



PDEA's

Annasaheb Magar Mahavidyalaya, Hadapsar, Pune 411028

2020 - 21

GREEN AUDIT REPORT

2020 - 21

Reported by

Environmental Awareness Committee

	Green Audit Assessment Team					
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		Science; Science coordinator				
4	Dr. Joshi Ramakant P.	IQAC Co-coordinator	for			
5	Dr. Shirurkar Deepavali D.	Head, Department of Botany;				
		Chairman / Co-coordinator –	Phint			
		Environmental Awareness	0/			
		Committee				
5	Dr. Khisti Ujwala V.	Chairman - Criteria VII	yout			



Executive Summary – Green Audit

Sr.No	Area	Observations	Remark
1.	Awareness and use of renewable energy	Renewable energy such as solar PV plant, solar street lamps and water heater is effectively used in college and hostel.	Awareness program has been also carried out in nearby villages about use of solar energy such as solar cooker, water heater, etc. Good initiative taken by college toward use of renewable energy
2.	Solid Waste Management	Vermicomposting project is on college campus to make the use of solid waste	Good initiative taken by college towards use compost of solid waste and its effective use for fertilizer and biogas
3.	Liquid Waste Management	There is ETP plant.	Initiative taken by college towards liquid waste management
4.	Water conservation	Rain water harvesting system is used to recharge the ground level water. Students and staff participated in pani foundation and panlote programs.	Good initiative taken by college towards water conservation
5.	E waste Management	E -waste channelised through collection Centre or recycler	Well-intentioned initiative by college towards the e-waste management.
6.	Plastic and Paper Management	College is taking initiative by displaying posters/banners about awareness of plastic	Worthy initiative by college towards to implement plastic free campus
7.	Environment awareness	Various programs under taken in the forms of rallies, campaign, guest lectures, workshops etc.	Good initiative taken by college towards awareness regarding various environmental issues.

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A) INTRODUCTION:

The term "Green" means eco-friendly or not damaging the environment. Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. College has "Green audit, campus beautification, environmental awareness and rallies committee". Healthy and ecofriendly campus maintained and monitored by committee members. Colleges and Universities have broad impacts on the sphere around them, both negative and positive. The activities pursued by colleges can create a variety of positive environmental impacts. But colleges are also in a unique position as educational institutions to be leaders in pursuing environmentally sustainable solutions. This college was established in 1972 with the motto of our parent institution Pune District Education Association, Pune. The motto is बहुजन हिताय !बहुजन स्वाय! (meaning the welfare of masses and for the happiness of all)

B) GOALS OF GREEN AUDIT:

The 'Green Audit' aims to analyze environmental practices within and outside the college campus, which will have an impact on the eco-friendly ambience. Green Auditing is a unique process that allows you to know the uses of your available resources i.e. Energy, Water quality, Buildup Space, Air quality, Play Ground, Stationary, Human Resources, Fire Safety, Transport, Cafeteria, Classroom Environment, Library uses, Sanitation Facilities, Green cover, Return on your Investment, etc. which will give you clear authentic data of resources uses.

C) COLLEGE INFORMATION:

Name of the college	Annasaheb Magar Mahavidyalaya, Hadapsar, Pune.
Year of Establishment	1972
Address	Manjari Road, Hadapsar, Pune - 411028, India.
Contact details	020 – 26990376
College key members	Dr. Shelke P. N. (Principal)
	Dr. Mane A. B. (Vice-Principal)

	Dr. Mule P. P. (Vice-Principal and CDC member)	
	Prof. Dr. Patil N. N. (Science Coordinator)	
	Dr. Bhujbal N. N. (CDC member)	
	Dr. Satav G. P. (CDC member)	
	Mr. Bagade Dhananjay (O. S.)	
	Mr. Sonavane Shivaji (CDC member)	
Green Audit, rallies,	Dr. Shirurkar D. D Associate Professor (Chairman / Coordinator)	
Campus Beautification	Prof. Dr. N. N. Patil, Professor	
and Environmental Awareness	Dr. Kulkarni S. S, Associate Professor	
Committee	Mr. Awsare D. B., Associate Professor	
	Ms. Kamble A. N., Assistant Professor	
	Ms. Wadekar A. B., Assistant Professor	
	Mr. Kumkale V. Y.	
	Ms. Dhangar U. S.	
	Dr. Mundhe A. Y.	
	Mrs. Gadekar A. J.	
	Mr. Poman, C. N., Peon	
Courses offered	Senior college (UG) - Arts, Science and Commerce, BBA, BBA(CA),	
	BSc Computer Science.	
	PG Courses:	
	MSc - Chemistry, Physics and Microbiology, Computer Science,	
	Environmental Science.	
	MA - Hindi, Marathi, English, Politics and Economics,	
	MCA - Science	
	Ph.D. – Chemistry, Physics, Microbiology, Marathi, Economics and	
	Commerce.	

