

SOPHIA GIRLS' COLLEGE
(AUTONOMOUS), AJMER



DEPARTMENT OF BOTANY

2021-22




**Online Certificate Programme
Seed Science and Technology**

**ORGANISED BY
DEPARTMENT OF BOTANY
ST. THOMAS COLLEGE, BHILAI & SOPHIA GIRLS' COLLEGE, AJMER
5th July 2021 to 21st July 2021**

Inaugural Address
Dr. E.C. Mathan
Hon. Professor
School of Life Sciences
P. O. S. University,
Kadapa





Valedictory Address
Dr. Babu Vasudeva
Director, CARS
University of KwaZulu-Natal,
Durban, South Africa.



MEMBER
H.G. Dr. Anandh Mohan
MEMBER
Asst. Pr. Dr. Jashi Varghese
PRINCIPAL
Dr. M. S. Royman
Dr. Sr. Feat
Sophia Girls College, Ajmer
Deans Academics,
Dr. Vinod Thomas

Click Here

TO REGISTER!

UG and PG students with Biological Science

ORGANISING COMMITTEE
CONVENOR
Dr. Jyoti Rajshi
PROGRAM COORDINATOR
Dr. Sunithi Parthiy
CO-COORDINATOR
Dr. Sandhya
Sophia Girls College, Ajmer



Date: 5th July to 21st July 2021
Time: 11:00 am – 1:00 pm
REGISTRATION
Only UG and PG students with Biological Sciences


 Head
 Department of Botany
 Sophia Girls' College
 (Autonomous), Ajmer

Name of Department - Botany

Name of the Activity – Online Certificate Programme on Seed Science & Technology

Date of activity - 5th – 21st July 2021

Number of Participants - 116

Venue - Online (Google Meet)

Details of Resource Persons-

Date	Topics	Resource Person
05.07.21 Monday	Introduction to Seed Science	Prof. S.C. Naithani, Seed Biology Lab. SoS Life Sciences, Pt RSU, Raipur, 7587207043
06.07.21 Tuesday	Floral Biology: Fertilization, Biology of Seed Development & Maturation Experiments on structure of seed	Dr. Jyoti Bakshi, Assistant Prof., St. Thomas College, Bhilai
07.07.21 Wednesday	Seed Germination, Germination tests	Mrs. Annu Bhardwaj, Assistant Prof. Sophia Girls College, Ajmer, 7976035388
08.07.21 Thursday	Seed Dormancy- Physiology and Methods of breaking dormancy Dormancy breaking tests	Dr. Sandhya, HoD Botany Department, Sophia Girls College, Ajmer, 9460478919
09.07.21 Friday	Seed Quality Assessment Part I Seed Moisture Content, Seed Viability	Dr. Suruchi Parkhey, Assistant Prof. St. Thomas College, Bhilai, 9926125262
10.07.21 Saturday	Seed Quality Assessment Part II Membrane Perturbation (Leachetes) Seed Vigor Test, Seed purity Test	Dr. Suruchi Parkhey, Assistant Prof. St. Thomas College, Bhilai, 9926125262
12.07.21 Monday	Post -harvest: - Storage & Deterioration	Dr. Keshav Kant Sahu, HoD, SoS in Biotechnology, Pt. RSU Raipur, 9425228966
13.07.21 Tuesday	Seed Ageing: - Understanding Mechanisms & Kinetics & Physical Changes	Dr. Balram Sahu, Assistant Prof. ITM University, Raipur, 9165741152
14.07.21 Wednesday	Seed Ageing: - Mechanisms & Kinetics Biochemical & Molecular Changes	Dr. Balram Sahu, Assistant Prof. ITM University, Raipur, 9165741152
15.07.21 Thursday	Germplasm Conservation and Preservation <i>in-situ</i> Seed Banks	Dr. Ademola Emmanuel Adetumji, School of Life Sciences, University of KwaZulu- Natal, Durban, South Africa
16.07.21 Friday	Principles of Quality Seed Production Factors affecting quality seed production	Dr. Subrata Sharma, Associate Professor, Plant Physiology, College of Agriculture, Balaghat
17.07.21 Saturday	Causes of Varietal Deterioration & Maintenance of Genetic Purity During Seed Production	Dr. Amita Sharma Assistant Professor, Plant Physiology, College of Agriculture, Balaghat

19.07.21 Monday	Seed Pathology Seed Health Test	Dr. Vinita Thomas, HoD P.G. Department of Botany, St. Thomas College, 9826132880
20.07.21 Tuesday	Seed Certification & Marketing Rules & Regulations	Dr. Alok Sahu, Senior Scientist Virology Lab, Govt. Medical College, Mahasamund
21.07.21 Wednesday	Feedback & Test Valedictory Session	Dr. Bobby Varghese Director, Centre for Academic Success in Science and Engineering, University of KwaZulu-Natal, Durban, South Africa.

