### **Department of Botany**

SKILL BASE PROGRAMME (2023-2024) Certificate Course: Mushroom Cultivation

# **Notice**

The Department of Botany is conducting **Certificate Course on Mushroom Cultivation** (Skill Base Course) under Department of Life Long Learning and Extension, RTMNU, Nagpur for the session 2023-24. Interesting students of B.Sc. Part I, Part II & Part III should registered themself in early and contact to the Course Coordinator Dr. R. H. Mahakhode immediately.

| Course               | Admission Fees |
|----------------------|----------------|
| Mushroom Cultivation | Rs. 500/-      |

Dr. R.H. Mahakhode Course Coordinator Dept. of Botany

Mahathode

# **Department of Botany**

# SKILL BASED PROGRAMME (2023-2024)

# Certificate Course: Mushroom Cultivation List of admitted students

| Sr. No | Name of Students           | Sr. No | Name of Students              |  |
|--------|----------------------------|--------|-------------------------------|--|
| 1      | Admane Tanvi Ravindra      | 20     | Nakhale Mansi Nagesh          |  |
| 2      | Bangadkar Megha Sanjay     | 21     | Nagpure Gayatri Tejlal        |  |
| 3      | Bambal Aishwarya Pramod    | 22     | Patil Chaitali Sandeep        |  |
| 4      | Bisen Minal Shankar        | 23     | Rajput Madhura Chandrashekhar |  |
| 5      | Bhandarkar Toral Suresh    | 24     | Raut Sanika Vilas             |  |
| 6      | Borkar Sejal Rajesh        | 25     | Satpute Sanvay Sanjay         |  |
| 7      | Burade Janhavi Narendra    | 26     | Samrit Smita Arvind           |  |
| 8      | Chirkute Anushree Vijay    | 27     | Siingh Riya Virendra kumar    |  |
| 9      | Chaudhari Ketaki Prakash   | 28     | Shende Kasak Pravin           |  |
| 10     | Dorle Yash Sunil           | 29     | Solanki Mohak Hitesh          |  |
| 11     | Durbule Rasika Rajesh      | 30     | WasekarJiwak Dilip            |  |
| 12     | Fiske Vedanti Jagdish      | 31     | Waghmare Aditya Anand         |  |
| 13     | Ghangare Priyanka Liladhar | 32     | Wankhede Shreya Dnyaneshwar   |  |
| 14     | Ghaturle Grishma Vinod     | 33     | Walke Devyani Ratnakar        |  |
| 15     | Gurnule Madhavi Dhanraj    | 34     | Wasnik Aakanksha Lahanu       |  |
| 16     | Jadhao Ekta Lokhande       | 35     | Yadav Dipesh Gyaneshwar       |  |
| 17     | Kolhe Chetan Sanjay        | 36     | Yadav Soumya Sunil            |  |
| 18     | Kowe Rajshree Parmanand    | 37     | Zade Akanksha Sanjay          |  |
| 19     | Mahajan Bhumi Sudhakar     | 38     | Zadgaonkar Avanti Anirudha    |  |

Department of Botany SKILL BASE PROGRAMME (2022-2023) Certificate Course: Mushroom Cultivation

### GUEST LECTURE

### Notice

Date: 17/11/2022

The students who are admitted in Mushroom Cultivation Certificate Course (Skill Base Course) under Department of Life Long Learning and Extension, RTMNU, Nagpur for the session 2022-23 are hereby informed that department of Botany is organizing Guest lecture, by Dr. Abhimanyu Rao Dongarwar, Expert, Sky Mushroom, Nagpur on 18th November at 12.30 pm in C-1 Class room. All Students are informed to remain present for the same.

Dr. R.H. Mahakhode Course Coordinator
Dr. Rupali H. Mahakhode
Assistant Professor
Department of Botany
SES Am's Science College
Congless Nagar, Nagpur-44091... Prof. R.N. Deshmukh HOD Dept. of Botany

S.S.E.S. Amt's Science College, Congress Nagar, Nagpur.

