

Amphisbaena trachura Cope, 1885 (Amphisbaenia: Amphisbaenidae): new record for the northeast of Argentina

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Abstract: We present a new record of *Amphisbaena trachura* (Squamata: Amphisbaenidae) for the northeast of Corrientes province, Argentina. Seven specimens (five females and two males) were identified using morphological and meristic characters. The specimens were found under *Eucalyptus* sp. logs on 6 December 2014 and 3 March 2015, in General Alvear Department, Corrientes.

Key words: Corrientes province; amphisbaenians; Squamata

Amphisbaenians are worm-like Squamata distributed mainly in South America, Caribbean and sub-Saharan Africa. Also, a few genera are limited to North America, Northern Africa, Middle East and the Mediterranean region (Vidal et al. 2008).

The family Amphisbaenidae contains about 175 species distributed in 11 genera (Uetz and Josek 2015), this number included the recently synonymized genus by Mott and Vieites (2009) into *Amphisbaena* (*Anops*, *Aulura*, *Bronia*, *Cercolophia* and *Leposternon*).

The genus *Amphisbaena* Linnaeus, 1758 includes 107 species (Mott and Vieites 2009; Uetz and Josek 2015), with ten species known from Argentina. *Amphisbaena heterozonata* Burmeister, 1861, *A. hiata* Montero and Céspedes, 2002, *A. mertensii* Strauch, 1881, *A. prunicolor* (Cope, 1885), *A. kingii* (Bell, 1833) and *A. microcephalum* (Wagler, 1824) are known to occur in Corrientes province (Abdala et al. 2012).

Amphisbaena trachura Cope, 1885 is a medium-sized amphisbaenian, characterized by four pre-cloacal pores and the presence of tuberculate segments in the tail tip. This species is currently distributed in Brazil (São Paulo to Rio Grande do Sul states), the northern region of Uruguay, west region of Paraguay and the extreme northeast of Argentina (Gans 1966; Montero and Terol 1999). It was first considered part of the *darwinii*

complex identified by Gans (1966). Later, Vanzolini (2002) considered it to be a species based on meristic characters, and Gans (2005) accepted this classification.

In Argentina, Cei (1993) and Montero (1994, 1996) cited *A. trachura* for Misiones province, whereas Abdala et al. (2012) did not mention its presence in this country. After analyzing specimens from Misiones and Entre Ríos provinces, Perez et al. (2012) identified them as *A. trachura*. Nevertheless, this species was not included by Avila et al. (2013) in the recent checklist of lizards and amphisbaenians of Argentina.

In the present study we report a recent new record of *A. trachura* from Corrientes province in northeast Argentina.

We examined seven specimens collected by hand from field sampling using active random searches. Three amphisbaenians: UNNEC 12842, 28°55'46.31" S, 056°24'19.99" W; UNNEC 12843, 28°55'48.73" S, 056°24'15.67" W; UNNEC 12844, 28°55'47.34" S, 056°24'17.37" W, were collected on 6 December 2014 and four amphisbaenians: UNNEC 12845, 28°55'36.74" S, 056°24'23.60" W; UNNEC 12846, 28°55'47.15" S, 056°24'17.83" W; UNNEC 12847, 28°55'49.29" S, 056°24'15.54" W (Figure 1); UNNEC 12848, 28°55'45.06" S, 056°24'20.23" W on 3 March 2015 in a private field located in Paraje Pirayú, about 10 km north from Alvear locality, General Alvear Department, Corrientes province, Argentina (Figure 2). This region is phytogeographically inserted in Campos district in the Paranaense Province (Cabrera 1976).

We analyzed the external morphological characters and the meristic data following Gans and Alexander (1962), Gans (1966), Vanzolini (2002) and Perez et al. (2012). The measurements were taken with 0.01 mm precision digital calipers. Voucher specimens are housed at the Herpetological Collection of the Universidad Nacional del Nordeste in Corrientes (UNNEC).

We identified the sex of each specimen by examination of gonads through a ventral incision. Five of the seven



Figure 1. (A) Dorsal and (B) tail detail of a live adult specimen of *Amphisbaena trachura* (UNNEC: 12847) from General Alvear Department, Corrientes province, Argentina.