Objective of the Activity-

Dept. of Botany, Sophia Girls' College, Ajmer in collaboration with St. Thomas College, Bhilai, Chhattisgarh organised this 15 days Certificate Programme on Seed science & technology with the following objectives-

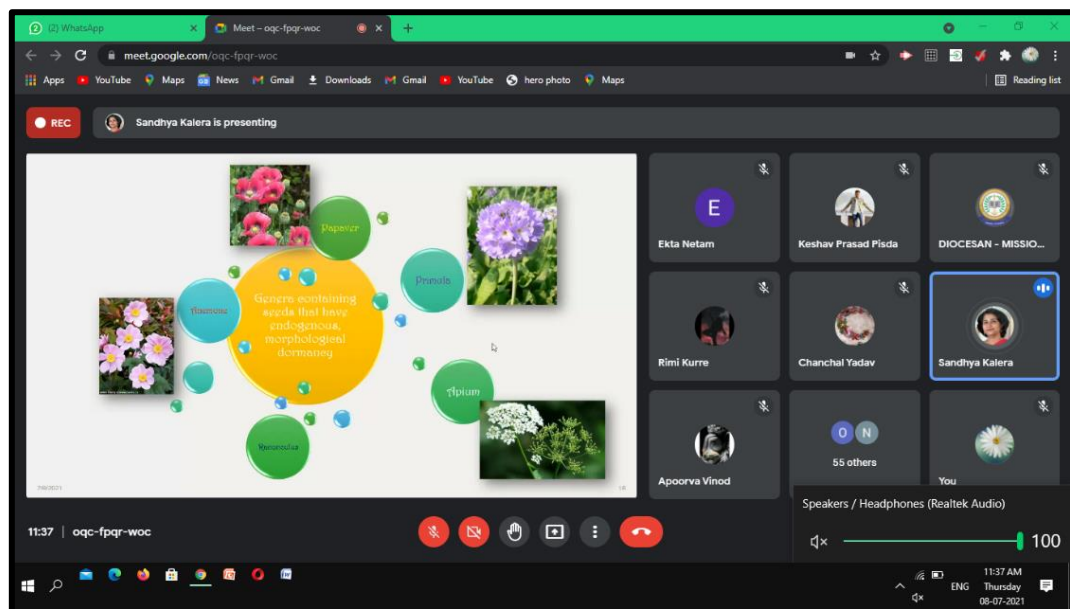
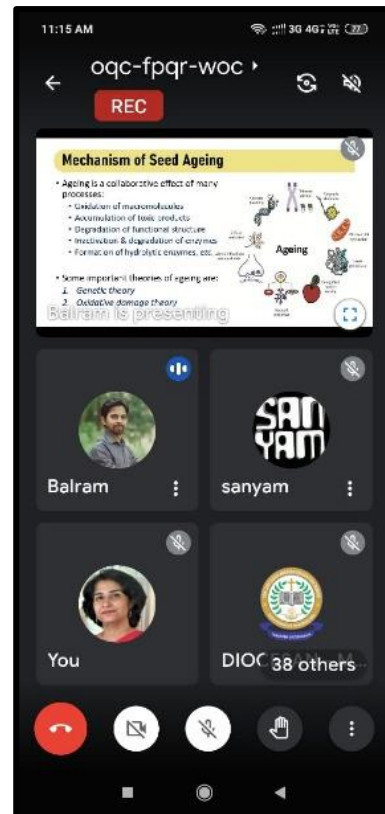
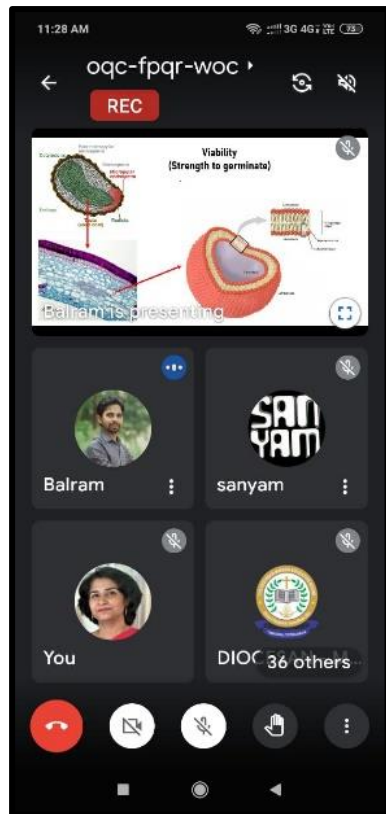
- To familiarise them with the role of seed in agriculture and forestry
- To introduce to basic technology used in seed industry
- To encourage the students, learn beyond specified syllabus.

Learning Outcome –

The students will be able to-

1. Understand the basics of Seed Morphology and Physiology.
2. Initiate research associated with seed storage and seed health.
3. Assess the seed quality for certification.


