

First record of *Lyssomanes quadrinotatus* Simon, 1900 (Araneae: Salticidae: Lyssomaninae) from Brazil and Colombia

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Abstract. The jumping spider *Lyssomanes quadrinotatus* Simon, 1900 (Salticidae: Lyssomaninae) is reported from Brazil and Colombia for the first time. A distribution map is included with both new and previously published records.

Keywords. faunistics, jumping spider, lyssomanines, zoogeography

Introduction

The subfamily Lyssomaninae Blackwall, 1877 currently includes three Neotropical genera (*Chinoscopus* Simon, 1900, *Lyssomanes* Hentz, 1845 and *Sumakuru* Maddison, 2016), and one genus from southwestern India (*Hindumanes* Logunov, 2004) (Maddison, 2015; Sudhin et al., 2017). The genus *Lyssomanes* is one of the most diverse genera of jumping spiders, with 93 described species ranging from North Carolina (USA), through Central America, the Antilles, and South America, to Buenos Aires (Argentina) (World Spider Catalog 2018). Galvis (2017), Galvis & Rubio (2016), Logunov (2002, 2014), and Rubio et al. (2017) provided the latest taxonomic and faunistic data on the genus from Colombia and Brazil.

L. quadrinotatus was the only species of *Lyssomanes* described by Simon, in 1900, from a male collected by him in Colonia Tovar (Aragua, Venezuela). Subsequently, Crane (1949) described *L. bradyspilus* from a male and female collected in the Henri Pittier National Park (formerly Aragua National Park, Rancho Grande), after which Caporiacco (1995) cited her in his paper about arachnids from Venezuela. Later, Galiano (1962, 1963, 1980) synonymized *L. bradyspilus* with *L. quadrinotatus* in her revision of the subfamily Lyssomaninae, giving illustrations and a better description of the species. Here, first records of *L. quadrinotatus* from Brazil (Amazonas, Pará) and Colombia (Putumayo) are presented, representing the first records of this species from the southern hemisphere of South America. This paper is part of a project on the diversity, systematics and biogeography of Lyssomanines from the World.

Materials and methods

The material examined is deposited in the following arachnological collections: Instituto de Ciencias Naturales (ICN-Ar, E. Flórez), Universidad Nacional de Colombia, Bogotá, Colombia; Instituto Nacional de Pesquisas da Amazônia (INPA, C. Magalhães), Manaus, Amazonas, Brazil; and Museu Paraense Emílio Goeldi (MPEG, A.B. Bonaldo), Belém, Pará, Brazil. Specimens previously described by Galiano (1962, 1980) were also examined and new drawings of their reproductive structures are presented here.

