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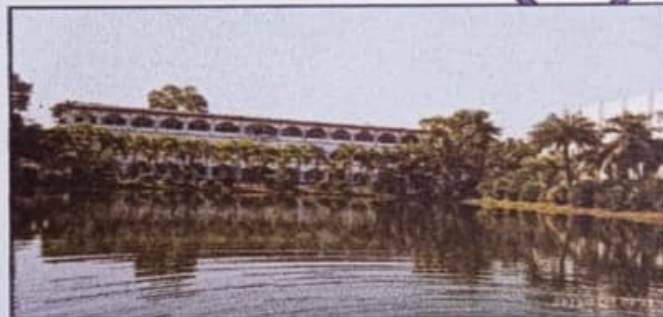
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DEPARTMENT OF ZOOLOGY

SEMESTER- II

ZOOLOGY (H)



PROJECT NAME:- LARVAL FORMS OF MOLLUSCA

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This is to certify that Mr./Miss Anindita Gole.....

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has successfully completed a dissertation/project entitled... The larval

forms of mollusca.....

For the paper... C2P..... In the year... 2023.....

u.d. K.A. 13.09.23

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Sonam 14.9.23

Signature of Principal

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Date:-

A PROJECT WORK ON
"THE LARVAL FORMS OF MOLLUSCA"

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- 2) TYPES OF LARVAL FORM IN MOLLUSCA
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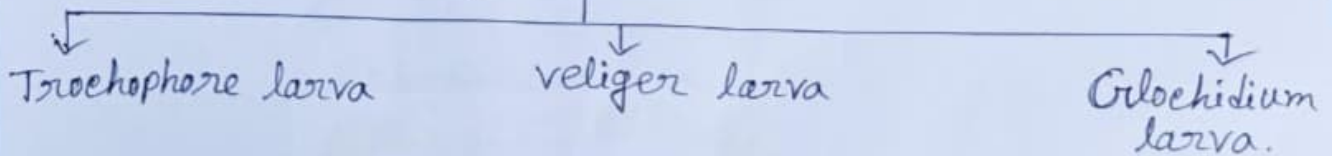
INTRODUCTION

Mollusca = mollis (L.) = Soft bodies. First used by Aristotle to the cuttle fish. It is the second largest phylum of Animal Kingdom. Animal having soft bodies with in shell and ventral muscular foot. Found in all possible habitat except in the air. Most of them are marine. Fertilization either direct or indirect. Direct development has no larval stage but indirect development with larval stage.

LARVAL FORMS IN MOLLUSCA

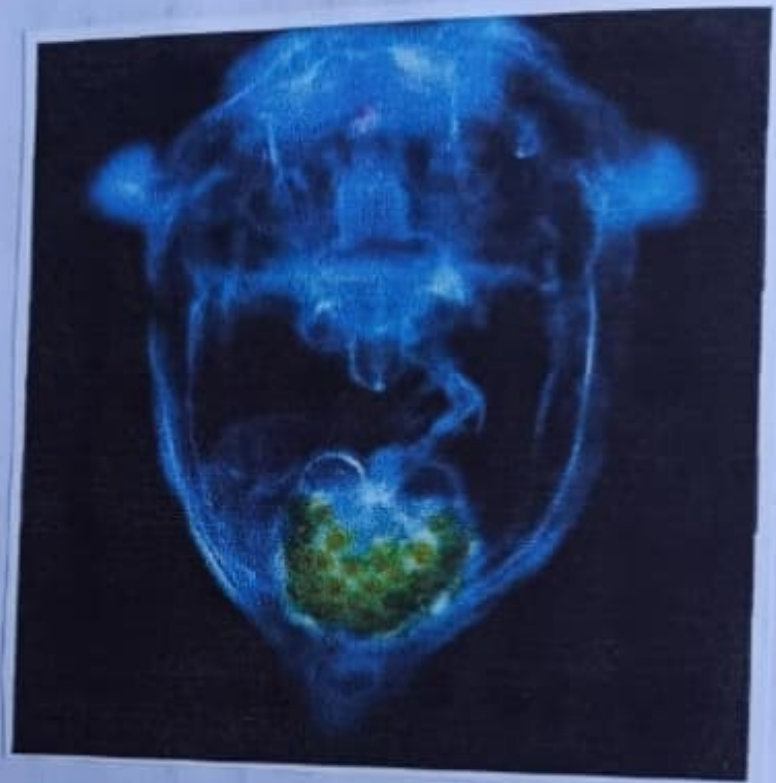
3 types of larva are found in mollusca.

