

## First record of the jumping spider tribe Huriini Simon (Araneae: Salticidae: Salticinae) from Colombia

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**Abstract:** The jumping spider tribe Huriini Simon is recorded for the first time from Colombia, with new records for *Hurius vulpinus* and *Simonurius quadratarius*, both representing the northwesternmost records for the tribe. *H. vulpinus* is recorded from the Cundinamarca and Meta departments, both in urbanized or conserved ecosystems. *S. quadratarius* is recorded from a highly intervened Páramo ecosystem in the Serranía de Perijá, Cesar department. A map is included with the known distribution for both species.

**Key words:** Andes, Campus Universidad Nacional de Colombia, *Hurius vulpinus*, huriines, Macarena, Serranía de Perijá, *Simonurius quadratarius*

### Introduction

The Huriini Simon is one of the less-diverse tribes of jumping spiders of the new world. With six genera and 16 species this group is found only in South America, from Colombia and Venezuela to Argentina and Chile (Maddison 2015; WSC 2016). The group is united by several morphological characters including the presence of two or three well-developed tibial apophyses, a single tooth on the retromargin of the chelicerae, and a fourth leg longer than the third, along with some molecular evidence (Ruiz & Maddison, 2015). This tribe currently includes the genera *Hurius* Simon, 1901 and *Simonurius* Galiano, 1987.

The genus *Hurius* Simon, 1901 includes four accepted species described from the Andean region, from Argentina, Chile, Peru and Ecuador (WSC 2016). Galiano (1985) provided the latest revision of the genus, describing *H. pretrohue* and *H. pisac* from Llanquihue (Chile) and Cusco (Peru), respectively. Galiano (1985) also transferred *H. aeneus* (Mello-Leitão, 1941) from Córdoba and Tucumán, Argentina, into the genus *Hurius*. The genus *Simonurius* was described by Galiano (1987) to include four species from Venezuela and Argentina. It is important to point out that *S. campestratus* (Simon, 1901) might be a synonym of *S. quadratarius* (Simon, 1901), both described from the same location in Colonia Tovar (Venezuela).

Here, we present two new records that represent the first known occurrence of the tribe Huriini from Colombia. These include *H. vulpinus* from an urbanized environment in the Campus of the Universidad Nacional de Colombia (Bogotá D.C., Cundinamarca) and a conserved ecosystem in La Macarena (Meta), and *S. quadratarius* from the Serranía de Perijá (Cesar, Colombia) in a highly intervened Páramo ecosystem.

## Materials and methods

This material examined was deposited in the Arachnological Collection of the Instituto de Ciencias Naturales, Universidad Nacional de Colombia (ICN-Ar, Eduardo Flórez), Bogotá, Colombia. Multifocal photographs of the sexual characters were taken with a Leica MC-170 HD digital camera attached to a Leica M205A stereomicroscope, then stacked with the Leica Application Suite version 4.6.0. Measurements were taken with an AmScope MU300 digital camera attached to an Advanced Optics JSZ-6 stereomicroscope. For visualization the epigynal plate was dissected and cleared in 10% KOH.

Abbreviations used in the text and figures are: MA=medial apophysis of the male palpal bulb, MNHN= Muséum National d'Histoire Naturelle de París, France, MUCV=Museo de Biología, Facultad de Ciencias, Universidad Central de Venezuela, Caracas, Venezuela, RTA=retrolateral tibial apophysis of the male palp, SD=sperm duct; co=copulatory opening, e=embolus, fd=fertilization duct, lpo=lateral copulatory pocket, m=meters above mean sea level, sp=spermatheca, vTA=ventral tibial apophysis. The map was prepared with the Geographic Information System QGIS "Lyon" (version 2.12.2, Sherman *et al.* 2012), with raster files from NaturalEarth©.

