 1878 [1870--1909]), according to Brygoo (1987: 6); restricted to vicinity of Cáquipec, Department of Alta Verapaz, Guatemala by CAMPBELL (on http://www.uta.edu/biology/campbell/guatemala/checklist.html).
Types	Syntypes: MNHN 1189, 1189A, and 1189B; MNHN 1189 designated lectotype by CAMPBELL.
Comment	

Abronia frosti CAMPBELL, SASA, ACEEDO & MENDELSON, 1998

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	Frost’s Arboreal Alligator Lizard
Synonym	Abronia frosti CAMPBELL, SASA, ACEEDO & MENDELSON 1998 Abronia frosti — KÖHLER 2000: 38
Distribution	NW Guatemala (Sierra de losCuchumatanes), elevation 2835 m. Type locality: Along road to Patalcal, 5.9 km (by road) NW intersection of Guatemala road 9N (near San Mateo Ixtatán), 2835 m.
Types	Holotype: UTA R-41131
Comment	Abronia frosti is the only Abronia known from Guatemala that lacks protuberant supra-auricular spines.

Abronia fuscolabialis (TIHEN, 1944)

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	S: Escorpión Arboricola del Zempoaltepec S: Mount Zempoaltepec Arboreal Alligator Lizard
Synonym	Gerrhonotus fuscolabialis TIHEN 1944: 112 Abronia fuscolabialis — TIHEN 1949: 591 Abronia fuscolabialis — SMITH & TAYLOR 1950: 198 Abronia kalaina GOOD & SCHWENK 1985 Abronia kalaina — LINER 1994 Abronia fuscolabialis — CAMPBELL & FROST 1993 Abronia fuscolabialis — LINER 2007
Distribution	Mexico (Oaxaca) Type locality: Mount Zempoaltepec, Oaxaca.
Types	Holotype: personal collection of R. T. Moore, California Institute of Technology, Pasadena, California, No. 400, an adult male, collected by Mr. Moore at Mt. Zempoaltepec, Oaxaca, between November, 1941, and June, 1942. Holotype: MVZ 177806 (adult male) [kalaina]
Comment	Synonymy: CAMPBELL & FROST 1993 synonymized Abronia kalaina with Abronia fuscolabialis. Distribution: Map in Bogert and Porter 1967: 16. DIAGNOSIS. A Gerrhonotus of the deppii group without protuberant supra-auricular scales; adult without conspicuous light areas laterally; chin moderately dark in color; lower labials as dark as the granular area of the neck, with indistinct lighter bands; approximately 30-31 rows of dorsal scales between the occipital and the posterior border of the thigh; dorsal osteoderms well developed; an upper anterior loreal present; sides of neck covered with more or less equal subgranular scales (from TIHEN 1944).

Abronia gaiophantasma CAMPBELL & FROST, 1993

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	Brilliant Arboreal Alligator Lizard
Synonym	Abronia (Auriculabronia) gaiophantasma CAMPBELL & FROST 1993 Abronia gaiophantasma — KÖHLER 2000
Distribution	NE Guatemala (elevation: 1600-2350 m) Type locality: “cloud forest at 1600 m elevation on the west slope of Cerro Verde in the vicinity of La Unión Barrios, Baja Verapaz, Guatemala.” (approximately 15°11' N, 90° 12' W.)
Types	Holotype: UTA R19646

Comment	Similar species: Several specimens that have been identified as A. aurita are actually A. gaiophantasma.

Abronia graminea (COPE, 1864)

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	E: Sierra de TehuacanArboreal Alligator Lizard, Terrestrial Arboreal Alligator Lizard G: Grüne Baumschleiche S: Escorpión Arboricola de Tehuacá
Synonym	Gerrhonotus gramineus COPE 1864: 179 Gerrhonotus gramineus — O'SHAUGHNESSY 1873: 45 Gerrhonotus gramineus — BOULENGER 1885: 269 Abroniataeniata graminea — TIHEN 1949: 591 Abroniataeniata graminea — SMITH & TAYLOR 1950: 198 Gerrhonotustaeniatus gramineus — WERMUTH 1969 Abronia graminea — LINER 1994 Abronia graminea — LINER 2007
Distribution	Mexico (C Veracruz, E Puebla, Oaxaca) Type locality: Orizaba, Mexico.
Types	Holotype: USNM
Comment	

Abronia leurolepis CAMPBELL & FROST, 1993

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	S: EscorpiónArboricola de EscamasPlanas E: Flat-scaled Arboreal Alligator Lizard, Smoothback arboreal alligator lizard
Synonym	Abronia (Auriculabronia) leurolepis CAMPBELL & FROST 1993 Abronia leurolepis — KÖHLER 2000: 38
Distribution	Mexico (Chiapas) Type locality: Santa Rosa, near Comitán, E Chiapas, Mexico (1800-2300 m)
Types	Holotype: CNAR (= UNAM = IBHUNAM) 340 (in original description "IBUNAM")
Comment	

Abronia lythrochila SMITH & ALVAREZ DEL TORO, 1963

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	E: Red-lipped Arboreal Alligator Lizard S: EscorpiónArboricola de LabiosRojos
Synonym	Abronia lythrochila SMITH & ALVAREZ DEL TORO 1963 Abronia (Auriculabronia) lythrochila - CAMPBELL & FROST 1993 Abronia lythrochila — LINER 1994 Abronia lythrochila — KÖHLER 2000: 38
Distribution	Mexico (C Chiapas), elevation 2000-3000 m Type locality: Mexico: Nachij, Carretera Tuxtla-Las Casas, Chiapas.
Types	Holotype: UIMNH 51013, M. Alvarez del Toro; July 11, 1956.
Comment	Seems to be confined to drieer pine-oak forests (SMITH & ALVAREZ DEL TORO 1963).

Abronia martindelcampoi FLORES-VILLELA & SÁNCHEZ-H., 2003

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	S: Escorpión Arboricola de Martin del Campo E: Martín del Campo's Arboreal Alligator Lizard
Synonym	Abronia martindelcampoi FLORES-VILLELA & SÁNCHEZ-H. 2003 Abronia deppii — SMITH & TAYLOR 1950: 196 Abronia deppii — TIHEN 1954 Abronia deppi — DAVIS & DIXON 1961 Abronia deppii — GOOD 1988
Distribution	Mexico (Guerrero) Type locality: Mexico, Guerrero, Chilpancingo, Omiltemi, Orilla Norte in oak forest at 2250 m elevation.
Types	Holotype: CNAR (= UNAM = MZFC) 02778
Comment	

Abronia matudai (HARTWEG & TIHEN, 1946)

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	S: EscorpiónArboricola de Matuda E: Matuda's Arboreal Alligator Lizard
Synonym	Gerrhonotus matudae HARTWEG & TIHEN 1946 Abronia matudai — TIHEN 1949: 591 Abronia matudai — SMITH & TAYLOR 1950: 196 Abronia (Auriculabronia) matudai - CAMPBELL & FROST 1993 Abronia matudai — LINER 1994 Abronia matudai — KÖHLER 2000: 38
Distribution	Mexico (SE Chiapas), SW Guatemala (elevation 1950-2630 m) Type locality: Volcán de Tacaná, Chiapas, 2000 m.
Types	Holotype: UMMZ 88331 (collected by Eizi Matuda)
Comment	Not listed for Guatemala by KÖHLER (2000).

