#### Shiavji College, Star College Scheme Department of Botany

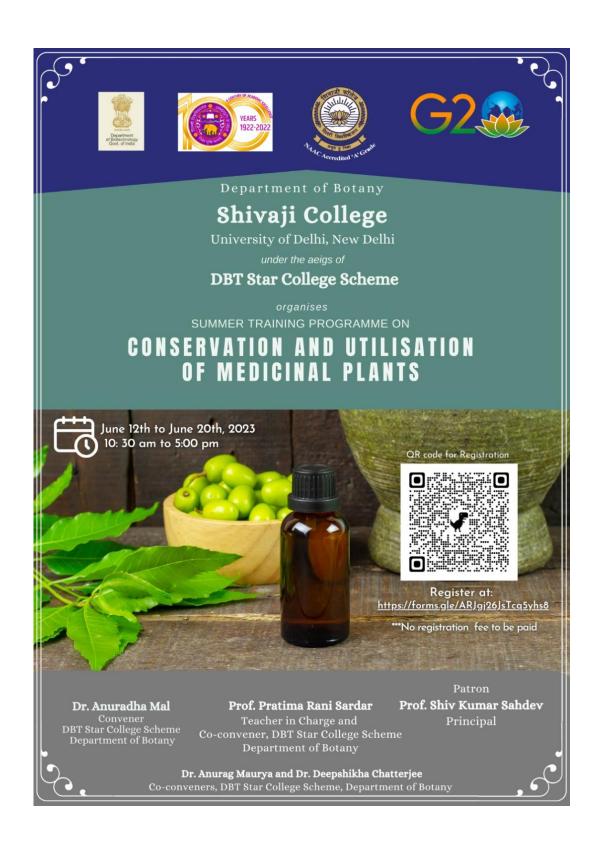
#### Summer Training program on "Conservation and Utilisation of Medicinal Plants" from June 12- June 20, 2023

Department of Botany, Shivaji College had organized a week-long Summer Training Internship Programme under the aegis of DBT Star College Scheme, entitled "Conservation and Utilisation of Medicinal Plants" from June 12- June 20, 2023.

The session on the first day was addressed by Dr. Vijay Kumar, on 'Herbal Garden and Herbarium Techniques', followed by a talk delivered by Prof. Pratima Rani Sardar (Teacher in charge). The participants were acquainted with the procedures to prepare herbarium specimens, which was followed by a visit to the herbal garden of the college with **Dr. Devender** Singh Meena, to familiarize them with various plants of medicinal use. On the second day of the programme, the participants received hands-on training on experiments regarding Reproductive Biology of plants after a lecture session on the 'Role of Reproductive Biology in Conservation of Medicinal Plants' by Dr. Prabhavathi and Dr. Seema Talwar as the resource persons. The third day was devoted to a session on 'Conservation of knowledge related to medicinal plants and their uses' by Dr. Kiran Bamel and Dr. Nupur Mondal, followed by making students aware about the digital tools required to access information about traditional knowledge, modern patents and copyrights of plants available in our country. This was succeeded on the next day by a lecture session on 'Somatic Embryogenesis and artificial seeds' by Dr. Anuradha Mal and Dr. Deepshikha Chatterjee, where the participants learnt about raising plants on artificial growth media apart from soil after preparing them. The Programme also included a trip to the Botanical Garden of the Republic of India (BGRI, NOIDA), where the participants were apprised of the natural habitats and growth conditions of a wide variety of flora ranging from aquatic plants to the large trees. Dr. Priyanka Ingle (Scientist E and Head of Office, BGRI) led the participants to different sections of the Garden, including arboretum, Ayurvedic Herbal Garden, gave detailed account of the flora present and answered the various queries put forward by them. Participants also visited museum of BGRI displayed with collection of photographs and copy of important illustration of plants gathered from various parts of the world. Dr. Smita Tripathi, Dr. Misha Yadav and Dr. Anurag Maurya served as the resource persons on the penultimate session of the programme on 'Active phytochemicals in medicinal plants', where participants were familiarised with protocols related to phytochemical analyses. On the last day of the programme, an exploratory visit to Ayurvedic and Unani Tibbia College and Hospital, Karol Bagh, Delhi was made. Here, Dr. Shalini Varshney (Dept. of Dravyaguna) and her team delivered lectures on conservation and utilisation of medicinal plants and also familiarized the participants on the same with a visit to the institute's Herbal Garden and research facilities available there.

The key highlights of the programme were the excursions to BGRI and A&U Tibbia College and Hospital, where the students received experiential learning not only about medicinal plants but also about the flora of Delhi in general.

No. of student beneficiaries: 13





# SHIVAJI COLLEGE



(University of Delhi) NAAC Accredited 'A' Grade

### **Department of Botany**

## (Under the aegis of DBT Star College Scheme)

**Organizes** 

## SUMMER TRAINING PROGRAMME

On

## Conservation and Utilisation of Medicinal Plants

June 12 - June 20, 2023

Venue: Department of Botany, Shivaji College

## Organizing Committee

**Patron**: Prof. Shiv Kumar Sahdev, Principal (Officiating)

Coordinator: Dr. Renu Baweja, DBT Star College Scheme

Convenor: Dr. Anuradha Mal

Co-convenors: Prof. Pratima Rani Sardar, Dr. Anurag Maurya, Dr. Deepshikha Chatterjee

