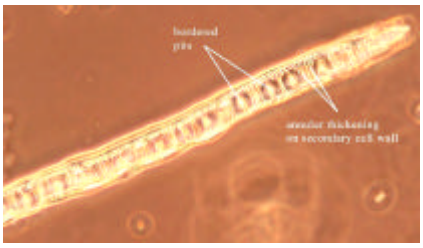
7. Preparation of macerated plant materials

Macerated plant materials are excellent for the study of plant cell types. A small quantity of the macerated tissues may be mounted in glycerine and observed under microscope.



Procedure

1. Cut the plant tissue (stem or root) into small pieces of not more than 1 mm thick.
2. Put the tissue into freshly prepared macerating fluid. The fluid is prepared by mixing equal volumes of 10% chromic acid with 10% nitric acid.
3. Leave the tissue in the macerating fluid for about three days. (The exact number of days required depends on the type of plant material being used.)
4. Tease the tissue with dissecting needles. If the cells do not separate readily, leave the tissue in the macerating fluid for another day. If the cells separate easily, they are ready for the next step.
5. Filter off the macerating fluid and wash away the acids from the macerated material with water.
6. The macerated plant material may be stored in 70% alcohol.
7. The macerated material is ready for temporary mounting.

Chromic acid and nitric acid are corrosive. Avoid contact with skin.

Note

1. Flowering Chinese cabbage, Chinese kale and *Zebrina* are suitable plant materials.