

Agricultural Microbiology Course Finishers Training Program

This capstone-level program consolidates the core knowledge of agricultural microbiology, offering intensive review sessions and hands-on applications to ensure field competence and exam preparedness.

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

Soil and Rhizosphere Microbiology

Agricultural Microbiology Training Module

Fee: Rs 32000/-

Protocols List

- 1. Rhizosphere Microbial Community Profiling**
- 2. Plant Growth-Promoting Rhizobacteria (PGPR) Characterization**
- 3. Nitrifying and Denitrifying Bacteria Isolation**
- 4. Mycorrhizal Fungi Assessment Techniques**
- 5. Soil Enzyme Activity Assays (e.g., Dehydrogenase, Phosphatase)**
- 6. Nitrogen Fixation Bioassays in Legumes**
- 7. Molecular Characterization of Rhizobium Isolates**
- 8. Use of Metagenomics for Soil Microbial Diversity**
- 9. Soil Respiration Rate Measurements**
- 10. Carbon and Nitrogen Mineralization Experiments**
- 11. Root Exudate-Microbe Interaction Studies**
- 12. Antagonistic Microbial Screening for Biocontrol**
- 13. Soil DNA Extraction and qPCR Quantification**
- 14. Microbial Biomass Carbon/Nitrogen Estimation**

Compost, Biomanure and Biofertilizer

Microbiology

Agricultural Microbiology Training Module

Fee: Rs 38000/-

Protocols List

- 1. Compost Maturity Index Testing**
- 2. Phosphate Solubilizing Bacteria (PSB) Quantification**
- 3. Azotobacter and Azospirillum Isolation Protocols**
- 4. Quality Control Testing for Commercial Biofertilizers**
- 5. Production of Liquid Biofertilizers Using Fermenters**
- 6. Shelf-Life Stability Testing of Bioformulations**
- 7. Mass Production of Trichoderma spp.**
- 8. Carrier Material Selection and Compatibility Testing**
- 9. Mycorrhiza Inoculum Development and Packaging**
- 10. Cell Count Standardization Using Haemocytometer**
- 11. Compatibility Testing of Microbial Consortia**
- 12. Evaluation of Potash Mobilizing Microbes in Field Trials**
- 13. Pilot Scale Production of Enriched Vermicompost**

Agro-Environmental Microbiology

Agricultural Microbiology Training Module

Fee: Rs 29000/-

Protocols List

- 1. Pesticide Degrading Microbial Screening**
- 2. Bioremediation Microbe Isolation from Polluted Fields**
- 3. Assessment of Microbial Volatile Organic Compounds (mVOCs)**
- 4. Pathogen Suppression Bioassays in Contaminated Soils**
- 5. Soil Heavy Metal Tolerance Index Calculation in Bacteria**
- 6. Microbial Indicators for Soil Health Monitoring**
- 7. Greenhouse Gas Emission Reduction via Microbial Inoculation**
- 8. Fate of Microbial Inoculants in Agricultural Ecosystems**
- 9. Biosurfactant Production from Soil Bacteria**
- 10. Fungal Bioremediators Isolation and Field Trials**

Plant-Microbe Interaction Studies

Agricultural Microbiology Training Module

Fee: Rs 42000/-

Protocols List

1. Endophyte Isolation and Functional Characterization
2. ISR (Induced Systemic Resistance) Assays in Model Crops
3. Confocal Microscopy for Plant–Microbe Colonization
4. Molecular Docking of Microbial Effectors with Plant Receptors
5. Screening for ACC Deaminase-Producing Bacteria
6. Biotic Stress Tolerance Assays with Microbial Priming
7. Quorum Sensing Modulation by Root Microbes
8. Plant Transcriptomics Response to Microbial Inoculants
9. Use of Split-Root Systems in Plant–Microbe Experiments
10. GFP Tagging and Tracking of Rhizobacteria in Soil
11. In vitro Plant–Microbe Dual Culture Assays
12. Biocontrol Efficiency of Microbes Against Root Pathogens

Individual Protocols Under Agricultural Microbiology Course Finishers Training Program