MOLLUSCA



* EVOLUTIONARY CHARACTERS OF MOLLUSCA :-

- Some molluscas are herbivorous while other are carnivorous. The digestive system is largely extra-cellular.
- The mostly have ganglionated nervous system the ganglia have tendency to become concentrated at the anterior end.
- The nephridial wall tends to become evaginated and folded to effects to an increase in the surface area for tubular secretion of waste picked up from circulatory blood.
- The gonad have lost their primitive associations with the pericardial cavity and associated with the priey and have mounted on special axis to the outside.



Fig^o Trocophore Larva

TROCHOPHORE LARVA

SYSTEMATIC POSITION OF TROCHOPHORE LARVA

Kingdom - Animalia

Sub-Kindom - Metazoa

Phylum - Mollusca

Class - Polyplacophora

Specimen - Trochophore larva

SPECIMEN CHARACTERS :-

- Body unsegmented with distinct oral and aboral and divided into three regions, Trochophal region, Pygidium, growth region.
- The presence of a few encircled ciliated band, Protoch, Metach and Neuroch.
- Gut complete have four distinct regions, A mid ventral mouth, A sac like stomach, long intestine, Anus.
- A pair of ocelli present and a pair of protonephridia are present.

ECONOMIC IMPORTANCE

Trochophore also exhibits the primitive form of metamerism. Now a days old ideas of recapitulation have been greatly modified. It is claimed that the trochophore represents a transitional stage in the line up of emergence of the bilateral groups from the radial groups.



Fig:- Veliger Larva

VELIGER LARVA

SYSTEMATIC POSITION OF VELIGER LARVA

Kingdom - Animalia

Sub-Kingdom - Metazoa

Phylum - Mollusca

Class - Scaphopoda

Specimen - veliger larva

SPECIMEN CHARACTERS

- The velum are very delicate and extensive and a very delicate organs of locomotion.
- The preoral ciliated area or velum begin to produce on both sides as a bilobed flap.
- The larva has shell into which the velum apparatus could be withdrawn and which encloses the partly developed viscera.
- on the dorsal surface mantle is formed between velum and anus.
- Alimentary canal is complete and provided with eyes and tentacles.

ECONOMIC IMPORTANCE

Veliger larva is second stage larva of certain mollusca such as marine snail. The velum is used for feeding, swimming and gas exchange and it is absorbed or lost at its adult stage as the mollusca metamorphosis.



Fig:- Glochidium Larva

GLOCHIDIUM LARVA

SYSTEMATIC POSITION OF GLOCHIDIUM LARVA

Kingdom - Animalia

Sub-Kingdom - Metazoa

Phylum - Mollusca

Class - Bivalvia

Specimen - Glochidium larva

SPECIMEN CHARACTERS

- Body comprises a shell and mantle.
- Mantle lobes are small and bears brush like sensory bristles.
- Adductor muscle minute body 0.1 to 0.4 mm in diameter.
- Shell consists of two triangular valves united dorsally and free ventrally.
- Extends between two valves at the base.

ECONOMIC IMPORTANCE

A parasite glochidium larva on host fishes has many advantages. Besides affording protection and a mean of nourishment it ensure for wide and more rapid dispersal.

CONCLUSION

- Free swimming larva are usually formed when the adult is fixed.
- Internal parasites generally have a stage which may be called larval stage in which they are transferred either by active or passive migration to a new host.

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10/10/23

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