CERTIFICATE COURSE IN BOTANY

ACADEMIC YEAR 2020-21

{FROM 5-2-2021 TO 10-3-2021}

DEPARTMENT OF BOTANY

Mushroom Cultivation

NAGARJUNA GOVERNMENT COLLEGE (Autonomous), NALGONDA

RESOLUTION

Departmental meeting on Botany Department is held on 01-02-2021 at 2 pm . The Dept. of Botany academic chairmanship of HOD Botany to discuss about offering of Certificate course on "Mushroom Cultivation" of duration 5 weeks (30 working days).

- > It is resolved to offer Certificate course on "Mushroom Cultivation" with the duration of 5 weeks for B.SC (B.ZC) III Year students.
- It is resolved to frame syllabus for the Certificate course on "Mushroom Cultivation".
- It is also resolved to distribute the teaching hours among the staff to teach the Certificate course.
- > It is resolved to provide Certificates to successfully course Completed Students after Evolution.

Department of Botany Nagarjuns Government College NALGONDA

Date: 01-02-2021

TO,

The principal, Nagarjuna Govt. Degree college (A) . Nalgonda.

Respected sir,

Subject: Seeking permission to start Certificate Course in Botany in our college Req-Reg.

We the Department of Botany would like on start Certificate course on "Mushroom Cultivation" in our college for the academic year 2021-22 for the 8.5c Life sciences Students.

Hence, we are request you to permit us to start the Certificate Course.

Thanking you sir,

Powertted

Principal, Nagarjuna Government College NALGONDA-508 001 (T.S.)

Date :-02-02-2021

Department of Sotany Nagarjuna Government College NALGONDA

STUDENT CIRCULER

NAGARJU IA GOVERNMENT COLLEGE (Autonomous), NALGONDA

Date :- 03-02-2021

CIRCULAR

Academic Year 2020-2021

All the B.Sc Life science, students are here by informed that Dept. of BOTANY is organizing to offer Certificate course or "Mushroom Cultivation" from 05-02-2021 to 10-03-2021.All the students should utilize this course. Interested students contact the Coordinator.

Department of Botany Regarjuna Government Callege NALGONDA

Principal, Nagarjuna Government College NALGONDA - 508 001 (T.S.)

Certificate course syllabus

Mushroom Culture Technology

Unit – I (15 Hours)

1. Introduction & history, Medical value of edible mushrooms, Poisonous mushrooms. Types of edible mushrooms available in India – Volvariellavolvacea, Pleurotuscitrinopileatus, Agaricus bisporus.

- 2. Cultivation Technology: Infrastructure; substrates (locally available) Polythene bag, vessels, Inoculation hook, Inoculation loop, low cost stove, sieves culture rack, mushroom unit (Thatched house) water sprayer, tray, small polythene bags.
- 3. Pure culture: Medium, sterilization, preparation of spawn, multiplication. Mushroom bed preparation- paddy straw, sugarcane trash, maize straw, banana leaves.
- 4. Factors affecting the mushroom bed preparation Low cost technology, Composting technology in mushroom production.

Unit – II (15 Hours)

- 5. Storage: Short term storage (Refrigeration upto 24 hours) Long term Storage (Canning, pickles, papads), drying, storage in salt solutions.
- 6. Nutritional value of Mushrooms: Proteins amino acids, mineral elements nutrition-Carbohydrates, Crude fibre content Vitamins.
- 7. Food Preparation: Types of food prepared from mushroom. Research Centres National level and Regional level. Cost benefit ratio Marketing in India and abroad. Export Value.

30 hrs

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.

Course objectives:

- > To facilitate self-employment.
- > To know the nutrient value of mushroom.
- > To study the morphology and types of Mushrooms.
- > To know the spawn production technique.
- > To aware the identification of edible and poisonous Mushrooms.
- > To learn the prospects and scope of mushroom cultivation in small scale industry.
- > To understand the Diseases. Post harvesting techniques of Mushrooms.

