

Classification of Urochordates

UROCHORDATA CLASSIFICATION -2



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UROCHORDATES CLASSIFICATION

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Classification

Present classification has been adopted from “Storer and Usinger” as given in their book, ‘General Zoology’ of 1965.

The subphylum Urochordata has been divided into following 3 classes.



Class: 2. Thaliacea

1. Adults free living, pelagic, in warm and temperate sea
2. Solitary or colonial
3. Tunic permanent, thin and transparent, with circular muscle
4. Atriopore located posteriorly
5. Pharynx with 2 large or numerous small gill slits
6. Dioecious
7. Adult without notochord, nerve cord, and tail
8. Asexual budding from a complex stolon
9. Life history with an alternate of generation

Order 1. Pyrosomida

1. Colony compact, tubular, closed at one end and phosphorescent through the life, due to invasion of its egg y a symbiont luminescent bacteria
2. Muscle bands confined to body ends
3. Gill-slits upto 50
4. No free swimming larva
5. Reproduction by budding

Example: *Pyrosoma*

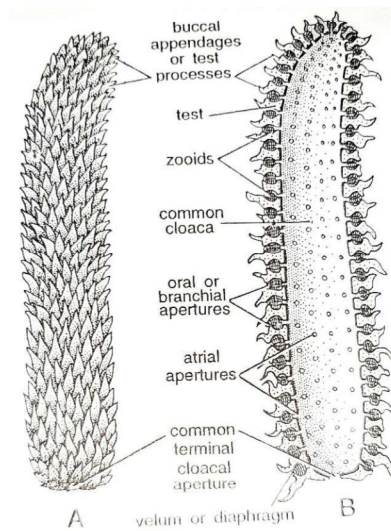


Figure 2 *Pyrosoma*

Order 2. Doliolida

1. Body barrel-shaped
2. 8 complete rings of muscle bands
3. Gill-slits small, few to many
4. Tailed larva with notochord

Examples: *Doliolum*, *Doliopsis*

Order 3. Salpida

1. Body cylindrical or prism shaped
2. Muscle bands incomplete ventrally
3. Pharynx communicates freely with atrium through a gill-slit
4. Tailed larva absent

Examples : *Salpa*, *Scyclosalpa*

Class 3. Larvacea (Appendicularia)

1. Small, solitary, free-swimming
2. Neotenic,
3. larva-like forms have tail, notochord, nerve cord and brain
4. Atrium and atrial aperture absent
5. Gill-slits 2, opening directly to outside
6. Hermaphrodite
7. No metamorphosis

Order 1. Endostylophora

1. Bilaterally symmetrical
2. separate inhalent and exhalent apertures
3. Pharynx with endostyle

Examples : *Oikopleura*, *Appendicularia*

Order 2. Polystylophora

1. Biradially symmetrical, with aperture
2. Pharynx without endostyle.

Example : *Kowalevskia*

