

GURU NANAK COLLEGE (AUTONOMOUS)
(Affiliated to university of Madras and Re-accredited at A Grade By NAAC)
Guru Nanak Salai, Velachery, Chennai 600042



ENVIRONMENTAL SUSTAINABILITY

Prepared by

**PLANT BIOLOGY AND PLANT BIOTECHNOLOGY
&
ENVIROCLUB**

S.No	Events	Date (From - To)
1.	Tree Plantation -2018	14.10.2018
2.	Field Visit – In Guru Nanak College Campus	10.12.2018
3.	Velachery lake Cleaning Campaign	10.07.2019 to 20.07.2019
4.	Guru Nanak College Campus Cleaning Campaign	21.07.2019
5.	Green auditing	1.08.2019
6.	Mushroom Cultivation- Workshop	06.03.2019
7.	Tree Plantation-2019	05.09.2019
8.	Seed for your Future (Seed Balls Preparation)	21.09.2019
9.	CommuniTree in name The North Chennai's First Man Made microFOREST (Miyavakki Forest)	21.12.2019
10.	Med Plant Expo 2020	10.01.2020
11.	Environmental Awareness Quiz-1 (Online)	18.07.2020 to 24.07.2020
12.	Environmental Awareness Quiz-2 (Online)	12.07.2020 to 27.07.2020
13.	Orientation for the Fresher's	22.09.2020
14.	Tree Plantation -2021	09.05.2021 to 25.5.2021
15.	Arbores of GNC an Eye opener to Epithets of Trees	19.03.2021
16.	Fuchsia Plant Expo 2K21	19.03.2021
17.	Connect with the Ocean-Coastal and Marine Debris Clean Up awareness program	18.09.2021
18.	Cycle Rally in support to Wildlife Conservation	03.10.2021
19.	Green Audit and Mapping the Trees	2020-2021
20.	Vermicomposting unit Maintenance	14.12.2021

Environmental awareness Initiative -1 (Inside the Campus)

Tree Plantation in Guru Nanak College's Campus

Department of Plant Biology and Plant Biotechnology has organized Tree Plantation on October 14th, 2018 in our Guru Nanak College's Campus under the guidance and supervision of our beloved principal Dr. S . Selvaraj and respected Guest of Honor, **Dr. Thol. Thirumamavalavan** (an Indian Politician and Tamil activist, Member of Parliament in 15th Lok Sabha and the current President of the Viduthalai Chiruthaigal Katchi l party in the state of Tamil Nadu in India). Some interesting endemic and red listed trees collected from western ghats were planted by Thol thirumavalavan and Principal. The trees planted are *Artocarpus hirsutus* (Wild jack), *Saraca asoca* (Asokha tree), *Oroxylum indicum* (Broken Bones Plant) and *Vateria indica* (Indian Copal Tree).

The main goal of the whole day activity is to plant trees, increase awareness in student & also analyse their own skill. Principal addressed our students and faculties to not only plant the trees but also to save and guard the trees. He also stated that, this practice will create a habit of planting more trees in their future. Even if each one, plant one tree annually, it will create a big impact on global warming.

"Preserving the tree is an obligation for everyone without exception; one tree will absorb approximately a ton of carbon dioxide during the course of its life cycle."

As we all know that the whole world is facing the problem of global warming and to recover from such problem planting the trees has become one of the most important aspects. The educational and social goal of our students implies that besides gaining; understanding of concept like social structure, power, community occurring in real life situation, students should acquire competence in the field of program planning, shouldering responsibilities, participation in cooperative task and promotional work in the community.



Environmental awareness Initiative -2 (Inside the Campus)

Field visit – In Guru Nanak College campus

Field visit for Plant Biotechnology students reinforces what a teacher has been explaining in class about various concepts and help students understand the topic better. It also cultivates an interest among the students to observe the plants in their close proximities and understand the Taxonomy of the plants. 37 Allied Botany students of Semester I were assisted by Dr. A.C Tangavelou on 10th December, 2018. In the beginning, they were briefed about identifying the plant and explained how to identify the plant kingdom and also helped the students to understand practically about Habit, Habitat and morphology of the all the Plants in the college campus was one of the main purposes of the visit. Students were able to understand the purpose and importance of classification. Students were able to perform simple classification of plants and to justify their reasoning by pointing to defining plant. Students were able to compare and contrast plants species and to identify specific characteristics that distinguish one plant group from another. Students were very curious to learn and observe different plants growing in their natural habitats. Such field visits create, “episodic memories,” which helps students retain information for longer periods. The visit was very valuable for students.





Environmental awareness Initiative -3 (Outside the Campus)

Velachery lake Cleaning Campaign

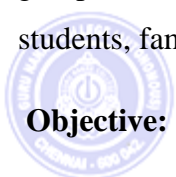
The Enviro Club of Guru Nanak College conducted a campaign on Velachery lake and water bodies cleaning an Environmental Awareness program from 10.07.2019 to 20.07.2019, in College level.

AIM :

The aim of the campaign is to clean the litter around the Velachery lake and water bodies in general, elimination of water hyacinth weed and to bring the issue to the public's attention through concrete activities.

It also aims to inspire people to clean up beaches on a voluntary basis.

In addition to motivate individuals, the target groups includes different kinds of clubs, hobby groups, businesses, institutions and residents' associations as well as school children and students, families and groups of friends, and other organizations.



Objective:

The Enviro Club Association's of Guru Nanak College, Chennai, task and aim is to keep the Velachery lake clean, so the water way will be used by the peoples near Velachery.

History of Velachery lake:

Velachery aeri or Velachery lake, is one of the lakes inside Chennai, in the Indian state of Tamil Nadu, with a good stock of water all through the year. Since Velachery is a low-lying area, the monsoon rain water from the neighbouring areas is drained into this lake. In an unexpected turn of events, the Chennai Corporation has decided to put on hold the proposal for boat rides and other tourist facilities on the Velachery lake, one of the few water bodies still alive in the city. The reason it has cited is the high level of contamination of the water.

"The water is totally contaminated and not conducive for boating. At present, storm water drain works are in progress near the lake, which we hope will put an end to illegal discharge of sewage from residential areas. So we have targeted to help the NGO to clean the lake.

The Association aims to provide guidance on environmentally conscious ways to get around on cleaning of waterways. This activity are non-funded and volunteers based activity.

We actively advise all those tress passer in and around the waterways ways to enjoy the natural surroundings in an environmentally-friendly manner.

The objective is to advise everyone on ways to navigate the waters in an environmentally-considerate and respectful way.

The 2 Project staff and project group of 15 students started their campaign from 10.07.2019 to 20.07.2019. Initially 15 students lead the campaign on part time basis. At present the campaign on volunteering basis reached 52 were in-charge of the campaign.

In addition to cleaning up the lake, these voluntary work events also aim to gather information about the type of litter found and types of plant in the lake. GNC EC (GNC Enviro club) has asked the teams of volunteers to report the type of litter material on the printable litter form created for the campaign. The reports should be returned to the campaign head by post or e-mail, or via the online form. The campaign will work through the years to clean the lake periodically.

The support has come mainly in the form of encouragement from the Principal and students of Guru Nanak Colleges. This kind of support was very important, especially in the first year, when the campaign was being launched.