 Head
 Department of Botany
 Sophia Girls' College
 (Autonomous), Ajmer




Sandhya
 Head
 Department of Botany
 Sophia Girls' College
 (Autonomous), Ajmer

WhatsApp | Meet - oqc-fpqr-woc

meet.google.com/oqc-fpqr-woc

REC Sandhya Kalera is presenting



- Adaptation that prevents seeds from germination during unsuitable ecological conditions
- Delayed germination – allows seed dispersal and prevents simultaneous germination of all seeds
- Proper distribution of seed germination, in both temporal and spatial manners, is critical for survival and proliferation of seed plants.

11:11 | oqc-fpqr-woc

Speakers / Headphones (Realtek Audio) 100

11:11 AM Thursday 08-07-2021

WhatsApp | Meet - oqc-fpqr-woc

meet.google.com/oqc-fpqr-woc

REC

11:48 AM | oqc-fpqr-woc

Type here to search

31°C Light rain 11:48 21-07-2021

Sandhya
Head
Department of Botany
Sophia Girls' College
(Autonomous), Ajmer

CERTIFICATES

 **Certificate Programme on - Seed Science & Technology** 
Organized by Department of Botany
ST. THOMAS COLLEGE, BHILAI (NAAC Re-accredited 'B++' Grade)
&
SOPHIA GIRLS' COLLEGE (Autonomous), AJMER
NAAC Re-accredited 'A' Grade

Certificate of Completion



This is to certify that **Avani Chandel** of
St. Thomas College, Bhilai, Chhattisgarh has successfully
completed a 30 Hours Online Certificate Programme on **Seed Science**
& **Technology** from 5th - 21st July 2021.


Principal
St. Thomas College


Principal
Sophia Girls' College



Coordinator

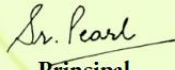

Co-Coordinator


 **Certificate Programme on - Seed Science & Technology** 
Organized by Department of Botany
ST. THOMAS COLLEGE, BHILAI (NAAC Re-accredited 'B++' Grade)
&
SOPHIA GIRLS' COLLEGE (Autonomous), AJMER
NAAC Re-accredited 'A' Grade


Certificate of Completion

This is to certify that **Chavi Verma** of
Sophia Girls' College, Ajmer has successfully
completed a 30 Hours Online Certificate Programme on **Seed Science**
& **Technology** from 5th - 21st July 2021.


Principal
St. Thomas College


Principal
Sophia Girls' College


Coordinator


Co-Coordinator


Head
Department of Botany
Sophia Girls' College
(Autonomous), Ajmer



DEPARTMENT OF BOTANY

(ORCHID- THE BOTANY FORUM)

SOPHIA GIRLS' COLLEGE (AUTONOMOUS),

AJMER

ORGANIZES

A flex making competition

Themes-

- 1. Endangered plants of Rajasthan*
- 2. Khejari: A Wonder Tree*
- 3. Neem: A Complete Tree*
- 4. Anticancer properties of Papaya*

Last date of submission

30th July, 2021

e-mail at- botany@sophiacollegeajmer.in


Head
Department of Botany
Sophia Girls' College
(Autonomous), Ajmer

Name of Department - Botany (Orchid – The Botany Forum)

Name of the Activity - Flex Making Competition

Date of activity - 30th July 2021

Number of Participants - 33

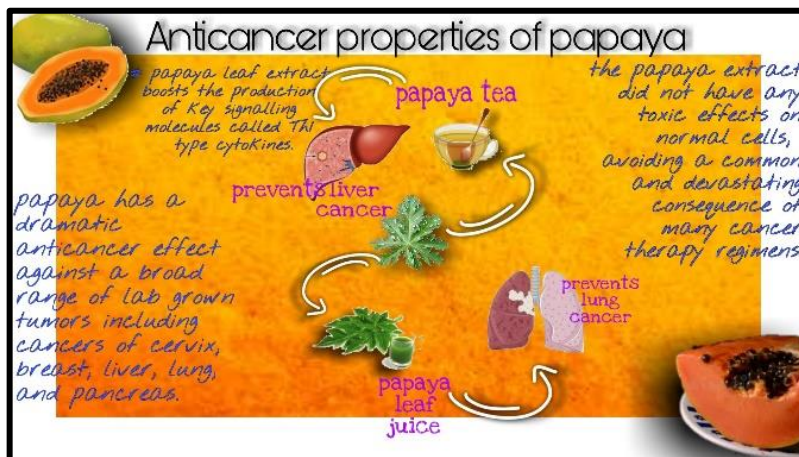
Venue - Online

Objective of the Activity-

The Flex making competition was organized by Orchid – The Botany Forum, for which 4 themes were given. This will help in developing their creative and imaginative skills as well as they will learn something new which is not a part of their syllabus.



Learning Outcome –

The students will be able to develop creative skills and recall economic importance and other interesting facts about plants.



Sandhya
Head
Department of Botany
Sophia Girls' College
(Autonomous), Ajmer

CERTIFICATES





Department of Botany
Orchid - The Botany Forum
SOPHIA GIRLS' COLLEGE (AUTONOMOUS), AJMER

This is to certify that
Saniya Khan of **B.Sc. Bio. Sem II**
participated in **Flex Making Competition**
held on **30th July 2021** & secured **Second** position.