D) ATTENTION ZONES:

- a. Solid Waste and Recycling
- b. Electricity and Natural Gas Use
- c. Water and Waste water Management
- d. Wetlands, Store water Management and Campus Ground Management
- e. Emissions and Air Quality
- f. Canteen

E) BUILDING SURVEY:

1. Total campus area : 5.2 acres.

2. College Building : 11,917 square meters.

3. Ground Area : 3000 square meters.

4. Green Area : 3100 square meters.

5. Road/Paved Area : 2570 square meters.

6. Terrace Area : 3570 square meters.

7. Impervious area : 6140 square meters.

Pervious area : 6100 square meters.

Ratio of impervious: pervious area : 50:50

8. Number of Class Rooms : 50

9. Number of Laboratories : 34

10. Water filters with aqua guard : 03

11. Water coolers : 09

12. Number of Fire Extinguishers : 15

13. Gymkhana : 1800 sq.fit.

14. Number of washrooms: Male Toilet Blocks: 4 (Total - 8 WC, 32 Urinals)

Male Toilet Blocks: 1 (Total - 1 WC, 2 Urinals)

Wash rooms – Male: 2

Female Toilet Blocks: 4 (Total - 16 WC, 4 Urinals)

Female Toilet Blocks: 1 (Total - 1 WC, 2 Urinals)

Wash rooms – Female: 9

15. Hostel Area : Campus area : 1.36 acres., Building 10327.82 m²

- 16. ACs are with Five star rating in Power saving.
- 17. Classrooms with sufficient cross ventilation and light.
- 18. Laboratories with safety instructions and measures.

F) WATER FACILITIES ON CAMPUS:

- RO water purifiers are mounted in the College and Hostel premises.
- 09 water coolers installed in the College and Hostel premises.
- PMC drinking water connection.
- 02 drinking water bore wells.
- 16 Water tanks →

Underground: 05 tanks of total capacity 78000 litters;

Overhead: 02 cement tanks of capacity 50000 litters and

09 Sintex tanks of capacity 9000 litters.

G) RAIN WATER HARVESTING ON CAMPUS:

- Annasaheb Magar College campus = 5.2 acres
- Average annual rainfall ranges between 700-800 mm.
- Total catchment area = 3570 m²
- Total quantity of rainfall (harvesting potential) = $200 \text{ m}^3/\text{annum}$
- Total 6 rain water harvesting units are present on campus.
- This project gives adequate quantity of harvested rain water.
- It is helpful for recharging ground water and other uses like watering garden plants.

H) USE OF RENEWABLE ENERGY:

- 10 solar street lamps installed on campus. (PV panel 12 V 40 W, LED luminary : 9 W;
 Battery : 160 WAH Lithium ferro phosphate battery)
- 2. Terrace area of college buildings is with roof top Grid Tied Captive Solar PV plant with following specifications.

Type of system : Grid tied
Solar array capacity : 40 kWp
Module mounting : Fixed tilt

Estimated power generation : 55,480 KWh / year (First year)

Degradation : 0.7 % YOY Linearly

Project life : 25 years

Project benefits:

- Installing this system is equivalent to planting 2360 mature trees.
- Reduction of 30 metric tons of CO2 Emission for first year.

