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Question 60 :- *Balanoglossus* ko classify karne hue chitra sahit varnan karne ?

Ans :-

Balanoglossus is an ocean-dwelling acorn worm (Enteropneusta) genus of great zoological interest because, being a Hemichordate, it is an "evolutionary link" between invertebrates and vertebrates. *Balanoglossus* is a deutostome, and resembles the Ascidians or sea squirts, in that it possesses branchial openings or "gill slits". It has notochord in the upper part of the body and has no nerve chord. It does have a stomochord, however, which is gut chord within the collar. Their heads may be as small as per 2.5 mm (1/10) in or as large as 5 mm (1/5 in).

Scientific Classification

Kingdom : Animalia

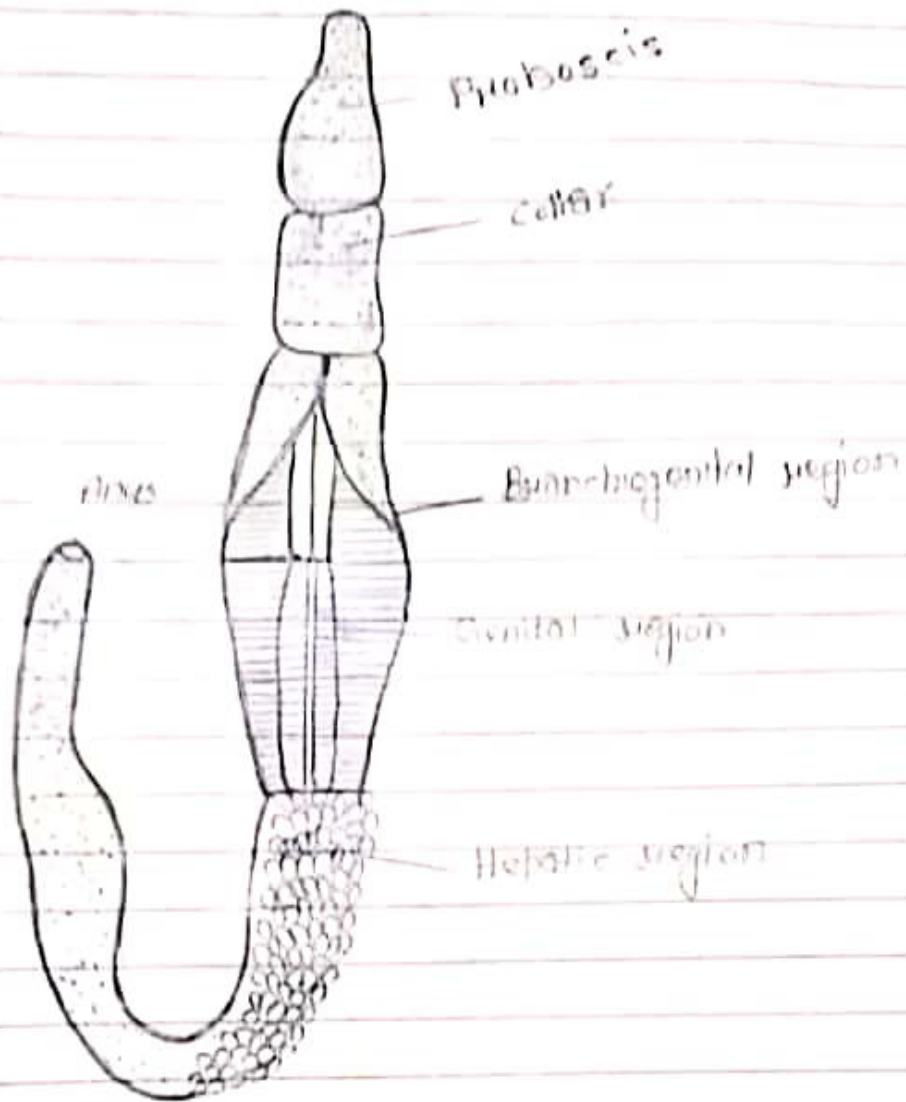
Phylum : Hemichordata

Class : Enteropneusta

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SALANOGLOSSUS

Order : Enterozoista

Family : Ptychodermidae

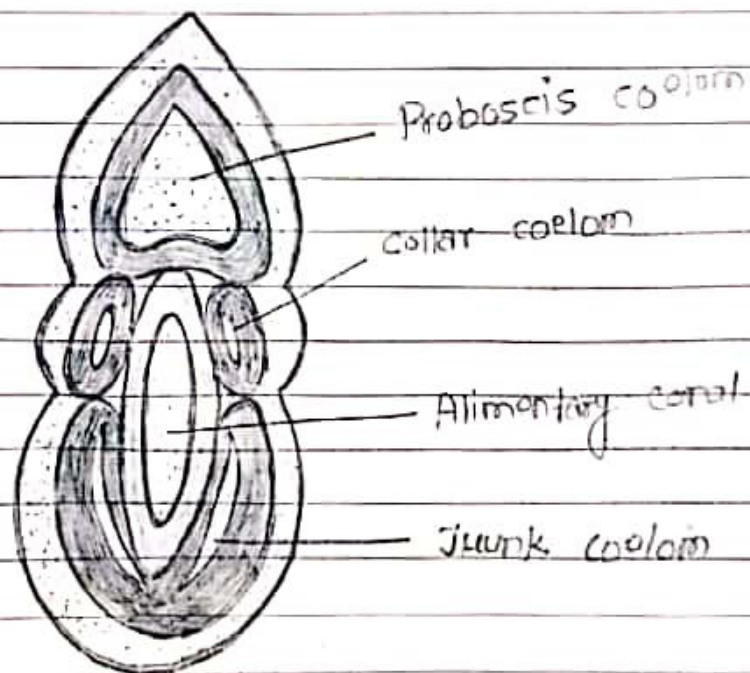
Genus : Salanoglossus
Otte Chioje, 1829

Discovery :-

