

# **GREEN AUDIT REPORT 2020-21**

## **GOVT. NAVEEN COLLEGE, JANAKPUR, DISTT. KOREA (C.G.)**



**SUBMITTED TO**

**Internal quality assurance cell as on  
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**INTRODUCTION:** - Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of various establishments. It aims to analyze environmental practices within and outside of the concerned sites, which will have an impact on the eco-friendly ambience.

Green audit can be a useful tool for a college to determine how and where they are using the most energy or water or resources; the college can then consider how to implement changes and make savings. It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization plan. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education, it could also be stated that institutional self-enquiry is a natural and necessary outgrowth of a quality educational institution. Thus it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent.

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric carbon-di-oxide from the environment. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all

Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

In recent time, the Green Audit of an institution has been becoming a paramount important for self-assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. Many institutions undertake lot of good measures to resolve these problems but are not documented due to lack of green documentation awareness. All this non-scholastic efforts of the administrations play an important role in ensuring the green quotient of the campus is intact.

**OBJECTIVE:** - The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. Green audit has become very important which shows the self-assessment of the institution present environmental issues as well as their management in a very sustainable way. **Govt. Naveen College Janakpur** is very much active in this aspect and we are constitutionally putting efforts to keep the campus eco-friendly which effects on student education. Therefore, the objectives of the present green audit are identifying, quantify, recording and priority wise framework of environmental sustainability in compliance with the applicable regulation policies and standards on the aspects the main objective of govt. Naveen Janakpur college green audit are as follows:

- To map the geographical location of govt. Naveen college Janakpur.
- Documentation of the floral diversity of the campus.

**MATHODOLOGY:** - The purpose of the green audit of govt. Naveen college Janakpur is to ensure that the practice followed in the campus are in accordance with the green policy of the country. The methodology includes: collection of the data physical inspection of the campus, observation and review of the documentation and data.

## **ABOUT COLLEGE**

Our college is located in village post Janakpur distt. – Korea (C.G.). The college is spread over an area of 6070.28sq.m. The institute has a well-organized, magnificent building symbolizing grandeur of the institute. This building covers a total area of 1652.4 sq. m. It is a double storied planned structure. The institution provides the opportunity of getting groomed with best of Education, Sports and Extra-curricular activities as well as the overall personality development of the young aspirants. The three prominent faculties, viz., ARTS, COMMERCE and SCIENCE directs the student towards multi-dimensional and decision-making approach towards their goals and careers.

## **VISION**

- Aspiration to emerge as an institute of excellence for all round development with ethical and entrepreneurial values in students.

- Imparting a higher learning and value based education of global standards for betterment and upliftment of society.
- Increasing collaborations and linkages to fill up the gap between higher education and employment.

## **MISSION**

- To provide quality higher education and value based learning to female students at minimal cost.
- To maintain excellent academic standards through research and innovation by utilizing modern teaching aids and technologies.
- To encourage and promote faculty members for advanced research and teaching methods.
- To inspire and prepare students to compete at national and international platforms of academics, arts and sports.
- To inculcate the Indian heritage and culture and to instill moral values of life.
- To extend the services of the institution for the betterment of the society.



# GPS LOCATION OF COLLEGE



## LIST OF PLANT SPECIES OBSERVED IN THE CAMPUS DURING THE FIELD VISIT

S.No	Common Name	Botanical Name	Family
1.	ASHOK	Saraca Asoca	Fabaceae
2.	SAL	Shorea Robusta	Dipterocarpaceae
3.	SAGUON	Tactona Grandis	Lamiaceae
4.	MAHUA	Madhuca logifolia	Sapotaceae
5.	AAM	Mangifera Indica	Anacardiaceae
6.	NEEM	Azadirecta Indica	Meliaceae
7.	AMLA	Phyllanthus Emblica	Phyllenthus
8.	CHHUIMUI	Mimosa Pudicia	Fabaceae
9.	SITAFAL	Annoona Squamosa	Annonaceae
10.	PALM TREE	Areca plam	Arecaceae
11.	ALOVERA	Alove vera	ascalpidiceae
12.	DEV DAR	Thuja	Capraceceae



		oxidentalis	
13.	CROTAN	Codiaeum variegatum	euphorbiaceae
14.	AMRUD	Psidium guajava	Myteraceae
15.	BEL	Aegle mermelos	Ruteceae
16.	PAPYA	Carica papaya	Caricaceae
17.	MADAR	Calotropis proccera	Calotropis gigantea
18.	ACALYPHA	Acalypha	Euphorbiaceae
19.	ZEPHYRANT HES MINUTA	zephyranthes minuta	Amaryllidaceae
20.	VAIJANTI	Premna spinosa	Caprifoliaceae

# PLANT DESCRIPTION AND THEIR USES

1. **ASHOK-**      **Scientific name:** *Saraca asoca*

**Family:** Fabaceae      **Kingdom:** Plantae

**Order:** Fabales



*Saraca asoca* is a plant belonging to the Detarioideae subfamily of the legume family. It is an important tree in the cultural traditions of the Indian subcontinent and adjacent areas. It is sometimes incorrectly known as *Saraca indica*. The flower of Ashoka tree is the state flower of Indian state of Odisha.