Course Outcome:

- Students can start small scale industry of Mushroom cultivation.
- Students study the morphology and types of Mushrooms.
- They are aware of the identification of edible and poisonous Mushrooms.
- Students will be able produce spawn on their own.
- Learned the prospects and scope of mushroom cultivation in small scale industry.
- Studied the technique of Mushroom cultivation.
- Understood the Diseases. Post harvesting techniques of Mushrooms.

Certificate Course Enrollment List

MUSHROOM CULTIVATION

List of Students

		Name of the								
S.No	ROLLNO	student								
1	19044028445001	A.Anusha								
2	19044028445102	A.Lingaswamy								
3	19044028/445103	A.Venkatesh								
4	19044028445105	A.Nithya								
5	19044028445106	A.Nandhini								
6	19044028445107	A.Ramcharan								
7	19044028445108	A.Suryaprakash								
8	19044028445110	A.Vinay								
9	19044028445111	A.Maneesha								
10	19044028445112	A.Vamshi krishna								
11	19044028445113	A.Venkatesh								
12	19044028445115	B.Shivarani								
13	19044028445116	B.Thirumalesh								
14	19044028445117	B.Swetha								
15	19044028445118	B.Shivashankar								
16	19044028445119	B.Radhika								
17	19044028445121	B.Sathyavathi								
18	19044028445122	B.Chaitanya								
19	19044028445123	B.Sandeep								
20	19044028445124	B.Vamshi sai								
21	19044028445125	B.Raviteja								
22	19044028445127	B.Mounika								
23	19044028445128	B.Akhil kumar								
24	19044028445129	B.Shivakumar								
25	19044028445130	B.Sathish								
26	19044028445131	B.Uma								
27	19044028445132	B.Hemalatha								
28	19044028445133	B.Shiva								
29	19044028445134	B.Pavithra								
30	19044028445135	B.Mounika								
31	19044028445136	B.Gopi								
32	19044028445137	CH.Umesh								
33	19044028445138	CH.Mahesh								
34	19044028445140	CH.Shivani								
35	19044028445141	CH.Sravan kumar								
36	19044028445142	CH.Anjali								
37	19044028445143	CH.Vamshi								
38	19044028445144	CH.Geetha								
39	19044028445145	CH.Navya								
40	19044028445146	D.Mahesh								

