



Navsari Agricultural University



**ENGINEERS WITH
SOCIAL RESPONSIBILITY**

VEGETATIVE COVER STATUS

at

Dhirubhai Ambani

Institute of Information and Communication

Technology (DA-IICT), Gandhinagar

Prepared by

College of Forestry

Navsari Agricultural University (NAU), Navsari

and

DA-IICT, Gandhinagar

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Acknowledgement

In the era of imminent global warming and climate change, to promote awareness and compassion among students and society, about flora existing in the campus, DA-IICT came up with the noble idea to identify trees /shrubs / herbs species and do QR coding giving details of each species through QR code.

At the request of DAIICT, Navsari Agricultural University (NAU) carried out the project which is a unique attempt in the campus of a University in Gujarat, if not in India.

The authors are grateful to Dr. Z. P. Patel, Hon Vice Chancellor, Navsari Agricultural University, who has kindly consented to carry out the task outside the jurisdiction of University / State forests. The contributors sincerely acknowledge the encouragement and motivation provided by Prof K. S. Dasgupta, Director DAIICT for this work. We are also grateful to Dr. M. K. Jhala, Director of Research (DR), Anand Agricultural University (AAU) for his kind help in contacting DR, NAU for their support for carrying out the activity. The authors are thankful to Dr. T. R. Ahlawat, DR and Dean PG Studies, Navsari Agricultural University, who assigned the project to the faculty of forestry, as he was aware that it could be done by expertise available in the college. The team is thankful to the authorities of DA-IICT for providing necessary financial support along with boarding and lodging arrangements to the survey team from NAU, Navsari. The team acknowledges the administrative support from DA-IICT and NAU in conducting the exercise.

1. Introduction

“The urge to classify is a fundamental human instinct; like the predisposition to sin, it accompanies us into the world at birth and stays with us to the end”

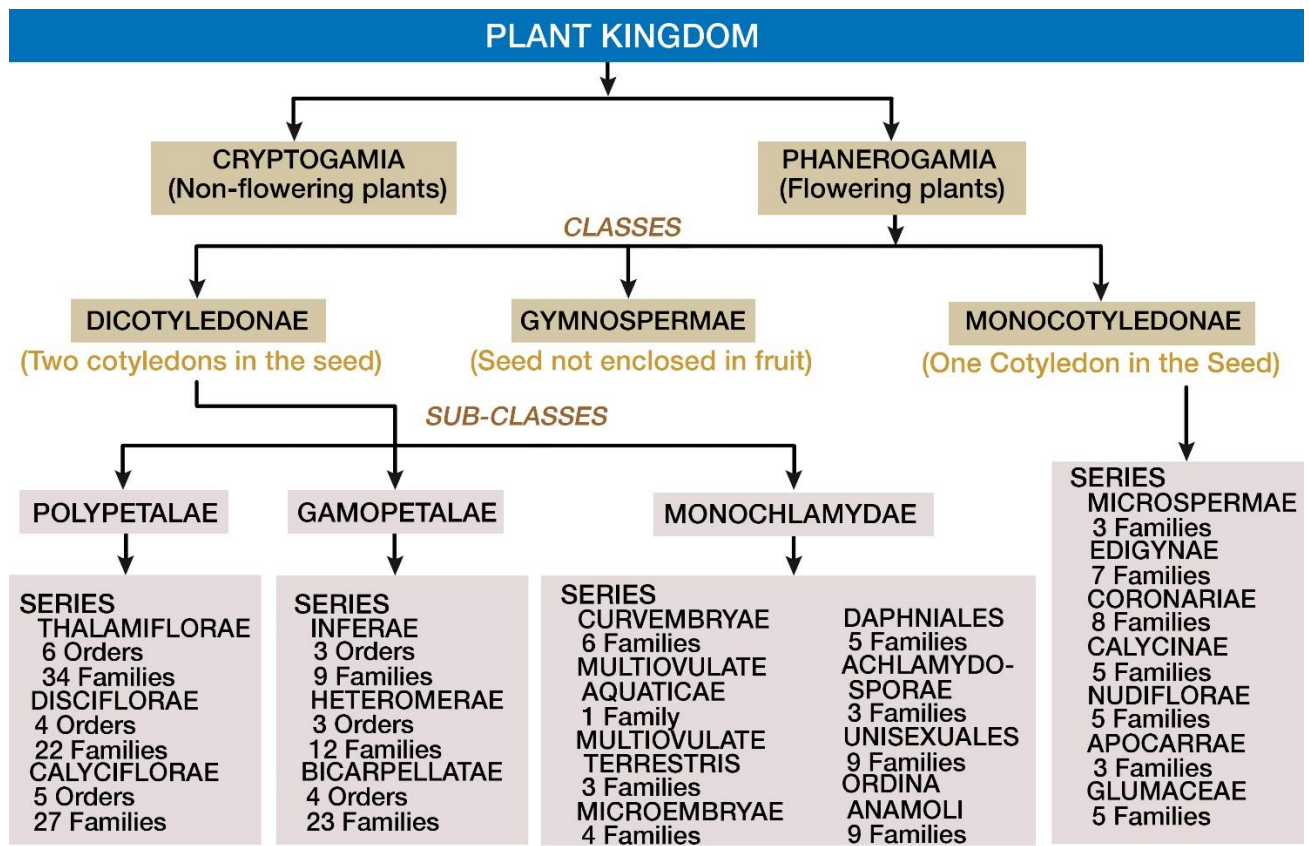
- A. TINDELL HOPWOOD (1959)

Taxonomy and classification—the basis of identification—are fundamental sciences and at the same time dependent on other sciences as well. In this respect, it holds a unique position. It has become a synthetic science that benefits from research in a very wide range of subjects both in the organic and inorganic world. In this sense, taxonomy is frankly a lagging science because it depends for its improvement, and indeed for its very existence, entirely on information from other fields. In the so-called herbarium, taxonomy and identification can be (and often are) understood by limitation. Plants are largely classified and identified by intuitive processes many a time either by local or vernacular names or based on only a few characters, leading to false interpretations and information. In such circumstances, a live field specimen photograph can provide some insight into many morphological clues to differentiate and distinguish between closely allied species. Hence, this volume deals with Digital aspects of Tree/herbs/shrubs/climbers enumerated during the survey of DA-IICT.

2. Methodology

Plant species (trees) are arranged alphabetically (family-wise) with a key of identification based on Bentham and Hooker’s system of classification, which is universally accepted for the identification of plants. Local name/Vernacular name with as an when available English Common name, flowering plant family is provided along with the brief description and phenological aspects i.e. flowering and fruiting time. Separate photographs for bark, flower, and fruit are also provided, as many times this becomes one of the most essential field characters for identification.