Candhya
In-charge

Sr. Pearl
Principal



Department of Botany
Orchid - The Botany Forum
SOPHIA GIRLS' COLLEGE (AUTONOMOUS), AJMER

This is to certify that
Sr. Jobitha of **B.Sc. Bio. Sem II**
participated in **Flex Making Competition**
held on **30th July 2021** & secured **First** position.

Candhya
In-charge

Sr. Pearl
Principal

Candhya
Head
Department of Botany
Sophia Girls' College
(Autonomous), Ajmer

3. Collage Making Competition



**The Gender Sensitization
Cell - SAMVEDNA &
Orchid-The Botany Forum**
Sophia Girls' College (Autonomous)
Ajmer
*Invites All the Young and Dynamic
Sophians to Participate in a
Collage Making Competition on the
Theme-*
Celebrating Feminism !
***on 16 /11/ 2021 *at 1:30 pm**
***Venue - Fortunatus Indoor Stadium**



Rules for Collage Making-

1. Collage Making time – 1 hour
2. Paper, Magazines, Glue, Sketch pens, Pen colours etc. to be brought by participants.
3. Use of Scissor is not allowed.
4. Theme for the collage – "CELEBRATING FEMINISM"
5. Disqualification- On exceeding time or deviating from the theme or unsatisfactory explanation to judges

***Click to Register**
<https://forms.gle/6jPuBBUKhnljQir7>
last date to register - 15/ 11/ 2021

***For queries contact -
Dr. Sandhya
Co-ordinator Gender Sensitization Cell
9460478919
(Department of Botany)**

Name of Department - Botany (Orchid – The Botany Forum) & Samvedna- The GSC

Name of the Activity - Collage Making Competition

Date of activity - 16th November 2021

Number of Participants - 14

Venue - Fortunatus Indoor Stadium, Sophia Girls' College (Autonomous), Ajmer

Objective of the Activity-

In collaboration with 'Samvedna'- The Gender Sensitization Cell, Orchid – The Botany Forum organized a Collage Making Competition on the theme '**Celebrating Feminism**'.

Learning Outcome –

This activity will help in developing the creative and imaginative skills of the students and also in expressing their feelings, thoughts and wishes using pictures and drawings. The students will develop a sense of appreciation and proud of being a woman.





4. Exhibition on Medicinal Plants



DEPARTMENT OF BOTANY

Orchid - The Botany Forum

Sophia Girls' College (Autonomous)

Ajmer

is organizing

*An Exhibition on
Medicinal Plants*



*let's explore the world of
Healing plants*

Date - 18/11/2021

at 12:30 pm

Venue - Fortunatus Indoor Stadium

Name of Department - Botany (Orchid – The Botany Forum)

Name of the Activity - Exhibition on Medicinal Plants

Date of activity - 18th November 2021

Number of Participants - 114

Venue - Fortunatus Indoor Stadium, Sophia Girls' College (Autonomous), Ajmer

Objective of the Activity -

Orchid – The Botany Forum organized an **Exhibition on Medicinal Plants** on 18th November 2021. This was organized to make the students aware of the medicinal value and unexplored potential of plants. There is no such plant on the Earth which has no medicinal value, so this activity would also make the students appreciate the diversity and healing properties of plants.

Learning Outcome –

The students will be able to recall and explain the medicinal value of plants. They will also be able to identify the local plants of potential medicinal value.







5. Online Botanical Excursion

Guru Nanak Vidyak Society's



Guru Nanak College of Arts, Science and Commerce.

G. T. B. Nagar, Sion, Mumbai - 37

**In collaboration with
Sophia Girls' College (Autonomous), Ajmer, Rajasthan**

**Department of Botany
Student Exchange Program -2021**

**Organise
Online Botany Excursion**



**6th December 2021,
Monday**

1p. m - 3 p. m



***Open to -All Botany students
Registration is compulsory.No Registration fee.
Platform - Google meet***

**Dr. Pushpinder G Bhatia
Principal, Guru Nanak College**

**Dr. Sr. Pearl
Principal, Sophia Girls'
(Autonomous) College**

**Dr. Shrutika , Dr. Sandhya
9819174496,9460478919**



Name of Department - Botany (Sophia Girls' College (Autonomous), Ajmer in collaboration with GNC of Arts, Science and Commerce, Mumbai)

Name of the Activity - Online Botanical Excursion

Date of activity - 6th December 2021

Number of Participants - 65

Venue - Online (Google Meet Platform)

