

Plant Pathology Workshops

Plant Pathology Workshops

NTHRYS BIOTECH LABS provides a diverse array of workshops in the realm of Plant Pathology. Explore our comprehensive offerings below

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Embark on a Plant Pathology Adventure: Find the Perfect Workshop!

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- 2. Workshop in Molecular Diagnostics in Plant PathologyPDF
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- 4. Workshop in Fungal Plant Pathogens and Control StrategiesPDF
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- 6. Workshop in Bacterial Plant Pathogens and Disease ManagementPDF
- 7. Workshop in Plant Disease Epidemiology and ModelingPDF
- 8. Workshop in Integrated Disease Management in Plant PathologyPDF
- 9. Workshop in Plant Microbiomes and Disease SuppressionPDF
- 10. Workshop in Genomics and Plant PathogenomicsPDF

1. Workshop in Introduction to Plant Pathology

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Date: Pre Selected Date

Fee: Rs 6000/-

Duration: One Day

Mode: Offline and Virtual

Location for Offline: NBL Cherlapalli IDA Branch

Facilitator(s): NTHRYS TEAM

8:00 AM - 8:30 AM: Registration and Welcome Coffee

Participants arrive, register, and network over coffee.

8:30 AM - 8:45 AM: Opening Remarks

Welcome by the host.

Brief overview of today's focus.

8:45 AM - 10:15 AM: Session 1: Fundamentals of Plant Pathology

Hands-on workshop on the basics of plant pathology.

Protocols for studying plant diseases, their causes, and effects on plant health.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Plant-Pathogen Interactions

Practical session on plant-pathogen interactions.

Protocols for understanding how pathogens infect plants and trigger disease symptoms.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: Common Plant Pathogens: Identification and Diagnosis

Hands-on training on pathogen identification.

Protocols for identifying bacterial, fungal, and viral pathogens in plant tissues using microscopy and molecular techniques.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: Environmental Factors Affecting **Plant Disease**

Practical session on the environment and plant disease.

Protocols for studying the influence of temperature, humidity, and soil conditions on the development and spread of plant diseases.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and **Technology Adoption**

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors.

Feedback session and closing remarks.

Certificate Issue

5:30 PM: Workshop Concludes

2. Workshop in Molecular Diagnostics in Plant Pathology

Date: Pre Selected Date

Fee: Rs 6000/-

Duration: One Day

Mode: Offline and Virtual

Location for Offline: NBL Cherlapalli IDA Branch

Facilitator(s): NTHRYS TEAM

8:00 AM - 8:30 AM: Registration and Welcome Coffee

Participants arrive, register, and network over coffee.

8:30 AM - 8:45 AM: Opening Remarks

Welcome by the host.

Brief overview of today's focus.

8:45 AM - 10:15 AM: Session 1: Molecular Techniques for Plant Disease Diagnosis

Hands-on workshop on molecular diagnostics.

Protocols for using PCR, qPCR, and LAMP techniques to detect plant pathogens at the molecular level.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: High-Throughput Sequencing for Pathogen Detection

Practical session on NGS for plant pathogens.

Protocols for using high-throughput sequencing to identify and characterize pathogens in plant samples.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: CRISPR-based Tools for Pathogen Detection

Hands-on training on CRISPR diagnostics.

Protocols for developing CRISPR-based assays for rapid and specific detection of plant pathogens.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: DNA Barcoding and Metabarcoding in Plant Pathology

Practical session on DNA barcoding.

Protocols for using DNA barcoding and metabarcoding to identify pathogens in complex plant samples.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors.

Feedback session and closing remarks.

Certificate Issue

5:30 PM: Workshop Concludes

3. Workshop in Plant Immunity and Defense Mechanisms

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Date: Pre Selected Date

Fee: Rs 6000/-

Duration: One Day

Mode: Offline and Virtual

Location for Offline: NBL Cherlapalli IDA Branch

Facilitator(s): NTHRYS TEAM

8:00 AM - 8:30 AM: Registration and Welcome Coffee

Participants arrive, register, and network over coffee.