## Taxonomy

### **Salticidae Blackwall, 1841**

### **Salticinae Blackwall, 1841**

### **Huriini Simon, 1901**

### ***Hurius* Simon, 1901**

*Hurius* Simon, 1901a: 583, 585, type species: *Hurius vulpinus* Simon, 1901a: 585, fig. 708.

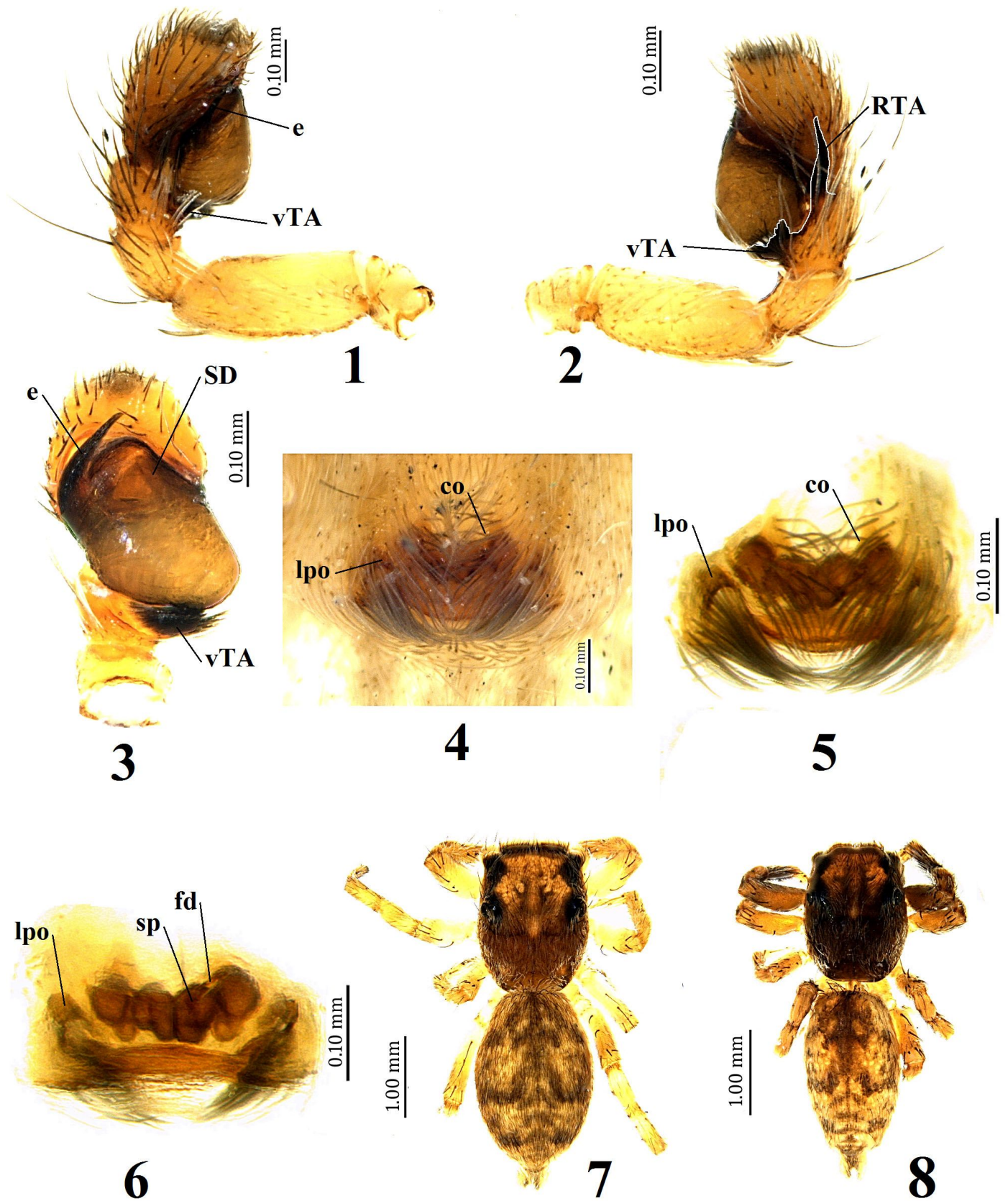
*Diagnosis.* Males can be recognized by their palps with two tibial apophysis without medial apophysis in the bulb, shorter embolus without basal denticles, and posterior legs with strong spination. Females can be recognized by have two copulatory openings and two lateral copulatory pockets, and smaller spermathecae (Galiano 1985, 1987).