Taxonomy

Salticidae Blackwall, 1841

Lyssomaninae Blackwall, 1877

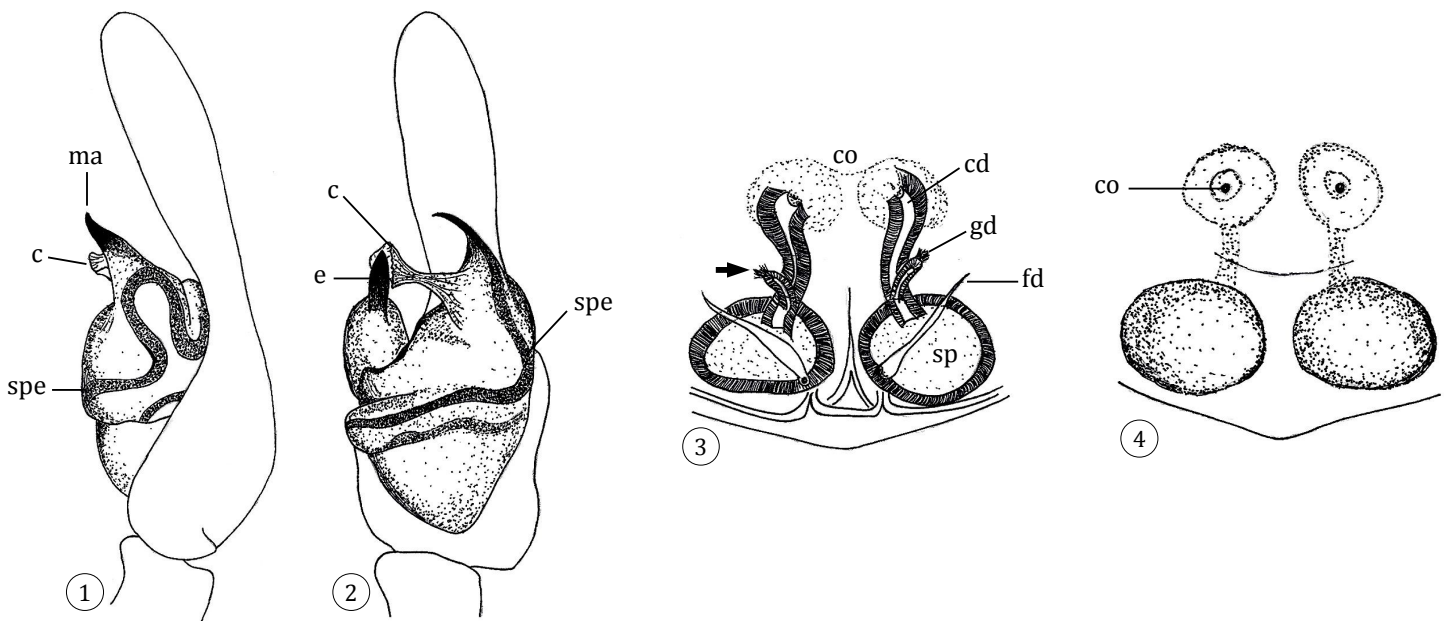
Lyssomanes quadrinotatus Simon, 1900

Figures 1-5

Lyssomanes quadrinotatus Simon, 1900: 27 (description of the male holotype collected in Colonia Tovar, Venezuela, deposited in the Muséum National d'Histoire Naturelle, Paris, France (MNHN), not examined); Galiano, 1962: 85, pl. VII, figs. 5-8; Galiano, 1963: 385, pl. XXI, figs. 4-5; Galiano, 1980: 46, figs. 105-106; World Spider Catalog, 2018.

Lyssomanes bradyspilus Crane, 1949: 31, figs. 1A-E (male holotype and female paratype from Portachuelo, Rancho Grande, Aragua National Park [now Henri Pittier National Park], near Maracay, Venezuela, both deposited in the American Museum of Natural History, New York, USA (AMNH), not examined); Caporiacco, 1955: 417. Synonymized by Galiano (1980: 46).

Material examined (notations in brackets added to supplement label data). Colombia, Putumayo: Territorio Kofán, [0.76°N, 77.07°W], 1430 m asl, 21 Sep 1998, 1♂, V. Rodríguez (ICN-Ar 3362). Brazil, Amazonas: Manaus, Reserva da Campina, [2.489°S, 60.021°W], [91 m], 23 Feb 1992, 1♀, no coll. (INPA 2926). Pará: Juruti, Vista Bela, Pista de Pouso, 3.116666°S, 56.585194°W, [22 m asl], 30 Sep 2009, 1♂, N.F. Lo-Man-Hung (MPEG 15687).



Figures 1-4. *Lyssomanes quadrinotatus* Simon, 1900. **1.** ♂ (ICN-Ar 3362), left palp, retrolateral view. **2.** Same, ventral view. **3.** ♀ (INPA 2926), epigynum, cleared, dorsal view. **4.** Same, ventral view. Abbreviations: c = conductor, cd = copulatory duct, co = copulatory opening, e = embolus, fd = fertilization duct, gd = glandular duct, ma = median apophysis, sp = spermatheca, spe = spermophore.

Diagnosis. *L. quadrinotatus* belongs to the *L. viridis* group of species, with males very similar to those of *L. elegans*, *L. remotus* and *L. mandibulatus*, from which they can be distinguished easily by the straight ventral edge of their long and pointed median apophysis, and their short, robust and straight embolus with a thickened embolar base (Figures 1-2). Females resemble those of *L. bryantae*, *L. unicolor*, *L. adisi* and *L. trinidadus* by their epigyna with anterior copulatory openings, posterior spermathecae, and short copulatory ducts. However *L. quadrinotatus* females can be identified by their epigynum with a rounded posterior border, longer copulatory ducts with posterior glandular ducts (arrow in Figure 3), and deeper and wider copulatory openings (Figures 3-4) (Galiano 1962, 1980).

Distribution (Figure 5). Previous known from Venezuela (Aragua) (World Spider Catalog 2018). Here I add new records from Brazil (Amazonas, Pará) and Colombia (Putumayo). This species was collected in a pitfall trap in a highly-conserved Amazonian-Andean rainforest forest in Colombia, and in two well-conserved Amazonian forests in Brazil, the first records of the species from the southern hemisphere of South America.

