

Nota Científica
(Short Communication)

**FOUR NEW ADDITIONS TO THE ARANEOFAUNA OF
GUANAJUATO STATE, MEXICO**

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RESUMEN. Se presentan los datos de recolecta de cuatro nuevos registros de arañas para el estado de Guanajuato: *Argiope argentata* (Fabricius 1775), *Castianeira dorsata* (Banks 1898), *C. plorans* (O.P.-Cambridge 1898) y *Selenops gracilis* Muma 1953. Adicionalmente, se proporcionan algunos datos de su historia natural y se actualiza el número de especies de arañas conocidas para Guanajuato de 46 a 50.

The state of Guanajuato is located in central México at the intersection of three biogeographic provinces: the Sierra Madre Oriental, the Mexican Plateau, and the Trans-Mexican Volcanic Belt (INEGI 2010). Within the state of Guanajuato there are diverse array of vegetation types ranging from scrub and grasslands in the north and northwest arid regions, temperate forests in the mountain ranges, to tropical deciduous forest and subtropical scrub in the southern lowlands (Rzedowski 2006). The araneofauna of Guanajuato has never been systematically sampled and remains poorly known. Data on the state's spider fauna are scarce, mainly included in broad taxonomic revisions, as those for the taxa cited here (Reiskind 1969; Levi 1968, 2004; Crews 2011) or as part of spider behavior notes (Uetz 1985; Tietjen 1986). Previous compilations of the araneofauna of Guanajuato appear in Hoffman (1976) and Jiménez (1996), accounting for 34 species. Recently Lucio-Palacio et al. (in press) updated the checklist of spiders to 46 species. Here we present data belonging to four new spider state records found during biological surveys performed between years 2009 and 2010 in southern Guanajuato. We additionally actualize the number of spider species in the state from 46 to 50.

Keys and diagnosis to species are found elsewhere (Levi 1968, 2004; Reiskind 1969; Crews 2011). Geographic coordinates are shown in decimal degrees with refe-

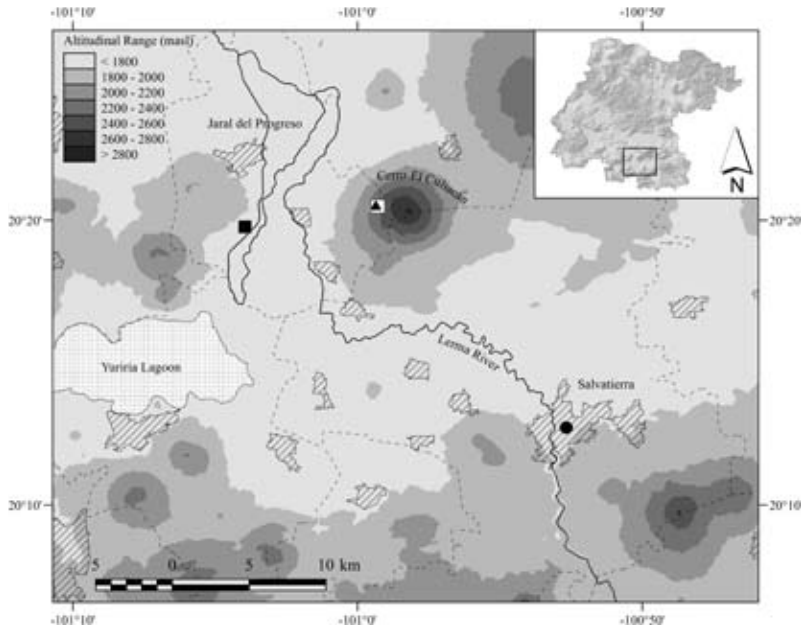


Figure 1. Map of southern Guanajuato with the collecting localities for each species of spider: *Argiope argentata* (black square), *Castianeira plorans* (white square), *C. dorsata* (black triangle), and *Selenops gracilis* (black circle). Hatch polygons represent urban areas, and dashed lines delineate municipality borders.

rence datum WGS84, and elevation (elev.) in meters above sea level. All specimens were collected by CMGB and JCAM. Abbreviation is as follows: CZUAA (Colección de Zoología, Universidad Autónoma de Aguascalientes).

ARANEIDAE Clerck 1757.

Argiope argentata (silver argiope). New record. MÉXICO: Guanajuato: Municipality of Jaral del Progreso, Cerro “La Angostura” (20.329617°, -101.065885°; elev. 1738), 25 July 2009 (1 ♀ CZUAA) (Fig. 2 a). Found on its web in a patch of tropical deciduous forest dominated by *Lysiloma microphyllum*.

CORINNIDAE Karsch 1880.

Castianeira dorsata. New record. MÉXICO: Guanajuato: Municipality of Jaral del Progreso, Cerro “El Culiacán” (20.341613°, -100.988023°; elev. 2354), 25 July 2009 (1 ♂ CZUAA) (Fig. 2 e). Found under a rock in oak forest dominated by *Quercus deserticola*.