Department of Botany SKILL BASED PROGRAMME (2022-2023) Certificate Course: Mushroom Cultivation

### **GUEST LECTURE 2**

### Notice

Date: 13/03/2023

The students who are admitted in Mushroom Cultivation Certificate Course (Skill Based Course) under Department of Life Long Learning and Extension, RTMNU, Nagpur for the session 2022-23 hereby informed that department of Botany will be organizing Guest lecture, by Dr. Abhimanyu Rao Dongarwar, Expert, Sky Mushroom, Nagpur on 15th March at 1.00 pm in C-1 Class room. All Students are informed to remain present for the same

Prof. R.N. Deshmukh HOD Dept. of Botany

Mahakhde Dr. R.H. Mahakhode Course Coordinator Dept. of Botany

Mouere Prof. M.P. Dhore Principal Science College, Nagpur

S.S.E.S. Amt's Science College, Congress Nagar, Nagpur.

Department of Botany SKILL BASED PROGRAMME (2022-2023) Certificate Course: Mushroom Cultivation

### GUEST LECTURE 3

### Notice

Date: 13/03/2023

The students who are admitted in Mushroom Cultivation Certificate Course (Skill Based Course) under Department of Life Long Learning and Extension, RTMNU, Nagpur for the session 2022-23 and hereby informed that department of Botany will be organizing Guest lecture, by Dr. Abhimanyu Rao Dongarwar, Expert, Sky Mushroom, Nagpur on 16th March at 12.00 pm in C-1 Class room. All Students are informed to remain present for the same.

Prof. R.N. Deshmukh HOD

Moure Prof. M.P. Dhore Principal Science College, Nagpur

Dr. R.H. Mahakhode Course Coordinator Dept. of Botany

S.S.E.S. Amt's Science College, Congress Nagar, Nagpur.

# Department of Botany SKILL BASED PROGRAMME (2022-2023) Certificate Course: Mushroom Cultivation

### TWO DAYS WORKSHOP

### Notice

Date: 21/03/2023

Department of Botany will be organizing Two Days Workshop on "Mushroom Cultivation" and power point presentation by Dr. Abhimanyu Rao Dongarwar, Expert, Sky Mushroom, Nagpur for the registered students of Certificate Course under Department of Life Long Learning and Extension, RTMNU, Nagpur for the session 2022-23 to inculcate Entrepreneurship Skill and Self Employment amongst the students.

Date: 23-24 March 2023 Time: 1:00 pm Venue: Botany Lab

Prof. R.N. Deshmukh HOD Dept. of Botany

Prof. M.P. Dhore Principal Science College, Nagpur

Mahakhoda Dr. R.H. Mahakhode Course Coordinator Dept. of Botany

Department of Botany SKILL BASED PROGRAMME (2023-2024) Certificate Course: Mushroom Cultivation

Guest Lecture

ttendance

22/03/2024

| r. No | Name of Students           | Signature              |
|-------|----------------------------|------------------------|
| 1     | Admane Tanvi Ravindra      | Janffdmin              |
| 2     | Bangadkar Megha Sanjay     | AP.                    |
| 3     | Bambal Aishwarya Pramod    | ABule                  |
| 4     | Bisen Minal Shankar        | ma                     |
| 5     | Bhandarkar Toral Suresh    | aphulaker              |
| 6     | Borkar Sejal Rajesh        | Defal                  |
| 7     | Burade Janhavi Narendra    | Thurada                |
| 8     | Chirkute Anushree Vijay    | Maraela<br>Anderk Wite |
| 9     | Chaudhari Ketaki Prakash   | Othi                   |
| 10    | Dorle Yash Sunil           | Au.                    |
| 11    | Durbule Rasika Rajesh      | Radio                  |
| 12    | Fiske Vedanti Jagdish      | Sun                    |
| 13    | Ghangare Priyanka Liladhar | Oujorla                |
| 14    | Ghaturle Grishma Vinod     | Originaly<br>Otraturlo |

