



2022-23 NEWSLETTER

PG AND RESEARCH DEPARTMENT OF BOTANY **PROVIDENCE WOMEN'S COLLEGE KOZHIKODE**

FLORICAN HILL, MALAPARAMBA,
KOZHIKODE, KERALA

REACCREDITED WITH A+ (3.52) BY NAAC



2022-23

HIGHLIGHTS



Activities focusing on the development of

**STUDENTS
SCIENCE
SOCIETY**
in accordance with **SDG**



- Pursuing global goals in all the activities of the Department



- Academic excellence with high pass percentage and University Ranks.
- Ample experiential learning opportunities



- Student Ambassadors working together with Nature Positive Universities Alliance to prioritize nature on campuses



- MoU with National level institutions
- Collaborations with Govt Organizations
- Collaborations with local self government bodies



- Opportunity to Interact with eminent scientists and researchers



- Conservation and sustainable use of natural resources, Biodiversity and water
- Maintaining gene banks and plant repositories



- Discharging social responsibilities
- Transferring subject knowledge to the benefit of the society

CONTENTS



About the Department

Motto, Vision & Mission
Milestones
Programmes offered
Former Faculty
Prominent Alumnae
Faculty
Infrastructure



Activities 2022-23

- Curriculum & Programmes
- Teaching, Learning & Evaluation
- Experiential Learning
- Research output
- Innovations
- Collaborations
- Mou
- Consultancy Services
- Seminars Workshops organized
- Research Scholars
- Awards /Recognitions
- Seminars /workshops attended
- Students' Projects
- Competitions organized
- Faculty in various roles outside
- Extension
- Student Support Programmes
- Skill Development
- Career guidance programmes
- Progression
- Achievements of students
- Achievements of Alumnae
- Student Ambassadors of NPUA
- Faculty Development Programmes
- Days observed
- Bhoomithrasena Club
- Jalasree Club
- Biodiversity Club
- Nature Club
- Best practices

MILESTONES

Year of Establishment : 1965
Starting B.Sc. Botany Subsidiary : 1965
Starting B.Sc. Botany Main : 1969
Starting Certificate Courses : 2002
Starting M.Sc. Botany : 2013
Upgrading as a Research Centre & Starting PhD: 2020

MOTTO

Inspire & Equip

VISION

To excel by providing quality education
To cultivate talent and equip students with employable and inventive skills

PROGRAMMES OFFERED

BSc BOTANY

MSc BOTANY

PhD BOTANY

Certificate Programmes

Mushroom Culture Technology

Leafy Vegetable Cultivation

Biofertilizer Technology

MISSION

- To bring behavioral change by inculcating values of life
- To enlighten students in all aspects of curricular and extracurricular
- To improve original thinking and research aptitude
- To teach the responsibilities of a citizen and their role in the society by applying the knowledge skills they acquire during the period of study

FORMER FACULTY



Prof TV Kamalam
Founder HoD 1966-1992



Prof. Elizabeth Joseph
1968-2002



Prof. Rosamma Joseph
1970-2002



Smt. Mary TC
1972-2004



Dr. M Shylaja
1974-2008



Smt. T Umadevi
1992-2010



Dr. Jija Mathew
2012-2020

National Agricultural Research Service



Dr. Shobhakumari VP
Principal Scientist
ICAR SBI Coimbatore

Faculty in Higher Education



Prof. M. Madhavi
Govt. Victoria College
Palakkad



Smt. Mary TC
Providence Women's
College



Dr. M Shylaja
Providence Women's
College



Smt. T Umadevi
Providence Women's
College



Dr. Alphonsa Vijaya Joseph
Principal, St. Teresa's College
Ernakulam



Dr. Anu Augustine,
Associate Professor
(Biotech), Kannur University

PROMINENT ALUMNAE



Dr. Renjana PK
Assistant Professor
GASC Kozhikode



Dr. Sinitha K
Associate Professor
Govt College
Madappally



Dr. Jayasree S
Associate Professor
GASC Kozhikode



Dr. Jija Mathew
Providence Women's
College



Dr. Nishitha IK
Assistant Professor
St. Teresa's College Ekm



Dr. Nisha P
Assistant Professor
St. Xavier's College Aluva



Dr. Anjana S
Assistant Professor
Govt College
Madappally



PROVIFLORA

Faculty in General Education



Dr. Rency RC
Assistant Professor
Govt. College Koderchery



Smt. Naseeha CP
Assistant Professor
Farook College
Kozhikode



Sr. Pilty Peter A
Assistant Professor
Providence Women's
College



Dr. Sini
Higher Sec School
Teacher, GHSS Payimbra



Shiipa TP
Higher Sec School
Teacher, GVHSS
Perumanna



Ancy Maria Sebastian
High School Teacher,
LSN Ottappalam



High School Teacher
GHS

Scientists in Central Service



Dr. Arathymol A
Scientist
CMLRE Cochin



Megha Das
Scientific Officer
Kerala Police



Sruthi Bharathan
Scientific Officer
Kerala Police

Scientific Officers in State Service



Farhana Muhammadali
Research Scientist FUJIFILM
Diosynth Biotechnologies, UK



Anaswara
R&D Specialist
Bayer Crop Sciences USA

Scientific Officers in MNCs abroad



Dhanya Jayaram
Agri Extension Officer
Coffee Board



Anjana NC
Field Assistant
Plantation Corporation



Anjitha Thomas
Field Assistant
Plantation Corporation



Safna KM
Technical Assistant
NBPGR Thrissur

Agriculture - Field & technical officers

Media



Lishna NC
Radio Jockey
Radio Mango

Literature



Anju Francis
Malayalam writer

Social Service



Adv. Noorbeena
Rasheed
Former Member, Kerala
Women's Commission

Banking



Maheesa
Manoharan
State Bank of
India

Law



Adv. Viswalekha
Lawyer

FCI



Surya KP
Food Corporation
of India

Library Science



Jasna Jayaraj
Librarian
Central University
Hyderabad

Cinema



Anila Sreekumar
Cine Artist

Music



Krishnendu P
Singer

IT



Sanjuna Murali
Infosys Bangalore

FACULTY PROFILE

Responsibilities 2022-23

Institution
level

University
level

Membership
in
Professional
Bodies



DR. DEENA MERIA JOSE
PROFESSOR

HoD

Teaching
Experience:
17 yrs

Research Guide.
Chairperson, BoE-
MSc Botany (S1&2) &
BVoc Org. Farming.
Member, BoE-
BSc Botany