I) WASTE MANAGEMENT ON CAMPUS:

1. SOLID WASTE MANAGEMENT:

- Garbage segregated as Dry waste and wet waste, 15 dustbins were provide in different areas on campus.
- In laboratories bins are clearly labeled for glass, paper, plastic, and for organic waste.
- Reuse of waste material: Show pieces / articles were prepared by students from waste materials.
- Vermicomposting project is maintained.
- Organic waste, like food scraps from hostel, canteen, plants and lawn clippings used for vermicomposting.
- Prepared vermicomposting used as a fertilizer for plants grown in campus.
- Re use of paper System is evident. Both sides of paper are used.
- Regular activities are monitored by software.
- Book bank system is evident by library.
- E-book system is used.
- Hazardous chemicals are carefully handled at Chemistry, Microbiology, Botany and Zoology laboratories.
- List of chemicals are available with respective laboratory.
- M S D S / safety displays for chemicals recommended.

2. PLASTIC WASTE MANAGEMENT:

- For plastic collection 15 dustbins were provide in different areas on campus.
- Collected plastic handed over to registered recycler Keshav Sita Memorial Foundation
 Trust for recycling and disposal.
- MOU with **Keshav Sita Memorial Foundation Trust** is renewed in years 2020-21 (01/08/2020 to 31/07/2021).

3. E-WASTE MANAGEMENT:

- E Waste dropping boxes set up in Computer Science Department and in Library.
- Collected E-waste handover to Poornum Eco-vision Foundation (registered recycler for recycling and disposal).
- Whenever Department of Computer Science upgrade computer system, old systems are handed over to other departments and PDEA, Parent Institute, for distribution to the schools, as their requirement can be fulfilled with these system.

- Machines which are not in working conditions, revived by replacing required spares parts from other non-working machines having some functional spare parts.
- Old Batteries of back-up system are replaced under buy back scheme.
- Students prepared articles from E-waste.

4. LIQUID WASTE MANAGEMENT:

• Effluent treatment plant (ETP) Installed on campus.

J) GAS USAGE:

• Gas Usage apparent in Chemistry, Microbiology, Botany Laboratories and in Canteen.

K) AIR QUALITY MONITORING:

- PUC is mandatory for the Vehicles coming in the campus.
- Awareness done for students by organizing guest lecture.
- VOC / NON VOC based Water based colours are recommended. No apparent use of VOC based paints.

L) CANTEEN:

- Segregation of wet and dry garbage done.
- Food waste disposed in Vermicomposting pit.
- Food License recommended for Canteen Operator.

M) HEALTHY PRACTICES ON COLLEGE CAMPUS:

- Sanitary napkin Vending Machines and Disposable Machines are installed in the College and Hostel premises.
- Burning of garbage not allowed in campus.
- All water tanks are cleaned twice in a year by External agency by using Jet Machine.
- Water Leakage → Regular checking done in house staff available to rectify leakages.
- Water analysis done in microbiology laboratory, records are available
- Daily cleaning of wash rooms.

- Quality food in canteen.
- College faculty and administrative staff actively participated in Cycle Rally, which is organized along with parent institution for promotion of use of cycles and other environment promoting issues.
- Extra efforts have been taken by the college to create environment consciousness
 amongst students. NSS, NCC and environmental awareness committees
 organized tree plantation program. Plantation is encouraged by Principal and
 faculties of all departments to increase greenery and reduce carbon emission
 effects on campus.
- Medicinal plants and ornamental plants propagated by students in botanical garden and on college premises. Near about 200 plant species are maintained on the campus.
- Development of vertical garden and hanging bottle garden.
- Five Bee boxes installed and maintained in botanical garden.
- Vertical garden and hanging baskets and bottle garden is well maintained.

N) INITIATIVES TAKEN BY THE COLLEGE TO MAKE THE CAMPUS ECO- FRIENDLY

- Awareness of environment issues and Awareness of carbon footprints inculcated in students.
- Green building for quality living, Know green and think green is promoted on the campus
- Tree Plantation is encouraged by Principal and faculties of all departments to increase greenery and reduce carbon emission effects on campus.
- Tree plantation campaign is organized by NSS every year.
- Water conservation by water harvesting units and prevention of water wastage.
- Twice a year staff lectures/ guest lectures on Environment issues are arranged.
- Environment Awareness course is conducted for all second year students (S.Y.B.A, B.Com, B.Sc. and B.Sc. Computer Science)
- Environment Awareness rallies and street plays were organized.
- Projects on Environment were carried out by students and staff.