## 2. SAL Scientific name: Shorea robusta

**Family:** Dipterocarpaceae      **Kingdom:** Plantae  
**Order:** Malvales



Sal is moderate to slow growing, and can attain heights of 30 to 35 m and a trunk diameter of up to 2–2.5 m. The leaves are 10–25 cm long and 5–15 cm broad. In wetter areas, Sal is evergreen; in drier areas, it is dry-season deciduous, shedding most of the leaves from February to April, leafing out again in April and May.



**3. SAGWAN****Family: Lamiaceae Genus: Tectona****Species: *T. grandis* Order: Lamiales**

Teak is a large deciduous tree up to 40 m (131 ft) tall with grey to grayish-brown branches, known for its high quality wood. Its leaves are ovate-elliptic to ovate, 15–45 cm (5.9–17.7 in) long by 8–23 cm (3.1–9.1 in) wide, and are held on robust petioles which are 2–4 cm (0.8–1.6 in) long. Leaf margins are entire.

#### 4. MAHUA – **Scientific name:** *Madhuca longifolia*



*Madhuca longifolia* is an Indian tropical tree found largely in the central and north Indian plains and forests. It is commonly known as **madhūka**, *madkam* (in Hindi), **mahuwa**, **mahua**, **mahwa**, *mohulo*, or **Iluppai** or **vippa chettu**. It is a fast-growing tree that grows to approximately 20 meters in height, possesses evergreen or semi-evergreen foliage, and belongs to the family Sapotaceae.



**5. AAM - Scientific name:** *Mangifera indica*

**Family:** Anacardiaceae **Kingdom:** Plantae **Order:** Sapindales



*Mangifera indica*, commonly known as mango, is a species of flowering plant in the sumac and poison ivy family Anacardiaceae. Mangoes are believed to have originated from the region between northwestern Myanmar, Bangladesh, and India.



## 6. NEEM

**Scientific name:** *Azadirachta indica* **Family:** Meliaceae

**Kingdom:** Planta **Order:** Sapindales



*Azadirachta indica*, commonly known as neem, nimtree or Indian lilac, is a tree in the mahogany family Meliaceae. It is one of two species in the genus *Azadirachta*, and is native to the Indian subcontinent and most of the countries in Africa. It is typically grown in tropical and semi-tropical regions.



## 7. AMLA- **Scientific name:** *Phyllanthus emblica*

**Family:** Phyllanthaceae      **Kingdom:** Plantae  
**Order:** Malpighiales



The tree is small to medium in size, reaching 1–8 m (3 ft 3 in–26 ft 3 in) in height. The branch lets are not glabrous or finely pubescent, 10–20 cm (3.9–7.9 in) long, usually deciduous; the leaves are simple, sub sessile and closely set along branch lets, light green, resembling pinnate leaves. The flowers are greenish-yellow. The fruit is nearly spherical, light greenish-yellow, quite smooth and hard on appearance, with six vertical stripes or furrows.



## 8. CHHUIMUI - **Scientific name:** *Mimosa pudica*



this plant is most often grown as an indoor annual, but is also grown for groundcover. Propagation is generally by seed. *Mimosa pudica* grows most effectively in nutrient poor soil that allows for substantial water drainage. However, this plant is also shown to grow in scalped and eroded subsoil's. Typically, disrupted soil is necessary in order for *M. pudica* to become established in an area. Additionally, the plant is shade intolerant and frost-sensitive, meaning that it does not tolerate low levels of light or cold temperatures. *Mimosa pudica* does not compete for resources with larger foliage or forest canopy undergrowth.

## 9.SITAFAL



**Custard apple** is deciduous perennial fruit plant in Annonaceae family. Branches with light brown bark. Leaves are thin, simple, and alternate and occur singly. Flowers are Solitary or in short lateral clusters. Fruits are aggregate and soft fruits from the numerous and loosely united pistils of a flower



## 10. PALM TREE



The **Arecaceae** is a family of perennial flowering plants in the monocot order Arecales. Their growth form can be climbers, shrubs, tree-like and stem less plant, all commonly known as **palms**. Those having a tree-like form are called **palm trees**. Currently 181 genera with around 2,600 species are known, most of them restricted to tropical and subtropical climates. Most palms are distinguished by their large, compound, evergreen leaves, known as fronds, arranged at the top of an unbranched stem.

