

**DEPARTMENT OF BOTANY
CITY COLLEGE**

EXCURSION SCHEDULE FOR THE ODD SEMESTERS: ACADEMIC SESSION 2024 - 2025.

Class / Year	Course Name	Date	Place of visit	Meeting Place & Time	Name of Teacher Guide
Semester 1 [NEP]					
4 Year BOTM DSCC 1	PLANT DIVERSITY	18.11.2024	SUVAS SAROBAR	SWABHUMI, 11 AM	SDG + SD
4 year ZOOM MN 1	PLANT DIVERSITY	18.11.2024	SUVAS SAROBAR	SWABHUMI, 11 AM	NC + AM + SY + SG ₁
3 Year MDC MBOT CC 1	PLANT DIVERSITY	18.11.2024	SUVAS SAROBAR	SWABHUMI, 11 AM	NC + AM + SY + SG ₁
Semester 3 [NEP]					
3 Year MDC MBOT MN 1	PLANT DIVERSITY	18.11.2024	SUVAS SAROBAR	SWABHUMI, 11 AM	NC + AM + SY + SG ₁
4 Year BOTM DSCC 3	ECONOMIC BOTANY	19.11.2024	RICE RESEARCH STN. CHINSURAH, HOOGLY	Howrah St. large Clock, 9.30 AM	SY + SG ₂ + SD
3 Year MDC MBOT CC 3	ECONOMIC BOTANY	19.11.2024	RICE RESEARCH STN. CHINSURAH, HOOGLY	Howrah St. large Clock, 10 AM	SY + SG ₂ + SD
4 Year BOTM DSCC 3	ECONOMIC BOTANY	11.12.2024	BSI GALLERY (ECO. BOT) INDIAN MUSEUM	Museum Gate 11 AM	AM + PK + SY
4 Year BOTM SEC 1	PLANT BIO TECH & HORTI. PRACTICES	26.11.2024	BCKV, MOHANPUR. NADIA	Sealdah Main Stn. 10 AM	RSG + PK + SG ₂
Semester 5 [CBCS]					
Botany Hons	PLANT BIOTECHNOLOGY	05.12.2024	TISSUE CUL. LAB. LADY BRABOURNE COL.	Lady Brabourne Col. Gate, 12 PM	SY + SG ₁ + SG ₂

Note: Students must carry the following items with them: 1. College ID Card 2. Note Book 3. Pen, Pencil 4. Camera (optional) 5. Polythene bag / pouches for keeping collecting specimens.

Arzoo Ghosh
HOD 13/11/24

Associate Professor and Head
Department of Botany
City College, Kolkata-9

Sat Chatterjee
13/11/2024

PRINCIPAL

Copy to : 1) Leave Section

Report on local excursion to Bidhan Chandra Krishi Vishwavidyalaya (BCKV), Mohanpur, Nadia

Date Of Visit : 26.11.2024

Place of Visit : Bidhan Chandra Krishi Vishwavidyalaya (BCKV), Mohanpur, Nadia

Participants : Students of SEM I Hons and SEM III Hons

Teachers accompanied : Dr. Rupak Kr. Sengupta, Mrs. Sutapa Gupta

No. Of Students : 14

Objectives Of Field Study :

1. To make students understand the basic principles of cultivation for fruits,vegetables,flowers and ornamental flowers.
2. To make students learn about different propagation methods like pruning, grafting ,cutting etc.
3. To become aware of different techniques of vegetative propagation of different crops.
4. To know about the application and effects of fertilizers, to know the use of biofertilizers.
5. To understand the post harvest handling, storage, packaging etc.
6. To make students understand the working principles and procedures of tissue culture.
7. To know and observe about the laboratory set up and various equipment used for tissue culture practices.
8. To understand the use of tissue culture in developing genetically modified crops .