Abronia meledona CAMPBELL & BRODIE, 1999

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	
Synonym	Abronia meledona CAMPBELL & BRODIE 1999 Abronia meledona — KÖHLER 2000: 38
Distribution	SE Guatemala (Jalapa), 2200-2660 m elevation. Type locality: near the Torre de Guatel, near the aldea of Soledad Grande, Jalapa, Guatemala, 2660 m elevation (14° 31' N, 90° 09' W). This locality is located about 4 km airline ESE of Mataquescuintla on the slopes drained by the upper tributaries of the Rio Tapalapa.
Types	Holotype: UTA R-31041, an adult female, The University of Texas at Arlington. The type was collected by local resident for Christian Girola and Eric Smith (original field no. CLG 199) on 28 September 1991.
Comment	

Abronia mitchelli CAMPBELL, 1982

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	E: Mitchell's Arboreal Alligator Lizard S: Escorpión Arboricola de Mitchell
Synonym	Abronia mitchelli CAMPBELL 1982 Abronia (Aenigmabronia) mitchelli - CAMPBELL & FROST 1993 Abronia mitchelli — LINER 1994 Abronia mitchelli — LINER 2007
Distribution	Mexico (Sierra Juarez, Oaxaca) Type locality: Cerro Pelón, N slope Sierra Juárez, Oaxaca, Mexico, in cloud forest at an elevation of about 2750 m.
Types	Holotype: UTA R-10000, an adult female; collected 5 September 1974 by L. A. Mitchell.
Comment	A. mitchelli most closely resembles A. bogerti, A. chiszari and A. reidi, species inhabiting highland regions adjacent to the Sierra Madre del Sur and associated ranges in Oaxaca.

Abronia mixteca BOGERT & PORTER, 1967

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	S: Escorpión ArboricolaMixteco E: Mixtecan Arboreal Alligator Lizard
Synonym	Abronia mixteca BOGERT & PORTER 1967 Abronia mixteca — LINER 1994 Abronia mixteca — LINER 2007
Distribution	Mexico (Guerrero, Oaxaca, Nuevo Leon) Type locality: near Tejocotes, Oaxaca, approx. 2400 m elevation (17° 14’ N, 96° 59’ W).
Types	Holotype: AMNH 91000
Comment	Distribution: Map in Bogert and Porter 1967: 16. Not listed by LAZCANO VILLARREAL & DIXON 2002 for Nuevo Leon.

Abronia montecristoi HIDALGO, 1983

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	Monte Cristo Arboreal Alligator Lizard
Synonym	Abronia montecristoi HIDALGO 1983 Abronia (Abaculabronia) montecristoi - CAMPBELL & FROST 1993 Abronia (Lissabronia) montecristoi - CAMPBELL et al. 1998 Abronia montecristoi — KÖHLER 2000: 39
Distribution	El Salvador, Honduras, Guatemala, 1370-2250 m Type locality: El Salvador, Santa Ana, Hda. Montecristo, Metapan, 2250 m elevation
Types	Holotype: KU 184046
Comment	A. montecristoi has 5 occipital scales while A. salvadorensis has 1-4 (usually 3).

Abronia oaxacae (GÜNTHER, 1885)

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	E: Oaxacan Arboreal Alligator Lizard S: Escorpión Arboricola de Oaxaca
Synonym	Gerrhonotus oaxacae GÜNTHER 1885: 36 Gerrhonotus oaxacae — BOULENGER 1885: 268 Abronia oaxacae — TIHEN 1949: 591 Abronia oaxacae — SMITH & TAYLOR 1950: 197 Gerrhonotus oaxacae — WERMUTH 1969 Abronia oaxacae — LINER 1994 Abronia oaxaca — LINER 2007
Distribution	Mexico (Oaxaca: Tehuantepec), elevation ~100 m. Type locality: Oaxaca.
Types	Syntypes: BMNH
Comment	Distribution: Map in Bogert and Porter 1967: 16. Extremely rare, known only from a few specimens.

Abronia ochoterenai (MARTIN DEL CAMPO, 1939)

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	S: Escorpión Arboricola de Ochoterena E: Ochoterena's Arboreal Alligator Lizard, Northern Chiapas Arboreal Alligator Lizard
Synonym	Gerrhonotusvasconcelosiiochoterenai MARTIN DEL CAMPO 1939 Abronia ochoterenai — TIHEN 1949: 591 Abronia ochoterenai — SMITH & TAYLOR 1950: 197 Abronia (Auriculabronia) ochoterenai - CAMPBELL & FROST 1993 Abronia ochoterenai — LINER 1994 Abronia ochoterenai — KÖHLER 2000: 39
Distribution	Mexico (Chiapas), 1800-2300 m elevation Type locality: Santa Rosa, Comitán, Chiapas.
Types	Syntypes: CNAR (= UNAM, Instituto de Biología, México)
Comment	

Abronia ornelasi CAMPBELL, 1984

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	S: Escorpión Arboricola de Ornelas E: Ornelas's Arboreal Alligator Lizard, Cerro Baul Alligator Lizard
Synonym	Abronia ornelasi CAMPBELL 1984 Abronia (Abaculabronia) ornelasi - CAMPBELL & FROST 1993 Abronia ornelasi — LINER 1994 Abronia ornelasi — KÖHLER 2000: 39 Abronia ornelasi — MATA-SILVA et al. 2015
Distribution	Mexico (E Oaxaca), elevation 1500-1600 m Type locality: Cerro Baul, Oaxaca, Mexico; cloud forest at an elevation of about 1600 m.
Types	Holotype: UTA R-6641, an adult male, University of Texas at Arlington Collection of Vertebrates. Original number JAC 3103, collected 25 July 1977 by Julio Ornelas Martinez.
Comment	Distribution: The type locality is in the vicinity of Colonia Rodulfo Figueroa, in the Atlantic drainage of the Rio Mono Blanco, 19 km NW Rizo de Oro, Chiapas.

Abronia ramirezi CAMPBELL, 1994

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	E: Ramirez's Alligator Lizard S: Escorpión Arboricola de Ramirez
Synonym	Abronia ramirezi CAMPBELL 1994 Abronia ramirezi — KÖHLER 2000: 39
Distribution	Mexico (W Chiapas), elevation 1350 m Type locality: Rancho El Recuerdo, Cerro La Vela, Sierra Madre de Chiapas, Municipio de Jiquipilas, Chiapas, México, 1350 m.
Types	Holotype: IHN 1177.
Comment	

Abronia reidi WERLER & SHANNON, 1961

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	S: Escorpión Arboricola de Reid E: Reid's Arboreal Alligator Lizard
Synonym	Abronia reidi WERLER & SHANNON 1961 Gerrhonotus reidi — WERMUTH 1969 Abronia (Abaculabronia) reidi — CAMPBELL & FROST 1993 Abronia reidi — LINER 1994 Abronia reidi — LINER 2007
Distribution	Mexico (Veracruz) Type locality: Mexico: Volcan San Martin, crater rim, Veracruz.
Types	Holotype: UIMNH 67062; J. Werler and J. Reid; February 15, 1953.
Comment	

Abronia salvadorensis HIDALGO, 1983

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	Salvador Arboreal Alligator Lizard
Synonym	Abronia salvadorensis HIDALGO 1983 Abronia (Lissabronia) salvadorensis — CAMPBELL & FROST 1993 Abronia salvadorensis — KÖHLER 2000: 39
Distribution	El Salvador, Honduras (Sierra de Montecillos, Sierra de Opalaca), 1900-2250 m elevation Type locality: El Salvador, Morazan Canton Palo Blanco, 10 km NE Perquin, 1900 m elevation.
Types	Holotype: KU 184047, adult female
Comment	Distribution: Listed for El Salvador with a question mark by KÖHLER 2000. A. montecristoi has 5 occipital scales while A. salvadorensis has 1-4 (usually 3).