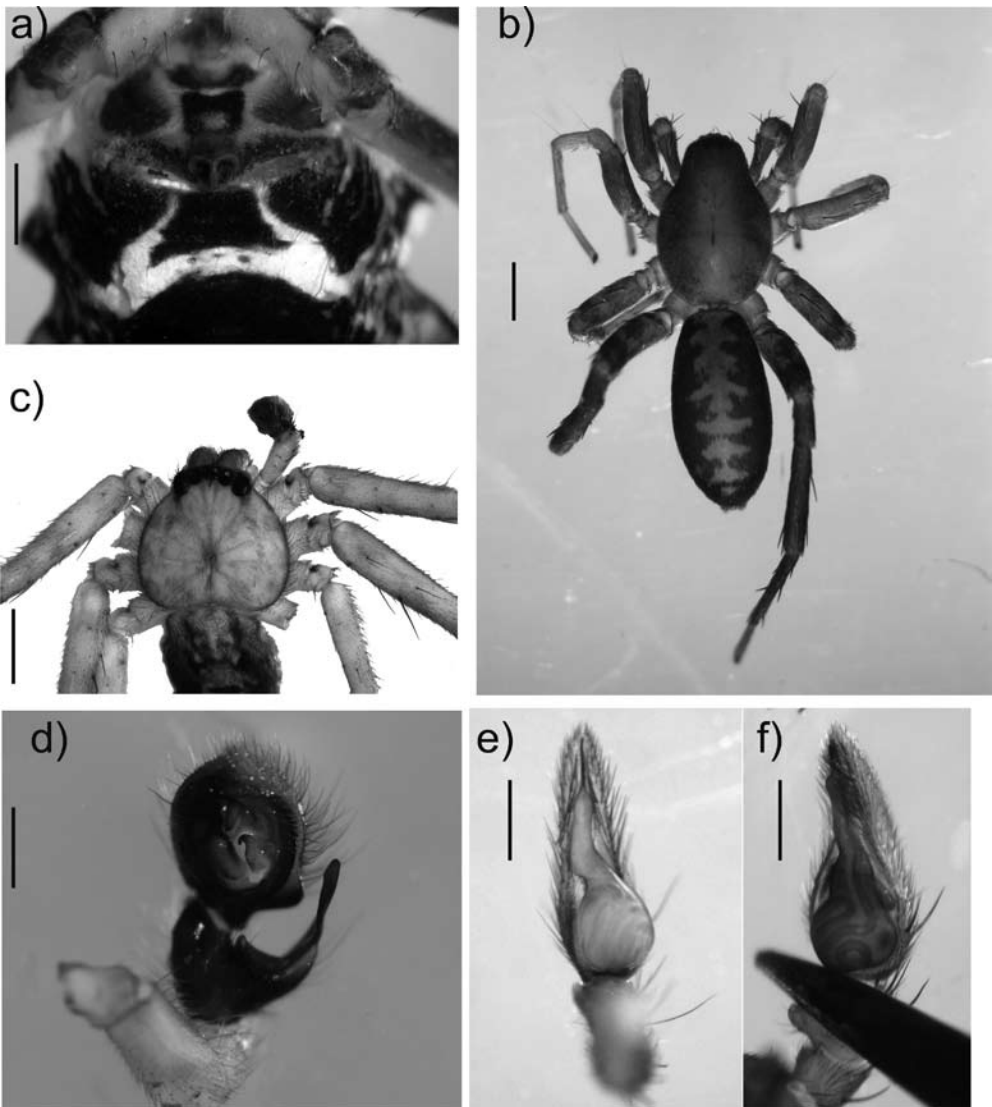


Figure 2. a) Ventral view of the abdomen of female *Argiope argentata*. b) General habit of male *Castianeira plorans* in dorsal view. c) Cephalotorax of male *Selenops gracilis* in dorsal view. d) *S. gracilis* right palpus in ventral view. e) Right palpus of male *C. dorsata* in ventral view. f) Left palpus of *C. plorans* in ventral view. Scale bars: a-b = 1.00 mm; e-f = 0.38 mm; c = 2.50 mm; and d = 0.90 mm.

Castianeira plorans. New record. MÉXICO: Guanajuato: Municipality of Jaral del Progreso, Cerro “El Culiacán” (20.342411°, -100.989327°; elev. 2296), 25 July 2009 (1 ♂ CZUAA) (Fig. 2 b, f). Found under a rock in the ecotone between tropical deciduous forest and oak forest.

SELENOPIDAE Simon 1897.

Selenops gracilis. New record. MÉXICO: Guanajuato: Municipality of Salvatierra, Salvatierra (20.211947°, -100.877781°; elev. 1762), 20 November 2010 (1 ♂ CZUAA) (Fig. 2 c, d). Found on the ceiling inside a house in the urban area.

Prior to our findings, *A. trifasciata* was the only *Argiope* known to occur in Guanajuato. *Argiope argentata* has been recorded for 20 states in México occupying several habitats including urban areas (Durán-Barrón *et al.* 2009). The presence of this species in Guanajuato is not surprising considering its ubiquitous habits (Levi 1968).

Since the revision of the Castianeirinae from North and Central America (Reiskind 1969), this group of ant mimic spiders has received little attention in México. For more than 130 years the only known species of *Castianeira* inhabiting Guanajuato was *C. dugesi* (Becker 1879). In Reiskind (1969), *C. dorsata* was recorded for 8 states. However, no natural history or habitat data was presented for this species nor for the rare *C. plorans* which were recorded here from Guanajuato. Previously *C. plorans* was known from the type locality in Amula (now Almolonga), Guerrero. The *C. dorsata* and *C. plorans* specimens were found under rocks, separated by 450 m straight line and 58 m vertically on the western slope of Cerro “El Culiacán” (Fig. 1). Their distributions could overlap along this elevational gradient where the transition between tropical deciduous forest and oak forest occurs. Similarly, *C. plorans* is sympatric with three species of *Castianeira* in Guerrero (Reiskind 1969).

Spiders of the *Selenops* genus are widely distributed in the world tropics, often found inhabiting human establishments (Muma 1953; Corronca 1998; Valdez-Mondragón 2010). According to Durán-Barrón *et al.* (2009), *S. gracilis* is a rare sinantropic species in México City. Our finding suggests that, despite the rate of change in its natural habitat, this species is adaptable, and now occupies numerous suitable artificial microhabitats that human buildings provide.

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