

New distribution records of the genus *Martarega* White, 1879 (Hemiptera: Heteroptera: Notonectidae) in eastern Mato Grosso State, Brazil

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ABSTRACT: *Martarega* White, 1879 is a small genus of Notonectidae with 20 described species. Individuals of this genus occur in the Western Hemisphere with records from the southern United States to Argentina. In Brazil, we find 14 species. Distribution records of *Martarega* have a gap in 11 states of Brazil. The State of Mato Grosso has three species, *Martarega gonostyla*, *M. chinai* and *M. bentoi*. This work raised to five the number of species recorded in this state: *M. bentoi*, *M. brasiliensis*, *M. chinai*, *M. gonostyla*, and *M. membranacea*.

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Martarega White, 1879 is a small genus of Notonectidae, with 20 species described occurring in the Western Hemisphere with records from the southern United States to Argentina (Menke and Truxal 1966; Bachmann 1998). Three species occurs exclusively in Colombia: *Martarega awa* Padilla-Gil, 2010; *M. lofoides* Padilla-Gil, 2010; and *M. pacifica* Manzano, Caicedo & Nieser, 1995. *M. guarani* Mazzucconi, 2011 occurs only in Argentina; *M. mexicana* Truxal, 1949 has records for United States, Mexico and Guatemala (Truxal 1949; Menke and Truxal 1966; Polhemus 1966; Zalom 1977; Stevens and Polhemus 2008); and *M. hondurensis* Bare, 1932 has disjunct distribution records occurring in Mexico, Guatemala, Honduras, Panama and Peru (Bare 1932; Truxal 1949).

In Brazil 14 species are reported: *Martarega barcelos* Barbosa, Ribeiro & Nessimian, 2012; *M. bentoi* Truxal, 1949; *M. brasiliensis* Truxal, 1949; *M. chinai* Hynes, 1948; *M. gonostyla* Truxal, 1949; *M. hungerfordi* Truxal, 1949; *M. mcateeii* Jaczewski, 1928; *M. membranacea* White, 1879; *M. nessimiani* Barbosa & Rodrigues, 2013; *M. nieseri* Barbosa, Ribeiro & Nessimian, 2012; *M. oriximinaensis* Barbosa, Ribeiro & Ferreira-Keppler, 2010; *M. pydanieli* Barbosa, Ribeiro & Nessimian, 2012; *M. uruguayensis* (Berg, 1883); and *M. williamsi* Truxal, 1949. There are records in 15 of the 26 Brazilian states (Amazonas, Pará, Rondônia, Roraima, Tocantins, Mato Grosso, Goiás, Pernambuco, Ceará, Minas Gerais, São Paulo, Rio de Janeiro, Espírito Santo, Paraná and Santa Catarina) (Truxal 1949; Heckman 1998a, 1998b; Melo and Nieser 2004; Pereira and Melo 2007; Souza *et al.* 2006; Barbosa *et al.* 2010; Barbosa *et al.* 2012; Barbosa and Rodrigues 2013; Floriano *et al.* 2013; Dias-Silva *et al.* 2013).

Three species have been reported for the Mato Grosso State: *M. gonostyla*, in Canarana and Poconé municipalities (Nieser 1970; Heckman 1998a, 1998b); *M. bentoi*

(misidentified as *M. mcateeii* in Nieser (1970)), in “Mato Grosso, streaming waters between Cuiabá and Goiania” (Nieser 1970); and recently *M. chinai*, in Nova Xavantina municipality (Dias-Silva *et al.* 2013). This work raise to five the number of species recorded in this state (Figure 1): *M. bentoi*, *M. brasiliensis*, *M. chinai*, *M. gonostyla*, and *M. membranacea*.

Specimens studied in this work were collected, through the license SISBIO number 14 457-1, in four municipalities located in the eastern region of Mato Grosso State: Barra do Garças, Nova Xavantina, Ribeirão Cascalheira and Querência (Table 1).

