

PG DEPARTMENT OF BOTANY

DEVA MATHA COLLEGE, KURAVILANGAD

Affiliated to Mahatma Gandhi University, Kottayam



REPORT

ON

ADD-ON COURSE

Botany in everyday life [II PG] DMCK/ SFBOT/AD 17/2023

Academic Year: 2023-2024

Academic year : 2023-2024

Title : Botany in everyday life [II PG] DMCK/ SFBOT/AD 17/2023

Instructional Hours : 30 Hours

Duration : 1 month

Mode of Instruction : Offline

Intake Capacity : 25

Eligibility : Any degree

Beneficiaries : II PG

Date(s) on which program was conducted : January 2024

Collaborating agency inside/outside the institute : -

**Organizing Dept./Club & Name of the Coordinator : PG department of botany Deva
matha college, Kuravilangad**

Name of the Coordinator : Sreekutty Sreedharan

Number of students participated in the programme : 8

The number of students completed the programme : 8

Report

As a part of our curriculum, we conduct an add on course 'Botany in everyday life' for our second PG students [2020-2022 Batch]. Students actively participated in this course. We arranged online and offline classes for the students. The specific objectives of the course was to learn the diverse human uses of plants and plant products, to learn the taxonomic diversity of useful plants, to learn the biological reasons why certain plant resources are important, to acquire an increased awareness and appreciation of plants and plant products encountered in everyday life, to recognize geographic, historical, & cultural differences in the uses and importance of plants, to relate diverse aspects of human cultural endeavors to plant resources, and to gain a better understanding and perspective of the origins, histories, and roles of important plants and plant products to the development of human culture. Certificates are distributed to the successful participants.

Objectives

- An understanding of plants as a source of food – emphasis on major food crops with respect to the following: requirements for human nutrition, the origin of agriculture, legumes, and starchy staples.
- An understanding of commercial products derived from plants that provide us with consumable products such as beverages, herbs and spices, and materials such as cloth, paper, and wood.
- An understanding of plants and human health - historical foundations of Western medicine, the practice of herbal medicine, poisonous and allergy plants, and the chemistry of secondary plant products

DEPARTMENT OF BOTANY, DEVAMATHA COLLEGE KURAVILANGAD

ADD ON PROGRAMME – BOTANY IN EVERYDAY LIFE

Syllabus Theory

[25 Hrs]

Module 1 – Introduction [2 Hrs]

Introduction to the value based botanical world, scope of economic botany

Module 2 – Plants and plant products in everyday life [18 Hrs]

Botanical name, family, part used and their value-added products of listed plants

a. Cereals & Millets

Rice, Wheat, Maize, Barley, Oats, Ragi, Bajra, Jowar

b. Pulses & Legumes

Bengal gram, black gram, cow pea, green gram (mung bean), Kidney bean (Rajma), Soya bean, red gram dal, winged bean, Lablab bean

c. Leafy vegetables & other vegetables

Amaranthus sepsis's, Beet greens, Cabbage, Carrot, Celery leaves, Colocasia leaves, Coriander leaves, Curry leaves, Drumstick, Lettuce, Mint, Pumpkin, Tamarind leaves, Onion, Potato, Radish, Sweet potato, Yam

Ash gourd, Beans, Bitter gourd, Bottle gourd, Brinjal, Cauliflower, Cucumber, Sponge gourd, Chillies, Jack tender, Ivy gourd, Ladies finger, Mango green, Onion stalk, Papaya green, Ridge gourd, Snake gourd, Water melon, Tomato, Vegetable marrow

d. Nuts & Oil seeds

Arecanut, Almond, Cashew nut, Chilgoza pine, Coconut, Gingelly seed, Ground nut,

Linseed, Mustard seed, Pistachio nut, Safflower seed, Sun flower, Walnut, Castor oil,
Avocado pear nut, Sal

e. Condiments & spices

Water melon seed, Asafoetida, Cardamom, Chillies, Cloves, Coriander, Cumin seed,
Garlic, Ginger, Mango powder, Nutmeg. Black pepper, Indian long pepper, Poppy
seed, Tamarind pulp, Turmeric, Garcinia, Vanilla, All spice

f. Fruits

Wild mango, Mango, Amla, Apple, Avocado pear, Bael fruit (*A. marmelous*), Banana, Bilimbi, Annona, Carambola, Orange, Cashew fruit, Cherries, Date palm, Grape, Guava, Jack fruit, Jamba fruit, Lemon, Litchi, Mangosteen, Mulberry, Papaya, Passion fruit, Pineapple, Pomegranate, Sapota, Strawberry, Jam, Common jujube, *Syzygium zeylanica*

g. Sugar & starch crops

Sugarcane, Sugar beet, Stevia (sugar plant), Starch crops – Potato, Tapioca, Rice, Sago palm, Palm sugar, Yam, Colocasia

h. Beverages

Alcoholic – Wines, Beer, Spirits, Distilled liquors

Non-alcoholic – Tea, Cocoa, Cola, Cassine, Coffee, Chicory, Kola, Yaco

i. Tannins, Gums & Resins

Oak bark, Pine, Bark valonia, Hemlock, Gambier marketing nuts

Gum Arabic, Tragacanth, Babul karaya, Bengal kino

Gum resins, Oleoresins, Lac-kauri, Dammar, Copal, Dragon's blood, Amber

j. Essential oils (Volatile oils)

