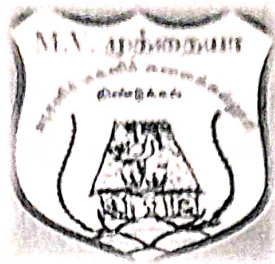


GREEN AUDIT REPORT
2022-2023



M.V.MUTHIAH GOVERNMENT ARTS COLLEGE FOR WOMEN

(Affiliated to Mother Teresa Women's University, Kodaikanal)

Re-Accredited with 'A' Grade by NAAC

DINDIGUL -624 001

TAMILNADU, INDIA

GREEN AUDIT REPORT-2022-2023



SUBMITTED BY

DEPARTMENT OF BOTANY

M.V.MUTHIAH GOVERNMENT ARTS COLLEGE FOR WOMEN

DINDIGUL -624 001

GREEN AUDIT- 2022-23

PREPARED BY

DEPARTMENT OF BOTANY

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ACKNOWLEDGEMENTS

Dr.J.P.NIKKITHA., ASSISTANT PROFESSOR AND HEAD, DEPARTMENT OF BOTANY, M.V.MUTHIAH

GOVT. ARTS COLLEGE FOR WOMEN, DINDIGUL, IS VERY MUCH THANKFUL TO PRINCIPAL *Dr.D.LAKSHMI* FOR

MOTIVATING US TO CONDUCT THE GREEN AUDIT AND ALSO GRATEFUL TO ALL HEAD OF THE DEPARTMENTS,

BURSAR, SUPERINTENDENT AND ALL OFFICE STAFF MEMBERS.

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1. About the College

M. V. Muthiah Government Arts college for women, Dindigul was established in the year 1966. The college is Reaccredited with Grade "A" by NAAC. The college has been providing quality education to the rural students in and around Dindigul District. The college offers 12 UG programmes, 11 PG programmes and 6 Departments are recognized for conducting M.Phil., Research Programmes. The college has almost 2871 students on its rolls in various programmes. The College campus is about 40 acres which include both built up area and open space.

2. About Botanical Garden

Of the 40 acres of the college, 17 acres are exclusively covered by Botanical Garden that has been established in September, 2016. This Botanical Garden is the first of its kind in Government Arts and Science College for Women, Tamil Nadu. The trees present in the premises and the botanical garden make an excellent green ecosystem in the college.

3. Objectives of Green Campus

The development of urban area due to the necessity of increased population on another side reduces the green coverage of our natural environment. Growing of tree species wherever possible not only provides a healthy life style for human population but also acts as a habitat for other species of plants and animals that is vital for the living environment.

The objectives of maintaining green covering of the campus are

- Providing a healthy environment in college campus
- Enhancing the awareness towards ecosystem and environmental protection.
- Creating awareness on cleanliness and pollution control.
- Making the students to study the species of plants, birds, insects and other small animals and improving their knowledge on biodiversity
- Reducing the noise and air pollution.

4. Number of plants and important plant species of College Campus

4.1. Number of species in the premises

There are a total number of 390 plants maintained in the college premises. 48 different plant species covers the total number of plants (390) of premises. The plants are from important herbs, shrubs and tree species of different categories (medicinal, ornamental and etc.). The habit of plants varied from herb, shrub, tree, climber and also epiphyte. There are a total of 286 tree species, 65 shrubs, 30 herbs, 9 climbers. The details of plants species such as their botanical name, local and common names and corresponding families are given in Table 1.

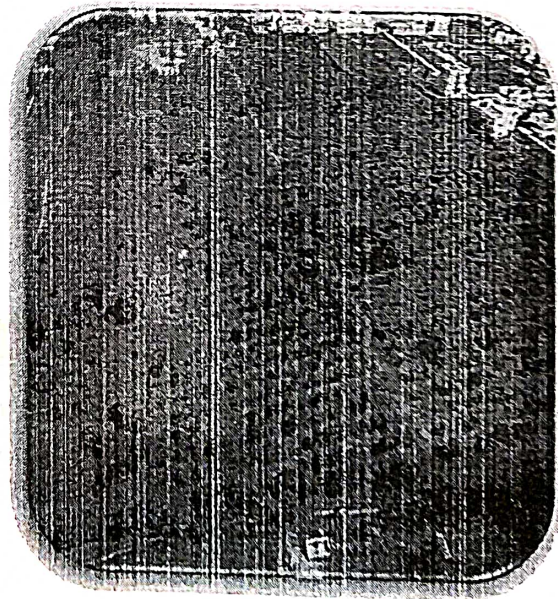
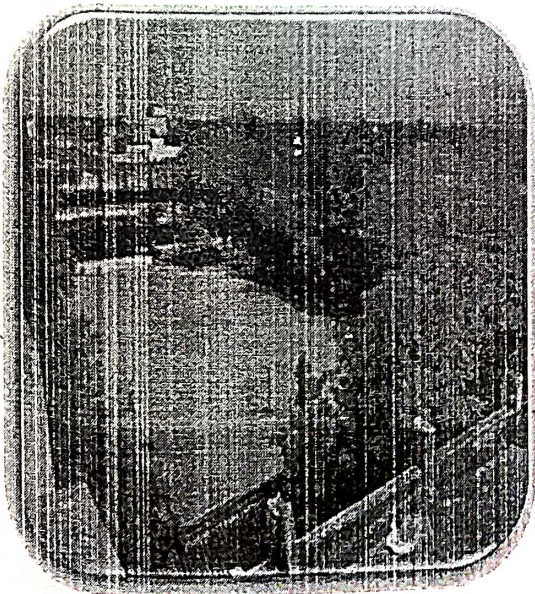
Table 1. List of plants species present in the college premises

