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***Epictia albipuncta* Burmeister, 1861 (Serpentes: Leptotyphlopidae) first record for the Formosa Province, Argentina**

José Augusto Ruiz García^{1*}, María Esther Tedesco¹, Ornela Sofía Stechina², Jorge Abel Céspedes¹

¹Laboratorio de Herpetología. Facultad de Ciencias Exactas y Naturales y Agrimensura. Universidad Nacional del Nordeste. Av. Libertad 5470 (3400) Corrientes, Argentina.

²Laboratorio de Entomología. Instituto de Medicina Regional. Universidad Nacional del Nordeste. Av. Las Heras 727 (3500) Chaco, Argentina.

*Corresponding author: ruizgarciaja@gmail.com

ABSTRACT

Epictia albipuncta Burmeister, 1861 is a small-sized snake distributed in Argentina, Brasil, Bolivia, Paraguay and Perú. In this study, we report the first record of *E. albipuncta* from Formosa province in the Eastern Chaco District. Our record extends the geographic distribution in 193 km northeast from the nearest previously known locality Presidencia Roque Sáenz Peña, Chaco province.

Keywords: Distribution, Scolecophidia, Snake

RESUMEN

***Epictia albipuncta* Burmeister, 1861 (Serpentes: Leptotyphlopidae) primer registro para la provincia de Formosa, Argentina.** *Epictia albipuncta* Burmeister, 1861 es una serpiente de pequeño tamaño que se distribuye en Argentina, Brasil, Bolivia, Paraguay y Perú. En este estudio, reportamos el primer registro de *E. albipuncta* para la provincia de Formosa en el Distrito Chaqueño Oriental. Nuestro registro extiende la distribución geográfica en 193 km al noreste de la localidad más cercana previamente conocida Presidencia Roque Sáenz Peña en la provincia del Chaco.

Palabras clave: Distribución, Scolecophidia, Serpiente

The genus *Epictia* (Gray 1845) includes 43 species of small-sized blind snakes distributed from southern Mexico, through Central America (including Caribbean islands), to Argentina and Uruguay (Adalsteinsson *et al.*, 2009; Uetz *et al.*, 2019), and five of them were recorded in Argentina: *E. albipuncta*, *E. australis*, *E. munoai*, *E. striatula* and *E. vellardi* (Giraudo *et al.*, 2012). *Epictia albipuncta* is distributed in Argentina, Brasil, Bolivia, Paraguay and Perú (Ceí, 1993; Carrillo

de Espinoza & Icochea, 1995; Kretzschmar, 2006; Cacciali, 2009). In Argentina, this species has a wide distribution, and it was reported in the provinces of Buenos Aires, Catamarca, Chaco, Córdoba, Corrientes, Entre Ríos, Jujuy, Mendoza, Misiones, Neuquén, Salta, Santa Fe, San Juan, Santiago del Estero and Tucumán (Kretzschmar, 2006; Acosta *et al.*, 2017).

In this study, we report the first record of the *E. albipuncta* in the Eastern Chaco District in Formosa province, Argentina.

During a herpetological sampling on 25th October 2010 at 11:20 h we collected a single individual of *E. albipuncta* in Colonia Napenay, Patiño department, Formosa province (25°10'33"S; 59°41'41"W, WGS84, 106 masl.; Fig. 1). The individual was found under planks of woods partially buried in sandy soil (Fig. 2), the collecting site is located in the Eastern Chaco District, characterized by a forest of *Schinopsis balansae* and *Prosopis* sp. (Cabrera & Willink, 1980).

The specimen was euthanized according to Guidelines for the Euthanasia of Animals (Leary *et al.*, 2013), fixed in 10% formalin solution, and preserved in 70% ethanol. The snake was deposited at the herpetological collection of the Universidad Nacional del Nordeste, Corrientes (UNNEC 13366). The external morphology of the specimen was analyzed and as *Epictia albipuncta* following the diagnostic characters indicated by Kretzschmar *et al.* (2006) and Francisco *et al.* (2012). Photographs of the specimen were taken with a Leica EZ4 stereoscopic microscope.