Teacher in Charge: Prof. Pratima Rani Sardar

**Organizing Committee**: Dr. Vijay Kumar, Dr. Prabhavathi, Dr. Smita Tripathi, Dr. Kiran Bamel, Dr. Misha Yadav, Dr. Seema Talwar, Dr. Nupur Mondal, Dr. Devender Singh Meena

## PROGRAMME SCHEDULE

12 June- 20 July 2023

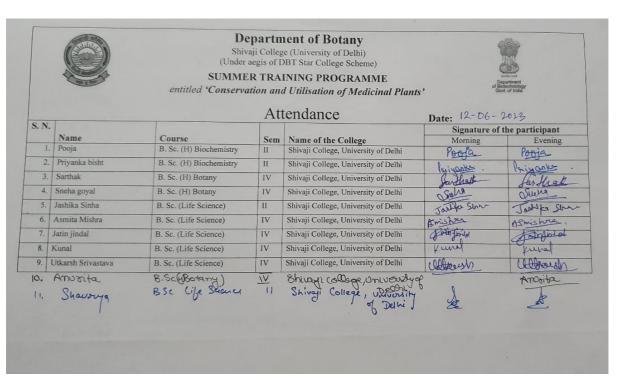
Day	Date	Morning Session	Topic of Talk	Resource Person	Afternoon Session	Hands On Training
Monday	12.6.2023	10:30 AM- 1:00 PM	Herbal Garden and Herbarium techniques	Dr. Vijay Kumar Prof. Pratima Rani Sardar Dr. Devender Singh Meena	2:00 PM onwards	Visit to Herbal Garden of the College, Herbarium preparation
Tuesday	13.6.2023	10:30 AM- 1:00 PM	Role of reproductive biology in conservation of medicinal plants	Dr. Prabhvathi V. Dr. Seema Talwar	2:00 PM onwards	Experiments Related to Reproductive Biology
Wednesday	14.6.2023	10:30 AM- 1:00 PM	Conservation of knowledge related to medicinal plants and their uses	Dr. Kiran Bamel Dr. Nupur Mondal	2:00 PM onwards	Repository of traditional knowledge and other digital tools for patents and copyrights
Thursday	15.6.2023	10:30 AM- 1:00 PM	Somatic embryogenesis and artificial seeds	Dr. Anuradha Mal Dr. Deepshikha Chatterjee	2:00 PM onwards	Tissue culture technique for medicinal plants
Friday	16.6.2023	10:30 AM- onwards	Trip to BGRI, Noida	Dr. Devender Singh Meena Dr. Anurag Maurya Dr. Deepshikha Chatterjee		Compilation of Report for the Trip
Monday	19.6.2023	10:30 AM- 1:00 PM	Active phytochemicals in medicinal plants	Dr. Smita Tripathi Dr. Misha Yadav Dr. Anurag Maurya	2:00 PM onwards	Phytochemical analysis of selected medicinal plants
Tuesday	20.6.2023	10:30 AM- 1:00 PM	Visit to Ayurvedic and Unani Tibbia College and Hospital, Delhi Report Compilation and submission	Dr. Shalini Varshney (Dept. of Dravyaguna, A&U Tibbia College & Hospital) Dr. Anurag Maurya Dr. Devender Singh Meena Dr. Deepshikha Chatterjee	2:00 PM onwards	Valedictory Session

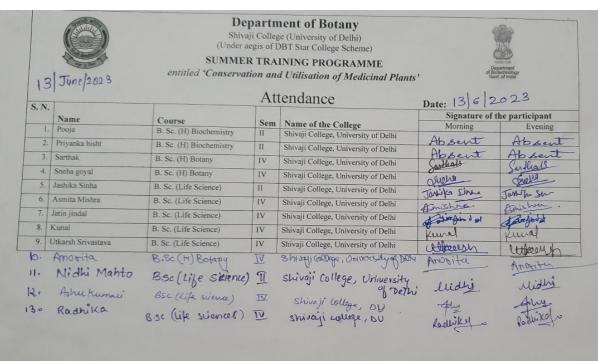
## **Details of Participants**

			Shivaji (Under ac SUMMER	College gis of DE TRAII on and	ent of Botany (University of Delhi) ST Star College Scheme) NING PROGRAMME Utilisation of Medicinal Plants'	Department of Biolechinety Gov. of Irola
S.	N. N.	ame	Course	Sen		Date-12/06/2023
	1000	ooja	B. Sc. (H) Biochemistry	11	Shivaji College, University of Delhi	Signature of the participant
	2. Pri	iyanka bisht	B. Sc. (H) Biochemistry	II	Shivaji College, University of Delhi	100ja
	3. Spa	arsh Aggarwal	B. Sc. (H) Biochemistry	IV	Shivaji College, University of Delhi	lanyanka.
	4. Aka	ish Satheesh	B. Sc. (H) Botany	П	Shivaji College, University of Delhi	
	5. Nite	sh Singh	B. Sc. (H) Botany	II	Shivaji College, University of Delhi	
(	6. Anu	rīta	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	
7	7. Deep	pali Singh	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	
8	. Mahi	ma Sharma	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	
9.	Manis	sha	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	
10	. Manis	ha	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	
11.	Manvi	Chaudhary	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	
2.	Sarthal	c	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	Carllan
3.	Sneha g	goyal	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	2011
1.	Afreen	Chaudhary	B. Sc. (H) Mathematics	II	Shivaji College, University of Delhi	Overs
*	Akshali	gupta	B. Sc. (H) Mathematics	II	Shivaji College, University of Delhi	
9)	Shivam I	Pandey	B. Sc. (H) Mathematics	II	Shivaji College, University of Delhi	
1	Sunith pa	andey	B. Sc. (H) Mathematics	1660	Shivaji College, University of Delhi	
1	Vimlendr	a Mohan Pathak	B. Sc. (H) Mathematics		Shivaji College, University of Delhi	