3. Classification of Plant Kingdom



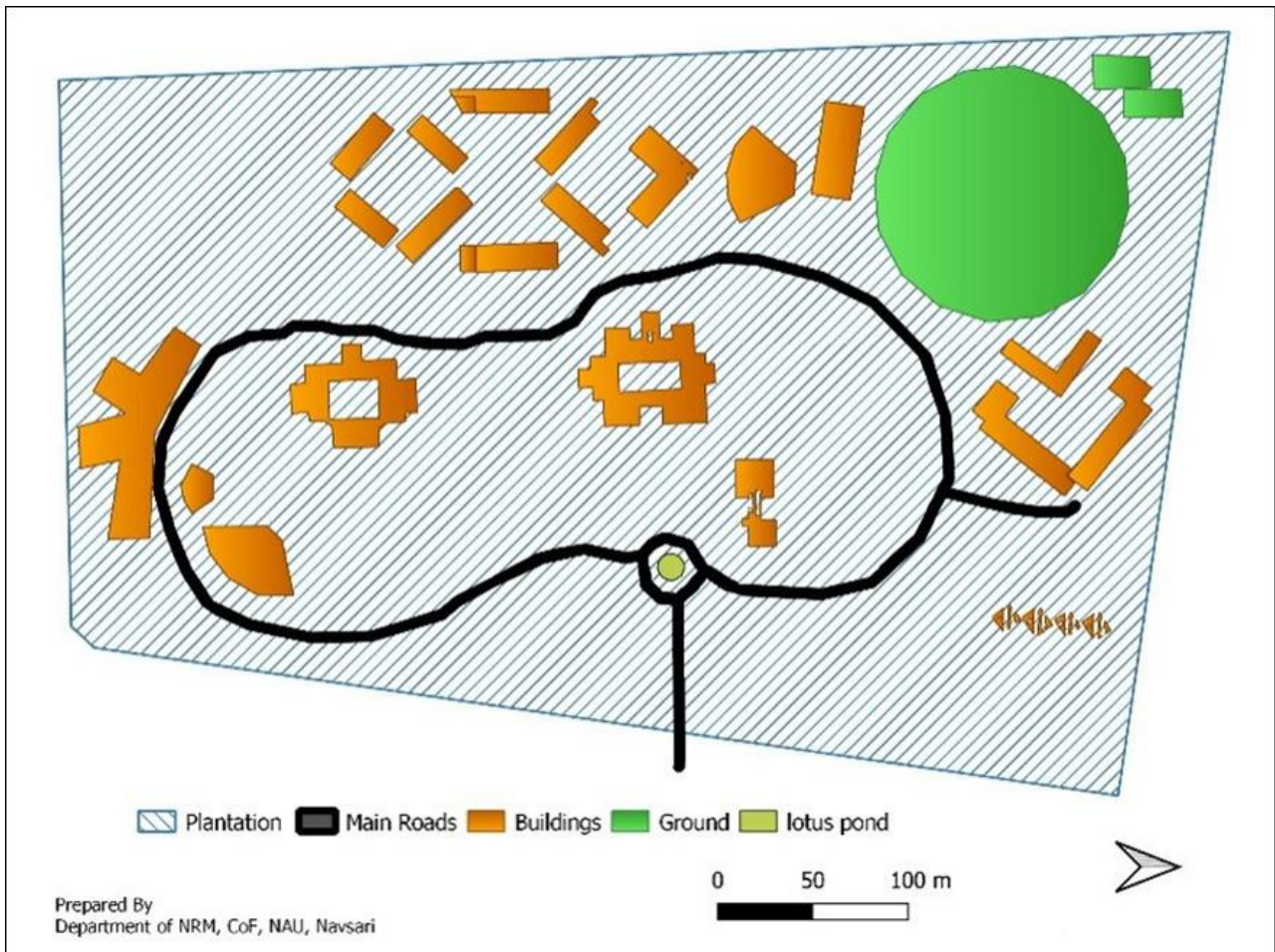
4. Summary of Plant Species

Total number of plant available in the campus	5364
Total number of species available in campus	107
Maximum number of plants of same specie available in campus	909

5. General Information about DA-IICT

Latitude	23.188538
Longitude	72.628715
Altitude	81 m
Annual Rainfall	805 mm
Maximum Temperature	36 to 42 °C
Minimum Temperature	10 to 27 °C
Agro climatic situation	North-Central-East Gujarat
Location	Gandhinagar
Soil type	Alluvial clay loam to sandy clay
Topography	Plain

6. Map of DA-IICT



7. QR code generation of each vegetation species

What is QR code and how it works?

A QR code is a machine-readable code consisting of an array of black and white squares, typically used for storing URLs or other information for reading by the camera on a smartphone. A QR code (Quick Response code) is a type of matrix barcode invented in 1994 by Japanese company Denso Wave.

Every QR code consists of a number of black squares and dots (including some fiducial markers) which represent certain pieces of information. When a smartphone scans this code, it translates that information that can be easily understood by the humans.

QR codes have become common in consumer advertising. Typically, a smartphone is used as a QR code scanner, displaying the code and converting it to some useful form (such as a standard URL for a website, thereby obviating the need for a user to type it into a web browser). QR code has become a focus of advertising strategy, since it provides a way to access a brand's website more quickly than by manually entering a URL.

How the QR code was generated for the trees at DA-IICT?

The steps are as follows

7.1 Create database in Excel and Mail merge of individual tree details in Word file:

The whole process of generating the QR code for an individual tree data at DA-IICT was done in-house through available software. Based on the database created in excel, word file was created using mail merge function. The word file has all the details of the trees such as Tree ID, Botanical name, English name, Common/Local name, Family, Uses, URL of their Geo-tagged photograph and Wikipedia links.

7.2 Individual tree details were converted from the Word file into a PDF file:

PDF file was created so that the details are in uniform format across all the platforms since word / text files often lose their formatting information when it is opened on a different computer or device. PDF is an abbreviation that stands for **Portable Document Format**. It's a versatile file format created by Adobe that gives an option for an easy, reliable way to

present and exchange documents - regardless of the software, hardware, or operating systems.

From the word file, individual PDF file for each tree was created using Adobe Acrobat. PDF file, with details of the tree, were then renamed with their Tree IDs for easy identification. Geo-tagged photograph of the tree was also renamed with their Tree ID. Now along with photographs, the individual PDF files of each tree were uploaded at the DA-IICT repository site. This site was made accessible to public through individual URLs for each PDF file.

7.3 QR code generation using ID card software (CARDPRESSO):

This individual URLs of each PDF file were entered into an excel database with Tree ID and tree details. To access the URL of the PDF file of an individual tree, QR code of the URL was to be generated. This was the final step, which would create a QR code of the URL providing details of the trees. It was decided to use CARDPRESSO a software available at DA-IICT which is used to create and print ID cards (**Fig 7.1**). The ID cards also have QR code identification of individual student whose ID card was created, Hence the same software was used for creating QR code for identifying a tree.

