

## SHORT COMMUNICATION

The polychaete *Lygdamis wirtzi* at Ascension and St Helena Islands (Annelida, Polychaeta, Sabellariidae)

JUDITH BROWN, EJIROH NISHI AND PETER WIRTZ



Brown, J., E. Nishi and P. Wirtz 2019. The polychaete *Lygdamis wirtzi* at Ascension and St Helena Islands (Annelida, Polychaeta, Sabellariidae). *Arquipelago. Life and Marine Sciences* 36: 19-21. <https://doi.org/10.25752/arq.19677>

Key words: Polychaeta, Sabellariidae, central Atlantic

*Judith Brown (judebrown.aqua@gmail.com), Ascension Island Government, Ascension Island, South Atlantic; Eijiroh Nishi (enishi@ynu.ac.jp), College of Education, Yokohama National University, Hodogaya, Yokohama 240-8501, Japan; Peter Wirtz (peterwirtz2004@yahoo.com): Centro de Ciências do Mar, Universidade do Algarve, Campus de Gambelas, PT-8005-139 Faro, Portugal.*

Little is known about the polychaete fauna of the two mid-Atlantic Islands, Ascension and St Helena. Baird (1864), Monro (1930), and Hartmann-Schröder (1992) documented the polychaetes from Ascension Island while Day (1946) reported polychaetes from St Helena Island. Lastly, Yáñez-Rivera & Brown (2015) reported on *Hermodice* and *Eurythoe* from both Ascension and St Helena Islands. We do not know any other publications on polychaetes for these two remote islands.

The genus *Lygdamis* (Family Sabellariidae) currently contains 20 species (Hutchings et al. 2012; Capa et al. 2015). *Lygdamis wirtzi* Nishi and Núñez, 1999, was originally described from Madeira Island and the Canary Islands and has also been found at the Cape Verde Islands and at São Tomé Island (Wirtz 2001, 2003).

New observations of this species were made while SCUBA diving at the coasts of Ascension and St Helena Islands in 2013 and 2015.

The specimens were collected from coarse sandy habitats in depths of ~10-12m. The animals (two specimens from St Helena and one from Ascension), were photographed *in-situ* and then collected by hand and stored in 70-80% ETOH. Preserved specimens were sent to the second author for identification. They are now deposited in the Coastal Branch, Natural History Museum and Institute, Chiba, Japan.

Morphological study by the second author confirmed the initial, provisional identification of the specimens as *Lygdamis wirtzi*. An animal from St. Helena Island is shown in a colour photo in a popular book by Brown (2014, p. 40). Figure 1 shows an animal from Ascension Island. In both places, the species was common in bottoms of coarse sand or gravel in shallow water.

Despite actively searching for it, the third author has not found *Lygdamis wirtzi* when diving on the coasts of Senegal, Sierra Leone, and Gabon. Until now, the species is only known from (sub) tropical



Fig. 1. *Lygdamis wirtzi* at Ascension Island (Photo J. Brown)

islands in the eastern and central Atlantic Ocean. *Lygdamis* species are notoriously difficult to observe and to collect as they quickly retract into their tubes when approached. These new records increase the known distribution of *Lygdamis wirtzi* and it is likely that this and other *Lygdamis* species are much more wide-spread than currently known.

#### ACKNOWLEDGMENTS

The record from Ascension Island was made during several expeditions in 2013 and 2015 funded by grants to the Shallow Marine Surveys Group from the Darwin Initiative (EIDCF012). Thanks to the staff of the Conservation Department on Ascension Island for continuing support. The record from St Helena Island was made while the first author was part of a Darwin Initiative funded marine biodiversity project

(Project 19-031) which was in joint partnership with the Joint Nature Conservation Committee (JNCC) and the Environmental Management Department (EMD) of St Helena Government. P. Wirtz wishes to thank the Centre for Marine Sciences (CCMAR) of the University of Algarve for partially funding two trips to Ascension Island and one trip to St Helena Island. This study received national funds through FCT -Foundation for Science and Technology project UID/Multi/04326/2013.

#### REFERENCES

- Baird, W. 1864. Description of a new species of Annelide belonging to the family Amphinomidae. *Transactions of the Linnean Society of London* 24: 449–450.
- Brown, J. 2014. *Marine Life of St Helena*. Pisces

*Lygdamis wirtzi* at Ascension and St Helena

- Publications, Newbury. 220 pp.
- Capa, M., L. Faroni-Perez & P. Hutchings 2015. Sabellariidae from Lizard Island, Great Barrier Reef, including a new species of *Lygdamis* and notes on external morphology of the median organ. *Zootaxa* 4019 (1): 184–206.
- Day, J.H. 1949. On the Polychaeta collected by Mr. J. Colman at St. Helena. *Journal of the Linnean Society of London, Zoology* 41: 434–451.
- Hartmann-Schröder, G. 1961. The Polychaetes of the Amsterdam Expedition to Ascension Island (Central Atlantic). *Bijdragen Tot De Dierkunde* 1961: 219-235.
- Hutchings, P., M. Capa and R. Peart 2012. Revision of the Australian Sabellariidae (Polychaeta) and description of eight new species. *Zootaxa* 3306: 1-60.
- Monro, C.C.A. 1930. Polychaete worms. *Discovery Reports* 2: 1–222.
- Nishi, E. & J. Nunez 1999. A new species of shallow water Sabellariidae (Annelida, Polychaeta) from Madeira Island, Portugal, and Canary Islands, Spain. *Arquipelago. Life and Marine Sciences* 17A: 37-42.
- Yáñez-Rivera, B. and J. Brown 2015. Fireworms (Amphinomidae: Annelida) from Ascension and Saint Helena Island, Central South Atlantic Ocean. *Marine Biodiversity Records* 8(e149); doi 10.1017/S1755267215001244
- Wirtz, P. 2001. New records of marine invertebrates from the Cape Verde Islands. *Arquipelago. Life and Marine Sciences* 18A: 81-84.
- Wirtz, P. 2003. New records of marine invertebrates from São Tome Island (Gulf of Guinea). *Journal of the Marine Biological Association of the United Kingdom* 83: 735-736.

*Submitted 03 Jan 2019. Accepted 01 Feb 2019.  
Published online 11 Mar 2019.*