The examined specimen corresponds to an adult individual, snout-vent length 163 mm, tail length 10.43 mm. The pholidosis was recorded as follows: rostral scale hexagonal contacting nasal scale laterally and frontal scale dorsally, with a white blotch covering most of the surface, prefrontal scale subpentagonal and frontal scale hexagonal, interparietal and

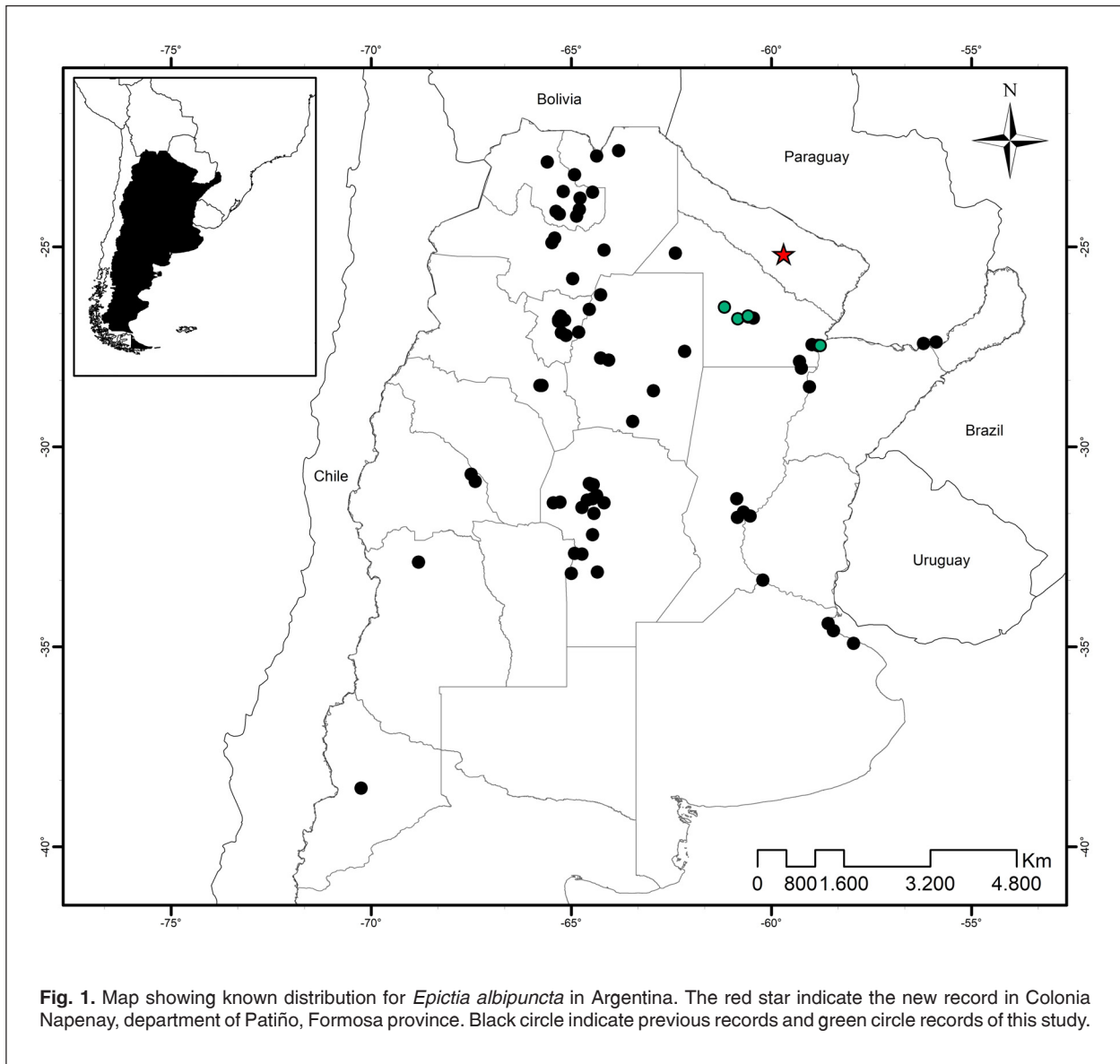


Fig. 1. Map showing known distribution for *Epictia albipuncta* in Argentina. The red star indicate the new record in Colonia Napenay, department of Patiño, Formosa province. Black circle indicate previous records and green circle records of this study.

