

### **Soil Microbiology Training Program**

The Soil Microbiology Training Program is designed for beginners looking to gain practical experience in studying soil microbial communities, their roles in nutrient cycling, and their applications in sustainable agriculture and environmental science.

Note: Below modules are designed keeping high end industrial professionals into consideration. Please refer individual protocols below for affordable prices.

#### **Introduction to Soil Microbial Diversity**

Kindly review the fees outlined for the individual protocols listed in this module.

- Introduction to microbial communities in soil
- Understanding microbial roles in nutrient cycling
- Hands-on isolation of soil microorganisms
- Introduction to microbial taxonomy and classification

#### **Laboratory Techniques for Soil Microbiology**

Kindly review the fees outlined for the individual protocols listed in this module.

- Microscopic observation of soil microbes
- Staining techniques for bacteria and fungi
- Quantifying soil microbial populations using colony counting
- Introduction to aseptic techniques in soil microbiology labs

#### **Soil Health and Microbial Interactions**

Kindly review the fees outlined for the individual protocols listed in this module.

- Role of nitrogen-fixing bacteria in soil health
- Applications of phosphate-solubilizing bacteria
- Understanding microbial contributions to soil organic matter

• Introduction to plant-microbe symbiotic relationships

#### **Microbial Enzymes in Soil**

## Kindly review the fees outlined for the individual protocols listed in this module.

- Role of cellulase, phosphatase, and dehydrogenase in soils
- Studying enzyme activities in soil microbial processes
- Practical applications of microbial enzymes in agriculture
- Introduction to enzyme kinetics in soil microbiology

#### **Basic Bioinformatics for Soil Microbiology**

## Kindly review the fees outlined for the individual protocols listed in this module.

- Using BLAST for identifying soil microbial sequences
- Analyzing microbial diversity with bioinformatics tools
- Introduction to 16S rRNA sequencing for soil microbes
- Documenting microbial diversity findings with software tools

# **Individual Protocols Under Soil Microbiology Training Program**

- 1. Sampling techniques for collecting soil microbiota | Fee: Contact for fee
- 2. Introduction to microbial communities in soil | Fee: Contact for fee
- 3. Understanding microbial roles in nutrient cycling | Fee: Contact for fee
- 4. Hands-on isolation of soil microorganisms | Fee: Contact for fee
- 5. Introduction to microbial taxonomy and classification | Fee: Contact for fee
- 6. Soil dilution plating for microbial isolation | Fee: Contact for fee
- 7. Microscopic observation of soil microbes | Fee: Contact for fee
- 8. Staining techniques for bacteria and fungi | Fee: Contact for fee
- 9. Quantifying soil microbial populations using colony counting | Fee: Contact for fee
- 10. Introduction to aseptic techniques in soil microbiology labs | Fee: Contact for fee
- 11. Studying microbial interactions with soil nutrients | Fee: Contact for fee
- 12. Role of nitrogen-fixing bacteria in soil health | Fee: Contact for fee
- 13. Applications of phosphate-solubilizing bacteria | Fee: Contact for fee
- 14. Understanding microbial contributions to soil organic matter | Fee: Contact for fee
- 15. Introduction to plant-microbe symbiotic relationships | Fee: Contact for fee
- 16. Extraction and analysis of soil enzymes | Fee: Contact for fee

#### NTHRYS OPC PVT LTD Soil Microbiology Training Program

- 17. Role of cellulase, phosphatase, and dehydrogenase in soils | Fee: Contact for fee
- 18. Studying enzyme activities in soil microbial processes | Fee: Contact for fee
- 19. Practical applications of microbial enzymes in agriculture | Fee: Contact for fee
- 20. Introduction to enzyme kinetics in soil microbiology | Fee: Contact for fee
- 21. Introduction to microbial sequence data and databases | Fee: Contact for fee
- 22. Using BLAST for identifying soil microbial sequences | Fee: Contact for fee
- 23. Analyzing microbial diversity with bioinformatics tools | Fee: Contact for fee
- 24. Introduction to 16S rRNA sequencing for soil microbes | Fee: Contact for fee
- 25. Documenting microbial diversity findings with software tools | Fee: Contact for fee

#### Please contact on +91-8977624748 for more details

Cant Come to Hyderabad? No Problem, You can do it in Virtual / Online Mode