Environmental awareness Initiative -4 (Inside the Campus)

Guru Nanak College Campus Cleaning Campaign

The Enviro Club of Guru Nanak College conducted a Campus Cleaning Campaign in our campus an Environmental Awareness program on 21.08.2019.

Guru Nanak College is one such green space located in Chennai. Our College Environment with sylvan groves and salubrious atmospheres sets perfect ambience for the study of nature naturally.

The major objective was to familiarize the students with the flora and ecology of the region. Also to acquaint them with the importance of plants and the threats these ecosystems face due to natural and anthropogenic pressures. It will provide a safe, clean, a friendly and caring environment. It improves hygiene level in campus and also helps to reduce the spread of sickness.

A group of 10 students were accompanied by two staff members for cleaning entire our college campus on 21.07.2019. They are collected plastics bottles, polythene bags from our college campus. Now it becomes plastic free environment.



Environmental awareness Initiative -5 (Inside the Campus)

GREEN AUDITING 2018-2019

Green auditing is a means of assessing environmental performance (Welford, 2002). It is a systematic, documented, periodic, and objective review by regulated entities of facility operations and practices related to meeting environmental requirements (EPA, 2003). It is otherwise the systematic examination of the interactions between any operation and its surroundings.

Guru Nanak College is one such green space located in Chennai; the detailed campus flora was studied by PBPBT Semester IV students Mr. Koushik Srinivas and Elakiyan.

The students aimed to study and understand the changes in the flora over more than 2 years since the publication of the first study. For this, we assessed the total current species richness in the campus and compared it with past Flora Auditing results. Also, a detailed unified inventory of all the vascular plants that are recorded till date in the campus is provided with notes about historical status, rarity, and ecological remarks.

The entire work was undertaken from June 2018– December 2018. For the first two month (June 2018– July 2018), the surveys were opportunistic in nature, but from July 2018 onwards, extensive and well-planned efforts were made. The study was divided into two sections:

1. **Primary data-** obtained from extensive and exhaustive ground surveys where on an average, from July 2018– December 2018, each field session lasted for about 2hr for three such days a week and thus about 100+hr effort.

Specimens were identified on the field following Cooke (1903–1908), Lakshminarasimhan (1996), Singh & Karthikeyan (2000), Singh et al. (2001), Ingahalikar & Barve (2010), and Potdar et al. (2012). Garden exotics were confirmed from the online database of Flowers of India (2014) and also from experts Dr. Ac. Tangavelou (acknowledged). All the scientific and family names were checked using The Plant List (2015).

Secondary data- extensive literature surveys were carried out and all publications that mention plants from the campus are extracted and cited. Current and past faculties from the PBPBT Department of GNC were also consulted for additional inputs.

A comprehensive checklist was drafted on uniting the data from all the aforementioned sources, which includes current as well as past status of occurrence for each species. This assessment was done for all vascular plants including

Gymnosperms as well as Pteridophytes. Lower cryptogams including algae and fungi were not assessed, but a brief literature review is presented.

General steps:

1. Systematic and comprehensive data collection
2. Documentation with physical evidences
3. Independent periodic evaluation with regulatory requirements and appropriate standards
4. Systematic and comprehensive improvement and management of existing system.

Thus the current work stands as an important, much awaited baseline document for all further studies with respect to the campus and we hope that it would be updated periodically in the future



Environmental awareness Initiative -6 (Inside the Campus)

MUSHROOM CULTIVATION- Workshop

Department of Plant biology and Plant Biotechnology organized one day workshop sponsored by **DBT- Star College scheme** on **Mushroom Cultivation** for Life science students of GNC.



Dr. Poonam Sethi welcomed the participants and informed the necessity of training to the present need of the day.



Dr. Nagaraj, Assistant Professor Department of Center for Advance Studies, University of Madras Inaugurated the workshop and motivated the students, about the importance and innovation of mushroom cultivation technology. He said that the present production of mushroom in India is 1.0 million tons /year out of 7.0 million tons produced all around the world. He also mentioned the spawning procedure of paddy straw mushroom on cotton seed hull substrate.



Participates of Mushroom Workshop

A total of 92 participants belongs to Department of Mathematics, Chemistry and Physics had participated in the workshop.

Theme of Workshop

Mushroom cultivation is a new investment opportunity for the youth and weaker sections, so that they can start their business on a small-scale level with techno -economical methods utilizing their rural level resources in a very effective manner. As we know that mushroom food industry is in its inception stage. The future will demand a strong mushroom food industry in the Nation and will call for added strength in food science and technology. The mushroom workshop will be helpful to the students to start small scale, large scale mushroom production as self-employment. The participants are trained for preparation of spawn, mushroom, bed, design & infrastructure of Oyster mushroom production farm, pest & disease management, harvesting, preparation of mushroom, marketing of mushroom in local market, retailer, export market and mushroom recipes.

Mushroom Bed Preparation

Students sterilized the paddy straw for mushroom bed preparation, spreading sterilized paddy straw for partial drying and making paddy straw role for mushroom bed preparation, and inoculated the spawn in the bed. The beds were prepared in a completely controlled growing house in a two tier system where air temperature of 33°C substrate temperature of 38-40°C, humidity of 90-92% and Co₂ of 1000 ppm was maintained. These conditions were kept on changing every day. The beds were of 2.5' wide and 6' long and covered by polythene sheets after spawning to maintain the temperature. The polythene sheet was kept at the bottom also on an iron racks. These beds were observed by us frequently. Later they packed the cover and mentioned their name in the cover. Incubated in the culture room.





Environmental awareness Initiative -7 (Inside the Campus)

TREE PLANTATION - 2019

Each one, Plant one.

Feel free to plant a tree.

Plant a tree and plant a hope for future

The Guru Nanak College to commemorate the 550th birth anniversary of Shri Guru Nanak Dev Ji celebrated a Go Green Initiative by planting sapling's on September 5th 2019. Our College has a long standing tradition of preserving culture, heritage and flora and fauna in the

S. No.	Bionomical	Vernacular Name
1.	<i>Muntingiacalabura</i> L.	தேன்பழம் Ten Pazham
2.	<i>Azadirachta indica</i> A. Juss.	Veppa, வேப்பை
3.	<i>Syzygiumcumini</i> (L.) Skeels	Navaal
4.	<i>Vitexaltissima</i> L.f.	Mayilaadi
5.	<i>Swieteniamahagoni</i> (L.) Jacq.	Mahogany
6.	<i>Delonixregia</i> (Hook.)Raf.	Gulmohar
7.	<i>Bauhinia racemosa</i> Lam.	Aatthi, ஆத்தி
8.	<i>Bauhinia purpurea</i> L.	நீலத்திருவத்தி Nilattiruvatti
9.	<i>Wrightiatinctoria</i>	வெட்பாலை Vet-palai,
10.	<i>Pongamiapinnata</i> (L.)Pierre	PongaMaram
11.	<i>Mangifera indica</i> L.	Mamaram, மா
12.	<i>Cordia sebestena</i> L.	Aechinaruvihl
13.	<i>Ficusglomerata</i> Roxb	Athi
14.	<i>Alstoniascholaris</i> (L.) R. Br.	Mukumpaalai, ஏழிலை
15.	<i>Bauhinia variegata</i> L.	மந்தாரைMantharai
16.	<i>Ocimum tenuiflorum</i>	Tulsi (100 Nos.)

campus.

