



<http://dx.doi.org/10.11646/zootaxa.3947.3.8>

<http://zoobank.org/urn:lsid:zoobank.org:pub:4E027E2A-069C-44B7-BFD8-1E4E59D454D1>

Description of two new species of *Martarega* White, 1879 (Heteroptera: Nepomorpha: Notonectidae), one based on the mixed type-series of *M. oriximinaensis* Barbosa, Ribeiro & Ferreira-Keppler, 2010

JULIANNA FREIRES BARBOSA^{1,2,3}, JORGE LUIZ NESSIMIAN¹ & DANIELA MAEDA TAKIYA¹

¹Laboratório de Entomologia, Departamento de Zoologia, Instituto de Biologia, Universidade Federal do Rio de Janeiro (UFRJ), Rio de Janeiro-RJ, Brazil

²Programa de Pós-graduação em Zoologia, UFRJ

³Corresponding author. E-mail: julianna.freires@gmail.com

Abstract

Description of two new species of *Martarega* White, 1879 (Heteroptera: Nepomorpha: Notonectidae), one based on the mixed type-series of *M. oriximinaensis* Barbosa, Ribeiro & Ferreira-Keppler, 2010. *Martarega* currently includes 20 species restricted to the Americas. A mixed type-series of *M. oriximinaensis* from Brazil was detected, including males with an additional group of ensiform bristles on the fore trochanter and mesofemur conspicuously setose. These specimens were described as a new species, *M. siolii* Barbosa, Nessimian & Takiya, **sp. nov.**, and a redescription of *M. oriximinaensis* is also given. A second new species from Colombia is described, *M. guajira* Barbosa, Nessimian & Takiya, **sp. nov.** This species is very similar to *M. pacifica*, except for having groups of ensiform setae on the fore- and mesotrochanter, and an additional opaque area on the hemelytra.

Key words: backswimmers, Hemiptera, taxonomy, Western Hemisphere, aquatic insects

Introduction

Martarega White, 1879 is a small genus of Notonectidae with 20 species (Mazzucconi 2011; Barbosa *et al.* 2012; Barbosa & Rodrigues 2013). Individuals of this genus are commonly found in slow current areas of lotic environments, but their biology is not well known. Their distribution is restricted to the Americas, from Argentina up to Arizona State (USA) (Truxal 1949; Menke & Truxal 1966).

In 2010, twelve specimens from Oriximiná (Pará, Brazil) were described and named *M. oriximinaensis* Barbosa, Ribeiro & Ferreira-Keppler, 2010. This species is very similar to *M. hungerfordi* Truxal, 1949, but differs from it because males have a group of ensiform bristles on the mesotrochanter. Nevertheless, a more detailed study of this type-series revealed that a couple paratypes have an additional rounded process on the fore trochanter and its mesofemur conspicuously setose, characteristics, which are not present in the male holotype and are not mentioned in the original description (Barbosa *et al.* 2010). Therefore, these specimens, in addition to material from the Zoologische Staatssammlung München, also from Pará, identified as *Martarega hungerfordi* by Nieser (1975), are described herein. A redescription based on the restricted type-series of *M. oriximinaensis* is also given. Finally, during a visit to the Universidad Nacional de Colombia, material from another new species of this genus, occurring in Colombia and resembling *M. pacifica* Manzano, Nieser & Caicedo, 1995, was studied.

Material and methods

Acronyms of the collections in which specimens studied were deposited are as follows: Coleção Entomológica Prof. José Alfredo Pinheiro Dutra, Departamento de Zoologia, Universidade Federal do Rio de Janeiro (DZRJ), Brazil; Instituto Nacional de Pesquisas da Amazônia (INPA), Brazil; Zoologische Staatssammlung München

gonostyla Truxal, 1949 and *M. uruguayensis* (Berg, 1883), with hemelytra opaque, brown, and longitudinal median stripe hyaline.

Etymology. Epithet in apposition to the genus, referring to the Department of La Guajira (Colombia), where the type-locality is located.

Type-material. Holotype. R[io]. Rancheria, arriba bocatoma, Barrancas [Colombia, La Guajira], I. 2003 (M. Laython): 1 m, coleopteroid (ICN). **Paratypes.** Data *idem* holotype: 9 m and 4 f, coleopteroid (ICN).

Additional material. Data *idem* holotype: 21 m and 7 f, coleopteroid (ICN); Dorada, Caldas, R. Miel, 130 m.s.n.m, M624 [Caldas, La Dorada, Río La Miel], 14.VI.2002: 5 m and 1 f, macropterous (ICN); M625, 16.VI.2002: 3 m and 6 f, coleopteroid, 1 m and 4 f, macropterous (ICN); Hidromiel I [Caldas, Norcasia, Represa HidroMiel], ? (E. Amaní): 4 m and 1 f, coleopteroid (ICN); Tolima, Mariquita, Quebrada Padilla, M136, 19.IX.1998: 2 m, coleopteroid (ICN).

Acknowledgments

We are grateful to Dr. Klaus Schönitzer and Bärbel Stock-Dietl for the loan of specimens from ZSM; to Dr. Carmem Elisa Posso (MUSENUV) and Dr. Rodulfo Ospina-Torres (ICN) to allow the visit of the senior author to their laboratories. This work was sponsored by The Brazilian Council of Scientific and Technological Development (CNPq).

References

- Barbosa, J.F. & Rodrigues, H.D.D. (2013) A new species of *Martarega* White, 1879, with new distributional records of Notonectidae (Hemiptera: Heteroptera: Nepomorpha) from Brazil. *Zootaxa*, 3682 (4), 534–540.
<http://dx.doi.org/10.11646/zootaxa.3682.4.4>
- Barbosa, J.F., Ribeiro, J.R.I. & Ferreira-Keppler, R.L. (2010) A new species of *Martarega* White, 1879 (Hemiptera: Heteroptera: Notonectidae) from the State of Pará, Brazil, and new records for three species in Brazil. *Zootaxa*, 2351, 58–64.
- Barbosa, J.F., Ribeiro, J.R.I. & Nessimian, J.L. (2012) A synopsis of the *Martarega* White, 1879 (Insecta: Heteroptera: Notonectidae) occurring in the Brazilian Amazonia, with description of three new species. *Journal of Natural History*, 46 (17–18), 1025–1057.
<http://dx.doi.org/10.1080/00222933.2011.651645>
- Mazzucconi, S.A. (2011) A new species of *Martarega* White, 1879 from South America (Hemiptera: Heteroptera: Notonectidae) with an identification key to all described species of the genus. *Aquatic Insects*, 33 (2), 113–126.
<http://dx.doi.org/10.1080/01650424.2011.600317>
- Menke, A.S. & Truxal, F.S. (1966) New distribution data for *Martarega*, *Buenoa* and *Abedus*, including the first record of the genus *Martarega* in the United States (Hemiptera: Notonectidae, Belostomatidae). *Contributions in Science*, 106, 1–6.
- Nieser, N. (1975) The water bugs (Heteroptera: Nepomorpha) of the Guyana region. *Studies on the fauna of Suriname and other Guyanas*, 16, 176–210.
http://dx.doi.org/10.1007/978-94-017-7118-4_1
- Schuh, R.T. & Slater, J.A. (1995) *True bugs of the world (Hemiptera: Heteroptera): classification and natural history*. Cornell University Press, New York, 336 pp.
- Truxal, F.S. (1949) A study of the genus *Martarega* (Hemiptera: Notonectidae). *Journal of the Kansas Entomological Society*, 22 (1), 1–36.