SHRI GURU RAM RAI UNIVERSITY

Patel Nagar, Dehradun, Uttarakhand (Estd. by Govt. of Uttarakhand, vide Shri Guru Ram Rai University Act no. 03 of 2017)

COURSE SYLLABI

For Value Added Course Programme

"PRODUCTION AND POST HARVEST HANDLING OF MUSHROOM"

Course Code: VCSAS001



Approved By:

BOARD OF STUDIES

SCHOOL OF AGRICULTURAL SCIENCES SHRI GURU RAM RAI UNIVERSITY PATEL NAGAR DEHRADUN 248001

School of Agricultural Sciences

Department of Plant Pathology



School of Agricultural Sciences

Department of Plant Pathology

VALUE ADDED COURSE (VAC)

PRODUCTION AND POST HARVEST HANDLING OF MUSHRROM

Course code: VCASAS003

Duration:30 Hrs

Name of Coordinator	Office Address	Office Number	Email. ID		
Dr. Khilendra Singh	SAS, Pathribagh	9411562640	ks77333@gmail.com		
	Campus, SGRRU				
Course Objectives:					
To enable the trainees to identify edible and poisonous mushroom.					
To provide hands on training for the preparation of bed for mushroom cultivation , pest and disease					
control and harvesting and post harvesting management.					
To provide awareness about the market trend of mushroom.					
To give the exposure of experiences of experts in the field and to functioning in mushroom farm.					
To learn a mean of self employment and income generation.					
Eligibility for registration in the course					
Any student of SGRR University can be registered in value added course in "Production and post					
harvest handling of mushroom."					
Examination and Evaluation					
As per university norms					

SYLLABUS

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-VI

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

Course outcomes (CO):

On Successful completion of course the student will be able to:

- 1. To acquaint with the nutrient value of mushroom.
- 2. To understand the morphology and types of mushroom.
- 3. To develop the skill of spawn production technology.
- 4. To aware the identification of edible and poisonous mushroom.
- 5. To learn the prospects and scope of mushroom cultivation in small scale industry.
- 6. To understand the diseases and post harvest handling of mushroom

Suggested readings:

- Agri. Information Service, Himachal Pradesh, Shimla. How to grow mushroom Bull. Agri. Inf serv. 1, 1972.
- AOAC Official Methods of Analysis of Association of Official Agricultural Chemists, 12th ed. Published by the Association , Washington,1975.
- College of Agri. Cultivation of tropical mushrooms;Bull. Tamilnadu Agri. University, Coimbatore, Tamilnadu, 1968.

- Paul Stamets, J.S. and Chilton, J.S. 2004. Mushroom cultivation A practical guide to growing mushrooms at home, Agarikon Press.
- Tewan and Pankaj Kapoor S.C. 1993. Mushroom cultivation. Mittal Publication. Delhi.
- Marimuth et al., 1991. Oyster Mushrooms. Dept. of Plant pathology, TNAU, Coimbatore.
- Nita Bahl. 1988. Hand book of Mushrooms, 2nd Edition, Vol I & II.
- Shu Fing Chang, Philip G. Miles and Chang, S.T. 2004. Mushrooms Cultivation, nutritional value, medicinal effect and environmental impact. 2nd ed., CRC press.

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Value Added Course

APPLICATION FORM

Name of the course	: "Production and post harvest handling of mushroom"	
Name of School	: School of Agricultural sciences	
Name of Department	: Department of Plant Pathology	
Name of the Student	:	
Enrollment No.	:	
Name of Enrolled school	:	
Class	:	
Year/Sem	:	
Community	:	
Address	:	
Contact No.	:	
Email ID	:	

DECLARATION

ISon or Daughter/Of			
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

School of Agricultural Sciences

Department of Plant Pathology