

New Distributional Records of Amphibians and Reptiles from Northern Oaxaca, México

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ABSTRACT: During 2011 we performed a microregional inventory of amphibians and reptiles from the south-central region of the Papaloapan basin in northern Oaxaca. We recorded one amphibian species previously unknown in the state, and recorded range extensions for two additional amphibian and four reptile species. This increases the known herpetofauna of Oaxaca to 378 species.

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Oaxaca contains more species of herpetofauna than any state in México (Casas *et al.* 2004). However, there are still areas of the state that are understudied. One such area is the south-central region of the Papaloapan basin (Tuxtepec and Choapam districts), where existing herpetofaunal records are limited (Güerere and Hernández 1970; Rendón-Rojas *et al.* 1998; Juárez-López *et al.* 2000). To address this problem, between January and June 2011 we undertook a microregional inventory of amphibians and reptiles from the region. Our work was carried out under a collection permit (number FAUT-0243) originally issued to M. C. Uri Omar García Vásquez and extended to the junior authors (ALB and TJMA). No specimens were collected; photographic records were deposited at the University of Texas at Arlington (UTADC).

Here, we provide a new anuran record for Oaxaca, and distributional records for six species previously unknown from the Papaloapan basin (Figure 1).

Eleutherodactylus leprus (Cope, 1879) (Amphibia, Eleutherodactylidae)

This species is found on the Atlantic versant of México from central Veracruz eastwards through north-central Chiapas and into northern Guatemala (Santos-Barrera et al. 2004). Casas et al. (2004) reported this species from the Isthmus of Tehuantepec and Rendón-Rojas et al. (1998) from Jalahui in northern Oaxaca. Between 29 January and 21 February 2011, we found twenty specimens of this species (UTADC8067) at elevations between 79 and 699 m in disturbed habitats at five localities in Tuxtepec and Choapam districts, Oaxaca: Monte Bello (17°45'26.7" N, 96°15'55.8" W) and San Cristóbal La Vega, Municipality of Valle Nacional; Oaxaca (17°44'50.9" N, 96°14'43.8" W), Playa Limón (17°45'28.7" N, 96°01'28.1" W), Plan Martín Chino (17°44'50.1" N, 95°58'04.5" W) and Plan de San Luis (17°46'21.6" N, 95°56'19.7" W) Municipality of Santiago Jocotepec, Oaxaca (Figure 1). These findings represent new records for the Tuxtepec district.

Exerodonta abdivita (Campbell & Duellman, 2000)

(Amphibia, Hylidae)

This species is endemic to Oaxaca, having been described from Rio Aloapan, Jalapa de Diaz, Sierra Mazateca at an elevation of 405 m. Recently, Delia *et al.* (2013) reported two populations in the Tuxtepec district of northern Oaxaca, one in a stream near San Mateo Yetla (700 m elevation) and another in a stream in the north of Vista Hermosa (1600 m elevation). On 14 February 2011 at 19:24 h at Playa Limón (17°46′28.8″ N, 96°02′31.0″ W; 89 m elevation), Municipality of Santiago Jocotepec (Figure 1) we found one young specimen (UTADC8070) (SVL=13.00 mm) among rocks at the edge of a stream in a tropical rainforest. This is the lowest elevation record for this species, and extends the species' distribution to a new district in the south-central region of Cuenca del Papaloapan (Choapam).

Gastrophryne elegans (Boulenger, 1882) (Amphibia, Microhylidae)

This species is found on the Atlantic versant of México, from central Veracruz to southern Campeche and Quintana Roo east to Guatemala, Belize and the north-central coast of Honduras, at elevations of 0–350 m (Santos-Barrera *et al.* 2004). On 18 February 2011 we found an adult specimen (UTADC8066) (SVL=19.00 mm) at approximately 13:00 h. in a tropical rainforest at Plan Martin Chino (17°45′58.7″ N, 95°58′20.8″ W; 82 m elevation), Municipality of Santiago Jocotepec, Oaxaca (Figure 1). The nearest record for this species is from Veracruz, 56.3 km south of Acayucan (17°32′24.0″ N, 95°6′36.0″ W) (CUMV6930). This is the first record for the state and for south-central Cuenca del Papaloapan (Choapam district). It extends the species' known range *ca.* 94.6 km northwest from the nearest locality in Veracruz.

Celestus enneagrammus (Cope, 1860) (Reptilia, Anguidae)

This species is found on the Atlantic versant of México, from near Jalapa and Orizaba in central Veracruz south to Totontepec in northern Oaxaca (Campbell and Camarillo

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1994). Canseco-Márquez *et al.* (2000) also reported this species in southern Puebla. It occurs from 1000–1830 m elevation. On 5 February 2013, we found one specimen (UTADC8069) (SVL=60.00 mm) at 14:21 h at La Rejoya, Nuevo Málzaga, Municipality of Santa María Jacatepec, Oaxaca ($17^{\circ}48'52.3''$ N, $96^{\circ}02'12.0''$ W; 167 m elevation) in a tropical rainforest (Figure 1). This is the first record of this species from the Tuxtepec district, extending its range *ca.* 63 km NNW from the nearest locality in the Sierra Mixe, Oaxaca (Campbell and Camarillo 1994). It also represents a new low-elevation record for the species.