Associate of the Linnean
Society of London,

Member of the Indian
Botanical Society



DR. MINOO DIVAKARAN
PROFESSOR

Coordinator
of IQAC

Teaching
Experience:
17 yrs

Research guide.
Chairperson, BoE-
MSc Botany (S3&4).
Member, BoE-
BSc Botany

Fellow of the Linnean
Society of London



DR. VEENA V
ASSISTANT POFESSOR

FIC of
Bhoomithra
sesna

Teaching
Experience:
2 yrs

Member, BoE,
MSc & BSc Botany
BVoc Organic
Farming

Life time Member of the
Indian Botanical Society



SR. PILTY PETER A
ASSISTANT POFESSOR

FIC of
Biodiversity
Club

Teaching
Experience:
2 yrs

Member, BoE,
MSc & BSc Botany
BVoc Organic
Farming



DR. ARCHANA ER
ASSISTANT POFESSOR

FIC of Jalasree,
Student Advisor,
Coordinator of
IEDC
Teaching
Experience:
2 yrs

Member, BoE,
MSc & BSc Botany
and
BVoc Organic
Farming



DR. SAVITHA RABEQUE C
ASSISTANT POFESSOR

Staff Editor

Teaching
Experience:
1 yr

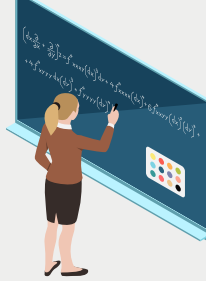
Member, BoE,
MSc & BSc Botany,
BVoc Organic
Farming



**DR. SARANYA BABU
JAYAPRAKASH**
GUEST LECTURER

Teaching
Experience:
1 yr

INFRASTRUCTURE & LEARNING RESOURCES



LIBRARY



Reference Books & Text Books
Digi drive -eBooks
Journals & Periodicals
Floras & Dictionaries
Theses & Dissertations

ICT FACILITIES



Computers with net connectivity
Smart projectors
Interactive board
Image analysis system
Digital Flora & Herbarium

MUSEUM



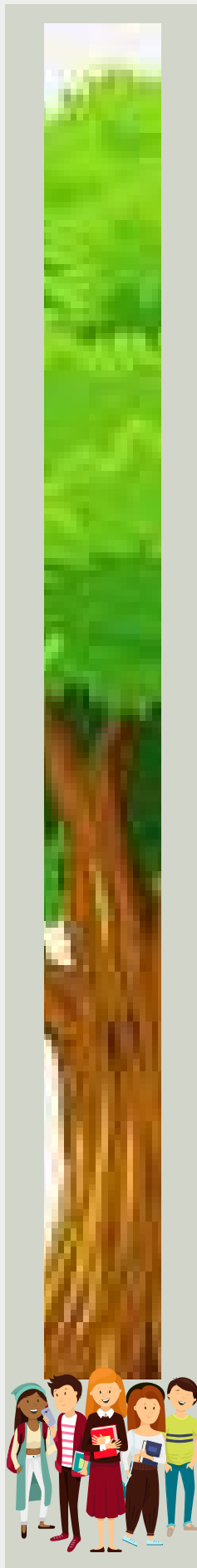
Angiosperms
Gymnosperms
Pteridophytes
Bryophytes
Algae
Fungi
Economically important plants
Forest products
Pathology

HERBARIUM



CONVENTIONAL & DIGITAL

Angiosperms
Gymnosperms
Pteridophytes
Bryophytes
Algae
Fungi
Pathology



LABORATORIES

General Botany Lab
Research Lab
Physiology Lab
Biochemistry lab
Tissue culture Lab
Molecular Biology Lab
Bioinformatics Lab
Jalasree Harithasala Lab



PLANT REPOSITORIES

Botanical Garden
Vegetable Garden
Green house
Fern house
Collection of aquatic plants
Collection of traditional fruit trees- Santhisthal
Collection of star plants
Collection of medicinal plants
Collection of underutilised leafy vegetable crops
Vanilla Gene Bank
Musa Gene Bank
Tulsi Gene Bank
Aloe Gene bank
Azolla cultivation unit



OTHER RESOURCES

Campus Biodiversity Register
Fossil specimens
Microslides
Visual aids
Vermicompost unit



OTHER FACILITIES

Faculty room
Research Scholar's room
Lecture halls & Reading space

CURRICULUM & PROGRAMMES



BSc

Curriculum of B.Sc. Botany focuses on imparting knowledge in basic and applied aspects of Botany

Intake : 36 + marginal increase

MSc

Curriculum of M.Sc. Botany focuses on imparting knowledge in traditional and modern aspects of Botany as well as creating awareness on conservational aspects

Intake : 12+ marginal increase

PhD

Course work:

- Morphology, Biochemistry and Molecular Biology
- Plant tissue culture and Molecular Biology
- Cell and Molecular Biology

Intake : 4 per guide

CERTIFICATE PROGRAMMES

Designed to develop and strengthen specific subject oriented skills.

Mushroom Culture Technology

Target group: I Year UG & PG
No of students enrolled: 53
Course Coordinator: Sr. Pilty

Biofertilizer Technology

Target group: 2nd year UG & PG
No of students enrolled: 56
Course Coordinator : Dr. Savitha

Leafy Vegetable Cultivation

Target group: 3rd year UG
No of students enrolled: 42
Course Coordinator: Dr. Savitha

TEACHING, LEARNING & EVALUATION



University Rank MSc Botany



GOPIKA VM
7th position



FATHIMA FEBIN CP
8th position

Results

PG : 100%
UG : 97.3%

Outcome Based Education

Progression

UG

35% pursuing PG Courses
16% pursuing professional courses
7% employed.

PG

7% pursuing higher studies in foreign Universities
7% Internship in National level Organizations
38% pursuing professional courses
7% employed

Mentor
Mentee
System
Peer Tutoring

Transparent
Assessment
system

Remedial
Coaching
Bridge Course

Student
Centric
Teaching
methods

Grievance
Redressal
mechanisms

special
programmes for
Slow & advanced
learners

EXPERIENTIAL LEARNING

FIELD TRIPS LAB VISITS



UNDER GRADUATE LEVEL

09-01-2023

6 sem UG students visited **Kodaikanal** for the study of vegetation at ecologically different areas



10-01-2023

6 sem UG students visited **Ramakalmedu** for the study of vegetation at ecologically different areas



07-02-2023

I sem UG students visited **Punchavayal Wetland Kannadikal**, Kozhikode as a part of World Wetland day observance



18-03-2023

4 sem UG students visited **Regional Agricultural Research Station Ambalavayal**, Wayanad



02-02-2023

IV Sem UG students visited **Centre for Water Resources Development and Management**, Kozhikode as a part of World Wetland day observance



POST GRADUATE LEVEL

20-06-2022

3 sem PG students visited molecular Biology Lab at **Indian Institute of Spices Research** Kozhikode



01-08-2022

3 sem PG students visited **Gurukulam Botanical Sanctuary Wayanad**



02-08-2022

I & 3 sem PG students visited **Regional Agricultural Research Station Pattambi** for lab and field visits related with Rice breeding



EXPERIENTIAL LEARNING

FIELD TRIPS

LAB VISITS



02-11-2022

1 sem PG and 4 sem PG students visited **Calicut University Botanical Garden**, for Biodiversity studies



19-12-2022

1 sem PG students visited the shore of **Thikkodi**, Kozhikode for specimen collection and for studying the ecology of marine algae.



02-02-2023

II sem PG students visited **Centre for Water Resources Development and Management**, Kozhikode as a part of World Wetland day observance



03-02-2023

1 sem PG students visited **Malabar Botanical Garden and Institute for Plant Sciences** for a studying the diversity of lower plants and aquatic plants.



