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Authors: Short, Andrew Edward Z., Clarkson, Bruno, Bello, Raul, and Hamada, Neusa

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SCIENTIFIC NOTE

FIRST RECORD OF SPERCHEIDAE (COLEOPTERA) FROM PERU WITH A SUMMARY OF THE DISTRIBUTION OF THE FAMILY IN SOUTH AMERICA

ANDREW EDWARD Z. SHORT*

Department of Entomology & Nematology
University of Florida, Gainesville, FL, 32611 USA
aczshort@gmail.com

*Corresponding Author

BRUNO CLARKSON

Instituto Oswaldo Cruz, Fundação Oswaldo Cruz
Rio de Janeiro, BRAZIL

and

Instituto de Biologia, Universidade Federal do Rio de Janeiro
Rio de Janeiro, BRAZIL

RAUL BELLO

Kawsay Biological Station
Puerto Maldonado, PERU

AND

NEUSA HAMADA

Instituto Nacional de Pesquisas da Amazônia
Manaus, BRAZIL

DOI.org/10.1649/0010-065X-77.3.296

The water scavenger beetle family Spercheidae is the smallest of the six families that comprise the Hydrophiloidea, containing just 18 described species in the single genus *Spercheus* Kugelann, 1798 (Hansen 1999; Short and Fikáček 2011). Half of this diversity is found in the Afrotropics (nine species) with the remainder distributed throughout all other biogeographic regions except the Nearctic. The filter-feeding habits of the adults are unique in Coleoptera (Rothmeier and Jäch 1986). Two species of *Spercheus* are known from the Neotropics: *Spercheus fimbriicollis* Bruch, 1915 and *Spercheus halophilus* Archangelsky, 2001. Both species were originally discovered in northern Argentina. The more recently described *S. halophilus* is only known from the type locality in Córdoba Province, where it lives in saline pools (Archangelsky 2001). In contrast, *S. fimbriicollis* was originally described from the Chaco region of Santa Fe Province (Bruch 1915a) but subsequently found in Bolivia, Brazil, and Paraguay (Hebauer 1997; Reichardt *et al.* 1975). Within Argentina, Bruch (1915b) cited additional provincial

records but without further locality or specimen information; the first record for Corrientes Province was published by Torres *et al.* (2012). Though it is collected periodically, it appears to be locally rare and is usually only represented by a few specimens here and there and to our knowledge its full distribution has never been summarized or visualized (Fig. 1).

During recent fieldwork, we collected *S. fimbriicollis* at four localities in the Brazilian states of Mato Grosso do Sul and Mato Grosso (new state record). Additionally, we collected two specimens at the Kawsay Biological Station along the Madre de Dios River in Peru. This is the first record of the family from Peru, though it had previously been suggested it would occur here (Shepard and Chaboo 2015). Specimens are deposited in the Snow Entomological Collection, University of Kansas (SEMC), the Instituto Nacional de Pesquisas da Amazônia, Manaus, Brazil (INPA), the Coleção Entomológica do Instituto Oswaldo Cruz (CEIOC) and the Museo de Historia Natural de la Universidad Nacional Mayor de San Marcos, Lima, Peru (MHNSM).



Fig. 1. Distribution of *Spercheus* in South America.

Spercheus fimbricollis Bruch, 1915

Material Examined: BRAZIL: Mato Grosso: Poconé, Transpantaneira, Route MT-060, km 47, bridge, 16°39'54.5"S, 56°37'37.7"W, 115 m, 29.vii. 2013, leg. B. Clarkson (2 exs., SEMC, CEIOC).

Mato Grosso do Sul: Corumbá, Paraguay River, 25.vi.2018, leg. Hamada & team, macrophytes along river margins and in floating island mats, BR18-0625-01A (2 exs. SEMC); ca. 29 km SE Corumbá, on BR-262, 25.vi.2018, leg. Hamada & team, large marsh, BR18-0625-02A (3 exs., INPA, SEMC); MS-243, 3 km SW of junction w/ BR262, 26.vi.2018, leg. Hamada & team, small drying marsh by road near cattle pasture, BR18-0626-02A (1 ex., INPA). **PERU: Madre de Dios:** Kawsay Biological Station, ca. 19 km E of Puerto Maldonado, 190 m, 4.vi.2022, leg. Short, Baca, & Gonzalez, PE22-0604-01C (2 exs., SEMC, MHNSM).

The collection in Peru was made in a lowland forested swamp habitat, in a large detrital pool in an

area of seasonally flooded forest (Fig. 2D). The two specimens were taken by agitating the marginal detritus and collecting the floating beetles. The collection on the Paraguay River in Brazil was in an entirely different habitat: the specimens were in the roots and detritus of floating vegetation mats along the margin of the river (Fig. 2C). Two other nearby collections were made in large marshes that were in the process of drying up (not associated with river; Figs. 2A, B). The specimens from Mato Grosso were collected by swiping the D-net in the substrate in shallow flooded grasslands in the Pantanal biome during the dry season.

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Fig. 2. Habitat of *Spercheus fimbriicollis* in Brazil and Peru. A) Brazil: Mato Grosso do Sul, collecting event BR18-0625-02A, B) Brazil: Mato Grosso do Sul, collecting event BR18-0625-02A, C) Brazil: Mato Grosso do Sul, collecting event BR18-0626-02A, D) Peru: Madre de Dios, collecting event PE22-0604-01C.

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