

OUTREACH PROGRAM

Since 2021, Post Graduate Department of Botany, is being engaged in maintenance, production and utilization of microbial cultures as bioinoculants, viz. biofertilizers and biopesticides. This initiative is part of the departmental curriculum activities and outreach programme. This programme included local farmersto develop awareness of green farming and use biofertilizers and bioesticides as a commitment to sustainable agricultural practices, and boosting up students for self-employment schemes in mushroom cultivation and eco-friendly organic farming, under supervision of Dr.AnuradhaBandopadhyay. The facility includes Mycology and Plant Pathology laboratory unit, where beneficial microorganisms are cultured and formulated into products that enhance soil fertility and plant health while reducing dependency on chemical inputs.

Biofertilizers are developed using specific strains of bacteria and fungi to enhance soil nutrients and plant growth by fixing nitrogen and solubilizing phosphorus. Applied to soil or seedlings, they boost nutrient uptake and crop health. Biopesticides, derived from natural organisms like bacteria and fungi, combat specific pests and diseases, providing an eco-friendly alternative to chemical pesticides and reducing environmental harm.

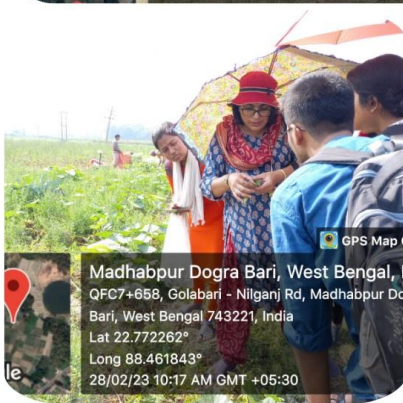
The Mycology and Plant Pathology laboratory, Department of Botanylaboratory serve multiple purposes:

- **Educational:** They provide hands-on learning experiences for students diagnosing crop diseases in field and emphasizing importance of eco-friendly agricultural practices. Value added courses has been conducted for mushroom cultivation, plant disease diagnosis and preparation of biofertilizers and biopesticides.
- **Research:** The laboratory conducts research optimizing bio-inoculant efficacy, recycling of agricultural wastes and discovering new beneficial strains.
- **Community Engagement:** The department conducts field visit by students and teachers as an outreach programme for local farmers including active interactive sessions and promoting the adoption of sustainable farming methods.
- **Campus Beautification:** The bio-inoculants are used to nurture the campus organic vegetable garden, contributing to a greener eco-friendly environment.

Proud of its contribution to environmental stewardship and education, the Botany Department is dedicated to the continual improvement and expansion of these programs, aspiring to inspire a new generation of self-sufficient ecologically conscious individuals.



BGC/BOT-PROGRAMMES/EXCURSION/FIELD VISIT/OUTREACH/ EXTENSION PROGRAM



1. Agricultural field visit for plant disease identification and farmers' interactions by M.Sc. Sem and Sem4 students, P.G. Department of Botany, BGC, at Sarpadihi, AmdangaSubdivision, North 24 Parganas., on 15.03.2024 for consecutive 3 academic sessions (2021-22, 2022-23 and 2023-24

