

PBO-501 PRACTICAL BASED ON TOPICS COVERED IN CBO-501

MAJOR EXPERIMENTS

- Determination of IAA/IAA Oxidase activity.
- Determination of Amylase and Peroxidase activity from control and stressed seeds.
- Estimation of Sugar, Protein, Amino acid content from control and stressed seeds.
- Separation of Plant pigments by using separating funnel.

MINOR EXPERIMENTS

- Seed germination under different light, temperature and hormone treatments.
- Extraction and estimation of plant pigments in young and old leaves.
- Estimation of chlorophyll a and b from C₃ and C₄ plants
- Separation of chlorophyll pigments from the leaves by chromatographic method.
- Demonstration of seed survival under salinity.
- Seed germination studies using different mineral ions.

GENERAL EXPERIMENTS

- Seed viability, seed vigor study and seed leachate study.
- Study Growth indices: RGR, NAR, LWR and LAL.
- Effect of Seed soaking with different PGRs on seed germination and seedling growth.
- Demonstration of Leaf senescence by ABA and Kinetin.

SPECIMENS 'A' and 'B'

- Promotion and inhibition of seed germination as affected by Red and Far-red irradiation.
- Bioassay of hormones: Auxin, GA and Kinetin.
- A model of dormancy and germination showing selective functions of hormones.
- *Avena* Coleoptile section test
- *Avena* Coleoptile curvature test
- Effect of apical bud removal and auxin on lateral bud growth.
- Translocation of floral hormone.
- Corn leaf showing Kranz anatomy.