Report :

Students of SEM I Hons and SEM III Hons had visited the Horticultural field or garden and the tissue culture laboratory of BCKV ,Mohanpur,Nadia where students had a hands on experience on Media Preparation, Sterile techniques to maintain aseptic conditions. Students learned about stages of micropropagation like initiation, multiplication, rooting etc. Students came to know about the operation of some laboratory equipments like laminar air flow cabinets, autoclave, growth chambers, incubators, magnetic stirrers etc. Students also came to know about various applications of tissue culture like in the field of agriculture for propagation of high yielding disease resistant varieties, on producing various ornamental plants, conserving rare and endangered species, genetic engineering and molecular biology studies. Students side by side had theoretical and hands on experience on different aspects of horticulture techniques, their processes, recent trends and its applications as well.

PLANT DIVERSITY (PRACTICAL)
BOT-H-CC1-1-P
Total marks 25; Credit 1, Class 30 hours

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|--|----------|
| 1. Work out: Morphology | 10 marks |
| 2. Identification with reasons (other groups except angiosperms) | 5 marks |
| 3. Class room performance (Practical notebook) | 3 marks |
| 4. Field notebook | 2 marks |
| 5. Viva-voce | 5 marks |

1. Flower- dissection, drawing and study
 - a) Different parts, b) Adhesion and cohesion, c) Placentation, d) Aestivation
2. Study of ovules: types (Fresh specimens/ permanent slides/ photographs)
3. Fruits: different types- study from fresh/ preserved specimens
4. Inflorescence types: study from fresh/ preserved specimens
5. Identification on the basis of reproductive and structural features from preserved specimens/ permanent slides: Algae (*Nostoc*, *Oedogonium* and *Ectocarpus*), Fungi (*Rhizopus*, *Ascobolus* and *Agaricus*), Bryophytes (*Marchantia*, *Anthoceros* and *Funaria*), Pteridophytes (*Selaginella*, *Equisetum* and *Pteris*), Gymnosperms (male cone and female cone/ megasporophyll of *Cycas*, *Pinus* and *Gnetum*).
6. A field notebook supported with photographs taken during field study to be submitted giving comprehensive idea about different types of inflorescence, flowers and fruits.

Textbook Reference:

1. Ganguli, H.C., Das, K.S.K. & Dutta, C.T. College Botany, Vol. I, latest Ed., New Central Book Agency
2. Ganguli, H.C. and Kar, A.K. College Botany, Vol. II, latest Ed., New Central Book Agency
3. Mukherjee, S. College Botany, Vol. III, latest Ed., New Central Book Agency
4. Uno, Storey & Moore, Principles of Botany, 2001, McGraw Hill.
5. Kenrick, P. & Crane, P. The Origin & early diversification of land plants (1997), Smithsonian Institute Press.
6. Bell, P.R. & Hensley, A.R. Green plants; their Origin & Diversity (2nd ed.), 2000, Cambridge University Press

parts (orange, banana, mango, papaya, guava, litchi, bael, potato, cauliflower, carrot, onion, peas, brinjal, ridged gourd), 4.2 Fruit processing- scope and benefit.

PLANT TISSUE CULTURE AND HORTICULTURE PRACTICES (PRACTICAL)

BOT-H-SEC-3-P

Total marks- 25; Credit 1, Class 30 hours

1. Work out/ Demonstration	10 marks
2. Identification (ornamental flowers)	3 marks
3. Field report & Diary	5 marks
4. Class room performance (Practical notebook)	2 marks
5. Viva-voce	5 marks

Field trip (any two with report submission) - Visit to plant tissue culture laboratory, gardens, standing crop sites, nurseries, vegetable plantations, horticultural fields at IARI/AHSI and cold storage.

