REPORT ON

EXTENSION ACTIVITY

Documentation of Medicinal Plants in the campus of AMUP School Kumminiparamba

ORGANIZED BY

DEPARTMENT OF BIOCHEMISTRY

E.M.E.A. COLLEGE OF ARTS AND SCIENCE

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DEPARTMENT OF BIOCHEMISTRY EMEA COLLEGE OF ARTS AND SCIENCE, KONDOTTY

(Re-accredited with 'A' Grade by NAAC)

EXTENSION ACTIVITY

DOCUMENTATION OF MEDICINAL PLANTS

AMUP SCHOOL KUMMINIPARAMBA



Introduction

On 7 March 2024, the Department of Biochemistry at E.M.E.A. College of Arts and Science organized an extension activity aimed at documenting the medicinal plants on the campus of AMUP School, Kumminiparamba. The activity involved second-year biochemistry students, providing them with hands-on experience in identifying and understanding the medicinal properties of local flora. This initiative aimed to foster awareness about the importance of medicinal plants and their role in traditional and modern healthcare systems.

Objectives

The primary objectives of the activity were:

- To engage students in the field identification and documentation of medicinal plants.

- To understand the medicinal properties and traditional uses of locally available plants.

- To raise awareness among the school community about the importance of conserving medicinal plants.

- To link theoretical knowledge gained in the classroom with practical, realworld applications.

Participants

The activity was conducted by second-year biochemistry students from E.M.E.A. College of Arts and Science, under the supervision of faculty members

from the Department of Biochemistry. The students were divided into teams, each responsible for identifying, collecting data, and documenting different medicinal plants present on the school campus.

Methodology

The following steps were followed for the documentation process:

1. Field Survey: Students conducted a survey of the AMUP School campus, identifying various plant species with potential medicinal value.

2. Identification: Plants were identified using botanical guides, apps, and expert consultations. Key features such as leaves, flowers, and stems were closely observed.

3. Data Collection: Each plant was documented with respect to its local (Malayalam) name, scientific name, common English name, and traditional medicinal uses.

4. Photographic Documentation: Photographs of the plants were taken to aid in visual identification and future reference.

5. Analysis of Medicinal Properties: Based on literature reviews and prior knowledge, the medicinal properties of each plant were analyzed and documented.

List of Documented Plants

The following plants were documented during the activity, along with their scientific names, local names in Malayalam, common English names, and medicinal properties:

Conclusion

The extension activity at AMUP School was a successful endeavor in documenting valuable medicinal plants and engaging students in experiential learning. It not only provided hands-on experience but also emphasized the importance of conserving medicinal plant species. The knowledge gained through this exercise will contribute to both academic and practical aspects of the students' education in biochemistry and related fields.

Sl.no	Scientific Name	Common Name	Medicinal Properties
1.	Ageratum houstonianum	കുഞ്ഞിച്ചിരക Common Floss Flower	Anti-inflammatory, antimicrobial
2.	Albizia saman	പൂവിരശു , <u>മഴമര</u> ം Rain Tree	Antioxidant, anti-diabetic
3.	Alternanthera brasiliana	ചോരച്ചീര Ruby Leaf	Antibacterial, anti-inflammator
4.	Alternanthera sessilis	<u>പൊന്നാങ്കണ്ണി</u> Sessile Joyweed	Antioxidant, anti-inflammatory
5.	Amaranthus blitum	കാട്ടുചീര Purple Amaranth	Rich in vitamins, detoxifying
6.	Artocarpus heterophyllus	പ്ലാവ് Jackfruit	Antioxidant, anti-ulcer,

			antidiabetic
7.	Azadirachta indica	ആര്യവേപ്പ് Neem	Antibacterial, antifungal, antiparasitic
8.	Bougainvillea berberidifolia	കടലാസ്സുചെടി Bougainvillea	Antidiabetic, anti- inflammatory
9.	Callisia fragrans	കാലിസിയ Basket Plant	Anti-inflammatory, antioxidan
10.	Carica papaya	പപ്പായ Papaya	Antioxidant, digestive aid, ant inflammatory
11.	Manihot esculenta	കറപ്പ Cassava	Anti-inflammatory, antidiarrheal
12.	Capsicum annuum	മുളക് Chilli	Analgesic, antioxidant, anti- inflammatory
13.	Chromolaena odorata	കമ്യൂണിസ്റ്റ് പച്ച Jack in the Bush	Antimicrobial, wound healing
14.	Citrus limon	ചെറുനാരങ്ങ Lemon	Antioxidant, detoxifying, digestive aid
15.	Cucurbita pepo	മത്തൻ Pumpkin	Antidiabetic, antioxidant
16.	Datura	වුණුර Jimson Weed	Analgesic, antispasmodic (tox in large amounts)
17.	Dracaena trifasciata	മരൽ Snake Plant	Air purifier (traditional use for respiratory issues)
18.	Ficus fraseri	ചെരാല	Antioxidant, anti-inflammator