Abronia smithi CAMPBELL & FROST, 1993

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	E: Smith's Arboreal Alligator Lizard S: Escorpión Arborícola de Smith
Synonym	Abronia (Auriculabronia) smithi CAMPBELL & FROST 1993 Abronia smithi — KÖHLER 2000: 39 Abronia smithi — WILSON et al. 2013
Distribution	Mexico (SE Chiapas), elevation 1800-2800 m Type locality: Southeast slope of Cerro El Triúnfo (sic), Sierra Madre de Chiapas Chiapas, Mexico, in cloud forests. This locality is about 13.1 Km airline NNE Mapastepec at 15° 40' N, 92° 48' W. Elevation: 2020 m
Types	Holotype: UTA R-30202.
Comment	

Abronia taeniata (WIEGMANN, 1828)

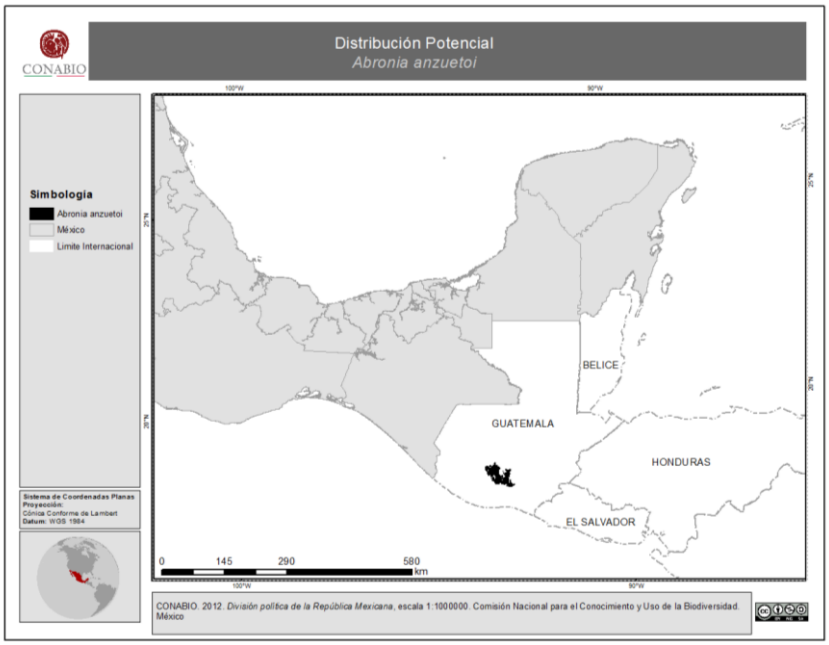
Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	S: Escorpión Arborícola de Bandas E: Banded Arboreal Alligator Lizard, Bromeliad Arboreal Alligator Lizard
Synonym	Gerrhonotus taeniatus WIEGMANN 1828: 380 Abronia taeniatus — GRAY 1838: 390 Gerrhonotus taeniatus — DUMÉRIL & BIBRON 1839: 399 Gerrhonotus taeniatus — O'SHAUGHNESSY 1873: 45 Gerrhonotus taeniatus — BOULENGER 1885: 270 Gerrhonotus deppiivar. digueti MOCQUARD 1905 (fide SMITH & TAYLOR 1950) Abronia taeniata taeniata — TIHEN 1949 Abronia taeniata taeniata — SMITH & TAYLOR 1950: 197 Gerrhonotus taeniatus — WERMUTH 1969 Abronia taeniata — LINER 1994 Abronia taeniata — LINER 2007
Distribution	E Mexico (SW Tamaulipas, San Luis Potosi, Hidalgo, N Puebla, Nuevo Leon, Quéretaro) Type locality: Mexico. RestrictedtoEl Chico, Hidalgo, by SMITH & TAYLOR 1950.
Types	Holotype: ZMB 1152 Syntypes: MNHN 1904.486 [digueti]
Comment	SMITH & TAYLOR 1950 report intergrades of taeniata and graminea from la Joya, Veracruz. Distribution: Not listed by LAZCANO VILLARREAL & DIXON 2002 for Nuevo Leon.

Abronia vasconcelosii (BOCOURT, 1871)

Higher Taxa	Anguidae (Gerrhonotinae), Diploglossa, Anguimorpha, Sauria, Squamata (lizards)
Subspecies	
Common Names	G: Guatemala-Baumschleiche
Synonym	Gerrhonotus vasconcelosii BOCOURT 1871 Gerrhonotus Vasconcellosii — O'SHAUGHNESSY 1873: 45 Gerrhonotus vasconcelosii — BOULENGER 1885: 270 Abronia vasconcelosii - TIHEN 1949 Abronia vasconcelosii — KÖHLER 2000: 39 Abronia vasconcelosii — PIANKA & VITT 2003: 236 Abronia vasconcelosii — KÖHLER 2008: 62
Distribution	Guatemala (elevation > 2000 m) Type locality: "Arguetta [= Argueta] (Guatémala), à plus de 2,000 mètresd'altitude".
Types	Holotype: MNHN 2017
Comment	

Mapas de distribución potencial y descripción de las especies del género de *Abronia*

1. *Abronia anzuetoi*: **GT:** Nativa del Volcán de Agua, Escuintla, en el centro-sur de Guatemala (Campbell & Frost 1993). Se distingue de otras especies del género por presentar la siguiente combinación de características: escamas supra-auriculares en forma de espina, 14 filas de escamas longitudinales ventrales, zona circumorbital amarilla, color verde oscuro o azul-verde oscuro, tamaño máximo de 135 mm., posmental dividido (Campbell & Frost, 1993).

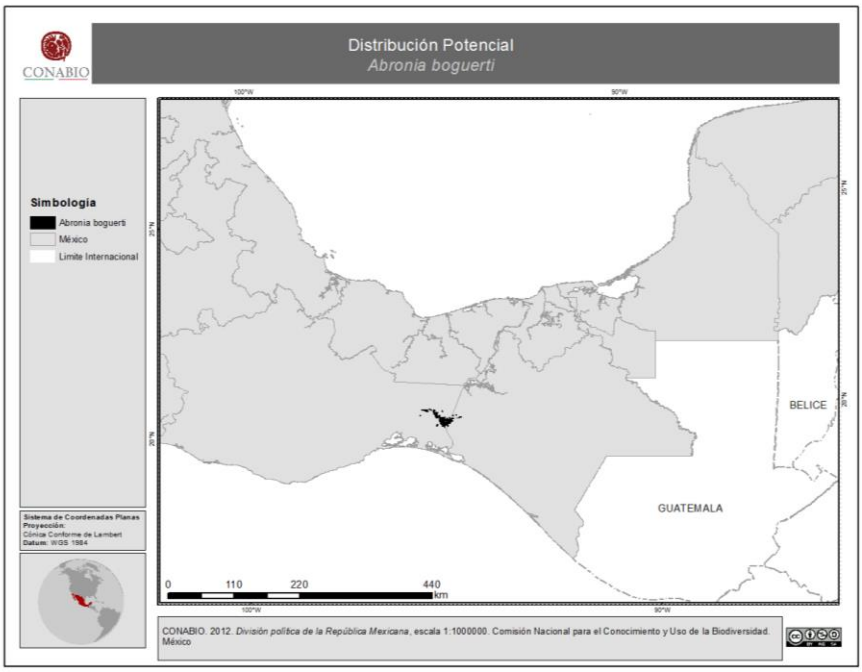


Abronia anzuetoi. Jiménez-Velázquez y col. **2016**.

2. *Abronia aurita*: **GT:** Tierras altas de Verapaz, Guatemala. Dos escamas posmentales, escama posmental dividida. Color verde, verde-amarillo, o turquesa pálido, con abundantes motas negras con bandas horizontales oscuras, la zona alrededor de los ojos es amarilla, manchas naranjas en la cabeza y el margen de la mandíbula inferior también naranja. Un tamaño máximo de 125 mm (Campbell & Frost, 1993),

Abronia aurita. Acevedo, M., Ariano-Sánchez, D. & Johnson, J. 2013. *Abronia aurita*. The IUCN Red List of Threatened Species. Version 2015.2. <www.iucnredlist.org>. Downloaded on **25 June 2015**.

