Pilot Scale Biocontrol Production and Scale Up Workshop

Workshop Index **Duration: 2 Days**

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

Quick Summary

Biocontrol Production **Two Day Format** **Scale Up Readiness**

Core Pilot Scale Production Principles for Biocontrol Agents

Understand how pilot scale production bridges laboratory success and larger manufacturing readiness for microbial and biological plant protection agents.

Manufacturing Readiness **Biological Agents**

Review upstream and downstream considerations including inoculum preparation, media selection, fermentation logic, harvesting, stabilization, and formulation planning.

Fermentation Logic **Formulation Planning**

Examine how process consistency, contamination control, yield performance, and viability retention influence pilot scale success.

Contamination Control **Viability Retention**

Build awareness of equipment choice, batch documentation, process monitoring, and quality checkpoints relevant to biocontrol production workflows.

Process Monitoring **Quality Checkpoints**

Understand the value of pilot scale trials for refining scalability, process economics, product stability, and field deployment preparation.

Process Economics **Product Stability**

Strengthen production planning for plant pathology teams developing microbial biocontrol solutions from bench to pilot scale.

Production Planning **Bench To Pilot**

Overview

Plant Pathology **Production Training** **Quality Focus**

Workshop Overview and Learning Outcomes

Learn how pilot scale production systems are designed to translate laboratory biocontrol research into repeatable production workflows.

Repeatable Workflows **Laboratory Translation**

Understand how inoculum quality, fermentation parameters, recovery steps, and formulation decisions affect yield and product performance.

Inoculum Quality **Recovery Steps**

Recognize the importance of process controls, contamination prevention, viability testing, and batch consistency in production scale up.

Viability Testing **Batch Consistency**

Develop awareness of equipment handling, documentation discipline, process optimization, and troubleshooting approaches in pilot facilities.

Equipment Handling **Troubleshooting**

Build confidence in evaluating scale-up suitability, formulation choices, and production feasibility for plant disease management bioproducts.

Scale Up Suitability **Production Feasibility**

Gain practical understanding of how pilot production improves readiness for validation, field testing, and commercialization of biocontrol agents.

Field Testing **Commercialization Readiness**

Agenda

Hands On Review **Two Day Format** **Applied Learning**

Agenda Flow and Hands-on Components

Day 1 introduces pilot scale production concepts, inoculum preparation, fermentation planning, contamination control, and process flow design.

Inoculum Preparation **Process Flow Design**

Day 2 covers recovery logic, stabilization, formulation planning, quality checkpoints, documentation practices, and scale-up troubleshooting.

Stabilization **Scale Up Troubleshooting**

Participants review how microbial growth conditions, process control variables, and viability measures influence pilot batch performance.

Growth Conditions **Control Variables**

Hands-on components include mapping production steps, identifying process bottlenecks, refining quality checks, and improving documentation logic.

Process Bottlenecks **Documentation Logic**

Interactive review highlights how pilot production decisions affect stability, process economics, field suitability, and manufacturing readiness.

Field Suitability **Manufacturing Readiness**

Participants consolidate learning through practical review of pilot production pathway models for plant disease biocontrol agents.

Production Pathways **Biocontrol Agents**

Deliverables

Production Guidance **Awareness Outcomes** **Reference Support**

Deliverables, Support Material, and Frequently Asked Questions

Participants receive guidance on pilot production planning, fermentation basics, process consistency, and scale-up oriented quality thinking.

Pilot Planning **Quality Thinking**

Reference support emphasizes contamination awareness, viability retention, stabilization logic, process control, and documentation discipline.

Viability Retention **Documentation Discipline**

The workshop is relevant to plant pathology researchers, biocontrol developers, production teams, scholars, and technical staff.

Production Teams **Biocontrol Developers**

FAQ topics address beginner suitability, pilot batch goals, formulation considerations, quality expectations, contamination risks, and scale-up scope.

Beginner Friendly **Pilot Batch Goals**

Additional discussion clarifies how pilot scale production improves deployment readiness, validation planning, and manufacturing confidence for biological products.

Validation Planning **Manufacturing Confidence**

Participants finish with stronger understanding of pilot scale production pathways for biocontrol agents used in plant disease management.

Scale Pathways **Disease Management**

Quick View Who Should Attend Outcomes Delivery Policies FAQs