Specimens were deposited in the following institutions: Coleção Entomológica Prof. José Alfredo Pinheiro Dutra, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil (DZRJ) and Coleção Zoobotânica James Alexander Ratter, Universidade do Estado do Mato Grosso, Campus de Nova Xavantina, Mato Grosso, Brasil (CZNX). The full citation of individual specimens collected at the same locality on different dates is not cited. An exclamation mark (!) indicates new state records of a species. Collectors are cited in parentheses. The letter “m” refers to male specimens and the letter “f” to female ones.

Species of Martarega recorded for Mato Grosso State

Martarega membranacea White, 1879

Known distribution: Colombia, Guyana, Suriname, Brazil, Ecuador, Bolivia and Argentina.

Distribution in Brazil: North Region (PA, AM, TO, RO), Central-West Region (GO, MS), and Southeast Region (MG, RJ) (White 1879; Truxal 1949, 1957; Nieser 1970; Melo and Nieser 2004; Pereira and Melo 2007; Barbosa *et al.* 2010; Ribeiro *et al.* 2010; Barbosa *et al.* 2012; Barbosa

and Rodrigues 2013; Floriano *et al.* 2013).

Material examined: Brasil, Estado do Mato Grosso!, Barra do Garças, Rio Corrente (14°54'40" S, 52°0'27" W), 03.IV.2004 (H.S.R. Cabette *et al.*), *det.* J.F. Barbosa: 1 m brachypterous (CZNX 625); Córrego Caveira (14°49'5" S, 52°3'16" W), 03.XI.2007: 1 m brachypterous (DZRJ 3555); Córrego Papagaio (15°27'11" S, 52°24'32" W), 06.XI.2007 (K. Dias-Silva): 1 m brachypterous (DZRJ 3554). Ribeirão Cascalheira, Córrego Brejão (12°38'32" S, 51°53'21" W), 25.V.2008: 1 f brachypterous (CZNX 2664); Fazenda Maruá, Lago São João (12°43'02" S, 51°06'21" W), 21.VI.2004 (H.S.R. Cabette *et al.*): 1 m brachypterous (DZRJ 3550). Querência, Rio Suiá 3 (11°50'18" S, 52°15'07" W), 26.V.2008: 1 f brachypterous (CZNX 2266); Córrego Neuri, represa (12°22'27" S, 52°13'19" W), 29.IX.2007: 1 m and 1 f brachypterous (DZRJ 3549).

Martarega chinai Hynes, 1948

Known distribution: Trinidad, Colombia, Venezuela, Brazil, Bolivia, and Argentina.

Distribution in Brazil: North Region (PA, AM), Central-West Region (MT), and Southeast Region (MG) (Truxal 1949; Nieser 1970; Nieser and Melo 1997; Barbosa *et al.* 2012; Barbosa and Rodrigues 2013; Dias-Silva *et al.* 2013).

Material examined: Brasil, Estado do Mato Grosso, Nova Xavantina, Córrego Duílio (14°48'19" S, 52°30'11" W), 17.IX.2010 (H.S.R. Cabette *et al.*), *det.* J. F. Barbosa: 1 m brachypterous (CZNX 4173).

Martarega bentoi Truxal, 1949

Known distribution: Brazil and Argentina.

Distribution in Brazil: Northeast Region (PE, PI) and Southeast Region (MG) (Truxal 1949; Barbosa and Rodrigues 2013).