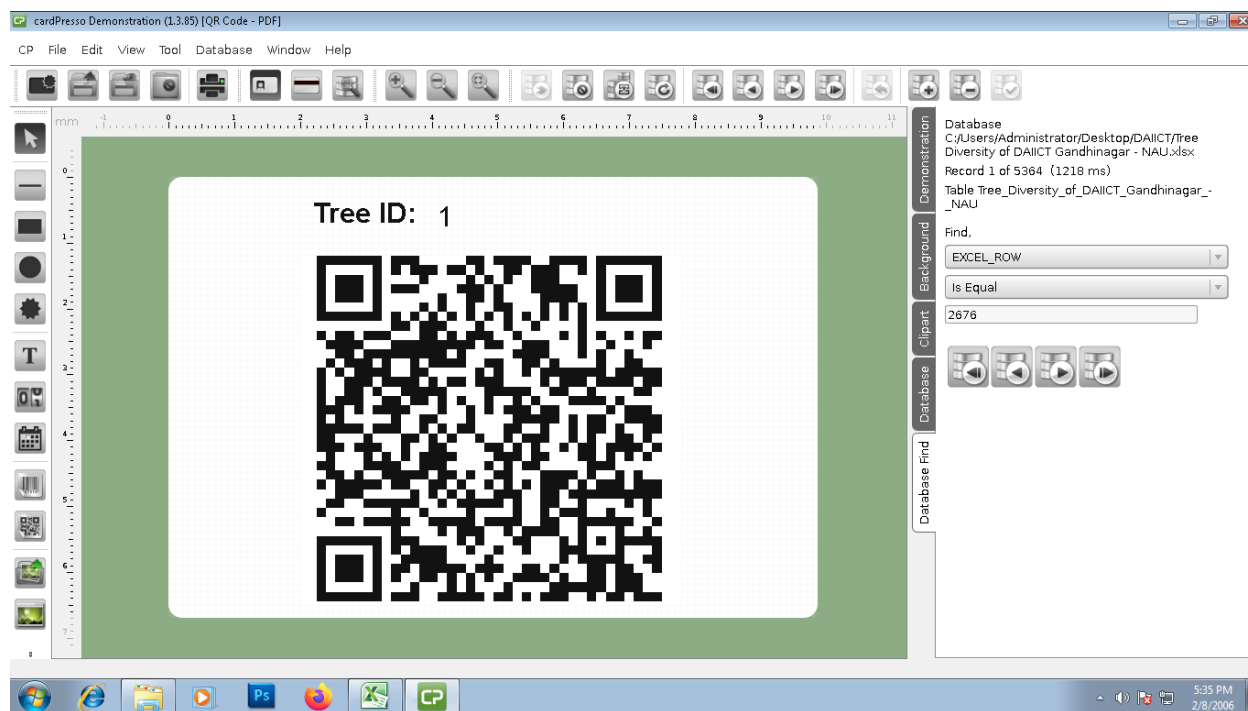


Fig 7.1: Screenshot of the ID card software-CARDPRESSO for generating tree QR code

Database of the trees with their individual URL for each tree, was linked to the ID card software for creating QR codes. The software, using the tree database, generated separate QR codes for each of the 5364 Trees. This QR codes were transformed in a PDF file format where each QR code having heading as its Tree ID (**Fig 7.2**).

Tree ID: A1342



Fig 7.2: QR code generated of an individual Tree at DA-IICT with Tree ID

The end user can see the Tree ID above the QR code and on scanning the QR code with any QR code scanner or supported smartphone, the particular Tree's PDF file with details would open and provide all the details available regarding that Tree **Fig 7.3**. Based on the URL clicked within the Tree details it will open the Geo-tagged photograph or Wikipedia link.



DA-IICT – Trees details

Tree ID. : A555

Botanical name : *Cassia fistula* Linn.

English name : The purging fistula, Indian laburnum

Common / Local Name : Garmalo

Family : Caesalpiniaceae

Uses : Timber used as posts, Shafts, Carts, Furniture, Boat making, Fuelwood, Charcoal, Medicinal

Photo URL : [Click here for Photo.](#)

Wikipedia Link : [Click here for more details.](#)



DA-IICT – Trees details

Tree ID. : A1001

Botanical name : *Bismarckia nobilis* Hildebr. & H. Wendl.

English name : Bismarckia

Common / Local Name : Bismarckia

Family : Areaceae

Uses : Landscaping, ornamental

Photo URL : [Click here for Photo.](#)

Wikipedia Link : [Click here for more details.](#)

Fig 7.3: Details of trees after scanning the QR code

8. List of Vegetation Species

Sr. No.	Botanical Name	English Name	Common/Local Name	Page No.
Trees				
1	<i>Acacia auriculiformis</i> A Cunn. Ex Benth.	Australian babool	Bengali babool	16
2	<i>Acacia catechu</i> Wild.	Cutch tree, Senegalia catechu	Khair	17
3	<i>Acacia leucophloea</i> Wild.	White barked acacia	Safed babul	18
4	<i>Acacia nilotica</i> (L.) Willd. Ex Del.	Indian gum arabic tree	Desi Babul	19
5	<i>Aegle marmelos</i> L. Correa	Bael tree, Bengal Quince	Billi patra, Bel patra	20
6	<i>Ailanthus excelsa</i> Roxb.	Tree of heaven	Arduso, Ardu, Maharukh	21
7	<i>Albizia odoratissima</i> (L.f.) Benth.	Black siris	Kalo siras	22
8	<i>Alstonia scholaris</i> R. Br.	Devil's tree, Saitan wood, Dita bark tree	Saptparni	23
9	<i>Annona squamosa</i> (L.)	Custard apple	Sitaphal	24
10	<i>Azadirachta indica</i> A. Juss.	Nim, Margosa tree	Limbdo	25
11	<i>Balanites aegyptiaca</i> (L.) Delile	Egyptian balsam	Ingoriya	26
12	<i>Bauhinia purpurea</i> L.	Purple orchid tree	Bauhinia, Camel's foot tree, Butterfly tree, Orchid tree	27
13	<i>Bauhinia tomentosa</i> L.	Yellow bauhinia, Yellow bell orchid tree	Yellow Bauhinia	28
14	<i>Bismarckia nobilis</i> Hildebr. & H. Wendl.	Bismarckia	Bismarckia	29
15	<i>Bombax ceiba</i> L.	Silk cotton tree	Shimalo	30
16	<i>Butea monosperma</i> (Lamk) Taub.	The flame of forest	Kesudo, Khakharo, Dhak, Palas	31
17	<i>Caesalpinia pulcherrima</i> (L.) Sw.	Peacock flower, Poinciana	Dwarf Gulmohar	32
18	<i>Calliandra haematocephala</i> Hassk.	Powder puff flower	Powder crop	33
19	<i>Callistemon acuminatus</i> R. Br.	Australian bottle brush	Australian bottle brush	34
20	<i>Carissa carandas</i> L.	Karaunda, Bengal currant	Karamda	35
21	<i>Caryota urens</i> L.	Solitary fishtail palm, Kitul palm	Shivjata	36
22	<i>Cascabela thevetia</i> (L.) Lippold	Yellow oleander	Yellow karen	37
23	<i>Cassia fistula</i> Linn.	The purging fistula, Indian laburnum	Garmalo	38

