

New records of *Amphisbaena medemi* Gans & Mathers, 1977 (Squamata: Amphisbaenidae) from the Caribbean region of northern Colombia

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Abstract: This report extends the distribution range of *Amphisbaena medemi* to the southeast foothills of the Sierra Nevada de Santa Marta and western foothills of the Serranía del Perijá in La Guajira department, Colombia. These records offer a more detailed picture of the species' distributional range along the Caribbean region of Colombia and represent the first observation of the species in a transitional zone between dry and moist tropical forest.

Key words: *Amphisbaena medemi*, Sierra Nevada de Santa Marta, Serranía del Perijá, dry tropical forest, moist tropical forest

Amphisbaena medemi Gans & Mathers, 1977 is a small to medium-sized amphisbaenian with four preloacal pores, nasals separated or just touching, 230–235 body annuli, and 17–18 tail annuli, with autotomy occurring between the 5th and 7th caudal annuli (Hoogmoed and Avila-Pires 1991; Vanzolini 2002). This species, endemic to Colombia, was described originally from specimens inhabiting flood-prone lowland pastures and shrubs (about 45 m above sea level [a.s.l.]), at the Laguna de Amajahuevo, Atlántico department, Colombia (Gans and Mathers 1977; Gans 2005). Given the fossorial life-style of the amphisbaenians, many features of their natural history are unknown, and the descriptions of new species are usually based on few specimens (Silva *et al.* 2010), frequently collected in a single locality, not necessarily representative of its true geographical distribution.

This limited knowledge of its distributions is evidenced in *A. medemi*, which for the last 30 years was believed to be restricted to a small area around its type locality. Rueda-Almonacid *et al.* (2008) reported a second locality for this species, from a deciduous dry tropical forest (elevation not reported) at Santuario de Vida Silvestre Los Besotes (Cesar department), about 177 km east of the type locality. Recently, Blanco-Torres *et al.* (2013) listed the species in its inventory of the herpetofauna of the middle valley of the Ranchería River (Carbones del Cerrejón Ltd., municipality of Albania, La Guajira department), ca. 32 km northeast of the second locality reported for the species. This note provides new data that

expands the ranges of distribution, elevation, and habitat type of *A. medemi*.

During 2011, two new specimens of *Amphisbaena medemi* (Figure 1) were recorded from two new localities in the Sierra Nevada de Santa Marta and Serranía del Perijá in La Guajira department (Colombia). Collection of specimens was authorized by Corporación Autónoma Regional de La Guajira (Acuerdo 0021–2011). One adult female specimen, SVL 146.7 mm, was collected in the Corregimiento La Sierrita, municipality of San Juan del Cesar (approximately 214 km east-northeast of its type locality; Figure 2) in the southeast foothills of the Sierra Nevada de Santa Marta. The specimen was collected at night (about 22:15 h), on the right margin of “El Arroyo” (10°51'22" N, 073°09'17" W; 687 m a.s.l.), a rocky creek bordered by secondary riparian forest, and located in a transitional zone between dry and tropical moist forest (Figure 3). The specimen voucher was deposited in the herpetological collection of the Universidad Industrial de Santander, Bucaramanga, Colombia (catalog number UIS-R–2700). The second record comes from the Vereda Puerto López in the municipality of Fonseca (ca. 259 km east-northeast of its type locality; Figure 2). One juvenile specimen, SVL 98.3 mm, was found on a shrub near to disturbed tropical dry forest in the foothills of the Serranía del Perijá (10°48'05" N, 072°43'51" W; 776 m a.s.l.). The specimen was photographed but not collected (Figure 1A). The photographic voucher was deposited in the herpetological collection of the Universidad Industrial de Santander, Bucaramanga, Colombia (catalog number UIS-R–2773).

