





















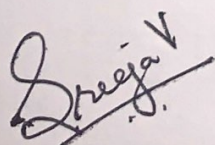
MANNAM MEMORIAL NSS COLLEGE, KOTTIYAM

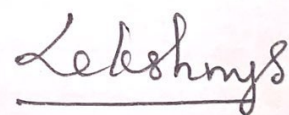
STUDENT ENROLMENT LIST (2022-23)

Name of department : Department of Zoology

Name of course : Mushroom cultivation

Sl No	Name of Student	Signature
1	Abhishek R Krishnan	
2	Ajmi k	
3	Althaf N	
4	Jeeja Jayaprasad	
5	Radhika R	
6	Unnikuttan B	
7	Aparna Mohan	
8	Devika Babu	
9	Haritha H	
10	Jasina S	
11	Jeena Prasad	
12	Karthika G	
13	Krishnathulasi V	
14	Misiriya H S	
15	Nandana krishnan R	
16	Navya Sudarsan	
17	R Anjana	
18	Saranya S	
19	Sukhi S	
20	Vinu T	


(Co-ordinator)


(HOD)

**DEPARTMENT OF ZOOLOGY
MMNSS COLLEGE, KOTTIYAM
ADD ON COURSE 2022-23
MUSHROOM CULTIVATION**

Total hours : 30

Course Objectives:

- Enable the students to identify edible and poisonous mushrooms
- Provide hands on training for the preparation of bed for mushroom cultivation and spawn production • Give the students exposure to the experiences of experts and functioning mushroom farms
- Help the students to learn a means of self employment and income generation

Course outcome: By successfully completing the course, students will be able to:

- Identify edible types of mushroom
- Gain the knowledge of cultivation of different types of edible mushrooms and spawn production
- Manage the diseases and pests of mushrooms
- Learn a means of self-employment and income generation

SYLLABUS

Module 1: Introduction to mushrooms (3 hours)

Mushrooms -Taxonomical rank -History and Scope of mushroom cultivation - Edible and Poisonous Mushrooms-Vegetative characters



Module 2: Common edible mushrooms (3 Hours)

Button mushroom (*Agaricus bisporus*), Milky mushroom (*Calocybe indica*), Oyster mushroom (*Pleurotus sajorcaju*) and paddy straw mushroom (*Volvariella volvcea*).

Module 3: Principles of mushroom cultivation (12 Hours)

Structure and construction of mushroom house. Sterilization of substrates. Spawn production - culture media preparation- production of pure culture, mother spawn, and multiplication of spawn. Composting technology, mushroom bed preparation. Spawning, spawn running, harvesting. Cultivation of oyster and paddy straw mushroom. Problems in cultivation - diseases, pests and nematodes, weed moulds and their management strategies.

Module 4: Health benefits of mushrooms (4 Hours)

Nutritional and medicinal values of mushrooms. Therapeutic aspects- antitumor effect

Module 5: Post harvest technology: (8 Hours)

Preservation of mushrooms - freezing, dry freezing, drying, canning, quality assurance and entrepreneurship. Value added products of mushrooms.

References

1. Marimuthu, T. et al. (1991). Oster Mushroom. Department of Plant Pathology. Tamil Nadu Agricultural University, Coimbatore.
2. Nita Bhal. (2000). Handbook on Mushrooms. 2nd ed. Vol. I and II. Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi
3. Pandey R.K, S. K Ghosh, 1996. A Hand Book on Mushroom Cultivation. Emkey Publications.
4. Pathak, V. N. and Yadav, N. (1998). Mushroom Production and Processing Technology. Agrobios, Jodhpur.
5. Tewari Pankaj Kapoor, S. C. (1988). Mushroom Cultivation. Mittal Publication, New Delhi.



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DR. SREEJA-V
Course Co-ordinator

Lekshmy S
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DEPARTMENT OF ZOOLOGY