In order to sensitize students towards the need to preserve our environment, Tree plantation drives were organized. The lions Club International supports the program.

Total number of 100 tree saplings were planted during the day in different areas of within the campus. It included the wide range of Plants such as *Azadirachta indica* A. Juss., *Ficusglomerata*Roxb.and*Pongamiapinnata* (L.)Pierre.

The hundred Thulasi herbal plant handed over to all teaching and non teaching staff for the mark of 550th Birth Anniversary of Shree Guru Nanak Devji during teachers day celebration on 5th September 2019. This Go-Green initiative is a step towards educating the students and staff members on the need of trees and to protect the environment. The initiative was well

supported by our Principal Dr. M. G. Ragunathan, and executed by the Enviro Club Coordinators and Student volunteer's.



GURU NANAK COLLEGE (AUTONOMOUS)
Re-accredited at 'A' grade by NAAC
GURU NANAK SALAI
VELACHERY, CHENNAI 42

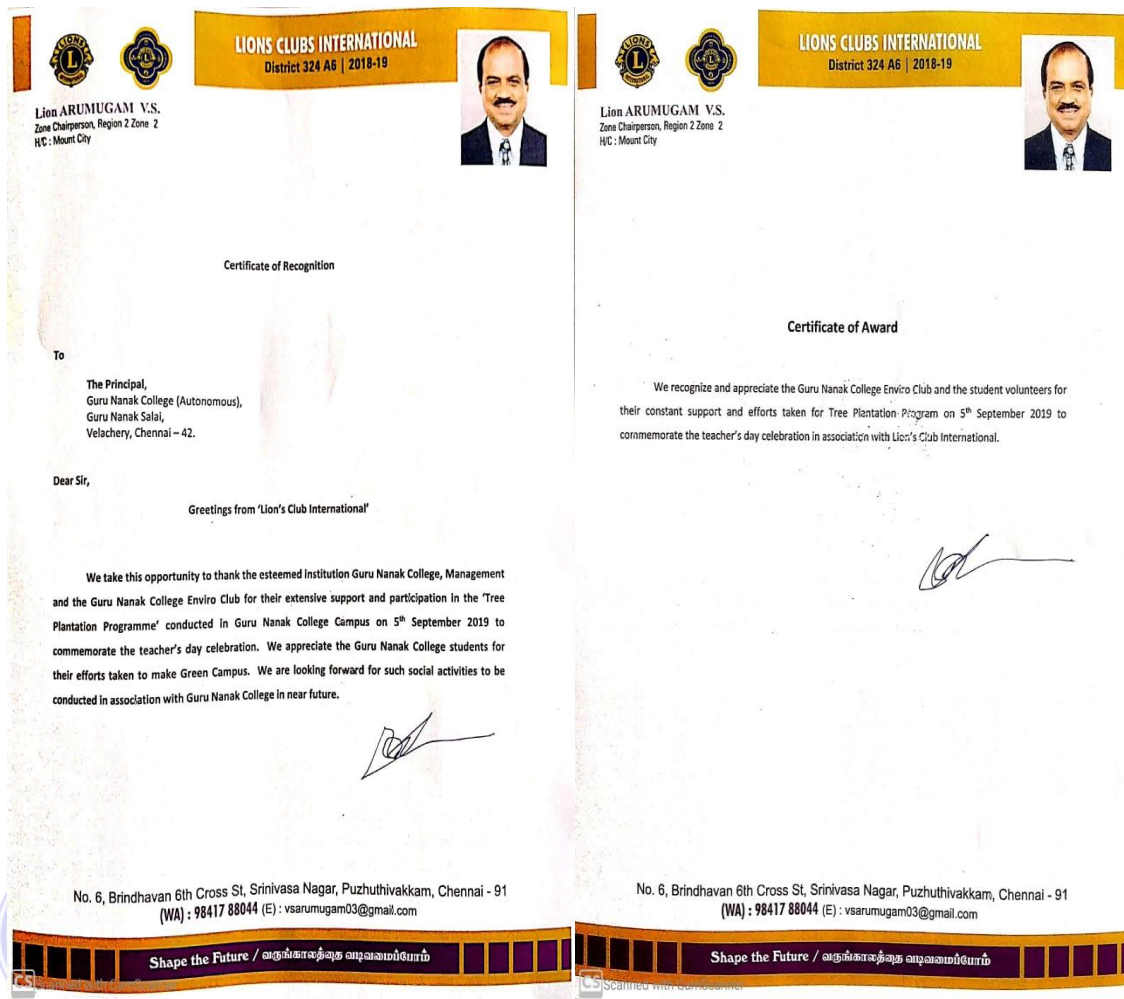
ENVIRO CLUB 2019- 20
Celebrating
550th Birth Anniversary
of
Guru Nanak Dev Ji
On
"The Teachers Day"
5th September 2019 at 9.00 am

"Go Green Initiative"

**"Each one ! Plant one !
For Plentiful Rain...."**

Supported by
Lions Club International





Environmental awareness Initiative -8 (Inside the Campus)

Seed for your Future (Seed Balls Preparation)

“Think about it. A whole habitat in a tiny clay ball...” Said by

– Masanobu Fukuoka

Adding a touch of innovation into environmentalism, a group of ‘green soldiers’ have taken up an awareness campaign with the unique idea of preparing seed balls. As many as 15733 seed balls were readied on the grounds of Guru Nanak College Campus on 21.09.2019 by students of PBPBT, AZBT, Enviroclub, NSS NCC and NGOs volunteers for scattering in the

countryside as part of their extension activity. The Event was inaugurated by college President Sardar Rajinder Singh Bhasin in the presence of Principal Dr. M.G. Ragunathan and Enviroclub Coordinators Dr. M. Gopi and Dr. S.S. Jayaraj. Dr. M.G. Ragunathan, Principal highlighted the importance of seed balls in natural farming technique which contains plant potential for an entire ecosystem. This event was held jointly by Vidiyal Charitable Trust, Rudambara Yoga trust, Annakkili Ammal Research Institute and Sevalayam NGOs.

The event introduced this ancient concept of 'seed balls' to a group of students, who learnt the methods and preparation of compost for the seed balls. Seed balls, also known as 'earth balls', consist of a variety of different seeds rolled within a ball of clay with compost and soil. There is an interesting bit of history associated with this method.

Experts say the success rate of saplings born out of seed balls tends to be high. "The seed balls are an ancient technique for propagating plants from seeds without opening up soil with cultivation tools such as a plough. This technique is used to introduce vegetation to the land by throwing or dropping seed balls by aerial reforestation.

The students sat around mounds of mixture of red soil, clay and vermi compost to make balls inserting Pungan, Vembu, Poovarasu, Eyalvaagai, Yaanaigundumani, Sarakondrai and other seeds of native species that the students had themselves collected various parts of the district.

Increasing green cover, enlarging diversity of flora, extending size of forests, ensuring regularity of monsoons, according to thrust on farming and restoration of natural resources constituted the objective of the exercise involving a few hundred students. Students have been instructed to disperse the seed balls in their villages to make them soak in wet soil after a spell of rain during the monsoon season. Hostel students going home for weekends by buses and trains have been told to disperse the seed balls en route. Seed balls will be made in subsequent phases with the remaining stock. The Event ignited the young minds to develop an eco-friendly environment and

awareness about conservation of forest among students. The Event also witnessed participation from the public and it was a grand success.

