



A new species of the selenopid crab-spider genus *Selenops* Latreille, 1819 (Araneae: Selenopidae) from Guerrero, Mexico

The spider family Selenopidae Simon, 1897 consist of four genera, of which *Selenops* Latreille, 1819 has about 110 species in tropical to temperate regions around the world (Platnick 2007). The distribution of this genus in America is from Argentina and Paraguay in South America, northward through tropical and subtropical America to Florida, Texas, New Mexico, Arizona, and southern California in North America (Muma 1953). These spiders can be found in different habitats, from dry desert and chaparral to tropical areas. They are typically found under rocks and other objects on the ground, occasionally inside tree trunks, and between the bases of the leaves of tropical plants. They also occur in the entrances of caves, on flat surfaces and in narrow cracks and crevices. They are commonly found inside human habitations. Their flattened body allows them to slide into these cracks with very fast movements, which makes their collection in the field difficult. They are nocturnal and do not build webs (Muma 1953).

The first systematic study of the genus was done by Walckenaer (1837), who recognized three species groups based on the chelicerae, labium and leg lengths (Crews 2005). However, Simon (1880) could not corroborate the characters used by Walckenaer, and separated Old and New World species based on eye size. Later, O. Pickard-Cambridge (1905) distinguished species of the American continent using eye size, eye position and genitalic characters (Crews 2005). The most complete work on the genus *Selenops* in North and Central America was made by Muma (1953) who described several new species based on leg lengths, eye size and position, and genitalic characters (Crews 2005).

Selenops differs from other selenopids genera by the arrangement of the eyes: the anterior median eyes, posterior median eyes and anterior lateral eyes are aligned or slightly recurved, with the posterior median eyes being equal or subequal in size to the anterior median eyes (Corronca 2002). The male palp has two apophyses, with the retrolateral tibial apophysis (RTA) being larger than the ventral tibial apophysis (VTA). The median apophysis of the tegulum is small and simple, showing one or two branches. The female epigynum is characterized by the well-developed central area with distinct lateral lobes (Corronca 2002).

From Mexico 14 species are recorded, including the new species that is described below. These species belong to two groups: the *debilis* and *mexicanus* groups. In the state of Guerrero three species have been reported: *S. gracilis* Muma, 1953 (*mexicanus* group), *S. scitus* Muma, 1953 (*debilis* group) and *S. nigromaculatus* Keyserling, 1880 (unplaced species).

Material and methods. The specimens used in this study are deposited in the Colección Nacional de Arácnidos (CNAN) of the Instituto de Biología, Universidad Nacional Autónoma de México (IBUNAM). Palps and epigynes were dissected in isopropilic alcohol (80%) and cleared in KOH (10%) for 10 to 15 minutes. A dissecting microscope Zeiss Stemi SV11 with a camera lucida attached was used to make the drawings. All measurements are in millimeters.

Abbreviations of morphological terms: AER, anterior eye row; ALE, anterior lateral eyes; AME, anterior median eyes; C, conductor; CD, copulatory duct; E, embolus; GO, genital openings; LLE, lateral lobes of the epigynum; MA, median apophysis; MF, middle field; P, promargin; PER, posterior eye row; PLE, posterior lateral eyes; PME, posterior median eyes; R, retromargin; RTA, retrolateral tibial apophysis; S, spermatheca; T, tegulum; VTA, ventral tibial apophysis.

Selenops juxtlahuaca sp. nov.

Figures 1–8

Type material. Holotype: male, from near entrance of the caves named Grutas de Juxtlahuaca, 938 m, 5 km northwest of the town of Colotlipa, 59 km southeast of Chilpancingo, [17° 26' 32.4" N, 99° 09' 57.0", Guerrero, Municipality of Quechultenango, Mexico], 17 January 2006, Valdez, A. and Montaña, H. (CNAN T0239).

Paratypes: 1 male, 2 females, 7 immatures, 9 and 15 September 2005, same locality as holotype (CNAN T0240-T0244).