Activity Coordinators -

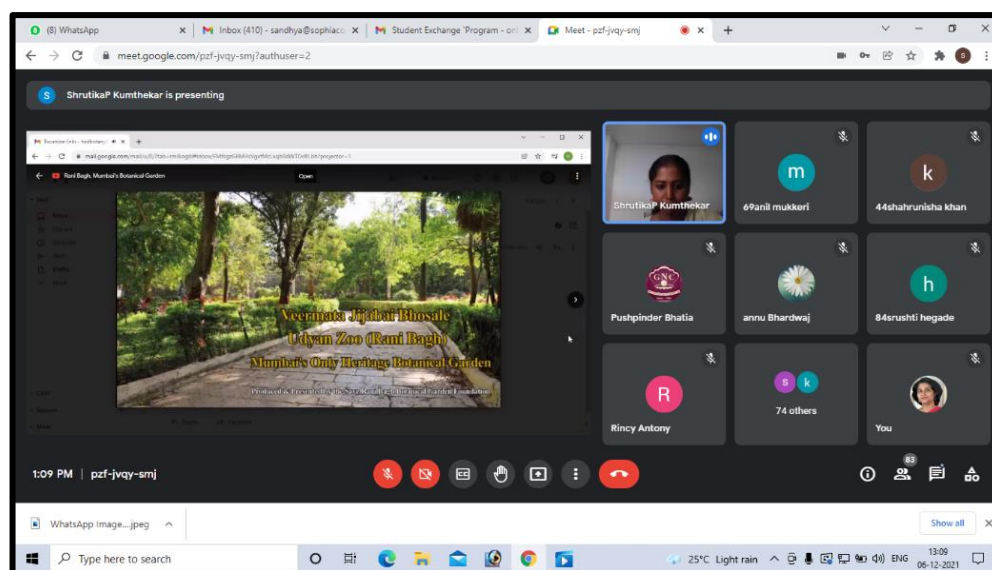
1. Dr. Shrutika Kumthekar, HOD, Dept. of Botany, GNC of Arts, Science and Commerce, Mumbai, 9819174496
2. Dr. Sandhya, HOD, Dept. of Botany, Sophia Girls' College (Autonomous), Ajmer, 9460478918
3. Mrs. Annu Bhardwaj, Assistant Prof., Sophia Girls' College (Autonomous), Ajmer, 7976035388

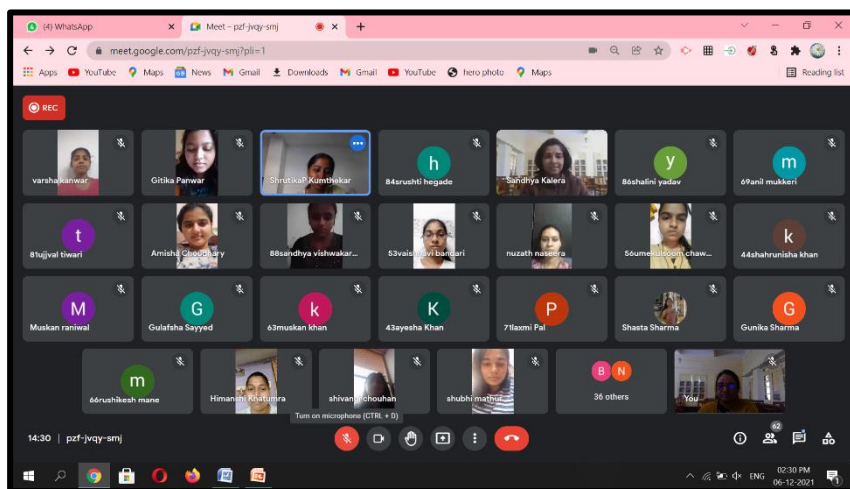
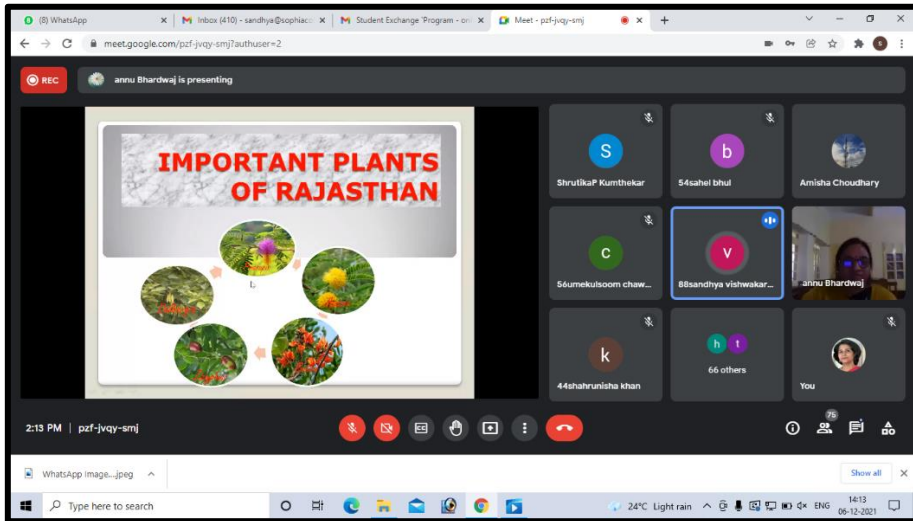
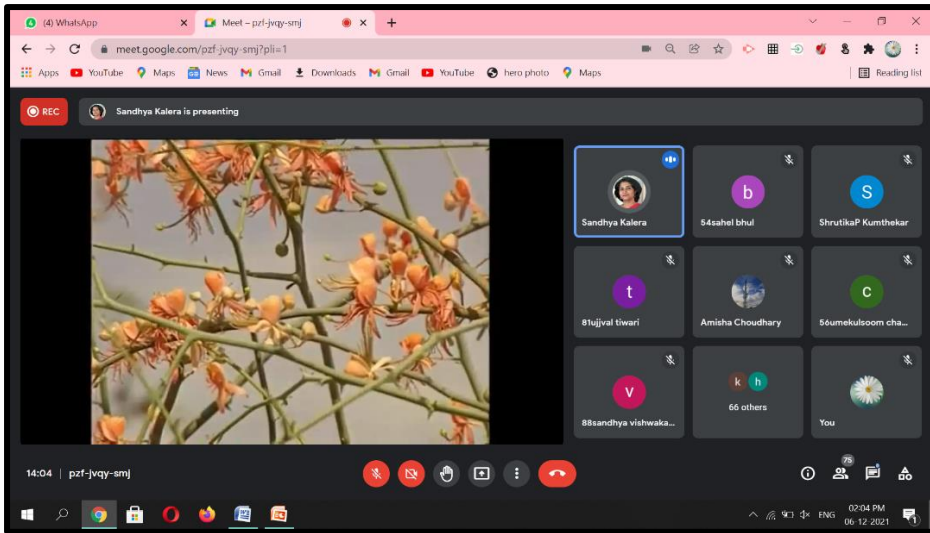
Objective of the Activity -

