

MKR GOVT. DEGREE COLLEGE

(Accredited with B** Grade by NAAC, ISO 9001-2015)

Affiliated to Mahatma Gandhi University

DEVARAKONDA, NALGONDA, TELANGANA



A REPORT

ON

CERTIFICATE COURSE IN MUSHROOM CULTIVATION

(24-02-2023 to 11-04-2023)

ORGANIZED

 \boldsymbol{BY}

DEPARTMENT OF BOTANY

CERTIFICATE COURSE

ON

MUSHROOM CULTIVATION

Duration: 30 Hours

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 (4 hours)

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

Module 2: Common edible mushrooms (2 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 (8 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 (2 Hours)

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

Module 5: Post harvest technology: (4 Hours)

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

Module 6: Training/ Workshop/ Field visit (10 Hours)

Sterilization and sanitation of mushroom house, instruments and substrates

Preparation of mother culture, media preparation, inoculation, incubationand spawn production

Cultivation of oyster mushroom using paddy straw/agricultural wastes

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.
- 6. Tripathi, D.P. (2005) Mushroom Cultivation, Oxford & IBH Publishing Co. PVT.LTD, New Delhi.
- 7. V.N. Pathak, Nagendra Yadav and Maneesha Gaur, Mushroom Production and Processing Technology/ Vedams Ebooks Pvt Ltd., New Delhi (2000)

DEPARTMENT OF BOTANY

CERTIFICATE COURSE IN MUSHROOM CULTIVATION

Mushroom cultivation can help to reduce vulnerability to poverty and strengthens livelihoods through the generation of a fast yielding and nutritious source of food and a reliable source of income. As it does not require access to land, the cultivation is viable and attractive. Mushroom cultivation is not only a source for nutritious protein-rich food; it can also contribute to the production of effective medicinal products. It is an eco-friendly agricultural practice in the efficient utilization of agricultural and industrial waste. It can also play a significant role in generating self-employment opportunity. Considering the significance of mushroom cultivation, the department is offering a certificate course in mushroom cultivation for the under graduate students. In addition to theory classes the course is providing hands-on trainings, seminars, assignments and field visits.

Aim of the Course

- 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

Duration of the Course: 30 Hours

COURSE ASSESSMENT

Assessment of students was carried out on the basis of internal evaluations which include attendance, viva, test papers and practical skill during training. Certificates will be issued to students on successful completion of the course.

MKR Government Degree College, Devarakonda

Dist: Nalgonda

DEPARTMENT OF BOTANY

NOTICE

Date: 13.02.2023

All the students are here by informed that, Department of Botany is organizing 30 Hours certificate Course in "Mushroom Culture". Interested students should enroll your names with Dr. Ch. RamaRaju, Asst. Professor of Botany on or before 20/02/2023.

All the students of B.A/ B.Com/. MPCs should note.

Dr. Ch. RamaRaju

Asst. Professor of Botany

Principal,
MKR Govt. Degree College,
DEVARAKONDA-F32220

MKR GDC DEVARAKONDA

Certificate Cource on Mushroom Cultivation FOR VI- SEM (BA,B.Com.

(CA),MPCS) Students List

		Students List	GROUP	Remarks
	ROLL NO	NAME	GROOF	
1	20044026468024	P.Shiva	MPCs	
2	20044026468014	M.Anil	MPCs	
3	20044026468017	N.Naveen	MPCs	
4	20044026468016	Nazma	MPCs	
5	20044026468005	E.Kotesh	MPCs	
6	20044026468018	N.Surendhar	MPCs	
7	20044026468008	J. Poojitha	MPCs	
8	20044026468020	N.Hymavathi	MPCs	
9	20044026468028	R.Sai shirisha	MPCs	
10	20044026468027	Md. Minhaj Mohiuddin	ва	
11	20044026405012	G.Bhavani	B. Com C.A	
12	20044026405013	J.Bhagya	B. Com C.A	
13	20044026405039	V.Mahesh	B. Com C.A	
14	20044026405020	K.Anil	B. Com C.A	
15	20044026405002	A.Sowmya	B. Com C.A	
16	20044026405993	N.Srikanth	B. Com C.A	
17	20044026129018	MD.Wahaj haneef	ВА	
18	20044026469020	N.Anusha	ВА	
19	20044026469515	C.Naresh	ВА	
20	20044026129028	SK.Sameer	ВА	

PRINCIPAL (FAC)
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Devarakonda, Nalgonia, Dt. 508/248

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MKR GDC DEVARAKONDA (2022 - 23)
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Photograph of student participants in the preparation of compost. Course coordinator and Principal Dr. Ch. Rama Raju along with other staff are seen.





Spanning and bedding in Mushroom cultivation.



Growth and appearance of Mushroom on the beds.