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J. F. Eschscholtz who discovered *Balanoglossus* in 1825 in Marshall Islands described it as a worm-like holothurian. The discovery of gill-slits in this animal by Knwalewsky (1865) led to creation of a special class Enteropneusta by Gegenbause (1870). Bateson (1895) included them in phylum Chordata. Hyman (1959), however, placed them near Echinodermata and gave Hemichordata a status of an independent phylum.



Balanoglossus. Diagram of Tripartite embryo showing coelomic cavities.

Classification

This simple organism shows affinities with several diverse groups.

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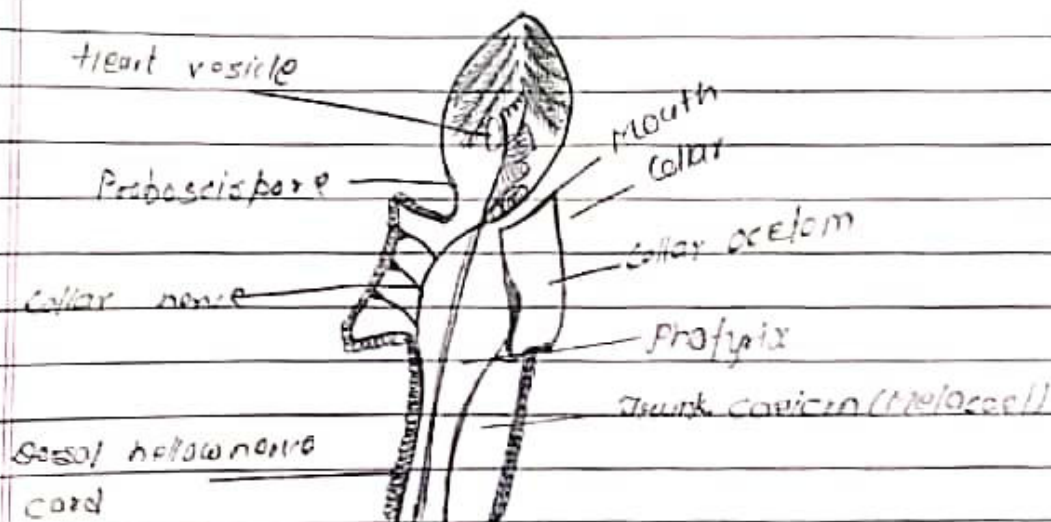
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Habitat :-

Balanoglossus is a tuberculus or burrowing and exclusively marine animal. It is found in shallow waters between tide marks along the coast of warm and temperate oceans.

BURROW :-

Balanoglossus clavigerus is a U-shaped excavated in a sandy bottom.



Affinities with Nemertinea :-

Nemertines resemble flatworms and possess a long protrusible proboscis. Balanoglossus shows similarity with nemertine in burrowing and feeding habits. The proboscis of nemertines is compared with proboscis of Balanoglossus. These similarities are superficial as the proboscis of Balanoglossus