24	<i>Cassia renigera</i> Benth.	Pink shower tree	Pink cassia	39
25	<i>Ceiba pentandra</i> (L.) Gaertn.	Kapok, Silk cotton, Java kapok	Kapok	40
26	<i>Citrus limetta</i> Risso	Sweet lemon	Mosambi	41
27	<i>Citrus limon</i> L.	Lemon	Limbu	42
28	<i>Clerodendrum phlomidis</i> L. f.	Glory bower, Bag flower	Arni	43
29	<i>Cordia dichotoma</i> Forst. F.	Indian cherry, Clammy cherry	Gundo	44
30	<i>Cordia sebestena</i> L.	Siricote tree, Geiger Tree	Lal lasora	45
31	<i>Couroupita guianensis</i> Aubl.	Cannon ball tree	Kailash pati	46
32	<i>Dalbergia cochinchinensis</i> Pierre ex Laness.	Thailand rosewood	Dalbergia	47
33	<i>Dalbergia sisso</i> Roxb. Ex DC.	Sisoo	Sisoo, Moto sisam	48
34	<i>Delonix regia</i> (Boj) Raf.	The flameboyant tree, Fire tree, Flame tree	Gulmohar	49
35	<i>Drypetes roxburghii</i> (Wall.) Hurus.	Lucky bean tree	Putranjiva	50
36	<i>Elaeis guineensis</i> Jacq.	African oil palm	Oil Palm	51
37	<i>Embllica officinalis</i> Gaertn	Indian gooseberry	Amla	52
38	<i>Erythrina variegata</i> L. var.	Indian coral tree	Pangaro	53
39	<i>Fatsia polycarpa</i> Hayata	Many fruited atralia	Fatsia polycarpa	54
40	<i>Ficus benghalensis</i> L.	Banayan tree	Vad	55
41	<i>Ficus benjamina</i> L.	Weeping fig, Benjamin fig	Benjamina	56
42	<i>Ficus longifolia</i> Schott	Banana leaf fig, Ficus alii	Ficus longifolia	57
43	<i>Ficus microcarpa</i> L. f. (Endangered & Rare Specie)	Chinese banayan, Indian laurel	Nandrak Vad	58
44	<i>Ficus racemosa</i> L.	Cluster fig, Gular	Umro	59
45	<i>Ficus religiosa</i> L. Forssk.	Pipal tree, Sacred fig, Bodhi tree	Piplo	60
46	<i>Gliricidia sepium</i> (Jacq.) Steud.	Quick stick	Gliricidia	61
47	<i>Gmelina arborea</i> L.	White teak	Sevan	62
48	<i>Grevillea robusta</i> A. Cunn.	Silver oak	Silver oak	63
49	<i>Hippomane mancinella</i> L.	Little apple	Hippomane mancnilla	64
50	<i>Holarrhena antidysenterica</i> var. <i>macrantha</i> Kerr	Bitter oleander	Indrajau	65
51	<i>Holoptelea integrifolia</i> Planch.	Indian elm	Kanji, Khanjho	66
52	<i>Kigelia pinnata</i> (Jacq.)	Cucumber tree	Cucumber tree	67
53	<i>Lagerstroemia speciosa</i> (L.) Pers.	Pride of india	Bondaro	68

54	<i>Latania lontaroides</i> (Gaertner) H. E. Moore	Fan Palm	Fan Palm	69
55	<i>Leucaena leucocephala</i> (Lam) de Wit	House tamarind, White babool	Subabul	70
56	<i>Limonia acidissima</i> L.	Elephant apple	Kothi	71
57	<i>Livistona mariae</i> F.Muell.	Red cabbage palm	Livistonia mariae	72
58	<i>Madhuca longifolia</i> Macb.	Mahua, Butter treee	Mahudo	73
59	<i>Magnolia champaca</i> (L.) Baill. Ex Pierre	Champak	Champo	74
60	<i>Mangifera indica</i> (L.)	Mango	Ambo	75
61	<i>Manilkara hexandra</i> (Roxb.)	Rayan	Rayan	76
62	<i>Melia azedarach</i> L.	Bead-tree, Bastard cedar, Persian lilac	Bakan neem, Bakayan neem	77
63	<i>Melia dubia</i> Cav.	Malabar neem	Limbara, Nimbara	78
64	<i>Mimusops elengi</i> L.	Spanish cherry, Bullet wood	Borsalli	79
65	<i>Mitragyna parvifolia</i> (Roxb.) Korth.	Kaim tree	Kalam	80
66	<i>Murraya koenigii</i> (L.) Sprengel	Curry tree	Mitho Limdo	81
67	<i>Murraya paniculata</i> (L.) Jack	Orange jasmine	Kamini, Kunti	82
68	<i>Neolamarckia cadamba</i> (Roxb.) Bosser	Burflower tree, Laran	Kadam	83
69	<i>Nyctanthus arbortristis</i> L.	Night flowering jasmine	Parijat	84
70	<i>Parkia roxburghii</i> G. Don	Tree bean	Parkia	85
71	<i>Peltophorum pterocarpum</i> (DC.) K. Heyne	Yellow flame tree	Sonmohor	86
72	<i>Phoenix sylvestris</i> (L.) Roxb.	Date palm	Khajuri	87
73	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Manila tamarind, Monkey pod tree	Mithi ambali	88
74	<i>Polyalthia longifolia</i> Sonn.	The budhha tree/Mast tree	Asopalav, False asoka	89
75	<i>Pongamia pinnata</i> (L.) Pierre	Ponga oil tree, Indian beech tree	Karanj	90
76	<i>Prosopis cineraria</i> Druce.	Khejri	Khijado	91
77	<i>Prosopis juliflora</i> (Swartz) DC.	The mesquite tree	Gando baval, Vilayati babul	92
78	<i>Psidium guajava</i> L.	Guava	Jamphal	93
79	<i>Pterospermum acerifolium</i> L. Wild. (Rare Specie)	Bayur tree, Karnikara tree	Kanak Champo	94
80	<i>Salvadora oleoides</i> Decne.	Large pilu, Toothbrush tree	Pilu	95
81	<i>Samanea saman</i> (Jacq.) Merr.	Monkey pod tree, Saman	Rato-Sarasdo	96
82	<i>Sapindus mukorossi</i> Gaertn	Soapnut tree	Aritha	97
83	<i>Senna siamea</i> (Lam.) Irwin et Barneby	Iron wood tree	Kashid	98

