Phylum: Ciliophora:

Characteristics of Ciliophora:

- **1.** They are either freeliving in freshwater, e.g., <u>Paramecium</u> sp., <u>Vorticella</u> sp. and or parasitic in host's body, e.g., <u>Balantidium</u> <u>coli</u> and <u>Opalina</u> sp.
- **2.** Body takes different and complex forms, contains a micronucleus its role is reproduction and a macronucleus that performs other cellular functions, contractile vacuoles and other organelles.
- 3. Movement is by cilia.
- **4.** Lifecycle includes asexually (by binary fission) and sexually stages(by conjugation).

Kingdom: Protista

Subkingdom: Protozoa Phylum: Ciliophora

Class: Oligohymenophorea

Order: Peniculida

Family: Parameciidae

Paramecium sp.:

- 1) Freeliving ciliated protozoa, lives in fresh water ponds and streams.
- 2) Body is oval-shaped, equally covered with simple cilia, a deep oral groove is found.
- 3) Reproduction is asexually by binary fission or sexually by conjugation.

Order: Peritrichia Family: Vorticellidae

Vorticella sp.:

- 1) Freeliving ciliated protozoa, lives in fresh water ponds and streams.
- 2) Body is inverted bell-shaped, consisted of disk and stalk, only the disk is covered with (adoral area). Each cell has a separate stalk reached to the substrate surface.
- 3) Reproduction is asexually by budding or sexually by conjugation.

Class: Oplalinea Order:Opaliida Family: Opalinidae

Opalina sp.:

1) Parasitic or commensal ciliated protozoa, lives in the rectum of frog.

3rd Lab. **Practical Invertebrates**

- 2) Body is leaf like, covered with nearly equal flagelliform cilia. It has many nuclei. It is without a mouth (Cytostome) and contractile vacuoles.
- 3) Reproduction is asexually by binary fission or sexually by gametes formation.



