



A new species of *Admesturius* Galiano, 1988 from north Chile (Araneae: Salticidae: Amycoida)

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The Hurieae group was created by Simon (1901) and revised by Galiano (1987). This group includes the genera *Admesturius* Galiano; *Atelurius* Simon; *Hurius* Simon; *Scoturius* Simon and *Simonurius* Galiano. They are nested within the Neotropical clade Amycoida (Maddison & Hedin 2003), but their phylogenetic relationships among these genera are uncertain.

The salticid genus *Admesturius* Galiano currently includes two species. One of them, *A. schajovskoyi* Galiano, occurs in Chile and Argentina, and the other, *A. bitaeniatus* (Simon), seems to be endemic from Chile. The genus was diagnosed by the combined presence of two branches in the tibial apophysis of the male palp, posterior edge of the epigynum with two lobes and the flattened body (Galiano 1987, Richardson 2010).

In this work we describe and illustrate a new species of *Admesturius* Galiano from the Atacama-desert. This species is the northernmost record of the genus in Chile.

Description follows Galiano (1963), and leg spination follows Platnick & Shadab (1975) with minor changes. Female epigynum was cleared in clove oil to study the internal genital structures. Drawings of internal structures of epigynum were made with a camera lucida mounted on a Carl Zeiss Axioskop compound microscope. Drawings of external structures of epigynum were made on picture models using a Canon T3 digital camera mounted on a Carl Zeiss Stemi 2000-C stereoscopic microscope. Illustrations of male palp were made on picture models and using a Leica DFC 290 digital camera mounted on a Leica M165 C stereoscopic microscope. The examined material is deposited at Arachnological collections of the Museo de Zoología de la Universidad de Concepción (MZUC-UCCC, Jorge N. Artigas), Museo Nacional de Historia Natural, Chile (MNNC, Mario Elgueta) and Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” (MACN-Ar, Cristina L. Scioscia, Martín J. Ramírez). All measurements are in mm. The following abbreviations are used in the leg spination formulae: d = dorsal; p = prolateral; r = retrolateral; v = ventral; di = distal. Other abbreviations: AME: anterior median eyes; ALE: anterior lateral eyes; PME: posterior median eyes; PLE: posterior lateral eyes; RTA: retrolateral tibial apophysis.