“Seed Balling – is a natural farming technique which contains plant potential for an entire ecosystem”



Certificate of Recognition

To

The Principal,
Guru Nanak College (Autonomous)
Guru Nanak salai, Velachery, Chennai - 42

Dear Sir,

Greeting from 'Vidiyal Charitable Trust'

We take this opportunity to thank the esteemed institution **Guru Nanak College Management** and the **Guru Nanak College Enviro Club** for their extensive support and participation in the seed ball preparation and distribution of seeds around the entire state of Tamil Nadu, conducted on 21st Sep-2019 in the Guru Nanak College campus.

We appreciate the Guru Nanak College students and other NGO volunteers who extended their efforts for this social cause. We thank the management for their hospitality and refreshments provided to the volunteers. We are looking forward for such social activities to be conducted in association with Guru Nanak College in near future.

N.Parthasarathy



President





Environmental awareness Initiative -9 (Outside the Campus)

CommuniTree in name ” The North Chennai’s First Man Made microFOREST (Miyavakki Forest)



The CommuniTree program grew out of the need to promote tree planting, after-planting care and maintenance of trees. CommuniTree is supported by a dynamic partnership of community, industry and government agencies with the ultimate goal of creating a healthier and more diverse tree population.

A tree plantation was organized by CommuniTree in name ”The North Chennai’s First Man Made microFOREST “. Close to 150 volunteers, including residents, students and employees of various colleges came together at Moolakkothalam Play Ground, Opposite to Washermanpet Metro.Chennai on 21.12.2019 to plant 10,000 saplings and enhance the City’s green cover via an urban forest! Shri Thiru Jayakumar, Honourable Minister for Fisheries Department, TN, was the chief guest at the green drive. The saplings were planted on 14 acres across. Such plantation drives not only help reduce carbon footprint, but also bolster local biodiversity.

The initiative, in partnership with The Times of India and Hero MotoCorp, is an important milestone in our Company’s mission of Transforming Urban Landscapes by Creating Sustainable Communities that are environmentally responsive and resilient.

Under the Guidance of Dr. M. Gopi, HOD Dept of Department of Plant Biology and Plant Biotechnology with 20 volunteers planted more than 50 trees. The students also placed

bricks as barricades and each student took the responsibility to nourish and maintain the allocated plant. Eventually, the ground attained a glorious look. The committee decided to proceed with the same inspiration, enthusiasm and zeal to enhance the beauty of the entire Chennai city. At the end of programme there was a photo session with Honourable Minister for Fisheries Department, Co-ordinators and students.





Environmental awareness Initiative -10 (Inside the Campus) MED PLANT EXPO 2020

As an extension to the Pongal Day celebrations 2020, an expo (Exhibition) on medicinal plants was organized. (10th January 2020). An array of medicinal plants was displayed for both staff and students of Our Institution. Healing with medicinal plants are as old as mankind itself. The connection between man and his search for drugs in nature dates from the far past. Awareness of medicinal plants is essential for usage against illnesses due to which man learned to pursue drugs in barks, seeds, fruit bodies, and other parts of the plants

The most liked and popular being *Andrographis paniculata* -Nilavembu.

Others include Thulsi (*Ocimum sanctum*), the Ramar thulsi, Krishna thulsi were displayed and its importance was cited, Kelanelli (*Phyllanthus amaranthus*) for liver ailments. The importance of *Hibiscus rosa sinensis* in hair colouring was mentioned.

In addition to this the Enviro Club volunteers distributed Thulsi saplings to the interested staff members.

With icing to the cake Marine seaweeds of Rameswaram, southern coastline were displayed and its importance nutraceutical values were explained.

Hence overall an awareness programme for the staff and students regarding plants mentioned in Hindu Mythology. Every temple in Tamil Nadu has its own KALPAVIRUKCHAS or trees. In line with this the plants linked to Hindu mythology were mentioned.

EACH ONE SHOULD PLANT ONE! Should be the motto of todays Youth.

NATURE ITSELF IS A BEST PHYSICIAN-HIPOCRATES





Environmental awareness Initiative -11 (Inside the Campus)

Workshop on Organic farming and Vermicomposting

One day workshop cum hands on training was conducted in two sessions one with Entrepreneurial prospects the other involving the participant's exposure to a kit designed by V5 Organics, to multiply exotic earthworm Varsity. This was done under the able guidance of two resource persons from New College, Chennai; who are also budding entrepreneurs in the field of organic farming, the products are sold online market with good response in the general public.

The first session revolved around how to start an enterprise of one self Dr. Abdul jalil discussed about three organic homemade insecticides from common plants, cosmopolitan in Nature. Chemical insecticides do have side effects on the soil and the biota dependent on the soil. Hence the current need to formulate insecticides from plant sources is the need of the hour he motivated the students to formulate three common insecticides. To name a few one formulation with neem, Morinda and Calotropis leaves and the second being Jaggery and fish waste (crab shell). The other interesting one was egg lime syrup with four eggs one lime and five Grams of Jaggery this is an effective organic manure for all vegetable crops.

The other one with ten bananas, one papaya and ten grams of Jaggery was an effective herbicide which enhanced the microorganisms surviving in the soil for the betterment of the horticulture plants. Lastly he emphasized the students, who are the beneficiaries of this prestigious institution to open startups with minimum inputs and maximum outputs. His venture V5 organics is culmination of five friends who did under graduation course together.

The Second session was after a tea break, this provided hands on training to 50 participants from all the science Stream viz. Zoology, Physics, Chemistry, Mathematics and Botany. This session was handled by Dr. Imran, who had brought the kit designed by them to multiply the earth worms in the laboratory conditions first layer of gravel followed sand then enriched black soil in a plastic aerated container. After formation of these layers the earth worms introduced and kept to multiply for 15 days.

Organic formic is the need of the hour which has immense social relevance mainly in the field of agriculture, fruits and vegetables being healthy with adequate supplements. Entrepreneurship opened in the young mind to earn extra money.



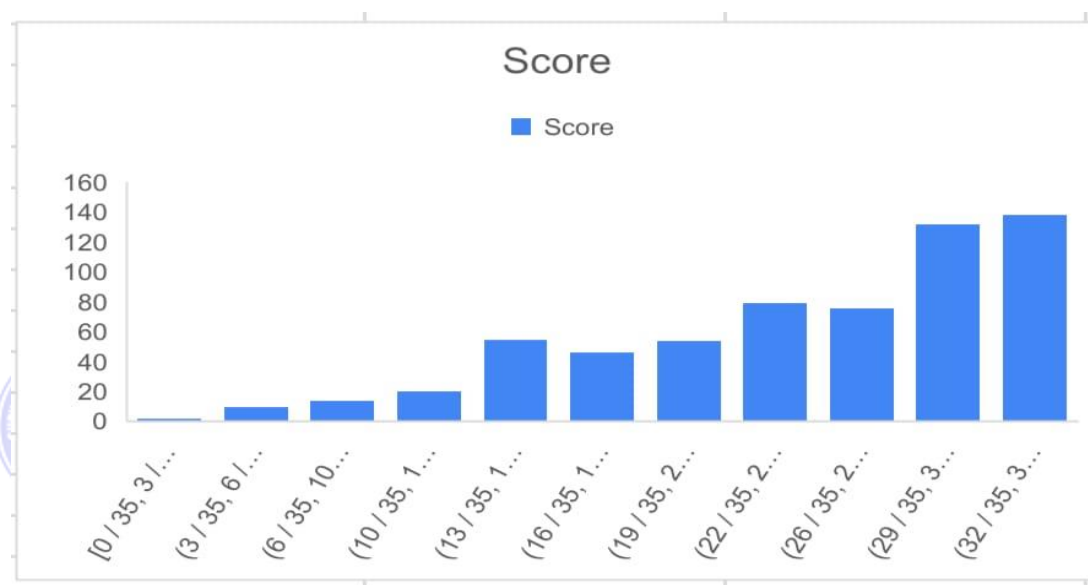


Environmental awareness Initiative -12 (Online mode)

Environmental Awareness Quiz -1

The Enviro Club conducted an Environmental Awareness Quiz from 18.07.2020 to 24.07.2020, in National level.