- Science Exhibition related to environmental awareness projects was organized in the College.
- Extra efforts have been taken by the college to create environment consciousness amongst students. NSS, NCC and environmental awareness committees organized tree plantation program.
- Plastic waste is collected twice a year from the College and also from homes of students and sent to Keshav Sita Foundation Trust for plastic recycling solution.
- Energy conservation maximizing the use of natural light and solar light.
- Use of solar street lamps and CFL bulbs.
- Solar system for electricity generation.
- Vending machine for sanitary napkins is available at ladies common room, also disposal methods is evident for the same.
- Burning of garbage is not allowed in campus.
- Displaying boards like 'Say No to Plastic' for promotion of usage of paper bags.
- Reduce Reuse Recycle methods are followed.
- Carbon dioxide neutrality is maintained on the campus by developing greenery
- Global warming, bio-diversity and pollution incorporated in the curriculum.
- Organization of E-waste campaign and rallies for environmental awareness.
- Use of renewable energy Utilization of solar energy for production of light energy.
- Solid waste management by vermicomposting.
- Liquid waste management carried out by chemistry department.
- NSS & NCC activities
 - o Swatchatta Bharat Abhiyan
 - o Cleaning of surrounding area
 - Tree plantation
 - Water management by making bandhara in villages.
 - o 'Save female child' awareness campaign in villages.

O) SUGGESTIONS:

- All computers have to be set for power save mode for switching off screen if not used for 15 minutes and hibernate if not used for more than 60 minute.
- Students may be educated towards saving of electricity by displaying messages in the classroom and common public area for switching off lights, fans and computers when not required.
- Fans should not be rewound more than once and has to be replaced by 5 STAR rated energy efficient fans to reduce consumption.
- CFL bulbs should replace with LED bulbs.

P) PHOTOGRAPS

Green Audit Assessment Team (2020-21)



Environmental Awareness Committee (2020 – 21)



RO Water Purifier



RO water purifier 500 LPH with storage 2000 Lit.

Effluent Treatment Plant (ETP)



Sanitary Napkin Vending and Disposable Machine (College and Hostel)

College premises.





Sanitary napkin Vending Machines Hostel premises.



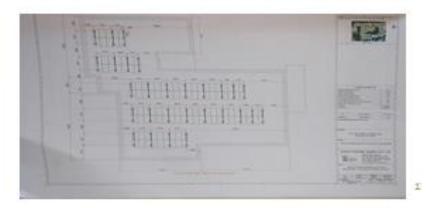
Grid Tied Captive Solar PV Plant











Solar Street Lamps





Solar Water Heater System

On College

On Hostel





Water Harvesting On Campus



Vertical Garden and Hanging Bottle Garden and Bee Boxes





Bee boxes





Vermicomposting unit





9

Campus Beautification and Botanical Garden



































Tree Plantation on Hostel Campus







LIST OF SOME ANGIOSPERM PLANTS GROWN IN COLLEGE CAMPUS

Sr.	Botanical name of the plant	Common name	Family	Habit
1	Abrus precatorius L.	Gunj.	Papilionaceae/ Fabaceace	Climber
2	Acalypha wilkesiana Muell-Arg	Acalypha	Euphorbiaceae	Shrub
3	Acalypha hispida Burm.	Acalypha, Copper leaf	Euphorbiaceae	Shrub
4	Acorus calamus L.	Wekhand	Araceae/ Acoraceae	herb
5	Adeniu obesum Roem. & Schult.	Red Sandalwood, Desert rose	Apocynaceae	Tree (Bonsai)
6	Adhatoda vasica Nees	Adulsa	Acanthaceae	Shrub
7	Aegle marmelos (L.) Corr.	Bael	Rutaceae	Small to medium- sized tree
8	Aglaonema commutatum Schott	Philippine evergreen	Araceae	Perennial herb
9	Aglaonema Modestum	Chinese evergreen	Araceae	Perennial herb
10	Aglaonema widuri	Red Peacock	Araceae	Perennial herb
11	Aglaonema nitidum	Silver evergreen	Araceae	Perennial herb
12	Albizia saman (Jacq.) Merr.	Shirish	Mimosaceae	Tree
13	Alcea rosea L. Synonym: Althaea rosea Cav	Hollyhock	Malvaceae	Herb
14	Allamanda blanchetii A. DC.	vine red Allamanda	Apocynaceae	Climbing h abit
15	Allamanda cathartica L.	Yellow Allamanda Golden trumpet	Apocynaceae	Climbing h abit
16	Aloe vera (L.) Burm	Korphad	Liliacae	Herb under Shrub
17	Alstonia scholaris L. R.Br.	Saptparni	Apocynaceae	Tree
18	Araucaria heterophylla, (Salisb) Franco	Christmas tree	Araucariaceae	Tree
19	Artabotrys hexapetalus (L. f.) Bhandari	Green Champa	Annonaceae	Bushy shrub climbing by hooks
20	Asparagus densiflorus (Kunth) Jesso	Asparagus Fern / foxtail fern	Liliaceae /Asparagaceae	Perennial herb
21	Asparagus plumosus Baker., J. Linn	Climbing asparagu s fern	Liliaceae /Asparagaceae	climbing ha
22	Asparagus racemosus Willd.	Shatavari	Liliaceae /Asparagaceae	climbing shrub
23	Azadirachta indica A. Juss.	Kadu-Neem	Meliaceae	Tree
24	Bauhinia acuminata L.	Safed Kachnar	Caesalpiniaceae/	Shrub/