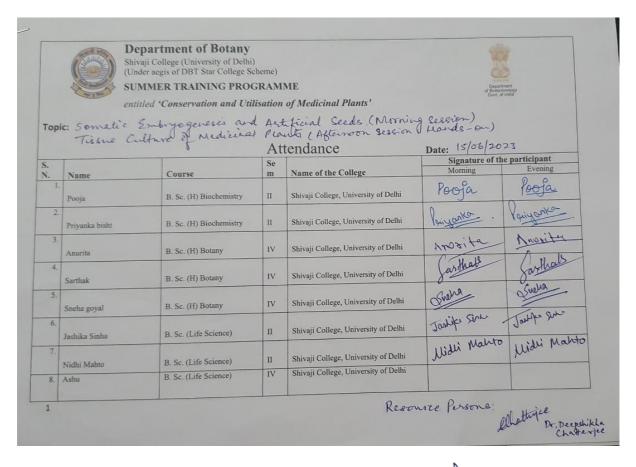
1	19.	Jatin barsiwal	B. Sc. (H) Zoology	111	Shivaji College, University of Delhi	
	20.	Ammar afzal	B. Sc. (Life Science)	Ш	Shivaji College, University of Delhi	
	21.	Hafsa azmi	B. Sc. (Life Science)	11	Shivaji College, University of Delhi	
	22.	Isha soni	B. Sc. (Life Science)	II	Shivaji College, University of Delhi	
	23.	Jashika Sinha	B. Sc. (Life Science)	II	Shivaji College, University of Delhi	Jostika Sinta
	24.	Manshi	B. Sc. (Life Science)	П	Shivaji College, University of Delhi	9-1
	25.	Mohd Usaid Khan	B. Sc. (Life Science)	II	Shivaji College, University of Delhi	
	26.	Nidhi Mahto	B. Sc. (Life Science)	П	Shivaji College, University of Delhi	
	27.	Palak	B. Sc. (Life Science)	II	Shivaji College, University of Delhi	
2	28.	Tanzia Mehnaz	B. Sc. (Life Science)	II	Shivaji College, University of Delhi	
2	19.	Ashu	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	
3	0.	Asmita Mishra	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Asnita Mishrer
3	1.	Baldev kaur	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	
32	2. (	Gunjan Yadav	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	
33	. I	Harshita Yadav	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	
34	. J.	atin jindal	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Kund
35.	K	anishka	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	
36.	K	unal	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Kund
37.	Pr	erna	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	
38.	Ra	dhika	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	
39.	Rit	ika dewan	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	
10.	Riy	a	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	
1.	Utk	arsh Srivastava	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	tellegen
2.	Vee	nita yaday	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	West

#### **Attendance:**





#### Department of Botany Shivaji College (University of Delhi) (Under aegis of DBT Star College Scheme) SUMMER TRAINING PROGRAMMY continued 'Conservation and Utilisation of Medicinal Plants' continued 'Conservation of knowledge related to medicinal flants & their uses Attendance Date: 14. 6. 2023 Signature of the participant S. N. Signature of the participant Name I. Pooja Sem Name of the College II Shivaji College, University of Delhi B. Sc. (H) Biochemistry Poojs\_ 2. Priyanka bisht B. Sc. (H) Biochemistry II Shivaji College, University of Delhi Priyorka Sasthat 3. Sarthak Liyank B. Sc. (H) Botany Jasthall Shivaji College, University of Delhi 4. Sneha goyal B. Sc. (H) Botany Shivaji College, University of Delhi Suela 5. Jashika Sinha July B. Sc. (Life Science) H Shivaji College, University of Delhi 6. Asmita Mishra B. Sc. (Life Science) IV Shivaji College, University of Delhi Anishren. Anishna . 7. Jatin jindal B. Sc. (Life Science) IV pund pund Shivaji College, University of Delhi 8. Kunal B. Sc. (Life Science) Shivaji College, University of Delhi Kuns 9. Utkarsh Srivastava B. Sc. (Life Science) IV Shivaji College, University of Delhi ulkersh Wheush 10- Radhika B.sc (life science) Shivaji college, university of shivaji college, DU IV Raduir laduzgo 110 Ashu Bischife science) 10 -Ashy Resource Persons. Dr. Kiran Bamel Dr. Nefen Youdsl



9.	Asmita Mishra	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Linishna	Amila
10		B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Adim	Anin
11	Kunal	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Kund	Kunal
12	Radhika	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi		
13	Utkarsh Srivastava	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Uttersh	Measter

Resource persons: Motty or Deepshikla Chatterjee



#### Department of Botany

Shivaji College (University of Delhi) (Under aegis of DBT Star College Scheme)

#### SUMMER TRAINING PROGRAMME

entitled 'Conservation and Utilisation of Medicinal Plants'

TOPIC: FIELD TRIP TO BOTANICAL GARDEN OF REPUBLIC OF INDIA LEGRI), NOIDA, U.P.

