



BARASAT GOVERNMENT COLLEGE

POST GRADUATE DEPARTMENT OF BOTANY

10, K.N.C. Road, Barasat, Kolkata - 700124, West Bengal, India

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Date: 20.09.2022

NOTICE

This is to notify that the Department of Botany is going to conduct one Value Added Course on 'Study of Macrofungi, Mushroom Cultivation and Plant Diseases' in Puja Vacation, from 14.10.2022 to 20.10.2022 (36 hours) at the Departmental seminar room. Interested students and faculty members are requested to contact HOD, Department of Botany for registration within 10.10.2022. Certificates will be awarded on successful completion of the course.

Alhathejje

Principal

Barasat Govt. College

Principal

Barasat Govt. College
Govt. of West Bengal

Chandra
Head
Deptt. of Botany
Barasat Govt. College

Department of Botany

A REPORT ON
VALUE ADDED COURSE FOR ACADEMIC SESSION 2022-2023
CONDUCTED BY THE DEPARTMENT OF BOTANY
BARASAT GOVERNMENT COLLEGE

From 14th October -20th October, 2022

A value added course titled '**STUDY OF MACROFUNGI, MUSHROOM CULTIVATION AND PLANT DISEASES**' was organised by Department of Botany on and from 14th October to 20th October, 2022, except Sunday. On each day the classes were conducted from 11.00 am to 5.00 pm.

100 students from UG, PG courses and Research scholar of this college enrolled for the course and successfully completed the same. One out of three resource persons were involved from other institutions. Various topics on macrofungi, mushroom cultivation and plant diseases of agricultural and horticultural crops were taught.

Duration of the course: 36 hours(13.5 hours of lecture, 12 hours of Hands on training, 7 hours of field visit, 2.5 hours of break, 1 hour of discussion and doubt clearance)

COURSE CODE: BGCBOTVAC001/22: Academic session: 2022-2023

Programme objectives:

The objective of this course is to provide students with theoretical and practical knowledge on macrofungi, mushroom cultivation, plant diseases and control, with an aim to apply this knowledge for self-employment and entrepreneurship development in future

Programme outcome:

1. Participants learnt about the diversity, ecology, and evolution of macrofungi.
2. Students acquired skills and tools to identify and characterize macrofungi.
3. Participants got hands on training in mushroom cultivation.
4. Acquired knowledge on various symptoms of plant diseases caused by pathogens in agricultural and horticultural crops.
5. Students learned to identify, characterise and classify plant pathogens based on morphology using common tools including web based resources.

6. Developed skills to identify, describe and characterise plant diseases in field.
4. Acquired knowledge and got hands on training on preparation and uses of low cost biofertilizers and biopesticides.

Medium of Instruction: Bengali and English

Method of evaluation: The evaluation process carried out throughout the programme duration by a combination of the following methods:

1. Performance throughout the course (20% weightage)
2. Interactive session (20% weightage)
3. Attendance (10% weightage)
4. MCQ test (50% weightage)

Course Co-ordinator: Dr. Anuradha Bandopadhyay

Resource persons involved:

1. Dr. Nirmalendu Das, Associate Professor in Botany, Barasat Government College
2. Dr. Anuradha Bandopadhyay, Faculty, P.G. Department of Botany, Barasat Government College
3. Dr. Ashok Kumar Das, Associate Professor in Botany (Retired), Bethune College

ABandopadhyay

Dr. Anuradha Bandopadhyay
Co-ordinator, Value Added Course
Barasat Govt. College

Faculty

P.G. Department of Botany
Barasat Govt. College

Abhijit De

Dr. Abhijit De
IQAC Co-ordinator
Barasat Govt. College

Dr. Abhijit De
Associate Professor in Physics
Coordinator, IQAC
Barasat Govt. College
Government of West Bengal