Abronia bogerti: **MX:** Se conoce de Niltepec (entre Cerro Atravesado y la Sierra Madre) y de Cerro Baúl, Oaxaca (Bille 2001; Zaldívar *et al,* 2010). Lagartija de cuerpo delgado. El único ejemplar conocido para la especie mide 64 mm de longitud de hocico a la cloaca y 113 mm de longitud total Coloración dorsal verdosa con diez a once barras transversales poco definidas en el cuello y la parte dorsal del cuerpo. Se distingue de las demás especies de su género por presentar un par de escamas postmentonales, osteodermos dorsales desarrollados únicamente en unas cuantas hileras de escamas ubicadas en la parte anterior del cuerpo, una sola escama temporal en contacto con la órbita, penúltima supralabial en contacto con la órbita, parietales en amplio contacto con las supraoculares medias, cantales anteriores presentes, 41 hileras de escamas transversales dorsales, y un mínimo de ocho escamas en una hilera del cuello (descripción tomada de Tihen, 1954; Good, 1988; Campbell, 1994)



Abronia boguerti. Jiménez-Velázquez y col. **2016**.

3. *Abronia campbelli*: **GT:** Conocida de Potrero Carrillo-La Pastoría, Jalapa en Guatemala Centro oriental (Ariano-Sánchez & Torres-Almazán 2010; Brodie & Savage 1993). Presenta escamas supra-auriculares en forma de espina, color de gris a café, la región orbital y las espinas supra-auriculares son color crema, nunca amarillas, temporal terciario grande y con contacto con el segundo temporal primario, 31 filas de escamas dorsales trasnversales, 34 filas transversales ventrales (Broadie & Savage, 1993).

Abronia campbelli. Ariano-Sánchez, D., Johnson, J. & Acevedo, M. 2013. *Abronia campbelli*. The IUCN Red List of Threatened Species. Version 2015.2. <www.iucnredlist.org>. Downloaded on **25 June 2015**.

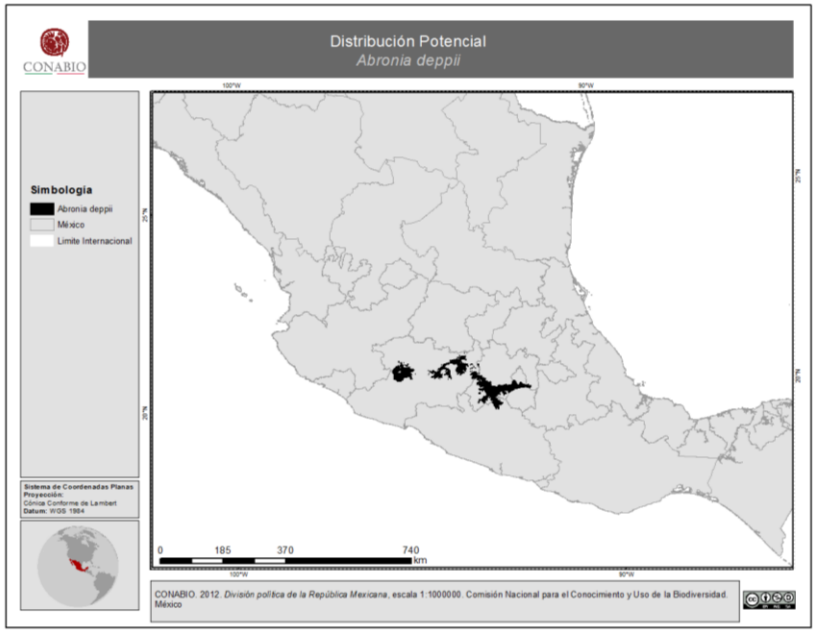
4. *Abronia chiszari*: **MX:** Restringida a los volcanes Santa Martha y San Martin, en la Sierra de los Tuxtlas, Veracruz. Lagartija de cuerpo alargado, cola prensil, y patas relativamente largas, (Campbell & Frost, 1993). Es muy similar a otras especies del subgénero *Scopaeabronia*, especialmente a *Abronia bogerti*, estando justificado el estatus taxonómico entre ambas especies más por distancia geográfica entre sus áreas de distribución que por diferencias en su morfología (Smith & Smith, 1981). Se distingue de los demás miembros de su género por presentar las siguientes características (Smith & Smith, 1981; Heimes, en preparación): 39 o más hileras transversales de escamas dorsales y ocho hileras transversales de escamas nucales; cuerpo y cabeza muy delgados y alargados; la cabeza en los adultos es color gris plateado con marcas oscuras; color de fondo en la región dorsal del cuerpo gris y amarillo con bandas transversales oscuras; vientre gris con pequeñas manchas de tono más oscuro. Los especímenes adultos alcanzan una longitud hocico cloaca conocida de hasta 93 mm.

Abronia chiszari. Lopez-Luna, M.A., Flores-Villela, O. & Frost, D.R. 2007. *Abronia chiszari*. The IUCN Red List of Threatened Species. Version 2015.2. <www.iucnredlist.org>. Downloaded on **23 June 2015**.

5. *Abronia cuetzpali:* **MX:** Única especie del género Abronia conocida de las porciones central y occidental de la Sierra de Miahuatlán en la región sur de la Sierra Madre del Sur, a una altitud de 1,711 a 2,150 msnm. Parece estar más relacionada a A. mixteca y *A. oaxacae*, pero difiere de estas y otras del subgénero *Abronia* por presentar la siguiente combinación de caracteres.: 1). dos temporales primarias contactando la serie postocular, 2). la superciliar anterior en contacto con la cantoloreal, 3). 2 a 3 occipitales, 4). 32 a 35 hileras transversales de escamas dorsales, 5) 6 a 8 nucales en hilera transversal sobre la nuca, 6). 7 a 8 escamas entre las nucales grandes y las escamas ventrales del cuello, 7). 39 a 40 hileras transversales de escamas ventrales, 7). Pliegue ventrolateral bien desarrollado. Coloración en vida del holotipo: cuerpo grisáceo con siete bandas transversales de color marrón pálido en el dorso, incluyendo la nuca y extendiéndose al pliegue ventrolateral, salpicadas de negro lateralmente. Cuello y superficie dorsl de las extremidades anteriores de color similar al cuerpo y con manchas negras. Escamas como la internasal anterior, la prefrontal izquierda y las de la parte posterior de la cabeza de color amarillo verdoso. Superficie y lados de la cabeza rugosos con vermiculaciones negras. Cola gris con 15 bandas transversales ligeramente irregulares con machas negras. Mandíbula inferior y parte central de la cabeza y cuello de color blanco inmaculado. Parte central del cuerpo ligeramente más oscura que el cuello. Iris color balnquecino con un ligero brillo de color verde amarillento. Lagartija con una longitud hocico-cloaca de 108 mm (Campbell, *et al*., 2016).

