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Taxonomic revision of *Scopocira* Simon, 1900 (Araneae: Salticidae)

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Abstract

The genus *Scopocira* Simon, 1900 is revised and six valid species are redescribed and illustrated: *S. carinata* Crane, 1945, *S. dentichelis* Simon, 1900, *S. fuscimana* (Mello-Leitão, 1941), *S. histrio* Simon, 1900, *S. melanops* (Taczanowski, 1871) and *S. tenella* Simon, 1900. The following synonymies are established: *S. vivida* (Peckham & Peckham, 1901) = *S. histrio* Simon, 1900 **syn. nov.**; *S. panamena* Chamberlin & Ivie, 1936 = *S. dentichelis* Simon, 1900 **syn. nov.** The males of *S. fuscimana* (Mello-Leitão, 1941) and *S. melanops* (Taczanowski, 1871) are described and illustrated for the first time. Both sexes of *S. abaporu* **sp. nov.**, *S. bicornia* **sp. nov.**, *S. cepa* **sp. nov.**, *S. cyrili* **sp. nov.** and *S. kunai* **sp. nov.**, and males of *S. crotalica* **sp. nov.**, *S. pterodactyla* **sp. nov.** and *S. sciosciae* **sp. nov.**, all eight from South America, are described and illustrated, increasing the present member list up to 14 species. Record maps are given. *Scopocira atypica* Mello-Leitão, 1922 is considered *species inquirenda*.

Key words: *Grauhara*, *Paranaia*, *Suaruna*, systematics, taxonomy, jumping spider

Introduction

The clade Amycoida (Maddison & Heddin 2003) comprises a great percentage of the Neotropical jumping spider diversity. In fact, the group has flourished in South America since 32–39 Ma (Bodner & Maddison 2012), period during which this land mass became isolated from all the others. The radiation resulted in a great variety of colors, shapes and sizes, including several lineages of beetle- and ant-mimics. Maddison *et al.* (2008) confirmed that the ant-mimic *Synemosyna* Hentz, for instance, was not closely related to other ant-mimic amycoids, such as *Sarinda* Peckham & Peckham and *Zuniga* Peckham & Peckham. Conversely, closer to *Sarinda* and *Zuniga* they found non ant-mimic lineages, such as *Cyllodania* Simon, *Arachnomura* Mello-Leitão, and *Scopocira* Simon. Although Maddison *et al.* (2008) were not trying to determine the relationships within the amycoids, morphology of female reproductive structures seems to support such grouping: *Sarinda*, *Zuniga*, *Cyllodania*, *Arachnomura* and *Scopocira* have globular spermathecae anteriorly placed beneath the epigynal plate. Nevertheless, a more thorough understanding of the phylogenetic relationships within the amycoids is expected to be released in the following years (Ruiz & Maddison, in prep.).

The genus *Scopocira* Simon, 1900 comprises a group of similar species, hard to identify without the examination of reproductive organs. Even the examination of female genital structures is of limited use in species recognition, leaving most diagnostic features for the male palp. The group monophyly may be supported by several apomorphic states of characters, such as the apophysis on the prolateral face of the male chelicera, exclusive for the genus (Galiano, 1958), or even the embolus arising from the retrolateral side of the tegulum, unusual in dionychans.

The genus was proposed by Eugène Simon (1900) to include the type species *S. dentichelis* Simon, 1900 from Venezuela, and *S. tenella* Simon, 1900 and *S. histrio* Simon, 1900 from Brazil. Peckham & Peckham (1901) described *Grauhara vivida* from Brazil, but Simon (1903) synonymized the genus with *Scopocira*, being *G. vivida* tranferred. Until the 40's we had the following additions: *S. atypica* Mello-Leitão, 1922 from Brazil, *S. panamena* Chamberlin & Ivie, 1936 from Panama and *S. carinata* Crane, 1945 from Guyana.

Contributions by Galiano began in 1958, when she described *S. pikelinae* from Argentina and synonymized

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Female (MPEG 20835). Total length: 3.83. Carapace orange, 1.62 long, 1.07 wide, 0.65 high (Fig 183). Ocular quadrangle 0.89 long. Anterior eye row 1.07 wide and posterior 0.96 wide. Legs 4132, light yellow. Length of femur: I 1.13, II 0.86, III 0.84, IV 1.14; patella + tibia: I 1.45, II 1.03, III 0.99, IV 1.35; metatarsus + tarsus: I 1.10, II 0.91, III 1.02, IV 1.08. Spination as in male. Abdomen as in male. Epigyne as in Figs 184–185.

Distribution. French Guiana; Brazil (Amapá, Amazonas, Pará, Bahia, Espírito Santo) (Fig. 192).

Scopocira atypica Mello-Leitão, 1922

Scopocira atypica Mello-Leitão, 1922: 217 [Male holotype from Pinheiral, Rio de Janeiro, Brazil, deposited in MNRJ 1380, not examined, lost (Silva-Moreira *et al.* 2010)]; World Spider Catalog, 2014.

Note. Probably not a species of this genus. Mello-Leitão (1922: 217) mentioned verticiles of spines on metatarsi of posterior legs. No true *Scopocira* species examined here have spines on posterior metatarsi. Since the type specimen is lost (Silva-Moreira *el al.* 2010: 58) and the original description does not have any illustration, the species cannot be recognized and is treated as *species inquirendae*.

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REFERENCES

Bennet, R.G. (1992) The spermathecal pores of spiders with special reference to Dictynoids and Amaurobioids (Araneae, Araneomorphae, Araneoclada). *Proceedings of the Entomological Society of Ontario*, 123, 1–21.

