

Revision of the *acutidens* group of *Mago* (Araneae: Salticidae: Amycinae)

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Abstract

Of all the amycines, the *acutidens* group of species of *Mago* is one of the most commonly collected groups throughout the Amazon. Redescriptions of *M. acutidens* Simon and *M. longidens* Simon by Galiano initially helped separating the two species, but then it became clear that we were dealing with a group of several similar species demanding revision. In order to make identification possible, we present here a revision of this newly proposed group of species, providing illustrations of the male palp and epigyne for all the recognized species. The female of *M. longidens* Simon is described for the first time. Besides the new records for both *M. acutidens* and *M. longidens*, we present *M. jurutiensis* sp. nov. and *M. similis* sp. nov. from Juruti, Pará, Brazil, *M. delicatus* sp. nov. from several localities in the Brazilian states of Amazonas and Pará, and *M. balbina* sp. nov. from Presidente Figueiredo, Amazonas. Maps with collecting records for all species of the group are presented.

Key words: Amazon, amycines, systematics, taxonomy, jumping spider

Introduction

The Amycoida is a large clade of jumping spiders that has flourished in the Neotropics (Maddison & Hedin, 2003). Among the several subfamilies and informal groups, the Amycinae are easily recognizable, diverse and one of the dominant groups in the Amazon (Galiano, 1968). The genus *Mago* O.P.-Cambridge presently gathers 14 described species (Platnick, 2014), most of them from areas with rain forest in South America. Simon (1900) described six of these species, including *M. acutidens* and *M. longidens*. These two are similar both in color pattern and external reproductive structures, differing in details on the embolus of male palps. *Mago longidens* was known from a few localities, while *M. acutidens* seemed to be the dominant species of the genus in the Amazon, being commonly collected throughout the Brazilian states covered with rain forest. However, a more careful exam of specimens of this species led us to conclude that we were dealing with more than a single taxon. Hence, new species should be described. The illustrations of the lectotype of *M. acutidens* by Galiano (1963), although, did not allow us to define which of our species should bear Simon's name and which should be described as new. The revision of Simon's type specimens, then, became necessary to clarify this situation.

Material and methods

The material examined belongs to MNHN, Muséum Nationale d'Histoire Naturelle, Paris and the following Brazilian institutions: IBSP, Instituto Butantan, São Paulo; INPA, Instituto Nacional de Pesquisas da Amazônia, Manaus; MCTP, Museu de Ciências e Tecnologia, Pontifícia Universidade Católica, Porto Alegre; MPEG, Museu Paraense Emílio Goeldi, Belém.

Species are ordered according to morphological similarity. The number of males, females and juveniles examined as additional material is followed by “m”, “f” and “j”, respectively. Measurements are expressed in millimeters and were taken according to Edwards (2004, fig. 1). Anterior median eyes were included in both the total length and carapace length values. Total length also includes the anal tubercle. Carapace height was taken

quadrangle: 1.80; anterior eye row 2.28 wide, posterior 2.09 wide. Legs 3412. Length of femur I: 1.90; II: 1.80; III: 2.37; IV: 2.18; patella+tibia I: 2.47; II: 2.18; III: 2.47; IV: 2.28; metatarsus+tarsus I: 1.61; II: 1.52; III: 2.09; IV: 2.28.

Additional material examined. FRENCH GUIANA: Réserve Naturelle National de la Trinité [4.583333°N 53.3°W], 3m 6f, X.2008–XII.2010, C. Courtial (MNHN); BRAZIL, **Pará**: Melgaço (Floresta Nacional de Caxiuana) [1.792306°S 51.434028°W], 3m 1f, 11.VIII.1996, A.A. Lise (MCTP 9461, 37173); Belém (Parque Estadual do Utinga) [1.421897°S 48.426539°W], 1m 1f, 2012, G.R.S. Ruiz (MPEG 21097–21098); 5m 2f, 2011, E.L.S. Costa (MPEG 21099–21105).