### ***Hurius vulpinus* Simon, 1901**

Figures 1-8, 13

*Hurius vulpinus* Simon, 1901a: 585, fig. 708; Simon, 1901b: 154 (female lectotype and female paralectotype from Quito, Ecuador, deposited in MNHN, not examined); Galiano, 1963: 363, pl. 19, fig. 16; Galiano, 1985: 10, figs. 1-7; WSC 2016.

*Material examined.* Colombia, Cundinamarca, Bogotá, Ciudad Universitaria Universidad Nacional de Colombia, 4.641944°N, 74.081944°W, 2600 m, 10 Sep 2002, 1♂, Estudiantes Biología Universidad Nacional (ICN-Ar 6660); same location and collectors, Sep to Nov 2003, 2♂, 4♀, 8 immatures (ICN-Ar 6247, 6418, 6640, 6663, 7175, 7180); same location, 19 Sep 2009, 1♂, 1♀, 2 immatures, E. Flórez & Grupo Cheliceros (ICN-Ar 7478-7479); same location, 25 Oct 2011, 1♀ juvenile, 1 immature, W. Galvis (ICN-Ar 6655); same location and collector, 20 May 2012, 1♀, 2 immatures (ICN-Ar 7250); same location, 15 Aug 2013, 1♂, 5♀, Grupo Cheliceros (ICN-Ar 7481-7482), Meta, La Macarena, June 1994, 1♀, A. Calixto (ICN-Ar 6235).



**Figures 1-8.** *Hurius vulpinus* Simon (♂ ICN Ar-7482, ♀ ICN Ar-7250). **1**, Left male palp, prolateral view. **2**, Same, retrolateral view. **3**, Same, ventral view. **4**, Epigyne, ventral view. **5**, Same, cleared, ventral view. **6**, Same, cleared, dorsal view. **7**, Female, habitus. **8**, Male, habitus.

**Diagnosis.** Males of the species can be diagnosed by their short embolus, reduced ventral tibial apophysis (vTA) with a long RTA (Figures 1-3). Females can be recognized by the presence of two posterior lateral copulatory pockets (lpo) in the epigyne (Figures 4-6).

**Distribution.** Colombia (Cundinamarca, Meta) and Ecuador (Pichincha, Quito, Tungurahua) (Figure 13). Specimens of both sexes were collected together on tree bark and in low scrubs in a highly intervened urban environment or in a conserved ecosystem. The record of *H. vulpinus* in the Meta department could not be georeferenced because of its doubtful locality, but could correspond to a locality in the Serranía de La Macarena at a high altitude. These localities represent the northernmost records for the genus. The known altitudinal range is 1800-2850 m.

### ***Simonurius* Galiano, 1987**

*Simonurius* Galiano, 1987: 296, type species: *Akela gladifera* Simon, 1901b: 146.

**Diagnosis.** Males can be recognized by their palps with two tibial apophyses and a medial apophysis (MA) in the bulb (Galiano, 1987).