08-12-2022

3 sem PG students visited molecular Biology Lab at **Indian Institute of Spices Research** Kozhikode



04-03-2023

2&4 sem PG students visited **Kerala Forest Research Station Sub Centre Nilambur** on 04-04-2023



14-03-2023

2 & 4 sem PG students visited **ICAR Indian Agricultural Research Station Wellington Ooty** for lab and field visits related with Wheat breeding



15-03-2023

2 & 4 sem PG students visited **Central Potato Research Station Ooty** for lab and field visits related with Wheat breeding



22-03-2023

2 & 4 sem PG students visited **Vanaparvam Biodiversity park Engapuzha** for a nature camp in connection with World Water Day.



RESEARCH OUTPUT

PUBLICATIONS

ARTICLES IN JOURNALS

Saranya Babu J C.M., Minoo Divakaran, P.V. and Madhusoodanan, 2022. 'Role of activated charcoal in the micropropagation and conservation of *Celastrus paniculatus* Willd'. *Medicinal Plants - International Journal of Phytomedicines and Related Industries*, 14(3): 448-455.

Abidha EK, Minoo D and Bibinsha P (2022) Morphometric analysis of the three *Curcuma* species, *Bioinfolet* 19 (3): 244-245

PRESENTATIONS

INTERNATIONAL CONFERENCES

Abidha EK, Bibinsha P and Minoo Divakaran (2022) Genome sequence analysis of three *Curcuma* species. (P014), Golden Jubilee International Online Conference 4-9 Feb 2022, Biotechspectrum 2022, CUSAT India

Fathima Rafieah NT and Minoo Divakaran (2022) Embryogenesis and morphometric analysis of *Vanilla siamensis* Rolfe (P015) Golden Jubilee International Online Conference 4-9 Feb 2022, Biotechspectrum 2022, CUSAT India



ART

Azolla Restoration Technology

The practice of growing Azolla to be used in the making of Biofertilizers



Cu Tab

Making Curcumin pellets to be used as a post Covid immunity booster and for cosmetic use



Jaljeevan

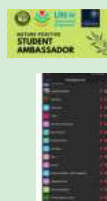
Propagation and conservation of aquatic plants using tissue culture technique



Coco Bonsai

A technique of making bonsai with coconut seedlings





Nature Positive Universities Alliance coordinated by University of Oxford

12 Student Ambassadors working to prioritize nature on campuses



Kerala State Higher Education Council



Conducted an international seminar under the Erudite Scholar in Residence Programme



Dept of Botany University of Calicut



Conducted an international seminar under the Erudite Scholar in Residence Programme



ICAR-IARI Wellington, Ooty



Field visit and Demonstrations of wheat breeding experiments



ICAR-CPRI Ooty



Field visit, off campus lecture and Demonstrations of potato breeding experiments



Kozhikode Municipal Corporation



Involved in the Azhaku Project for waste management in the city



Directorate of Environment and Climate Change, Govt. of Kerala



Functioning of Bhoomithrasana Club



Kerala State Biodiversity Board (KSBB)



Functioning of Biodiversity Club. Conducted a seminar under the Biodiversity Awareness & Extension programme



CCDU, Water Resources Dept, Govt. of Kerala



Functioning of Jalasree Club & Water literacy programmes



KSCSTE KFRI Sub Centre Nilambur



Participated in a workshop on traditional wisdom and modern practices for biodiversity conservation



KSCSTE MBGIPS



Conducted field visits to study the diversity of cryptogams, aquatic, insectivorous plants. Participated in EK Janaki Ammal memorial seminar



KSCSTE CWRDM



Conducted water quality lab visit. Participated in the World Wetland Day programme



Vanasree Dept. of Forests and Wildlife, Govt of Kerala



Conducted a nature camp at Vanaparvam Biodiversity Park



Amplicon Biolabs KINFRA Techno Industrial Park, Kakanchery



Collaborated in the UG Project work



Sir Syed College Taliparamba



Conducted an international seminar under the Erudite Scholar in Residence Programme



Kites India Foundation



Implemented Agri Gram project for promotion of vegetable gardens



Organic Rich PV Exports, Alappuzha



Conduct of the Certificate course in Biofertilizer Technology

Green Kerala Movement



Awareness programmes in connection with World Meteorological Day

Kerala River Protection Council



Participated in the awareness programmes in connection with World Water Day 2023



**ICAR Indian Institute of
Spices Research,
Kozhikode, Kerala**



**St. Pious X Degree
College Hyderabad,
Telangana**



**St. Joseph's College
(Autonomous) Devagiri
Kozhikode, Kerala**



**VJ Biotech Coimbatore,
Tamilnadu**



**St. Mary's College
Thrissur, Kerala**



**Carmel College Mala,
Thrissur, Kerala**

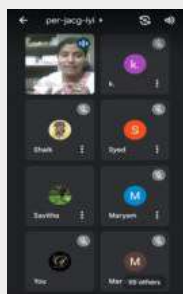
MoU Activities



**ICAR Indian Institute of
Spices Research**



**St. Pious X Degree College
Hyderabad**



**St. Joseph's College (Autonomous)
Devagiri**

CONSULTANCY SERVICES

**St. Vincent Colony
GHSS Kozhikode**

For
students'
project work
on marine
algae
12/10/2022



**GHSS Medical College
Campus, Kozhikode**



For identification and
labelling of campus trees
29/10/2022

**JDT Islam College of
Pharmacy, Kozhikode**



For identification of
plants for project work
31/03/2023

SEMINARS/WORKSHOPS ORGANISED



International Seminar :

Mechanisms of abiotic stress management in plants 27-10-2022

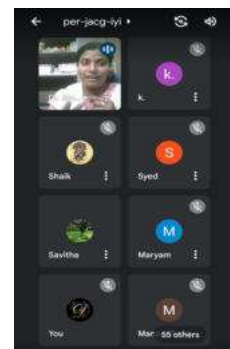
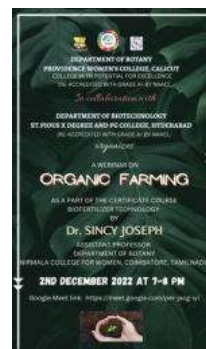
A one-day international seminar on 'Mechanisms of abiotic stress management in plants' under the **Erudite Scholar in Residence Program** funded by **Kerala State Higher Education Council** on 27th October, 2022. Professor Om Prakash Dhankher, Stockbridge School of Agriculture, University of Massachusetts Amherst, USA was the Erudite Scholar. A total of 75 participants including post graduate and graduate students from different streams participated in the program.



National level Webinar:

Organic Farming 02-12-2022.

The webinar was organized in collaboration with **St. Pious X Degree and PG College, Hyderabad**. The resource person was **Dr. Shincy Joseph**, Nirmala College for Women, Coimbatore. A total of 100 students participated in the webinar.



State level Seminar :

The untapped assets of Nature 06-12-2022

The seminar was organized under the Biodiversity Awareness & Extension programme of **Kerala State Biodiversity Board (KSBB)**. Resource person was **Mr. Sajeewan Kavumkara**, Recipient of Plant genome conservation award.