In Collaboration with Guru Nanak College of Arts, Science and Commerce, Mumbai, the Department organized an **Online Excursion** for the students of both the colleges. This Student Exchange Programme would contribute in sharing the knowledge about plant diversity of Rajasthan and Mumbai.

Learning Outcome –

The students will be able to compare the plant diversity of two regions (Mumbai & Rajasthan) with varied climatic conditions.





6. Educational Visit to 'Kisan Mela evam Sangoshthi'



DEPARTMENT OF BOTANY
ORCHID - THE BOTANY FORUM
SOPHIA GIRLS' COLLEGE (AUTONOMOUS)
AJMER

is organizing

An Educational Visit to
'Kisan Mela evam Sangoshthi'
at
Krishi Vigyan Kendra,
Tabiji, Ajmer

Date
05/03/2022
Time
10 am - 12 noon



किसान मेला एवं संगोष्ठी
दिनांक : 05 मार्च, 2022

आयोजक: कृषि विज्ञान केंद्र, तबीजी, अजमेर
(श्री कर्ण जेठव कृषि विश्वविद्यालय, जोधपुर)

प्रायोजक: कृषि प्रौद्योगिकी प्रपंच अधिकरण (आरामा परिशोजना), कृषि विभाग, अजमेर

विशेष आकर्षण
गिर गाय, बकरी, भेड़, मुर्गी, बटेर, खरगोश चालन, अजोला, बर्फीकम्योस्ट, मशरूम उत्पादन, भूरा स्वास्थ्य जांच, संक्षिप्त जेठी, फसल, एकडी, फल-फूल उत्पादन एवं जल संज्ञान

कृषि, उद्यान एवं पर्यटन विभाग की योजनाओं की जानकारी

स्थान:- कृषि विज्ञान केंद्र, तबीजी फार्म, अजमेर

सहयोगी संस्था



किसान मेला एवं संगोष्ठी

दिनांक : 05 मार्च, 2022



आयोजक
कृषि विज्ञान केन्द्र
तबीजी, अजमेर
(श्री कर्ण नरेन्द्र कृषि विश्वविद्यालय, जोबनेर)



प्रायोजक
कृषि प्रौद्योगिकी प्रबन्ध अभिकरण
(आत्मा परियोजना)
कृषि विभाग, अजमेर



विशेष आकर्षण

गिर गाय, बकरी, भेड़, मुर्गी, बटेर, खरगोश पालन,
अजोला, वर्मीकम्पोस्ट, मशरूम उत्पादन,
मृदा स्वास्थ्य जांच, संरक्षित खेती, फसल, सब्जी, फल-फूल उत्पादन एवं जल संरक्षण
कृषि, उद्यान एवं पशुपालन विभाग की योजनाओं की जानकारी

स्थान:- कृषि विज्ञान केन्द्र, तबीजी फार्म, अजमेर

सहयोगी संस्था



Name of Department - Botany (Orchid – The Botany Forum)

Name of the Activity – Educational Visit to ‘Kisan Mela evam Sangoshthi’

Date of activity – 5th March 2022

Number of Participants - 54

Venue – Krishi Vigyan Kendra, Tabiji, Ajmer

Objective of the Activity -

Orchid – The Botany Forum organized an **Educational Visit to ‘Kisan Mela evam Sangoshthi’** held at Krishi Vigyan Kendra, Tabiji, Ajmer on 5th March 2022. The aim of this visit was to provide the students an opportunity for experiential learning about different aspects of agriculture viz. Horticulture, Mushroom cultivation, Vermicomposting, Soil testing etc.

