

Sabellastarte spectabilis (Grube, 1878)

Kingdom: Animalia

Phylum: Annelida

Class: Polychaeta

Order: Sabellida

Family: Sabellidae

Genus: *Sabellastarte*

Species: *S. spectabilis*



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Sabellastarte spectabilis is commonly known as the **feather duster worm**, **feather duster** or **fan worm**. It has reported for the **first time from Iranian waters (Kish Island)** and finding in the intertidal and subtidal reefs. Especially common in sites where phytoplankton is abundant. The worm's body occupies a flexible mucus tube formed by adhesion of silt from the water column. Polychaetes, or marine bristle worms, have elongated bodies divided into many segments. Each segment may bear setae (bristles) and parapodia (paddle-like appendages). Some species live freely, either swimming, crawling or burrowing, and these are known as "errant". Others live permanently in tubes, either calcareous or parchment-like, and these are known as "sedentary". This large worm can reach 80 millimeters in length and 10–12 millimeters in width. It is buff in color with purple specks. It lives in a tough, leathery tube covered with fine mud. The tentacles are striped in dark and pale brown bands and bear neither stylodes nor eye spots. There are two long, slender palps and a four-lobed collar. Cilia on the tentacles cause currents in the water and organic particles are caught as they float past. They are channeled along mucus-filled grooves to the mouth. Larger non-food particles are used for building the tube. The tentacles are also used as gills for gas exchange. This worm can reproduce asexually by fragmentation, and can regenerate body parts after being damaged. Reproduction can also be by sexual means. Most worms are either male or female and the gametes mature in the coelom before being released into the water column. Some specimens, particularly larger ones, have both male and female gametes and a study concluded that this was consistent with sequential hermaphroditism. Fertilization is external, and after a short time in the plankton, the trochophore larvae settle out and grow into adult worms.

Food: *Sabellastarte spectabilis* feed by filtering plankton and organic particles.

Distibution: *Sabellastarte spectabilis* is native to Indo-Pacific but has spread to other parts of the world. The native range of *S. spectabilis* is the Indian Ocean and the Red Sea, but it is now also found on the coasts of Africa and Mozambique and the Gulf of Mexico. It was reported in Hawaii.

