

Balanoglossus

Classification:

Kingdom: Animalia
Phylum: Hemichordata
Class: Enteropneusta
Order: Enteropneusta
Family: Ptychoderidae
Genus: *Balanoglossus*



Habit and habitat

Burrowing: *Balanoglossus* is a burrowing animal, meaning it lives in a burrow or tunnel in the sediment.

Tubicolous: They are tubicolous, meaning they live in a tube or burrow, which they line with mucus.

Marine: *Balanoglossus* is exclusively marine, meaning it lives only in saltwater environments.

Shallow waters: They are typically found in shallow, coastal waters.

Sandy or muddy bottoms: They prefer to burrow in areas with sandy or muddy substrates.

Characteristics

- *Balanoglossus*, commonly called acorn worm is an ocean-dwelling Hemichordate. It is an exclusively marine organism found in shallow waters in coastal regions of warm oceans. Their body is divided into proboscis, collar, and trunk. It is a burrowing animal. They are basically ciliary feeders. Development can be direct or indirect.
- *Balanoglossus* has a worm-like, brittle and soft body. Their body cavity is enterocoelous.
- They have a complete alimentary canal present in the digestive system. They respire by gill or body surface. Their respiratory pigment is vanadium in their blood. They have open circulation with colorless blood and amoeboid corpuscles. They possess true notochord. They do not have post-anal tail. Excretion is done by a single glomerulus commonly called the proboscis gland.
- Central nervous system is just like non chordates.
- The brain is present in the form of a nerve ring. Primitive nervous consists of the subepidermal nerve plexus. Cleavage is holoblastic in balanoglossus.
- Its food comprises minute organic substances, microscopic organisms, mud, and sand. It uses its muscular proboscis and collar to burrow sand and mud.