

CERTIFICATE COURSE IN MUSHROOM CULTIVATION

BHB College, Sarupeta

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 individual 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 courses is providing hands- on trainings seminars, assignments and fields visits.

Aim of the Course

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

Duration of the course: 3 months

COURSE ASSESSMENT

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

COURSE OBJECTIVE

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- Give the students exposure to the experiences of experts and functioning mushrooms 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 mushrooms
- Gain 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 (2 Hours)

Mushrooms -Taxonomical rank-History and Scope of mushroom cultivation-Edible and Poisonous mushrooms-vegetative characters.

Module 2: Common edible mushrooms (2Hours)

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

Module 3: Principles of mushrooms 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 (2Hours)

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

Module 5: Post harvest technology: (4hours)

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

Module 6: Training/ Workshop/ Fields visit (12 Hours)

Sterilization and sanitization of mushrooms house, instruments and substrates.

Preparation mother culture, media preparation, inoculation, incubation and spawn production .

Cultivation of oyster mushrooms using paddy straw/agriculture wastes.

References

1. Marimuthu, T. et al.(1991). Oyster Mushroom Department of Plant Pathology. Tamil Nadu agriculture 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). Mushrooms Production and Processing Technology. Agrobios, Jodhpur.
5. Tewari Pankaj kapoor, S.C (1988). Mushroom Cultivation, Mittal Publication, new Delhi.
6. Triparthi, D.P. (2005) Mushroom Cultivation, Oxford and 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).

LIST OF STUDENTS ENROLMENT

YEAR	STUDENT NAME	COMPLETED/INCOMPLETED	PH. NO
Oct to Dec, 2022	1. Priyabrat Talukdar	Completed	7002591713
Oct to Dec, 2022	2. Rahul Bayan	Completed	6901485568
Oct to Dec, 2022	3. Rakesh Barman	Completed	6002056552
Oct to Dec, 2022	4. Jyotirmay Barman	Completed	6001090321
Oct to Dec, 2022	5. Dhruva Barman	Completed	6000717311