			Att	endance	Date: 16-06-2	923.
	1				Signature of th	ie participant
S. N.	Name	Course	Sem	Name of the College	Morning	Evening Pool 2
1.	Pooja	B. Sc. (H) Biochemistry	11	Shivaji College, University of Delhi	Pooja	
2	Priyanka bisht	B. Sc. (H) Biochemistry	11	Shivaji College, University of Delhi	briganka.	lariyanka
3.		B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	Anorda	- Aring
4.	Sarthak	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	Carteries -	Sardie
5.	Sneha goyal	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	Suelia	Luci
7.0		B. Sc. (Life Science)	11	Shivaji College, University of Delhi	Jostika Sinh	JOHP You
6.	Jashika Sinha	B. Sc. (Life Science)	н	Shivaji College, University of Delhi		
7.	Nidhi Mahto		IV	Shivaji College, University of Delhi	Ashr	Ashy
8.	Ashu	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Ambra	Anishre
9.	Asmita Mishra	B. Sc. (Life Science)		Shivaji College, University of Delhi	Join	Adia
10	Jatinjindal	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Kural	Tours
11.	Kunal	B. Sc. (Life Science)	IV		-	
12	Radhika	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	1144-011	11 + 1000 11
	Utkarsh Srivastava	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Uthalsh	- What

Resource Persone.

Dr. Derender Singh Meera 1508

Dr. Amurag Maurya

Dr. Deepshiels Chetterjee Material

Prof. Prabhavathi V Teacher in Charge

Department of Botany

#### Department of Botany

Shivaji College (University of Delhi) (Under aegis of DBT Star College Scheme)



#### SUMMER TRAINING PROGRAMME

entitled 'Conservation and Utilisation of Medicinal Plants'

Topic: Altilisation of medicinal plants in drug discovery

			Att	endance	Date: 19/06/20	-7
0.31						he participant
S. N.	Name	Course	Sem	Name of the College	Morning	Evening
1	Pooja	B. Sc. (H) Biochemistry	II	Shivaji College, University of Delhi		10 10
2.	Priyanka bisht	B. Sc. (H) Biochemistry	11	Shivaji College, University of Delhi	grigonka.	Priyosta.
3.	Anurita	B, Sc. (H) Botany	IV	Shivaji College, University of Delhi	Amorita	Anorth a
	1,200,100	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	Sarthas	Sarthals
4.	Sarthak	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	Sucha	Subs
5.	Sneha goyal	B. Sc. (Life Science)	П	Shivaji College, University of Delhi		
6.	Jashika Sinha		Ш	Shivaji College, University of Delhi		
7.	Nidhi Mahto	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Ash	Adri
8.	Ashu	B. Sc. (Life Science)		Shivaji College, University of Delhi		
9.	Asmita Mishra	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi		
10	Jatin jindal	B. Sc. (Life Science)	IV		Kunal	Kural
	Kunal	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi		Lodbert
200		B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Ladierio	1000
1000	Radhika		IV	Shivaji College, University of Delhi	Udkersh	Uthersh
13. 1	Utkarsh Srivastava	B. Sc. (Life Science)				

Resource Persons - Dr. Smitatripathi Dr. Meesha Yadau Dr. Amurag Maurya



#### Department of Botany

Shivaji College (University of Delhi) (Under aegis of DBT Star College Scheme)

#### SUMMER TRAINING PROGRAMME

entitled 'Conservation and Utilisation of Medicinal Plants'

Topic: Visit to Ayurvedia and Urani Tibbia College & Haspital

			At	tendance	Date: 20/06/20	123
S.			Se		Signature of t	the participant Evening
N.	Name	Course	m	Name of the College	1 0	Pasia
1	Pooja	B. Sc. (H) Biochemistry	II	Shivaji College, University of Delhi	Poojs	1003
2	Priyanka bisht	B. Sc. (H) Biochemistry	II	Shivaji College, University of Delhi	Pariyanka.	Painanka.
3.	Anurita -	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	Politica	said
4	Sarthak	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	Sarthorte	Southal
5.	Sneha goyal	B. Sc. (H) Botany	IV	Shivaji College, University of Delhi	Sucha	Stretz
6.	Jashika Sinha	B. Sc. (Life Science)	II	Shivaji College, University of Delhi		
7.	Nidhi Mahto	B. Sc. (Life Science)	II	Shivaji College, University of Delhi		
8.		B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Jam	Ashre
		B. Sc. (Life Science)	IV	Shivaji College, University of Delhi		
9.	Asmita Mishra		IV	Shivaji College, University of Delhi	Klim	Name
10	Jatin jindal	B. Sc. (Life Science)	1,850		er s	James
11	Kunal	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Jan 1111	loule 40
12	Radhika	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	feedbless	
	Utkarsh Srivastava	B. Sc. (Life Science)	IV	Shivaji College, University of Delhi	Uspeurh	Uthersh

Resource Persons:

Dr. Devender Suigh Meens St.

Dr. Amurag Maurya

Dr. Deepshikks Chatterjee Mattelle

#### **Student Feedback:**

Utkarsh Srivastava, B. Sc. (Life Science) Semester IV: Conservation and preservation of medicinal plants is crucial in modern times which have been long used since ages by our ancestors and indigenous

Asmita Mishra, B. Sc. (Life Science) Semester IV: It was so informative and interesting workshop

Radhika, B. Sc. (Life Science) Semester IV: From the summer training internship we get to know the wider aspect of the knowledge we grab through our theory books. We get to know more in-depth knowledge through practical approaches.