### ***Simonurius quadratarius* (Simon, 1901)**

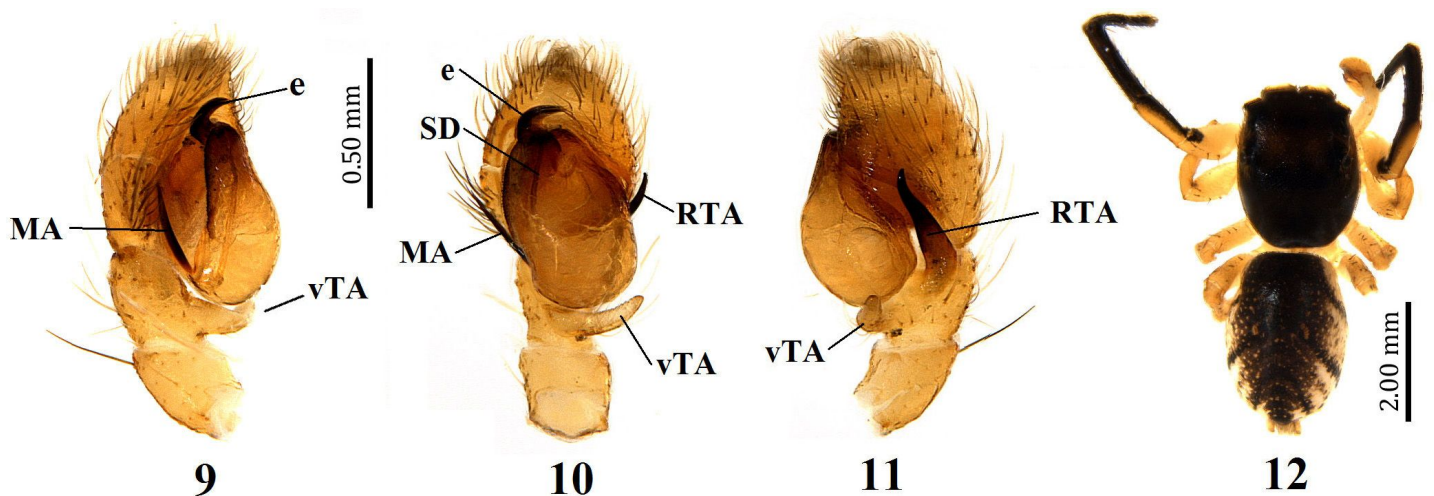
Figures 9-13

*Akela quadrataria* Simon, 1901b: 145 (male holotype from Colonia Tovar, Venezuela, deposited in MNHN, not examined); Galiano, 1963: 287, pl. 4, figs. 3-5 (redescription).

*Sidusa variegata* Caporiacco, 1955: 430, figs. 71a-c (male holotype from El Junquito, Distrito Federal, Venezuela, deposited in MUCV 737, not examined). Synonymized by Ruiz & Brescovit, 2005: 759.

*Simonurius quadratarius* Galiano, 1987: 300 (transferred to the genus *Simonurius*).

**Material examined.** Colombia, Cesar, Serranía de Perijá, Sabana Rubia, 10.369055°N, 72.892666°W, 3200 m, 18 May 2016, 1♂, L. Martínez (ICN-Ar 8203, Figures 9-12).



**Figures 9-12.** *Simonurius quadratarius* (Simon) (♂ ICN Ar-8203). **9**, Left male palp, prolateral view. **10**, Same, ventral view. **11**, Same, retrolateral view. **12**, Male, habitus.

**Diagnosis.** Males of this species can be identified by their medial apophysis (MA), shorter than in *S. exers* Galiano, 1988 and longer than in *S. gladiferus* (Simon, 1901) (Figures 9-11).

**Distribution.** Colombia (Magdalena) and Venezuela (Aragua, Distrito Federal) (Figure 13). The Colombian specimen was collected beating a frailejón (*Asteraceae: Espeletia* sp) in a highly intervened Páramo ecosystem. This is a new genus and species record for Colombia, representing the northwesternmost record for both *Simonurius* and the tribe Huriini. The known altitudinal range is 1290-3200 m.



**Figure 13.** Known distribution of *Hurius vulpinus* Simon and *Simonurius quadratarius* (Simon) in South America. The record of *H. vulpinus* with a “?” corresponds to an unknown locality in the Meta department, Colombia.

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