1. Rhizosphere Microbial Community Profiling | [Fee: Contact Us](#)
2. Plant Growth-Promoting Rhizobacteria (PGPR) Characterization | [Fee: Contact Us](#)
3. Nitrifying and Denitrifying Bacteria Isolation | [Fee: Contact Us](#)
4. Mycorrhizal Fungi Assessment Techniques | [Fee: Contact Us](#)
5. Soil Enzyme Activity Assays | [Fee: Contact Us](#)
6. Nitrogen Fixation Bioassays in Legumes | [Fee: Contact Us](#)

7. Molecular Characterization of Rhizobium Isolates | [Fee: Contact Us](#)
8. Metagenomics for Soil Microbial Diversity | [Fee: Contact Us](#)
9. Soil Respiration Rate Measurements | [Fee: Contact Us](#)
10. Carbon and Nitrogen Mineralization Experiments | [Fee: Contact Us](#)
11. Root Exudate-Microbe Interaction Studies | [Fee: Contact Us](#)
12. Antagonistic Microbial Screening | [Fee: Contact Us](#)
13. Soil DNA Extraction and qPCR Quantification | [Fee: Contact Us](#)
14. Microbial Biomass Carbon/Nitrogen Estimation | [Fee: Contact Us](#)
15. Compost Maturity Index Testing | [Fee: Contact Us](#)
16. Phosphate Solubilizing Bacteria Quantification | [Fee: Contact Us](#)
17. Azotobacter and Azospirillum Isolation | [Fee: Contact Us](#)
18. Quality Control of Commercial Biofertilizers | [Fee: Contact Us](#)
19. Liquid Biofertilizers Production in Fermenters | [Fee: Contact Us](#)
20. Shelf-Life Stability Testing of Bioformulations | [Fee: Contact Us](#)
21. Trichoderma Mass Production | [Fee: Contact Us](#)
22. Carrier Material Compatibility Testing | [Fee: Contact Us](#)
23. Mycorrhiza Inoculum Development | [Fee: Contact Us](#)
24. Microbial Consortia Compatibility Testing | [Fee: Contact Us](#)
25. Potash Mobilizing Microbes in Field Trials | [Fee: Contact Us](#)
26. Pilot Scale Vermicompost Production | [Fee: Contact Us](#)
27. Pesticide Degrading Microbes Screening | [Fee: Contact Us](#)
28. Bioremediation Microbe Isolation | [Fee: Contact Us](#)
29. Assessment of mVOCs from Microbes | [Fee: Contact Us](#)
30. Pathogen Suppression Bioassays | [Fee: Contact Us](#)
31. Soil Heavy Metal Tolerance Index | [Fee: Contact Us](#)
32. Microbial Indicators of Soil Health | [Fee: Contact Us](#)

33. GHG Emission Reduction via Microbes | [Fee: Contact Us](#)
34. Fate of Inoculants in Agri Ecosystems | [Fee: Contact Us](#)
35. Biosurfactant Production by Soil Bacteria | [Fee: Contact Us](#)
36. Fungal Bioremediators Field Testing | [Fee: Contact Us](#)
37. Endophyte Isolation and Characterization | [Fee: Contact Us](#)
38. ISR Assays in Crops | [Fee: Contact Us](#)
39. Microscopy of Plant–Microbe Interactions | [Fee: Contact Us](#)
40. Molecular Docking of Microbial Effectors | [Fee: Contact Us](#)
41. ACC Deaminase Activity Assays | [Fee: Contact Us](#)
42. Microbial Priming for Stress Tolerance | [Fee: Contact Us](#)
43. Quorum Sensing Modulation Analysis | [Fee: Contact Us](#)
44. Plant Transcriptome Changes Upon Inoculation | [Fee: Contact Us](#)
45. Split-Root Experiments | [Fee: Contact Us](#)
46. GFP Tagging of Soil Microbes | [Fee: Contact Us](#)
47. Dual Culture Plant–Microbe Assays | [Fee: Contact Us](#)
48. Biocontrol Screening Against Root Pathogens | [Fee: Contact Us](#)

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