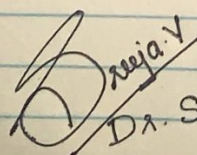
COURSE : MUSHROOM CULTIVATION

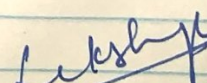
COURSE

COURSE SCHEDULE – MUSHROOM CULTIVATION

DATE	TIME	TOPIC
05/09/2022 (Monday)	3.30 – 4.30 pm	Introduction to mushrooms
06/09/2022 (Tuesday)	3.30 – 4.30 pm	Mushrooms -Taxonomical rank
07/09/2022 (Wednesday)	3.30 – 4.30 pm	History and Scope of mushroom cultivation
08/09/2022 (Thursday)	3.30 – 4.30 pm	Edible and Poisonous Mushrooms
09/09/2022 (Friday)	3.30 – 4.30 pm	Vegetative characters
10/09/2022 (Saturday)	9.00 – 1.00 pm	Button mushroom , Milky mushroom
12/09/2022 (Monday)	3.30 – 4.30 pm	Oyster mushroom
13/09/2022 (Tuesday)	3.30 – 4.30 pm	paddy straw mushroom
14/09/2022 (Wednesday)	3.30 – 4.30 pm	Structure and construction of mushroom house.
15/09/2022 (Thursday)	3.30 – 4.30 pm	Sterilization of substrates
16/09/2022 (Friday)	3.30 – 4.30 pm	Spawn production
17/09/2022 (Saturday)	9.00 – 1.00 pm	culture media preparation
19/09/2022 (Monday)	3.30 – 4.30 pm	production of pure culture
20/09/2022 (Tuesday)	3.30 – 4.30 pm	Composting technology
21/09/2022 (Wednesday)	3.30 – 4.30 pm	Spawning
22/09/2022 (Thursday)	3.30 – 4.30 pm	Cultivation of oyster
23/09/2022 (Friday)	3.30 – 4.30 pm	Problems in cultivation
24/09/2022 (Saturday)	9.00 – 1.00 pm	weed moulds and their management strategies
27/09/2022 (Monday)	3.30 – 4.30 pm	Nutritional and medicinal values of mushrooms
28/09/2022 (Tuesday)	3.30 – 4.30 pm	Preservation of mushrooms
29/09/2022 (Wednesday)	3.30 – 4.30 pm	added products of mushrooms
03/10/2022	END COURSE EVALUATION	




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 Course Coordinator


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MMNSS COLLEGE, KOTTIYAM
DEPARTMENT OF ZOOLOGY
END COURSE EVALUATION OF ADD ON COURSE 2022-23
MUSHROOM CULTIVATION

Max marks: 25

Time: 1 hr

Section A. Answer all questions in one or two sentences (5×1= 5)

1. Name one edible mushroom
2. Which mushroom yields anticancer drug?
3. Optimum humidity required for Oyster mushroom spawn running is -----
4. Damping off disease in mushrooms are caused by -----
5. Which mineral is commonly found in mushrooms?

Section B. Answer any 4 of the following (4×2=8)

6. How will you identify the edible and poisonous mushrooms?
7. Give an account of medicinal mushrooms
8. Elucidate the nutritional value of mushrooms
9. Draw the layout of the mushroom cropping room.
10. Examine the factors affecting the mushroom bed preparation
11. Examine the prospects of mushroom cultivation as a small-scale industry.

Section C. Answer any 3 of the following (3×4= 12)

12. Discuss the life cycle of oyster mushroom
13. How will you dry the mushrooms?
14. Give an account of canning of mushrooms.
15. Explain the significance of mushrooms.
16. Analyze the strategies of protection of mushroom from pests

Mark sheet of end course evaluation of the Add on course Mushroom cultivation(2022-23)

Sl. No:	Name	Candidate code	Mark (25)	Signature
1	Abhishek R Krishnan	25021116001	20	<i>[Signature]</i>
2	Ajmi k	25021116002	23	<i>[Signature]</i>
3	Althaf N	25021116003	21	<i>[Signature]</i>
4	Jeeja Jayaprasad	25021116004	24	<i>[Signature]</i>
5	Radhika R	25021116007	25	<i>[Signature]</i>
6	Unnikuttan B	25021116008	15	<i>[Signature]</i>
7	Aparna Mohan	25021116009	25	<i>[Signature]</i>
8	Devika Babu	25021116011	18	<i>[Signature]</i>
9	Haritha H	25021116012	24	<i>[Signature]</i>
10	Jasina S	25021116013	22	<i>[Signature]</i>
11	Jeena Prasad	25021116014	23	<i>[Signature]</i>
12	Karthika G	25021116015	24	<i>[Signature]</i>
13	Krishnathulasi V	25021116016	25	<i>[Signature]</i>
14	Misiriya H S	25021116017	22	<i>[Signature]</i>
15	Nandana krishnan R	25021116018	21	<i>[Signature]</i>
16	Navya Sudarsan	25021116019	20	<i>[Signature]</i>
17	R Anjana	25021116020	20	<i>[Signature]</i>
18	Saranya S	25021116021	19	<i>[Signature]</i>
19	Sukhi S	25021116024	24	<i>[Signature]</i>
20	Vinu T	25021116025	18	<i>[Signature]</i>

[Signature]
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 Course Co-ordinator

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 Kottiyam - 691571

COURSE REPORT

The add on course on mushroom cultivation is designed to provide participants with comprehensive knowledge and practical skills required to successfully cultivate different types of mushrooms. The course covers topics like scope of mushroom cultivation, types of edible mushroom, principles of mushroom cultivation, health benefits of mushrooms and post harvest technology. 20 students participated in this course. Mushroom cultivation is an eco-friendly farming practice. By promoting mushroom cultivation, the course contributes to sustainable agri culture and environmental preservation. The course was started on 01/09/2022. And course duration of the course was 30 hours. And course evaluation was conducted on 03/10/2022.

Sreeja V

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KOTTIYAM

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Kottiyam, Kollam



FEEDBACK REPORT BY STUDENTS

The course provided in-depth knowledge of mushroom cultivation. With the growing demand for mushrooms in the food and health industry, the course equips students with skills needed to pursue a career in mushroom cultivation, farming etc. The course offered valuable insights into starting and managing a mushroom cultivation business.

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