Salticidae Blackwall, 1841

Admesturius Galiano, 1988

Admesturius mariaeugeniae Bustamante & Scioscia, new species

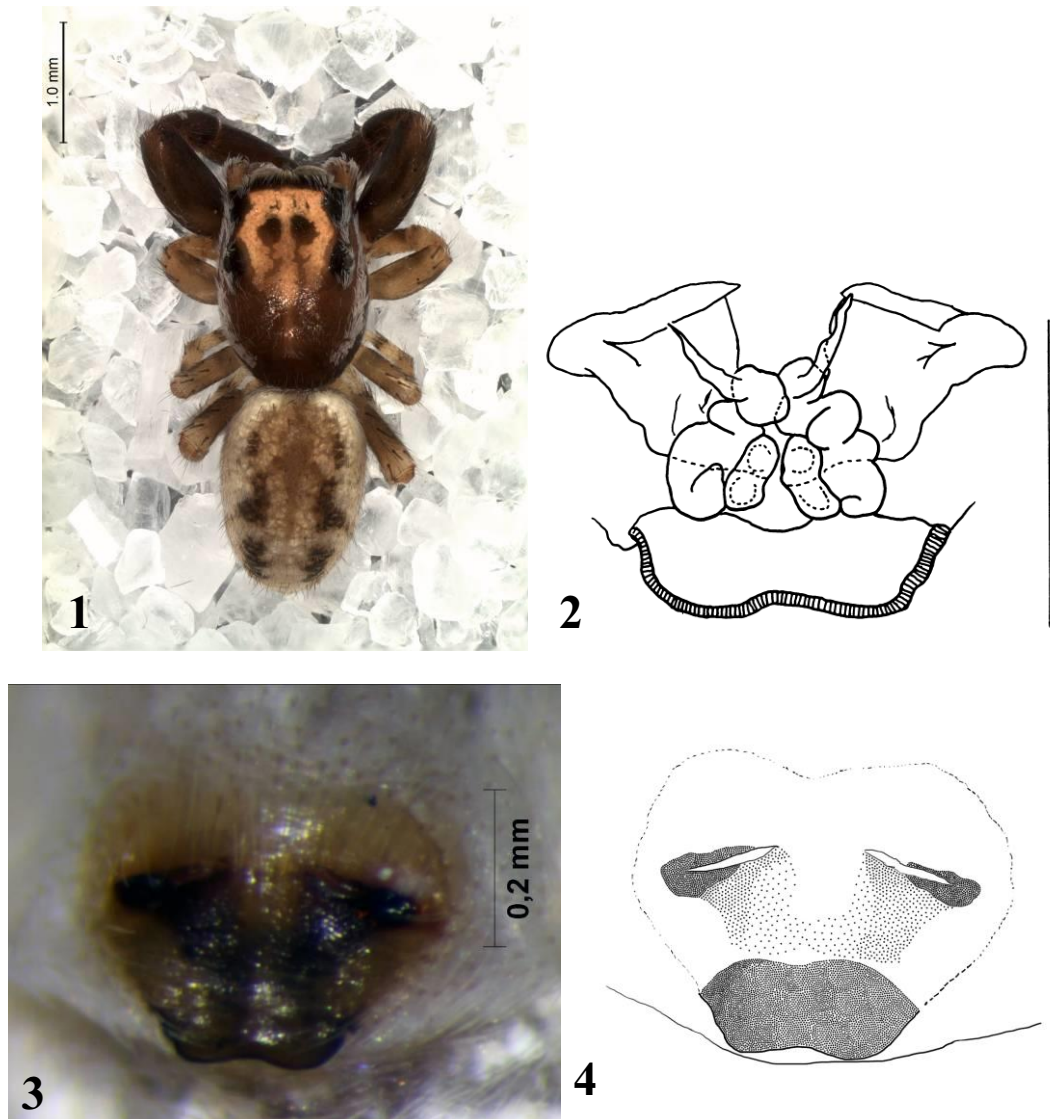
Figs. 1–8.

Type material. Male holotype (MNNC 7001 ex MACN-Ar 29471) from Región de Antofagasta (II): Prov. Antofagasta: 8,1 km NNW Paposo, 60 km (por aire) N Taltal, 24.93947° S 70.49265° W (GPS +-200m), elev. 114 m (barómetro), 27-29/Oct/2011, desierto florido, matorrales (fogging *Euphorbia*), colecta general, M. J. Ramírez, A. Ojanguren, J. Pizarro *et al.* coll. (MJR-loc-45). Paratypes: one male (MACN-Ar 29472) with same data as the holotype, one female (MZUC-UCCC 39957) 19/Oct/2012 R. Honour coll. and one male (MZUC-UCCC 39958) 18/Oct/2012 A. Lüer coll. from Región de Coquimbo (IV): La Serena, Punta Teatinos.

Etymology. The specific name is a patronymic in honor of Dr. Maria Eugenia Casanueva for her contributions to the

Chilean arachnology, her guidance to the senior author and her help and encourage during the development of the manuscript.

Diagnosis. It is easily recognized by the simple embolus, oriented to middle line of palp, the short RTA, and by the flattened and hook-shaped ventral branch of RTA rounded distally and pointing to palp dorsum (Figs 5–8). The epigynum (Figs. 2–4) resembles those of *A. bitaenitus* but the internal structures are more complex, with at least four loops in the insemination ducts. Abdomen with three pairs of dark spots on the dorsum (Fig. 1).

