

DEPARTMENT OF BOTANY
ST. GREGORIOS COLLEGE, KOTTARAKARA

CERTIFICATE COURSE IN MUSHROOM CULTIVATION AND MARKETING

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, phosphorus, 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 six months (54 Hours)

Admission Procedure

Candidates for admission to the course should be degree students of the St. Gregorios College, Kottarakara. Interested students shall apply for admission at the time of notification in the prescribed form.

Examinations

Sl. 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 AND MARKETING- 54 Hrs

UNIT I

- Introduction: General History, Edible mushrooms and Poisonous mushrooms.
- Common Indian mushrooms.
- Nutritional value, medicinal value and advantages.
- Systematic position, morphology, distribution, structure and life cycle of *Agaricus*.

UNIT II

- Cultivation: Paddy straw mushroom – substrate, spawn making.
- Methods – bedmethod, polythene bag method, field cultivation.
- Oyster mushroom cultivation –Substrate, spawning, pre-treatment of substrate.

UNIT III

- Maintenance of mushroom.
- Diseases- Common pests, disease prevention and control measures.
- Processing - Blanching, steeping, sun drying, canning, pickling, freeze drying.
- Storage – short term and long term storage.

UNIT IV

- Production level, economic return, Foreign exchange from Mushroom cultivating countries and international trade.

Field Study: Visit to a mushroom cultivating Laboratory

REFERENCES

1. Pandey B P 1996. A textbook of fungi. Chand and company N Delhi.
2. Kaul T N 2001. Biology and conservation of mushrooms. Oxford and IBH publishing company N.Delhi
3. Gupta P.K. Elements of Biotechnology.
4. Harander Singh. 1991. Mushrooms- The Art of Cultivation- Sterling Publishers.
5. Indian Journal of Mushrooms. Published by I.M.G.A. Mushroom Research Laboratory. College Agriculture, Solan