# **ACTIVITY REPORT 2023-24**

**FACULTY:** Science **DEPARTMENT:** Botany

NAME OF THE	Outdoor Activity - Educational visit of B.Sc. (H) Semester IV
ACTIVITY:	Students to 'Sunder Nursery Heritage Park' on 05 April, 2023

DATE	FACULTY	DEPARTMENT/ COMMITTEE	COORDINATORS NAME
05/04/2023	Botany	Department of BOTANY	Teacher-In-Charge  Dr. Shukla Saluja  Event Coordinators –  Dr. Pamil Tayal  Dr. Shweta Sharma
TIME	VENUE	NUMBER OF PARTICIPANTS	NATURE (INDOOR/OUTDOOR)
1:00 PM	Sunder Nursery Heritage Park	31	Outdoor

# **BRIEF INFORMATION ABOUT THE ACTIVITY:**

TOPIC/SUBJECT OF THE ACTIVITY	Field Visit to Sunder Nursery to learn about medicinal value of different Medicinal Plants of Delhi.
OBJECTIVES	Going to a field trip enhances student's critical thinking skills and gives them a chance to think about a topic or theme from a different prospective. Sunder Nursery is a park of great plant

	varieties and there are various trees that are just found there, the main objective of conducting an Educational Field trip for students is to reinforce experiential and contextual learning, better understanding about medicinal importance of plants related to traditional system of medicine.
METHODOLOGY	Dr. Pamil Tayal and Dr. Shweta Sharma elaborate about different medicinal Plants found there and also explain about their morphology, active constituents and importance in the field of Pharmacy.
OUTCOMES	Educational trips outside the classroom are vital when it comes to experiential learning. As the students get to know the varieties of medicinal plants closely, they become more respectful and empathetic towards plants as well as their surroundings.

# PROOFS AND DOCUMENTS ATTACHED:

Notice &	Student List of	Activity	Photos
Letters	Participation	Report	
<b>√</b>	✓	✓	✓

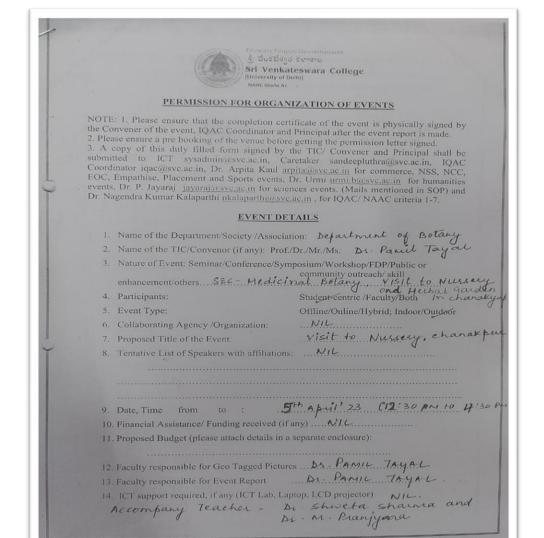
Dr. Pamil Tayal

Dr. Shweta Sharma

Dr. Pamil Tayal

IQAC Document No.: IQAC/SVC/ 2022-2023/ Botany/Outdoor/ 03	Criterion No: II, III, VII
Department File No.: Botany/2022-2023/ Outdoor Activity/ PT	IQAC File No. SVC/2022-2023

## PERMISSION LETTER FOR ORGANIZING THIS TRIP:



15. Caretaker support required (tables, chairs, public addressing system, sanitation, manpower assistance) NIL

16. Room requirement (Seminar/ any other) ... NIL

Name & Signature of TIC/Convenor

D1. PAMIL TAYAL

Date: 24<sup>th</sup> March 23

Date: 29/3/1013

# STUDENTS LIST:

SBH:-	sec medicinal Botany
Sen	rester - IX
visit to	Nursery in chanakya Puri
list of students.	of B.sc. (H) Botany (sen IV), visitir
the nursery on 4	to April' 2023.
- I II WOOV OV	20) Sornjana
2) Priya	27) POOJA
3) Aditya	28) Sheekai
(4) Kareeha	29) Duye 30) snjali
5) akriti	SO) Infali
6) dnanya	31) Allshot
7) Balmikund	
S) Dipti	
9) Shriya	
10) dyfu	
11) Syush	
12) sichlya 13) sonal	
14) Aditi Raj	
15) Sukriti	
16) Supriyo.	
(7) Aditi Kal/Khur	a
(8) Prarthna	
(9) Kritagya	
20) Padma"	
21) Chandranshu	
22) Pawani	
23) onubha	
23) onubha 24) Priyanka 25) Priyanshu	

#### ACTIVITY REPORT

Sunder Nursery is a large park located in the heart of Delhi, and is a home to a diverse array of flora and fauna. The park is spread over 90 acres and is known for its rich biodiversity that includes more than 300 plants of tree species, shrubs and plants; 80 species of birds and wide variety of butterflies, insects and small animals. The park is home for several endangered species including Indian flapshell turtle and the painted stork. In addition to its natural beauty, Sunder Nursery is also known for its historic significance, as it houses several ancient monuments, toms and maintained gardens of Mughal era. Overall, Sunder Nursey is a prime example of how a park can serve as a sanctuary for flora and fauna; while also provide recreational and educational opportunities for visitors.

