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First record of *Bledius caribbeanus* Blackwelder, 1943 (Coleoptera: Staphylinidae: Oxytelinae) from Brazil and distributional extension of *B. hermani* Caron and Ribeiro-Costa, 2007

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ABSTRACT: Two species of *Bledius* Leach, 1819 (Coleoptera, Staphylinidae, Oxytelinae) are recorded for northeastern Brazilian coast. The occurrence of *B. caribbeanus* Blackwelder, 1943 is reported for the first time in Brazil and the geographical distribution of *B. hermani* Caron and Ribeiro-Costa, 2007 is extended.

The rove beetles of genus *Bledius* Leach, 1819 are most abundant in moist sandy environments adjacent to rivers, lakes and oceans, feeding on algae and diatoms, where its presence can be quickly detected by the cast or tumulus left on surface above the entrance of the burrows (Herman 1986). Species of the genus are found on all continents except Antarctica and on some continental and oceanic islands (Herman 1986). At sandy beaches ecosystems, these organisms are conspicuous, inhabiting upper zones of these environments (McLachlan and Brown 2006).

At previous studies dealing with the ecology of the sandy beaches in southern Brazil, three species – *B. bonariensis*, *B. fernandezi* Bernhauer, 1939 and *B. microcephalus* Fauvel, 1901 – had been reported (Gianuca 1997; Barros *et al.* 2001; Schreiner and Ozorio 2003). However, after a recent revision of the species of *Bledius* recorded from sandy beaches of Brazilian coast, Caron and Ribeiro-Costa (2007) confirmed *B. bonariensis* and *B. fernandezi* and described a new species, *B. hermani* Caron and Ribeiro-Costa, 2007, all of them have been recorded only for south coast of Brazil. Furthermore, according Caron and Ribeiro-Costa (2007), the record of *B. microcephalus* in the south coast was probably a misidentification of *B. hermani.*

Therefore, since the review of Caron and Ribeiro-Costa (2007), only three species of *Bledius* were recognized in the sandy beaches of Brazilian coast: *B. bonariensis*, *B. fernandezi* and *B. hermani*, and all of them occur only in the states of Paraná and Rio Grande do Sul.

During sandy beach surveys, carried out from 2008 to 2011, several individuals of *Bledius* were collected in several Brazilian states, especially along of northeastern coast of the country. Collected individuals were deposited in the entomological collection Padre Jesus Santiago Moure, of the Federal University of Paraná, Curitiba, Brazil (DZUP) and in collection from Laboratory of Entomology, Federal University of Sergipe, São Cristóvão, Brazil.

New records:

Bledius caribbeanus Blackwelder, 1943

Alagoas state: 10 individuals from Municipality of Coruripe, Pontal do Coruripe, 10°10'20" S, 36°10'12" W, 08.X.2011, coll. B. Ambrogi & L. Souto.

Rio Grande do Norte state: 12 individuals from Municipality of Nísia Floresta, Camurupin beach, 06°03'25" S, 35°05'52" W, 29.IX.2010, coll. L.S. Souto.

Bledius hermani Caron and Ribeiro-Costa, 2007

Rio Grande do Norte state: 14 individuals from Municipality of Nísia Floresta, Camurupin beach, 06°03'25" S, 35°05'52" W, 29.IX.2010, coll. L.S. Souto.

Paraíba state (20 individuals): eight specimens from Municipality of Conde, Sol beach, 07°18'38" S, 34°47'15" W, 14.II. 2010, coll. L.S. Souto; 12 specimens from Carneiros beach, 07°15'38" S, 34°54'29" W, 15.II.2010, coll. L.S. Souto.

Alagoas state (26 individuals): three specimens from Municipality of Marechal Deodoro, Francês beach, 09°46'21" S, 35°53'31" W, 05.II. 2010, coll. L.S. Souto; 23 specimens from Municipality of Coruripe, Pontal do Coruripe, 10°10'20" S, 36°10'12" W, 08.X. 2011, coll. B. Ambrosi & L.S. Souto.

Sergipe state (44 individuals): 32 specimens from Municipality of Aracaju, Aruana beach, 11°01'82" S, 37°04'65" W, 23.I.2010, coll. L.C. Rosa; eight specimens from Atalaia beach, 10°59'81" S, 37°03'06" W, 23.I.2010, coll. L.C. Rosa; four specimens from Refúgio beach, 11°04'22" S, 37°06'27" W, 23.I.2010, coll. L.C. Rosa.

Santa Catarina state: five individuals from Municipality of Itapoá, 26°02'02" S, 48°36'31" W on January 2008, coll. R.C. Correia.

