PHYLUM: SIPUNCULA

Authors

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Citation

Atkinson LJ. 2018. Phylum Sipuncula In: Atkinson LJ and Sink KJ (eds) Field Guide to the Offshore Marine Invertebrates of South Africa, Malachite Marketing and Media, Pretoria, pp. 117-119.

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Phylum: SIPUNCULA

Peanut worms

Peanut worms (Sipunculids) can be described as smooth, unsegmented marine worms mostly found buried in sediment due to their burrowing habits. Some are known to burrow into solid rock or discarded shells, which are used as shelters. These worms feed on detritus and sand as they burrow, processing the edible content. Sipunculid worms are typically less than 10 cm in length, however some have been known to reach several times that length. The body is divided into a trunk and introvert, the latter being muscular and can be evaginated or retracted. The introvert terminates in a crown of tentacles surrounding the mouth. Reproduction can be both sexual (external fertilisation) and asexual (transverse fission).

Collection and preservation

Specimens should be preserved in 5% formalin and 96% ethanol for molecular studies. Menthol crystals can be used to relax the specimen for several hours until unresponsive to touch. The specimen can then be kept in fresh water for one hour before preservation.

References

Cutler EB. 1994. *The Sipuncula: Their systems, biology and evolution*. Cornell University Press. New York.

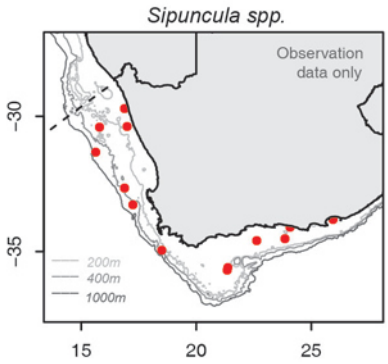
Huang D-Y, Chen J-Y, Vannier J and Saiz Salinas JI. 2004. Early Cambrian sipunculan worms from southwest China. *Proceedings of the Royal Society B: Biological Sciences* 271 (1549): 1671. doi:10.1098/rspb.2004.2774.

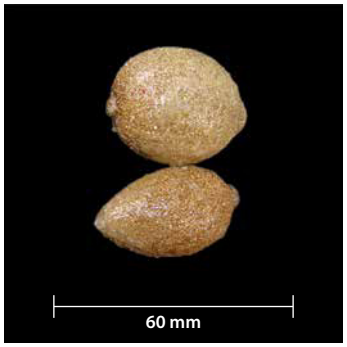
Sipuncula (Sipunc)

Peanut worms

Most Sipuncula worms require detailed microscopic examination of body parts to identify beyond Phylum level. For the purposes of this guide, Sipuncula are identified at a Phylum level.

Class:	Phascolosomatidea **Order:** Aspidosiphoniformes • Family Aspidosiphonidae **Order:** Phascolosomatiformes • Family Phascolosomatidae
Class:	Sipunculidea **Order:** Golfingiida • Family Golfingiidae • Family Phascolionidae • Family Themistidae • Family Sipunculidae
Common name:	Peanut worm





Distinguishing features

Sipunculid worms (Peanut worms) are unsegmented marine worms that show bilateral symmetry. Mouth located at anterior end of tubular 'introvert' (retractable proboscis). Between 18-24 ciliated tentacles surround mouth for feeding (seldom everted on capture). Introvert is usually retracted into body wall, giving them a peanut shape. Generally firm body texture, often covered with sediment particles.

All such species are to be recorded as Peanut worms, FishBoard code 'Sipunc'.

Colour

Variable, often covered with sediment.

Size

Variable, but generally not greater than 100 mm in length.

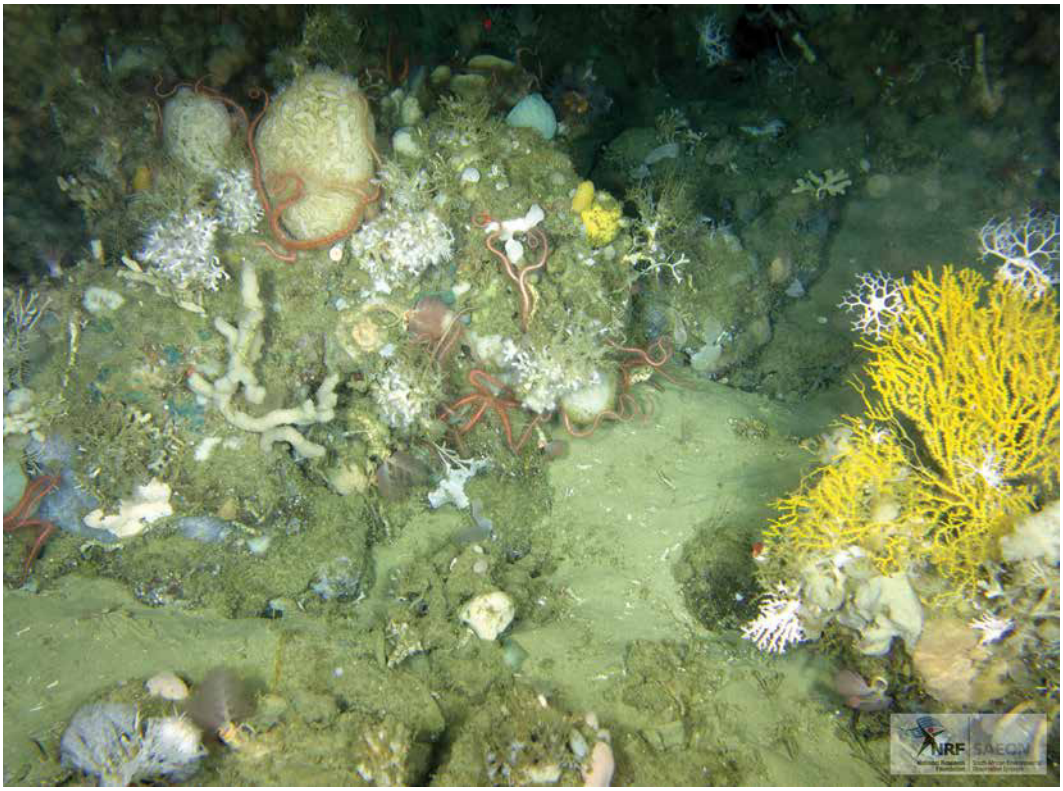
Distribution

West and South Coasts of South Africa. Global distribution.

References

Cutler EB. 1994. *The Sipuncula: Their systems, biology and evolution*. Cornell University Press. New York.

Huang D-Y, Chen J-Y, Vannier J and Saiz Salinas JI. 2004. Early Cambrian sipunculan worms from southwest China. *Proceedings of the Royal Society B: Biological Sciences* 271 (1549): 1671. doi:10.1098/rspb.2004.2774.



Rich benthic communities in the proposed Childs Bank Marine Protected Area on the West Coast of South Africa. Photo credit: Charles von der Meden, SAEON and SANBI

Bristle worms (*Chloeia inermis*), red spotted crab (*Mursia cristiata*) and mollusc (*Amalda bullioides*) in the highly productive sandy habitat on the outer continental shelf, West Coast of South Africa. Photo credit: Charles von der Meden, SAEON and SANBI