Kingdom animalia: phylum platyhelminthes

Philosophy



Platyhelminthes are known for organ level of organization, highlighting three main sets of organs: The excretory system, the nervous system, and the digestive tract. The excretory system is made up of flame cells and ducts. The nervous system includes a pair of anterior ganglia with two nerve cords, interlinked by transverse nerves, going through the whole length of the creature. These nerve cords form a ladder-like structure. The digestive tract is branched and does not have an anus, hence it is incomplete. Platyhelminthes are triploblastic because of the three germ layers called ectoderm, endoderm, and mesoderm. The ectoderm is the base of the outer epithelium. The endoderm becomes the lining of the gut tract. The mesoderm is the tissue between the ectoderm and the endoderm. Mesoderm consists of muscle and undifferentiated cells called parenchyma. Platyhelminthes are also called acoelomate because there is nobody cavity between any of the three germ layers. Platyhelminthes are further divided into three classes: Class Turbellaria (flatworms); Class Trematoda (flukes); and Class Cestoda (tapeworms).