25	Bombax ceiba L.	Kapok	Bombacaceae	Tree
26	Bougainvillea spectabilis Willd	Bougainvel	Nyctaginaceae	Woody climber
27	Bryophylum pinnatum Oken	Paanphuti	Crassulaceae	succulent herb.
28	Caesalpinia pulcherrima (L) Sw.	Shankhasur	Caesalpiniaceae/F abaceae	Shrub
29	Callistemon lanceolatus (Sm.) Sweet	Bottle brush	Myrtaceae	Small Tree or shrub
30	Campsis radicans Seem. Journ.	Trumpet Vine	Bignoniaceae	Shrub
31	Canna indica L	Kardal	Cannaceae	Perennial herb
32	Canna flaccida Rosc.	Kardal Piwali	Cannaceae	Perennial herb
33	Cascabella thevetia (L)	Pivali Kanher, Bitti	Apocynaceae	Shrub or small tree
34	Cassia siamea Lam.	Kashid	Caesalpinaceae/ Fabaceae	Small tree
35	Cassia surattensis Burm. f.) H.S. Irwin & Barneby	Motha Tarvad	Caesalpinaceae/ Fabaceae	Tree
36	Catharanthus roseus (L.) G. Don.	Sadaphuli	Apocynaceae	Perennial Herb
37	Celosia argentea L. var. cristata	Cockscomb	Amaranthaceae	Herb
38	Celosia spicata L. Sp.	Kurdu	Amaranthaceae	Herb
39	Cereus peruvianus	Apple Cactus	Cactaceae	Perennial Shrub
40	Cestrum nocturnum L.	Raat-ni-Rani	Solanaceae	Climber
41	Chlorophytum comosum (Thunb.) Jacques	Spider Plant	Liliaceae /Asparagaceae	Herb
42	Cinnamon zeylanicum Blume	Dalchini	Lauraceae	Evergreen Tree
43	Cissus quadrangularis L.	Hadjod	Vitaceae	Climber
44	Citrus aurantifolia (Christm. & Panz.) Swing.	Limbu	Rutaceae	Small Tree
45	Citrus limetta Risso.	Mosambi	Rutaceae	Small Tree
46	Clerodendrum wallichii Merr.	Bridal vail	Verbenaceae /Lamiaceae	Shrub
47	Clerodendrum thomsoniae Balf.f.	Bleeding Heart Vine	Verbenaceae /Lamiaceae	bushy climber
48	Clitoria ternatea L.	Gokarna	Papilionaceae	Climber
49	Cocos nucifera L.	Coconut	Palmae / Arecaceae	Tree
50	Codiaeum variegatum var. angustifolium	Limbu croton	Euphorbiaceae	Shrub
51	Codiaeum variegatum var. Pictum, (L.) Bl., Bijdr.	Amba Croton	Euphorbiaceae	Shrub
52	Codiaeum variegatum var. Spirale	Croton	Euphorbiaceae	Shrub

