TOPIC: PLATYHELMINTHES:GENERAL CHARACTERISTICS(II)

LECTURE NO:23
B.SC PART 1
ZOOLOGY(HONS.)-PAPER I-GROUP A
CHAPTER 7
DATE: 2nd JULY 2020
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Order - Rhabdocoela

Small, usually less than 3mm.
Simple pharynx and sac- like intestine.
Proto-nephridial excretory system.
One or two gonads.
Yolk gland present or absent.
Marine, freshwater or terrestrial forms.
Free- living, commensal or parasitic forms.

Order –Rhabdocoela classified into following sub-order:-

Suborder-Notandropora

Exclusively fresh water forms.
Pharynx simple.
Testis single compact mass, penis unarmed.
Yolk glands absent.
Asexual fission occurs with formation of chains of zooids. E.g. *Catenula*

Suborder- Opisthandropora

Marine or freshwater forms.
Testis compact and penis unarmed.

Yolk glands absent.
Found paired nephridia.
Eg. *Macrostomum and Microstomum.*

Suborder- Lecithopora

Marine or freshwater and terrestrial forms.
Pharynx bulbose.
Separate ovaries.
Yolk glands present.
Mostly free living.
Reproduction
sexual. *E.g.*
Mesostoma.

Suborder- Temnocephalida

Freshwater ecto-commensal forms.
Pharynx dolii form.
Simple
gonopore.
Eg.
Temnoceph
ala.

Order -Alloecoela

Moderate- sized, between 1and 10 mm.
Pharynx simple, bulbous or plicate.
Intestine straight or branched.
Proto-nephridia paired, usually branched.
Testes numerous.
Penis papilla mostly present.
Mostly marine, common in littoral sand and mud.
Some freshwater and brakishwater forms.

Order –Alloecoela divided into four suborders.

Suborders- Archopora

Marine forms.
Pharynx plicate.
Female reproductive organ primitive.
Male copulatory
apparatus. *Eg.*
Proporoplana.

Suborder- Lecithoepitheliata

Marine or freshwater and terrestrial forms.
Pharynx simple or bulbose.
Female ducts simple
Yolk glands absent.
Eg. Prorhynchus and Geocentrophora.

Suborder- Cumulata

Marine or freshwater forms.
Pharynx plicate or bulbose.
Penis unarmed.
Yolk glands present.
Eg- Hypotrichina.

Suborder- Seriata

Several Marine forms but some freshwater forms.
Pharynx plicate.
Intestine usually with lateral diverticula.
Statocyst mostly present.
Female reproductive system consists of separate ovaries.
Yolk glands present.
Eg. Otoplana.

Order - Tricladida

This is large size turbellarians.

Size 2 to 60 cm in length.
Mouth mid-ventral, pharynx plicate and intestine with three branches, each with many diverticula.
Proto-nephridia as lateral networks with many nephridiopores.
Testes numerous, ovaries two.
Yolk glands present
Marine, freshwater or terrestrial forms.
Order – Tricladida divided into three suborders:-

Suborder- Maricola

Exclusively marine forms.
A pair of eyes.
Typical penis papilla.
Only sexual reproduction.
Eg. - Ectoplana.

Suborder- Plaudicola.

Mostly freshwater and some brackish water forms.
Eyes two to many or some time completely absent.
Sexual reproduction shows.
Eg. Planaria

Suborder- Terricola

Terrestrial, tropical and subtropical forms.
Body elongated.
Eyes more than two.
Bursa absent.
Asexual reproduction shows.
Eg. Bipalium.

Order - Polycladida

Moderate-sized, 2 to 20 mm.
Pharynx plicate.
Intestine highly branched.
Gonads many, scattered.
Yolk glands absent.
Male and female gonopores separate.
Marine, many bottom dwellers of littoral zone. Order – Polycladida classified into two sub order:-

Suborder- Acotylea

Pharynx vertical.
Sucker absent.
Tentacles nuchal type.
Eyes absent.
Eg. Notoplana.

Suborder- Cotylea

Pharynx tubular
Sucker present
A pair of marginal tentacles bearing eyes. *E.g. Thysanozoon (Fig.4)*

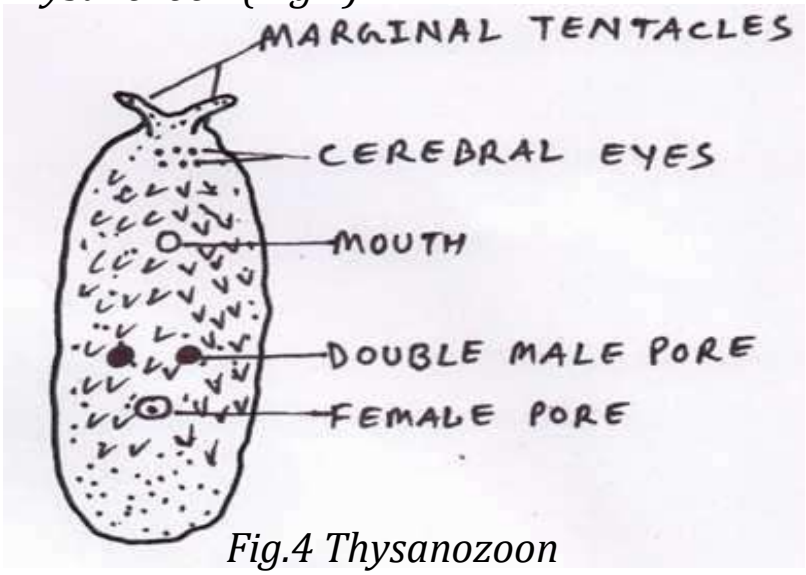

Fig.4 Thysanozoon