Material examined: Brasil, Estado do Mato Grosso, Nova Xavantina, Córrego Colher (14°39'19" S, 52°27'45" W), 21.XII.2004 (H.S.R. Cabette *et al.*), *det.* J.F. Barbosa: 1 f brachypterous (CZNX 1237); Córrego Santo Antonio, Nascente (14°29'14" S, 52°36'37" W), 20.VII.2005: 2 f brachypterous (DZRJ 3546); Córrego da Mata (14°59'59" S, 52°26'29" W), 05.XI.2007: 3 f brachypterous (CZNX 3500); 18.I.2008: 1 f brachypterous (DZRJ 3556); Córrego Duílio (14°48'19" S, 52°30'11" W), 01.V.2011: 1 f brachypterous (DZRJ 3548); Córrego Bacaba (14°43'10" S, 52°21'35" W), 01.VI.2011 (N.F.S. Giehl): 1 f brachypterous (DZRJ 3602); 2 m brachypterous (CZNX 5618); 29.XI.2011: 1 f macropterous (CZNX 5616); Córrego Chupador (14°50'10" S, 52°30'03" W), 18.IX.2010: 1 f brachypterous (CZNX 4253); 28.IV.2011: 1 f brachypterous (CZNX 4596); 18.IX.2010: 1 m brachypterous (DZRJ 3553); Córrego Buriti, Bacia do Rio das Mortes (14°45'1.4" S, 52°33'14.4" W), 27.IV.2011 (N.F.S. Giehl): 1 m and 1 f brachypterous (DZRJ 3599). Barra do Garças!, Córrego Taquaral (15°41'57" S, 52°19'56" W), 11.IX.2007 (K. Dias-Silva): 1 f brachypterous (DZRJ 3603); 01.XI.2007: 1 m macropterous (DZRJ 3604); Córrego Papagaio (15°27'11" S, 52°24'32" W), 06.XI.2007: 1 m brachypterous (DZRJ 3600). Querência!, Córrego Neuri, represa (12°22'27" S, 52°13'19" W), 26.IX.2007: 2 f brachypterous (DZRJ 3547).