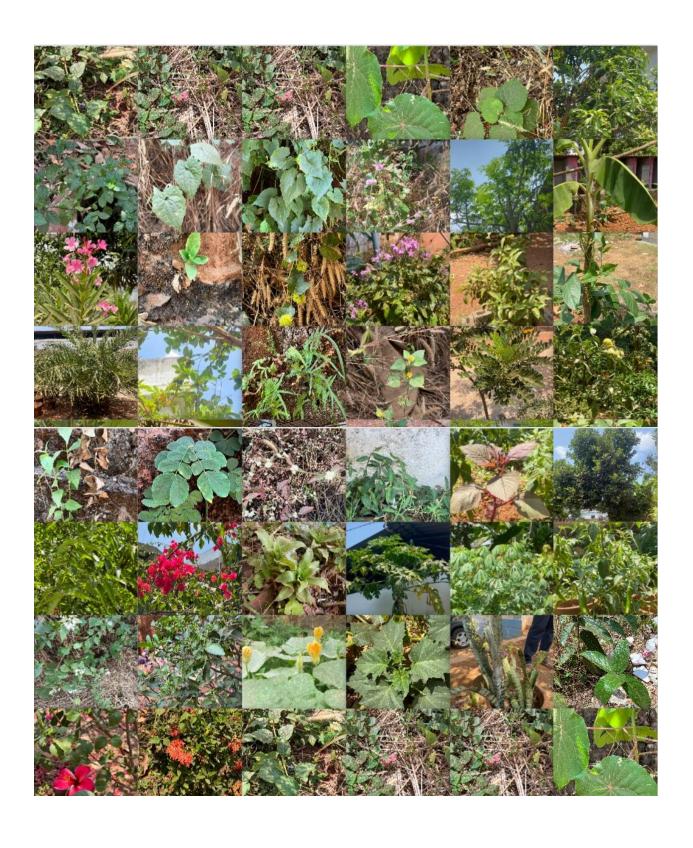
		Ficus	
19.	Hibiscus rosa	ചേമ്പരത്തി Hibiscus	Antioxidant, reduces blood pressure
20.	Ixora coccinea	ചെറ്റിപൂ Jungle Geranium	Antibacterial, anti- inflammatory
21.	Lantana camara	അരിപ്പൂച്ചെടി Lantana	Antimicrobial, anti- inflammatory (caution toxic in excess)
22.	Macaranga peltata	വട്ട Shield-Leaf Tree	Antibacterial, antifungal
23.	Mangifera indica	മാവ് Mango	Antioxidant, anticancer, immune booster
24.	Mentha arvensis	പുദിന Mint	Digestive aid, antispasmodic
25.	Mikania micrantha	ധ്യതരാഷ്ട്രപ്പച്ച Bitter Vine / Climbing Hempvine	Antibacterial, wound healing
26.	Mimosa pudica	തോട്ടാവാടി Touch Me Not	Antimicrobial, wound healing antidiabetic
27.	Moringa	മുരിങ്ങ Drumstick Tree	Antioxidant, anti- inflammatory, nutrient-rich
28.	Musa acuminata	എത്തപ്പഴഠ Banana	Antioxidant, digestive aid, antiulcer

29.	Nerium oleander	അരളി Oleander	Anticancer, cardiotonic (toxic in large amounts)
30.	Passiflora edulis	പാഷൻ ഫ്രൂട്ട് Passion Fruit	Sedative, antianxiety
31.	Pentas lanceolata	Egyptian Star Cluster	Antibacterial, wound healing
32.	Persea americana	അവക്കാഡോ Avocado	Antioxidant, anti- inflammatory, heart health
33.	Phaseolus vulgaris L.	Common Beans	Antidiabetic, cholesterol- lowering
34.	Phoenix dactylifera palm	ഈന്തപ്പഴo Date Palm	Antioxidant, energy booster, anti-inflammatory
35.	Psidium guajava	പെരയ്ക്ക Guava	Antidiarrheal, antidiabetic, antioxidant
36.	Pteris vittata	Ladder Brake (Fern)	Antibacterial, detoxifying
37.	Sida urens	വലാങ്കുറുന്തോട്ടിPri ckly Fanpetals	Anti-inflammatory, antioxidant
38.	Simarouba glauca	ലക്ഷ്കിതരു Paradise Tree	Anticancer, antimicrobial
39.	Solanum lycopersicum	തക്കാളി Tomato	Antioxidant, heart health
40.	Solanum melongena	വഴുതന Eggplant / Brinjal	Antioxidant, lowers cholesterol

41.	Tradescantia sp athacea	മൂഞ്ചിയച്ചിര Moses in the Cradle	Anti-inflammatory, antibacterial
42.	Trema orientalis	ആമത്താളി Indian Charcoal Tree	Antibacterial, digestive aid
43.	Tridax procumbens tridax	ഒടിയൻപച്ച Tridax Daisy	Wound healing, antimicrobial







Outcomes

- Student Engagement: The activity enabled students to apply their classroom learning in a real-world setting. By identifying and documenting medicinal plants, they developed practical skills in botany and pharmacognosy.

- Conservation Awareness: The event raised awareness about the importance of preserving medicinal plants and biodiversity within the local community, including the students and staff of AMUP School.