Green Audit Report

Giani Kartar Singh Memorial Government College Tanda Urmur Distt. - Hoshiarpur, Punjab — 144212





Punjab Government

Department of Forest and Wild Life Preservation

Office: Range Forest Officer

Near Vill. Ushmansaheed, Dasuya, Distt. Hoshiarpur

Floral diversity in tha college of GKSM Govt. College Tanda Urmar campus has been assessed by external and internal committee and a report has been generated to study environmental impact of institution and to fulfil the requirment for the Green Audit.

The floral diversity in the college and steps taken by institution to conserve the floral diversity has been found to be satisfactory.

Date of Analysis: 06-05-2022

Signature Forest Range Officer

Full Name: Kapil Dev

Forest Range Officer,

Dasuya.

Topic 1: TREE/SHRUB DIVERSITY OF GKSM GOVERNMENT COLLEGE, TANDA URMUR, HOSHIARPUR, PUNJAB:

Giani Kartar Singh Memorial Government College, Tanda Urmur, Hoshiarpur, affiliated to Panjab University, Chandigarh, was established in 1951 as a part of the local high school buildingand was shifted to the present sprawling 43-acre campus in 1975.



Photo1: Aerial view of college campus (Source: GoogleEarth)

The area boasts remarkable diversity, featuring a wide array of tree species that serve various essential functions. These trees have been planted over time through different plantation initiatives organized by the authority, and they have now become an integral part of the college. Notably, these college trees have significantly enhanced the quality of life not only for the college community but also for the surrounding population. They play a vital role in contributing to our environment by releasing oxygen, improving air quality, mitigating climate conditions, conserving water, preserving soil, and supporting wildlife.

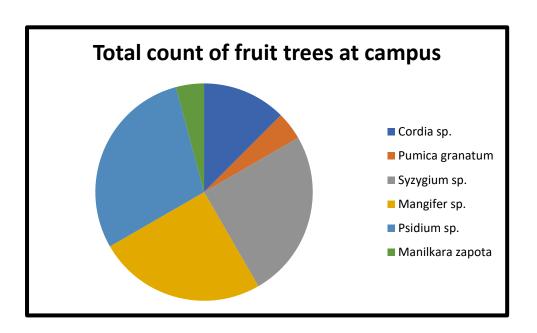
Furthermore, many species of birds and animals rely on these trees for food and shelter, adding to their ecological importance. The presence of these trees also serves as a reminder of our institution's glorious history. Over time, we have formed emotional connections with these trees, and some have become personally significant due to their daily presence in our lives.

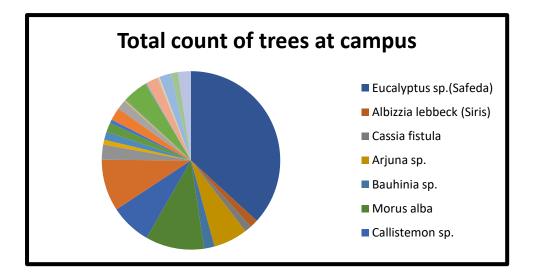
Moreover, the thick belt of large shady trees surrounding the college perimeter has proven effective in reducing noise and minimizing dust and storms. For reference, the main species of trees, shrubs, and ornamental plants can be found in Table 1.

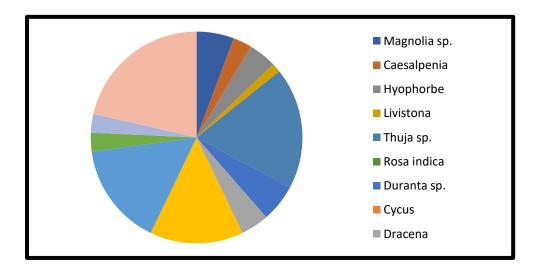
Table 1: Floral diversity at GKSM Government College, Tanda Urmur, Hoshiarpur.