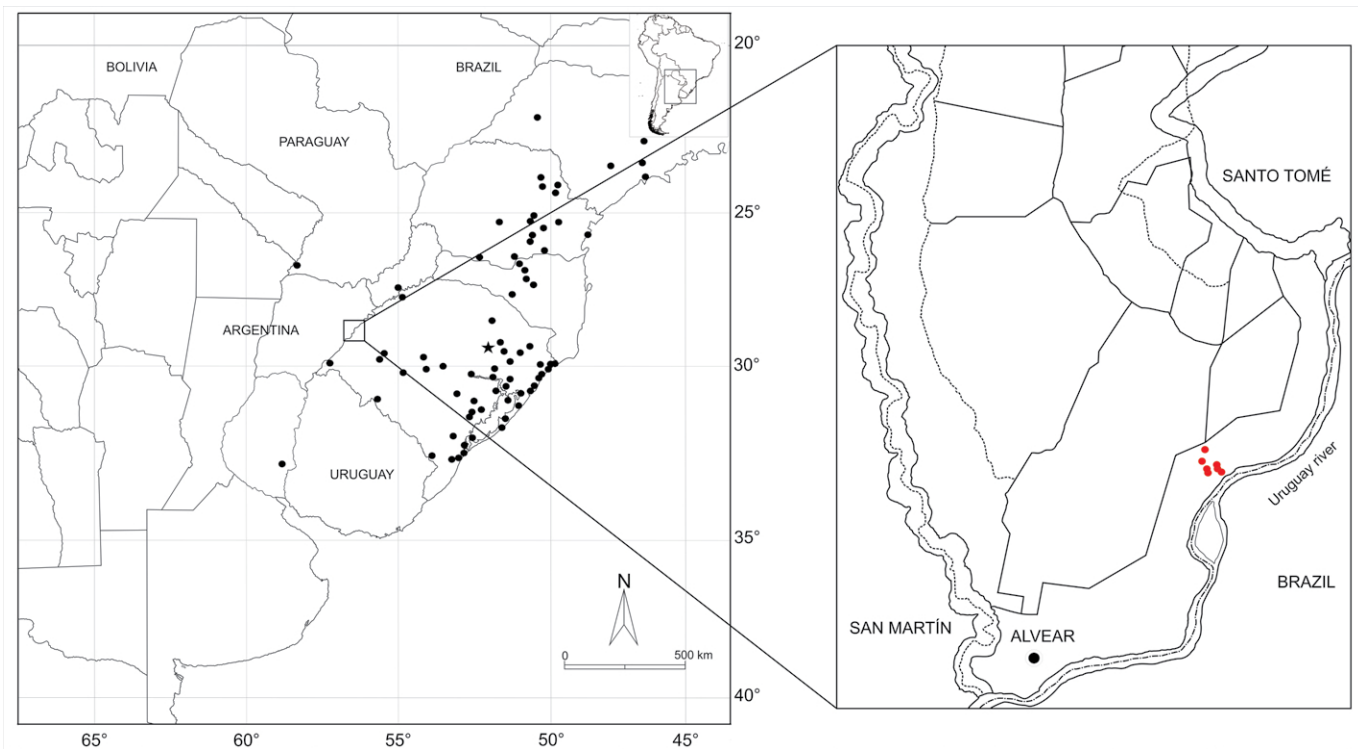


Figure 2. Geographic distribution of *Amphisbaena trachura*. Black circles represent the previous records (Gans 1966; Lema et al. 1980; Vieira et al. 1980; Gomes and Krause 1982; Lema et al. 1984; Lema 1994; Montero 1994, 1996; Montero and Terol 1999; Borges-Martins et al. 2007; Barbo and Sawaya 2008; Marques et al. 2009; Quintela et al. 2011a, 2011b; Perez et al. 2012; Souza-Filho and Verrastro 2012; Borges-Martins et al. 2013; Pazinato et al. 2013; Costa et al. 2015; Souza-Filho and Oliveira 2015) black stars show the type-locality (Montenegro, Rio Grande do Sul), and red circles represent the new records to General Alvear department, Corrientes Province, Argentina.

specimens were female and two were male. All the external morphological characters and the meristic data used for the identification are summarized in Table 1. The specimens were found semi-buried in a wet microhabitat under large rests of *Eucalyptus* sp. logs (Figure 3).

This record contributes to the knowledge of the geographical distribution of *Amphisbaena trachura*, a

poorly known species in Argentina, and confirms its presence in Corrientes province. This new record is ca. 650 km west of its type locality in Montenegro, Rio Grande do Sul, Brazil ($29^{\circ}41'19''$ S, $051^{\circ}27'40''$ W; Figure 2), and is important because the species had not been recently found in Argentina. We consider that additional surveys are needed to better know the real geographical distribution of *A. trachura* in this country.

Table 1. Morphological and meristic characters of the seven individuals of *A. trachura* (Amphisbaenidae) analyzed. The parentheses correspond to autotomized specimens. AA= autotomy annuli, SVL= snout-vent length (mm), TL= tail length (mm), PP= number of pre-cloacal pores, BA= body annuli, TA= tail annuli, SL/IL= supralabials/infralabials, DMS= dorsal midbody segments, VMS= ventral midbody segments, PRS= number of pre-cloacal segments, POS= number of post-cloacal segments. References: 1. Gans (1966); 2. Vanzolini (2002); 3. Perez et al. (2012).

UNNEC	Sex	Measurements		Scales		Annuli			Segments			
		SVL	TL	SL/IL	BA	TA	AA	PRP	DMS	VMS	PRS	POS
12842	F	183	15.09	3/3	199	15	5	4	15	18	8	12
12843	F	213	18.43	3/3	200	17	6	4	14	17	6	10
12844	F	244	9.95	3/3	196	(7)	7	4	16	18	8	13
12845	F	205	17.79	3/3	200	16	5	4	15	18	6	10
12846	M	202	17.92	3/3	202	17	6	4	16	20	6	12
12847	M	250	18.77	3/3	198	17	7	4	16	20	6	12
12848	F	235	20.17	3/3	194	16	6	4	16	20	8	12
Ref.	—	—	—	1, 2 (3/3)	1, 2(186–203) 3(168–208)	1(15–22) 2(5–22) 3 (18–25)	1(5–8) 2(5–9) 3(6–9)	1, 3(3–4) 2(4)	1, 2(14–21) 3(16–24)	1(17–22.5) 2(17–23) 3(16–24)	1(6–8)	11(9–14)



Figure 3. Sampling area, located in a private field near Alvear locality, General Alvear department, Corrientes province, Argentina.

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