The new records herein presented offer a more detailed picture of the species' distributional range across the lowlands of the Caribbean region of Colombia into the foothills of Sierra Nevada de Santa Marta and Serranía del Perijá. The record from Sierra Nevada de Santa Marta extends the distribution of the species ca. 68 km SW from Carbones del Cerrejón, the closest known locality; whereas the record from Serranía del Perijá is about 40 km south-southwest from the abovementioned locality. These records increase the elevational distribution of *Amphisbaena medemi* by nearly 700 m higher than its type locality. The record from tropical dry and moist forest belt transition zone in the Sierra Nevada de

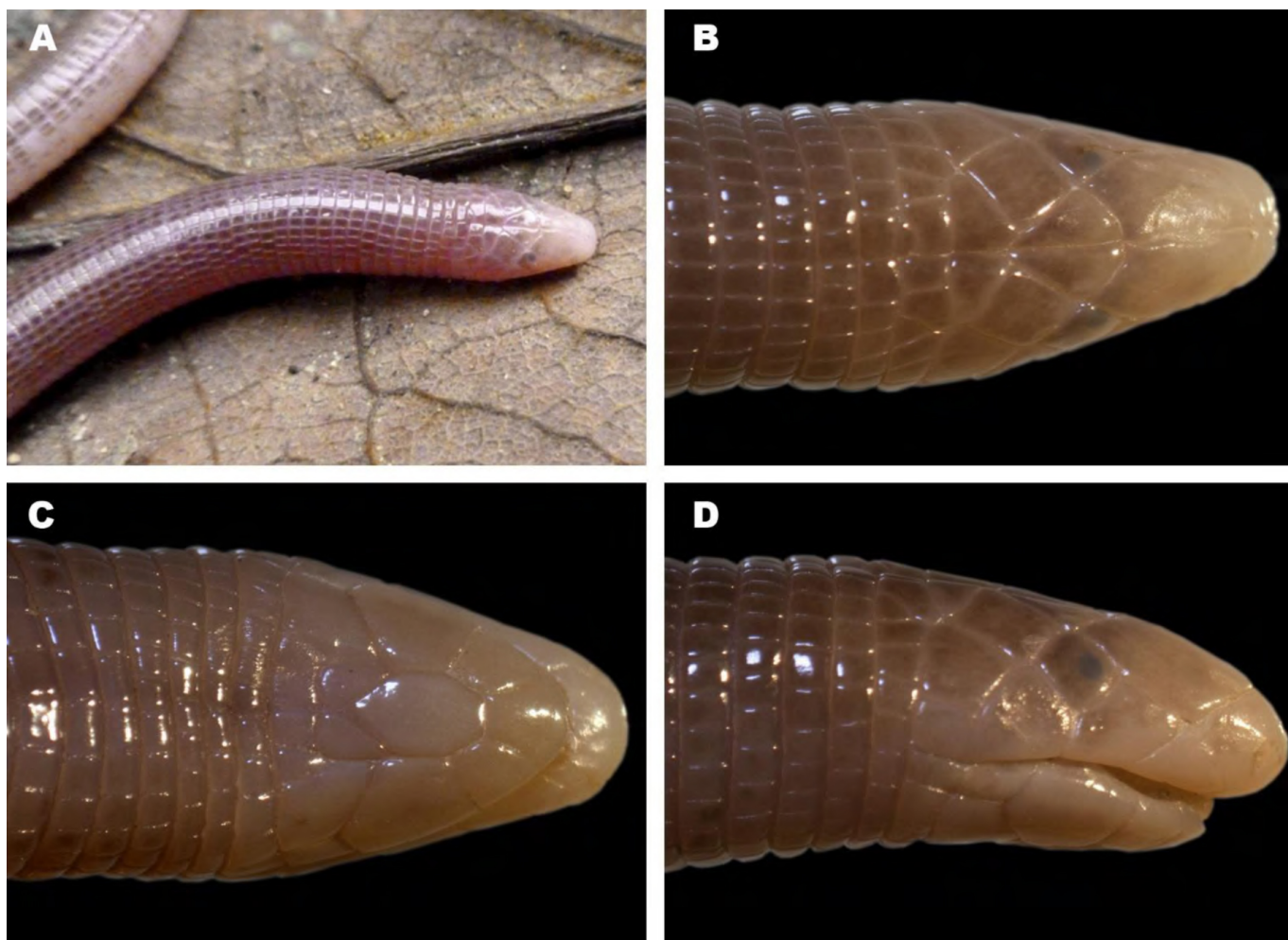


Figure 1. Specimens of *Amphisbaena medemi* from La Guajira department (Colombia). (A) Close-up of anterior part of the uncollected juvenile specimen (photographic voucher UIS-R-2773), from foothills of the Sierra de Perijá. (B) Dorsal, (C) ventral and (D) lateral views of head of the adult female UIS-R-2700. Photos by F. Leonardo Meza-Joya and Asociación Selva.