Environmental Quiz is the National Level Online Quiz to create Environmental Awareness among the staff and students of various colleges. From 18.07.2020 to 24.07.2020 the Enviro Club conducted a quiz on “Environment” Nearly 626 participants of students and staff attended in the quiz. The quiz highlighted about the environment of our mother earth. The quiz was very informative and it was reaches to the students and staff.



Environmental awareness Initiative -13 (Online mode)

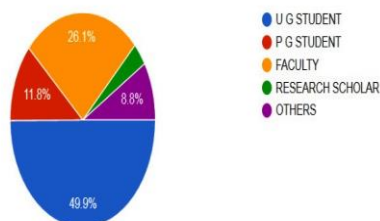
Environmental Awareness Quiz -2

Report

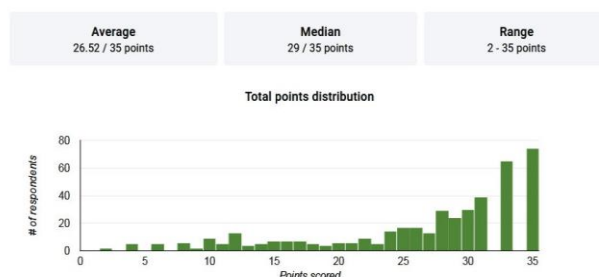
The Enviro Club conducted an Environmental Awareness Quiz from 12.07.2020 to 27.07.2020, in National level.

Environmental Quiz is the National Level Online Quiz to create Environmental Awareness for the staff and students of various colleges. From 12.07.2020 to 27.07.2020 the Enviro Club conducted a quiz on “Environment”. Nearly 434 participants of students and staff attended in the quiz. The quiz

highlighted about the environment of our mother earth. The quiz was very informative and it reaches to the students and staff.



Insights



Environmental awareness Initiative -13 (Online mode)

Orientation for the Fresher's on 22.09.2020

The Guru Nanak College to commemorate the 550th birth anniversary of Shri Guru Nanak Dev Ji celebrated a Go Green Initiative by Enviro Club conducted online Orientation for the Fresher's on 22.09.2020. Our College has a long standing tradition of preserving culture, heritage and flora and fauna in the campus.

The program was organized under the auspices of students' affairs Dr. L.R.S. Kalanithi, Vice Principal Students' affairs, Welcome the facilitator Dr. R. Geetha, Dean School of Commerce and the gathering. Dr. M. Gopi, Assistant Professor and Head, Department of Plant Biology & Plant Biotechnology shift – I and Staff Co-ordinator for Enviro Club presented a detailed presentation and highlighted on the major activities organized during the previous years along with Dr. S.S. Jayaraj, Assistant Professor, Department of Advance Zoology and Biotechnology Enviro Club Co-ordinator from shift –I and Dr. P. Kavitha, Associate Professor and Head, Department of Corporate Secretaryship, Enviro Club Co-ordinator from Shift - II. Our Enviro Club team expressed their gratitude to the respected our beloved General Secretary and Correspondent Mr. Manjit Singh Nayar, to the respected Principal Dr. M.G. Ragunathan for their constant encouragement to conduct the activities throughout the year. More than 570 students, faculty members teaching and non-teaching participated in the program.



Environmental awareness Initiative -14 (Inside the campus)

Tree Plantation on Guru Nanak College Campus

"Preserving the tree is an obligation for everyone without exception; one tree will absorb approximately a ton of carbon dioxide during the course of its life cycle."

Department of Plant Biology and Plant Biotechnology has organized Tree Plantation on 19th January, 2021 in our Guru Nanak College's Campus under the guidance and supervision of General Secretary and Correspondent Mr. Manjit Singh Nair Sir, stated that, this practice will create a habit of planting more trees in near future.

A total of about 287 saplings were planted on the college campus and were furthered watered by the students.

The main goal of the whole day activity is to plant trees, increase awareness in student & also analyse their own skill. Vice Principal (Shift- II), COE, CAO along with students planted few plants in our campus.

As we all know that the whole world is facing the problem of global warming and to recover from such problem planting the trees has become one of the most important aspects. The educational and social goal of our students implies that besides gaining; understanding of concept like social structure, power, community occurring in real life situation, students should acquire competence in the field of program planning, shouldering responsibilities, participation in cooperative task and promotional work in the community.





Environmental awareness Initiative -15 (Inside the campus)

Arbores of GNC an Eye opener to Epithets of Trees


The objective of this “Arbores of GNC an Eye opener to Epithets of Trees” is to explore the plant species of GNC campus

Our Guru Nanak College is known for its lush foliage and shady trees, some almost as old as the college itself. “The trees are part of the heritage of the college. So it was decided to tag the trees of campus with name plates showing their scientific name, vernacular name and common names.

The objectives of this drive were to enhance the tree cover on the campus and to sensitize the students towards importance of trees.

We conducted green audit and field survey to assess the plant species. The whole campus was visited many times for the collection of plants and the Collected Plants information's were documented in the form of botanical name and family. 150 name boards were made ready.

On 19.03.2021 Friday, Arbores of GNC an Eye opener to epithets or trees were inaugurated by Dr. M. G. Ragunathan, Principal, Guru Nanak College. He also tagged few points in the college campus and appreciated the initiatives of Plant biology and Plant Biotechnology Department. He also highlighted that, Plant labels play a vital role, in College campus, so that students and lay person can be familiar with all the plants in the campus.



GURU NANAK COLLEGE (AUTONOMOUS)
RE-ACCREDITED AT "A" GRADE BY NAAC, AFFILIATED TO UNIVERSITY OF MADRAS
GURU NANAK SALAI, VELACHERY, CHENNAI - 600 042.

ENVIRO CLUB
IN ASSOCIATION WITH
DEPARTMENT OF PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

CORDIALLY INVITES YOU
TO
Arbores of GNC
AN EYE OPENER TO EPITHETS OF TREES

Chief Guest
Dr. M. G. RAGUNATHAN
PRINCIPAL

**REVERSING DEFORESTATION IS
COMPLICATED; PLANTING A TREE IS
SIMPLE**
-MARTIN O'MALLEY

ON 19.03.2021 (FRIDAY) @ 10.30 A.M.
VENUE: COLLEGE CAMPUS



Environmental awareness Initiative -16 (Inside the campus)

Fuchsia Plant Expo 2K21

The objective of this “Fuchsia Plant Expo 2K21” is to create Entrepreneurs skill among students of PBPBT department

Today students are more connected to people all over the world but less connected to the near and dear ones and the nature. Taking this into consideration, Department of Plant biology students and Eco Club in our college, sorts out some activities which help them to connect, to our 'Mother Earth'.

