

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 the college of GKSM Govt. College Tanda Urmur 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 requirement 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
DASUYA
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 building and 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.

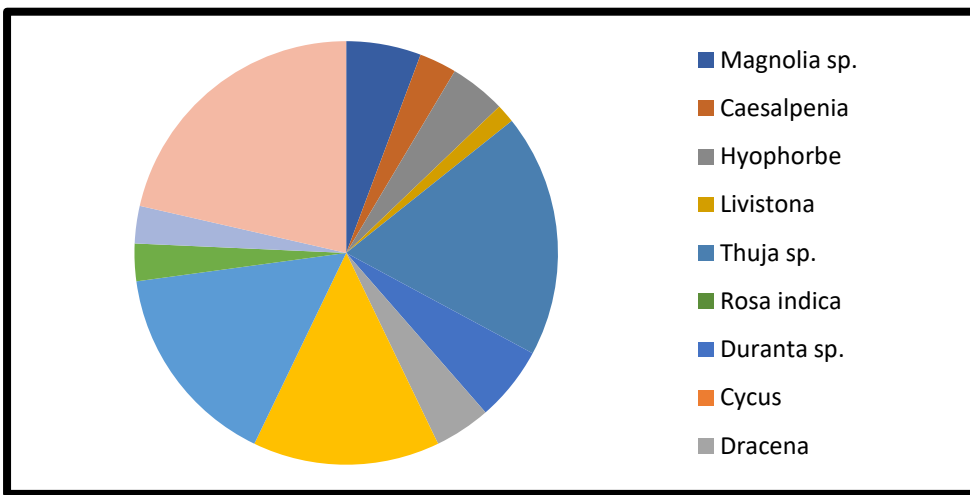
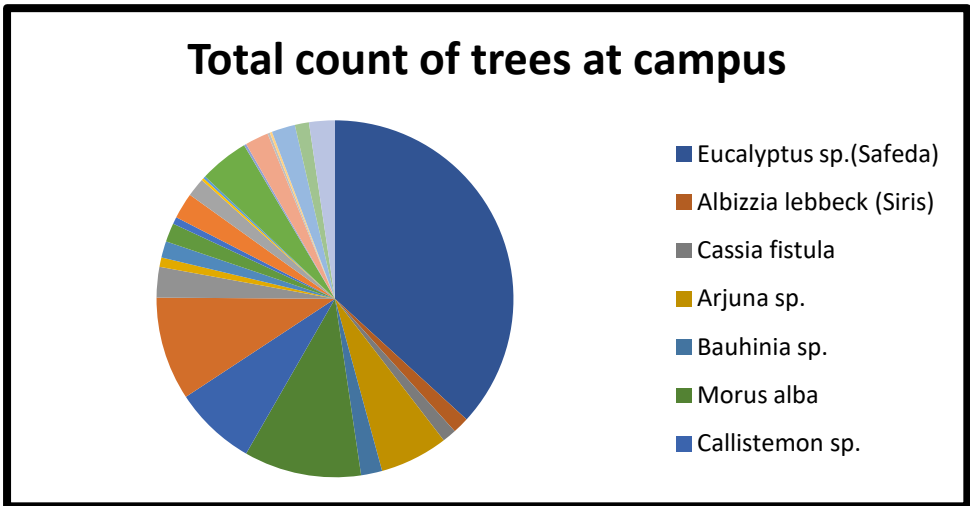
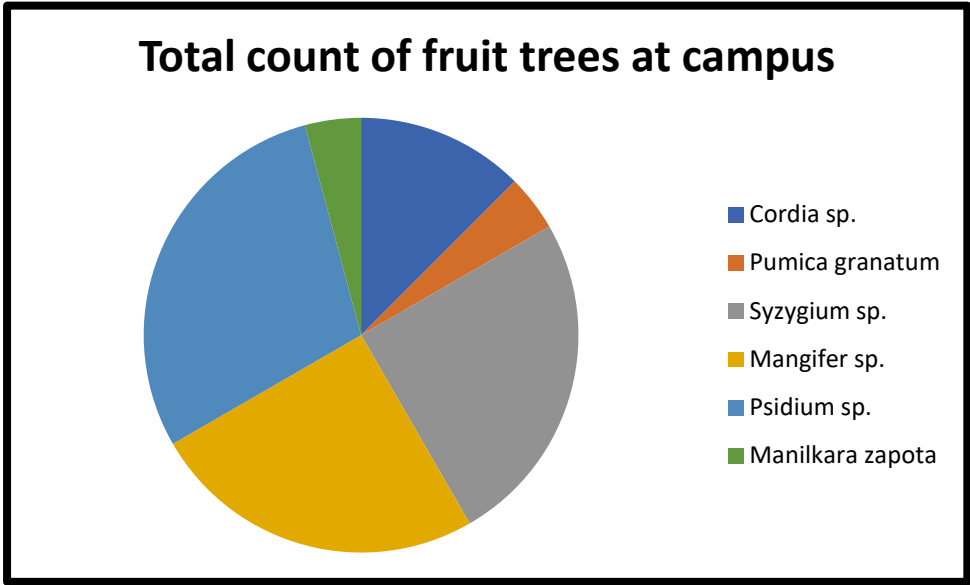
Furthermore, many species of birds and animals rely on these trees for food and shelter, adding to their ecological importance. The presence of these trees also serves as a reminder of our institution's glorious history. Over time, we have formed emotional connections with these trees, and some have 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	<i>Eucalyptus sp.</i>	Safeda	Myrtaceae
2	<i>Albizzia lebbeck</i>	Siris	Fabaceae
3	<i>Cassia fistula</i>	Amaltas	Fabaceae
4	<i>Arjuna sp.</i>	Arjun	Combretaceae
5	<i>Bauhinia sp.</i>	Kacchnaar	Fabaceae
6	<i>Morus alba</i>	Mulberry	Moraceae
7	<i>Callistemon sp.</i>	Bottle Brush	Myrtaceae
8	<i>Melia sp.</i>	Drek	Meliaceae
9	<i>Dalbergia sisso</i>	Shisham	Fabaceae
10	<i>Ficus religiosa</i>	Pipal	<u>Moraceae</u>
11	<i>Phyllanthus emblica</i>	Amla	Phyllanthaceae
12	<i>Azadirachta indica</i>	Neem	Meliaceae
13	<i>Murayyapaniculata</i>	Orange Jasmine	<u>Rutaceae</u>
14	<i>Alstonia</i>	Sat Patiya/ Devil tree	Apocynaceae
15	<i>Grevelliarobusta</i>	Silver tree	Proteaceae
16	<i>Pinus</i>	Chir	Pinaceae
17	<i>Tectona grandis</i>	Sagwan	Lamiaceae
18	<i>Ficus sp.</i>	ficus	<u>Moraceae</u>
19	<i>Ficus benghalensis</i>	Banyan	<u>Moraceae</u>
20	<i>Chukrasiatubularis</i>	Indian red wood	<u>Moraceae</u>