interoccipital scales are larger than frontal scale, parietals and occipitals scales oriented transversely, parietals slightly longer than occipitals, nasal scale completely divided, supranasal larger than infranasal scale, ellipsoid nostril located in infranasal scale, ocular scale hexagonal, supraocular scale large and pentagonal, two supralabial scales, anterior supralabial scale is more narrow than posterior infralabial and not contact supraocular scale (Fig. 3A and B), and four infralabial scales, cloacal shield semilunate. The specimen has 258 middorsal scales, 240 ventral scales, 14-14-14 scales rows around body, 20 subcaudals and 12 scales around the middle of the tail. The dorsal surface is background light cream with seven dark longitudinal lines, striped pattern with dark brown triangular blotches (Fig. 3C), ventral surface cream

light with seven brown longitudinal lines, caudal spine and last four ventral subcaudals scales white (Fig. 3D).

Based on the locality records of Álvarez *et al.* (2002; 2003); Kacoliris *et al.* (2006); Kretzschmar *et al.* (2006); Acosta *et al.* (2017) and records from the UNNEC herpetological collection (Table 1) for *E. albipuncta* in Argentina, we extend the known geographic distribution of the species around 193 Km in a straight-line northeast from its nearest previously known locality Presidencia Roque Sáenz Peña, Comandante Fernández department, Chaco province.

The records of leptotyphlopids in Formosa province are scarce since only two species have been previously cited: *Epictia vellardi* and *Rena unguirostris* (Laurent, 1984; Cei, 1993). With the



Fig. 2. Habitat where *Epictia albipuncta* was found at Colonia Napenay Formosa province, Argentina.