As we reached at Sunder Nursery, there were many different species of plants. We visit Herbal garden which is full of medicinal plants such as *Mentha*, *Trachyspermum ammi*, Rose, *Bacopa*, *Origano*, *Madhuca indica*, *Ocimum sanctum*, *Catharanthus roseus* and many other plants. Other than these, there were many oranamental plants including *Balsam*, *Coreopsis*, *Cosmos*, *Gaillardia*, *Portulaca*, *Saliva*, *Zinnia* etc. We observed a wide variety of flowering plant gardens such as rose garden with different varieties, marigold, dahlia and bougainvillea, which added a splash of colours to the garden. Strolling through the astonishing heritage sites, we came across the exclusive Pink cedar in Delhi. Distant from native plants like shisha, guava and chalta, a few of the exotic species set up in the nursery are badminton ball tree, tun, Brazilian ironwood, whistling pines, and colville's glory. While 20 acres of the garden are utilized for cultivating nursery beds, another r30 have been devoted to establishing a biological diversity zone. We studied about a small created wetland inside the heritage site and fountain as well.

Different Medicinal Plants observed in the field with its medicinal values and active constituents are as follows:

## 1. BALSAM

Botanical name –*Impatiens balsamina* Family-Balsaminaceae Common Name - Rose balam

#### Medicinal uses

- 1. Juice extracted from plant leaves was used to cure warts and snakebite. The flower was used in treating burns.
- 2. In korea, impatiens plants known as Bongeonhwa dae have been used as a remedy for constipation and gastritis in folk medicine.
- 3. In asia ,the garden balsam has been used to treat ailments such as rheumatism, fractures etc. Use as dye; In southeast asia ,it's used for making dyes.
- 4. Balsam leaves were crushed to colour fingernails on the day of shrawan sankranti.

5. As an ornamental plant for designing theme based gardens such as butterfly garden, ornamental garden.

## 2. Coreopsis

Botanical name – Coreopsis grandiflora

Family –Asteraceae

Common Name - tickseed

## Medicinal uses

- 1. Amerindians used root tea for diarrhea and as an emetic.
- 2.Dried tops in a tea used to strengthen the blood.
- 3. Boiled plants to make a drink for internal pains and bleeding.

## Use a food

1. Flower boiled in water makes a red liquid used as a beverages.

## Uses as ornamental

- 1. Widely cultivated as an ornamentals in common nurseries and herbal gardens.
- 2. It's used to decorate the fences of the garden and acts as an attractant for the nectar by bees, butterflies, insects and birds .

#### 3. Cosmos

Botanical name - Cosmos bipinnatus

Family - Asteraceae

# **Medicinal uses**

- 1. It's exhibits highest anti-oxidant activity.
- 2. It's has anti-diabetic properties because it's help in reduction of lipid and plasma glucose.
- 3. Anti-hypertensive, stroke volume amplitude induced by adrenaline.
- 4. Anti-inflammatory, induced by carrageenam.
- 5. Exhibit Anti-microbial and anti-fungal properties, significantly inhibits the growth of microbial strains.

## 4. Gaillardia

Botanical name- Gaillardia grandiflora.

Family-Asteraceae

Common name-Blanket flower

## **Medicinal uses**

- 1. Tea of root for gastroenteritis.
- 2. Chewed powder root applied to skin disorders.
- 3. Sore nipples of nursing mothers bathed in tea made from plants.
- 4. It's also used for sore eyes.

## 5. Portulaca

Botanical name – Portulaca grandiflora

Family- Portulacaceae

Common Name - Twleve o'clock plant

## **Medicinal Uses**

- 1. The entire plant is depurative.
- 2. It is used in the treatment of hepatitis, cirrhosis of the liver with ascites, swelling and pain in the pharynx.
- 3. The fresh juice of the leaves and stems is applied externally as a lotion to snake and insect bites, burns, scalds and eczema.