21	<i>Delonix regia</i>	Gulmohar	Fabaceae
22	<i>Bombax mori</i>	Simbal	<u>Malvaceae</u>
23	<i>Polyalthia longifolia</i>	Ashoka tree	Fabaceae
24	<i>Moringa</i>	Suhanjana	Moringaceae
25	<i>Murrayakoenigii</i>	Curry Patta	<u>Rutaceae</u>
26	<i>Cordia sp.</i>	Lasoori	Boraginaceae
27	<i>Pumica granatum</i>	Anar	Lythraceae
28	<i>Syzygium sp.</i>	Jamun	Myrtaceae
29	<i>Mangifer sp.</i>	Mango	Anacardiaceae
30	<i>Psidium sp.</i>	Guava	Myrtaceae
31	<i>Manilkara zapota</i>	Cheeku	Sapotaceae
32	<i>Magnolia sp.</i>	Champa	Magnoliaceae
33	<u><i>Caesalpenia</i></u>	Gulmohri	Fabaceae
34	<i>Hyophorbe</i>	Bottle Palm	Arecaceae
35	<i>Livistona</i>	China Palm	Arecaceae
36	<i>Thuja sp.</i>	Thuya, White cedar	Cupressaceae
37	<i>Rosa indica</i>	Rose	Rosaceae
38	<i>Duranta sp.</i>	Golden dew drop	Verbenaceae
39	<i>Cycus</i>	Sago palm	Cycadaceae
40	<i>Dracena</i>	Corn palm	<u>Asparagaceae</u>
41	<i>Nerium sp.</i>	Kaner	Apocynaceae
42	<i>Bougainvillea sp.</i>	Bougainvillea	Nyctaginaceae
43	<i>Portulaca</i>	DhupKhiddi	<u>Portulacaceae</u>
44	<i>Vinca rosea</i>	Sadabahar	Apocynaceae

45	Hibiscus rosa sinensis	Shoe flower	Malvaceae
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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:

	Common Name	Scientific Name
1	Leaf beetle	<i>Aulacophora femoralis</i>
2	Indian House crow	<i>Corvus splendens</i>
3	Peafowl/ Peacock	<i>Psittaciformes</i>
4	Koel	<i>Eudynamis scolopaceus</i>
5	Kingfisher	<i>Alcedinidae</i>
6	Indian myna	<i>Acridotherus tristis</i>
7.	Eagle	<i>Aquila chrysaeta</i>
8.	Woodpecker	<i>Dryocopus linaetu</i>
9.	White heron	<i>Ardea alba</i>
10.	Owls	<i>Strigiformes</i>
11.	Dogs	<i>Canis lupus familiaris</i>
12.	Cats	<i>Felis catus</i>
13.	Cows/Bulls/Cattles	<i>Bos taurus</i>