**Ashu Kumari, B. Sc. (Life Science) Semester IV**: Getting to know about plants behaviour according to the surroundings and various factors and also plants conservation techniques.

**Jatin Jindal, B. Sc. (Life Science) Semester IV**: Key takeaways from this workshop is the importance of knowledge about IPR and future prospects in it Importance of identification of plants for their ultimate use and how things are actually working in practical life regarding medicinal plants and what is the scope for improvement

Anurita, B. Sc. (H) Botany Semester IV: Knowledge about medicinal plants

Sarthak, B. Sc. (H) Botany Semester IV: All the sessions were very informative even if its theory lecture or practical and the field visits also.

Kunal, B. Sc. (Life Science) Semester IV: Knowledge for career options in the field of botany.

Priyanka Bisht, B. Sc. (H) Biochemistry Semester II: Learned about tissue culture and phytochemical analysis.

**Pooja, B. Sc. (H) Biochemistry Semester II**: Learnt about medicinal use and conservation methodologies of medicinal plants as tissue culturing and phytochemical analysis

Sneha Goyal, B. Sc. (H) Botany Semester IV: I gain too much knowledge from this workshop. This was very helpful.





### **Practical Sessions:**









Visit to BGRI, NOIDA





Visit to A&U Tibbia College, Karol Bagh, New Delhi



## **Additional Experiments**

- 1. Demonstration of cellulose lysis potential of cellulose-degrading bacteria and
  - 2. Culture of endophytic fungi from root and shoot of Amarantus virdis





#### Under DBT Star College Scheme Department of Botany, Shivaji College

Aim: Demonstration of cellulose lysis potential of cellulose-degrading bacteria

#### Resource Persons:

Dr. Anuras Maurya Annagrampa Dr. Misha Yadav Mushe Dr. Pawan Kunai Dr.P. Participating Students: # 56

Date: 11/03/2024

S. N.	Full Name	Course	Sem	Section	Signature
1.	DeepaliSingh	BSC(H)Botany	6	NA	Deepalfing
2.	Ayushi Yadav	BSC(H)Botany	6	NA	Fyuchi
3.	Agusti Mehra	BSC (H) Botan		N/A	Lywli
4.	Sneha Goyal	BSC(H) Botany	6	N/A	Snelva
5.	Manui Chaudhary	BS((H) Botany	6	NIA	Manu Chaudhay
6.	Supariya	BSC(H) Botany	6	NIA	Supurija
7.	Tyoti	BSe(H) Botomy	6	N/A	Iyoti
8.	Arrisha Sirigh	BSC (H) Botany	6	N/A	Anish
9.	Sanjivani Jaglan	Bsc (H) Botany	6	NIA	Sanjivani
10.	Ansh Kumar	B.sc.(H) Botany	6	N/A	ani
11.	Sarthak	B.Sc (H) Borley	6	N/A	July
12.	Palak Gupta	B.S. (4) Rolary	6	N/A	<u>falak</u>
13.	Yaichenbi Sanasam	B. Sc. (4) Botany	6	N/A	Gaichenbi
14.	Sanwari Jain	B.SC(H) Botany	6	N/A	Sanwari
15.	Keenack Bhardway	Bisc (H)Botany	6	NIA	Kowalc.
16.	saniya Poqueen	BSC CH) By.	6	NIA	Saniya
17.	Manisha	BSC(7) Bot	6	NIA	Men
18.	Mahima Sharma	B.Sc(H)Bat	6	NIA	Makine
19.	Khushi singh	B. SC(H) BOX	G	NIA	of right
20.	kundan singh	B.SCCH) BO+	6	MA	Kuntagen
21.	Sakshi Singh	B.Sc(H)80H	G	NIA	Saksy'
22.	Aditya Boudhan	B. Se CH)BOH	G	NIA	Aliman
23.	Tanvi Dhall	Bsc. Lije & lience	6	N/A-	Tanvi.
24.	Anusha	<i>)</i> ,	6	NA	Anusha.

flathevell.

25.	Akanksha Singh	BSc life Science			(A)Singh
		BSC Life Science	,		RiyaTiwan
27.		Bac life science			Ameita
28.	Siddhouth Singh	BSC. Life Sciony			Siddheigh
29.	Upul Kant	Bsc lifesci			selvelle
30.	Scorget Kondon	BSE life Science			Sorge
31.	Yurray Tripathi	Bsc. Life Science			Duraj
32.	Lucky	BSC Lill'Swinc			Lucky
33.	Driet Kumar	Bsc. Lift Science			Driet
34.		Bsclif Scien			Kayak V
35.	Mayork Chauhon Abhishek Biswas	и			Allu 2
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	Hyush for	17			1 -0

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### Additional Experiment

#### Under DBT Star College Scheme Department of Botany, Shivaji College

Aim: Culture of endophytic fungi from root and shoot of Amarantus virdis

Resource Persons:

