

ANNELIDA

(a) Nereis

Parapodium Permanent Preparation

1. In Nereis, parapodia are lateral projections of the body. Cut a few parapodia from the body of Nereis, wash them in water dehydrate in 30, 50 and 70 %alcohol.
2. Stain in borax carmine; again dehydrate in 90%and 100 %alcohol.
3. Clear in xylene and mount in Canada balsam.
4. Study the slide under microscope, draw the diagram and note its characteristic feature.

(b) Pheretima

Glycerine preparations of setae in situ and brain

1. In situ means mounting of setae within the body wall. Cut a squarish piece of integument from the ventral side of the body of earthworm, put it in the test tube and pour 5% KOH solution in the test tube
2. Boil it until the integument piece turns yellow. When it cools, decant the KOH. Wash the integument with water and spread it on the slide. Remove the muscles present on the inner side of the integument.
3. Observe it under the microscope and observe the setae, once the presence of setae is ascertained dehydrate it in 30, 50 and 70% alcohol, stain in borax carmine and again dehydrate in 90% and 100 % alcohol.
4. Clear in xylene and mount in Canada balsam. Study the slide under the microscope.
5. Draw a neat well-labeled diagram and write comments.

Permanent preparations of ovary:

1. Take a well-preserved earthworm having a distinct clitellar region. Pin it properly and open it from the dorsal surface. Lift the alimentary canal considerably behind the clitellum and pull it forward upto 13th segment.
2. Pin down the cut end of alimentary canal in front of the anterior end of the body. Two white dot like structures are visible attached at 13/14 beneath the gut on either side of ventral nerve cord. Carefully take out both the ovaries on a slide in a drop of water and confirm under the microscope.
3. Once confirmed dehydrate it in 30, 50 and 70% alcohol, stain in borax carmine and again dehydrate in 90% and 100 % alcohol.
4. Clear in xylene and mount in Canada balsam. Study the slide under the microscope.
5. Draw a neat well-labeled diagram and write comments.

Septal nephridia:

1. Dissect open the preserved earthworm and take out one or two septa. Observe under the microscope and confirm the presence of septal nephridia.
2. Once confirmed wash in water, dehydrate it in 30, 50 and 70% alcohol, stain in borax carmine and again dehydrate in 90% and 100 % alcohol.
3. Clear in xylene and mount in Canada balsam. Study the slide under the microscope.
4. Draw a neat well-labeled diagram and write comments.