



KHAIRA COLLEGE, KHAIRA, BALASORE

Add-on Course

MUSHROOM CULTIVATION

Unit: I Mushroom morphology and classification:

Different parts of a typical mushroom & variations in mushroom morphology.

Key to differentiate Edible from Poisonous mushrooms.

Structure and texture of fruit bodies-gilled fungal & pore fungal,

Fruit bodies and spores- Ainsworthetal (1973) classification.

Unit:II Biology of Mushrooms, Nutrient Profile of Mushroom:

Button, Straw & Oyster- General morphology, distinguishing characteristics, spore germination and lifecycle.

Protein, aminoacids, calorific values, carbohydrates, fats, vitamins & minerals.

Unit:III Health benefits of Mushroom:

Antiviral value, antibacterial effect, antifungal effect, anti-tumor effect, hematological value cardiovascular & renal effect, in therapeutic diets, adolescence, foragedpersons & diabetes mellitus.

Unit:IV Cultivation System& Farm design:

Principles of mushroom farm layout-location of building plot, Design of farm, bulk chamber, composting platform, equipment & facilities, pasteurization room &growing rooms.

Collection of raw materials, compost & composting, spawn & spawning, casing & caserun, cropping & crop management, picking & packing.

TextBook:

1.Mushroom Cultivation, Tripathi, D.P(2005) Oxford & IBH Publishing Co. PVT.LTD,NewDelhi.

ReferenceBooks:

1. Mushroom Production and Processing Technology, Pathak Yadav Gour (2010) Published by Agrobios (India).
2. A hand book of edible mushroom, S.Kannaiyan& K.Ramasamy (1980). Today & Tomorrow sprinters & publishers, New Delhi
3. Handbook on Mushrooms, Nita Bahl, oxford & IBH Publishing C.

Program outcome:

1. Mushroom farming is one the most profitable agro-business that can be started with less investment and space
2. Student study the morphology and types of mushrooms.
3. They are aware of the identification of the edible and poisonous mushrooms.
4. Learned the technique, prospects and scope of mushroom cultivation in small scale industry.
5. Understood the mushroom cultivation related diseases and post harvesting techniques of mushrooms.

Eushree Jangir
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