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A new record of the orb-weaving spider *Xylethrus superbus* Simon (Araneae: Araneidae), the northernmost known from South America

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Abstract: A new record of the araneid spider *Xylethrus superbus* is presented, from the eastern plains of the department of Meta, at the municipalities of San Martín and Villavicencio, in Colombia; the record is the northernmost known so far from South America. Additionally, some interesting variations of the abdomen sculpturing and coloration are illustrated.
Key words: Araneae, Araneidae, faunistics, zoogeography, Colombia.

Nueva cita del araneido *Xylethrus superbus* Simon (Araneae: Araneidae), el registro más septentrional conocido de Sudamérica
Resumen: Se presenta un nuevo registro del araneido *Xylethrus superbus*, de las llanuras orientales del departamento de Meta, en los municipios de San Martín y Villavicencio, en Colombia; la cita es la más septentrional conocida de Sudamérica hasta la fecha. Además se ilustran algunas variaciones interesantes del relieve y coloración del abdomen.
Palabras clave: Araneae, Araneidae, faunística, zoogeografía, Colombia.

Introduction

Orb-weaving spiders of the family Araneidae are one of the most common and diverse spider groups in tropical forests. In total, 3096 species in 169 genera have been described worldwide (World Spider Catalog, 2017) and about 1500 species and 65 genera are reported from the New World (Levi, 2002). However, information of the diversity and distribution of araneids from Colombia is still scarce, with most of the records restricted to the Andes region (Flórez & Sánchez, 1995), Orinoco region (Gilede-Moncayo & Bello-Silva, 2000) and the Amazon region (Pinzón *et al.,* 2010).

The genus *Xylethrus* Simon, 1895 was officially recorded from Colombia by Levi (1996) with the species *X. scrupeus* Simon, 1895 from the Eastern department of Meta. Posteriorly, Pinzón *et al.* (2010) provided new faunistic information for this species from the Amazonian department of Vaupés, and reported *X. superbus* Simon, 1895 as a new record for Colombia, from the Amazonian departments of Amazonas and Vaupés.

Xylethrus superbus was described from a female from São Paulo de Olivença (Amazonian region of Brazil, in the Amazonas state), together with a male and an immature. In the taxonomic revision of the genus, Levi (1966) provides new faunistic information about the species in South America, synonymizes *X. trifidus* Simon, 1895 from Paraguay and *X. peruanus* Archer, 1971 from Peru with *X. superbus* and notes that the male paralectotype is a male of an *Enacrosoma* species.

Previous surveys have not reported *X. superbus* in the Meta department (Gilede-Moncayo & Bello-Silva, 2000). Hence, here we present two new northernmost records of *X. superbus* in Colombia and South America, at the municipalities of San Martín and Villavicencio (Meta department), from females that were collected in highly intervened Eastern plain ecosystems. These specimens presented interesting variations in the abdomen sculpturing and coloration, with numerous spines in the lateral sides of the abdomen and in the distal portion of the lateral and medial abdominal extensions.

The material examined is deposited in the Arachnological collection of the Instituto de Ciencias Naturales (ICN-Ar, E. Flórez), Universidad Nacional de Colombia, Bogotá, Colombia, and the Entomological collection of the Museo Javeriano de Historia Natural (MPUJ_ENT, D. Forero), Pontificia Universidad Javeriana, Bogotá, Colombia. The photographs were obtained from several images taken using a Leica MC-170 HD digital camera attached to a Leica M205A stereomicroscope, and then stacked using the Leica Application Suite version 4.6.0. Text in square brackets below was added to complement the museum label information. The measurements are in millimeters

Results

***Xylethrus superbus* Simon, 1895**
Fig. 1-4

Xylethrus superbus Simon, 1895a: 865, figs 926-927 (female lectotype, male and juvenile paralectotypes from Brazil, São Paulo [São Paulo de Olivença, Amazonas state], deposited in MNHN 8195, not examined). Simon, 1895b: 158. Levi, 1996: 134, fig. 248-258, 271-276 (concluded that the male paralectotype is a true *Enacrosoma* species). Pinzón *et al.* 2010: 60. World Spider Catalog, 2016.

Xylethrus trifidus Simon, 1895b: 157 (immature holotype from Paraguay, deposited in MNHN, not examined). Synonymized by Levi (1996: 134).

Xylethrus peruanus Archer, 1971: 157, fig. 1-2 (female holotype from Peru, San Martín, Moyabamba, deposited in AMNH, not examined). Synonymized by Levi (1996: 134).

Material examined. Colombia, Amazonas: Leticia, km 7 vía Tarapacá, [4.1416°N, 69.9232°W], 95 masl, 1 female juvenile, 30/X/2005, Estudiantes Sistemática Animal Universidad Nacional de Colombia (ICN-Ar 2281). Meta: San Martín, Reserva Natural El Caduceo, km 4.5 a San Francisco, 3.665533°N, 73.658316°W, 309 masl, 1 female, 10-14/III/2014, L. Garzón (MPUJ_ENT 47554); Villavicencio, Vereda La Vanguardia, Pozo Azul, [4.1738°N, 73.6243°W, 325 masl], 1 female, 18-19/IV/2005, Estudiantes Sistemática Animal Universidad Nacional de Colombia (ICN-Ar 5554).

