On the authorship of the Costa Rican bolas spider *Mastophora caesariata* Levi, 2006 (Araneae: Araneidae)

Danniella Sherwood

Arachnology Research Association, United Kingdom. danni.sherwood@hotmail.com

Abstract: The authorship of the bolas spider *Mastophora caesariata* Levi, 2006, which was described in Eberhard & Levi (2006) based on a female holotype from Costa Rica, is briefly discussed and clarified following Article 50.1 of the International Code of Zoological Nomenclature.
Key words: Araneae, Araneidae, taxonomy, systematics, nomenclature, Costa Rica.

Sobre la autoría de la araña bolas de Costa Rica *Mastophora caesariata* Levi, 2006 (Araneae: Araneidae)
Resumen: La autoría de la araña bolas *Mastophora caesariata* Levi, 2006, que fue descrita en Eberhard & Levi (2006) sobre un holotipo hembra de Costa Rica, se discute brevemente y se aclara siguiendo el Artículo 50.1 del Código Internacional de Nomenclatura Zoológica.
Palabras clave: Araneae, Araneidae, taxonomía, sistemática, nomenclatura, Costa Rica.

The genus *Mastophora* Holmberg, 1876 currently contains fifty valid taxa distributed exclusively in the New World (World Spider Catalog, 2020) with the most recent comprehensive treatments of the group being made by Levi (2003, 2006). Like other bolas spiders, *Mastophora* species use a specialised technique to catch prey, swinging a "bolas" (in actuality, a web structure consisting of an adhesive droplet attached to the end of a silk thread) at prey items (Eberhard, 1977), which are attracted to the vicinity of the spider by chemical mimicry (Stowe, Tumlinson & Heath, 1987; Yeargan, 1994; Gemeno, Yeargan & Haynes, 2000).

Eberhard & Levi (2006) published an important work which described the behaviour and egg sac morphology of a previously undescribed species of *Mastophora*, which was subsequently described in the same work as *Mastophora caesariata* based on a female holotype. In their work, the authors state in the material and methods section:"For taxonomic purposes, the author of this species is H. W. Levi" (Eberhard & Levi, 2006: 337). This is because the second author undertook the taxonomic work for the manuscript, whilst the initial collection of the specimen and the behavioural work was undertaken by the first author (Eberhard pers. comm.). Presumably, their statement has been overlooked (perhaps as the author designation was somewhat cryptically located in the methods and all references to *M. caesariata* by explicit mention in the work are not given as *M. caesariata* Levi sp. n. but simply as "*M. caesariata* sp. n.") as this species is listed in both the current version of the World Spider Catalog (2020), and in previous versions of the earlier catalog in its older format that were produced after the original description of the species, with the authority "Eberhard & Levi, 2006". However, given the two aforementioned points, it is very easy to understand how this minor mistake of dual-author attribution was made and remained unnoticed.

Thus, in accordance with Article 50.1 of the International Code of Zoological Nomenclature (ICZN, 1999) which states "… If a work is by more than one person but it is clear from the contents that only one of these is responsible for the name or act, then that person is the author;..." the correct authorship of this species is: *Mastophora caesariata* Levi, 2006. Since its original description, *M. caesariata* does not appear to have been cited in any subsequently published taxonomic works, but it is briefly referenced in two unpublished theses (Zhang, 2013; da Silva, 2019). All presently known information about its distribution, behaviour and morphology remain derived from its original description.

Acknowledgements

I would like to thank Bill Eberhard (Smithsonian Tropical Research Institute, Panama) for his kind encouragement for me to publish this short note, Neal Evenhuis (Bishop Museum, Honolulu) for helpful discussion on the Code, and Theo Blick (World Spider Catalog) for invaluable comments on the manuscript.

References

EBERHARD, W. G. 1977. Aggressive chemical mimicry by a bolas spider. *Science*, **198**: 1173–1175.

EBERHARD, W. G. & H. W. LEVI 2006. Camouflage and chemical defence in a bolas spider, *Mastophora caesariata* sp. n. (Araneae, Araneidae). *Bulletin of the British Arachnological Society*, **13**: 337–340.

GEMENO, C., K. V. YEARGAN & K. F. HAYNES 2000. Aggressive chemical mimicry by the bolas spider *Mastophora hutchinsoni*: identification and quantification of a major prey's sex pheromone components in the spider's volatile emissions. *Journal of Chemical Ecology*, **26**(5): 1235–1243.

ICZN. 1999. *International code of zoological nomenclature. Fourth Edition*. London (International Trust for Zoological Nomenclature): i–xxix + 1–306.

LEVI, H. W. 2003. The bolas spiders of the genus *Mastophora* (Araneae: Araneidae). *Bulletin of the Museum of Comparative Zoology*, **157**: 309–382.

LEVI, H. W. 2006. A new *Mastophora* from Argentina and the male of *Mastophora vaquera* (Araneae, Araneidae). *Journal of Arachnology*, **34**(1): 244–246.

SILVA, P. R. DA 2019. Padrões biogeográficos e estruturação do conhecimento taxonômico das aranhas araneoideas americanas. Unpublished MSc thesis, Universidade Federal de Minas Gerais, 83 pp.

STOWE, M. K., J. H. TUMLINSON & R. R. HEATH 1987. Chemical mimicry: bolas spiders emit components of moth prey species sex pheromones. *Science*, **236**(4804): 964–967.

WORLD SPIDER CATALOG. 2020. *World Spider Catalog. Version 21.5*. Natural History Museum Bern, online at: http://wsc.nmbe.ch

YEARGAN, K. V. 1994. Biology of bolas spiders. *Annual Review of Entomology*, **39**: 81–99.

ZHANG, S. C. 2013. Chemical defences in web-building spiders. Unpublished PhD thesis, National University of Singapore, 198 pp.