Botanical Name	Common Name	Vernacular Name	Family	Total Number
<i>Pithecellobium dulce</i>	Madras Thorn Manila Tamarind	Kodukkaapuli	Fabaceae	15
<i>Albizia lebbek</i>	Siris Tree	Vagai	Fabaceae	5
<i>Syzygium cumini</i>	Java Plum	Naval	Myrtaceae	8
<i>Morinda tinctoria</i>	Indian Mulberry	Manjanathi	Rubiaceae	9
<i>Ficus religiosa</i>	Sacred Fig	Arasamaram	Moraceae	3
<i>Bougainvillea spectabilis</i>	Great bougainvillea	Kakithapoo	Nyctaginaceae	8
<i>Acacia leucophloea</i>	White-barked acacia	Velvelam	Fabaceae	3
<i>Senna siamea</i>	Kassod Tree	Manjalkonnai	Fabaceae	10
<i>Mangifera indica</i>	Mango Tree	Mamaram	Anacardiaceae	4
<i>Azadirachta indica</i>	Neem Tree	Veppamaram	Meliaceae	36
<i>Monoon longifolium</i>	Indian mast tree	Nettulingam	Annonaceae	18
<i>Eucalyptus globulus</i>	Southern blue gum	Thailamaram	Myrtaceae	13
<i>Bombax ceiba</i>	Malabar Silk Cotton Tree	Elava Maram	Malvaceae	1
<i>Pongamia pinnata</i>	Indian Beech Tree, Pongame Oil Tree	Pungan	Fabaceae	48
<i>Ixora coccinea</i>	Jungle Geranium	Vedchi /Idly poo	Rubiaceae	7
<i>Thespesia populnea</i>	Portia tree	Poovarasam	Malvaceae	5
<i>Caesalpinia pulcherrima</i>	Peacock flower	Mayil konrai	Caesalpiniaceae	4
<i>Morinda citrifolia</i>	Great Morinda	Ven Nuna	Rubiaceae	19

<i>Ficus sycamorus</i>	Sycamore Fig	Authi maram	Moraceae	6
<i>Zizyphus jujuba</i>	Jujube	Elanthi	Rhamnaceae	5
<i>Opuntia sps.</i>	Prickly pear	Sapathikalli	Cactaceae	3
<i>Cassia fistula</i>	Golden Shower Tree	Sarakonral	Fabaceae	39
<i>Tabernaemontana divaricata</i>	Crepe Jasmine	Nandiar Vattai	Apocynaceae	6
<i>Tecoma stans</i>	Yellow elder	Thunga arali	Bignoniaceae	3
<i>Catharanthus roseus</i>	Madagascar Periwinkle	Nithya kalyani	Apocynaceae	9
<i>Nerium oleander</i>	Oleander	Arali	Apocynaceae	3
<i>Crotons sps.</i>	Crotan	Crotan	Euphorbiaceae	2
<i>Muntingia calabura</i>	Cotton Candy Berry	Seenipazha sedi	Muntingiaceae	3
<i>Acaela auriculiformis</i>	Ear leaf tree	Kaththi Karuvel	Fabaceae	5
<i>Prosopis cineraria</i>	Sponge Tree	Vanni maram	Fabaceae	6
<i>Melia dubia</i>	Malabar Neem	Malai vembu	Meliaceae	5
<i>Datura metel</i>	Horn of Plenty plant	Oomathai	Solanaceae	3
<i>Delonix elata</i>	Creamy Peacock Flower	Vadanarayani	Fabaceae	6
<i>Anisomeles malabarica</i>	Malabar Calmint	Pacimiratti	Lamiaceae	7
<i>Vitex negundo</i>	Five-leaved Chaste Tree	Nochi	Verbenaceae	7
<i>Delonix regia</i>	Flame Tree	Semmayil - Kondrai	Fabaceae	7
<i>Acer saccharinum</i>	Silver Maple Tree	-	Sapindaceae	2
<i>Terminalia catappa</i>	Indian Almond	Nattuvadumai/ Vadham	Combretaceae	4

