

Characteristic Features of Phylum Ectoprocta:

1. Phylum Ectoprocta are mostly marine and some are freshwater animals.
2. Un-segmented, bilaterally symmetrical, sessile, colonial coelomate animals of trimeric construction except Monobryozoon which lives in solitary state.
3. The individuals or zooids of the colony are connected by organic substance.
4. Each zooid is covered by a cup-shaped exoskeletal case, called zoecium which is calcareous or chitinous and gelatinous in freshwater species.
5. Usually each zooid of the colony is about 0.5 mm in length.
6. V-shaped digestive tract with anus at the outside of the lophophore. Digestion in both extracellular and intracellular.
7. Respiratory, circulatory and excretory systems are absent in Phylum Ectoprocta.
8. Nervous system includes a sub-epidermal plexus with circumpharyngeal nerve ring.
9. Polymorphism is a common feature and physiological exchange takes place through the pores of the walls among the colony zooids.
10. Bryozoans are hermaphrodites.
11. Gonoducts are lacking in Phylum Ectoprocta.
12. Sperms are released into the coelom and exit through the pores in the lophophore tentacles.
13. Fertilization takes place both in sea water or in the metacoel.
14. Development takes place in sea water or in the special brood chambers of the colony (e.g., Cheilostome sp.).

15. Cleavage is biradial in Phylum Ectoprocta.