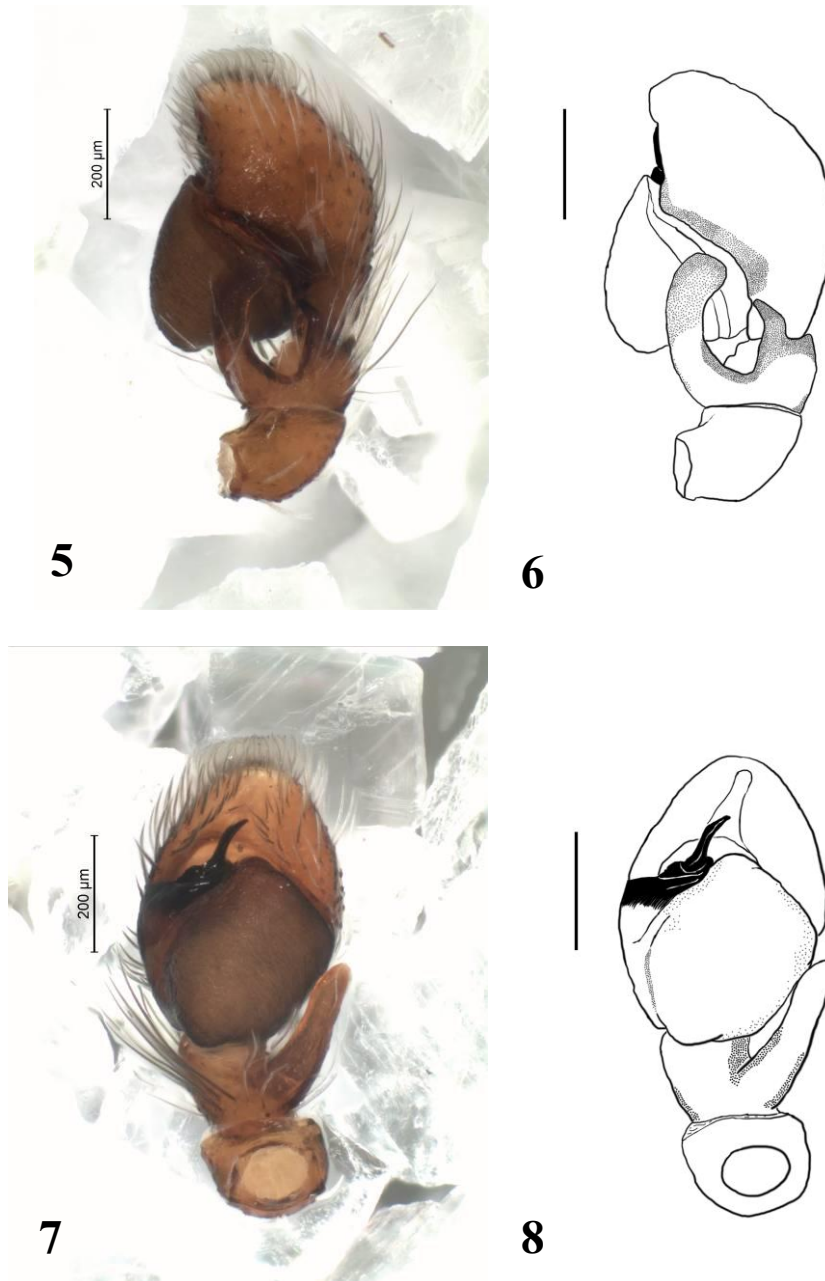


FIGURES 1–8. *Admesturius mariaeugeniae* Bustamante & Scioscia n. sp. 1, 5–8, male holotype; 2–4 female genitalia (2 internal structures, 3–4 epigynum ventral). 1 dorsal habitus. 5–8 left male palp (5–6 prolateral, 7–8 ventral). Scale bars: 2= 0.25 mm, 4, 6, 8= 0.2 mm.