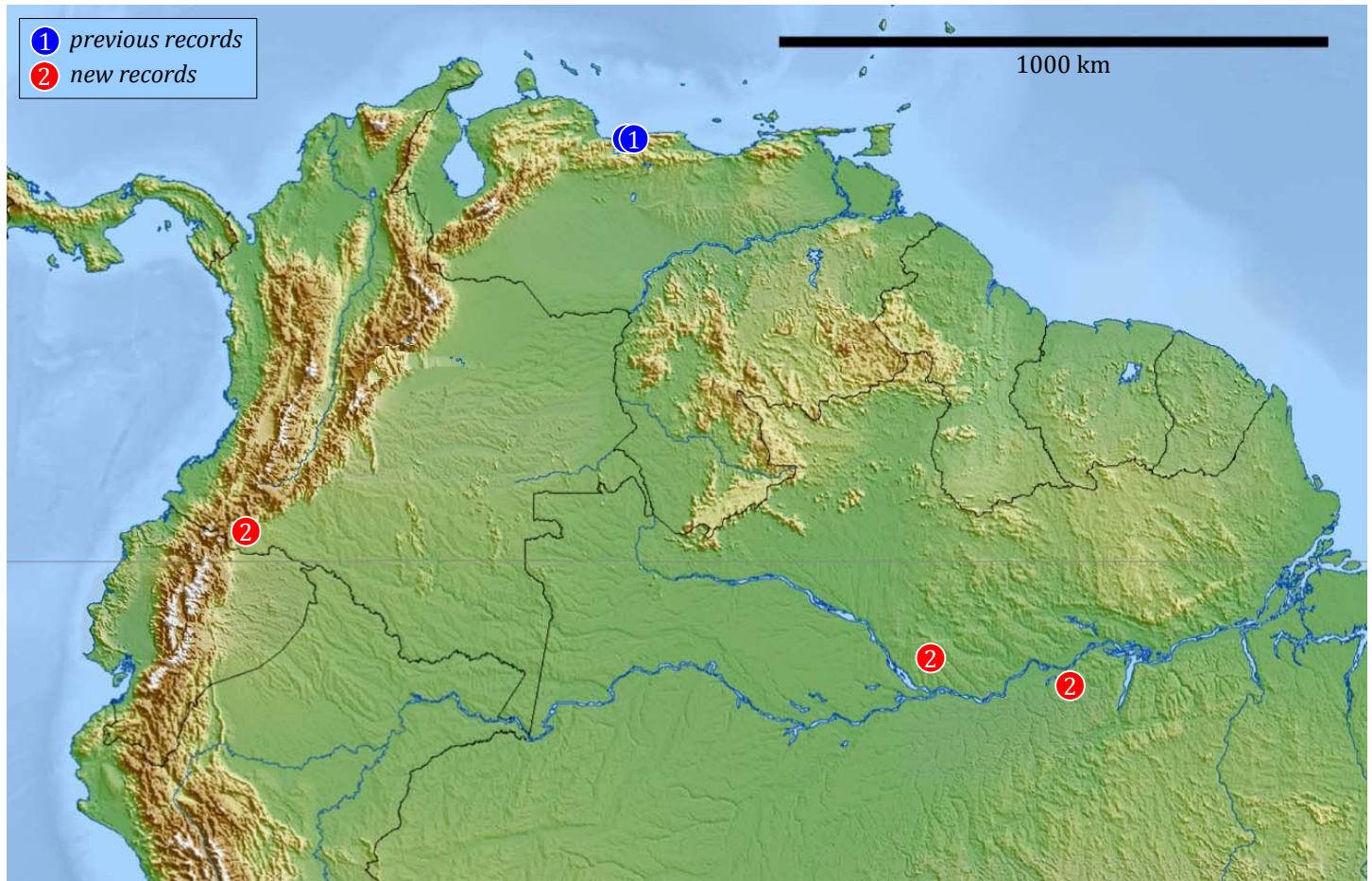


Figure 5. Known distribution of *Lyssomanes quadrinotatus* Simon, 1900 in South America. Map by Mapswire.com (<https://mapswire.com>) used and modified under a Creative Commons Attribution 4.0 International (CC BY 4.0) License.

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