

Curriculum for Certificate Course in Mushroom Cultivation



**Duration 12 Months
(48 Classes)**

Paper-I Mushroom Classification & Economic Importance

(24 Classes)

Course Contents:

Unit: I Mushroom morphology: **04**

Different parts of a typical mushroom & variations in mushroom morphology. Key to differentiate Edible from Poisonous mushrooms.

Unit: II Mushroom Classification: **06**

Based on occurrence-Epigenous & Hypogenous, Natural Habitats-Humicolous, Lignicolous & Coprophilous, Color of spores- white, yellow, pink, purple brown & black, Morphology- fruiting layers exposed to air, fruiting layers not exposed to air, plants with predominantly pitted cap, cap saddled shape & saucer shape, Structure and texture of fruit bodies-gilled fungal & pore fungal, Fruit bodies and spores- Ainsworth et al (1973) classification. Recent Classification- 8th edition of Ainsworth & Bisby's 'Dictionary of Fungi'.

Unit: III Biology of Mushrooms: **04**

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

Unit: IV Nutrient Profile of Mushroom: **04**

Protein, amino acids, calorific values, carbohydrates, fats, vitamins & minerals.

Unit: V Health benefits of Mushroom: **06**

Antiviral value, antibacterial effect, antifungal effect, anti-tumour effect, haematological value cardiovascular & renal effect, in therapeutic diets, adolescence, for aged persons & diabetes mellitus.

PAPER-II: Cultivation Techniques **(24 Classes)**

Unit: I Cultivation System & Farm design: **06**

Fundamentals of cultivation system- small village unit & larger commercial unit.

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

Unit: II Compost & Composting: **06** Principles

of composting, machinery required for compost making, materials for compost preparation.

Methods of Composting- Long method of composting (LMC) & Short method of composting (SMC).

Unit: III Spawn & Spawning:

04 Facilities

required for spawn preparation, Preparation of spawn substrate, preparation of pure culture, media used in raising pure culture, culture maintenance and storage of spawn.

Unit: IV Casting materials & Case running:

04

Importance of casing mixture, Quality parameters of casing soil, different types of casing mixtures, commonly used materials.

Unit: V Cultivation of Button, Oyster and Straw Mushrooms:

04 Collection

of raw materials, compost & composting, spawn & spawning, casing & case run, cropping & crop management, picking & packing. Visit to relevant Labs/Field Visits

Text Book:

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

Reference Books:

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 & Tomorrows printers & publishers, New Delhi Handbook on Mushrooms, Nita Bahl, oxford & IBH Publishing Co.

**Agreement / Understanding with West Bengal
Comprehensive Area Development Corporation
(WBCADC), Debra for conduction of the course**



WEST BENGAL COMPREHENSIVE AREA DEVELOPMENT CORPORATION
(Under Panchayats and Rural Development Department, Government of West Bengal)

Debra Project

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TO WHOM IT MAY CONCERN

This is to certify that WBCADC Debra Project (Under P&RD Department, Govt. of West Bengal) is conducting Training Programme in **Mushroom Cultivation** for the students of Debra Thana Sahid Kshudiram Smriti Mahavidyalaya since 2020. Two nos. unit for Mushroom Cultivation, under RKVY has also been set up in the college premises by WBCADC Debra Project.

Date:- 13 DEC 2021


Deputy Project Officer
WBCADC Debra Project
Deputy Project Officer
WBCADC
Debra Project
Dist:- Paschim Medinipur

Some photos of the course





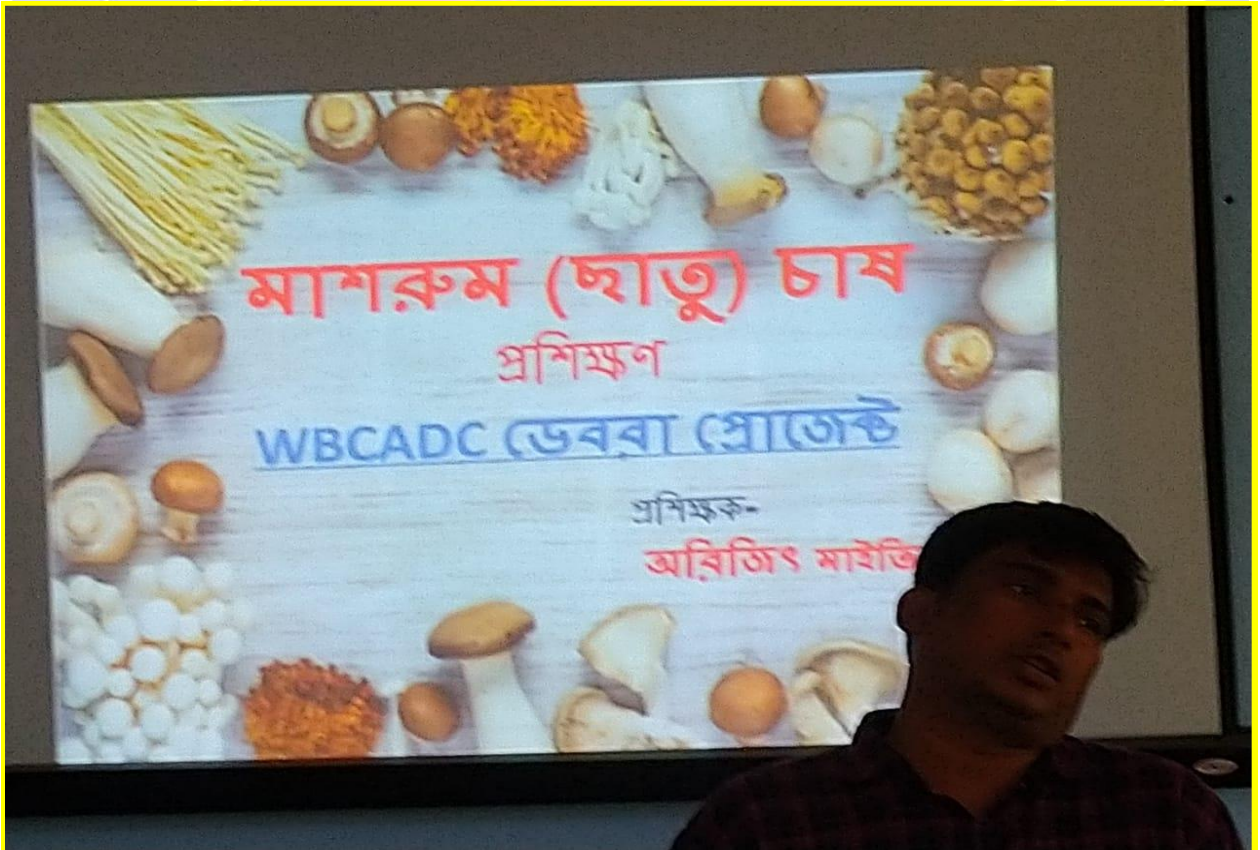














Sample certificate of the course