2. Media preparation, sterilization and aseptic inoculation of explant for seed culture.
3. Propagation of two horticulturally important plants (each student needs to propagate plants following two separate vegetative methods; records and photographs to be authenticated by respective teacher and presented in a form of field diary during examination)
4. Identification of ornamental flowers as per theoretical syllabus

Textbook references:

PLANT TISSUE CULTURE

1. Chawla, H.S. An Introduction to Plant Biotechnology (2nd ed.), 2002, Oxford & IBH
2. Borer, A., Sentos, F.R. & Bowen, D.B. Understanding Biotechnology, 2003, Pearson Education
3. Ingacimuthu, S. Plant Biotechnology, 1997, Oxford & IBH
4. Walker, J.M. & Rapley, R. Molecular Biology & Biotechnology, 2000, Royal Society of

NAME

SEM I EXCURSION TO BCKV
(Hons.)
Roll

PH NO

1. Ayesha Afsana 241302 886978 73216
2. Antara Mandal 241309 8459178065
3. Riya Singh 241310 6290847645
4. Lakshmi Kumari Singh 241308 9163699584
5. Bidisha Nag 241307 9002972156
6. RAHUL JANA 241205 8017585015
7. Tanmay Mondal 241210 90738261425
8. Xineem Mandal 241206 7980278201
9. Arjunen Halder

SEM-III (Hons)

1. Vineet Sengupta — 231203
2. Ritika Roy — 231301
3. Aishwarya Manna — 231304
4. Hritika Kundu — 231303
5. Namid Paniker — 231305

Total = (14) nos

Amala
26/11/24

 **BIDHAN CHANDRA KRISHI VISWAVIDYALAYA** ESTD-1974
MOHANPUR, NADIA, W.B, 741252



 **GPS Map Camera**



Manpur, West Bengal, India
Wgvm+h78, Manpur, West Bengal 741221, India
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ICAR-AICRP ON FRUITS

BIDHAN CHANDRA KRISHI VISWAVIDYALAYA

MOHANPUR CENTER, MANDOURI, NADIA (W.B.)



ফল গবেষণা কেন্দ্র, বি.সি.কে.ভি, মন্ডৌরী



ON FRUITS
Center
Mohanpur



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ICAR-AICRP ON FRUITS

BIDHAN CHANDRA KRISHI VISWAVIDYALAYA

MOHANPUR CENTER, MANDOURI, NADIA (W.B.)

ফল গবেষণা কেন্দ্র, বি.সি.কে.ভি, মন্ডৌরী



WASTE SUB-PLAN (SCSP)
ICAR-AICRP ON FRUITS
Mohanpur Center
Bidhan Chandra Krishi Viswavidyalaya
Mandouree, Nadia, West Bengal

ICAR
Mohanpur
Waste Sub-Plan

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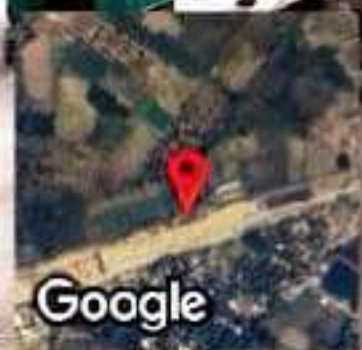
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ডি.এল.বায় সভাকক্ষ
ICAR-AICRP on Fruits, Maheswari Lecture BCUV

ICAR-AICRP ON FRUITS

Chandra Krishi Viswavidyalaya
Directorate of Research
Daibagnapur, Nadia, West Bengal-741201



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Daibagnapur, West Bengal, India

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West Bengal 743195, India

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BISHAN CHANDRA KUSHI V SWADHYAYAYA
কল মছোনা গৌড়

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West Bengal 743195, India
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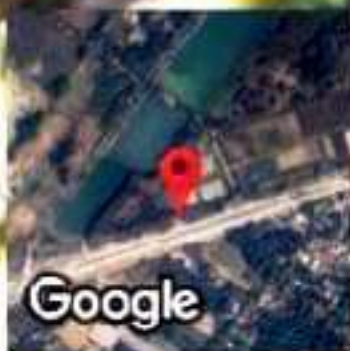
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West Bengal 743195, India

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Kanchrapara, West Bengal, India

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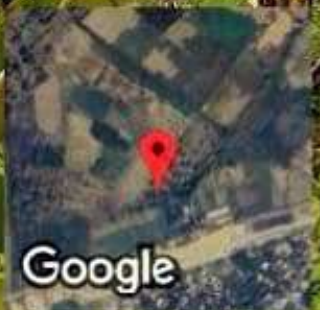
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