The PBPBT conducts various activities, one among them are students were trained to starting their own nursery gardens and were trained to enter the nursery business. For that there is a need to have an experience and a strong knowledge of plants and plant culture, purchasing an existing business or starting a new one are logical options. So it was planned to inaugurate Fuchsia Plant Expo 2K21 in College campus each year. This academic year, the expo was organized on 19.03.2021. Dr. M. G. Ragunathan, Principal inaugurated the Fuchsia plant Expo for the year 2K21 and encouraged the students to extend the activity each semester.



The show is on through the day and the evening Students displayed 15 different varieties of medicinal plant, 14 varieties of ornamental plants and 10 different indoor varieties, which were clearly explained by them. This exhibition was very informative for the students.

Around 250 Participants (45 staff + 205 students) visited the exhibition, all the visitors were happy at being able to create awareness among the public about medicinal plants that were available in nature. At the end of the Plant Expo, the 53 plants were sold and students were profited with Rs.1195/- .





**Guru Nanak College
(Autonomous)**

Velachery, Chennai - 42

Dept. of Plant Biology & Plant Biotechnology

in association with

Enviro Club

organizes

"Fuchsia Plant Expo 2k21"

CHEIF GUEST

DR. M. G. RAGHUNATHAN

PRINCIPAL

On 19th March 2021 @ 10:30 am

Venue: Assembly Square

All are Invited!

JOIN US

GO GREEN

SAVE EARTH

Environmental awareness Initiative -17 (Outside the campus)

Connect with the Ocean-Coastal and Marine Debris Clean Up awareness program

An awareness programme was arranged by TREE Foundation, where 36 Enviro Club students and 3 staff members of Guru Nanak College were invited to join the Coastal and Marine Debris Clean Up awareness program titled as “Connect with The Ocean”. The program was conducted at VGP Marine Kingdom Chennai on September 18th 2021 scheduled between 09:35 A.M -05.30 P.M

36 Enviroclub students participated in an awareness program organized by Tree Foundation on 18.09.2021 between 09:35 A.M -05.30 P.M. A float theme of Ocean was arranged; this theme depicted the different types of pollution that directly or indirectly affecting the Ocean Animals. A detail Float design were arranged to explain regarding ‘Threats to the Marine Environment’. Video session was organized related to Marine Biodiversity Conservation among student community, fisher folk and general public. The float designed also depicted the plight of the marine life forms due to dumping of garbage and fishing gears indiscriminately in the marine ecosystem is displayed along the beaches and coastal villages. The float van mounted with banners and models of marine life is flagged off from Marina Beach by the chief Guest invited by the Coast Guard for the ICC programme. After the Post flagging off the van moved to various areas in and around the city including the villages along the ECR. Float modelled around the central theme titled “Connect with the Ocean” plans showcased the attitudinal changes that can be motivated in the general public by action at the individual level. The float is a joint initiative of the TREE Foundation with The Indian Coast Guard, US Consulate Chennai, United Way and HCL Foundation. All the Pandemic protocol’s and social distancing norms were followed throughout the program. TREE Foundation also initiated a program by “Involving Fishing Community in Marine Conservation Though, Ghost Net Retrieval” and incentivizing the fishermen. The program created awareness on how plastic pollution affects the Ocean life forms. Students from now will join with Trust for Environment Education, Conservation & Community Development and take part in cleaning the coastal area.





Environmental awareness Initiative -18 (Outside the campus)

Cycle Rally in support to Wildlife Conservation

An awareness programme was arranged by Tamil Nadu Forest Department, where 12 Enviro Club students of Guru Nanak College were invited to join the Cycle Rally program titled as Wild Life Celebration 2021 with theme “A Conservation Collective Wild Run , 2021!”. The program was conducted at Besant Nagar beach on October 03rd 2021 scheduled between 06.00 A.M -12.00 P.M. The programme aimed at creating awareness among the youth to have a passionate heart for the biodiversity around them.

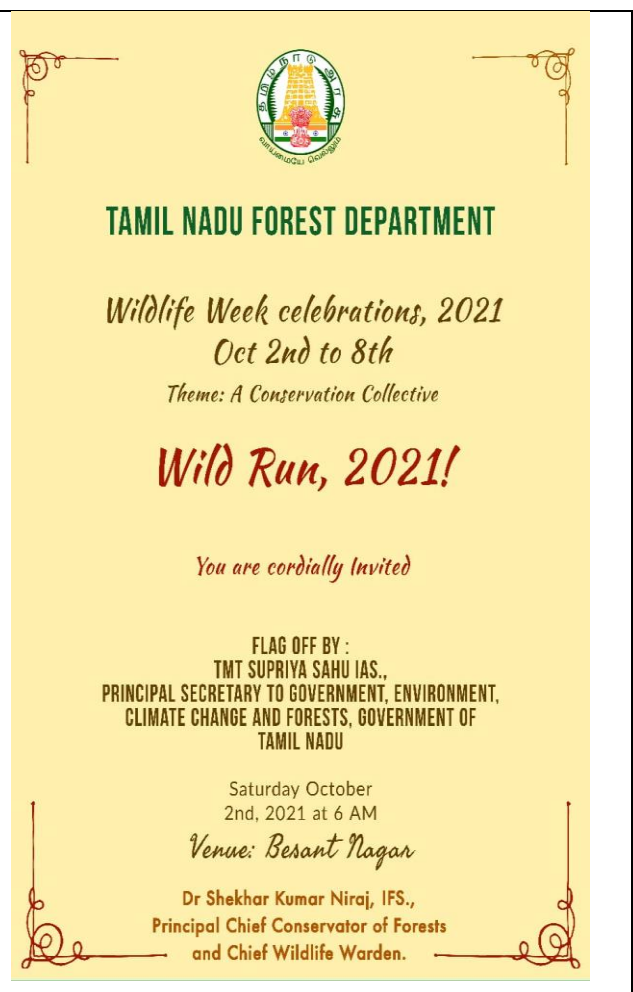
A cycle rally was arranged by Tamil Nadu forest department on October 03rd 2021 in Besant Nagar beach to create awareness among people on the need to conserve and protect wild animals in connection with Wildlife Week celebrations. The programme aimed at creating awareness among the youth to have a passionate heart for the biodiversity around them.