IPR WEBINAR SERIES BY STUDENTS

- **Introduction to IPR** (02/12/2022) Amitha P (3 sem MSc)
- **Patents** (03/12/2022) Amitha PP (3 sem MSc)
- **Copyrights** (04/12/2022) Anusha KS (3 sem MSc)
- **Trademarks** (05/12/2022) AparnaSudarsan (3 sem MSc)
- **Geographical Indications** (06/12/2022) Ashlin Rose Wilson (3 sem MSc)
- **Protection of Traditional Knowledge** (07/12/2022) Aswana C (3 sem MSc)
- **Protection of Plant Varieties** (08/12/2022) Midhuna A (3 sem MSc)
- **Biotechnology and Intellectual Property Rights** (09/12/2022) Mufeedath(3 sem MSc)

RESEARCH METHODOLOGY WEBINAR SERIES BY STUDENTS

- **Collection of scientific literature** (11/12/2022) Akhila VP (3 sem MSc)
- **Structure and components of research papers** (12/12/2022) Amitha P (3 sem MSc)
- **Scientific conduct & ethics** (13/12/2022) Sneha K (3 sem MSc)
- **Authorship issues.** (14/12/2022) Sandra KK (3 sem MSc)
- **Preparation of scientific posters** (15/12/2022) Sandra KG (3 sem MSc)
- **Citation and acknowledgement** (15/12/2022) Nanda SK (3 sem MSc)

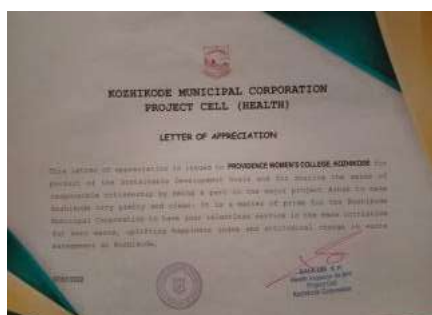
RESEARCH SCHOLARS

Fathima Rafieah NT– Topic: In vitro conservation and molecular diversity analysis of a few *Vanilla* species (Full time, UGC-NFOBC) Research Guide: **Dr. Minoo Divakaran**

Abidha EK– Topic: Morphological, Biochemical and Molecular Diversity Analysis in important species of *Curcuma* L (Full time, CSIR-JRF) Research Guide: **Dr. Minoo Divakaran**

Dipija AP – Phytochemical, molecular and in silico profiling of selected species of *Sida* L (Malvaceae) (Full time) Research Guide: **Dr. Deena Meria Jose**

AWARDS/RECOGNITIONS



Appreciation for participating in the Azhaku Project of Kozhikode Municipal Corporation



Appreciation for participating in the Green Campus initiative of Govt. HSS Medical college Campus



Appreciation for identifying and labelling the campus trees of Govt. HSS Medical college Campus

ATTENDING SEMINARS/WORKSHOPS/TRAINING PROGRAMS ORGANISED BY OTHER INSTITUTIONS



FACULTY

IPR Awareness webinar BAUDDHIK 3.0 organized by **Patent Office**, Department for Promotion of Industry and Internal Trade under the **National Intellectual Property Awareness Mission** on 21-12-2022 (Dr. Deena MJ, Dr. Minoo D)

Five Day international Seminar on Modern Perspectives in Biological Sciences organized by **Govt. Victoria college Palakkad** (28-02-2023 to 06-03-2023) (Dr. Deena MJ, Dr. Minoo D, Dr. Veena)

Two days National Workshop on Algal Biology organized by the Post Graduate & Research Department of Botany, **Catholicate College, Pathanamthitta** in association with DoECC from 27-28 September, 2022 (Dr. Archana ER)

Two days NAAC sponsored National Seminar on Implementation of NEP in Higher Education Institutions organized by the IQAC **St. Teresa's College (Autonomous), Ernakulam** from 17th and 18th January 2023. (Dr. Savitha Rabeque C)

institutional training programme on learning management system (Moodle) organized by **Kerala State Higher Education Council** 6 - 10 March 2023. (Dr. Deena MJ, Dr. Minoo D, Dr. Veena V, Dr. Archana ER, Sr. Pilty PA, Dr. Savitha RC & Dr. Sharanya B JP)

institutional training programme on learning management system (Moodle) organized by **Kerala State Higher Education Council** 6 - 10 March 2023. (Dr. Deena MJ, Dr. Minoo D, Dr. Veena V, Dr. Archana ER, Sr. Pilty PA, Dr. Savitha RC & Dr. Sharanya B JP)

Training on Barcode availed CV Camp organized by **University of Calicut** on 27/03/2023 (Dr. Deena MJ)

Training for Biodiversity Club Coordinators of Kozhikode district organized by **Kerala State Biodiversity Board** on 13/12/2022 (Sr. pilty Peter A)



STUDENTS

Workshop Traditional wisdom and modern practices for Biodiversity Conservation organized by **Kerala Forest Research Institute Sub Centre Nilambur** on 04-03-2023. (PG students)

EK Janaki Ammal memorial lecture - a prelude to 35th Kerala Science Congress organised by **KSCSTE Malabar Botanical Garden and Institute for Plant Sciences** on 03-02-2023 (PG students)

Experiential Learning Workshop on development of onsite detection kits for viruses and oomycetes infecting black pepper organized by **Indian Institute of Spices Research**, Kozhikode on 08-12-2022 (PG students)

Seminar- it's time for wetland restoration organized by **KSCSTE Centre for Water Resources Development and Management**, Kozhikode on 02-02-2023, as a part of observing World Wetland Day 2023.

IPR Awareness webinar BAUDDHIK 3.0 organized by **Patent Office**, Department for Promotion of Industry and Internal Trade under the National Intellectual Property Awareness Mission on 21-12-2022 (UG and PG students)



Under Graduate Level

- » Isolation and identification of probiotic bacteria from fresh chilli
- » Isolation, screening and molecular characterization of leaf blight disease causing bacterial strain from *Mangifera indica*.
- » Phytochemical analysis and antimicrobial study of some selected medicinal plants
- » Isolation, screening and molecular characterization of plant growth promoting bacteria from rhizosphere soil of *Amaranthus viridis*

Post Graduate Level

- » Evaluation of Eryptosis induced by Silver nanoparticles synthesized biogenically using *Epiphyllum* extract
- » Comparative assessment of Air Pollution Tolerance Index (APTI) of selected plants from two different locations in Kerala
- » Evaluation of Cytotoxic effect of silver nanoparticles synthesized by *Mikania* sp. extract
- » Larvicidal property of biogenically synthesized Silver nanoparticles using *Cycas* extract

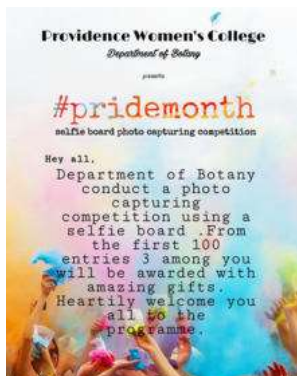
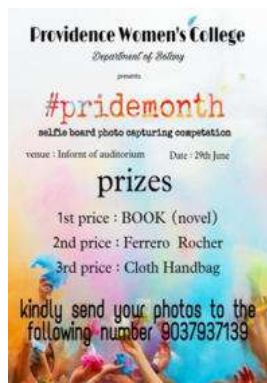
- » Phytochemical and antioxidant activity of leaf and seed extracts of White Turi (*Sesbania grandiflora* (L.) Pers.)
- » Allelopathic effects of aqueous leaf extract of *Azadiracta indica* L. Juss., *Lantana camara* L. and *Amaranthus retroflexus* L. on *Vigna Mungo* (L.) Hepper and *Vigna radiata* (L.) R. Wilczek.
- » Phytochemical and antioxidant activity of *Tinospora sinensis* (Lour) Merr.
- » Evaluation of total polyphenol and flavanoid content in the ayurvedic formulation Nalpamaram.
- » Determination of total polyphenol and flavanoid content in Dasapushpam, a group of culturally and medicinally significant herbs.
- » Determination of total polyphenol and flavanoid content in Dasapushpam, a group of culturally and medicinally significant herbs.
- » Effect of automobile pollution and assessment of Air Pollution Tolerance Index (APTI) in herbs
- » Assessment of the phytoremediation potential of *Alternanthera philoxeroides* towards heavy metals with a note on physiological and anatomical parameters at Maghuniathode, Kozhikode
- » Assessment of Air Pollution Tolerance Index (APTI) in urban roadside trees