<i>Ficus benghalensis</i>	Banyan Tree	Aalamaram	Moraceae	2
<i>Euphorbia virosa</i>	Gifboom tree	Kalli chedi	Euphorbiaceae	2
<i>Lantana camara</i>	West Indian Lantana	Unni chedi	Verbenaceae	3
<i>Ocimum basilicum</i>	Great basil	Thiruneetru Pachilai	Lamiaceae	2
<i>Solanum trilobatum</i>	Red Pea egg plant	Thoodhuvalai	Solanaceae	8
<i>Cissus quadrangularis</i>	Adament Creeper	Pirandai	Vitaceae	7
<i>Coleus aromaticus</i>	Mexican Mint	Omavalli	Lamiaceae	3
<i>Centella asiatica</i>	Indian Pennywort	Vallarai	Apiaceae	9
<i>Bryophyllum pinnatum</i>	Life/Air Plant	Ranakalli	Crassulaceae	3
<i>Dalbergia latifolia</i>	Indian Rosewood	Thodhkathi	Fanaceae	4
			TOTAL	390

AERIAL VIEW OF COLLEGE CAMPUS AND BOTANICAL GARDEN



4.2 Key species of plants present in the premises

There are important medicinal herbs like *Catharanthus roseus*, *Ocimum sanctum*, *O. basilicum*, *Solanum trilobatum*, *Centella asiatica*, *Anisomeles malabarica*, *Coleus aromaticus* and *Bryophyllum pinnatum* maintained in the college. Important medicinal shrubs like *Morinda tinctoria*, *Datura metel*, *Abutilon indicum*, *Vitex negundo* and ornamental shrubs like *Tecoma stans*, *Ixora coccinea*, *Crotons*, *Nerium oleander* and Climber like *Bougainvillea spectabilis* are also grown in the college. Important tree species present in the premises are *Ficus religiosa*, *F. benghalensis*, *Senna siamea*, *Acacia leucophloea*, *A. auriculiformis*, *Melia dubia*, *Delonix elata*, *D. regia* and *Terminalia catappa*.

4.3. Number of species in the Botanical Garden

There are a total number of about 2012 plants maintained in the botanical garden of our college. Of these 2012 plants, 1808 plants are documented and a very few plants could not be identified. The plants are covered by 51 different plant species. The majority of (more than 95%) the plants consists tree species and the remaining are shrubs. These different species are represented by a total of 25 different families. The details such as botanical name, local and common names and corresponding families of the plants present in the garden are listed out and given in Table 2.

Table 2. List of plant species present in the College Botanical Garden

Botanical Name	Common Name	Vernacular Name	Family	Total Number
<i>Pithecellobium dulce</i>	Madras Thorn Manila Tamarind	Kodukkaapuli	Fabaceae	29
<i>Albizia lebbek</i>	Siris Tree	Vagai	Fabaceae	17
<i>Syzygium cumini</i>	Java Plum	Naval	Myrtaceae	56
<i>Tectona grandis</i>	Teak	Thekku	Verbenaceae	10
<i>Morinda tinctoria</i>	Indian Mulberry	Manjanathi	Rubiaceae	36
<i>Acacia leucophloea</i>	White-barked acacia	Velvelam	Fabaceae	26
<i>Azadirachta indica</i>	Neem Tree	Veppamaram	Meliaceae	880
<i>Monoon longifolium</i>	Indian mast tree	Nettulingam	Annonaceae	6

<i>Eucalyptus globulus</i>	Southern blue gum	Thailamaram	Myrtaceae	7
<i>Pongamia pinnata</i>	Indian Beech Tree, Pongame Oil Tree	Pungan	Fabaceae	350
<i>Thespesia populnea</i>	Portia tree	Poovarasam	Malvaceae	11
<i>Tamarindus indica</i>	Tamarind Tree	Puliamaram	Fabaceae	78
<i>Aegle marmelos</i>	Wood apple Tree	Vilvam	Rutaceae	7
<i>Punica granatum</i>	Pomegranate	Madhulai	Lythraceae	3
<i>Millingtonia hortensis</i>	Indian Cork Tree	Maramalli	Bignoniaceae	10
<i>Bauhinia variegata</i>	Orchid Tree	Mantharai	Fabaceae	4
<i>Lannea coromandelica</i>	Indian ash tree	Odhiyan	Anacardiaceae	8
<i>Pterocarpus santalinus</i>	Red sanders	Semmaram	Fabaceae	23
<i>Michelia champaca</i>	Champak	Senbagam	Magnoliaceae	5
<i>Calophyllum inophyllum</i>	Alexandrian Laurel Tree	Punnai	Calophyllaceae	20
<i>Phyllanthus acidus</i>	Star gooseberry	Arinelli	Phyllanthaceae	11
<i>Phyllanthus emblica</i>	Gooseberry	Nelli	Phyllanthaceae	17
<i>Diospyros ebenum</i>	Ebony	Karungali	Ebenaceae	2
<i>Ficus carica</i>	Fig	Athi	Moraceae	4
<i>Couroupita guianensis</i>	Cannon ball tree	Nagalingam	Lecythidaceae	6
<i>Prunus dulcis</i>	Almond	Vadhumai	Rosaceae	3
<i>Sterculia foetida</i>	Wild almon	Poothakarappan	Malvaceae	4
<i>Cordia dichotoma</i>	Indian Cherry	Naruvili	Boraginaceae	8
<i>Annona reticulata</i>	Wild sweet sop	Ramar Seethapazham	Annonaceae	11

