

Short note | Nota breve

***Leiosolenus aristatus* (Dillwyn, 1817), new to the Cape Verde Islands (Mollusca, Bivalvia, Mytilidae)**

Evandro P. Lopes

Key words: Bivalves, Mytilidae, *Leiosolenus aristatus*, Cape Verde Islands, new record

Leiosolenus aristatus (Dillwyn, 1817) is a small bivalve that pierces into calcareous substrata, particularly shells of other mollusks. Previously, the taxon has often been placed in *Lithophaga* Röding, 1798. It was then transferred to *Myoforceps* Fischer, 1886, which is now included in the synonymy of *Leiosolenus* Carpenter, 1856 (cf. Huber 2012).

The species is distributed almost worldwide, including the Pacific and Atlantic Oceans (Huber 2012). In the western Atlantic, it is known from North Carolina to Florida, the Gulf of Mexico and the northern Caribbean Sea (Simone & Gonçalves 2006). In recent years, it has invaded the states of São Paulo, Rio de Janeiro and Santa Catarina along the Atlantic coast of Brazil (Simone & Gonçalves 2006, Vianna da Silva 2007, Breves-Ramos *et al.* 2010). In the eastern Atlantic, it occurs along western European coasts (Gofas *et al.* 2001), while in West Africa it is known from Mauritania, Senegal and Angola (Ardevini & Cossignani 2004, Gofas *et al. sine anno*).

The habitat of *Leiosolenus aristatus* consists of hard surfaces, such as shells, corals and barnacles. It often punctures shells of other mollusks, causing damage and deformities (Simone & Gonçalves 2006). The species is easily identified by the pointed tips

at the posterior extensions of the shells, which cross like fingers (cf. Turner & Boss 1962, Abbott 1974, Morton 1993), hence the common name of scissor datemussel. Because of its habit of penetrating corals and because its presence often goes unnoticed initially, it may significantly change the structure of local coral communities and is considered an invasive species (Simone & Gonçalves 2006, Vianna da Silva 2007).

This note reports the first confirmed occurrence of *Leiosolenus aristatus* in the Cape Verde Islands (cf. Lopes 2010). Specimens were collected at Ponta do Sol (17°12'11"N, 25°05'38"W), in the north of Santo Antão island, 25 March 2009 (Fig. 1). The animals were collected from corals (Fig. 2), photographed in the field and preserved in alcohol 96°. After their taxonomic identity had been confirmed, the specimens were deposited in the collections of the Department of Engineering and Marine Sciences of the University of Cape Verde in Mindelo, São Vicente.

Should the record reported herein signify the settlement of a new invasive species in Cape Verde, it will be of interest to follow possibly harmful effects of its boring activities on the native marine biota.

