

NTHRYS WORKSHOPS.

Integrated Plant Tissue Culture Workflow and Plantlet Acclimatization

[Workshop Index](#) | [Duration: 5 Days](#)

Use the index to navigate the workshop sections and open quick reference modals for scope, audience, outcomes, delivery, policies, and FAQs.

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Integrated tissue culture workflow across initiation, multiplication, rooting, and hardening

Review the complete micropropagation pathway from explant collection to acclimatized plantlet establishment.

[Workflow Mapping](#) | [Micropropagation](#)

Learn aseptic handling, sterilization sequencing, and contamination control measures for reliable culture initiation.

[Aseptic Technique](#) | [Contamination Control](#)

Understand media preparation, growth regulator balancing, and subculture planning for shoot multiplication.

[Media Preparation](#) | [Shoot Multiplication](#)

Practice rooting strategies, plantlet quality checks, and transition steps required before hardening.

In Vitro Rooting **Quality Checks**

Cover hardening chamber conditions, substrate choice, humidity management, and greenhouse acclimatization.

Hardening **Greenhouse Transfer**

Discuss documentation, batch tracking, and troubleshooting checkpoints across the full tissue culture cycle.

Batch Records **Troubleshooting**

Overview

Plant Tissue Culture **Lab To Greenhouse** **Applied Training**

Build operational understanding of every stage from explant preparation to acclimatization

Examine explant selection criteria, mother stock quality, and pre-treatment practices that influence culture response.

Explant Selection **Mother Stock**

Compare sterilants, exposure times, rinse cycles, and aseptic transfer practices used during initiation.

Surface Sterilization **Culture Initiation**

Interpret how basal media, carbon source, gelling agents, and hormones affect multiplication performance.

Basal Media **Growth Regulators**

Understand rooting induction, elongation support, and vessel management for vigorous plantlet development.

Root Induction **Plantlet Development**

Map hardening stages including primary hardening, humidity

reduction, and acclimatization under protected conditions.

Primary Hardening **Acclimatization**

Identify measurable outcomes such as survival rate, contamination rate, multiplication index, and transplant readiness.

Survival Rate **Process Metrics**

Agenda

Stepwise Practice **Demonstration Based** **Five Day Format**

Structured agenda covering setup, culture handling, rooting, and acclimatization practice

Day 1 introduces workflow logic, lab safety, mother stock review, explant collection, and sterilization planning.

Day 1 **Lab Safety**

Day 2 focuses on media preparation, pH adjustment, dispensing, sterilization, and culture initiation workflow.

Day 2 **Media Preparation**

Day 3 covers incubation conditions, contamination reading, subculturing, and multiplication strategy optimization.

Day 3 **Subculturing**

Day 4 demonstrates rooting media selection, plantlet assessment, vessel opening protocols, and pre-hardening care.

Day 4 **Rooting Stage**

Day 5 addresses washing, transplanting, substrate preparation, humidity control, and greenhouse acclimatization.

Day 5 **Greenhouse Acclimatization**

Hands-on segments reinforce sterile transfer, media handling,

vessel labeling, record keeping, and troubleshooting.

Hands-On Practice **Process Records**

Deliverables

Templates Included **Reference Support** **Practical Outputs**

Take away workflow references, practical exposure, and answers to common implementation questions

Participants receive guided coverage of the end-to-end tissue culture workflow with stepwise operational notes.

Workflow Notes **Operational Guidance**

Hands-on exposure includes sterile handling, media setup, transfer routines, and acclimatization checkpoints.

Sterile Handling **Checkpoint Review**

Reference formats may include batch logs, media planning notes, transfer labels, and troubleshooting cues.

Templates **Documentation**

FAQs address expected participant background, lab exposure, workflow depth, and plantlet transition topics.

Participant Fit **Workflow Depth**

The workshop is designed for learners seeking connected understanding across initiation, multiplication, rooting, and hardening.

Integrated Learning **Stagewise Progression**

Participants can use the workshop as a practical bridge between lab tissue culture steps and greenhouse establishment.

Lab To Greenhouse **Application Ready**

Quick View **Who Should Attend** **Outcomes** **Delivery** **Policies** **FAQs**

