Add-on Course

MUSHROOM CULTURE



Department of Botany Rural Institute of Higher Studies, Bhograi

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 on Mushroom culture at RIHS, Bhograi, students will be able to:

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

Duration:

The entire course will be of 3 months. The classes will be conducted on off-hours. There will be 36 classes to cover the entire course. Each class will be of 45 minutes.

Attendence: 75% attendance is mandatory

Certificate: Certificate of Participation will be given to each student having 75% of attendance.

Syllabus COURSE-1 Introduction to Mushrooms (6 hours) Unit:1

- Fungi groups
- Basidiomycetes
- Mushrooms
- History

Unit:2

Introduction to Agaricus

- Agaricus
- Taxonomical rank
- Vegetative character
- Life cycle of Agaricus

Unit:3

Importance of Mushrooms

- Nutritional value
- Medicinal value

Unit:4

Edible mushrooms in India

- Button mushroom (Agaricus bisporus)
- Milky mushroom (*Calocybe indica*)
- Oyster mushroom(*Pleurotus sajorcaju*)
- Paddy straw mushroom (Volvariella volvacea).

Unit:5

Poisonous Mushrooms

- Amanita muscaria
- Amanita phalloides
- Agaricus xanthoderma

COURSE:2 Unit:6 Principles of mushroom cultivation (6 Hours)

- Pure culture medium
- Sterilization process
- Preparation of Spawn, Multiplication
- Compost technology
- Mushroom bed preparation
- Problems in cultivation diseases, pests and nematodes, weed moulds and their management strategies.

COURSE:3

Unit:7

Post harvest technology: (6 Hours)

- Preservation of mushrooms freezing, dry freezing, drying, canning
- Nutrient contents in Mushroom
- Value added products of mushrooms

COURSE:4

Unit:8

Field visit(12 Hours)

- Mushroom Farm visit
- Training programme of Mushroom Culture

Assessment Strategy

- Oral assessment (2-classes)
- Written assessment (3 classes)

Implementation Strategy

- Mushroom culture farming was developed by students in Department Campus
- Classroom Seminar by Students