| 15 | Gurnule Madhavi Dhanraj       | Come            |  |  |
|----|-------------------------------|-----------------|--|--|
| 16 | Jadhao Ekta Lokhande          | Gallace Gallace |  |  |
| 17 | Kolhe Chetan Sanjay           | Avelor for      |  |  |
| 18 | Kowe Rajshree Parmanand       | Ramit           |  |  |
| 19 | Mahajan Bhumi Sudhakar        | Shumi,          |  |  |
| 20 | Nakhale Mansi Nagesh          | Rese            |  |  |
| 21 | Nagpure Gayatri Tejlal        | - Com-          |  |  |
| 22 | Patil Chaitali Sandeep        | Bolie           |  |  |
| 23 | Rajput Madhura Chandrashekhar | MI              |  |  |
| 24 | Raut Sanika Vilas             | Sanika          |  |  |
| 25 | Satpute Sanvay Sanjay         | Saterte         |  |  |
| 26 | Samrit Smita Arvind           | 81modd          |  |  |
| 27 | Siingh Riya Virendra kumar    | Osings          |  |  |
| 28 | Shende Kasak Pravin           | \$ hende        |  |  |
| 29 | Solanki Mohak Hitesh          | Sofanto         |  |  |
| 30 | WasekarJiwak Dilip            | Sussellas       |  |  |
| 31 | Waghmare Aditya Anand         | OX day          |  |  |
| 32 | Wankhede Shreya Dnyaneshwar   | 85.             |  |  |
| 33 | Walke Devyani Ratnakar        | Denyone         |  |  |

34 Wasnik Aakanksha Lahanu
35 Yadav Dipesh Gyaneshwar
36 Yadav Soumya Sunil
37 Zade Akanksha Sanjay
A S 2ade
38 Zadgaonkar Avanti Anirudha

Dr.R.H. Mahakkoda

Caraupath Mahakkoda

Caraupath Mahakkoda

Caraupath Second College
Congress Nagar, Nagour 440012.

# Shri Shivaji Education Society Amaravati's SCIENCE COLLEGE, Congress Nagar, Nagpur

# Department of Botany Organized Skill- Based Mushroom Cultivation Certificate Course Session 2023-24

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### **REPORT**

Department of Botany organized Skill Based Programme under Department of Life Long Learning and Extension, RTM Nagpur University, Nagpur for the session 2023 -2024 on Mushroom Cultivation. Botany Department signed MOU with Organo Mushroom, Nagpur on 2<sup>nd</sup> March 2024. Under this MOU department was organized a training program for the students of Bachelor of Science & Master's of Science. The purpose of Skill Based Programme to develop Entrepreneurship Skill, Nutritional Awareness, Scientific Inquiry, Career Exploration and Self Employment for the students. The duration of the course is 45 hrs. Total 38 Students participated in this program. Department of Botany signed MOU with Organo Mushroom, Nagpur. The registered students under this course attend lectures; practical's and hands on training on mushroom cultivation. The lectures were conducted on different topics entitled Introduction and Identification of Mushroom and their types, Inoculation and Sterilization techniques Mushroom Cultivation techniques, Substrate preparation, Incubation phase, Environmental conditions, Fruiting & Harvesting, Challenges and solutions, Market Potential and Social Impact of Mushrooms. Hands on Session were taken from 27<sup>th</sup> March 2024 to 2<sup>nd</sup> April 2024. Registered students visited to Organo Mushrom Farm.

The student participated in hands-on training on mushroom cultivation. Through this training, students learned about fungal biology, sustainable farming practices. They engaged in various stages of the cultivation process where students prepared substrates, inoculated them with mushroom spawn, Bag casing involves adding a layer of spawns inside the cultivation bags, Pinning refers to the stage where tiny mushroom primordia know as pins to start from the surface of casing layer and maintained optimal conditions for mycelium growth. Humidity, Temperature, Fresh Air Exchange monitoring and adjusting these conditions teach students the importance of precision and care in cultivation process throughout the training, strict hygiene and safety protocols were emphasized to prevent contamination. Students observed the fruiting and harvesting stages, gaining insights into both the scientific and practical aspects of

mushroom farming. Students experience that session was more informative and Interactive. At the end students gave their feedbacks and explained how they are benefitted.