COMPETITIONS ORGANISED



Photo capturing competition

using a selfie board in connection with Pride month (29 06-2023)



Logo designing competition

for Biodiversity Club. The logo was released by Dr KP Manju KSBB Dist. Coordinator



Poster making competition on the topic the 'life of Mendel and his discoveries' -on the occasion of the **200th birthday of Gregor John Mendel**, the Father of Genetics (22 July 2022).



Various competitions like **drawing, painting, poster making** etc. were organized for students of Varadur LP School Kannadikkal, Kozhikode during the occasion of Ozone Day to create awareness among the necessity of ozone layer protection among the young generations.



Dr. Jija Mathew memorial intercollegiate Quiz competition was organized on 27-03-2023. The theme of the competition was Biodiversity- Threats and conservation



FACULTY IN VARIOUS ROLES OUTSIDE THE CAMPUS



Delivering Talks

Dr. Minoo Dvakaran - Inaugural address 'Science for the peaceful tomorrow', at the National Science Day 'Candle', at Govt UPS Mutheri, Kozhikode, on 28.02.23



Dr. Minoo Dvakaran -Talk on 'The Transition - Student Induction Programme' Deeksharambh, 13 Sept 2022, at SAFI Institute of Advanced Study, Malapuram, Kerala,



Dr. Minoo Dvakaran - Talk on Nature Positive Initiatives at the Youth and Education Alliance Global Summit, organized by the University of Oxford and UNEP, 5 July 2022.



Judge for paper presentations

Dr. Minoo Dvakaran - Judge to the Paper presentation session at the International Conference cum Workshop 'Physiological and Molecular Mechanisms /Markers for abiotic stress tolerance in plants, University of Calicut, 27 Oct, 2022

Board Members in Universities and other institutions

Dr. Deena Meria Jose - Chairperson Board of Examiners MSc Botany 1&2 semesters (North Zone) University of Calicut

Dr. Minoo Dvakaran - Chairperson Board of Examiners MSc Botany 3&4 semesters (North Zone) University of Calicut

Dr. Deena Meria Jose & Sr. Pilty Peter A - Chairperson Member respectively of Board of Question paper setters, Kannur University

Dr. Deena Meria Jose - Chairperson Board of Examiners BVoc Organic farming, University of Calicut

Dr. Deena Meria Jose -Member of Board of Studies (UG & PG Botany) St. Joseph's College Devagiri (Autonomous) Kozhikode

Dr. Minoo Divakaran- Member of the Interview Board, as External Expert for selection of Project Assistants at KSCSTE-MBGIPS 10 Dec 2022

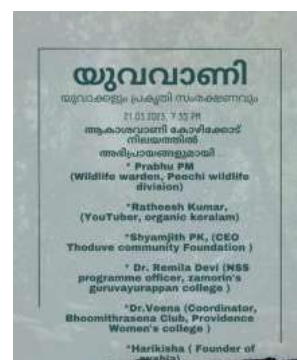
Quiz Master

Dr. Minoo Dvakaran - Quiz master at the All Kerala Botany Quiz Competition for the Prof BK Nayar Endowment Award, 17 Jan 2023, Dept of Botany, University of Calicut, Kerala



Radio Talk

Dr. Veena V - delivered a talk in All India Radio on the occasion of World Forestry Day 2023



Transferring subject knowledge to the benefit of the society

An exhibition 'Sanjeevani' of ecosystems, biodiversity, medicinal plants and applied aspects of Plant Science was organized on 1-2 Nov 2022



Established a medicinal plant garden at Govt. High School, Medical College Campus, Kozhikode during the month of October - November 2022. The beautification of the ornamental plants garden also was done along with this.



A seminar on underutilized leafy vegetable plants was organized on 6th December 2022, for women in the neighbourhood. Planting materials of the leafy vegetable crops were distributed. 18 women from the neighbouring places attended the programme.

An awareness program on the significance of ozone layer was organized for students of Govt. LP School Varathur on 16th September 2022.



EXTENSION

Transferring subject knowledge to the benefit of the society

Agrigram, a green initiative in collaboration with KITES INDIA Foundation was launched on 23-02-2023.



Seed distribution to students of Providence Women's College



Staff members of PWC

Seed distribution @ other institutions

Nearly 800 packets of Vegetable seeds were distributed to the students and teachers of a few neighbouring institutions



Govt. LPS Malaparamba



Christuraja ALP School Malaparamba



Residents Association Kannadikkal



Campaign 3

Agri Gram



GUPS Civil Station Kozhikode



Govt LP School Chevayur



Providence College of Teacher Ed.



Camp office of DIG & Commissioner of Police



AC Provincial House



Cholapurath AUP S Paroppadi



Govt. HSS Medical College Campus



Officials of Kites Foundation handing over the seed packets to students

A vegetable garden was set up by the 4sem and 2 sem UG students as a part of the Agrigram initiative.



Transferring subject knowledge to the benefit of the society



Know Your Tree



Provip-QR Providence Retrieval of Valuable Information on plants using Quick Response Code



An initiative under Know Your Tree campaign was launched on the occasion of World Environment day 2022. The programme was aimed at labelling the trees and shrubs in the campus with Boards carrying scientific name, common names in English and Malayalam and the family name. The boards also carry a QR code which is linked to authentic worldwide databases. The programme was launched by Ms. Bindu Amat (HoD of English) on 5th June 2022. All the trees and shrubs were identified and labelled with the involvement of UG and PG students.



Ext Provip-QR Extension of Provip-QR to other Institutions

All the trees and shrubs in the campus of **Govt High School, Medical College Campus Kozhikode** was identified and labelled under the 'Know Your Tree Campaign'. The initiative was launched in collaboration with Nature Club of the school.





