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First record of the jumping spider genus *Balmaceda* Peckham & Peckham (Salticidae: Salticinae: Dendryphantini) from Colombia

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Abstract. A first record of the jumping spider genus *Balmaceda* Peckham & Peckham, 1894 (Salticidae: Salticinae: Dendryphantini) from Colombia is presented, with a new record of *B. nigrosecta* Mello-Leitão, 1945 from the Andean department of Antioquia, and a new record of *B. picta* Peckham & Peckham, 1894 from the Chocoan department of Nariño. A map with the known distribution of these species in Colombia is included.

Keywords. faunistics, Neotropical region, taxonomy

Introduction

The tribe Dendryphantini Menge, 1879 (Salticidae: Salticinae) currently includes about 740 species in 72 genera and 4 subtribes (Maddison, 2015). Of its four subtribes, the Marpissina Simon, 1901 is comprised of about 109 species in 10 genera, most of which are restricted to the New World (Table 1).

Table 1. Genera assigned to the subtribe Marpissina (Maddison, 2015; World Spider Catalog, 2018). Species counts for *Balmaceda*, *Maevia* and *Paramaevia* (*) are subject to results of a revision of these genera in progress (Hill, pers. comm.).

Genus	Distribution	Species described
Balmaceda Peckham & Peckham, 1894	Central and South America	*8
Empanda Simon, 1903	Central America	1
Fuentes Peckham & Peckham, 1894	Mexico to Central America	2
Maevia C. L. Koch, 1846	North America, also reported from Peru and Sumatra (old 1878 and 1882 records unverified)	*8
Marpissa C. L. Koch, 1846	Cosmopolitan but mostly Holarctic	53
Mendoza Peckham & Peckham, 1894	Palaearctic Eurasia	9
Metacyrba F. O. Pickard-Cambridge, 1901	North America to northern South America	7
Paramaevia Barnes, 1955	North America	*3
Platycryptus Hill, 1979	Canada to Argentina	4
Psecas C. L. Koch, 1850	Central and South America	14

The genus *Balmaceda* was described by Peckham & Peckham (1894) and currently includes eight valid species (World Spider Catalog, 2018). It was partially revised by Edwards (2006) who compared *Balmaceda* to related genera. *Balmaceda* are similar to marpissines of the genera *Metacyrba* and *Platycryptus* with respect to the shape of the body and external genitalia, but can be separated from those genera by their very hirsute bodies, cryptic gray and brown color patterns including a transverse median abdominal band, medium body length, the presence of oblique epigynal slits in females, male pedipalps with the tip of the dorsal prong of the RTA nearly straight like *Metacyrba*, or curved ventrally but thicker and shorter like *Platycryptus*, and the absence of a ventral retromedial tegular tubercle (Edwards, 2006; Rubio et al., 2016).

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Here we present two new records of the genus *Balmaceda* from Colombia. *B. nigrosecta* Mello-Leitão, 1945 is reported from the Andean department of Antioquia, and *B. picta* Peckham & Peckham, 1894 is reported from the Chocoan department of Nariño.

Materials and methods

The 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, and then united by the image stacking software *Leica Application Suite* version 4.6.0.

Taxonomy

Salticidae Blackwall, 1841
Salticinae Blackwall, 1841
Dendryphantini Menge, 1879
Marpissina Simon, 1901

Balmaceda Peckham & Peckham, 1894

Balmaceda Peckham & Peckham, 1894: 100; type species: Balmaceda picta Peckham & Peckham, 1894: 101.

For diagnosis and further taxonomic information, see Edwards (2006).

Balmaceda nigrosecta Mello-Leitão, 1945

Figures 1-5, 8

Balmaceda nigrosecta Mello-Leitão, 1945: 277; Edwards, 2006: 211, figs. 123-126; Rubio et al., 2016: 13, figs. 1-11; World Spider Catalog, 2018.

Metacyrba nigrosecta Galiano, 1980: 35.

Material examined. 1 σ from Colombia, Antioquia, Barbosa, Vereda Buga, 6.458861 $^{\circ}$ N, 75.348222 $^{\circ}$ W, 1300 m, 8.I.2017, O. Pulgarín (ICN-Ar 8339).

Note. For diagnosis and further taxonomic information (along with a diagnostic comparison with *B. picta*), see Rubio et al. (2016: 13). Based on pedipalp morphology and body coloration, *B. nigrosecta* might be a synonym of *B. anulipes* Soares, 1942.

Distribution and Natural History. B. nigrosecta is known only from Argentina (Misiones Province) (World Spider Catalog, 2018). This is a new record of the genus and species from Colombia (Figure 8). To add to information previously reported by Rubio et al. (2016), this species was collected by hand during the day in an intervened Andean ecosystem, suggesting that this species could easily inhabit an urban perimeter.