84	<i>Spathodea campanulata</i> P. Beauv.	African tulip tree	Spathodea	99
85	<i>Stebulus asper</i> Lour.	Toothbrush tree	Harero	100
86	<i>Sterculia foetida</i> L.	Wild almond	Jangli badam	101
87	<i>Swietenia mahagoni</i> (Linn.) Jacq.	Spanish mahogany	Mahagony	102
88	<i>Syzygium cumini</i> L. Skeels.	Black plum	Jambu	103
89	<i>Tabebuia aurea</i> (Silva manso) Benth. & Hook. F. ex S. Moore	Caribbean trumpet tree	Tabebuia aurea	104
90	<i>Tabebuia rosea</i> DC.	Rosy trumpet tree	Tabebuia rosea	105
91	<i>Tamarindus indica</i> L.	The tamarind tree	Khati amali	106
92	<i>Tecomella undulata</i> (Smith) Seem (Endangered)	Teak of marwar	Ragat Rohida	107
93	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight. & Arn. (Endangered)	Arjun	Arjun sadad	108
94	<i>Terminalia bellirica</i> Roxb.	Belleric myrobalan tree	Baheda	109
95	<i>Terminalia catappa</i> L.	Almomd tree	Desi badam	110
96	<i>Terminalia chebula</i> Retz.	Chebolic myrobalan tree	Harde	111
97	<i>Thespesia populnea</i> (L.) Sol. Ex Correa	Pacific rosewood	Paras piplo	112
98	<i>Vitex negundo</i> L.	Chinese chaste tree, Five leaved chaste tree	Nagod	113
Shrub				
1	<i>Bougainvillea spectabilis</i> Comm. Ex Juss.	Bougainvillea	Bougainvillea	114
2	<i>Hamalia patens</i> Jacq.	Fire bush	Hemalia	115
3	<i>Jacaranda mimosaeifolia</i> D. Don.	The mimosa leaved jacaranda	Jacaranda	116
4	<i>Jatropha gossypifolia</i> L.	Bellyache bush	Jatropha	117
5	<i>Pavetta indica</i> L.	Indian pavetta	Pavetta	118
6	<i>Tabernaemontana divaricata</i> R. Br. Ex Roem. & Schult.	Pinwheel flower, East india rosebay	Tagar	119
7	<i>Tecoma stans</i> (L.) Juss. Ex Kunth	Yellow trumpet bush tree	Tecoma	120
Herb				
1	<i>Agave americana</i> L.	Agave, Century plant	Ketki	121
Grass				
1	<i>Bambusa striata</i> Lodd. ex Lindl.	Golden bamboo	Bamboo, Vansh, Pilo bamboo	122

8.1 Trees

Acacia auriculiformis A Cunn. Ex Benth.

Bengali babool



Botanical Name	<i>Acacia auriculiformis</i> A Cunn. Ex Benth.
English Name	Australian babool
Common/Local Name	Bengali babool
Family	Fabaceae
Total No. of tree available in campus	19
Distribution	Throughout Gujarat planted as a social forestry plant, especially along farms and forest nurseries
Phenology	Flowering: August-September Fruiting: January-May
Uses	Wood, Pulpwood, Fuelwood, Soil erosion

Acacia catechu Wild.

Khair



Botanical Name	<i>Acacia catechu</i> Wild.
English Name	Cutch tree
Common/Local Name	khair
Family	Fabaceae
Total No. of tree available in campus	03
Distribution	Throughout in deciduous forests, Common; sparingly in scrub forests. Valsad, Dangs, Vansda NP, Waghai and Khatana, Vyara, Rajpipla, Chhotaudepur, Ratanmahal, Barda WLS, and Girnar forests
Phenology	Flowering: July-August Fruiting: August-December
Uses	Katha & cutch, Fodder, Gum, Hardboards, Wood

***Acacia leucophloea* Wild.**

Safed babul



Botanical Name	<i>Acacia leucophloea</i> Wild.
English Name	White barked acacia
Common/Local Name	Safed babul
Family	Mimosaceae
Total No. of tree available in campus	01
Distribution	So far reported from Kachchh, Saurashtra, Vallabh Vidyanagar, Valsad, Ratanmahal WLS, Barda WLS, Narayan Sarovar Sanctuary (Kachchh), Girnar forests, Chhotaudepur, Rampara WLS (Rajkot). Found commonly in Bhavnagar, Surendranagar, Banaskantha, Dahod and Vadodara districts
Phenology	Flowering: June-November Fruiting: July-January
Uses	Construction work, Railway sleepers, Tool handles, Fence posts, Agricultural implement, Fibre, Fodder, Fuel wood

Acacia nilotica (L.) Willd. Ex Del.

Desi Babul



Botanical Name	<i>Acacia nilotica</i> (L.) Willd. Ex Del.
English Name	Indian gum arabic tree
Common/Local Name	Desi Babul
Family	Fabaceae
Total No. of tree available in campus	86
Distribution	It is observed in Saurashtra especially on Girnar, and Barda hills
Phenology	Flowering: June-January Fruiting: February
Uses	Timber, Charcoal, Fuel wood, Tanning, Fodder, Fencing, Gum,

Aegle marmelos L. Correa

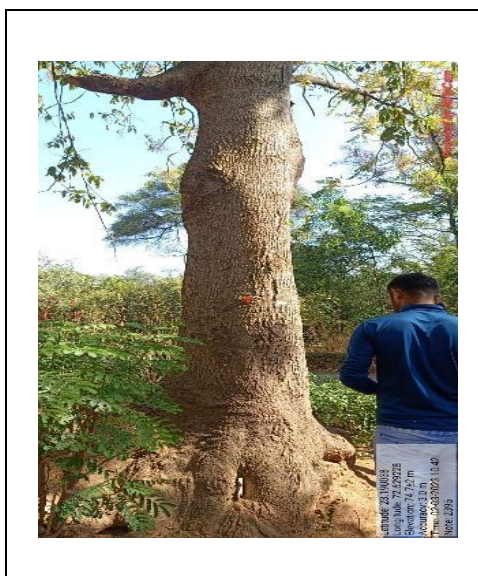
Billi patra



Botanical Name	<i>Aegle marmelos</i> L. Correa
English Name	Bael tree, Bengal Quince
Common/Local Name	Billi patra, Bel patra
Family	Rutaceae
Total No. of tree available in campus	10
Distribution	Throughout deciduous and scrub forests: Common, also planted in gardens, Dangs, Rajpipla forests, Vansada NP, Ratanmahal WLS, Barda WLS, Girnar forests, Rampara WLS (Rajkot)
Phenology	Flowering: January-May Fruiting: April-July
Uses	Fruits, Worship, Medicinal

***Ailanthus excels* Roxb.**

Arduso



Botanical Name	<i>Ailanthus excelsa</i> Roxb.
English Name	Tree of heaven
Common/Local Name	Arduso, ardu, maharukh
Family	Simaroubaceae
Total No. of tree available in campus	01
Distribution	Throughout frequent in scrub forests, rarely in cleared dry-deciduous forests. Common in wastelands and planted as roadside tree, Dangs, Rajpipla forests, Ratanmahal WLS, Barda WLS, Girnar forests. Planted as a common tree in Amreli, Rajkot, Jarnnagar, Banaskantha, Mehsana, Patan, Gandhinagar, Ahmedabad, Sabarkantha, Panchmahal, Kheda, Anand and Vadodara districts
Phenology	Flowering-Fruiting: Throughout the year
Uses	Wood, Fodder

Albizia odoratissima (L.f.) Benth.