Sharing the sense of responsible citizenship by conducting the Harithamithram Survey, thus being a part in the major project **Azhak** of Kozhikode Municipal Corporation - a mass initiative for zero waste, uplifting happiness index and attitudinal change in waste management of Kozhikode. This activity was taken up under the **UBA scheme of MoE, Govt of India**, an initiative to accelerate sustainable growth of rural India



Participated in the wall painting as a part of beautification of Kozhikode beach by District Tourism Promotion Council



Participated in an experiential learning workshop on the development of on site detection kits for viruses and oomycetes infecting black pepper on 08/12/2022





PRIZES AND SCHOLARSHIPS FOUNDED BY FACULTY

- Mr. **Sivaramakrishnan Memorial cash Prize** instituted by Ms. Akhila for the UG topper.
 - Ms. **T.C. Mary prize** for the topper in the UG Physiology paper.
 - Prize for **Co-curricular activities** of nature club.
 - **Dr. M. Shylaja prize** for commendable services in the department.
 - **Prof. TV. Kamalam, Prof.Elizabeth Joseph and Prof. Rosamma Joseph Prize** for outgoing UG students.
 - **Ms. T. Umadevi scholarship** for outgoing UG students
- **Mrs. Santha Divakaran Memorial cash prize** instituted by Dr. Minoo Divakaran for the topper in UG Biotechnology.
 - **Smt. Thressiamma Devasia memorial prize** instituted by Dr. Deena for the topper MSc Plant Physiology
 - **Dr. Jija Mathew memorial prize** for the topper in PG Cell biology paper

PROVIFLORA SCHOLARSHIPS & OTHER SUPPORT PROGRAMMES



- Scholarships instituted by '**Proviflora**', Botany Alumnae Association for UG and PG students.
- Scholarship instituted by '**Proviflora**' for a deserving student pursuing higher studies in Botany.
- Mrs.T.V.Kamalam Prize for earnest endeavor in every field founded by **students of 1991-92**.
- Anupama Memorial Endowment Scholarship instituted by the Botany **students 2004-'07 batch** for a deserving meritorious student of the Department of Botany.

An initiative of of donating books and other study materials by the passed out students to the College library



STUDENT WELFARE FUND

- Support for study tour, field trip etc.
- Support for procuring study materials, records and other stationary items etc.
- Support for project work



SKILL DEVELOPMENT PROGRAMMES

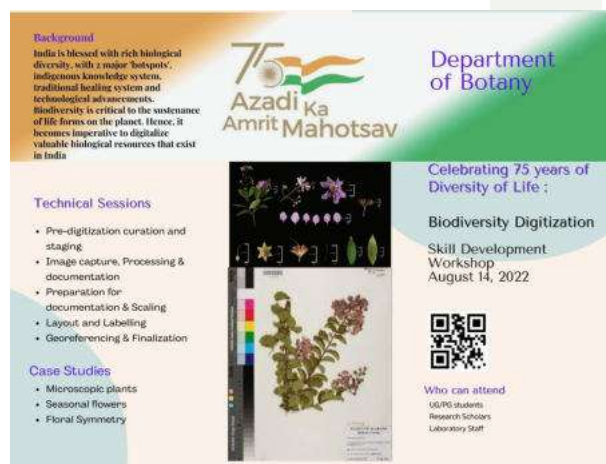
23-06-2022

Conducted a workshop on **Photoshop** for post graduate students and research scholars



21-06-2022

Training on **Yoga** for UG and PG students



14-08-2022

Skill Development workshop- **Biodiversity Digitization**- for UG & PG students, Research scholars and Laboratory staff, as a part of **Azadi ka Amrit Mahotsav**

CAREER GUIDANCE PROGRAMMES

23-06-2022

Orientation for JAM in collaboration with Alchemi for final year students

16-12-2022

Orientation for pursuit of higher studies and career in foreign universities by Mrs. Farhana Muhammadali KV, Research Scientist at FUJIFILM Diosynth Biotechnologies, UK



Placements abroad



Farhana Muhammadali KV
Research Scientist FUJIFILM Diosynth
Biotechnologies, UK



Ranimol
Community Centre Ranford Essex UK



Anaswara
R&D Specialist at Bayer Crop Sciences USA



Dr. Arathimol A
Project Scientist
CMLRE
(Ministry of Earth
Sciences) Cochin

Pursuing higher Studies in Foreign Universities

Placements- State Gov. sector



Sruthi P
Research Scholar
IRTA Spain



Ann Elizabeth Joseph
Master of Food Technology
University of Auckland,
New Zealand



Oshin P Joseph
Master in Biology
University of Coln, Germany



Deepika Deepak
MSc Food Tech &
Biotechnology,
Teesside University, UK



Sruthi Bharathan
Scientific Officers
Forensic Science Lab, Kerala Police Service



Megha Das
Plantation Corporation



Anjitha Thomas
Field Assistant
Plantation Corporation

Project Fellows

Assistant Professors on contract



Sugamya P
CWRDM
Kozhikode



Aiswarya Sreenivas
MBGIPS
Kozhikode



Haritha S
MBGIPS
Kozhikode



Nivetya R
MBGIPS
Kozhikode



Akshaya KK
IFGTB
Coimbatore



Saranya babu
Jayaprakash
Guest Lecturer
PWC



Alphy Sunny
Guest Lecturer
Nirmalagiri
College



Vinjusha N
Guest Lecturer
SN College Vatakara



Ruvyda
Guest Lecturer
SN College
Vatakara

Pursuing Research

Teachers in Sate Govt. Schools



Sruthi N Kumar
MG university



Geomol KK
Calicut
University



Archana V
Mysore
University



Haritha PK
CFTRI
Mysore



Sruthi
Bharathan
DBT RGCB
TVM



Theertha AP
ICAR IISR



Megha Das
ICAR IISR



Athulya
Sadanand
MBGIPS



Jaseela VP
MBGIPS



Silpa TP
HSST
GVHSS
Perumanna



Litna Jose
HSA
SVCCHS
Kozhikode



Athulya KC
HSA
Thrissur



Amrutha
Sasikumar
GHS
Panamaram

Placements- Private sector



Anjitha
Thomas
ZGC
Kozhikode



Navya CP
SJC Devagiri



Aparna
Prasad
SJC Devagiri



Naseeha CP
SJC Devagiri



Fathima
Rafieah NT
PWC



Dipija AP
PWC



Ayana KK
UC College
Aluva



Fathima
Nasreen



Aiswarya
lakshmi
Episorce Chennai



Meghna
Girish
MEMS School



Keerthana Das
Spring Valley
School



Shyni MP
Green Hills
Public School



Neema Scaria
Ideal Way
Ed Inst Dubai



Anu Shaju
Zygoe Academy

Pursuing Masters Degree in National Universities



Athulya M
Botany
Central University
of Kerala



Arsha K Aneesh
Botany
Calicut
University



Abhina P
Biotechnology
Calicut
University



Archana
Biotechnology
Calicut
University



Sreelakshmi P
Env. Science
Calicut
University



Souparnika C
Cytogenetics
Kerala
University



Veena
Vijayan
SKC Guruvayur



Akhila M
Botany
PWC



Akshaya N
Botany
PWC



Fathima Safa
KM
Botany
PWC



Kavya
Chandran
Botany
PWC



Nidha
Fathima V
Biology
SNG Chelannur



Rafeeda OM
Biology
SNG Chelannur



Anaswara
Biology
SNG Chelannur



Gayathri P
Botany
St.Xavier's
College Trichi




Fathima Luthfa
Botany
SJC Devagiri



Sneha Sherin KP
Botany
MG College
Mahe

ACHIEVEMENTS OF STUDENTS

HAFAEFA SHIRIN
3rd Sem BSc
Gold Medal
National Cycle Polo
Championship




ANU MARIA JOSEPH
(5th Sem BSc)
Summer Research
Fellowship Programme
Indian Academy of
Sciences