## 11. ALOVERA - **Scientific name:** Aloe Vera

**Family:** Asphodelaceae    **Kingdom:** Plantae  
**Order:** Asparagales



Aloe Vera is a succulent plant species of the genus Aloe. Having some 500 species, Aloe is widely distributed, and is considered an invasive species in many world regions. An evergreen perennial, it originates from the Arabian Peninsula, but grows wild in tropical, semi-tropical, and arid climates around the world



## 12. DEVDAR



It is a large evergreen coniferous tree reaching 40–50 m (131–164 ft) tall, exceptionally 60 m (197 ft) with a trunk up to 3 m (10 ft) in diameter. It has a conic crown with level branches and drooping branchlets. The leaves are needle-like, mostly 2.5–5 cm (0.98–1.97 in) long, occasionally up to 7 cm (2.8 in) long, slender (1 mm (0.039 in) thick), borne singly on long shoots, and in dense clusters of 20–30 on short shoots; they vary from bright green to glaucous blue-green in color.



13.CROTAN Scientific name: Croton Family: Euphorbiaceae



Croton is an extensive flowering plant genus in the spurge family, Euphorbiaceae. The plants of this genus were described and introduced to Europeans by Georg Eberhard Rumphius. The common names for this genus are rushfoil and croton, but the latter also refers to *Codiaeum variegatum*. The generic name comes from the Greek (*krótos*), which means "tick" and refers to the shape of the seeds of certain species.

## 14.AMRUD



Guava is a common tropical fruit cultivated in many tropical and subtropical regions. *Psidium guajava* (common guava, lemon guava) is a small tree in the myrtle family (Myrtaceae), native to Mexico, Central America, the Caribbean and northern South America. Although related species may also be called guavas, they belong to other species or genera, such as the pineapple guava, *Feijoa sellowiana*. In 2019, 55 million tonnes of guavas were produced worldwide, led by India with 45% of the total. Botanically, guavas are berries.



15.BEL - **Scientific name:** *Aegle marmelos*

**Family:** Rutaceae      **Kingdom:** Plantae

**Order:** Sapindales



*Aegle marmelos*, commonly known as bael, also Bengal quince, golden apple, Japanese bitter orange, stone apple or wood apple, is a species of tree native to the Indian subcontinent and Southeast Asia. It is present in India, Bangladesh, Sri Lanka, Nepal, Thailand, and Malesia as a naturalized species.

16. PAPAIA- **Scientific name:** *Carica papaya*

**Family:** Caricaceae    **Kingdom:** Plantae  
**Order:** Brassicales



The papaya is a small, sparsely branched tree, usually with a single stem growing from 5 to 10 m (16 to 33 ft) tall, with spirally arranged leaves confined to the top of the trunk. The lower trunk is conspicuously scarred where leaves and fruit were borne. The leaves are large, 50–70 cm (20–28 in) in diameter, deeply palmately lobed, with seven lobes. All parts of the plant contain latex in articulated laticifers.<sup>[6]</sup> Papayas are dioecious. The flowers are five-parted and highly dimorphic; the male flowers have the stamens fused to the petals.



17. **MADAR- Scientific name:** *Calotropis gigantea*

**Family:** Apocynaceae **Order:** Gentianales  
**Kingdom:** Plantae



It is a large shrub growing to 4 m (13 ft) tall. It has clusters of waxy flowers that are either white or lavender in color. Each flower consists of five pointed petals and a small "crown" rising from the center which holds the stamens. The aestivation found in *calotropis* is valvate i.e. sepals or petals in a whorl just touch one another at the margin, without overlapping. The plant has oval, light green leaves and milky stem.



## 18. ACALYPHA - Scientific name: Acalypha

**Family:** Euphorbiaceae **Order:** Malpighiales



Acalypha is a genus of flowering plants in the family Euphorbiaceae. It is the sole genus of the subtribe Acalyphinae. It is one of the largest euphorb genera, with approximately 450 to 462 species.



## 19.ZEPHYRANTHES MINUTA



*Zephyranthes minuta* is a plant species very often referred to as *Zephyranthes grandiflora*, including in Flora of North America. The latter is, however, an illegitimate name because the original author in coining the name *Zephyranthes grandiflora* listed the older name *Amaryllis minuta* as a synonym. This makes "minuta" the acceptable epithet under the ICN. In the UK it is a recipient of the Royal Horticultural Society's Award of Garden Merit.

## 20. VAIJANTI



The Vaijayanti (Vyjayanti) or Vaijayantimala or Vana-mala is a theological flower, offered to Krishna and Vishnu in worship as a garland, "Vaijayanti-mala". Literally meaning, "the garland of victory", A Vaijayanti-mala also finds mention in Vishnu sahasranama, a stotra dedicated to Vishnu in the Mahabharata, as vanamali (forest flowers).

**CONCLUSION** – green audit is carried out to provide in indication to college campus, about how the environmental organization system and equipments are the performing as a result the best practicable means to preserve air, water, soil, plant and animal life form the adverse effect.