Cananga odorata, Cinnamon, Citrus spp. Lemon grass, Ginger grass, Eucaly, Jasmine, Arabian jasmine, Lavender, Peppermint (*Pudina*), Champaca, Nutmeg, Chir pine, Sandal, Clove, Vetiver

k. Wax, Soap, substitutes & Insecticides

Carnauba, American myrtle, Soap nut, Pyrethrum, Barbasco, Tobacco

l. Fibres

Cotton, Coir, Deccan hemp, Jute, Sisal, Flax (linen), Kapok (silk cotton)

Paper making – Spruce, Pine, Fir, Larch, Bamboo, Acacia mangium

m. Woods

Teak, *Artocarpus* spp., Mahogany, Silver oak, Bamboo, Kalayam, Venga,

Mulluvenga, Ilavu

n. Medicinal plants

Liquorice, Indian sarsaparilla, Chitraka (*Plumbago*), Serpentine, Ashwagandha,

Asafoetida, Greater galanga, Turmeric, Mango ginger, Garlic, Asoka tree, Vasaka, Indiana aloe, Holy basil, Bel, Betel, Pepper, Belleric myrobalan, Chebula myrobalan,

Neem, Apple of Peru (Datura), Belladonna, Quinine, Foxglove, Ephedrine, Opium, Nux vomica, Ergot, Antibiotics

Module 3 – Ethnobotany [5 Hrs]

Introduction to ethnobotany and Pharmacology

Cultural and medicinal plants used in the tribal settlements of Kerala
Plants used by them such as

Trichopus zeylanicus, Ochlandra travencorica, Dendrocalamus strictus, Gloriosa superba, Emilia sonchifolia, Andrographis paniculata, Alocasia macrorhiza, Calamus rotang, Dioscoria oppositifolia, D. pentaphylla, Canarium strictum, Maranta arundinaceae, Vernonia anthelmentica, Adenia hondala, Asparagus recemosus

Scope and documentation of ethnobotanical data's

Practical [5 Hrs]

1. Collect and properly preserve the economically and ethnobotanically used plants or plant products
2. To conduct an exhibition of the economically and ethnobotanically used plants or plant products

References

1. Dr. Ashok Kr. Panigrahi and Alaka Sahu, (2000), Glossary of useful and economically important plants, New central book agency (P) Ltd, Calcutta.
2. S. L. Kochhar, (1981, 1998), Economic botany in the tropics, 2nd Ed., Macmillan India Ltd., Delhi.
3. A.V.S.S. Sambamurthy and N.S. Subrahmanyam, (1998), A text book of moderneconomic botany, CBS publishers and distributors, New Delhi.

Assessment Procedures

INTERPRETATION CRITERIA

A⁺ : 20 - 25 marks

A : 15 – 19 marks

B : 10 – 14 marks

C : Below 10

Course outcome

Co 1 - · An understanding of plants as a source of food – emphasis on major food crops with respect to the following: requirements for human nutrition, the origin of agriculture, legumes, and starchy staples.

Co 2 - · An understanding of commercial products derived from plants that provide us with consumable products such as beverages, herbs and spices, and materials such as cloth, paper, and wood.

Co 3 - · An understanding of plants and human health - historical foundations of Western medicine, the practice of herbal medicine, poisonous and allergy plants, and the chemistry of secondary plant products

List of Resource Persons = 0

List of students

Sl.no.	Name
1.	ABIYA JOSEPH
2.	ANNA GEETHU
3.	ANN MARIA THANKACHAN
4.	ARAVIND MOHAN V R
5.	JISSA GEORGE
6.	NEENU THOMAS
7.	HENSCHER MATHEW
8.	SREELAKSHMI A C

Mark list

Sl.no.	Name	Mark
1.	ABIYA JOSEPH	13/25
2.	ANNA GEETHU	14/25
3.	ANN MARIA THANKACHAN	13/25
4.	ARAVIND MOHAN V R	13/25
5.	JISSA GEORGE	11/25
6.	NEENU THOMAS	19/25
7.	HENSCHER MATHEW	21/25
8.	SREELAKSHMI A C	19/25

Attendance sheet of students


DEVA MATHA COLLEGE
P. G. STUDENT

KURAVILANGAD
ATTENDANCE REGISTER

Year & Month: January 2023

Sl No	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
1	Abhishek	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
2	Santhosh	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
3	Aravind	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
4	Harish	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
5	Aravind	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm

Francis Matha Thomas - Headmaster



Class conducted by Dr. C.T Chandralekha



Name of the coordinator ; SREEKUTTY SREEDHARAN

Department ; PG department of Botany