

Agricultural Microbiology Summer Training Program

This summer training program introduces students to essential agricultural microbiology techniques and real-world applications such as biofertilizer production, rhizosphere microbiota studies, and microbial biocontrol methods to improve sustainable agriculture.

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

Soil Microbial Ecology and Analysis

Agricultural Microbiology Training Module

Fee: Rs 40000/-

Protocols List

1. Soil Sampling Protocols for Microbiological Analysis
2. Serial Dilution and Plating for CFU Enumeration
3. Microscopic Characterization of Soil Microbes
4. 16S rRNA PCR Amplification for Soil Microbial Diversity
5. Soil Enzyme Activity Assays (Urease, Dehydrogenase, Phosphatase)
6. Metagenomic DNA Extraction and Purity Assessment
7. Microbial Biomass Carbon Estimation
8. pH, EC, Organic Carbon, and Nutrient Profiling in Soil Samples
9. Soil Microbial Indexing using BIOLOG EcoPlates

Plant-Microbe Interaction and Biofertilizer Applications

Agricultural Microbiology Training Module

Fee: Rs 50000/-

Protocols List

1. Isolation and Culturing of PGPR (Rhizobium, Azospirillum, PSB)
2. Nitrogenase Activity (ARA) for N-fixing Bacteria
3. Phosphate Solubilization and Siderophore Production Assays
4. IAA and GA Quantification in Microbial Cultures
5. Root Colonization Assay with Fluorescent Markers
6. Field Application Design for PGPR Biofertilizers
7. Shelf-Life Testing of Biofertilizer Formulations
8. Liquid Biofertilizer Stabilization Protocols
9. Regulatory Compliance and Packaging Guidelines

Biocontrol Agents and Microbial Crop Protection

Agricultural Microbiology Training Module

Fee: Rs 45000/-

Protocols List

1. Isolation of Antagonistic Bacteria from Rhizosphere
2. Dual Culture Assay Against Plant Pathogens
3. Enzyme Assays for Chitinase and β -1,3-glucanase
4. GC-MS Profiling of Antimicrobial Compounds
5. Biofilm Formation and Adherence Studies on Roots
6. Pot Trials for Biocontrol Efficacy Assessment
7. Genetic Characterization of Biocontrol Strains
8. LC50 Estimation for Microbial Biopesticides
9. Field Deployment Strategies and Pest Resistance Data Logging

Individual Protocols Under

Agricultural Microbiology Summer Training Program

1. Soil Sampling Protocols for Microbiological Analysis | [Fee: 5000](#) (Rupees Five Thousand)
2. Serial Dilution and Plating for CFU Enumeration | [Fee: 6000](#) (Rupees Six Thousand)
3. Microscopic Characterization of Soil Microbes | [Fee: 8000](#) (Rupees Eight Thousand)
4. 16S rRNA PCR Amplification for Soil Microbial Diversity | [Fee: 20000](#) (Rupees Twenty Thousand)
5. Soil Enzyme Activity Assays (Urease, Dehydrogenase, Phosphatase) | [Fee: 12000](#) (Rupees Twelve Thousand)
6. Metagenomic DNA Extraction and Purity Assessment | [Fee: 25000](#) (Rupees Twenty Five Thousand)
7. Microbial Biomass Carbon Estimation | [Fee: 7000](#) (Rupees Seven Thousand)
8. pH, EC, Organic Carbon, and Nutrient Profiling in Soil Samples | [Fee: 6000](#) (Rupees Six Thousand)
9. Soil Microbial Indexing using BIOLOG EcoPlates | [Fee: 30000](#) (Rupees Thirty Thousand)
10. Isolation and Culturing of PGPR (Rhizobium, Azospirillum, PSB) | [Fee: 8000](#) (Rupees Eight Thousand)
11. Nitrogenase Activity (ARA) for N-fixing Bacteria | [Fee: 10000](#) (Rupees Ten Thousand)
12. Phosphate Solubilization and Siderophore Production Assays | [Fee: 10000](#) (Rupees Ten Thousand)
13. IAA and GA Quantification in Microbial Cultures | [Fee: 12000](#) (Rupees Twelve Thousand)
14. Root Colonization Assay with Fluorescent Markers | [Fee: 15000](#) (Rupees Fifteen Thousand)

15. Field Application Design for PGPR Biofertilizers | [Fee: 10000](#) (Rupees Ten Thousand)
16. Shelf-Life Testing of Biofertilizer Formulations | [Fee: 10000](#) (Rupees Ten Thousand)
17. Liquid Biofertilizer Stabilization Protocols | [Fee: 12000](#) (Rupees Twelve Thousand)
18. Regulatory Compliance and Packaging Guidelines | [Fee: 8000](#) (Rupees Eight Thousand)
19. Isolation of Antagonistic Bacteria from Rhizosphere | [Fee: 7000](#) (Rupees Seven Thousand)
20. Dual Culture Assay Against Plant Pathogens | [Fee: 8000](#) (Rupees Eight Thousand)
21. Enzyme Assays for Chitinase and β -1,3-glucanase | [Fee: 15000](#) (Rupees Fifteen Thousand)
22. GC-MS Profiling of Antimicrobial Compounds | [Fee: 30000](#) (Rupees Thirty Thousand)
23. Biofilm Formation and Adherence Studies on Roots | [Fee: 10000](#) (Rupees Ten Thousand)
24. Pot Trials for Biocontrol Efficacy Assessment | [Fee: 15000](#) (Rupees Fifteen Thousand)
25. Genetic Characterization of Biocontrol Strains | [Fee: 20000](#) (Rupees Twenty Thousand)
26. LC50 Estimation for Microbial Biopesticides | [Fee: 12000](#) (Rupees Twelve Thousand)
27. Field Deployment Strategies and Pest Resistance Data Logging | [Fee: 10000](#) (Rupees Ten Thousand)

Please contact on +91-7993084748 for more details

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