De 1986 William Kinder Duningston 1

De 1 Anieta Minutes Duningston 1

De 1 Anieta Kantas Duningston 1

Date: 11 /03 /2 024

Participating Students:# 56

8.8.	Full Name	Course	Sem	Section	Signature
1.	Deetali Seph	BSC(H) Botany	6	N/A	Deepalified
2.	Aprilli Yalau	BS((H) Bokery	6	N/A	Hyushi .
3.	Hayushi Mehma	BSC (H) Bolley	6	N/A	Lyershie
4	Suda aryal	B.Sc. (H) Botaly	6	Nil	Sucha
5.	Marine Chaudhary	B.Sc (H) Botany	6	NA	Manue handhar
6.	Superiller	B.Sc (H) Botary	6	NIA	Superiya
7.	Tyeti	B.Sc (H.) Beting	6	AIN	Jyoti ()
8.	Anusha singh	BSc (H.) Botan	6	N/A	Anisha
9.	Sanjivani Taglan	BSC (H) Botany	6	NA	Saujivani
10.		Bsc (4) Botary	6	N/A	Palak.
11.	Arsh Keemar	BSc. (H) Bolary	6	N/A	ansh
12.	Sarthak	BS=(H) Bolany	6	N/A	Surthal
13.	Yaichenti Sanasam	O. Sc(H) Botany	6	N/A	Yaichenbi.
14.	Sanwari Jain	BSC(H) Botany	6	NIA	Sanwari
15.	Saniya Baveen	BSC(H) Botany	G	NIA	Saniya.
16.	Manisha	BSC (H) BO1 .	6	NIA	ZH.
17.	Kanak Bhardwag	BSC (H) Botany	6	NIA	Konacle,
18.	Mahima Sharma	B.Sc(H) Bet.	6	NIA	Mahime
19.	Sakshi Singh	B.Sc (H)Bat.	6	N/A	Solosli
20.	Khushi singh	B.22(H) Bot.	6	N/A	Sakslij
21.	kundan Singh	B.29(H)BO1.	6	N/A	Kurdansi
22.	Aditya Boughbon	B·sc(H) Bot	6	N/A	Asimo
23.	lalningom	BSC. Lije Sciena	2		as allais
24.	Ameita	Ber life Science	2		America

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25	Deepall Grupta	B-Sc. Uje Scieno	2		fair.
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28	. Ashiek kumar sahu	Bec. Life Sci	2		Askiek
29	· Retriari transam	Backlif Science	2		Mysel
30	· Lucker	B.Sc life science			Lucky
31		B-Schilescience			Judea .
32	Amali Singh	19			Anjah
. 33	Vanya Toman	a 1			Variation
34	My of Chauban	4			dazit
35	Langetu kumaui	/1			sweety
36	Rigo. Timari	. 11			RiyaTiwan
37.	Atanksha Singh	1.1	2		25:2-
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39.	AFgeen	21	2		Alagae
40.		1,	2		1. Showsh
41.	Midhi Micha	4	2		Nidhi
42.	Aujali Kuman	11	2		Aviali
43.	Dr bit Kuman	1)	)		Mahit
44.	Dikshe Joshi	1)	0	•	akshe
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47.	Sunit Ky	11	2		Smil
48.	2002	(1	2		Trez
49.	saly ha	li	2		Sahal
50.	Rachit Yalau	11	2		RY
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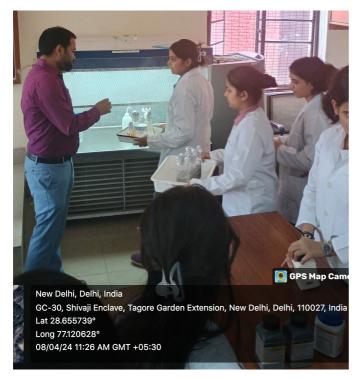
#### 3. Isolation of microbes from the rhizosphere of Amarantus virdis

#### and

# 4. Aim: Determination of antimicrobial activity of curcumin by disc diffusion method









#### Additional Experiment

#### Under DBT Star College Scheme Department of Botany, Shivaji College

Aim: Isolation of microbes from the rhizosphere of Amarantus virdis

Resource Persons:

Dr. Brahmattiv Polyton Dr. Nupar Mondal Dr. Annag Marry Amag Mars Participating Students: 56

Date: 08/04/17/024

. N.	Full Name	Course	Sem	Section	Signature
1.	Deepali Cingh	B.sc(+1) Botany	6	NIA	Deepalify d.
2.	snena Gogal	B.Sc.(11) Butani	6	Nil	Quelo
.3.	Ayushi Yadav	BSC(H) Botany	6	N/A	Flyushi
4.	Agyushi Mehra	BSC(H) Botany	6	N/A	Lyushi
5.	Manul Chaudhary	BSC (H) Botany	6	NIA	Mary bandhar
6.	Supariga	BSC(H) Botany	6	NIA	Supariya
7.	Tyoti	BSC (H) Botany	6	N/A	Jyoti )
8.	Anisha singh	BSc(H) Bolary	6	N/A	Anisha
9.	Soujivani Jaglan	Bsc(H) Botany	6	N/A	Sanjivani
10.	Ansh Kumar	BSG. (H) Botany	6	N/A	Avol
11.	Sarthak	BSc (H) Botay	6	NIA	Carthal
12.	Palak Gupha	B.Sc. (11) Botany		N/A	Palak
13.	Yaichenbi Sanasam	O. Sc. (H) Botany	6	N/A	Yaichenbi.
14.	Sanwari Jain	BSC(H) Botany	6	N/A	Lanwari'
15.	Saniya Poaveen	18SC(H) 1807.	6	NA	Saniyon
16.	Manisha	BSC417 80+	6	NIA	Man.
17.	Karak Bhardevey	BSc(H) Botany	6	N/A	Kanak.
18.	Mahima Sharma	B.S. (H) Bot	6	NIA	walyms
19.	Sakshi Sigh	Bisc (H)Bot	6	N/A	Sakeli
20.	Khesti Singh	BSC/H)Bot	6	N/A	Rugh
21.	kundon singli.	Bisc(H). Bot	6	NAA	,
22.	Aditya Bardhan	Bisc(H) Bot	6	NA	Aring w
23.	Aniket Singh chauhan				Aubet
-	Harried Countries of the Market	Je weren	-	В	Mughet