<i>Wrightia tinctoria</i>	Dyer's oleander	Veppalai	Apocynaceae	4
<i>Mimusops elengi</i>	Spanish Cherry	Magizham	Sapotaceae	5
<i>Chusia rosea</i>	Autograph tree	-	Clusiaceae	6
<i>Achrás sapota</i>	Sapodilla	Sapota	Sapotaceae	4
<i>Manilkara hexandra</i>	Ceylon Iron Wood	Ulakkaipalai	Sapotaceae	8
<i>Malva pentandra</i>	Mallow tree	Panchu maram	Malvaceae	13
<i>Psidium guajava</i>	Guava	Koyya Maram	Myrtaceae	5
<i>Abrus precatorius</i>	Rosary Pea	Kundrimani	Fabaceae	3
<i>Elaeocarpus angustifolius</i>	Blue marble tree	Rudraksham	Elaeocarpaceae	2
<i>Terminalia chebula</i>	Black Myrobalan	Kadukkai	Combretaceae	2
<i>Terminalia bellirica</i>	Myrobalan	Thanrikai	Combretaceae	1
<i>Terminalia arjuna</i>	Arjun Tree	Marudhamaram	Combretaceae	2
<i>Caesalpinia pulcherrima</i>	Peacock flower	Mayil konrai	Caesalpinaceae	5
<i>Ziziphus jujuba</i>	Jujube	Elanthi	Rhamnaceae	15
<i>Cassia fistula</i>	Golden Shower Tree	Sarakonrai	Fabaceae	12
<i>Muntingia calabura</i>	Cotton Candy Berry	Seenipazha sedi	Muntingiaceae	15
<i>Prosopis cineraria</i>	Sponge Tree	Vanni maram	Fabaceae	7
<i>Melia dubia</i>	Malabar Neem	Malai vembu	Meliaceae	7
<i>Vitex negundo</i>	Five-leaved Chaste Tree	Nochi	Verbenaceae	3
<i>Delonix regia</i>	Flame Tree	Semmayil - Kondrai	Fabaceae	13

<i>Terminalia catappa</i>	Indian Almond	Nattuvadumai/ Vadham	Combretaceae	17
<i>Ficus benghalensis</i>	Banyan Tree	Aalamaram	Moraceae	7
			TOTAL	1808

4.4. Major Plant families and important plant species of Botanical Garden

The different species maintained in the botanical garden are coming under a total number of 25 different families. The members of Meliaceae and Fabaceae are found dominant in the Botanical garden. There are medicinally as well as economically important tree species like *Azadirachta indica*, *Syzygium cumini*, *Pongamia pinnata*, *Calophyllum inophyllum*, *Tamarindus indicus*, *Terminalia chebula*, *T. bellirica*, *Phyllanthus emblica* and *Melia dubia*, economically important plants like *Tectona grandis*, *Pterocarpus santalinus* and *Acacia leucophloea* are present in the garden. The Botanical garden to its fame and holiness contains sacred tree species like *Ficus religiosa*, *Ficus benghalensis*, *Aegle marmelos*, *Crescentia alata*, *Elaeocarpus angustifolius* and *Lagestroemia speciosa*

5. Outcome of maintaining greening in Campus

The enormous plant diversity of the college premises and botanical garden of our college provides a rich biodiversity and great green coverage. The major outcomes from this are

- About 3150 students benefitted by visiting this rich biodiversity of the campus during environmental study field visit
- Created awareness among students, their parents, faculties and staff member on Green and Clean environment
- Sequestration of CO₂ level and reduced noise pollution inside the college campus
- Enhanced ecosystem development and management

RECOMMENDATIONS

1. Properly Maintained and found Good
2. Helps for oxygen Evolution inside campus
3. Greenery Environment for collection campus
4. Pollution free campus
5. Enhances Birds population

EXPERT COMMITTEE

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Assistant Professor
Department of Biotechnology
Mother Teresa Women's University
KODAIKANAL - 624 101

DATE: 20-4-2022

PLACE: DINDIGUL