These two species, *B. caribbenaus* and *B. hermani*, are morphologically very similar and mainly differences are higher size, elytra entirely black and sternite VII with just two prominent setae in *B. caribbeanus*, whereas *B. hermani* has pale yellow elytra with a basal and usually subapical median brownish spot and sternite VII with eight prominent setae arranged in a transverse row near the apex (Caron and Ribeiro-Costa 2007). The former species had its distribution restricted to Caribbean Sea (Jamaica, Dominican Republic and Trinidad and Tobago) (Frank and Ahn 2011), whereas the latter had been recorded to Brazilian south coast (Rio Grande do Sul and Paraná) (Caron and Ribeiro-Costa 2007; Gandara-Martins *et al.* 2010). These samplings represent the first record of *B. caribbeanus* in Brazil and extend the known geographic distribution of *B. hermani* in approximately 2,000 km northwards (Figure 1).

Along Brazilian coast, studies dealing with sandy beaches insects are scarce and were mainly carried out at south region (Gianuca 1997; Schreiner and Ozorio 2003; Caron and Ribeiro-Costa 2007; Rosa *et al.* 2008; Gandara-Martins *et al.* 2010). In this way, further studies addressing the composition of sandy beach insects will be needed to help us understand the real diversity as well the distributional pattern of *Bledius* species along Brazilian coast.

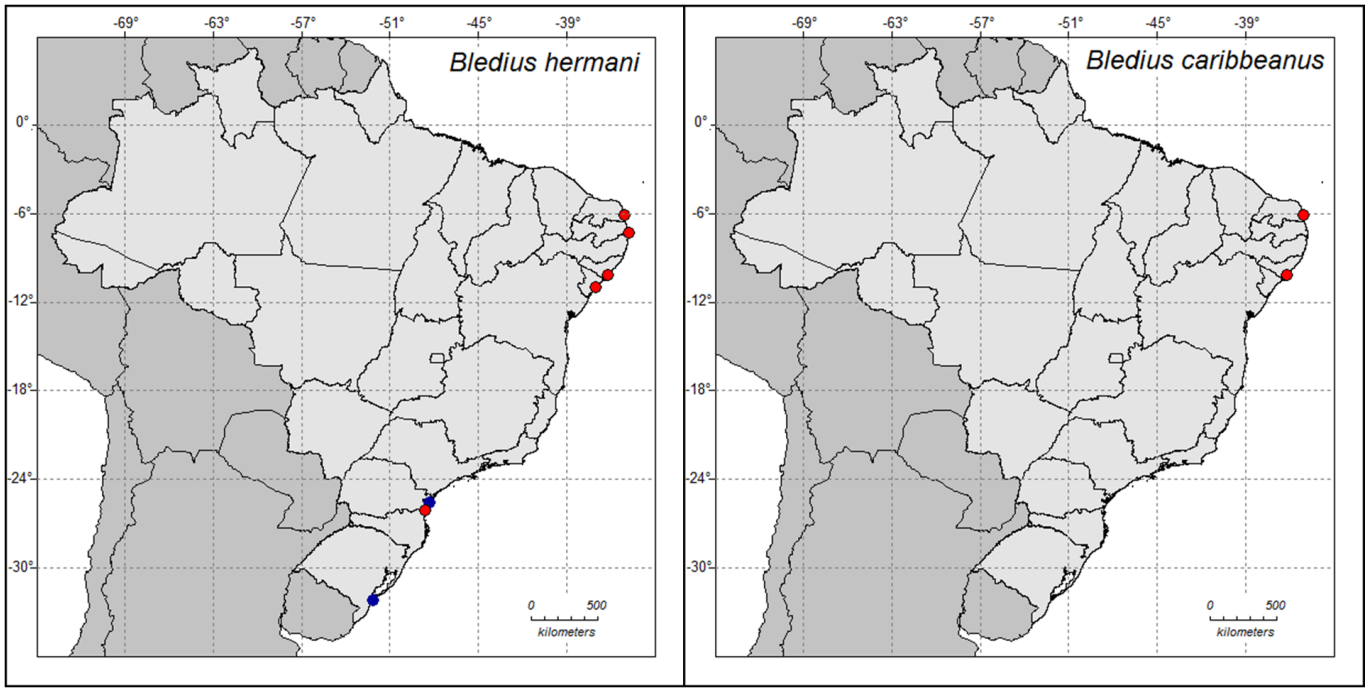

Figure 1. Distribution of *Bledius caribbeanus* and *B. hermani* along Brazilian coast. Red circle: new record; blue circle: previous record.

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