Distribution. Known from French Guiana and from the Brazilian states of Amazonas and Pará (Fig. 46).

Acknowledgments

We wish to thank the Institutional Program for Scientific Initiation (Universidade Federal do Pará) for having financially supported TJCP during this research. Arno Lise (MCTP), Célio Guimarães/Lidianne Salvatierra (INPA), Christine Rollard/Elise-Anne Leguin (MNHN) and Cyril Courtial (Université de Rennes) for sending material and Antonio Brescovit (IBSP) and Alexandre Bonaldo (MPEG) for allowing collection exam. We also thank Alexandre B. Bonaldo for equipment lending and Hilton T. Costi and Tarcymara B. Garcia for helping with the photomicroographies.

References

- Cambridge, O.P. (1882) On new genera and species of Araneidea. *Proceeding of the Zoological Society of London*, 1882, 423–442.
- Caporiacco, L. di. (1948) Arachnida of British Guiana collected in 1931 and 1936 by Professors Beccari and Romiti. *Proceeding of the Zoological Society of London*, 118, 607–747.
<http://dx.doi.org/10.1111/j.1096-3642.1948.tb00402.x>
- Caporiacco, L. di. (1954) Araignées de la Guyane Française du Muséum d'Histoire Naturelle de Paris. *Commentationes Pontificiae Academiae Scientiarum*, 16, 45–193.
- Edwards, G.B. (2004) Revision of the jumping spiders of the genus *Phidippus* (Araneae: Salticidae). *Occasional Papers of the Florida State Collection of Arthropods*, 11, 1–156.
- Galiano, M.E. (1963) Las especies americanas de arañas de la familia Salticidae descriptas por Eugène Simon. Redescripciones basadas en los ejemplares típicos. *Physis (C)* (Buenos Aires), 23, 273–470.
- Galiano, M.E. (1968) Revisión de los géneros *Acragás*, *Amycus*, *Encolpius*, *Hypaeus*, *Mago* y *Noegus* (Salticidae, Araneae). *Revista del Museo Argentino de Ciencias Naturales Bernardino Rivadavia (Entomología)*, 2, 267–360.
- 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. (2003) Jumping spider phylogeny (Araneae: Salticidae). *Invertebrate Systematics*, 17, 529–549.
<http://dx.doi.org/10.1071/is02044>
- Petrunkewitch, A. (1925) Arachnida from Panama. *Transactions of Connecticut Academy of Arts and Sciences*, 27, 51–248.
- Platnick, N.I. (2014) *The world spider catalog*, version 14.5. American Museum of Natural History, online at <http://research.amnh.org/iz/spiders/catalog/SALTICIDAE.html> (accessed 9 March 2014)
- Ruiz, G.R.S. & Brescovit, A.D. (2005) Notes on the Venezuelan jumping spiders described by Caporiacco (Araneae, Salticidae). *Revista Brasileira de Zoologia*, 22, 753–760.
<http://dx.doi.org/10.1590/s0101-81752005000300036>
- Ruiz, G.R.S., Brescovit, A.D. & Lise, A.A. (2007) On the taxonomy of some neotropical species of jumping spiders described by Caporiacco (Araneae, Salticidae). *Revista Brasileira de Zoologia*, 24, 376–381.
<http://dx.doi.org/10.1590/s0101-81752007000200016>
- Ruiz, G.R.S. & Brescovit, A.D. (2008) Redescription and resolution of some Neotropical species of jumping spiders described by Caporiacco and description of a new species (Araneae: Salticidae). *Revista Brasileira de Zoologia*, 25, 487–494.
<http://dx.doi.org/10.1590/s0101-81752008000300013>
- Simon, E. (1900) Études arachnologiques. 30e Mémoire. XLVII. Descriptions d'espèces nouvelles de la famille des Attidae. *Annales de la Societ Entomologique de France*, 69, 27–61.
- Simon, E. (1901) *Histoire naturelle des araignées*. Vol. 2. Paris, 381–668 pp.