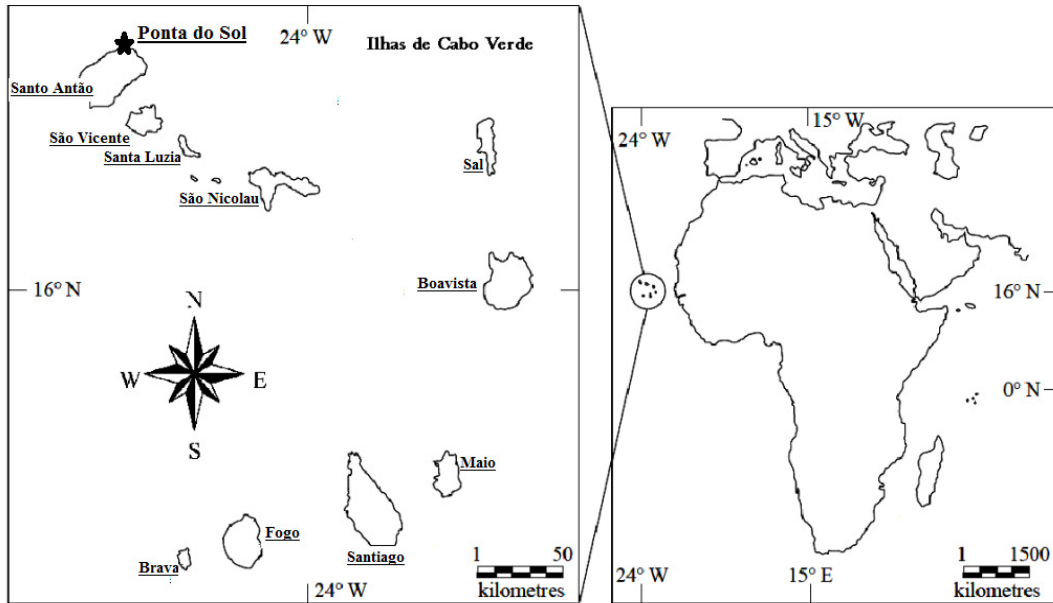


Fig. 1. Map of the Cape Verde Islands. * = collecting locality of *Leiosolenus aristatus*.



Fig. 2. *Leiosolenus aristatus*, embedded in coral, Ponta do Sol, Santo Antão, 25 March 2009 (Evandro Lopes).

ACKNOWLEDGEMENTS

I want to thank Robert Moolenbeek (Naturalis, Leiden) for his constructive comments on the manuscript. I also wish to thank Cornelis Hazevoet for providing editorial help during the preparation of this note.

REFERENCES

- Abbott, R.T., 1974. American seashells. 2nd edition. Van Nostrand Reinhold, New York. 663 pp.
- Ardevini, R. & T. Cossignani 2004. West African seashells (including Azores,

- Madeira and Canary Is.). L'Informatore Piceno, Ancona. 319 pp.
- Breves-Ramos, A., A.D. Pimenta, M.T.M. de Széchy & A. de O.R. Junqueira, 2010. Mollusca, Bivalvia, Mytilidae, *Myoforceps aristatus* (Dillwyn, 1817): distribution and new record localities at Ilha Grande Bay, Brazil. Check List 6: 408-409.
- Gofas, S., J. Le Renard & P. Boucet, 2001. Mollusca. Pp. 180-213 in: M.J. Costello, C. Emblow & R. White (eds.), European register of marine species. A check-list of the marine species in Europe and a bibliography of guides to their identification. Patrimoines Naturels 50.
- Gofas, S., J.P. Afonso & M. Brandão, *sine anno*. Conchas e moluscos de Angola. Universidade Agostinho Neto & Elf Aquitaine Angola, Luanda. 140 pp.
- Huber, M., 2012. *Leiosolenus aristatus* (Dillwyn, 1817). In: World Register of Marine Species, www.marinespecies.org, accessed 6 February 2012.
- Lopes, E.P., 2010. Recent data on marine bivalves (Mollusca, Bivalvia) of the Cape Verde Islands, with records of six species new to the archipelago. Zoologia Caboverdiana 1: 59-70.
- Morton, B., 1993. How the 'forceps' of *Lithophaga aristata* (Bivalvia: Mytiloidea) are formed. Journal of Zoology 229: 609-621.
- Simone, J.R.L. & E.P. Gonçalves, 2006. Anatomical study on *Myoforceps aristatus*, an invasive boring bivalve in S.E. Brazilian coast (Mytilidae). Papéis Avulsos de Zoologia 46: 57-65.
- Turner, R.D. & K.J. Boss, 1962. The genus *Lithophaga* in the western Atlantic. Johnsonia 4: 81-116.
- Vianna da Silva, J.S., A. de O.R. Junqueira, F. da C. Fernandes, M.S. Leitão, D. Barbosa & J. Bahia, 2007. *Myoforceps aristatus* (Dillwyn, 1817), mais um bivalve introduzido na Baía de Sepetiba/RJ. Anais do VIII Congresso de Ecologia do Brasil, Caxambu, 23-28 September 2007.

Evandro P. Lopes, Departamento de Engenharias e Ciências do Mar, Universidade de Cabo Verde, São Vicente, Republic of Cape Verde; e-mail evandrobiologia007@gmail.com

Received 1 September 2011

Accepted 7 February 2012