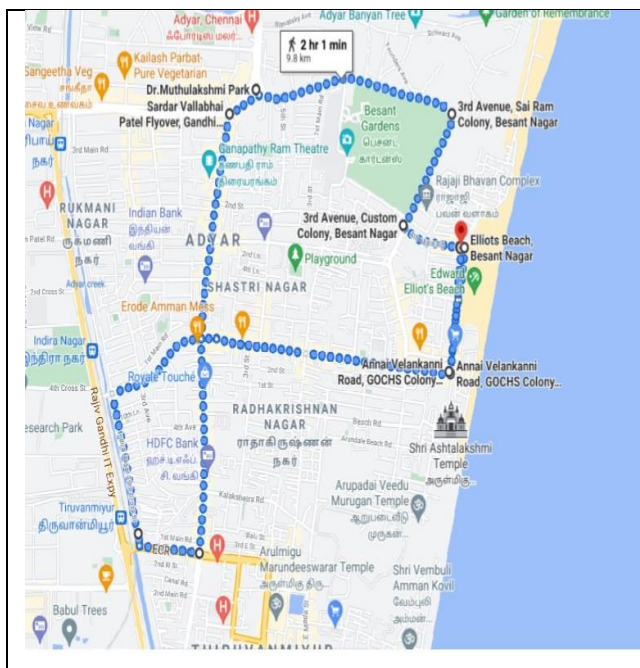
TMT. Supriya Sahu IAS., Principal Secretary to Government, Environment, Climate Change and forest, Government of Tamil Nadu flagged off the rally from Besant Nagar beach at in the presence of Dr.Shekhar Kumar Niraj, IFS., Principal chief Conservator of Forests and Chief wildlife warden and other senior officials.

The rally passed through Elliot beach road, Annai Velankanni Road, GOCHS colony, ECR main road, Adyar, Rajaji bhavan complex and concluded at Edward Elliot's Beach. Over 550 members from the Chennai Cycling Club and 12 students from Guru Nanak College took part in the cycle rally.

Dr. Shekhar Kumar Niraj said that Wildlife Week was celebrated during the first week of October every year to create awareness on importance of wildlife. He said various events including essay writing, elocution, logo designing competition for school and college students have been planned in the district as part of the celebration till October 8.

The program created an awareness on how anthropogenic directly or indirectly affects the wild life ecosystem. Students from now will join in hand with Tamil Nadu forest department, Conservation & Community Development and will take part in wild life conservation





Environmental awareness Initiative -19 (Inside Campus)

GREEN AUDIT AND MAPPING THE TREES 2020-2021

Our Guru Nanak College is known for its lush foliage and shady trees, some almost as old as the college itself. “The trees are part of the heritage of the college.

Aim:

This work aimed at the complete study and analysis of the flora of the Guru Nanak College Campus, Velachery.

Methods:

- To study and understand the changes in the flora through Flora audit
- The collected data of all the plant species are geotagged with latitude and longitude using an app called as OSM tool.
- This data is further processed to get a proper map containing the keys to all the plant species based on their family in an online application known as my maps.
- This data is further interpreted along with the complete details of each species in a website along with the individual and the overall map.

- The URL of each and particular plant species is further generated in the form of a QR code and affixed to the possible plant species.
- This provides better feasibility and accessibility to a larger crowd to get access about the knowledge of plants.
- In the scientific point of you, this work helps to study the ecology, biodiversity and various other concepts.

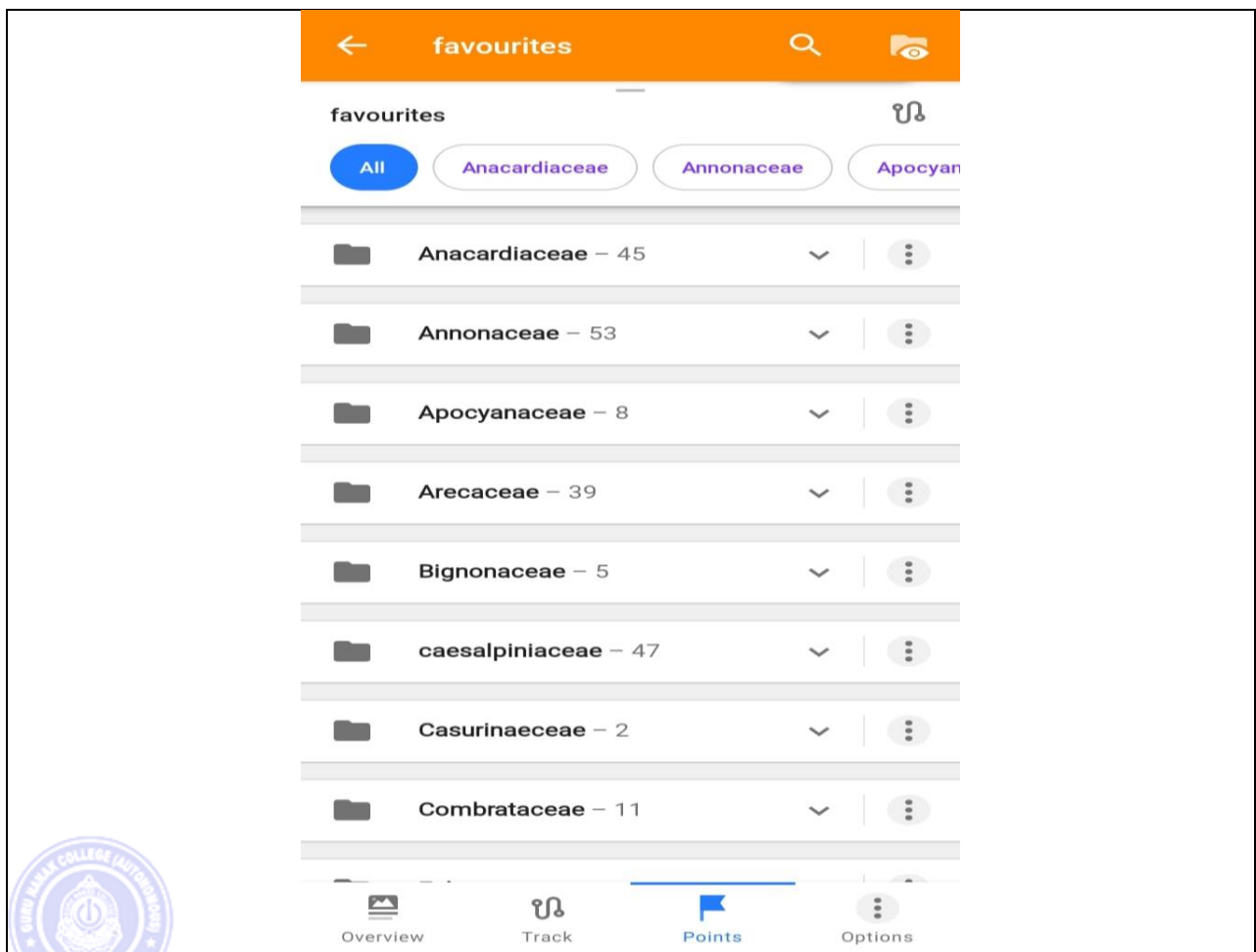
Link to My Map: <https://sites.google.com/gurunanakcollege.edu.in/e-flora-gnc-pbpb/home>