STUDENT ATTENDANCE

						-	Cer	tifi	cat	e (n Ci		rars.	tom									
			_		_	-	_	1300	-	-	List	tof	5tu	dent	Att	end	ance	JUN 1	1	T.	*	t	1	W		T.	=7	451	T
6		Name of the	6	6	17	100	9	10	11 1	2/1	3 4	a 12	F 14	m	6 1	100	31	3.6 7	33	-	240	12	13	1 IA	16	1	6		9
ä	ROLLNO	student.	0	400	te	P	P	P	P	P)	17	5	10	9	2 2		12	P 1		-	4	ER e	46	- Arie	S F	17	0	Sit.	T
i	25005832840025	A Anchia	0	A	P	p	0	9	17	F	PI.	3	2 5	100	P 1	100	18	計	5	-	計	4	$\omega \omega$	313	Mary 1	1	市	10	P
Ē	23044078445162	A Linguewarrie	0	10	+-	P	5	P	P	P 1	7	9	4410	1 B	P	-	1 Y	P	5	1504	計	7		1	P 5	2	5	1 2	8
Ī	E9046028/A45103	A, Verkateilt	F	P	P	0	D	D	14	P	P 4	-	315	11	1	PE	100	0	6	7	0	p	21	P \$		PIS	-	2 9	
	19044113445705	d, NITTY	0	15	5	P	P	P	P	0	P	PIS	A	4.1	230		L E	6	0	0	P	P	9	81	P 3	211		PEP	-
ī	100410000000	e Roomer	0		0	0	P	P	9	Pi	8 8	_	9 8	15	4	PE	10	6	5	0	정	PS	-	5	P	PF	1	FIE	-
	1004603940301	is participan	8	10	0	10	P	9	2	2	PI	_	1 8	11	P.		A	B	0	P	성	P	P	8	91	PE	7	PF	40
0	10044029441108	A.Suryapratisin	0	18	0	P	0	à.	D	0	PF	1	3 1	18	21	2 12	-	P	0	0	성	P	PT	P	P	P	2	PI	-
ī	19044028445110	AMMY	P	P	10	10	0	P	والمنت	व	715		0 6	18	PI	-	100	100	0	p	51	P	0	9	P	P	9	PP	-
ī	19044078445111	A Manesyta	100	A	福	B	P	D	0	p i	P	1	7	FP		PF	100	P	P P	0	0	D	P	P	P	P	P	F !	-
0	190402840117	A.Virmin liniting	8	10	0	5	60,000	P	7.7	P	P	1	2 8	P	-	PP	1 21	P	0	D	p	0	p	P	P	p.	9	PJE	2 2
H	13044028445113	Accounts	61	10	6	A	0	_			2	1	0 0	P	-		1000	H	0	50	6	d	P	6	P	F	P	9 5	5
ii.	19014078845175	8.9marani	K	10	10	n d	0	9	_	5	7 1	F	2	18	-	PF	-	1	5	7	0	D	6	0	P	P	0	PP	P
0	19048118881116	#.Theumalish	8	8	16	P	A	P	-	-	o F	5	P	P	P	PI	-	P	5	50	H	1	D	0	0	p	P	2 1	7
ï	19044028441317	a swetter	12	10	0	P	9	-	2	pli	PE	IK	8	P	P	PF	-	P	K	5	1	17	0	0		-	9	O	8
5	19044028445118	B.Shivartinskar	000	P	4	10	P	-	-	PI	2 5	5	2	8	P	PP	-	M	F	8	H	1	P	5	P	1	a	0 1	2 5
E.	39044028465729	E Sadkka	100	-	는	10	P	N	E.	2	PR	13	7 1	70		P	P	P	P	P	P	F	등	-	-	P	-		2 5
	10000028945121	B.SetfyavaTri	P	0	16	S. C.	p	D	-	-	0	1	PE	P	5 3	5 8	P	P	P	b	9	1		5	P	5	P	200	0
	19044538445322	E.Cructanya	P	A	10	0	9	D	-	-	त्र	2 0	PP	P	PP	18	P	P	P	P	H	P	P	2	5	끍	p	-	9
1	Control of the Contro	R.Sanderp	2	4.	0	10	50	5	P	动	515	5	9	9	PI	P	P	P	P	2	P	B	E	9	-	1	9	-	0
-	and the same of th	II.Vernité sai	0	P	18	6	0	-	01	T T	5 1	13	2 5	P	PI	1	P	P	P	P	P	5	P	8	F	P	-	V	1
1	the same of the sa	E-Royaltria	8	P	6	P	6	P	A	-	5/3	2 1	9	F	P	PF	P	P	P	P	8	P	P	P	P	P	3	-	븘
46		EMpunico	2	P	D	-	A	-	A	113	1	7	7 5	P	P	72 -1	P	P	P	P	P	P	8	P	6	P	2	P	P
an.	Control of the last of the las	CAkhil kumtr	0	0	0	0	-	-	A	D.	PH &	13	2 8	0	P	PV	2	0	P	P	6	P	6	P	P	P	8	-	1
400	Section 2 in case of the last	-Shawarrar	0	D	-	5	5	100	A	2 1	di	3 3	218	P	n	PF	P	P	P	P	P	P	8	18	P	P	D	9	8