ARYA DINESH
(3rd Sem BSc)
2nd place - Campus Jockey contest
conducted by Club FM



II Prize
JINFA NAHVIN PG & SHYAMA K (2 Sem MSc)

III Prize
ADITHYA & ANAMIKA P BABU (4 Sem BSc)

Dr. Jija Mathew memorial Intercollegiate Quiz Competition

ACHIEVEMENTS OF ALUMNAE



SRUTHI N KUMAR
School of Bioscience
MG University
Best Poster Award
Kerala Science Congress
2023



THEERTHA MD
CUBE Intern HBCSCE Mumbai
**Obtained CUBE Kishore Bharati
Grant 2022**
Presented a paper in the 4th
Conference of Indian Society of
Evolutionary Biologists



ASWATHI P
Cell & Molecular Biology Div.
Dept. of Botany
University of Calicut
**Successfully
completed PhD**



GEOMOL KK
Research Scholar
Dept. of Botany
University of Calicut
Qualified GATE

STUDENT AMBASSADORS OF NATURE POSITIVE UNIVERSITIES ALLIANCE

A collaborative initiative of University of Oxford

Activities

- Food event: Youth engagement in Green Cities 20 Oct 12-14 CEST
- COP15 workshops / developing Student Toolkit
- NPU January Student Ambassadors' meeting (Tue 31st)
- Nature Positive lecture (Fri 27th)
- Nature Positive and Sustainable food systems lectures
- Interdisciplinary Conservation Network 2023
- Student Ambassadors March meeting: Plastics and zero waste
- International day of Forests – Zoom event (YOUNGO)
- Nature Positive Ambassadors Meeting
- Ecological restoration and rewilding our campuses



FACULTY DEVELOPMENT PROGRAMMES ATTENDED



Dr. Deena Meria Jose : One-week Faculty Development Programme in '**Crossdisciplinarity in Research**' organized by the Faculty Development Centre of the Kerala State Higher Education Council from 19/01/2023 to 24/01/2023.

Dr. Minoo Divakaran : One-week Faculty Development Programme in '**Crossdisciplinarity in Research**' organized by the Faculty Development Centre of the Kerala State Higher Education Council from 19/01/2023 to 24/01/2023.

Sr. Pilty Peter A: Refresher Course in **Environmental Science** (Multidisciplinary) conducted by the UGC Human Resource Development Center, University of Calicut from 13/07/2022 to 26/07/2022

Dr. Veena V : One Week National Level Online Faculty Development Program on **Outcome Based Education** (OBE) organized by the IQAC of JPM Arts and Science College, Kanchiyar, Idukki in association with IPSR Solutions limited, Kottayam from 16/02/2023 to 22/02/2023.

Dr. Archana E R : One Week National Level Online Faculty Development Program on **Outcome Based Education** (OBE) organized by the IQAC of JPM Arts and Science College, Kanchiyar, Idukki in association with IPSR Solutions limited, Kottayam from 16/02/2023 to 22/02/2023.

Dr. Savitha Rabaque C : **Faculty Induction Program** conducted by UGC-Human Resource Development Centre, from 16 /11/2022 to 15/12/2022.

DAYS OBSERVED



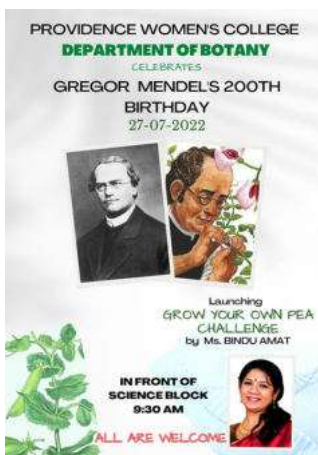
World Environment Day 05-06-2022

On the occasion of WED 2022, saplings were planted on the campus. The tree planting drive was inaugurated by Mrs. Bindu Amat, HoD of English. Saplings grown in ecofriendly coir bags were used for planting. Students' activity in connection with the UN Decade of ecosystem restoration was uploaded on the webpage of Nature Positive Universities, a collaborative initiative of University of Oxford



Vanamahotsav 07-07-2022

The annual tree planting festival was observed over a period of week starting from 1st to 7th July 2022 by distributing and planting saplings.



Bicentennial of Gregor Johann Mendel's birth 22-07-2022

Bicentennial of Gregor Johan Mendel, the Father of Genetics was observed on 22 July 2023. Various programmes like poster making competition, presentation on the life of Mendel etc. was organized. A 'Grow your pea' Challenge was launched during the occasion

World Mangrove Day 26-07-2022

World Mangrove Day was observed on 26 July 2022 by organizing an awareness programme on the conservation of mangroves at the Sarovaram Biopark, Kozhikode



DAYS OBSERVED

World Ozone Day 26-07-2022

World Ozone day was observed on 16 September 2022 by organizing an awareness programme at Varathur LP School Kannadikal, Kozhikode. Significance of the ozone layer and the harmful effects of ozone depletion was discussed. A few competitions also were conducted



World Wetland Day 02-02-2023

World Wetland Day was observed by conducting a nature walk to Punchavayal Wetland Kannadikkal to understand the ecosystem services of the wetlands



World Forestry Day 21-03-2023

World Forestry Day was observed during the Nature Camp at Vanaparvam Forest area held on 22-03-2023. Walking into the forests to understand the forest ecosystem was a memorable experience to the students



World Water Day 22-03-2022

World Water Day was observed during the Nature Camp at Vanaparvam Forest area held on 22 -03-2023. Awareness session on conservation of water was conducted at the Engapuzha river bank



World Meteorological Day 23-03-2023

World Meteorological Day was observed by participating in a discussion organised by the Green Kerala Movement at Tali pond area, Kozhikode on 22-03-2023



VISION To have environmental concern in education by undertaking awareness and action programmes for environmental protection

MISSION/OBJECTIVES

- ☐ To encourage college students appreciate environment and environmental issues of the locality
- ☐ To provide environmental education opportunities for college students and involve them in addressing environmental issues of the locality
- ☐ To utilize the enormous manpower available with college students as conduits for awareness of the society
- ☐ To make students practice & advocate sustainable life styles



Tree planting drive
Vriksharopan 22 in
connection with World
Environment Day 2022

Tree planting and
distribution of saplings
in connection with
Vanamahotsav 2022.



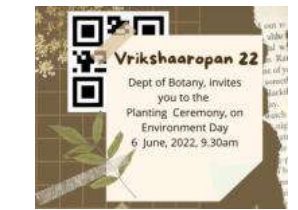
World Ozone Day was celebrated by conduction awareness programme at
Varathur LP School on 16th September 2022



Activities to inculcate environmental
concern in education by undertaking
awareness and action programmes to

Combat climate
change

Conserve the
forest wealth



Vrikshaaropan (വൃക്ഷാരോപണ) at
Providence Womens College,
Kerala India

Launched on June 5th 2022, as part of the
Environment Day, the Principal, Local Manager
and students joined a tree-planting drive.
Additionally a new initiative was launched titled
'Providence Retrieval of Valuable Information
on Plants - using Quick Response codes,'
whereby, name boards detailing each plant that
was planted, equipped with QR codes, were
installed to educate students and visitors about
the importance of each plant. Eventually it is
hoped to equip each plant on campus, with
such boards.