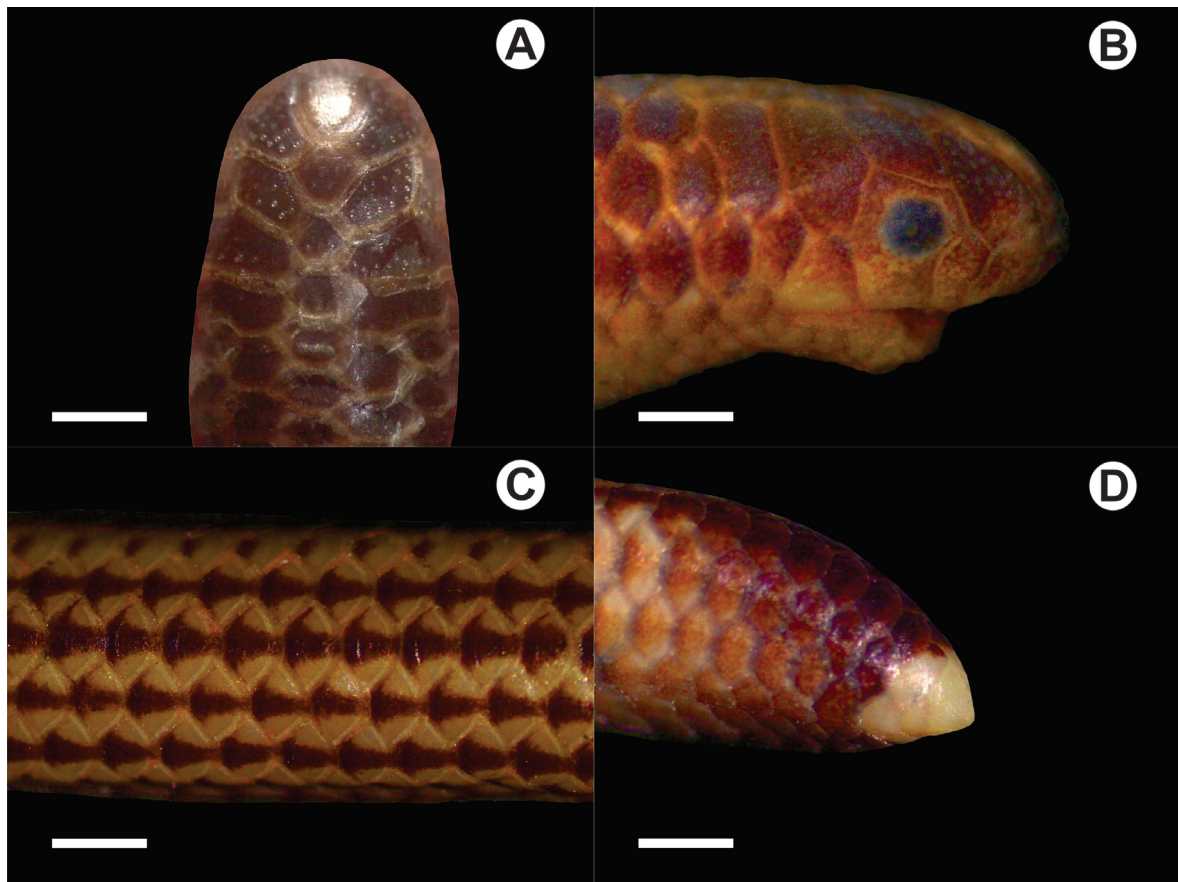


Fig. 3. *Epictia albipuncta* (UNNEC 13366). A. Dorsal head scale. B. Lateral head scale. C. Striped dorsal pattern with triangular blotches. D. Ventral view of tail. Scale: 1mm.

Table 1. Locality records of *Epictia albipuncta* in Argentina.

Province	Locality	Voucher	Geographic coordinates		Reference
			Latitude	Longitude	
Buenos Aires	Bosque de la Plata	MLP JW 524	34°55'	57°57'	Kretzschmar 2006
	Capital Federal	MACN ex CENAI 2059, 3305	34°36'	58°27'	Kretzschmar 2006
	Delta	MACN 1562	34°25'	58°35'	Kretzschmar 2006
	Capital Federal	MACN 34575	34°36'	58°27'	Kretzschmar 2006
	San Nicolás	MLP JW 1611, 1612	33°20'	60°13'	Kretzschmar 2006
Catamarca	Catamarca	MLP JW 274, 275, 276	28°28'	65°47'	Kretzschmar 2006
	Catamarca	MACN 3070	28°28'	65°47'	Kretzschmar 2006
	Sumalao	FML 00933	28°28'	65°44'	Kretzschmar 2006
Chaco	Basail	UNNEC 00318	27°52'	59°18'	Kretzschmar 2006
	Campo Largo	UNNEC 10694, 10695	26°48'1"	60°50'21"	This study
	Fuerte Esperanza	Distribution map	25°9'38"	61°84'00"	Kacoliris <i>et al.</i> 2006
	La Mascota	UNNEC 9417	26°45'19"	60°34'54"	This study
	Napenay	UNNEC 008147	26°43'57"	60°34'54"	This study
	Pampa del Infierno	UNNEC 10355	26°30'33"	61°10'30"	This study
	Resistencia	UNNEC 00227	27°27'	58°59'	Álvarez <i>et al.</i> 2002
	Sáenz Peña	MACN 12531	26°47'	60°27'	Kretzschmar 2006
Córdoba	Achiras	FML 02773, 02776, 02777, 06055, 06763	33°10'	65°00'	Kretzschmar 2006
	Alpa Corral	FML 02774	32°41'	64°44'	Kretzschmar 2006
	Bialet Maseé	FML 02767, 02768	31°18'	64°28'	Kretzschmar 2006
	Cabanas	MLP JW 575, MACN 3085 (12538)	31°13'	64°22'	Kretzschmar 2006
	Chacay, Sierra de Comechingones	MACN 32052	32°40'	64°55'	Kretzschmar 2006
	Córdoba	FML 00359	31°24'	64°11'	Kretzschmar 2006
	Corral de Felipe, Cabanas	MACN 4529 (19739)	31°13'	64°22'	Kretzschmar 2006
	Cruz Chica	MACN 4353 (17821)	30°58'	64°29'	Kretzschmar 2006
	Cruz Grande	MACN 21449	30°56'	64°30'	Kretzschmar 2006
	Icho Cruz	FML 01799	31°31'	64°44'	Kretzschmar 2006
	La Bolsa, Alta Gracia	MACN ex CENAI 1451	31°40'	64°26'	Kretzschmar 2006
	Los Chorrillos	FML 02770	30°57'	64°27'	Kretzschmar 2006
	Río Cuarto	FML 02775	33°08'	64°21'	Kretzschmar 2006
	San Esteban	FML 00661, 01168	30°55'	64°33'	Kretzschmar 2006
	Segunda Usina, Embalse Río Tercero	FML 02772	32°12'	64°28'	Kretzschmar 2006
	Sierra de Pocho, Entre Las Palmas y Chancani	FML 00753	31°23'	65°17'	Kretzschmar 2006
	Tanti	FML 02769	31°20'	64°36'	Kretzschmar 2006