-	7	Sathan		A	n	뉤	0	-	0. 1	a i	0 0		3 10	70	P	2 1	P	P	P	P	0	P	P	0	1	P	P	P	P
-	SAMORE STATE OF THE PARTY OF TH	1000	-	P	등	0	P	DV		3	03	5 6	2 3	2 0	6	0	PE	P	P	P	P	P	P	P	P	P	P	P	P
-	Design Townships	Name and Address of the Owner o	é÷.	0	p	성	-	4	0 1	dir.	3	4	o x	p	4	p	0 0	P	P	P	P	P	P	10	F	1	9	P	8
15	94028 HS137 PE	Street.	-	11	21	17	+1	27.53	A.	THE REAL PROPERTY.	-	-	7	100	-		-	-	_	-									
																					_	_							
				2	٤,	67	1	5 0	TIC	1	12.	19	yu?	15	Later L	16	9. 20	21	201			- 4						_	-
	19044028445134	B.Pavithra		15	2	0 0	F	8	0	8	10	P	8	PIS	10	-	P	10	D	0 1	51	53	4 3	10	10	1	51.0	11.00	1
8	19044028445135	BAtounika		10	3	0	10	P	0	A	0	0	0 1	2 5	10	p	OP	D	D	0	p	0	3	St.	10	151	20/1	010	10
3		THE REAL PROPERTY.	-	10	100	-	+	-	1	0	7	0	7		10	4	-	16	0	0	1	-	61	0 1	1	16	P	011	10
	19044028445136	В.борі		14	A	P	8	P	P.	1	Y	7		PF	TY	-		-	Y	1	D.	Y	5	1	M.	4	18	4 4	213
	19044028445137	CH.Umesh		0	1	A	P	D	P	0	P	PI	1	211	P	P	PP	P	P	P	9	7	P	8	9		-	1	13
				-	-	-	-	-	-	200	-6	-111-00	-	PP	P	P	PP	0	P	P	p	10	0	0	8	9	P	8	21
H	ARREST GARCITE	DH.Mahesh		8	-	18	-	1000	P	9	-2	100	0310		-	-	-		100	-	0	-	_	P	-	-	take or	P	P
	19044028445138			M	18	2	P	19	D	P	P	P	2	MY	P	9	PP	P	9	A	. Y	P	T	1	Silv	-	-	-	-
3	STATE OF THE PARTY	CH Shivani		0	100	4	and an	P	0	57	9	0	PS	P	P	A	2 6	8	P	0	P	91	0 1	PI	0	PIS	P	18	P
3	19044028445140	THE RESERVE OF THE PARTY OF THE	223	100	+	0	0				100	1-1	11		10	0 0	P	P	100	200	-	-		0	-	-	-	-	100
3	STATE OF THE PARTY	THE RESIDENCE OF THE PARTY OF T	nar	P	F	***	P	1	- 10	0	-	6 6	110	1								200	1000	100	DI	0 0	0 0	0	0
3	19044028445140 19044028445141	CH Sravan kun	nar	100	F	100	-	8	P	P	P	PP	- 1	10	II	1	1100	P	9	9	9	P	-	P		2 1	44	P	P
10 10	19044028445140 19044028445141 19044028445142	CH.Sravan kun CH.Anjali	nar	9	7	P	P	8	셺		-	141	- 11	-	P	1	PP	D	-	-	9	4	-	All			100	-	PP
3	19044028445140 19044028445141 19044028445142 19044028445143	CH Sravan kun CH Anjali CH Varrishi	nar	000	P	P	P	9	りかりか	PP	P	PF	1	9	11	9	P	P	9	9	Sec. 1	P	-	A	P	9	44	P	
10 10	19044028445140 19044028445141 19044028445142	CH Sravan kun CH Anjali CH Varrishi	nar	9	P	P	P	8	셺		P	141	1	2	00	1	P	-	-	-	Sec. 1	P	P	A	P	PI	P	P	P
5	19044028445140 19044028445141 19044028445142 19044028445143	CH Sravan kun CH Anjali CH Vareshi	nitr	000	7 7 7	P	P	9	셺		P	PF	1	9	11	9	P	PPP	9	9	PPP	PPP	P	A	P 9 9	9	000	P	P





NAGARJUNA GOVT. COLLEGE(A), NALGONDA, TELANGANA

Certificate

This is to certify that, ,Class/Group of Nagarjuna Government College Autonomous Nalgonda has successfully completed the training for certicate course organised by Department of Botany on "Mushroom Cultivation" during the Academic Year 2021-2022.

Principal