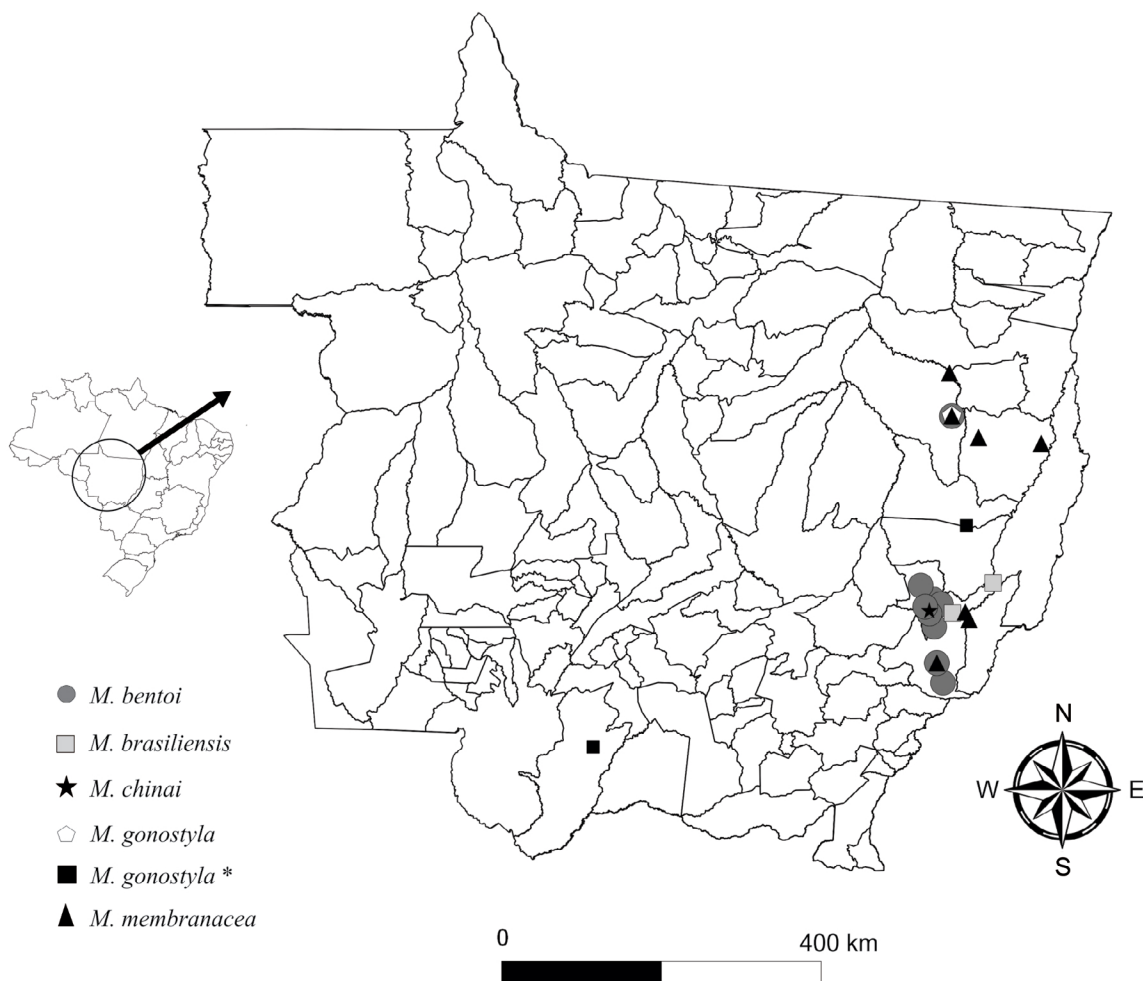


FIGURE 1. Distributional records of *Martarega* White, 1879 in the State of Mato Grosso. *Records from literature.

TABLE 1. List of watersheds with water bodies where specimens were collected, its respective municipalities and coordinates.

WATERSHED	MUNICIPALITY	WATER BODY	COORDINATES
Rio Corrente	Barra do Garças	Córrego Papagaio	15°27'11"S, 52°24'32" W
		Córrego Taquaral	15°41'57" S, 52°19'56" W
		Rio Corrente	14°54'40" S, 52°0'27" W
Rio Pindaíba	Barra do Garças	Córrego Cachoeirinha	14°49'45" S, 52°12'55" W
		Córrego Caveira	14°49'05" S, 52°3'16" W
	Nova Xavantina	Córrego da Mata	14°59'59" S, 52°26'29" W
		Rio Pindaíba	14°27'9" S, 51°42'26" W
Rio Suiá-Miçú	Ribeirão Cascalheira	Córrego Brejão	12°38'32" S, 51°53'21" W
		Córrego Neuri nascente	12°22'29" S, 52°13'23" W
	Querência	Córrego Neuri represa	12°22'27" S, 52°13'19" W
		Rio Suiá 3	11°50'18" S, 52°15'07" W
Rio das Mortes/ Araguaia	Nova Xavantina	Córrego Bacaba	14°43'10" S, 52°21'35" W
		Córrego Duílio	14°48'19' S, 52°30'11" W
		Córrego Colher	14°39'19" S, 52°27'45" W
		Córrego Santo Antonio	14°29'14" S, 52°36'37" W
		Córrego Buriti	14°45'1.4" S, 52°33'14.4" W
Ribeirão Antártico	Ribeirão Cascalheira	Lago São João	12°43'02" S, 51°06'21" W
	Nova Xavantina	Córrego Chupador	14°50'10" S, 52°30'03" W

***Martarega brasiliensis* Truxal, 1949**

Known distribution: Suriname, Brazil, and Peru.

Distribution in Brazil: North Region (PA, RR), Central-West Region (MS), Northeast Region (CE, PE), and Southeast Region (RJ) (Truxal 1949; Nieser 1970; Barbosa *et al.* 2010; Ribeiro *et al.* 2010; Barbosa *et al.* 2012; Barbosa and Rodrigues, 2013; Floriano *et al.* 2013).

Material examined: Brasil, Estado do Mato Grosso!, Nova Xavantina, Córrego Cachoeirinha (14°49'45" S, 52°12'55" W), 07.XI.2007 (H.S.R. Cabette *et al.*), *det.* J.F. Barbosa: 1 f brachypterous (DZRJ 3601); 1 m brachypterous (CZNX 3702). Nova Xavantina/ Araguaiana, Rio Pindaíba (14°27'9" S, 51°42'26" W), 02.X.2003 (S.O. Pagioro): 2 f brachypterous (DZRJ 3552).

***Martarega gonostyla* Truxal, 1949**

Known distribution: Suriname, Bolivia, and Brazil.

Distribution in Brazil: North Region (PA, AM, RO) and Central-West Region (MT) (Truxal 1949; Nieser 1970; Heckman 1998a, 1998b; Barbosa *et al.* 2012; Barbosa and Rodrigues 2013).

Material examined: Brasil, Estado do Mato Grosso, Querência, Córrego Neuri, nascente (12°22'29" S, 52°13'23" W), 27.V.2008 (H.S.R. Cabette *et al.*), *det.* J.F. Barbosa: 1 f brachypterous (CZNX 2268).

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