

Oryzophora

There are only 70 species included in this phylum, the most familiar genus of this phylum is paripatus. These are caterpillar like forms which display both annelidan as well as arthropodan characters besides its own typical features. Owing to its resemblances with the two phylum, paripatus is often referred to as the connecting link between Annelida and Arthropoda.

Annelidan Characters :-

- ① Vermiform body with truncated extremities
- ② Absence of true head.
- ③ Dermo-muscular body wall consisting of flexible cuticle with underlying and longitudinal muscle.
- ④ Locomotion is slow and by peristalsis as in case of earthworm.
- ⑤ Structures of eyes is simple as in case of polychaetes.
- ⑥ Unjointed, hollow, stumpy appendages like the parapodia of polychaetes.
- ⑦ Simple, straight alimentary canal with terminal mouth and anus.
- ⑧ Segmentally arranged paired nephridia
- ⑨ Similar excretory glands.
- ⑩ presence of cilia in excretory and reproductive ducts.

Arthropodan characters:

- ① Presence of Antennae
- ② jaws are modified appendages provided with striped muscles.
- ③ Locomotion by definite legs with well defined musculature and claws.
- ④ Cuticle with thin deposit of chitin like arthropoda
- ⑤ Body cavity is haemocoel.
- ⑥ Peculiar salivary glands that are modified nephridia.
- ⑦ Presence of a tracheal respiratory system.
- ⑧ Brain is large and typically arthropodan
- ⑨ Reproductive organ and development mainly arthropodan.

Onychophoran characters:

- ① Body wall is dermo-muscular consisting of cuticle, epidermis, dermis and striped circular and longitudinal muscles.
- ② Coelom is in the form of small cavities around the gonads and metanephridia
- ③ The body cavity is haemocoel, lined with epithelium.
- ④ A pair of slime glands is located one on either side of the body cavity.
- ⑤ The mouth leads into alimentary canal which consist of tongue with rows of sensory spines, muscular

pharynx, large salivary glands and short oesophagus, long mid gut or stomach, intestine and short hind gut or rectum.

⑥ The respiratory organs are unbranched trachea communicate outside through spiracles.

⑦ The excretory organs are coxal glands opening at the base of the legs.

⑧ Dorsal tubular contractile heart lies within pericardial cavity.

⑨ The nervous system consist of brain with two circum-pharyngeal connectives and a pair of longitudinal nerve chord.

⑩ Sensory organs are a pair of eyes near the base of antennae, taste spines are the lips, pre oral cavity and tactile spines on surface tubercles.

11. Female reproductive organ includes a pair of ovaries, a pair of oviducts and a pair of beaded uteri. Male reproductive system consist of a pair of testes, vas deferentia, genital openings and seminal vesicles.

⑫ Female produces about 30 or more young ones in a year. The young resemble the adult.

Oxychophora has the characters of both phylum Annelida and Arthropoda. Therefore, they are regarded as the intermediate stage or the connecting link between annelida and arthropoda. However they appear to be more closely allied to arthropods than to annelids and have arisen as a offshoot for the base of arthropod line.