8:30 AM - 8:45 AM: Opening Remarks

Welcome by the host.

Brief overview of today's focus.

8:45 AM - 10:15 AM: Session 1: Overview of Plant Immune Systems

Hands-on workshop on plant immunity.

Protocols for studying plant innate immunity, including pathogen recognition and defense activation mechanisms.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Signaling Pathways in Plant Defense

Practical session on plant signaling.

Protocols for investigating plant defense signaling pathways such as the jasmonic acid, salicylic acid, and ethylene pathways.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: Plant Resistance Genes and Their Roles

Hands-on training on plant resistance genes.

Protocols for identifying and characterizing plant resistance genes (R genes) involved in pathogen recognition.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: Induced Resistance and Priming in Plants

Practical session on induced resistance.

Protocols for studying how plants "prime" their immune systems in response to previous pathogen exposure and enhance resistance to future infections.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors.

Feedback session and closing remarks.

Certificate Issue

5:30 PM: Workshop Concludes

4. Workshop in Fungal Plant Pathogens and Control Strategies

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Date: Pre Selected Date

Fee: Rs 6000/-

Duration: One Day

Mode: Offline and Virtual

Location for Offline: NBL Cherlapalli IDA Branch

Facilitator(s): NTHRYS TEAM

8:00 AM - 8:30 AM: Registration and Welcome Coffee

Participants arrive, register, and network over coffee.

8:30 AM - 8:45 AM: Opening Remarks

Welcome by the host.

Brief overview of today's focus.

8:45 AM - 10:15 AM: Session 1: Biology of Fungal Plant Pathogens

Hands-on workshop on fungal pathogens.

Protocols for studying the biology and life cycles of major fungal pathogens affecting crops, including rusts, smuts, and mildews.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Fungal Spore Identification and Microscopy

Practical session on fungal spore identification.

Protocols for identifying fungal spores using microscopy and molecular techniques.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: Fungal Biocontrol Agents in Plant Pathology

Hands-on training on biocontrol agents.

Protocols for using beneficial fungi and other microorganisms to control fungal pathogens in agricultural settings.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: Antifungal Treatments and Resistance Management

Practical session on antifungal strategies.

Protocols for testing chemical and biological antifungal treatments and managing resistance in fungal pathogens.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors. Feedback session and closing remarks.

Certificate Issue

5:30 PM: Workshop Concludes

5. Workshop in Viral Plant Pathogens and Management

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Date: Pre Selected Date

Fee: Rs 6000/-

Duration: One Day

Mode: Offline and Virtual

Location for Offline: NBL Cherlapalli IDA Branch

Facilitator(s): NTHRYS TEAM

8:00 AM - 8:30 AM: Registration and Welcome Coffee

Participants arrive, register, and network over coffee.

8:30 AM - 8:45 AM: Opening Remarks

Welcome by the host.

Brief overview of today's focus.

8:45 AM - 10:15 AM: Session 1: Overview of Plant Viral Diseases

Hands-on workshop on plant viruses.

Protocols for studying the transmission, replication, and spread of plant viruses in crops.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Detection of Viral Pathogens Using ELISA and RT-PCR

Practical session on viral detection.

Protocols for detecting plant viruses using techniques like ELISA, RT-PCR, and real-time qPCR.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: RNAi-Based Control Strategies for Viral Pathogens

Hands-on training on RNAi techniques.

Protocols for using RNA interference (RNAi) to suppress viral replication and manage viral diseases in crops.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: Cross-Protection and Immunity Against Plant Viruses

Practical session on viral cross-protection.

Protocols for inducing cross-protection in plants to confer resistance to viral infections.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors. Feedback session and closing remarks.

Certificate Issue

5:30 PM: Workshop Concludes

6. Workshop in Bacterial Plant Pathogens and Disease Management

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Date: Pre Selected Date

Fee: Rs 6000/-

Duration: One Day

NTHRYS OPC PVT LTD Plant Pathology Workshops

Mode: Offline and Virtual

Location for Offline: NBL Cherlapalli IDA Branch

Facilitator(s): NTHRYS TEAM

8:00 AM - 8:30 AM: Registration and Welcome Coffee

Participants arrive, register, and network over coffee.