Kalo Siras



Botanical Name	<i>Albizia odoratissima</i> (L.f.) Benth.
English Name	Black siris
Common/Local Name	DholoSiras
Family	Fabaceae
Total No. of tree available in campus	03
Distribution	Deciduous forests; Occasional, sparingly in scrub forests. Barda WLS, Girnar forests, Chhotaudepur forest
Phenology	Flowering: April-June Fruiting: June-November
Uses	Nitrogen fixing, Fodder, Timber

Alstonia scholaris R. Br.

Saptparni



Botanical Name	<i>Alstoniascholaris</i> R. Br.
English Name	Devil's tree, Saitan wood, Dita bark tree
Common/Local Name	Saptparni
Family	Apocynaceae
Total No. of tree available in campus	174
Distribution	Planted throughout the state in and around residential and industrial areas and society common plots and on roads. Commonly planted in Gandhinagar district
Phenology	Flowering: December-March Fruiting: May-July
Uses	Boxes making, Furniture, Pencils, Medicinal

Annona squamosa (L.)

Sitaphal



Botanical Name	<i>Annona squamosa</i> (L.)
English Name	Custard apple
Common/Local Name	Sitaphal
Family	Annonaceae
Total No. of tree available in campus	174
Distribution	This species is common in large tract of forests in Central and Northern Gujarat. It is planted under Social Forestry in Amreli, Rajkot, Junagadh, Bhavnagar, Sabarkantha, Dahod, Panchmahal, Narmada, Navsari, Valsad
Phenology	Flowering: April-August Fruiting: June-August
Uses	Medicinal, Fruits, Juice

Azadirachta indica A. Juss.

Limbdo



Botanical Name	<i>Azadirachta indica</i> A. Juss.
English Name	Nim, Margosa tree
Common/Local Name	Limbdo
Family	Meliaceae
Total No. of tree available in campus	909
Distribution	Throughout in deciduous forests. Dangs and Rajpipla forests, VansadaNP, Ratanmahal WLS, Waghai and Khatana, Barda WLS, Girnar forests, Chhotaudepur forests, Narayan Sarovar and Rampara WLS
Phenology	Flowering: December-March Fruiting: January-May
Uses	Wood, Fuelwood, Neem oil, Insecticides, Fodder, Medicinal, Road side avenue, chew sticks, Mulching

Balanites aegyptiaca (L.) Delile

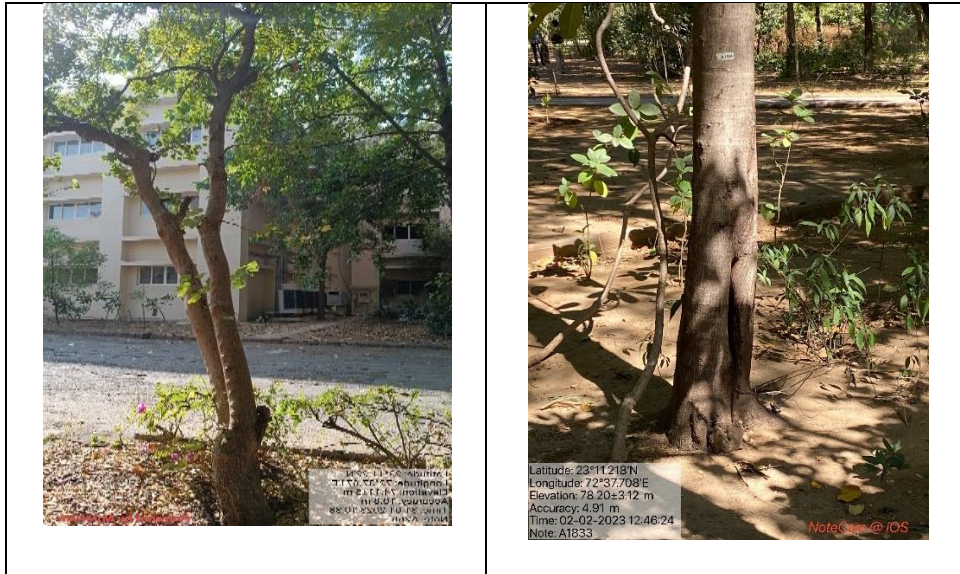
Ingoriya



Botanical Name	<i>Balanites aegyptiaca</i> (L.) Delile
English Name	Egyptian balsam
Common/Local Name	Ingoriya
Family	Zygophyllaceae
Total No. of tree available in campus	51
Distribution	Northern Eastern Africa, Egypt, and also the Sahel-Savannah region across Africa and the Arabian Peninsula
Phenology	Flowering: December-April Fruiting: May
Uses	Medicinal, Fence, Gum, Tatoes, Fibre, Alcoholic beverages, Oil, Oil cake

Bauhinia purpurea L.

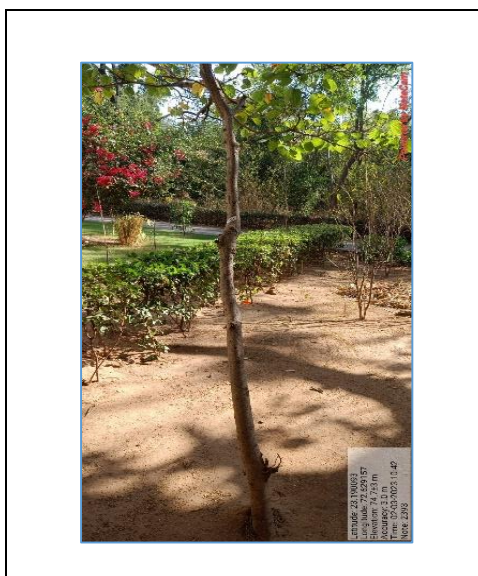
Purple orchid tree



Botanical Name	<i>Bauhinia purpurea</i> L.
English Name	Purple orchid tree
Common/Local Name	Kanchanar, Bauhinia
Family	Fabaceae
Total No. of tree available in campus	117
Distribution	Throughout wild in deciduous forests; also planted in gardens, S. Gujarat forests, cultivated in gardens and along roads. Chhotaudepur forests, Waghai, Ratanmahal, Girnar and Barda WLS
Phenology	Flowering: September-February Fruiting: March
Uses	Medicinal, Edible, Fodder, Ornamental, Landscaping, Road side avenue