Table 1. Continued.

Province	Locality	Voucher	Geographic coordinates		Reference
			Latitude	Longitude	
Corrientes	Bella Vista	MLP JW 536	28°30'	59°03'	Kretzschmar 2006
	Capital	UNNEC 10473, 11097	27°28'7"	58°46'54"	This study
	Concepción	Distribution map	28°23'	57°52'	Álvarez <i>et al.</i> 2003
	Corrientes (S/D)	ANSP 3297, 3298	27°28'	58°50'	Kretzschmar 2006
	Corrientes	FML 13512	27°28'	58°50'	Kretzschmar 2006
	Corrientes	UNNEC 213,214,216	27°28'7"	58°50'22"	Álvarez <i>et al.</i> 2002
	Mburucuyá	Distribution map	28° 25'	57°54'	Álvarez <i>et al.</i> 2003
	San Miguel	Distribution map	27°59'	57°36'	Álvarez <i>et al.</i> 2003
	Villa Olivari	Distribution map	27°38'	56°54'	Álvarez <i>et al.</i> 2003
	Yacaréí	UNNEC 00144	27°20'16"	58°10'46"	Kretzschmar 2006
Entre Ríos	Paraná	MAS 4586, 5170, 5171	31°44'	60°32'	Kretzschmar 2006
Formosa	Colonia Napenay	UNNEC 13366	25°10'33"	59°41'41"	This study
Jujuy	Calilegua	FML 01229	23°47'	64°47'	Kretzschmar 2006
	Chalicán	MACN 3027 (12450)	24°04'	64°48'	Kretzschmar 2006
	Las Capillas (La Capilla)	MACN 3067	22°53'	65°36'	Kretzschmar 2006
	San Pedro, Ingenio La Esperanza	FML 01326, 01947	24°14'	64°52'	Kretzschmar 2006
	San S. de Jujuy	MLP JW 277, 278	24°11'	65°18'	Kretzschmar 2006
Jujuy	Yala	MACN 25397	24°07'	65°23'	Kretzschmar 2006
	Yuto	FML 00268, 01319	23°38'	64°28'	Kretzschmar 2006
Mendoza	Mendoza	MAS 4496	32°53'	68°49'	Kretzschmar 2006
Misiones	Posadas	CUNaM 256	27°23'	55°53'	Kretzschmar 2006
Neuquén	Convucó	MACN 1891 (8647)	38°32'	70°15'	Kretzschmar 2006
Salta	Cerrillos, Partido La Candelaria	FML 01421	24°54'	65°29'	Kretzschmar 2006
	Finca Pozo Largo	FML 02082, 02311	25°05'	64°11'	Kretzschmar 2006
	Finca San Javier	FML 02307	25°05'	64°11'	Kretzschmar 2006
	Río Pescado (Aguas Blancas)	FML 00625	22°44'	64°22'	Kretzschmar 2006
	Rosario de la Frontera. Finca El Duraznito	MACN 35522	25°48'	64°58'	Kretzschmar 2006
	Salta	FML 02312	24°47'	65°25'	Kretzschmar 2006
	Santa Cruz	FML 00765	23°12'	64°55'	Kretzschmar 2006
	Vespucio	MACN ex CENAI 2184	22°36'	63°49'	Kretzschmar 2006
	San Juan	Las Tumanas	UNSJ 2547	30°52'00"	67°24'00"
La Majadita		UNSJ 2548	30°41'12"	67°30'13"	Acosta <i>et al.</i> 2017
Santa Fe	Florencia	UNNEC 06797	28°02'	59°15'	Kretzschmar 2006
	La Capital	FML 01370, MACN 28782	31°18'	60°52'	Kretzschmar 2006
	Santa Fe, Km 11	MACN 1243 (7035)	31°38'	60°42'	Kretzschmar 2006
	Sauce Viejo	FML 06604	31°46'	60°51'	Kretzschmar 2006