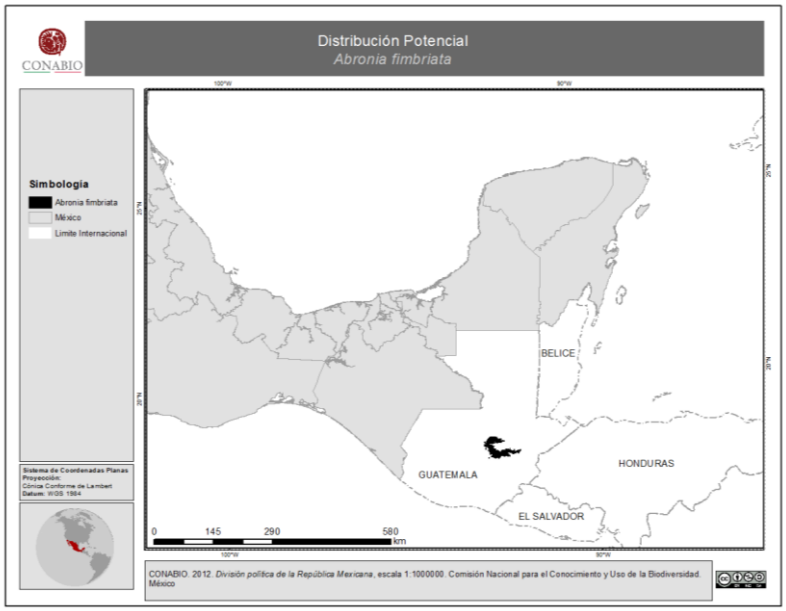
6. *Abronia deppii*: **MX:** Corredor Ecológico del Chichinautzin, Morelos, montañas cerca de Zitácuaro, Michoacán. Norte de guerrero en la Sierra de Taxco. Su límite de distribución es el lado noreste de la cuenca del Río Balsas (Flores-Villela y Schmidt, com. pers. 2015). Lagartija de cuerpo alargado, cola prensil, y patas relativamente cortas (Campbell & Frost, 1993). Se distingue de las demás especies de su género por presentar la siguiente combinación de características de escamación y coloración (Campbell

& Frost, 1993): escamas posterolaterales de la cabeza en forma de bulbo y poco desarrolladas; 14 hileras longitudinales de ventrales; 10-13 hileras longitudinales de dorsales; pliegue lateral muy reducido; una subocular; coloración dorsal en los adultos blanca o gris con seis u ocho bandas de color negro o gris oscuro; coloración ventral anaranjada.



Abronia deppii. Jiménez-Velázquez y col. **2016**.

7. *Abronia fimbriata:* **GT:** Bosques de niebla en la porción occidental de la Sierra de las Minas, Departmento de Alta Verapaz, a una altitud de 1,400-2,000 msnm. Color café-grisaceo, los costados del cuello son gris claro, la parte inferior de la cabeza es de rosa a amarillo-blanco. Se distingue por presentar la siguiente combinación de características: no presenta la escama frontonasal media, cuerpo alargado, escamas supra-auriculares en forma de espinas, no presenta las escamas frontonasales, escamas cantales discretas, supranasales largas y expandidas que se contactan en la línea media (Campbell & Frost, 1993).



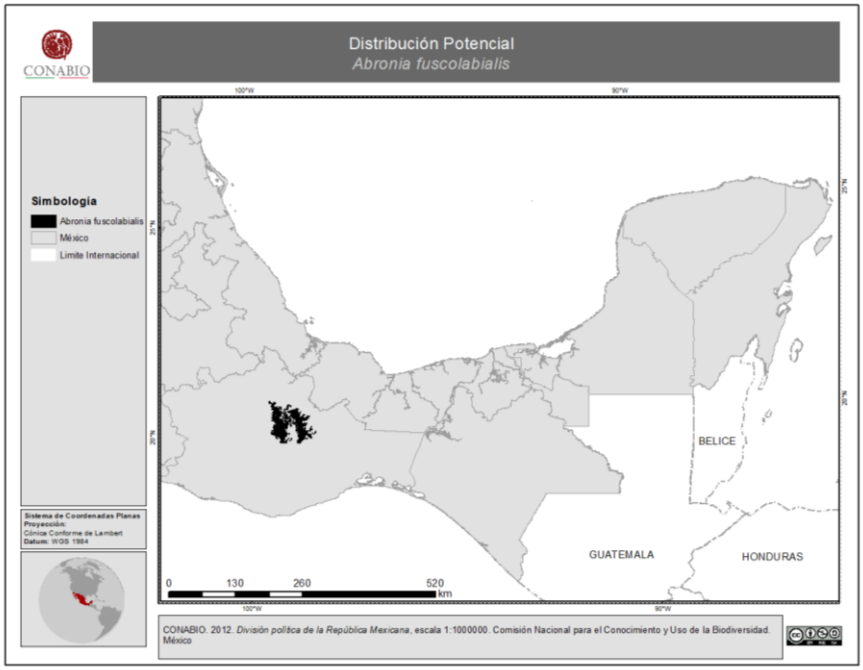
Abronia fimbriata. Jiménez-Velázquez y col. **2016**

8. *Abronia frosti*: **GT:** Patalcal, Sierra de Los Cuchumatanes Huehuetenango, a 2,35 m msn (Campbell *et al.* 1998; Ariano-Sánchez *et al.* 2011). Se distingue por presentar la siguiente combinación de características: escama frotonasal presente sin contacto con la frontal, cantales discretos, dos

temporales anteriores por lado, ambos contactan los posoculares, solo dos temporales primarios, tiene un color basal oscuro con marcas transversales claras en los lados y dorso del cuerpo (Campbell et al. 1998).

Abronia frosti. Ariano-Sánchez, D., Acevedo, M. & Johnson, J. 2013. *Abronia frosti*. The IUCN Red List of Threatened Species. Version 2015.2. <www.iucnredlist.org>. Downloaded on **25 June 2015**.

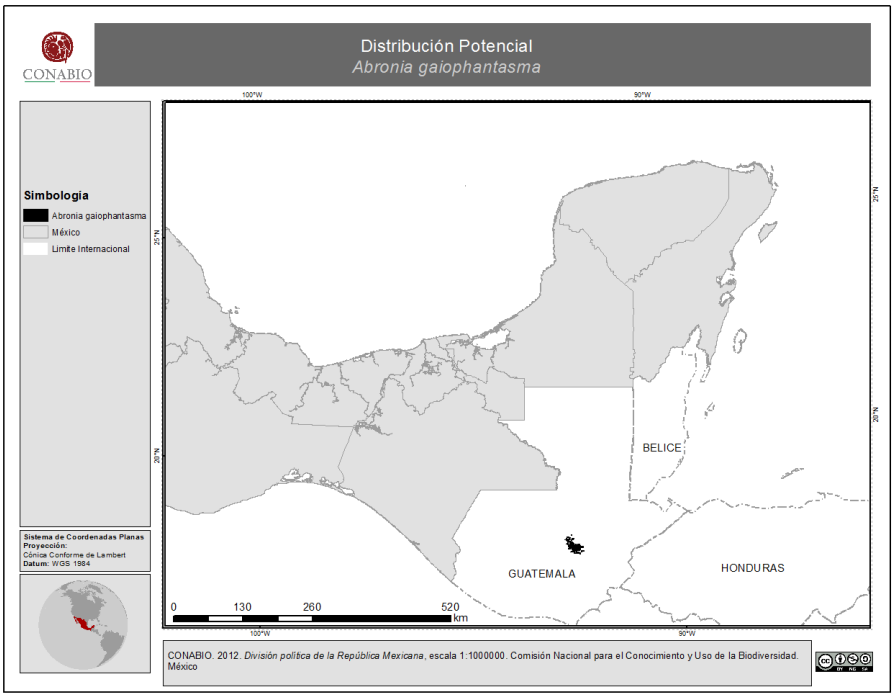
9. *Abronia fuscolabialis*: **MX:** Cerro Zempoaltepec, cerca de Totontepec, y en la Sierra Juárez. Lagartija con una longitud hocico-cloaca de por lo menos 118 mm. Se distingue por presentar la siguiente combinación de características de escamación y coloración (Campbell & Frost, 1993): 1) suprauriculares no protuberantes en adultos; 2) supranasales pequeñas y no expandidas; 3) frontonasal relativamente grande, separada de la frontal; 4) internasal posterior relativamente pequeña; 5) cantal poco conspicua; 6) cuatro temporales anteriores en cada lado, las dos inferiores en contacto con las postoculares; 7) parietal separada de las supraoculares medales; 8) una sola occipital; 9) escamas posterolaterales de la cabeza en forma de bulbo; 10) una sola hilera de preauriculares; 11) postmentonal dividida; 12) cuatro a seis hileras nucales longitudinales; 13) 28-32 hileras transversales de dorsales; 14) 11-14 hileras longitudinales de dorsales; 15) los adultos presentan un color de fondo verde turquesa con bandas transversales oscuras. La población procedente de Cerro Pelón, en la Sierra de Juárez, Oaxaca, descrita originalmente como *Abronia kalaina* (Good & Schwenk, 1985), en realidad representa una población de *A. fuscolabiallis* (Campbell & Frost, 1993).



