

Plant Tissue Culture Unit

Head of the Unit: Dr. Pushpalatha G., Associate Professor

The Plant Tissue Culture Laboratory provides starter plants like banana, pineapple and ornamental plants. The laboratory works to produce healthy seedlings free from pathogens and uniformity. The laboratory aims to promote academics, research and training for under-graduate, post-graduate and doctoral students for skill development, professional excellence and productivity at industrial sectors for an ultimate benefit to the tribal farmers, rural society and entrepreneurs.

Objective:

- To train the students of under-graduate, post-graduate and Ph.D.'s for their academics and skill development.
- To deliver commercially important and quality plants so as to reach farmers.

Scope: The development of tissue culture system is a rigorous procedure that involves genetic, physiological and developmental approaches and requires the optimization of chemical, physical and environmental factors of growth. The laboratory is committed to work towards development of tissue culture production of plants.



Functions:

The laboratory is well-equipped with instruments such as PCR, rt-PCR, cooling centrifuge, autoclave, laminar air flow chambers, etc., to carry out research activities like micro-propagation of medicinal/exotic plants and molecular biology based research activities comprising of gene-expression studies.

The wing is focused on research activities majorly on plant tissue culture and plant biotechnology, which works toward training the students for academics and skill development. The major activity is to produce plants like banana and pineapple.

Outcome:

Production of healthy plant tissue culture plants at laboratory conditions would further reach farmers in the field for large scale production. Students with the plant tissue culture skills would further build their own career in the field of plant biotechnology at several levels including entrepreneurship, biological engineers, plant breeders, etc.