53	Combretum indicum (L.) De Filipps Synonyms: Quisqualis indica L.	Madhumalti, Rangoon Creeper	Combretaceae	Climber
54	Commiphora wightii (Arn.) Bhandari Synonyms: Commiphora mukul (Stocks) Hook.	Gugul	Burseraceae	Shrub or small tree
55	Cordyline rubra Otto & A. Dietr	Palm lily	Liliaceae/Asparaga ceae	Evergreen shrub or small tree
56	Cordyline fruticosa (L.) A. Chev. Synonyms: Dracaena terminalis L.	Ti plant	Liliaceae/Asparaga ceae	Evergreen shrub or small tree
57	Costus igneus N.E. Br.	Insulin plant	Scitamineae/ Costaceaes	Herb
58	Cycas revoluta	sago palm, king sago	Cycadaceae	Tree
59	Cymbopogon citratus (DC.) Stapf.	Lemongrass	Gramineae/ Poaceae	Herb
60	Delonix regia (Hook.) Raf.	Gulmohar, Flame Tree	Caesalpiniaceae/ Fabaceae	Tree
61	Dianthus chinesis L.	Rainbow pink / China pink	Caryophyllaceae	Herb
62	Dianthus plumarius L. Synonyms: Caryophyllus plumarius Moench	Garden pink	Caryophyllaceae	Herb
63	Dieffenbachia seguine (Jacq.) Schott	Dumb-cane	Araceae	Herb
64	Dolichandra unguis-cati (L.) Miers Synonyms: Bignonia unguis-cati L.	Cat's Claw/ Nakh Vel	Bignoniaceae	Climber
65	Dracaena fragrans (L.) Ker Gawl. Synonyms: cornstalk dracaena	Corn Plant	Asparagaceae	Shrub
66	Dracaena trifasciata Prain Synonyms: Sansevieria trifasciata Prain	Snake Plant	Agavaceae/ Asparagaceae	Herb
67	Dypsis lutescens (H. Wendl.) Beentje & J. Dransf.	Areca palm	Araceae	Tree
68	Echinocactus grusonii Hildm.	Golden ball	Cactaceae	Shrub
69	Epiphyllum oxypetalum	Brahma-Kamal	Cactaceae	Shrub
70	Epipremum aureum (Linden & André)	Money plant	Araceae	Climber
71	Eucalyptus globulus Labill.	Nilgiri	Myrtaceae	Tree
72	Euphorbia milli Ch. Des. Moulins	Tawa	Euphorbiaceae	Shrub
73	Euphorbia pulcherrima Willd. ex Klotzsch	Lal-patti	Euphorbiaceae	Shrub
74	Ficus benghalensis L.	Banyan tree	Moraceae	Tree
75	Ficus benjamina L.	Weeping Fig	Moraceae	Tree
76	Ficus racemosa Linn Synonyms: Ficus glomerata Roxb.	Umber	Moraceae	Tree
77	Ficus religiosa L.	Pimpal	Moraceae	Tree
78	Gaillardia aristata Pursh	Blanket flower	Asteraceae	Herb