Balmaceda picta Peckham & Peckham, 1894

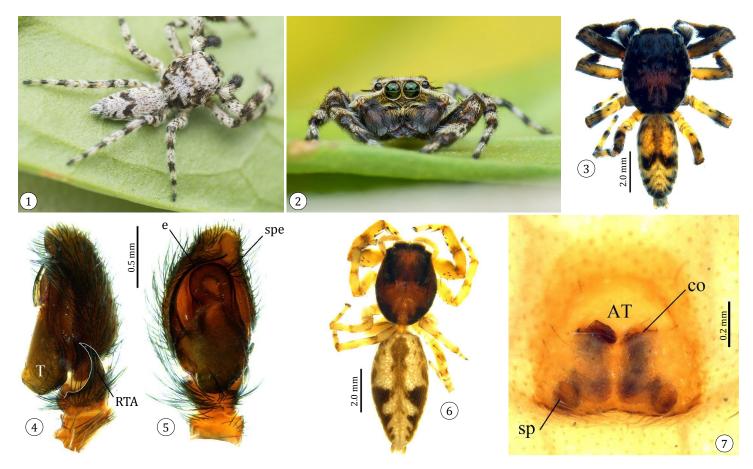
Figures 6-8

Balmaceda picta Peckham & Peckham, 1894: 101, pl. 10, fig. 1; F.O. Pickard-Cambridge, 1901: 297, pl. 28, figs. 18-19; Chickering, 1946: 61, figs. 42-44; Edwards, 2006: 211, figs. 115-122; World Spider Catalog, 2018.

Material examined. 19 from Colombia, Nariño, Tumaco, Sede Universidad Nacional de Colombia, 1.8°N, 78.75°W, 30 m, 4-14.III.2015, W. Galvis (ICN-Ar 8584).

Note. For diagnosis and further taxonomic information including a diagnostic comparison with *B. nigrosecta* see Edwards (2006: 211) and Rubio et al. (2016: 13).

Distribution and Natural History. Previously known from Guatemala (Izabal) and Panama (Canal Zone Biological Area) (World Spider Catalog, 2018). This is a new record of the genus and species from Colombia (Figure 8), representing the southernmost record of the species (Figure 8). The female specimen was collected by beating low scrubs in the daytime, in a secondary Chocoan wet forest.



Figures 1-7. 1-2, Dorsal and frontal views of living σ *Balmaceda nigrosecta* (ICN-Ar 8339) from Colombia. Photographs by Ovidio Pulgarín. **3,** Habitus of σ *Balmaceda nigrosecta* (ICN-Ar 8339). **4,** Same, retrolateral view of left pedipalp. **5,** Same, ventral view of left pedipalp. **6,** Habitus of φ *B. picta* (ICN-Ar 8584). **7,** Same, ventral view of epigynum. Abbreviations: AT=atrium, e=embolus, co=copulatory opening, sp=spermatheca, spe=spermophore, RTA=retrolateral tibial apophysis.



Figure 8. Known distribution of the genus *Balmaceda* in Colombia. 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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References

- **Chickering, A. M. 1946.** The Salticidae of Panama. Bulletin of the Museum of Comparative Zoology at Harvard College 97: 1-474.
- **Edwards, G. B. 2006.** A review of described *Metacyrba*, the status of *Parkella*, and notes on *Platycryptus* and *Balmaceda*, with a comparison of the genera (Araneae: Salticidae: Marpissinae). Insecta Mundi 19: 193-226.
- **Galiano, M. E. 1980.** Catálogo de los especímenes típicos de Salticidae (Araneae) descriptos por Cándido F. de Mello-Leitão. Primera parte. Physis, Revista de la Sociedad Argentina de Ciencias Naturales (C) 39: 31-40.
- **Maddison, W. P. 2015.** A phylogenetic classification of jumping spiders (Araneae: Salticidae). Journal of Arachnology 43: 231-292.
- Mello-Leitão, C. F. de. 1945. Arañas de Misiones, Corrientes y Entre Ríos. Revista del Museo de La Plata (N.S., Zool.) 4: 213-302.
- **Peckham, G. W. and E. G. Peckham. 1894.** Spiders of the *Marptusa* group. Occasional Papers of the Natural History Society of Wisconsin 2: 85-156.
- **Pickard-Cambridge, F. O. 1901.** Arachnida Araneida and Opiliones. In: Biologia Centrali-Americana, Zoology. London 2, 193-312.
- **Rubio, G. D., J. E. Baigorria and G. B. Edwards. 2016.** First description of the female of the jumping spider *Balmaceda nigrosecta* Mello-Leitão (Salticidae, Dendryphantini, Marpissina). ZooKeys 563: 11-19.
- **World Spider Catalog. 2018.** Natural History Museum Bern, *online at* http://wsc.nmbe.ch, version 19.0, accessed on 8 March 2018.