Description. Female (MPUJ_ENT 47554 and ICN-Ar 5554, Fig. 1-4). Total length: 12.50-13.34 mm. In spite of both females presented numerous spines in the lateral sides of the abdomen and in the distal portion of the lateral and medial abdominal extensions in comparison with those illustrated by Levi (1996: 133, fig. 256-257); female from Villavicencio presented a more reddish body coloration, with the abdomen with a blue-darkish border (Fig. 1). On the other hand, the female from San Martín have a prosoma and abdomen orange-reddish (Fig. 2), with legs and sternum with the same color, with the anterolateral prosomal projections with two to three lobes. In the same way, it presented a spiny sculpturing on lateral sides of the abdomen, and the ventral surface of the abdomen with numerous granular sculpturing finishing with a hair (Fig. 4). The epigynes was as in Levi (1996: 133, figs. 252, 254), with the only differences that both females presented their median lobe slightly rounded and longer (Fig. 3).

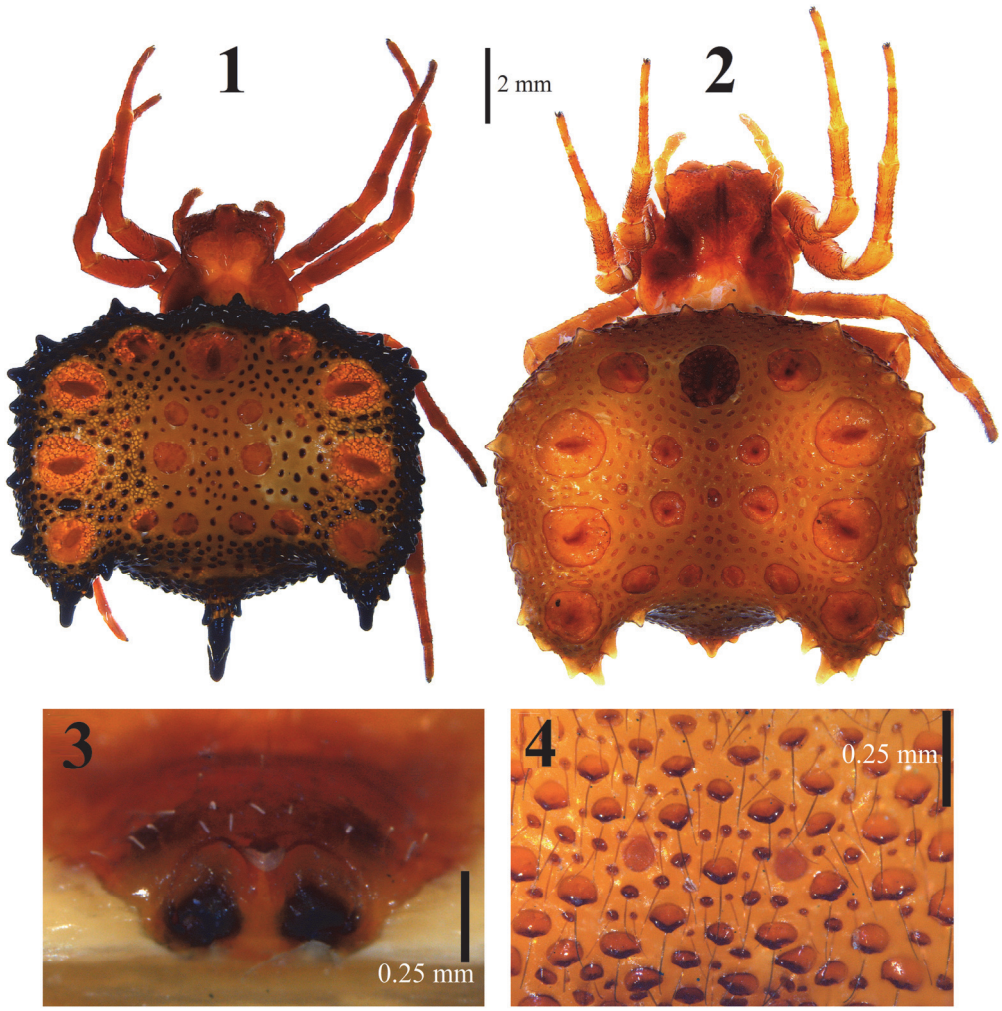


Fig.1-4. *Xylethrus superbus* Simon from Colombia:
1) Female from Villavicencio (Meta, ICN-Ar 5554), habitus;
2) Female from San Martín (Meta, MPUJ_ENT 00475-54), habitus;
3) Same, epigyne, posterior view;
4) Same, ventral sculpturing of the abdomen.

Distribution and Comments. Colombia (Meta, Vaupés, Amazonas), Brazil (Pará, Amazonas, Mato Grosso, Goiás, São Paulo, Santa Catarina), Peru (San Martín, Madre de Dios), Bolivia (El Beni) and Paraguay (La Cordillera). New northernmost known records for the species from the Eastern plains of Colombia, at Meta department are presented. Both females were caught in secondary-forested areas, with relatively high-grade of disturb. Likewise, both localities here presented represent new records of the species in the Sabana province, from the Neotropical region (Morrone, 2014).

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