#### 6. Sadabahar

Botanical name - Catharanthus roseus

Family - Apocynaceae

Common name - sadabahar, Periwinkle

## **Medicinal Uses**

- 1.Sadabahar flowers are rich in flavonoids, alkaloids, carbohydrates & phytochemicals like vinblastine & vincristine, vincardine that are useful in conditions such as cancer, diabetes, high blood pressure & stroke. Because of active constituents the plants is also called as anti-cancerous plant.
- 2.Sadabahar plants also having antimicrobial, healing properties. sadabahar actively heals wounds and prevents skin infections.
- 3. Sadabahar leaves and flower also using for making facial mask. Sadabahar leaves are used to make juice and consumed.

## 7. ZINNIA

Botanical name - Zinnia elegans

Family - Asteraceae

Common name- Youth and age, elegant zinnia

## **Medicinal Uses**

- 1. Zinnia species are used in folk medicine for the treatment of Malaria and stomach pain.
- 2. It is also used as hepeto-protective, antiparasitic, antifungal & antibacterial agents.
- 3. Zinnia is suitable for oily skin, as it helps to contract and open up the skin pores.
- 4. In victorian culture, gifting someone with zinnia means that you consider the person your close friend.

#### 8. Sunflower

Botanical name -Helianthus annuus

Family –Asteraceae

Common name – surajmukhi

## **Ornamental uses**

- 1.It use as ornamental due to beautiful flower that such a beautiful sight to behold either growing in the yard or as cut flowers in a vase.
- 2. It's used to make jewellary and vase and sometimes as in gifts also.

## **Edible Properties**

- 1. Sunflower are used to make vegetable oil, considered to be healthier due to low in saturated fat. Thus, the oil is largely used for cooking and baking.
- 2. The tender leaf petioles, seed and flowers are edible.
- 5. The seeds are used to extract edible oil, which is a very rich in vitamin E.

#### **Medicinal Uses**

- 1. The sunflower utilized by the Europeans as a remedy for pulmonary affections.
- 2. A preparation of the seeds has been widely used for cough and cold.
- 3. In the Caucasus the seeds have served as a substitute for quinine in the malaria.
- 4. The paste of sunflower seeds used for the treatment of skin disorder.
- 5. Leaves are expectorant, diuretic and astringent.
- 6. The intake of sunflower leaf tea helps to reduce fever.
- 7. The poultice of leaves is applied on sores, spider-snake bites and the swelling.

## Geo-tagged Pictures clicked during the visit:

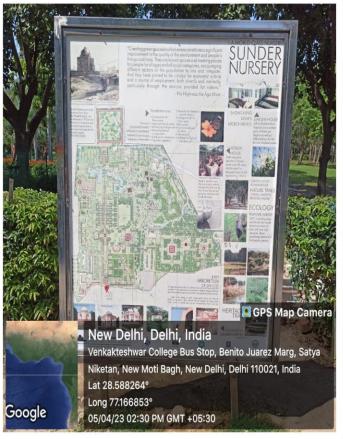


The group of students with Faculty inside the Sunder Nursery









Geographical Location of the Heritage Site



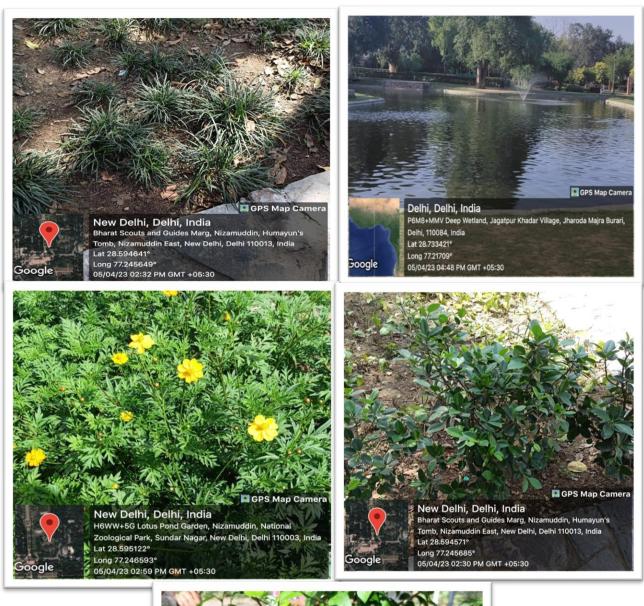
# **CERTIFICATE**

This is to certify that the **Visit to Sunder Nursery and Herbal Garden** was successfully conducted on 5<sup>th</sup> **April 2023** from 1:00 pm to 4:00 pm by <u>Dr. Pamil Tayal, Department of Botany</u> in the (Online/Offline/Hybrid) mode and its event report has been submitted to IQAC for records.

Event In-Charge

/ IQAC Coordinator

Coordinator, IQAC Sri Venkateswara College (University of Delhi) Dhaula Kuan, New Delhi-110021 Principal
PRINCIPAL
Sri Venkateswara College
(University of Delhi)
Dhaula Kuan, New Delhi-110021





Medicinal Plants studied in the garden