Narayan Chandra Karmakar

Dr. Narayan Chandra Karmakar
Head, PG Department of Botany
Barasat Govt. College

Head & Associate Professor
P.G. Department of Botany
Barasat Govt. College

TECHNICAL SESSIONS

Day 1 (Friday, 14.10.2022)

| Topic | Time | Speaker |
|--|----------------|--|
| Registration | 10.00-10.30 am | |
| Inauguration | 10.30-11.30 am | Dr. Samar Chattopadhyay, Principal, BGC |
| Introduction | 11.30-12.00 pm | Dr. N.C. Karmakar, HOD, Botany, BGC |
| Fungi as Biofertilizer and Biopesticides: Potential Applications and Future prospects | 12.00-1.30 pm | Dr. Anuradha Bandopadhyay, BGC |
| LUNCH BREAK | | |
| <i>Trichoderma</i> as a Biological Control Agent: Benefits for Crops and Development of Formulations | 2.00-3.00 pm | Dr. Anuradha Bandopadhyay, BGC |
| Hands on training on mass culturing of <i>Trichoderma</i> by eco-friendly loss cost technology | 3.00-5.00 pm | Dr. Anuradha Bandopadhyay, BGC |

Day 2 (Saturday, 15.10.2022)

| Topic | Time | Speaker |
|--|----------------|--|
| Evaluation of students (MCQ) | 10.30-11.00 pm | |
| Study of macrofungal population | 11.00-12.30 pm | Dr. Ashok Kr. Das, Bethune college |
| Macrofungal Diversity: Current Status, Future Prospects, and Conservation Challenges | 12.30-1.30 pm | Dr. Ashok Kr. Das, Bethune college |
| LUNCH BREAK | | |
| Medicinal Macrofungi | 2.00-3.00 pm | Dr. Ashok Kr. Das, Bethune college |
| Hands on training on study of macrofungal specimens | 3.00-5.00 pm | Dr. Ashok Kr. Das, Bethune college Dr. Anuradha Bandopadhyay, BGC |

Day 3 (Monday, 17.10.2022)

| Topic | Time | Speaker |
|---|----------------|--------------------------------|
| Evaluation of students | 10.30-11.00 pm | |
| Plant Disease Symptoms | 11.00-12.30 pm | Dr. Anuradha Bandopadhyay, BGC |
| Study of disease symptoms in agricultural and horticultural plants | 12.30-1.30 pm | Dr. Anuradha Bandopadhyay, BGC |
| LUNCH BREAK | | |
| Hands on training on classical and web-based methods used for identifying causal organisms and diagnosing the diseases of given specimens | 2.00-5.00 pm | Dr. Anuradha Bandopadhyay, BGC |

Day 4 (Tuesday, 18.10.2022)

Excursion at Beraberia, Amdanga subdivision, North 24 Parganas to study plant diseases in various agricultural crops in farmer's field.


Resource person: Dr. Anuradha Bandopadhyay, BGC

Day 5 (Wednesday, 19.10.2022)


| Topic | Time | Speaker |
|--|----------------|---|
| Evaluation of students | 10.30-11.00 pm | |
| Mushroom cultivation: Principles and Practices | 11.00-12.30 pm | Dr. Nirmalendu Das, BGC |
| Pests of mushroom and their management | 12.30-1.30 pm | Dr. Nirmalendu Das, BGC |
| LUNCH BREAK | | |
| Hands on training on Mushroom Cultivation | 2.00-5.00 pm | Dr. Anuradha Bandopadhyay, BGC Mrs. Chandana Paul (Trainer assistant), Research Scholar, BGC |

Day 6 (Thursday, 20.10.2022)

| Topic | Time | Speaker |
|---|--------------------|--|
| Student evaluation (MCQ) | 10.30-11.00 pm | |
| Mushroom cultivation: Nutraceuticals and cosmeceutical approaches | 11.00 pm-12.30 pm | Dr. Nirmalendu Das, BGC |
| Mushroom cultivation: Scope and challenges | 12.30 pm – 1.30 pm | Dr. Nirmalendu Das, BGC |
| | LUNCH BREAK | |
| Hands on training on Mushroom Cultivation | 2 .00-4.00 pm | Dr. Anuradha Bandopadhyay Mrs. Chandana Paul (Trainer assistant), Research Scholar, BGC |
| Valedictory Session | 4.00-5.00 pm | |


Dr. Anuradha Bandopadhyay
Co-ordinator, Value Added Course
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Dr. Narayan Chandra Karmakar
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