



THE NEW COLLEGE

(Autonomous)

Sponsored by The Muslim Educational Association of Southern India
(Affiliated to The University of Madras & Re-Accredited by NAAC with 'A' Grade)
Chennai - 600 014



Department of Botany

Value Added Course

On

Mushroom Technology



* Certificate Course ONLY for the students of New College

Significance of the course

Scope

- ❖ Mushrooms are used extensively in cooking, in many cuisines
- ❖ Mushrooms are a rich source of various antioxidants including Vitamin C, selenium, glutathione, and choline.
- ❖ It is also an excellent source of protein, fiber, and vitamin D. Thus the demand for mushroom is increasing steadily.

Opportunities

- ❖ Mushroom farming is one of the most profitable agri-business that can be started with lesser investment and space
- ❖ It is gradually growing as an alternative source of income for many people

◇ Seat ◇
50

(First come
first serve
basis)

◇ Course duration ◇
40 hours
(20 hrs practicals +
20 hrs theory)

◇ Span for the Course ◇
1st March
to
30th May – 2021

Registration Fee: Rs. 500/-

Participants: All UG/PG students of New College only

Patrons

Dr. Anvar Sadhath,
Director – IQAC

Dr. V. Kamal Nasir,
Vice – Principal
(Admin)

Prof. S. A. Sheik Mohamed,
Vice – Principal
(Academic)

Dr. S. Basheer Ahamed,
Principal

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DEPARTMENT OF BOTANY
THE NEW COLLEGE, CHENNAI-14.
VALUE ADDED COURSE ON MUSHROOM TECHNOLOGY
Scheme of Examination and Syllabus

Introduction

Mushrooms are being used as food and medicine from ancient times. Mushroom contains all essential amino acids, vitamin B complex, iron, calcium, potassium, phosphorous, folic acid and other biochemical compounds. It is also a good source of dietary fibre. It is regarded as highly edible even for people suffering from cholesterol problems, heart diseases, diabetes and cancer. Mushroom cultivation has now become a source for income generation since there is a large demand for healthy and quality food products. Many value added products are also obtained from mushrooms. The cultivation procedure is characterised by small initial investment and year round production. It is an eco-friendly agricultural practice. Considering the commercial viability and self-employment potential of mushroom cultivation and marketing, the Department is offering the same as an add on certificate course to the under graduate students of the College.

Aims of the Course

- ❖ To enable the students to identify the edible and poisonous mushrooms.
- ❖ To provide hands-on training for the preparation of bed for mushroom cultivation and its harvesting, pests and diseases control and post harvesting management.
- ❖ To provide the students awareness about the marketing trends of Mushrooms.
- ❖ To give the students exposure to the experiences of experts in the field and to functioning mushroom farms.
- ❖ To help the students to learn a means of self-employment and income generation.

Duration of Course: The course shall extend over a period of three months (40hrs).

Admission Procedure:

Candidates for admission to the course should be students of the New College, Chennai. Interested students shall apply for admission at the time of notification in the prescribed form.

Examinations

S. No.	Paper	Marks
1.	Paper I – Theory	100
2.	Paper II – Practical	80
3.	Internal Assessment	20
Total		200

Certificates will be issued to the candidates on successful completion of the course

SYLLABUS
MUSHROOM CULTIVATION TECHNOLOGY

Course objectives

- To facilitate self-employment.
- To know the nutrient value of mushroom.
- To study the morphology and types of Mushrooms.
- To know the spawn production technique.
- To aware the identification of edible and poisonous Mushrooms.
- To learn the prospects and scope of mushroom cultivation in small scale industry.
- To understand the Diseases. Post harvesting techniques of Mushrooms.

UNIT I

Introduction – History of mushroom cultivation; Classification and distribution of mushroom; life cycle of mushroom. Identification of poisonous mushrooms.

UNIT II

Spawn preparation - Isolation of pure culture; Nutrient media for pure culture; layout of spawn preparation room; raw material of spawn; sterilization; preparation of mother spawn and multiplication.

UNIT III

Cultivation of mushroom, layout of mushroom shed - small scale and large scale production unit. Types of raw material – preparation and sterilization; Mushroom bed preparation – maintenance of mushroom shed; harvesting method and preservation of mushrooms.

UNIT IV

Nutrient values of mushroom – protein, carbohydrate, fat, fibre, vitamins and amino acids contents; short and long term storage of mushroom; preparation of various dishes from mushroom. Medicinal value of mushroom – cultivation, extraction, isolation and identification of active principle from mushroom. Pharmacological and economic values of mushroom.

UNIT V

Cultivation of following types of mushroom – milky mushroom; oyster mushroom, button mushroom and any one medically valuable mushroom.

Practical: All the items included in theory.

SUGGESTED BOOKS

1. Paul Stamets, J.S. and Chilton, J.S. 2004. Mushroom cultivation A practical guide to growing mushrooms at home, Agarikon Press.
2. Tewan and Pankaj Kapoor S.C. 1993. Mushroom cultivation. Mittal Publication. Delhi.
3. Marimuth et al., 1991. Oyster Mushrooms. Dept. of Plant pathology, TNAU, Coimbatore.
4. Nita Bahl. 1988. Hand book of Mushrooms, 2nd Edition, Vol I & II.

5. Shu Fing Chang, Philip G. Miles and Chang, S.T. 2004. Mushrooms Cultivation, nutritional value, medicinal effect and environmental impact. 2nd ed., CRC press.

Course Outcome

- Students can start small scale industry of Mushroom cultivation.
- Students study the morphology and types of Mushrooms.
- They are aware of the identification of edible and poisonous Mushrooms.
- Students will be able produce spawn on their own.
- Learned the prospects and scope of mushroom cultivation in small scale industry.
- Studied the technique of Mushroom cultivation.
- Understood the Diseases. Post harvesting techniques of Mushrooms.

THE NEW COLLEGE (AUTONOMOUS), CHENNAI – 600 014.

VALUE ADDED COURSES

APPLICATION FORM

Name of the course : Mushroom Technology
Department : Botany
Name of the Course : General / Specific
Name of the Student :
Register No. :
Class :
Date of Birth :
Community :
Address :

Contact No. :
Email ID :
Fee Paid : Rs.

DECLARATION

I _____ would like to enroll in
the _____ Value Added Course. I
will abide by the rules and regulations of the College.

Date:

Signature of the Candidate