Abronia fuscolabialis. Jiménez-Velázquez y col. **2016**

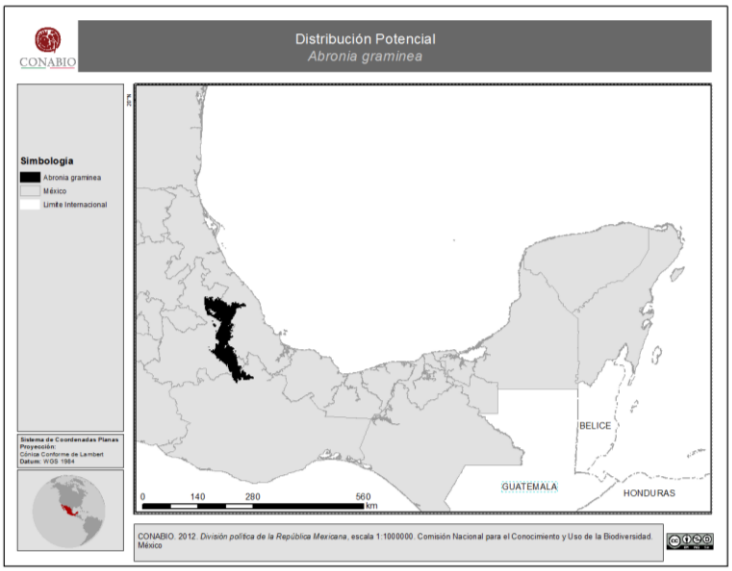
10. *Abronia gaiophantasma*: **GT:** Cerro Verde y Cerro Quisís en las cercanías def La Unión Barrios, Baja

Verapaz, a 1,600-1,929 m msn (Campbell & Frost 1993). Se distingue de otras especies del género por presentar la siguiente combinación de características: parta dorsal café-rojiza, de siete a nueve bandas transversales oscuras, region de la mandibula inferior blanca, no presenta una cuarta fila de escamas temporales, escamas supra-auriculares en forma de espina (Campbell & Frost, 1993).



Abronia gaiophantasma. Jiménez-Velázquez y col. **2016**

11. *Abronia graminea*: **MX:** Endémica de las tierras altas de los estados de Veracruz, Oaxaca y partes adyacentes de Puebla. Lagarto de cuerpo deprimido dorso-ventralmente (Campbell & Frost, 1993). Presenta la cabeza aplanada y triangular, escamas preauriculares en forma granular, y l2 hileras longitudinales de escamas ventrales (Good, 1988). Los adultos llegan a medir hasta 106 mm de longitud hocico cloaca y 160 mm de longitud de la cola (Good, 1988). La coloración dorsal de los especímenes adultos presenta una considerable variación, pudiendo ser de verde inmaculado a café pardusco con bandas transversales poco evidentes de color café oscuro o negro (Schmidt, Heimes, & Zaldívar-Riverón, 2001, personal).



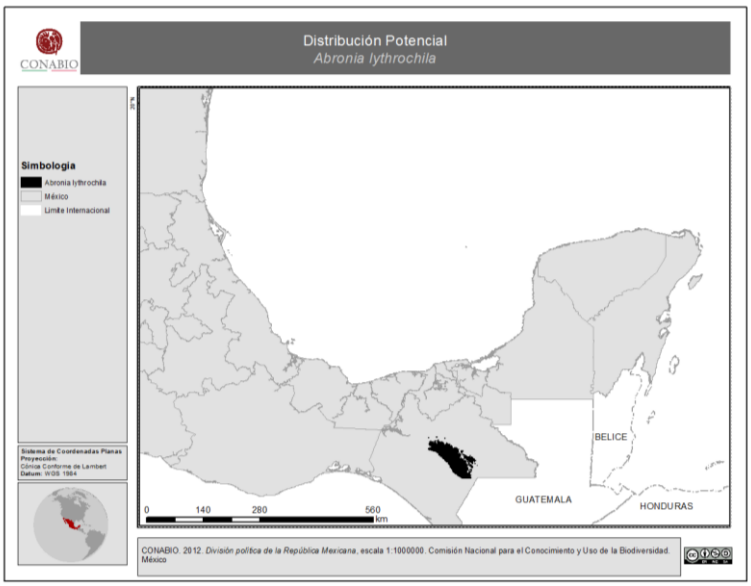
Abronia graminea. Jiménez-Velázquez y col. **2016**

12. *Abronia leurolepis*: **MX:** Localidad tipo en el este del estado de Chiapas. Se distingue de las demás

especies de su género por las siguientes características: escamas supra-auriculares en forma de espina, doce filas de escamas ventrales longitudinales, no tiene una escama frontonasal, no tiene supranasales expandidas que se contactan en la línea media dorsal, tiene más filas de escamas dorsales transversales (31 en lugar de 27-30), tiene escamas dorsales casi planas y es un animal más robusto. Presenta un color grisáceo en el dorso con estrechas bandas oscuras de forma irregular, la cola tiene manchas redondas oscuras, las escamas ventrales son pálidas que se oscurecen en la parte anterior de cada una (Campbell & Frost, 1993).

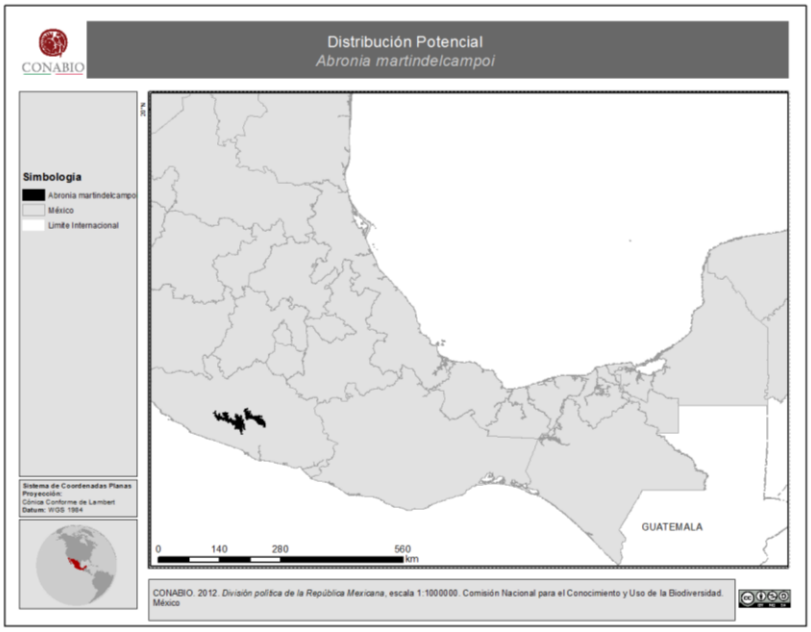
Abronia leurolepis. Campbell, J.A. & Muñoz-Alonso, A. 2007. *Abronia leurolepis*. The IUCN Red List of Threatened Species. Version 2015.2. <www.iucnredlist.org>. Downloaded on **23 June 2015**

13. *Abronia lythrochila*: **MX:** Registrada en la Meseta Central de Chiapas, de San Cristóbal de las Casas a Comitán. Lagarto de cuerpo aplanado dorso-ventralmente (Campbell & Frost, 1993). Se distingue de los demás miembros de su género por presentar la siguiente combinación de características (Campbell & Frost, 1993): 1) cabeza aplanada y triangular; 2) escamas preauriculares granulares y escamas suprauriculares espinosas; 3) postmentonal no dividida; 4) parietales separadas por una escama temporal primaria superior; 5) 14 hileras de escamas ventrales longitudinales; 6) cantal ausente; 7) una prenasal; 8) cuatro escamas en la segunda hilera temporal; 9) escamas de la cabeza muy rugosas; 10) escamas dorsales en 32-35 hileras transversales. La coloración dorsal en los especímenes adultos de esta especie es variable, pudiendo ser café clara, amarillenta, rojiza, grisácea o casi enteramente negra. Algunos ejemplares muestran manchas en la cabeza, escamas sublabiales y dorso de color rojo o anaranjado. El vientre es blanco inmaculado. Los especímenes adultos llegan a medir hasta 113 mm de longitud hocico cloaca (Heimes & Schmidt, 2001, personal).