	Botanical Name	Common Name	Family
1	Eucalyptus sp.	Safeda	Myrtaceae
2	Albizzia lebbeck	Siris	Fabaceae
3	Cassia fistula	Amaltas	Fabaceae
4	Arjuna sp.	Arjun	Combretaceae
5	Bauhinia sp.	Kacchnaar	Fabaceae
6	Morus alba	Mulberry	Moraceae
7	Callistemon sp.	Bottle Brush	Myrtaceae
8	Melia sp.	Drek	Meliaceae
9	Dalbergia sisso	Shisham	Fabaceae
10	Ficus religiosa	Pipal	Moraceae
11	Phyllanthus emblica	Amla	Phyllanthaceae
12	Azadirachta indica	Neem	Meliaceae
13	Murayyapaniculata	Orange Jasmine	Rutaceae
14	Alstonia	Sat Patiya/ Devil tree	Apocynaceae
15	Grevelliarobusta	Silver tree	Proteaceae
16	Pinus	Chir	Pinaceae
17	Tectona grandis	Sagwan	Lamiaceae
18	Ficus sp.	ficus	Moraceae
19	Ficus benghalensis	Banyan	Moraceae
20	Chukrasiatabularis	Indian red wood	<u>Moraceae</u>
21	Delonix regia	Gulmohar	Fabaceae
22	Bombax mori	Simbal	<u>Malvaceae</u>
23	Polyalthia longifolia	Ashoka tree	Fabaceae
24	Moringa	Suhanjana	Moringaceae
25	Murrayakoenigii	Curry Patta	Rutaceae
26	Cordia sp.	Lasoori	Boraginaceae
27	Pumica granatum	Anar	Lythraceae
28	Syzygium sp.	Jamun	Myrtaceae
29	Mangifer sp.	Mango	Anacardiaceae
30	Psidium sp.	Guava	Myrtaceae
31	Manilkara zapota	Cheeku	Sapotaceae
32	Magnolia sp.	Champa	Magnoliaceae
33	<u>Caesalpenia</u>	Gulmohri	Fabaceae
34	Hyophorbe	Bottle Palm	Arecaceae
35	Livistona	China Palm	Arecaceae
36	Thuja sp.	Thuya, White cedar	Cupressaceae
37	Rosa indica	Rose	Rosaceae
38	Duranta sp.	Golden dew drop	Verbenaceae
39	Cycus	Sago palm	Cycadaceae
40	Dracena	Corn palm	<u>Asparagaceae</u>
41	Nerium sp.	Kaner	Apocynaceae
42	Bougainvillea sp.	Bougainvillea	Nyctaginaceae
43	Portulaca	DhupKhiddi	<u>Portulacaceae</u>
44	Vinca rosea	Sadabahar	Apocynaceae

45 Hibiscus rosa sinensis Shoe flower Malvaceae







Topic 2: Vermi Composting

Department of Agriculture, GKSM Government College, Tanda Urmur carried out vermicomposting as a part of 4th year project work. The HDPE vermibeds available in different sizes were purchased from an agriculture shop. The first layer (starting from the ground) was a 6-inch layer made up of coconut husk, sugarcane stubble, wheat stubble, sesbania and straw. The 2-3 inch cow dung layer is spread over this as a second layer. The earthworm are introduced in the third layer. The 4th and 5th layer comprises of cow dung and crop residues respectively. It's covered with a layer of wet jute bags to keep it moist and water is sprinkled every day. It was turned once after 30 days for maintaining aeration and for proper decomposition. Compost gets ready in approximately 110 days, which is further grinded and sieved.

Steps involved in vermi composting:



HDPE VERMIBED





LAYER 1





LAYER 2



LAYER 3



LAYER 4



LAYER 5



LAYER 6

Topic 3: FAUNAL DIVERSITY OF GKSM GOVERNMENT COLLEGE, TANDA URMUR, HOSHIARPUR, PUNJAB:

The diversity of fauna plays a vital role in the proper functioning of the world's ecosystems, significantly impacting human health, the economy, and food production. Animals inhabit various trophic levels, ranging from mid-level consumers to top predators. They contribute to sustainable population levels of both their prey and predator species and, upon death, serve as a food source for scavengers and decomposers. Moreover, many animal species are crucial for plant reproduction, as they act as pollinators or seed dispersers.

The climatic conditions in the Hoshiarpur district, including GKSM Government College, are highly conducive to supporting a rich biodiversity of both flora and fauna. The campus, in particular, has documented diverse fauna, which will be discussed below:

S.No.	Scientific Name	Common Name
1	Pavo cristatus	Peocock
2	Corvus Splendens	Indian House crow
3	Funambulus	Gilahari/ squirrel
4	Canis lupus	Dog
5	Macaca	Monkey
6	Alcedo atthis	Kingfisher
7	Aquila Chrysaetos	Eagle
8	Psittaci formes	Parrot
9	Felis Catus	Cat
10	Bos taurus	Cow/ Bulls Cattles
11	Eudynamis	Koel
12	Alcedinidae	King Fisher
13	Acridotherus	Indian myna
14	Aquila	Eagle
15	Dryocopus	Woodpecker
l16	Ardea alba	Ergets/White heron
17	Oryctolagus	Rabbit
18	Tyto alba	Owl
19	Python	Ajgar
20	Naja	Cobra
21	Rhopalocera	Butterfly
22	Limax	Slugs/Snail
23	Apis Indica	Honey Bee
24	Polistes versicolor	Yellow wasp
25	Hemidactylus	Wall Lizard













- 19. ਕਾਲਜ ਕੈਂਪਸ/ਬਿਊਟੀਫਿਕੇਸ਼ਨ ਕਮੇਟੀ
 - ।. ਰੂਬਿਨ
 - 2. ਰਿੰਪੀ ਢਾਂਡਾ
 - 3. ਤਜਿੰਦਰ ਕੌਰ
 - 4. ਹਰਮੇਸ਼ ਸਿੰਘ ਟ
 - ੰ5. ਡਾ.ਸੋਨੀਆਂ

College Campus/Beautification Committee

- 1. Rubin
- 2. Rimpy Dhanda
- 3. Tajinder Kaur
- 4. Harmesh Singh
- 5. Dr. Sonia