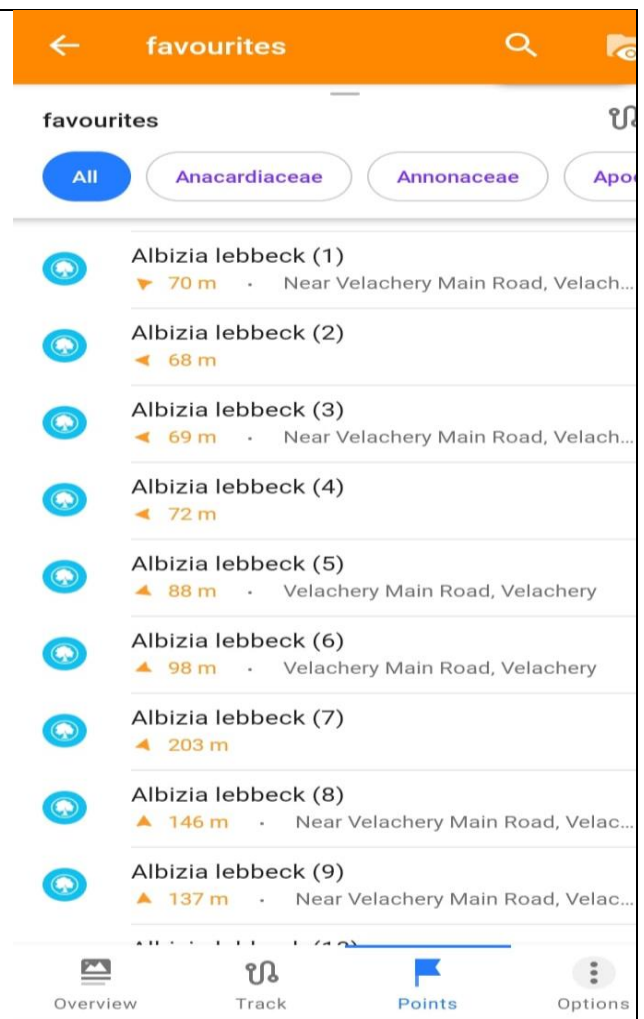
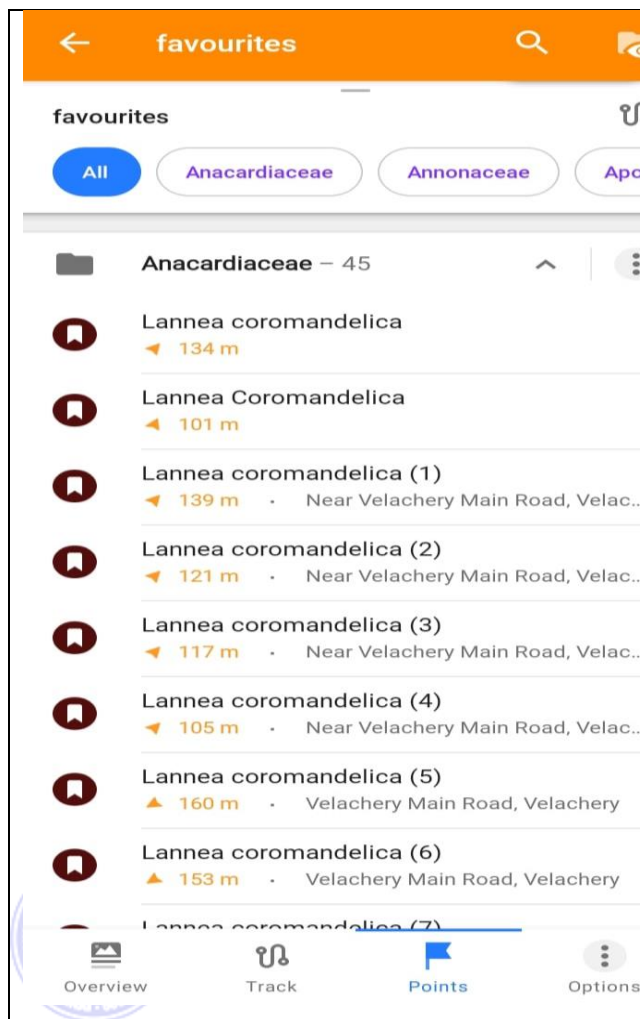
Geo Tags of Guru Nanak College Flora:


<https://play.google.com/store/apps/details?id=net.osmand>

E- Flora Video Link: https://drive.google.com/file/d/1wXRKHwnj9KXi_fpjtg-vBxxZNQyapUoV/view?usp=sharing








GNC PBPBT

HomeAcacia auriculiformisAlbizia lebbeckMore ▾



Acacia auriculiformis


CLASSIFICATION:

Order: Fabales


Family: Fabaceae

Genus: Acacia

Species: A. auriculiformis

GNC PBPBT

All changes saved in Drive



Publis

CLASSIFICATION:

Order: Fabales

Family: Fabaceae

Genus: Acacia

Species: A. auriculiformis

REGIONAL NAMES:

"MINNUMAANU" In Telugu, "AKAASHMONI" In Bengali, "KATHTHI KARUVEL" In Tamil.


NOTES:


Acacia auriculiformis (Auri or Earleaf acacia), is a fast-growing, crooked, gnarly tree in the family Fabaceae. It is native to Australia, Indonesia, and Papua New Guinea. It grows up to 30m tall.

USES:





This plant is raised as an ornamental plant, as a shade tree and it is also raised on plantations for fuel wood throughout Southeast Asia, Oceania and in Sudan. Its wood is good for making paper, furniture and tools. It contains tannin useful in animal hide tanning. In India, its wood and charcoal are widely used for fuel. Gum from the tree is sold commercially, but it is said not to be as useful as gum Arabic. In Thailand the small fresh leaves are eaten, often with nam prik chili sauce or papaya salad. The tree is used to make an analgesic by indigenous Australians. Extracts of *Acacia auriculiformis* heartwood inhibit fungi that attack wood.

InsertPage


Text box

Embed

Layouts



Collapsible



Environmental awareness Initiative -19 (Inside Campus)

Vermicomposting unit Maintenance

Learning objectives: To produce Organic compost using leaf litter of GNC campus

Department of Plant biology and Plant biotechnology and Enviro club are maintaining the Vermi-compost unit, laid out by the Guru Nanak College Management from 14.12.2021 to till date. The Collected litter from the GNC Campus are dumped into the Vermi-compost unit and watered periodically. Aeration were check once a week by digging the unit completely. Once the compost is ready, it will be used to fertilize the flora of GNC. Thus the compost helps in improving the soil fertility and make the plant grow better.







GURU NANAK COLLEGE (AUTONOMOUS)

Affiliated to University of Madras and Re-Accredited at "A" Grade by NAAC

Guru Nanak Salai, Velachery, Chennai – 600042.

5. Beyond the campus environmental promotion activities

Awareness programme created to young minds about the Pollution –directly or indirectly affect the ocean animals - 18th September 2021



The Enviro club Association's of Guru Nanak College, Chennai, task and aim is to keep the Velachery lake clean, so the waterway will be used by the peoples near Velachery.



Velachery lake cleaning programme



GNC enviro club volunteers participated in Wild Life Week Celebrations



TAMIL NADU FOREST DEPARTMENT

*Wildlife Week celebrations, 2021
Oct 2nd to 8th*

Theme: A Conservation Collective

Wild Run, 2021!

You are cordially invited

**FLAG OFF BY :
TMT SUPRIYA SAHU IAS.,
PRINCIPAL SECRETARY TO GOVERNMENT, ENVIRONMENT,
CLIMATE CHANGE AND FORESTS, GOVERNMENT OF
TAMIL NADU**

**Saturday October
2nd, 2021 at 6 AM**

Venue: Besant Nagar

**Dr Shekhar Kumar Niraj, IFS.,
Principal Chief Conservator of Forests
and Chief Wildlife Warden.**

Students of Guru Nanak College (Autonomous) participated in Cycle Rally