***Bauhinia tomentosa* L.**

Yellow Bauhinia



Botanical Name	<i>Bauhinia tomentosa</i> L.
English Name	Yellow bell orchid tree
Common/Local Name	Yellow Bauhinia
Family	Fabaceae
Total No. of tree available in campus	05
Distribution	Wild in Saurashtra, and North Gujarat, Abundant in Saurashtra. Rare in N. Gujarat". Barda WLS. Planted in M. S. University Campus, Vadodara. Gardens in Gandhinagar. It has wide extent of occurrence as it has been recorded from N. Gujarat and Saurashtra
Phenology	Flowering: August-October Fruiting: September
Uses	Antimicrobial, ornamental, Landscaping, Road side avenue

***Bismarckia nobilis* Hildebr. & H. Wendl.**

Bismarckia



Botanical Name	<i>Bismarckianobilis</i> Hildebr. & H. Wendl.
English Name	Bismarckia
Common/Local Name	Bismarckia
Family	Areaceae
Total No. of tree available in campus	02
Distribution	Native to Madagascar, an island
Phenology	Flowering: Summer Fruiting: Summer
Uses	Landscaping, ornamental

***Bombax ceiba* L.**

Shimalo



Botanical Name	<i>Bombax ceiba</i> L.
English Name	Silk cotton tree
Common/Local Name	Shimalo
Family	Bombacaceae
Total No. of tree available in campus	26
Distribution	Throughout in deciduous and scrub forests. Dangs, Khatana and Waghail, Ratanmahal WLSI, forests of Girnar, Vyara, Valsad and Chhotaudepur. It has been planted in districts of Dahod, Panchmahal, Kheda, Anand, Vadodara, Bharuch and Narmada
Phenology	Flowering: Feb.-March Fruiting: April-June
Uses	Match wood industry, Boxes, Plywood, Pillows, Medicinal

Butea monosperma (Lamk) Taub.

Kesudo



Botanical Name	<i>Butea monosperma</i> (Lamk) Taub.
English Name	The flame of forest
Common/Local Name	Kesudo, Khakharo, Dhak, Palas
Family	Papilionaceae
Total No. of tree available in campus	10
Distribution	Throughout common. Dangs, Vansda NP, Khatana and Waghai, Vyara and Rajpipla forests, Ratanmaha1 WLS, Chhotaudepur forests, Rampara (Rajkot) and Barda WLS, Girnar forests and Narayan Sarovar Sanctuary in Kachchh, planted in districts of Amreli, Rajkot, Junagadh, Bhavnagar, Jamnagar, Surendranagar, Banaskantha, Sabarkantha, Dahod, Panchmahal, Bharuch, Narmada, Surat and Valsad
Phenology	Flowering: December-May Fruiting: June
Uses	Pulp, Leaf plates, Soap industry, oil, Gum

***Caesalpinia pulcherrima* (L.) Sw.**

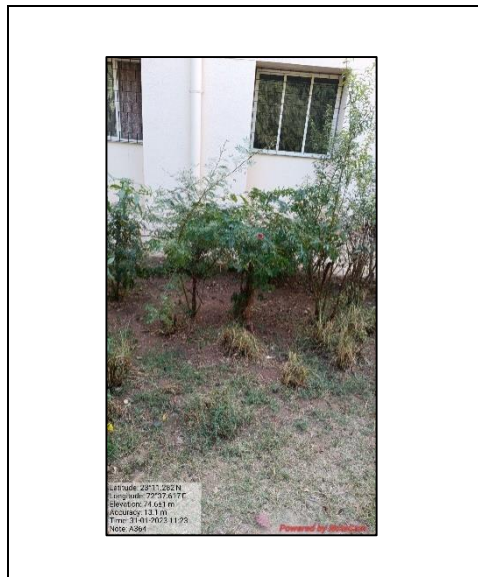
Dwarf Gulmohar



Botanical Name	<i>Caesalpinia pulcherrima</i> (L.) Sw.
English Name	Peacock flower, Poinciana
Common/Local Name	Dwarf Gulmohar
Family	Fabaceae
Total No. of tree available in campus	16
Distribution	Native to the tropics and subtropics of the Americas. It could be native to the West Indies
Phenology	Flowering: late summer Fruiting: late summer
Uses	Ornamental, Medicinal, Fodee

Calliandra haematocephala Hassk.

Powder crop



Botanical Name	<i>Calliandra haematocephala</i> Hassk.
English Name	Powder puff flower
Common/Local Name	Powder crop
Family	Fabaceae
Total No. of tree available in campus	01
Distribution	Native to Bolivia
Phenology	Flowering: November Fruiting: April
Uses	Nector & pollen, Ornamental, Road side avenue

***Callistemon acuminatus* R. Br.**
Australian bottle brush



Botanical Name	<i>Callistemon acuminatus</i> R. Br.
English Name	Australian bottle brush
Common/Local Name	Australian bottle brush
Family	Myrtaceae
Total No. of tree available in campus	04
Distribution	The entire genus is endemic to Australia but widely cultivated in many other regions and naturalised in scattered locations
Phenology	Flowering: October–December Fruiting: January
Uses	Ornamental decoration, road side avenue

***Carissa carandas* L.**

Karamda



Botanical Name	<i>Carissa carandas</i> L.
English Name	Karaunda, Bengal currant
Common/Local Name	Karamda
Family	Apocynaceae
Total No. of tree available in campus	01
Distribution	Western Ghats of Konkan in the western coastal states of Maharashtra and Goa in India
Phenology	Flowering: March Fruiting: July
Uses	Pickles, Medicinal, Jelly Jams

Caryota urens L.

Shivjata



Botanical Name	<i>Caryotaurens</i> L.
English Name	Solitary fishtail palm, Kitul palm
Common/Local Name	Shivjata
Family	Areaceae
Total No. of tree available in campus	15
Distribution	Planted in gardens. Waghai forests has 4 trees planted. Also planted in Shamlaji area and Vijaynagar forestsofSabarkantha district.
Phenology	Flowering: May-July Fruiting: September
Uses	Liquid jaggery, Basket, Ornamental

Cascabela thevetia (L.) Lippold

Yellow karen



Botanical Name	<i>Cascabelathevetia</i> (L.) Lippold
English Name	Yellow oleander
Common/Local Name	Pili karen
Family	Apocynaceae
Total No. of tree available in campus	02
Distribution	Planted at places as ornamental or a hedge. Sharnlaji area of Sabarkanthadistrict
Phenology	Flowering: March-April Fruiting: June
Uses	Ornamental, Road side avenue, Biological pest control

Cassia fistula Linn.