Abronia lythrochila. Jiménez-Velázquez y col. **2016**

14. *Abronia martindelcampoi*: **MX:** Endémica de los alrededores de Omiltemi en la Sierra Madre del Sur de Guerrero (Flores-Villela & Sánchez-H 2003). Su distribución se limita hasta el Río Balsas (Flores-Villela y Schmidt, com. pers. 2015). Lagartija con 24- 28 (xx 5 26.2) hileras de escamas dorsales transversales; 10-12 hileras de escamas dorsales longitudinales (xx 5 10.6); 34–37 (xx 5 35) hileras de escamas ventrales transversales; 12– 14 (xx 5 13.3) hileras de escamas longitudinales transversales ventrales; 76–80 espirales de escamas en colas no regeneradas; usualmente un mínimo de seis escamas nucales (uno de 12 especímenes tenía 5); 6-8 (xx 5 6.6) escamas entre las patas traseras; 9–10 supralabiales; anterior temporales 3/3; posterior temporales 3/3; 5/5 media supraoculares; una temporal en contacto con postocular; usualmente una subocular (2 de 12 especímenes tenian 2, ver Good, 1988:20); dos postmentales; y una occipital. Las supra nasales no están expandidas; frontonasal y frontal usualmente en contacto; no hay contacto del superciliar anterior y el cantoloreal (solo 1 una de 12 tenía contacto); escamas laterales del cuello agrandadas; osteodermos reducidos o ausentes en el dorso de los adultos.



Abronia martindelcampoi. Jiménez-Velázquez y col. **2016**

15. *Abronia meledona:* **GT:** Localidad tipo cerca de Torre de Guatel, cerca de la Aldea de la Soledad Grande, Jalapa (Campbell & Brodie 1999). Se distingue de demás especies del género por poseer las siguientes características: escamas supra-auriculares en forma de espina, las supranasales son pequeñas y no expandidas sin contacto en la línea media, una escama media frontonasal. Color dorsal crema rosa o verde con manchas negras, zona circumorbital amarilla.

Abronia meledona. Ariano-Sánchez, D., Acevedo, M. & Johnson, J. 2013. *Abronia meledona*. The IUCN Red List of Threatened Species. Version 2015.2. <www.iucnredlist.org>. Downloaded on **25 June 2015**.

Situación de las Abronias con base en la UICN y el Environmental Vulnerability Score (Wilson *et al*. 2013; Wilson & McCranie 2004)

EO = extent of occurrence; EVS = Environmental Vulnerability Score

Species	**Distribution**	**UICN Status / EVS Status**	**Population size**	**Pop. Trend**	**Threats**
Abronia anzuetoi *Abronia aurita*	Guatemala (EO 24 km^2) Guatemala EO 400 km^2)	VU D2 EN B1ab(iii)	Only known from type series Only known in one location	Unknown Unknown	Some extraction of wood for fire, no known major threats Deforestarion for agricultural purposes
Abronia bogerti *Abronia campbelli*	México Guatemala (EO 18 km^2)	DD EVS = 18/18 CR B1ab(iii,v)	Only known from holotype, found 50 years ago approximately 500 individuals (Ariano and Torres 2010)	Unknown Decreasing	Deforestation y degradation of montane forests Habitat loss and degradation, oak trees affected by chemical pollution, pet trade
Abronia chiszari	México (EO< 5,000 km²)	EN B1ab(iii) EVS = 17/18	Only three especímenes currently known	Decreasing	Deforestation, conversion of forested areas to agricultural use, timber extraction
Abronia deppii *Abronia fimbriata* *Abronia frosti*	México (EO< 5,000 km²) Guatemala (EO 1,500 km^2) Guatemala (EO 0.7 km^2)	EN B1ab(iii) EVS = 16/18 ENB1ab(iii) CR B1ab(iii)	Naturally rare species Uncommon Known from one location	Decreasing Unknown Decreasing	Forest fragmentation and loss, pet trade Habitat loss and ornamental exportation crops of leatherleaf (*Chamaedaphne calyculata*) to Japan and Europe, pet trade Habitat loss
Abronia fuscolabialis *Abronia gaiophantasma*	México (EO< 5,000 km²) Guatemala (EO 750 km^2),	EN B1ab(iii) EVS = 18/18 EN B1ab(iii)	Only known from six especimens found so far Uncommon	Decreasing Unknown	conversion of forested areas to agricultural use Habitat loss and ornamental exportation crops of leatherleaf (*Chamaedaphne calyculata*) to Japan and Europe
Abronia graminea	México (EO< 3,000 km²)	EN B1ab(iii) EVS = 15/18		Decreasing	Deforestation and degradation of forests, conversion of forest to agricultural use; pet trade
Abronia leurolepis	México	DD EVS = 18/18	Only known from a single individual collected en the 1930s	unknown	Deforestation, conversion of forest to agricultural use;
Abronia lythrochila	México	LC EVS = 17/18	Common within its restricted distribution	Stable	Deforestation, conversion of forest to agricultural use, occasionally pet trade

Abronia martindelcampoi	México (EO< 5,000 km²)	EN B1ab(iii) EVS = 15/18	All individuals are en fewer than 5 locations, moderately abundant there	Decreasing	Deforestation, conversion of forest to agricultural use; forest fires; occasionally and pet trade
Abronia matudai *Abronia meledona*	Guatemala, México (EO< 5,000 km²) Guatemala (EO < 900 km^2)	EN B1ab(iii) EVS = 15/18 EN B1ab(iii)	Only known from 2 localities en GT y one en MX Only one location known	Decreasing Unknown	Deforestation, conversion of forest to agricultural use; Habitat loss and pet trade
Abronia mitchelli	México	DD EVS = 18/18	Only known from a single specimen	Unknown	
Abronia mixteca *Abronia montecristoi*	México (EO< 20,000 km²) El Salvador, Honduras (EO 800 km^2)	VU A2cd+4cd, B1ab(iii) EVS = 18/18 EN B1ab(iii) EVS= 15 /18	Only known from two locations Only known from two locations	Decreasing Decreasing	Deforestation, pet trade Habitat loss
Abronia oaxacae	México (EO< 20,000 km²)	VU B1ab(iii) EVS = 17/18	distribution severely fragmented, moderately common	Decreasing	conversion of forest to agricultural use
Abronia ochoterenai	México, Guatemala	DD EVS = 16/18	Only known from 2 especímenes collected en the 1930s	Unknown	Deforestation, conversion of forest to agricultural use;
Abronia ornelasi	México	DD EVS = 18/18	Only known from a few especímenes (last one found en mid 1980s)	Unknown	Deforestation, conversion of forest to agricultural use;
Abronia ramirezi	México	DD EVS = 18/18	Only known from a single specimen collected 1993		Deforestation, conversion of forest to agricultural use;
Abronia reidi *Abronia salvadorensis*	México Honduras (EO 100-200 km^2)	DD EVS = 18/18 EN B1ab(iii) EVS = 16/18	Only known from a few especímenes Only known from fewer than ten specimens	Unknown Decreasing	Canopy species, highly depending on tall trees -> deforestation como the main threat Habitat loss and degradation
Abronia smithi	México (EO< 2,000 km²)	LC EVS = 17/18	Relatively uncommon, only known from a few localities	Stable	Deforestation, conversion of forest to agricultural use
Abronia taeniata *Abronia vasconcelosii*	México (EO< 2,000 km²) Guatemala (EO 2,500 km^2)	VU B1ab(iii) EVS = 15/18 VU B1ab(iii)	Distribution severely fragmented, en suitable habitat a common species Known from ten locations where it use to be common 20 years ago	Decreasing Decreasing	Deforestation, conversion of forest to agricultural use, pet trade Habitat loss and degradation