Dr. Veena FIC Of
Bhoomithrasena
delivered a radio
talk in AIR on the
occasion of World
Forestry Day

VISION To ensure safe potable water for all

MISSION/OBJECTIVES

- To proclaim the college as 'Water Sanitation and Information Centre' under CCDU
- To generate a sensitive and responsible attitude towards water among people through constant professional endeavors with diverse intervention strategies, which demands different devices, advanced technologies, improved designs and skills.
- To build a behavioral change among society which results in the reduction of loss of water, control and prevent contamination and enhance water quantity, enrich water quality and assure water prosperity in a sustainable manner

FIC: Dr. Archana ER



**World
Wetland Day
2 Feb 2023.**



As a part of observing World Wetland Day, students visited Punchavayal wetland Kannadikkal on 7th feb 2023, to experience the significance of wetland ecosystems. Diversity of wetland flora and fauna and the ecological roles played by the wetland in maintaining the ecosystem balance in the area was noted.



**World Water Day
22-03 2023.**

4th sem PG students attended a meeting organized by River Protection Council Kerala to discuss on conservation and sustainable use of water.



As a part of observing World Water Day 2 sem PG students visited Vanaparvam Biodiversity Park on 22-03-2023. A session on conservation and sustainable use of water was organized by Kerala Forest Department

As a part of observing World Wetland Day, students visited CWRDM and attended a seminar- its time for wetland restoration on 2 Feb 2023. They also visited the water heritage museum at CWRDM





VISION

To conserve and enhance local biodiversity

FIC: Sr. Pilty Peter A

MISSION/OBJECTIVES

- To assess the local biodiversity
- To conduct awareness programmes on environment and biodiversity conservation



Dr. Manju KP, KSBB District Coordinator visited the Department to evaluate the activities of the Club



Harvesting mango ginger and arrow root from the vegetable garden

Marinating plant repositories like Santhisthal (for Endemic fruit trees, Star plants garden, medicinal plant garden, Vanilla gene bank, Aloe gene bank etc.



Campus exploration as a part of updating **Campus Biodiversity Register**. Plants were recorded and photographed

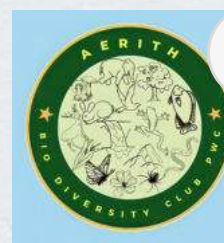


Establishment of Musa gene bank in the campus. Plantlings of 100 varieties of Banana were planted



A seminar on underutilized leafy vegetables was organized under the Biodiversity awareness & Extension programme of Kerala State Biodiversity Board (KSBB) on 6th Dec 2022.

Biodiversity Exhibition for students from neighbouring schools



Prize winning logo of the Logo designing competition



NATURE CLUB

VISION Protection of Our Environment

FIC: Dr. Savitha Rabeque C

MISSION/OBJECTIVES To inculcate a deep love and understanding for our natural environment in today's young women.

*“Diversifying diet:
Go traditional,
local and natural”*

An initiative to spread awareness among young generations about the nutritive value and health benefits of pulses based natural diets and traditional and local fruits.



'Grow your pea' Challenge



Planting Pappayas



**Welcoming freshers
with a sapling**

*Back to those
good old days*



**Onam celebration with
flower carpet**



Nutritional significance and health benefits of Onasadya were discussed. The source plants of the ingredients and their taxonomic information also were collected



**Established a garden of traditional
and local leafy vegetable plants**



*“I love Nature
as much as
I love Myself”*

Nature Camp

A nature Camp was organised in collaboration with Kerala Forest Department, Kozhikode Division on 22 March 2023 as a part of observing World Forestry Day and World Water Day. The camp was held at Vanaparvam Biodiversity Centre, Engapuzha. As a part of the camp, forest exploration and classes on the significance of forests were organized. Mr. Suresh, Section Forest Officer was the resource person.



**Nature Camp at Vanaparvam
Biodiversity Park**



Green initiatives under various clubs supported by Govt agencies

- Mechanisms to reduce waste
- Involving in waste management activities of the Kozhikode Municipal Corporation
- Saying no to plastics
- Planting trees
- Promoting biofertilizers and biopesticides
- Awareness programs to combat climate change
- Activities for conserving biodiversity
- Activities for conserving water
- Promoting healthy natural diet
- Ensuring good health and well-being - promoting vegetable gardens

Students' activity in connection
with the UN Decade of
ecosystem restoration being
uploaded on the webpage of
Nature Positive Universities, a
collaborative initiative of
University of Oxford



**Vrikshaaropan (वृक्षादीपण) at
Providence Womens College,
Kerala India**

Launched on June 5th 2022, as part of the
Environment Day, the Principal, Local Manager
and students joined a tree-planting drive.
Additionally a new initiative was launched titled
"Providence Retrieval of Valuable Information
on Plants - using Quick Response codes",
whereby, name boards detailing each plant that
was planted, equipped with QR codes, were
installed to educate students and visitors about
the importance of each plant. Eventually it is
hoped to equip each plant on campus, with
such boards.



3 GOOD HEALTH AND WELL-BEING



- **Clean City Campaign**- Participated in the Azhaku Project of Kozhikode Municipal Corporation.
- **Agrigram Campaign**- initiative to establish home kitchen gardens

- **Healthy mind and body campaign**- Skill training in Yoga
- Promoting the use of underutilized leafy vegetable crops
- Certificate course in Mushroom culture Technology
- Certificate course in Biofertilizer technology
- Cu Tab as post covid immunity booster
- Marinating Santhisthal- a repository of endemic fruit trees
- Maintaining a medicinal plants garden on the campus
- Establishing medicinal plants garden in other institutions
- Azolla Restoration Technology
- Learning the development of on site detection kits for viruses and oomycetes infecting black pepper

6 CLEAN WATER AND SANITATION



- Observing World Wetland Day
- Observing World Water Day
- Water Literacy programmes
- Awareness programmes on water sanitation and water conservation

13 CLIMATE ACTION



- **Save the planet Campaign**- Observing World Ozone Day
- Awareness programmes on the significance of Ozone layer
- Observed meteorological Day

15 LIFE ON LAND



- Seminar on stress management in plants
- Know your tree campaign- Provip-QR: Enhancing awareness on plants by keeping name boards with QR code
- Jaljeevan- an initiative to conserve aquatic medicinal plants
- Conserving plants by establishing plant repositories like Star plants garden, Musa gene bank, Vanilla bene bank, Tulsi gene bank, Aloe gene bank etc.
- Observing Vanamahotsav- tree planting campaign
- Observing World forestry Day- Nature camp to understand the importance of forests
- Observed World Mangrove day- awareness programmes on conservation of mangroves.
- Certificate course in Leafy vegetable cultivation
- Maintaining campus Biodiversity Register
- Quiz programmes

2022-23 NEWSLETTER

DEPARTMENT OF BOTANY
PROVIDENCE WOMEN'S COLLEGE KOZHIKODE



ANNUAL NEWSLETTER - DEPARTMENT OF BOTANY
COMPILED BY: DR. DEENA MERIA JOSE
PUBLISHED BY: DEPARTMENT OF BOTANY
PROVIDENCE WOMEN'S COLLEGE, KOZHIKODE 673009, KERALA, INDIA