Description. Male (holotype): Total length: 3.52. Carapace 1.66 long, 1.3 wide, 0.66 high. Ocular quadrangle 0.9 long. Anterior eye row 1.0 wide and posterior 1.10 wide. Distances: ALE-PME: 0.10; PME-PL: 0.28. AME diameter: 0.26. Chelicera small, with three promarginal teeth and one retromarginal tooth. Length of femur: I 1.06, II 0.76, III 0.64, IV 1.02; patella: I 0.50, II 0.40, III 0.40, IV 0.44; tibia: I 0.80, II 0.40, III 0.36, IV 0.62; metatarsus: I 0.50, II 0.36, III 0.36, IV 0.46; tarsus: I 0.36, II 0.30, III 0.24, IV 0.40. Leg formulae: 1423. Leg spination (variation in parenthesis): femora: I d1-1, p1di; II d1-1, p1di; III d1-1, p1 (right p1-1), p1di, r1di; IV d1-1-1, p1di, r1di; tibiae: I v2; II v1r; III p1, v1p, r1; IV p1, v1p-2, r1; metatarsi: I v2-2; II v2-2; III d2di, v2-1p di; IV d1p-1r (right d1p) -2di, p1-1di, v2di. Palp (figs. 5–8): RTA with two branches, one of them (dorsal branch) finger-like, smaller and more sclerotized than the ventral

branch of RTA. Cymbium with some white scales retrolaterally. Bulb rounded with a prolateral-distal embolus. Color in alcohol: Carapace brown with ocular quadrangle yellow and two dark spots in the middle. A stripe of white scales covering the sides of carapace below lateral eyes. Abdomen yellow with three pairs of dark brown spots. Leg I dark brown, tarsus I and legs II to IV brown.

Variation (two specimens): Total length 3.34–3.80, carapace length 1.64–1.80, carapace width 1.30 (both), carapace high 0.72–0.64, Ocular quadrangle length 0.9–0.98.



FIGURES 1–8. *Admesturius mariaeugeniae* Bustamante & Scioscia **n. sp.** 1, 5–8, male holotype; 2–4 female genitalia (2 internal structures, 3–4 epigynum ventral). 1 dorsal habitus. 5–8 left male palp (5–6 prolateral, 7–8 ventral). Scale bars: 2= 0.25 mm, 4, 6, 8= 0.2 mm.

Female (paratype): Total length: 3.85. Carapace 1.75 long, 1.2 wide, 0.85 high. Ocular quadrangle 0.55 long. Anterior eye row 1.05 wide and posterior 1.15 wide. Distances: ALE-PME: 0.12; PME-PLE: 0.32. AME diameter: 0.38. Chelicera small, with four promarginal teeth and one retromarginal tooth. Length of femur: I 0.84, II 0.80, III 0.70, IV 1.0; patella: I 0.60, II 0.50, III 0.30, IV 0.60; tibia: I 0.62, II 0.44, III 0.40, IV 0.50; metatarsus: I 0.44, II 0.34, III 0.36, IV

0.56; tarsus: I 0.26, II 0.30, III 0.36, IV 0.44. Leg formulae: 4123. Leg spination (variation in parenthesis): femora: I d1 (right d0); II p1di; III d1, p2di (right p1di), r1di; IV d1-1 (right d1-1-1), p1di, r1di (right r0); tibiae: I v1r-2; II v1-1; III no spines; IV d1r, v1-2di, p1; metatarsi: I v2-2; II v2-2; III d2di, v2-1di; IV d1-2di, v1p-2di, p1di. Epigynum (Figs. 2–4): Posterior edge bilobed, slightly overtaking the epigastric furrow. With two straight and transverse slits leading to insemination ducts. Insemination ducts long and convoluted with at least four loops, spermathecae small and rounded. Color in alcohol: As the male, with light brown legs.

Distribution. Only known from Antofagasta and La Serena Regions in the Atacama-desert, Chile.

Life history and habitat preferences. Some specimens were collected by fogging technique from the succulent plant *Euphorbia*.

Acknowledgements

To Milenko Aguilera and Gustavo Ruiz for their comments on the manuscript. To Erika Altamirano for provide help with some figures. To Antonio Bustamante and Carmen Ferrada for their continued support during the research and to Richard Honour for providing some specimens. This project was supported by grant DIUC 210.113.078-1.0 from Universidad de Concepción, Chile.

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