

CTENOPHORA (Comb Bearers)

Dr. RAMBABU (ASSOCIATE PROF.)

DEPTT. OF ZOOLOGY

Dr. B.R. AMBEDKAR GOVT. DEGREE COLLEGE MAINPURI

Salient Features:

- 1- Ctenophora is a small phylum of marine animals.
- 2- They are free swimming, transparent, jelly like soft bodied animals.
- 3- Generally ovoid and pelagic animals.
- 4- Biradial symmetery, Comb like ciliary plates for locomotion.
- 5- The lasso cells present but nematocyst are wanting.
- 6- The body is transparent pear shaped or ribben shaped.
- 7- They have a biradially symetrican body.
- 8- They have a pair of long solid retractile tentacles.
- 9- They have comb like eight ciliary plates.
- 10- The body is acoelomate and triploblastic.
- 11- The outer epidermis inner gastrodermis middle mesoglea.
- 12- They lack nematocyst.
- 13- They lack skeletal, circulatory, respiratory and excretory organs.
- 14- Their development direct cydippid larva.
- 15- They lack a sexual reproduction and alternation of generation.

CLASSIFICATION:

Phylum ctenophore contains about Hundred Known species and grouped in two classes

CLASS-1 Tentaculata

- 1- Mouth narrow and pharynx small.
- 2- Adult with two long aboral tentacles.
- 3- Adults have oral lobes.

ORDER-

CYDIPPIDA	LOBATA	CESTIDA	PLATYCTENEA	THALASSOCALYCIDA
Body simple round oval.	Body oval.	Body Elongated flat ribbon like.	Body comprassed.	Body is Medusa shaped.
Tentacles are two long and branched	Tentacles reduced.	Two main tentacles in the sheath.	Two well developed tentacles with sheath.	A pair of small tentacles.

Digestive canals blindly no anal pore.	Gastrovascular canals at oral ends.	Comb plates in four rows.	Comb plates reduced in adult.	Comb jelly colour less body.
eg. Pleurarobranchia Hormiphora	eg. Bolinopsis	eg. Cestum valamen	eg. Ctenophora coeloplana	eg. Thallasocalyce inconstans

CLASS- NUDA

1. Body large conical and laterally compressed.
 2. Body without tentacles and oral lobes.
 3. Wide mouth large pharynx voracious feeder.
- Eg- Beroe.

Affinities with Cnidiaria

Resemblance with coelentrata:

- 1- Body tetramerous like the medusa of hydrozoans.
- 2- Presence of branching gastrovascular canals.
- 3- Absence of coelom.
- 4- Presence of tentacles and statocyst.
- 5- Presence of gelatinous mesoglea.

Differences from Coelentrata-

1. No colony formation.
2. No polymorphism.
3. Nematocyst absent.
4. Statocyst present.

Affinities with platyhelminthes-

1. Dorsoventrally flattened body .
2. Crawling mode of locomotion ciliated epidermis lobed gastro vascular cavity.

There for it seems quiet logical to treat ctenophora as a seprate phylum rather than a class or sub phylum coelentrata. But ctenophores have certain characteristics in common with coelentrata.