79	Gaillardia pulchella Foug.	Blanket flower	Asteraceae	Herb
80	Galphimia glauca Cav.	Rain of gold Shower of Gold	Malpighiaceae	Shrub
81	Gomphrena globose L.	Makhmali, Supari	Amaranthaceae	Herb
82	Graptoveria opalina	Stonecrops	Crassulaceae	Prostrate habit
83	Grevillea robusta A. Cunn. Ex. R.Br.	Silver Oak	Proteaceae	Tree
84	Hamelia patens Jacq.	Fire Bush, Scarlet Bush	Rubiaceae	Shrub
85	Hibiscus rosa-sinensis L.	Jaswand	Malvaceae	Shrub
86	Impatiens balsamina L.	Garden Balsam/ Terada	Balsaminaceae	Herb
87	Ixora coccinea L.	Kuda, Jungle flame	Rubiaceae	Evergreen shrub
88	Jacaranda mimosifolia D. Don, Synonyms: Jacaranda ovalifolia R.Br.	Nil mohar	Bignoniaceae	Tree
89	Jasminum samba (L.) Aiton	Mogra	Oleaceae	Shrub
90	Jatropha gossipifolia L.	bellyache bush	Euphorbiaceae	Shrub
91	Jatropha integerrima Jacq. Synonyms: Jatropha pandurifolia Andr. Jatropha hastate Jacq.	Peregrina, Spicy Jatropha,	Euphorbiaceae	Shrub
92	Lagerstroemia speciosa (L) Pers.	Pride of India, Taaman	Lythraceae	Small to medium tree
93	Lantana camera L. var. aculeata	Tantani, Ghaneri	Verbinaceae	Medium size tree
94	Lantana involucrata L.	Buttonsage	Verbinaceae	Shrub
95	Lantana montevidensis (Spreng) Brig	trailing lantana	Verbinaceae	Shrub.
96	Licuala grandis (hort. Ex W. Bull) H. Wendl	Ruffled fan palm, Palas palm	Palmae/ Arecaceae	Shrub
97	Livistona rotundifolia (Lamarck) Mart. Synonyms: Saribus rotundifolius (Lamarck) Blume	Fan palm, Table palm	Palmae/ Arecaceae	Tree
98	Malvaviscu penduliflorus DC.	Muki Jaswand	Malvaceae	Shrub
99	Mangifera indica L.	Amba	Anacardiaceae	Tree
100	Michelia champaca L.	Pivala chaph , Sonchapha	Magnoliaceae	Tree
101	Mimosa pudica L.	Touch-Me-Not, Lajalu	Mimosaceae/Fabac eae	Tree
102	Monstera deliciosa Liebm.	Window Leaf,	Araceae	Herb
103	Muntingia calabura L.	Singapore cherry	Muntingiaceae	Climber
104	Murraya koenigii (L.) Spreng.	Kadhi-patta	Rutaceae	Shrub
105	Mussaenda erythophylla Schumach & Thonn.	Red flag bush, Buddha's lamp	Rubiaceae	Evergreen Shrub
106	Mussaenda frondosa, L.	Dhobi tree, white flag bush	Rubiaceae	Shrub
107	Nerium indicum Mill. Gard.	Kaner	Apocynaceae	Shrub Vine

108 109 110	Nyctanthes arbor-tristis L. Nymphaea sp. Peach Glow	Parijatak	/Nyctaginaceae	am all 4
	Nymphaea sp. Peach Glow			small tree
110		Water lily.	Nymphaeceae	Herb
	Ocimum tenuiflorum L., Synonym: Ocimum sanctum L.	Krishna Tulsi,	Labiateae	Herb or Under Shrub
111	Ocimum americanum L. Synonym: Ocimum canum, Sims.	Ran Tulsi	Labiateae	Herb or Under Shrub
112	Ocimum basilicum L.	Sabja	Labiateae	Herb or Under Shrub
113	Pandorea jasminoides (Lindl.) K. Schum. cultivar alba	Bower creeper, bower vine	Bignoniaceae	Shrub
114	Passiflora caerulea	Krishnakamal	Passifloraceae	Climber
115	Passiflora incarnate L	purple passionflower	Passifloraceae	Climber
116	Pelargonium vitifolium L. Ait., Hort. Synonym: Geranium vitifolium L	Geranium	Geraniaceae	Herb
117	Pentas lanceolata (Forsk) Deflers	Star Flower, Star Cluster	Rubiaceae	Herb
118	Petunia grandiflora	Crimson star	Solanaceae	Herb
119	Phyllanthus emblica L. Synonyms: Emblica officinalis Gaertn.	Amla	Euphorbiaceae	Tree
120	Piper betle L.	Nagvel, Nagarvel,	Piperaceae	Climber
121	Piper nigrum L.	Black Pepper, Kala Mari	Piperaceae	Climber
122	Pithecellobium dulce (Roxb.) Benth & Hook. Synonyms : Mimosa dulce (Roxb.)	Vilayati chinch	Mimosaceae	Tree
123	Plectranthus scutellarioides (L.) R. Br. Synonyms: Coleus blumei Benth.	Coleus	Lamiaceae	Herb
124	Plectranthus amboinicus Lour. Synonyms: Coleus amboinicus	Indian Mint, Owa pan	Lamiaceae	Herb
125	Plumbago auriculata Lam.	Blue Chitrak	Plumbaginaceae	Perennial herb
126	Plumbago zeylanica L.	Pandhara Chitrak	Plumbaginaceae	A soft perennial herb.
127	Plumeri alba L.	White Champka, white frangipani	Apocynaceae	Shrub/tree
128	Plumeria pudica Jacq.	Golden Arrow	Apocynaceae	Shrub/tree
129	Plumeria obtuse L.	Singapore graveyard flower	Apocynaceae	Shrub/tree
130	Plumeria rubra L. Synonyms : Plumeria acutifolia Poir.	Red champka	Apocynaceae	Tree
	Polianthes tuberosa L.	Tube Rose,	Amaryllidaceae	Herb