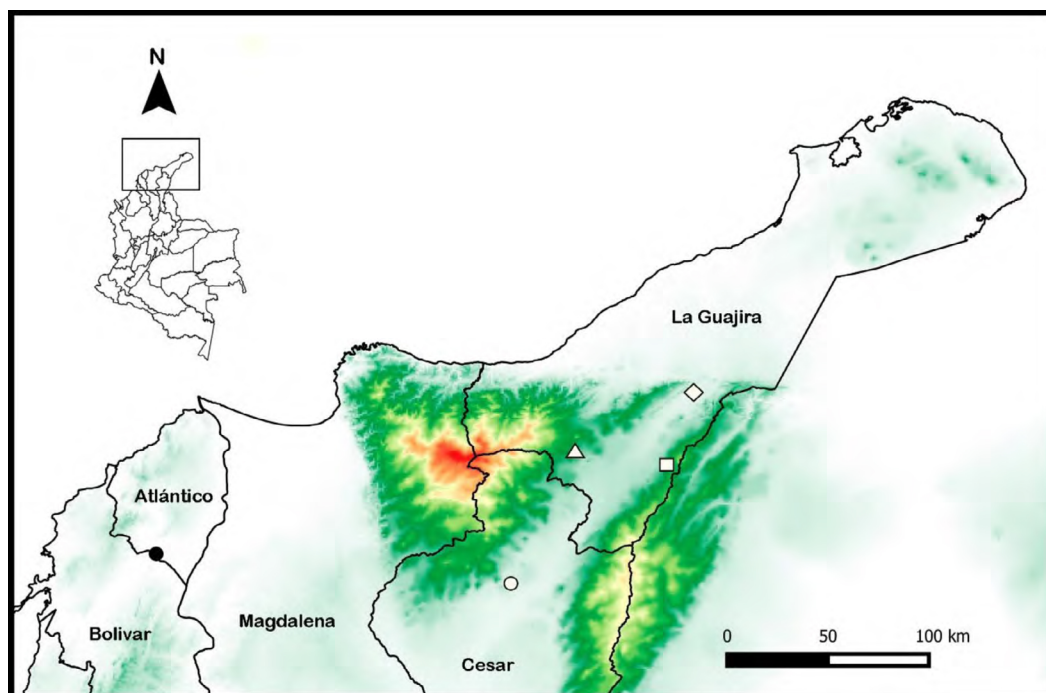


Figure 2. Map of Colombia showing the distribution of *Amphisbaena medemi* in the Caribbean Region. The black circle shows the type locality by Gans and Mathers (1977). The white circle represents the record by Rueda-Almonacid *et al.* (2008). The white diamond denotes the record by Blanco-Torres *et al.* (2013). The white triangle shows the new locality from Sierra Nevada de Santa Marta and the white square represents the new record from Serranía del Perijá herein reported.



Figure 3. View of the habitat where the adult female of *Amphisbaena medemi* (UIS-R-2700) was collected: A disturbed riparian forest in a transitional zone between dry and moist tropical forest in foothills of the Sierra Nevada de Santa Marta, La Guajira department, Colombia. Photo by F. Leonardo Meza-Joya.

Santa Marta improves the knowledge of the habitat occupied by this species, which has been reported only from lowland flood-prone pastures, scrub and deciduous dry forests of the Caribbean region of Colombia (Gans and Mather 1977; Gans 2005; Rueda-Almonacid *et al.* 2008). Further sampling and additional specimens will be needed to increase the very limited knowledge on the biology, ecology, biogeography, and conservation status of this rare species.

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