Bodner, M.R. & Maddison, W.P. (2012) The biogeography and age of salticid spider radiations (Araneae: Salticidae). *Molecular Phylogenetics and Evolution*, 65, 213–240. http://dx.doi.org/10.1016/j.ympev.2012.06.005

Caporiacco, L. di. (1947) Diagnosi preliminari de specie nuove di aracnidi della Guiana Brittanica raccolte dai professori Beccari e Romiti. *Monitore Zoologico Italiano*, 56, 20–34.

Caporiacco, L. di. (1948) Arachnida of British Guiana collected in 1931 and 1936 by Professors Beccari and Romiti. *Proceedings of the Zoological Society of London*, 118, 607–747. http://dx.doi.org/10.1111/j.1096-3642.1948.tb00402.x

Chamberlin, R.V. & Ivie, W. (1936) New spiders from Mexico and Panama. *Bulletin of the University of Utah*, 27 (5), 1–103.

Chickering, A.M. (1946) The Salticidae of Panama. *Bulletin of the Museum of Comparative Zoolology Harvard*, 97, 1–474.

Crane, J. (1945) Spiders of the family Salticidae from British Guiana and Venezuela. *Zoologica (New York)*, 30, 33–42.

Galiano, M.E. (1958) Novedades sobre los géneros *Scopocira* y *Gypogyna* Simon (Araneae, Salticidae). *Revista de la Sociedad Entomológica Argentina*, 20, 21–31.

Galiano, M.E. (1963) Las especies americanas de arañas de la familia Salticidae descriptas por Eugène Simon: Redescripciones basadas en los ejemplares típicos. *Physis B. Aires (CI)*, 23, 273–470.

Galiano, M.E. (1969) Salticidae (Araneae) formiciformes. VII. El género *Myrmarachne* Mac Leay, 1839, en América. *Revista del Museo Argentino de Ciencias Naturales Bernardino Rividavia (Ent.)*, 3, 107–148.

Galiano, M.E. (1981) Catálogo de los especímenes típicos de Salticidae (Araneae) descriptos por Cândido F. de Mello-Leitão. Segunda parte. *Physis, Revista de la Sociedad Argentina de Ciencias Naturales* (Secc. C), 39, 11–17.

Galiano, M.E. (1982) New combinations and synonymies in Salticidae (Araneae). *Bulletin of the British Arachnological Society*, 5, 423–424.

Galiano, M.E. (1995) Descripción de *Uspachus*, nuevo género (Araneae, Salticidae). *Physis B. Aires (C)*, 50, 121–142.

Levi, H.W. (1965) Techniques for the study of spider genitalia. *Psyche*, 72, 152–158.
http://dx.doi.org/10.1155/1965/94978
Maddison, W.P. & Hedin, M.C. (2003) Jumping spider phylogeny (Araneae: Salticidae). *Invertebrate Systematics*, 17, 529–549.
http://dx.doi.org/10.1071/is02044
Maddison, W.P., Bodner, M.R. & Needham, K.M. (2008) Salticid spider phylogeny revisited, with the discovery of a large Australasian clade (Araneae: Salticidae). *Zootaxa*, 1893, 49–64.
Mello-Leitão, C.F. de (1922) Quelques araignées nouvelles ou peu connues du Brésil. *Annales de la Societé Entomologique de France*, 91, 209–228.
Mello-Leitão, C.F. de (1941) Aranhas do Paraná. *Archivos do Instituto Biológico de São Paulo*, 11, 235–257.
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. & Peckham, E.G. (1901) *Pellenes* and some other genera of the family Attidae. *Bulletin of the Wisconsin Natural History Society (N.S.)*, 1, 195–233.
Petrunkevitch, A. (1925) Arachnida from Panama. *Transactions of the Connecticut Academy of Arts and Sciences*, 27, 51–248.
Ruiz, G.R.S. (2013) Nine new species of *Soesilarishius* from Brazil (Araneae: Salticidae: Euophryinae). *Zootaxa*, 3664 (4), 586–600.
http://dx.doi.org/10.11646/zootaxa.3664.4.10
Sherman, G.E., Sutton, T., Blazek, R., Holl, S., Dassau, O., Morely, B., Mitchell, T. & Luthman, L. (2012) *Quantum GIS User Guide* - Version 1.8 "Wroclaw". Available from: http://download.osgeo.org/qgis/doc/manual/qgis-1.8.0_user_guide_en.pdf (accessed 10 November 2014)
Silva-Moreira, T., Baptista, R.L.C., Kury, A.B., Giupponi, A.P.L., Buckup, E.H. & Brescovit, A.B. (2010) Annotated check list of Arachnida type specimens deposited in the Museu Nacional, Rio de Janeiro. II – Araneae. *Zootaxa*, 2588, 1–91.
Simon, E. (1900) Descriptions d'arachnides nouveaux de la famille des Attidae. *Annales de la Societé Entomologique de Belgique*, 44, 381–407.
Simon, E. (1901) *Histoire naturelle des araignées*. *2 (3)*. Paris, 288 pp. [pp. 381–668]
Simon, E. (1903) *Histoire naturelle des araignées*. *2 (4)*. Paris, 412 pp. [pp. 669–1080]
Taczanowski, L. (1871) Les aranéides de la Guyane Française. *Horae Societatis Entomologicae Rossicae*, 8, 32–132.
World Spider Catalog (2014) *World Spider Catalog*. Natural History Museum Bern, online at http://wsc.nmbe.ch, version 15.5, accessed on 20.XI.2014.Ruiz, G.R.S. (2011) Systematics of the genus *Soesilarishius* (Araneae: Salticidae: Euophryinae). *Zootaxa*, 3022, 22–38.