8:30 AM - 8:45 AM: Opening Remarks

Welcome by the host.

Brief overview of today's focus.

8:45 AM - 10:15 AM: Session 1: Identification of Bacterial Plant Pathogens

Hands-on workshop on bacterial pathogens.

Protocols for identifying bacterial pathogens in plant tissues using biochemical tests and molecular diagnostics.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Pathogenicity and Virulence Factors in Bacteria

Practical session on bacterial virulence.

Protocols for studying bacterial virulence factors like toxins, effector proteins, and biofilm formation.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: Biological Control of Bacterial Diseases in Plants

Hands-on training on biocontrol of bacterial diseases.

Protocols for using bacterial antagonists, bacteriophages, and other biological agents to manage bacterial plant diseases.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: Antibiotic Use and Resistance Management in Plant Bacterial Diseases

Practical session on antibiotic strategies.

Protocols for testing antibiotic treatments and developing resistance management strategies in bacterial plant pathogens.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors.

Feedback session and closing remarks.

Certificate Issue

5:30 PM: Workshop Concludes

7. Workshop in Plant Disease Epidemiology and Modeling

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Date: Pre Selected Date

Fee: Rs 6000/-

Duration: One Day

Mode: Offline and Virtual

Location for Offline: NBL Cherlapalli IDA Branch

Facilitator(s): NTHRYS TEAM

8:00 AM - 8:30 AM: Registration and Welcome Coffee

Participants arrive, register, and network over coffee.

8:30 AM - 8:45 AM: Opening Remarks

Welcome by the host.

Brief overview of today's focus.

8:45 AM - 10:15 AM: Session 1: Epidemiology of Plant Diseases

Hands-on workshop on plant disease epidemiology.

Protocols for studying the spread of plant diseases within populations and across regions.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Disease Monitoring and Surveillance Techniques

Practical session on disease surveillance.

Protocols for monitoring plant disease outbreaks and conducting surveillance using field and remote sensing techniques.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: Predictive Modeling for Plant Disease Outbreaks

Hands-on training on predictive modeling.

Protocols for developing models to predict plant disease outbreaks based on environmental, genetic, and epidemiological data.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: Climate Change and Plant Disease Dynamics

Practical session on climate effects.

Protocols for studying the impact of climate change on plant disease dynamics and

developing climate-adaptive management strategies.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors. Feedback session and closing remarks.

Certificate Issue

5:30 PM: Workshop Concludes

8. Workshop in Integrated Disease Management in Plant Pathology

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Date: Pre Selected Date

Fee: Rs 6000/-

Duration: One Day

Mode: Offline and Virtual

Location for Offline: NBL Cherlapalli IDA Branch

Facilitator(s): NTHRYS TEAM

8:00 AM - 8:30 AM: Registration and Welcome Coffee

Participants arrive, register, and network over coffee.

8:30 AM - 8:45 AM: Opening Remarks

Welcome by the host.

Brief overview of today's focus.

8:45 AM - 10:15 AM: Session 1: Principles of Integrated Disease Management (IDM)

Hands-on workshop on IDM.

Protocols for integrating chemical, biological, and cultural practices to manage plant diseases effectively.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Disease Forecasting and Early Intervention Strategies

Practical session on disease forecasting.

Protocols for developing early warning systems and implementing rapid-response interventions to manage plant diseases.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: Crop Rotation and Cultural Practices for Disease Control

Hands-on training on cultural controls.

Protocols for implementing crop rotation, sanitation, and other cultural practices to reduce disease incidence and severity.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: Evaluating the Effectiveness of IDM Programs

Practical session on IDM evaluation.

Protocols for assessing the success of integrated disease management programs in reducing disease impact and improving crop yield.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today. Dialogue on overcoming challenges in adopting new technologies in similar sectors. Feedback session and closing remarks.