Learning Outcome –

The students will be able to

1. Analyze the various possibilities in the field of development of novel varieties of crops, legumes, fodder crops etc.
2. Gain an insight about organic farming, vermicomposting and apiculture.

Understand the significance of indigenous varieties of crops and other plant species.





Orchid-The Botany Forum

A Visit to Kisan Mela Evam Sangoshthi



7. Online Staff Student Exchange Program



SOPHIA GIRLS' COLLEGE (AUTONOMOUS)
AJMER

in collaboration with



GURU NANAK COLLEGE OF ARTS, SCIENCE
& COMMERCE, MUMBAI

DEPARTMENT OF BOTANY



Topics :

- **Recombinant DNA Technology**
- **Plant Tissue Culture**

Dr. Sandhya, Dr. Shrutika
9460478919, 9819174496

ANNOUNCES!

.....
**An Online
STAFF STUDENT
EXCHANGE
PROGRAM**

JOIN US
THIS WEEK
from -
7th - 10th March 2022
at 1:00 - 2:00 pm

.....
Prof. Sr. Pearl
Principal, Sophia Girls' College
(Autonomous), Ajmer

Dr. Pushpinder G. Bhatia
Principal, Guru Nanak College,
Mumbai

Name of Department - Botany (Sophia Girls' College (Autonomous), Ajmer in collaboration with GNC of Arts, Science and Commerce, Mumbai)

Name of the Activity - Online Staff Student Exchange Program

Date of activity – 7th – 10th March 2022

Number of Participants –

07 / 03 / 2022	08 / 03 / 2022	09 / 03 / 2022	10 / 03 / 2022
59	43	46	30

Venue - Online (Google Meet Platform)

Activity Coordinators -

1. Dr. Sandhya, HOD, Dept. of Botany, Sophia Girls' College (Autonomous), Ajmer, 9460478918
2. Dr. Shrutika Kumthekar, HOD, Dept. of Botany, GNC of Arts, Science and Commerce, Mumbai, 9819174496

Objective of the Activity -

In Collaboration with Guru Nanak College of Arts, Science and Commerce, Mumbai, the Department organized a 4 days **Online Staff Student Exchange Program**. This Exchange Program will contribute in sharing of knowledge and expertise about Plant Tissue Culture and Recombinant DNA Technology.

Learning Outcome –

The students will be able to

1. Illustrate the key steps and tools & technique of Recombinant DNA Technology.
2. Analyse the technique and applications of Plant Tissue Culture.

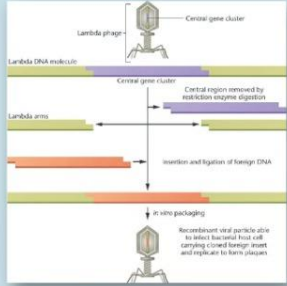
DAY 1:

WhatsApp Meet - dlx-rotk-gqu

meet.google.com/dlx-rotk-gqu?authuser=1

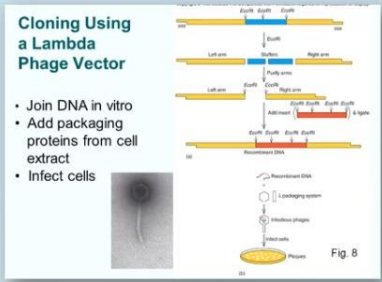
sandhya sophia is presenting

Bacteriophage



Cloning Using a Lambda Phage Vector

- Join DNA in vitro
- Add packaging proteins from cell extract
- Infect cells



1:28 PM | dlx-rotk-gqu

01:28 PM 07-03-2022

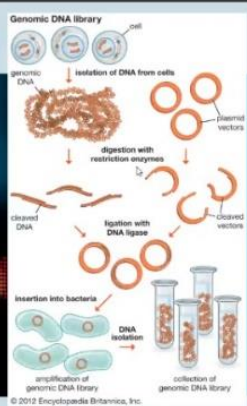
WhatsApp Meet - kbv-hqop-qze

meet.google.com/kbv-hqop-qze?pli=1&authuser=1

sandhya sophia is presenting

Genomic Library

A collection of plasmid clones or phage lysates containing recombinant DNA molecules so that the sum total of DNA inserts in this collection represents the entire genome of the concerned organism



1:23 PM | kbv-hqop-qze

01:23 PM 08-03-2022

DAY 2:

Meeting ID: kbv-hqop-qze

1:35 PM | kbv-hqop-qze

Artificial Transformation

❖ Calcium chloride treatment (Direct transformation)

❖ Infection by vectors packaged as virions

The diagram illustrates the process of artificial transformation in an antibiotic-sensitive bacterial cell. It shows the following steps: 1. Antibiotic-sensitive bacterial cell. 2. CaCl₂ treatment to permeabilize cell walls. 3. Add Plasmid DNA. 4. Selection on bacterial growth medium containing appropriate antibiotic. 5. 'Transformed' bacterial cell. 6. Selection on bacterial growth medium containing appropriate antibiotic. An inset image shows a bacteriophage (virus) infecting a bacterial cell.