Plestiodon sumichrastri (Cope, 1866) (Reptilia, Scincidae)

This species is found from central Veracruz through Guatemala and into Honduras (Calderón-Mandujano *et al.* 2005). In Oaxaca, the species is known only from Doce de Julio, 12 km W of Tolosa (=Donají) (Smith 1992). On 5 March 2011 and 26 April 2011 we found two specimens (UTADC8071), one at San Cristóbal la Vega, Municipality of Valle Nacional (17°45′54.6″ N, 96°14′23.5″ W; 147 m elevation) and another at Playa Limón, Municipality of Santiago Jocotepec (17°44′44.5″ N, 96°00′30.3″ W; 261 m elevation) (Figure 1). We found the first specimen at 09:00 h in a coffee plantation, and the second at 10:51 h. in

leaf litter in a tropical rainforest. These records extend the known distribution *ca.* 130 km west (Tuxtepec district) and 109 km west (Choapam district) of of the only previous Oaxaca locality reported by Smith (1992). They represent the second record for this species in the state.

Lepidophyma flavimaculatum Duméril, 1851 (Reptilia, Xantusiidae)

This species is found on the Atlantic versant of México from Veracruz and Oaxaca south to Panamá, but is absent from the Yucatán Península (Bezy and Camarillo 2002). On February 9 2011 at 11:09 h we found one young specimen (UTADC8076) (SVL=120.00 mm) on a rock inside a cave at La Rejoya, Nuevo Málzaga, Municipality of Santa Maria Jacatepec (17°48′55.3″ N, 96°01′54.5″ W; 119 m elevation) (Figure 1) in secondary vegetation. This record is *ca.* 129 km northwest of the nearest locality mentioned by Bezy and Camarillo (2002) for the state (3.2 km S Tolosita).

Dendrophidion vinitor (Smith, 1941) (Reptilia, Colubridae)

This species is found from central Veracruz to southeastern Guatemala and southern Belize (Lee *et al.* 2007). In Oaxaca, the species is reported from several localities in the southeast of the state (Cadle 2012).

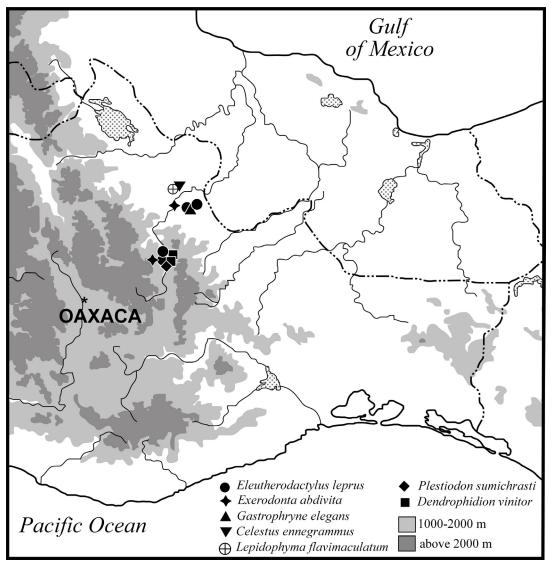


FIGURE 1. Localities of new records of amphibians and reptiles in the Papaloapan basin in Northern Oaxaca.

Between 5 and 9 March 2011, we found two specimens. One (UTADC8068) at San Cristóbal La Vega, Municipality of Valle Nacional ($17^{\circ}45'44.7''$ N, $96^{\circ}14'43.0''$ W; 395 m elevation); and one at Rancho Gavilán, Vega del Sol, Municipality of Santa María Jacatepec ($17^{\circ}48'27.0''$ N, $96^{\circ} 10'44.9''$ W; 657 m elevation) (Figure 1). We found the first specimen under a fallen log in a coffee plantation (SVL= 350.50 mm) and the second specimen in secondary vegetation (acahual) (SVL= 290.00 mm). These specimens extend the range of this species in Oaxaca north from Puente de Fierro ($18^{\circ}9'18''$ N, $96^{\circ}51'25''$ W) in the Sierra Mazateca (MZFC 13310) representing the northernmost records in the state.

Our findings increase the number of amphibian species known from Oaxaca to 134, and the total number of herpetofaunal species to 378. We believe that additional records remain to be discovered in this region. Further microregional inventories, particularly in the rainy season, will likely yield more new discoveries.

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