Certificate Issue

5:30 PM: Workshop Concludes

9. Workshop in Plant Microbiomes and Disease Suppression

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Date: Pre Selected Date

Fee: Rs 6000/-

Duration: One Day

Mode: Offline and Virtual

Location for Offline: NBL Cherlapalli IDA Branch

Facilitator(s): NTHRYS TEAM

8:00 AM - 8:30 AM: Registration and Welcome Coffee

Participants arrive, register, and network over coffee.

8:30 AM - 8:45 AM: Opening Remarks

Welcome by the host.

Brief overview of today's focus.

8:45 AM - 10:15 AM: Session 1: Role of Plant Microbiomes in Disease Suppression

Hands-on workshop on plant microbiomes.

Protocols for studying plant-associated microbiomes and their role in disease suppression and plant health.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Isolation and Characterization of Beneficial Microbes

Practical session on beneficial microbes.

Protocols for isolating and characterizing beneficial microorganisms from plant rhizospheres and endospheres.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: Microbial Inoculants for Disease Control

Hands-on training on microbial inoculants.

Protocols for applying microbial inoculants to suppress plant diseases and enhance plant growth.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: Engineering the Plant Microbiome for Enhanced Disease Resistance

Practical session on microbiome engineering.

Protocols for engineering plant-associated microbiomes to improve disease resistance and plant productivity.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors. Feedback session and closing remarks.

Certificate Issue

5:30 PM: Workshop Concludes

10. Workshop in Genomics and Plant Pathogenomics

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Date: Pre Selected Date

Fee: Rs 6000/-

Duration: One Day

Mode: Offline and Virtual

Location for Offline: NBL Cherlapalli IDA Branch

Facilitator(s): NTHRYS TEAM

8:00 AM - 8:30 AM: Registration and Welcome Coffee

Participants arrive, register, and network over coffee.

8:30 AM - 8:45 AM: Opening Remarks

Welcome by the host.

Brief overview of today's focus.

8:45 AM - 10:15 AM: Session 1: Genomic Approaches in Plant Pathology

Hands-on workshop on pathogenomics.

Protocols for using genomic tools to study plant pathogen diversity, evolution, and virulence.

10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break

Networking and refreshments.

10:30 AM - 12:00 PM: Session 2: Comparative Genomics of Plant Pathogens

Practical session on comparative genomics.

Protocols for comparing the genomes of different plant pathogens to identify key

virulence genes and evolutionary patterns.

12:00 PM - 1:00 PM: Lunch Break

Catered lunch and networking opportunity.

1:00 PM - 2:30 PM: Session 3: Transcriptomics of Plant-Pathogen Interactions

Hands-on training on transcriptomics.

Protocols for using RNA sequencing to study gene expression changes in plants and pathogens during infection.

2:30 PM - 2:45 PM: Short Break

Time for a stretch and informal discussions.

2:45 PM - 4:15 PM: Session 4: CRISPR and Genome Editing in Plant Pathology

Practical session on genome editing.

Protocols for using CRISPR/Cas9 and other genome editing tools to modify plant resistance genes and study pathogen interactions.

4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break

Last networking opportunity with snacks.

4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption

Group discussions on implementing new techniques learned today.

Dialogue on overcoming challenges in adopting new technologies in similar sectors. Feedback session and closing remarks.

Certificate Issue

5:30 PM: Workshop Concludes

Note: NTHRYS Management reserves the right to modify the workshop module at any time without prior notice. Registered or enrolled candidates will receive the module that is current on the day of enrollment.

NTHRYS Workshops Department

M: +91-7993084748

Email: workshops (at) nthrys [d0t] com

Plant Pathology Workshops Application Process

- 1. Select a workshop from the list.
- 2. Contact via whatsapp on the number present above to request fee details and dates suitable for joining. Alternatively, you can send an email to workshops (at) nthrys [d 0 t] com.
- 3. Our Workshop department will contact you promptly to provide further assistance.