Speakers / Headphones (Realtek Audio)

100

01:35 PM 08-03-2022

Meeting ID: kbv-hqop-qze

1:32 PM | kbv-hqop-qze

Step 1: denaturing (95 °C)

Step 2: annealing (55 °C)

Step 3: synthesizing (72 °C)

repeat cycle (20-40 times)

parent DNA

DNA template strand

two DNA strands

DNA primers

DNA polymerase (Taq)

nucleotides (dATP, dCTP, dGTP, dTTP)

section of DNA to be amplified

new DNA strands

four DNA strands

© Encyclopedia Britannica, Inc.

The diagram illustrates the Polymerase Chain Reaction (PCR) process. It shows the following steps: 1. Denaturing (95 °C): Parent DNA (double-stranded) is heated to separate into two DNA strands. 2. Annealing (55 °C): DNA primers (green and orange) bind to the DNA template strands. 3. Synthesizing (72 °C): DNA polymerase (Taq) and nucleotides (dATP, dCTP, dGTP, dTTP) are used to synthesize new DNA strands. 4. Repeat cycle (20-40 times): The process is repeated to amplify the DNA. The final product is four DNA strands.

Speakers / Headphones (Realtek Audio)

100

01:32 PM 08-03-2022

DAY 3:

Updated invitation: Student exch... Meet - Student exchange Pr... meet.google.com/jnt-vjst-yay

REC ShrutikaP Kumthekar is presenting

PowerPoint Slide Show - [Plant Tissue Culture] - PowerPoint

Plant Tissue Culture

Dr. Shrutika Kumthekar

1:11 PM | Student exchange Program

Turn off camera (ctrl + e)

32°C Haze 13:11 09-03-2022

This screenshot shows a Google Meet interface during a presentation. The main window displays a slide with a pink background and the text "Plant Tissue Culture" in a white box, with "Dr. Shrutika Kumthekar" written below it. The right sidebar shows a grid of participant video thumbnails, including ShrutikaP Kumthekar, Latika Sharma, 71laxmi pal, Riya Mathur, Vishakha Shamnani, and 29 others. The bottom status bar shows the time as 1:11 PM and the program as "Student exchange Program".

Updated invitation: Student exch... Meet - Student exchange Pr... meet.google.com/jnt-vjst-yay

REC ShrutikaP Kumthekar is presenting

PowerPoint Slide Show - [Plant Tissue Culture] - PowerPoint

Horizontal Hood
Hepa Filter
Work Surface Starts
Pre-filter

Laminar Air Flow

Inoculation room

Culture room

1:29 PM | Student exchange Program

32°C Haze 13:29 09-03-2022

This screenshot shows a Google Meet interface during a presentation. The main window displays a slide with a pink background. It features a diagram of a laminar air flow cabinet with labels for "Horizontal Hood", "Hepa Filter", "Work Surface Starts", and "Pre-filter". Below the diagram is a photo of a laboratory with the caption "Inoculation room". To the right is a photo of a laboratory with the caption "Culture room". The right sidebar shows a grid of participant video thumbnails, including ShrutikaP Kumthekar, Latika Sharma, 71laxmi pal, Chanchal Yadav, 37sushmita dutta, and 46 others. The bottom status bar shows the time as 1:29 PM and the program as "Student exchange Program".

DAY 4:

ShrutikaP Kumthekar is presenting

1:51 PM | Student exchange program day 2

Participants: Poonam Maheshwari, 63gulshan Khan, 59vidhi vishwakarma, 53Mohsin Siddiqui, amisha prasad, 51shagufta abdul hameed..., 24 others, You

Windows taskbar: 30°C Sunny, 13:51, 10-03-2022

ShrutikaP Kumthekar is presenting

1:47 PM | Student exchange program day 2

Participants: Poonam Maheshwari, 63gulshan Khan, 59vidhi vishwakarma, 53Mohsin Siddiqui, amisha prasad, 51shagufta abdul hameed..., 24 others, You

Windows taskbar: 30°C Sunny, 13:47, 10-03-2022

APPLICATION OF HAIRY ROOT CULTURES:

- 1. Functional analysis of genes.
- 2. Expressing foreign proteins.
- 3. Production of secondary metabolites.
- 4. The culture may produce compounds which is not found in untransformed roots.
- 5. The culture may change the composition of metabolites.
- 6. The culture can be used to regenerate a whole plant.