

Megalomma vesiculosum (Montagu, 1815)

Kingdom: Animalia

Phylum: Annelida

Class: Polychaeta

Order: Sabellida

Family: Sabellidae

Genus: *Megalomma*

Species: *M. vesiculosum*



Photo By: Ramin Ketabi, Tehran Univ. Kish Inter. Camp., Iran
Editor: Shahla Jamili, Iran Fish. Sci. Res. Inst. (AREOO), Iran

Megalomma vesiculosum (Giant Feather Duster Worm) has reported for the first time from Persian Gulf (Iran, Kish Island). *M. vesiculosum* is a polychaete worm that reaches up to 12 cm in length. It has relatively few (about 50) tentacles, each with a large eyespot at the free end. It creates a long and tough tube, which is mostly encrusted untidily with large shell fragments and small stones. The tube protrudes no more than 40-50 mm (in Iran, Kish Island) from coarse sand or muddy gravel at low water and below. The body and crown vary in color from yellowish to a reddish-purple brown and is usually spotted. The Giant Feather Duster Worm is a relative of the garden earthworm. It uses its colorful tentacles to filter the water for food, which includes phytoplankton and bacteria. *M. vesiculosum* requires a high density of phytoplankton and dissolved particulates to survive in a marine ecosystem. The worm generally buries its tube in the sand and the crown protrudes above to strain the water. If this worm sheds its tentacle crown, it is not getting enough food. It will usually regrow another, smaller than the previous. If this cycle continues, the worm will starve. Members of the class Polychaeta are mostly gonochoric (sexual). Females produce a pheromone attracting and signalling the males to shed sperm which in turn stimulates females to shed eggs, this behavior is known as swarming. Gametes are spawned through the metanephridia or body wall rupturing (termed as "epitoky", wherein a pelagic, reproductive individual, "epitoke", is formed from a benthic, nonreproductive individual, "atoke"). After fertilization, most eggs become planktonic; although some are retained in the worm tubes or burrowed in jelly masses attached to the tubes (egg brooders). Eggs develop into trocophore larva, which later metamorph into juvenile stage (body lengthened), and later develop into adults.

Food: *Megalomma vesiculosum* feeds mainly on phytoplankton.

Distribution: *Megalomma vesiculosum* occurs in Atlantic, Mediterranean and Indo-Pacific, Gulf of Naples, Persian Gulf.

