

PHARMACOGNOSY-I

List of Experiments

1. Introduction to the materials required for microscopic work, preparation of histological slides and their focusing to obtain the critical illumination with the instructions for the use of microscope.
2. Preparation of commonly used reagents in microscopic work.
3. Identification of following cell contents in plant materials by microscopical and microchemical tests: Starch grains in potato, maize, rice and wheat.
4. Identification of following cell contents in plant materials by microscopical and microchemical tests.
a) Mucilage b) Aleurone grains c) Fixed oils
5. Measurement of dimensions of cells and cell contents. Introduction to micrometer and camera lucida (drawing ocular).
6. Measurement of dimensions of starch grains in powdered ginger.
7. Identification of cinnamon by measuring the dimensions of starch grains.
8. Detection/ identification of Carbohydrates by chemical tests.
9. Detection/ identification of lipids by chemical tests.
10. Isolation of starch from Potato.
11. Determination of Swelling factor in crude drugs.
12. Identification of crude drugs mentioned in the theory by Organoleptic method.
13. Identification test for Tannins.
14. Identification test for Resins.
15. Determination of volatile oils content of Eucalyptus leaf or Fennel by using Clevenger apparatus.
16. Determination of Eugenol content in clove oil and detection by TLC.

ADDITIONAL EXPERIMENTS

17. Isolation of starch from maize.
18. Identification of volatile oils in lipids.