Relación de Unidades de Manejo para la Conservación de la Vida Silvestre (UMA) con manejo de especies del género *Abronia* en México

Nombre de la UMA/UMA name	Clave de Registro/ Code	Estado/State	Especies/Species	Año de registro/Year of registration	Tipo de Manejo/ Management
Bosques de Xoxocotla	DGVS-UMA-EX-3642-VER	Veracruz	*Abronia graminea*	14-Dec-10	Extensivo
EL Valle de Galera	DGVS-UMA-EX-3661-VER	Veracruz	*Abronia graminea*	14-Jul-11	Extensivo
CH'IX CHIKIN (ABRONIA)	DGVS-PIMVS-CR-IN-1575-DF/12	Distrito Federal	*Abronia lythrochila, Abronia campbelli*	17-Dec-12	Intensivo
REPRIAVES	DGVS-CR-IN-894-MEX/06 (PIMVS)	Estado de México	*Abronia graminea, Abronia deppii*	11-Apr-06	Intensivo
FAUMUSEO	SEMARNAT-UMA-IN-CR-0056-VER/06	Veracruz	*Abronia graminea*	29-May-06	Intensivo
TLILCALCO	SEMARNAT-UMA-IN-CR-0129/VER/11	Veracruz	*Abronia graminea*	2-Feb-11	Intensivo
MOLOCH	DGVS-PIMVS-CR-IN-1354-DF/11	Distrito Federal	*Abronia graminea*	---	Intensivo

Especies del género *Abronia* identificadas en comercio internacional en páginas web.

Especies	Precio/ejemplar	Sitio WEB	Comentarios
Abronia graminea	200 – 993 USD (405 – 720 EUR)	www.terraristik.com, www.bakwaterreptiles.com, www.terraristikladen.de, faunaclassified.com, teguTalk.com, pangeareptile.com www.facebook.com/JurasicPets	Vendedores de México, Suecia, Holanda, Reino Unido de la Gran Bretaña, ofrecidos en sitios web de Alemania, EUA y redes sociales.
Abronia martindelcampoi	717 – 1657 USD (520-1202 EUR)	Reptilienserver.de, Undergroundreptiles.com, faunaclassifieds.com	Vendedores de Reino Unido de la Gran Bretaña, ofrecidos en sitios web de Alemania y EUA.
Abronia deppii	405 – 1360 USD (300 - 1,000 EUR)	www.lafermetropicale.com, www.terraristik.com, reptilepetsdirect.com	Vendedores de Alemania y Holanda ofreciendo en sitios web de Francia, Alemania y EUA.
Abronia campbelli	2,000- 3000 USD (1,500-4000 EUR)	Faunaclassifieds.com, www.terraristik.com,	Vendedores y sitios web de EUA
Abronia lythrochila	600 - 1,500 USD (450 - 1,500 EUR)	Faunaclassifieds.com, www.terraristik.com	Vendedores de Alemania Holanda, y la República Checa, ofreciendo en sitios web de Alemania y EUA
Abronia smithi	2025 - 2500 USD (1500 EUR)	Emsworthreptiles.com	Vendedores y sitios web de Reino Unido de Gran Bretaña
Abronia taeniata	828 – 1200 USD (600 – 1080 EUR)	www.terraristik.com, lonestarreptilesyndicate.com	Vendedores de Suecia Holanda Reino Unido de la Gran Bretaña y Estados Unidos ofreciendo en sitios web de Alemania y EUA
Abronia sp.		www.terraristik.com	Vendedores franceses ofreciendo ejemplares en el sitio web de Alemania
Abronia mixteca	4,000 USD 950 EUR	reptilienserver.de	Vendedores y sitios web de Alemania
Abronia vasconcelosii	3000 USD 2750- 4000 EUR	www.terraristik.com,	Hamm Reptile show
Abronia fimbriata	2,800 EUR/ pair	www.terraristik.com	Hamm Reptile show
Abronia gaiophantasma		www.terraristik.com	Hamm Reptile show

*Información presentada durante el Foro de Conservación de las Abronias de México (Padilla, 2015). Adicionalmente, Wagner (2008c) nota varias ofertas de *Abronia* spp en sitios web japonenses; los detalles no están disponibles.

CONABIO
COMISIÓN NACIONAL PARA EL CONOCIMIENTO Y USO DE LA BIODIVERSIDAD

Dirección General de Cooperación Internacional e Implementación

Oficio DGCII-005/2016

México, D.F., a 08 de enero de 2016.

Autoridades Administrativas y Científicas de El Salvador, Guatemala y Honduras

Estimados colegas,

Hago referencia a la situación del género de lagartijas arborícolas *Abronia*, que comprende 28 especies con distribución en México, Guatemala, Honduras y el Salvador.

En la *28ª reunión del Comité de Fauna* (AC28; Tel Aviv, 2016), México presentó a través del documento AC28 Doc. 22.4 un borrador de propuesta de enmienda para incluir a las especies del género *Abronia* en el Apéndice II de la CITES, complementado por una guía de identificación morfológica de las especies del género, en el documento informativo AC28 Inf. 28.

Como resultado, el Comité de Fauna recomendó a México presentar la propuesta a consideración de la 17ª reunión de la Conferencia de las Partes (CoP17; Johannesburgo, 2016).

En preparación para la CoP17, y como países del área de distribución del género *Abronia*, agradeceremos su retroalimentación respecto a lo siguiente:

a) El borrador de propuesta de enmienda para incluir a todas las especies del género *Abronia* en el Apéndice II (Anexo al presente oficio), específicamente, información adicional que pudiera complementarla; y

b) La disponibilidad de su país de apoyar la propuesta de inclusión en el Apéndice II del género *Abronia*, y en particular, de ser co-proponentes junto con México de la misma.

Agradeceremos nos remitan su respuesta a más tardar el **15 de febrero de 2016**.

De antemano, agradezco su valiosa colaboración.

Biól. Gabriela López Segurajáuregui
Coordinación de la Autoridad Científica CITES
Firma en ausencia del Biól. Hesiquio Benítez Díaz
Director General de Cooperación Internacional e Implementación

ICO

c.c.e.p. Marcel Enzo Calvar Agrelo- Representante de América Central, del Sur y el Caribe ante el Comité de Fauna CITES
Paul Edward Ouboter- Representante de América Central, del Sur y el Caribe ante el Comité de Fauna CITES
John Scanlon.- Secretario General de la CITES
Jorge Maksabedian de la Roquette.- Director General de Vida Silvestre, SEMARNAT.- Autoridad Administrativa de México ante la CITES
Karla Acosta Resendi.- Directora General de Puertos Aeropuertos y Fronteras, PROFEPA, SEMARNAT, Autoridad de Observancia y Aplicación de la Ley de México ante la CITES

Liga Periférico - Insurgentes Sur, Núm. 4903, Col. Parques del Pedregal, Delegación Tlalpan, 14010, México, D.F.
Tel.: (55) 5004.5000 **www.conabio.gob.mx | www.biodiversidad.gob.mx**

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