Table 1. Continued.

Province	Locality	Voucher	Geographic coordinates		Reference
			Latitude	Longitude	
Santiago del Estero	Nueva Esperanza	FML 02130	26°12'	64°16'	Kretzschmar 2006
	Santiago del Estero	MACN ex CENAI 2060, 2061, 2062	27°47'	64°16'	Kretzschmar 2006
	Beltrán	MLP JW 526, 339, 448	27°50'	64°04'	Kretzschmar 2006
	Colonia Dora	MACN ex CENAI 2113,2114, 2115	28°36'	62°57'	Kretzschmar 2006
	Girardet	MLP JW 099	27°37'	62° 10'	Kretzschmar 2006
	Sumampa	MAS 2245	29°22'	63°28'	Kretzschmar 2006
Tucumán	Banda del Río Salí	FML 02472	26°50'	65°10'	Kretzschmar 2006
	El Cadillal	FML 00736, 06057, 06073	23°37'	65°12'	Kretzschmar 2006
	Garmendia	FML 00965	26°34'	64°33'	Kretzschmar 2006
	Ingenio San Pablo	FML 01205	26°52'	65°19'	Kretzschmar 2006
	Las Talitas	FML 02440	26°49'	65°13'	Kretzschmar 2006
	Mistas	FML 01954	27°13'	65°08'	Kretzschmar 2006
	Orilla del Canal Norte	FML 01600	26°44'	65°16'	Kretzschmar 2006
	Río Loro, El Cadillal	FML 01300	23°37'	65°12'	Kretzschmar 2006
	San Miguel de Tucumán	MNHN 911, FML 00603, 00630, 00652, 00662, 00664, 00699, 00731	26°49'	65°13'	Kretzschmar 2006
	San Pablo	FML 01234	26°52'	65°19'	Kretzschmar 2006
	Santa Rosa de Leales	FML 00147	27°09'	65°15'	Kretzschmar 2006
	Tacanas	FML 00766	27°08'	64°49'	Kretzschmar 2006
	Tucumán (S/D)	MLU IZH-R 461 (HOLOTIPO)	26°49'	65°13'	Kretzschmar 2006
	Yerba Buena	FML 00775,00791, 1601	26°49'	65°19'	Kretzschmar 2006

record of *E. albipuncta*, the richness of snakes in the Formosa province amounts to 56 species (Giraudó *et al.*, 2012). Our record completes the distribution gap of the species for northern of Argentina.

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