				,	1
25.	Diksha Joshi	BSC. Life Science	2	В	Okak
26.	Nichi Kiphra	BSC. Mg Sience	2	В	Mus
27.	Rachit Yaday	BSC Life Samue	2	Δ	Rach'tt.
28.	Shipal	Becliftescience			popul .
29.	Piyush Ranjan	Becilités c.			
30.	Harshita Chopra	R.Sc Wisa	2	B	Mondita.
31.	Jahanui Singh	BSc. If Su	Q	В	J. Singh
32.	Sagar	Bec LifeSe	d	R	Sayer.
33.	Ashish Sahu	Bse. Lêfe Sci	d	B	Ashish
34.	Tanisha	BSC Kille Sci	d	D'	You ideal to -
35.	Ameita	BSC. life Science	9	B	Ameita
36.	Riya Tiwari	BSC life science	2	В	Riya Tiwan
37.	molerad incertal	BSC. Life Sikia.	2	В	Ahuais:
38.	Siddhowth Singh	Bec life Svery	2	B	Siddhart
39.	upul leut	Bu logesi	2	B	upuer
40.	Surojit kander	Ba Cipar	2	B	Swiget
41.	Yurray Tripathi	BC "	2	B	Turace
42.	Lucky	l,	2	β	Lucky
43.	Argt.	11	2	B	Orpit
44.	Magant worken				
45.	Snelil Prajapati	n			dulu
46.	sweety kumary	U			sweety.
47.	Akankshou singl	1)	2,	B	Almy
48.	Tanisha Dhaka	ι,	2	B	Tanisha.
49.	Ashish Salw	1/	ð	B	Ashon
50.	Sagar	1,	2	V	Sagar.
51.	Anjali Kumasi	11	2		Avijali
52.	Anjali Sal				Agal
53.	Vanja. Tomar				Vang.
54.	Abliebel.	···U	2		Shlishell
55.	'Aashi kumarri	11	4	A,	Aushik.
56.	Anjali Chaudhavy	1,	4	IA)	Snigeli

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### Interdisciplinary Experiment

#### Under DBT Star College Scheme Department of Botany, Shivaji College

Aim: Determination of antimicrobial activity of curcumin by disc diffusion method.

Resource Persons:

Dr. Prabhavathi V

Dr. Nupur Mondal

Dr. Amuras Maurya Amurayanang

Participating Students: #56

Date: 08/04/2024

S. N.	Full Name	Course	Sem	Section	Signature
1.	Deepal Singh	BSC(+1)Botany	6	NIA	Doopallfireh
2.	Sneha Goyal	B. Sc. CH) Botany		Nel	Sucha
3.	Aycishi Yordav	BS( (H) Bolony		N/A	- Fyruli
4.	Acejushi Mehra	BSc (H) Bolong	6	N/A	Legushe
5.	Marau Chaudhary	BSC (H) Botary	6	NIA	Many hairdhan
6.	Superiya	BSC (H) Botony	6	MIA	Supurya
7.	Tyoli	BSe. (H) Botany	6	N/A	sydi
8.	Anisha Singh	BSC (H.) Bolomy	. 6	N/A	Anishe
9.	Ansh Kumar	B.Sc. (H) Botany	6	W/A	areh
10.	Palak Gupta	B.Sc. CH) Botany	6	N/A	Palak
. 11.	Saithak	Bisci (H) bolary	6	NA	Saskles
12.	Sanjivani Jaglan	B.Sc(H) Botarry	6	N/A	Sanjivani
13.	Yaichenbi Barasam	B. Sc(H) Botany	G	NA	Kichenbi
14.	Sanwari Jain	B.SC(H) Botany	6	NIA	Sanwari
15.	Kanak Bhardway	Bisc (H) Botany	6	NIA	Karak,
16.	Saniya Poaveen	BSC(H) BOH.	6	MA	Saniya
17.	Marisha	BSCCH) BOH.	6	NA	CM)
18.	Mahima Sharma	B.Sc (H) Bot	6	NIA	Maline
19.	Khushi singh	B.SCLM) BOX	6	NIA	Rings
20.	Sakshi Singh	R.SC(H) BOX	li .	/1	Sycolin
21.	Kundan singh	B.SCH) Bot	1.1	/1	thuransjust
22.	Aditya Bourahan	1.1	′,	1;	agina 1
23.	Spelul Prajapati	BSC. Lye Science			Juciel
24.	Afreen	BSC. life sci	t.	N/A	Street