132	Polyalthia longifolia (Sonner.) Thw, Enum.	Asoka Tree	Annonaceae	Tree
133	Portulaca umbraticola Kunth.	'Cupcake Carrot'/ 9 o'clock flower	Portulacaceae	Herb
134	Pothos Scandens L.	Money plant	Araceae	Climber
135	Prosopis cineraria (L) Druce	Shami	Mimosaceae / Fabaceae	Tree
136	Psidium guajavac L.	Peru	Myrtaceae	Tree
137	Pyrostegia venusta (Ker Gawl.) Miers Synonyms : Bignonia venusta Ker Gawl.	Flame Vine, Flaming Trumpet	Bignoniaceae	Climber
138	Rhoeo spathacea (Sw.)	Rhoeo	Commelinaceae	Herb
139	Rosa sp.	Gulab	Rosaceae	Herb or small shrub
140	Roystonea regia (Kunth) O. F. Cook Synonyms: Oreodoxa regia Kunth	Bottle Palm, Royal Palm	Palmae / Arecaceae	Tree
141	Russelia equisetiformrs Schlt Dl. & Cham. Synonyms Russelia juncea Zucc.	Fountain or Fire Cracker	Scrophulariaceae	Shrub
142	Synonyms: Saraca indica sensu Bedd. L.	Sitecha Ashok	Caesalpinaceae / Fabaceae	Tree
143	Scadoxus multiflorous (Martyn) Raf.	Blood lily, May flower	Amaryllidaceae	Herb
144	Spathiphyllum cochlearispathum (Liebm.) Engl.	Peace Lily.	Scrophulariaceae	Herb
145	Spilanthes acmella Murr. Synonyms: S. paniculata, Spilanthes calva DC.	Akarkara	Asteraceae	Herb
146	Strelitzia reginae Banks	Bird of Paradise	Strelitziaceae	Herb
147	Syzygium cumini (L.) Skeels, Synonyms: Eugenia jambolana Lam.	Jambul	Myrtaceae	Tree
148	Tamarindus indica L.	Chinch	Caesalpiniaceae / Fabaceae	Tree
149	Terminalia catappa L.	Desi Badam	Combretaceae	Tree
150	Thuja occidentalis L.	Mayurpankhi	Cupressaceae	Tree
151	Thunbergia laevis Nees	Whitelady	Acanthaceae	Climber
152	<i>Thunbergia grandiflora</i> (Roxb. Ex Rottl.)	Blue Thunbergia, blue skyflower	Acanthaceae	Climber
153	Tradescantia pallida (Rose) D. R. Hunt	Purple Queen	Commelinaceae	Herb
154	Tradescantia zebrina (Schinz) D. R. Hunt	Wandering jew	Commelinaceae	Herb
155	Tradescantia spathacea Sw. Synonyms: Rhoeo discolor (L'Her.) Hance	Rhoeo	Commelinaceae	Herb
156	Vitiveria zizanoides (L.)	Wala	Poaceae	Herb
157	Withania somnifera (L.) Dunal.	Ashwagandha	Solanaceae	Shrub

158	Wodyetia bifurcate A.K. Irvine	Foxtail palm	Palmae/ Arecaceae	Tree
159	Xanthostemon youngii C.T. White & W. d. Francis	Red penda / crimson penda	Myrtaceae	Shrub
160	Zamia pumila L.	Coontie palm,	Zamiaceae	Shrub
161	Zephyranthes candida (Lindl.) Synonyms: Amaryllis candida Lindl.	Fairy Lily	Amaryllidaceae	Herb
162	Tagetus erecta L.	Zendu	Asteraceae	Herb
163	Chrysanthemum indicum L.	Shevati	Asteraceae	Herb
164	Magnolia liliifera	Kawathi chafa	Magnoliaceae	Tree

Gymnosperms: 05 speciesPteridophytes: 03 species

Caccti :25 species

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