Physalia

Classification

Kingdom: Animalia

Phylum: Cnidaria

Class: Hydrozoa

Order: Siphonophorae

Family: Physaliidae

Genus: *Physalia*

For Further details link

Habit and habitat

Colonial Organism: The Portuguese man-of-war is not a single animal but a colony of individual organisms called zooids, each with a specialized function.

Pneumatophore: The gas-filled bladder, which can be up to 15cm high, acts as a sail, allowing the colony to be carried by the wind.

Tropical and Subtropical Waters: The Portuguese man-of-war thrives in warm waters, particularly in areas like the Florida Keys, the Gulf Stream, the Gulf of Mexico, and the Indian Ocean.

Pelagic Environment: They are a pleuston species, meaning they live at the surface of the ocean, with the pneumatophore exposed to the air.

Characteristics

- The species is composed of smaller units called zooids that hang in clusters from a large gas-filled structure called pneumatophores.
- Almost seven kinds of different zooids are described in the species, namely nectophores, vestigial nectophores and gonophores in the medusoid body and tentacle-bearing zooids, gonopalpons, gonozooids and free gastrozooids in the polyploid body.
- The pneumatophore, also called bladder, is a conspicuous, translucent and tinged (mauve, purple, pink or blue) part that rises as high as 15cm above the water.
- It is a floatation device that allows the colony to move in the direction of the wind.
- The pneumatophores are filled with carbon dioxide that is actively produced by the animal. This gas diffuses into the surrounding area in the event of an attack, thus allowing the colony to submerge in water for protection.
- The colony of *Physalia* hunts and feeds with the help of gastrozooids and tentacle-bearing zooids.
- The tentacle-bearing zooids, also known as dactylozooids or tentacular palpons, are equipped with tentacles of about 10 m lengths that can extend up to 30 metres.
- The tentacles have small, thread-like, coiled structures that are called nematocysts.
- The nematocysts have venom that is injected at the time of attack by squids and fishes. It paralyses and kills the organisms.
- For preying, the cnidarian contracts its tentacles to catch the prey upwards and bring it near the gastrozooids (digestive zooids). The gastrozooids surround the prey and secrete enzymes for digestion.
- The gonophores produce sperm and eggs, the gonozooids are accessory gastrozooids, and the nectophores allow the detached gonodendra to swim.