Prof. Prabhavathi V Teacher in Charge Department of Botany

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26.	1 agov	Brc ligisc	-	AIN "	Mayart D.
27.	Joseph Mimor	B. Sc. life Sc	i	NI	A Debit
28.	Schout tongon	BSC type Sa	me	N/	
29.	-tmeita	Bsc. life Scie		,,,	treita
30.	riga nwari	BSC life Scie			Riya Tiwar
31.	Siddhowth Singh	Bs. Life sie			Siddwith
32.	uppel Kent	By life sic			lund
33.	Yuyraj Tripothi	BC. Life Scient			Plung
34.	Lucky	Bose life Scen			Lury
35.	Sweely kumani	Bsc. Life sci			Sweely
36.	Anjali kunani	B-sc-life Sci			
37.	Agush Arend Singh	B. Sc. line so			Agun
38.	have Tanisha, bhatt				Tariota
39.	Diksha Joshi	BSC Life Sci		В	1 anishy 10/Kshy
40.	Rochit Yadav	BSC Los Su		P	
41.	Asheyan Grantam	BSC City Sa	//	0	Rachut !
42.	Snelil Prajapati	Bac. Uje scie	7)	- 8	Suchil
43.	Pinkr	ti	11	В	01
44.	Night Mishta		CI	R	Nah.
45.	Akanksha singh	2	),	B	
46.	Anjali Sigh	· · · ·	"		Dsinge
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49.	Piyush Panin	: .,			Quil Rin
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51.	Agushmaan	11	4	1	Sayueh
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#### Visit to Department of Biochemical Engineering and Biotechnology, IIT Delhi

Date: 15th April 2024 (Monday)

An educational visit of our B.Sc. (H) Botany students to the Department of Biochemical Engineering and Biotechnology, IIT Delhi, Delhi was organised on 15<sup>th</sup> April 2024 (Monday). Students got the opportunity to gain insight into the development of the fermentation process utilising laboratory-scale fermenters installed in the **Bioprocess Laboratory** and their **UG laboratory**. Visiting the **Waste Process Laboratory**, they witnessed the application of aerobic and anaerobic continuous stirred tank bioreactor (CSTR) for waste treatment and research work running in the lab. They also visited various facilities of analytical techniques applicable to downstream processing, including TOC-analyser, HPLC-MS, GC-MS, ion exchange chromatography, MALDI-TOF MS situated at the **Departmental Instrumentation Lab** and **Lotus Advanced Analytical Lab**. They saw research work operational and related facilities available for metagenomic analysis and soil microbes, their culture and application for crop improvement in the **Environmental Genomics Laboratory**. Collectively, it was a great learning experience and exposure to the high-end research facilities for our undergrad students. The visit coordinated by Dr Anurag Maurya and Dr Pawan Kumar benefitted 26 students of B.Sc. (H) Botany.





#### Department of Botany, Shivaji College (University of Delhi) B.Sc. (H) Botany, Semester VI

#### Educational Field Visit to the Department of Biochemical Engineering and Biotechnology IIT Delhi, Delhi

Date: 15/04/2024 (Monday)

S. No.	Roll No.	Name of Student	In time (signature and time) Out time (signature and time)
1.	21/09002	JYOTI	Typi 9.50 Ar Jack 2:46 Pm
, ,	21/09004	KUNDAN SINGH	Luna 8 da:56 toron 2. My
3.	21/09008	SARTHAK	Absort
• 4.	21/09012	PRIYA NAUTIYAL	longer 9:36Am 1/1 2:48
- 5.	21/09019	KANAK BHARDWAJ	Hanale 119:55 AM Kuruk 21.45 pm
6.	21/09022	DEEPALI SINGH	Dupapet 9: 50 AM Dufar 23 OF
7	21/09025	KHUSHI V. B. SINGH	10 an 2137
. 8.	21/09026	JEORUS M. SINGH	402 9:40 am 1000 7.46
. 9.	21/09027	ANISHA SINGH	Anishe 9:50 Am Anisho 2:46 pm
. 10		SANDHYA YADAV	Gently 9.36 Am scally L-40
. 11		NIKITA	Mikits 9:44 Am T:50 PM Lights
. 12		SANWARI JAIN	Sanwari 9740 AM Sanvara 2:45 pm
. 13		SAKSHI SINGH	Septer 9:38A- Sur 2.47 pm
• 1-		MAHIMA SHARMA	Mahina 9:40 AM Mahina 2:40 pm
1		YAICHENBI SANASAM	· Absent
	6. 21/09046	MANVI CHAUDHARY	Mary Charletary 9:36 Am Mary Charletary 2:45 pm
-	7. 21/09047	MANISHA	Maryla 9:46 Am Maruno 2:45 pm
. 1	8. 21/09048	PALAK GUPTA	Real Guyla 9:50 am Papele Giph 2:45 pm
. 1	9. 21/09049	SNEHA GOYAL	9:46 Am 8 2:45 BM
- 2	0. 21/09050	AAYUSHI MEHRA	9:50 Am dywhi 2:40 pm
. 2	1. 21/09051	SANJIVANI JAGLAN	Sanivario 9:50 Am Sanjirani 2:45 mm
. 2	2. 21/09052	ADITYA BARDHAN	Milya Badlor John J. U. Y
. 2	3. 21/09053		Anosita 9:46 Am Anuita 2:46 pm
2	24. 21/09054	MEGHNA S. CHAUHAN	Abcent
. 2	25. 21/09055		Sanita 9:48 dm Sanita 2:45 pm
. 2	26. 21/09056	AYUSHI YADAV	flywshig: 36 Am Just 2, 40 sm
. 2	27. 21/09059		Suprayer 9:50Am Sularyer 3:40
	28. 21/09060	VANSHIKA YADAV	Absent
	29. 21/0906	GAURI	Physical Delivery
	30. 21/09063		9:50Am 1 W 1 2 3 4 4 pm
-	31. 21/0906	4 ANSH KUMAR	9:50 AM 2:37 pm

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Department of botony

Dr. Bwan Kurner Co-convenor; ABPStarcollige Sheme Department of Botany,