Chief Guest of the program was Mrs. Priya Anilkumar Bavaskar, Founder and Director, Organo Mushroom explained the various techniques of mushroom cultivation. Prof. M.P. Dhore, Principal guided the students about their overall development by learning several skills in hand on training in mushroom cultivation. We would like to express our heartfelt gratitude for their unwavering support and encouragement in providing valuable Hands on learning experiences to all participants. Under visionary leadership and constant motivation of Prof R. N. Deshmukh, Head of the Department, your guidance and efforts in providing students with necessary resources, expertise and passion for sharing knowledge have illuminated the path throughout this journey. Dr. R. H. Mahakhode, Course Coordinator, Mushroom Cultivation Certificate Course (skill based program) guided the students about the importance, medicinal and nutritional values of the edible mushroom for humankinds and also developed the employment skill among the students.

Prof P.S. Tiwari, Dr. R.P. Sonwalkar, Dr. S.S. Deshmukh Ms. Shruti Agrawal, Ms. Aishwarya Zure and Non -Teaching staff with their cooperation the activity has been successfully implemented and making programme grand success.

Registered students were visited to Organo Mushroom Lab. on 6<sup>th</sup> April sfter the completion of Hands on training on mushroom cultivation. Students were given the projects in a group on different topics of mushroom cultivation technique. The certificate course was completed by taking examination of the students. Theory question paper is of 50 Marks and it contains 25 objective type questions and each carries 2 marks. Practical question paper is of 30 marks and carries 5 marks each.



# **Lectures conducted by Faculty & Guest on Mushroom Cultivation**





# **Inoculation and Sterilization Technique**



# Preparation of Substrate, bag casing and pinning training session









# Incubation phase, Primordial stage, Fruiting and Harvesting









# **Students visited to ORGANO MUSHROOM Farm**









Dr. R.H. Mahakhode Course Coordinator

# **Action Taken Report**

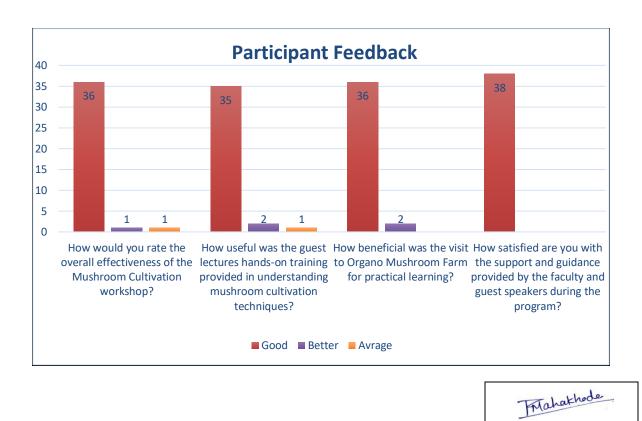
The Department of Botany, Shri Shivaji Science College organized a Skill Based Programme on Mushroom Cultivation for the session 2023-2024. An MOU was signed with Organo Mushroom, Nagpur, on March 2, 2024, to provide training for B.Sc. and M.Sc. students. The 45-hours course covered various aspects of mushroom cultivation, including substrate preparation, inoculation, and harvesting, and included hands-on training. Students visited Organo Mushroom Farm and engaged in practical sessions, learning about fungal biology and sustainable farming practices. The program concluded with a project submission and examination. Mrs. Priya Anilkumar Bavaskar, Founder of Organo Mushroom, delivered a keynote address, and the event was supported by faculty and staff, highlighting its success in developing students' skills and knowledge.

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Dr. R.H. Mahakhode Course Coordinator

### **FEEDBACK FORM**

| Sr. | Question   | Response |        |         |
|-----|--|----------|--------|---------|
| No. |  | Good     | Better | Average |
| 1)  | How would you rate the overall effectiveness of the Mushroom Cultivation workshop?                                 |          |        |         |
| 2)  | How useful was the guest lectures hands-on training provided in understanding mushroom cultivation techniques?     |          |        |         |
| 3)  | How beneficial was the visit to Organo Mushroom Farm for practical learning?                                       |          |        |         |
| 4)  | How satisfied are you with the support and guidance provided by the faculty and guest speakers during the program? |          |        |         |



Dr. R.H. Mahakhode Course Coordinator