Garmalo



Botanical Name	<i>Cassia fistula</i> Linn.
English Name	The purging fistula, Indian laburnum
Common/Local Name	Garmalo
Family	Caesalpiniaceae
Total No. of tree available in campus	560
Distribution	Throughout deciduous forests; Rare, also planted along roads and in gardens. Dangs, Vansada NP, Ratanmahal WLS, Barda WLS, ChhotaudepurforestsandGimar forests, Shamlaji area and Vijaynagar forests of Sabarkantha district
Phenology	Flowering: March-June Fruiting: July
Uses	Timber used as posts, Shafts, Carts, Furniture, Boat making, Fuelwood, Charcoal, Medicinal

***Cassia renigera* Benth.**

Pink cassia



Botanical Name	<i>Cassia renigera</i> Benth.
English Name	Pink shower tree
Common/Local Name	Pink cassia
Family	Fabaceae
Total No. of tree available in campus	104
Distribution	Indroda Park, Gandhinagar planted on roadsides in Gandhinagar, in gardens, Vadodara
Phenology	Flowering: March-June Fruiting: July
Uses	Medicinal, Ornamental, Fodder, Furniture

Ceiba pentandra (L.) Gaertn.

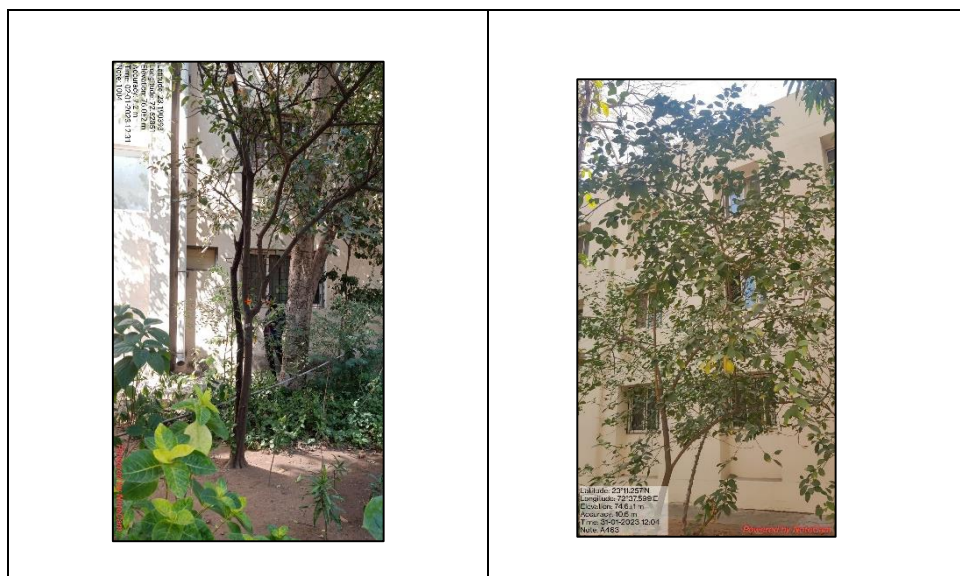
Kapok



Botanical Name	<i>Ceiba pentandra</i> (L.) Gaertn.
English Name	Kapok, Silk cotton, Java kapok
Common/Local Name	Kapok
Family	Malvaceae
Total No. of tree available in campus	08
Distribution	It is common plant in urban areas of the state. Vijaynagar forests of Sabarkantha district. At few places in Central and South Gujarat
Phenology	Flowering: January-September Fruiting: October
Uses	Nectar & pollen, Medicinal, Seed oil

Citrus limetta Risso

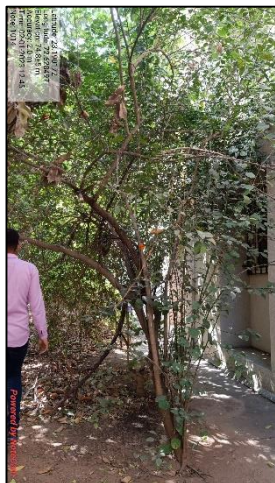
Mosambi



Botanical Name	<i>Citrus limetta</i> Risso
English Name	Sweet lemon
Common/Local Name	Mosambi
Family	Rutaceae
Total No. of tree available in campus	02
Distribution	Throughout india
Phenology	Flowering: February-April Fruiting: May-June
Uses	Juice, Ornamental, Medicinal

Citrus limon L.

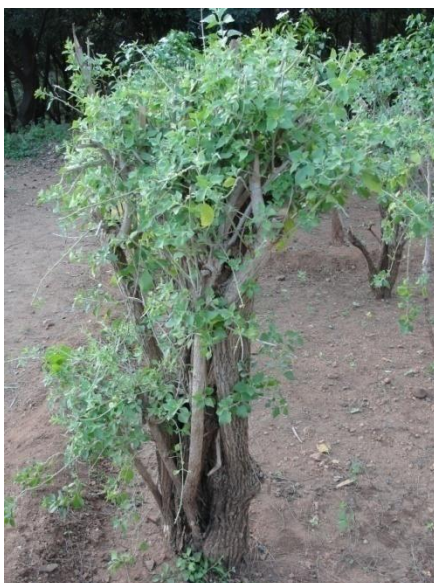
Limbu



Botanical Name	<i>Citrus limon</i> L.
English Name	Lemon
Common/Local Name	Limbu
Family	Rutaceae
Total No. of tree available in campus	01
Distribution	Commonly cultivated in Gujarat. Planted commonly in all districts, especially in Saurashtra and North Gujarat
Phenology	Flowering: Feb.-May Fruiting: July
Uses	Food & drinks, Peel, Oil, Medicinal

***Clerodendrum phlomidis* L. f.**

Arni



Botanical Name	<i>Clerodendrum phlomidis</i> L. f.
English Name	Glory bower, Bag flower
Common/Local Name	Arni
Family	Lamiaceae
Total No. of tree available in campus	09
Distribution	Native to Indian sub-continent and Myanmar
Phenology	Flowering: August-September Fruiting: September-November
Uses	Medicinal, Ornamental, Road side avenue

***Cordia dichotoma* Forst. F.**

Gundo



Botanical Name	<i>Cordia dichotoma</i> Forst. F.
English Name	Indian cherry, Clammy cherry
Common/Local Name	Gundo
Family	Boraginaceae
Total No. of tree available in campus	67
Distribution	Throughout Gujarat except Kachchh. Dang, Vansada NP, Waghai and Khatanal, Girnar forests, Narayan Sarovar Sanctuary, Rampara (Rajkot) and Chhotaudepur forests. Planted in Bhavnagar, Porbandar, Jamnagar, Banaskantha, Mehsana, Patan and Anand
Phenology	Flowering: February-June Fruiting: March-June
Uses	Fruits & Fodder, Boat making, Medicinals, pickles

Cordia sebestena L.

Lal lasora



Botanical Name	<i>Cordia sebestena</i> L.
English Name	Siricote tree, Geiger Tree
Common/Local Name	Lal lasora
Family	Boraginaceae
Total No. of tree available in campus	29
Distribution	Cultivated in gardens. Vijaynagar forests of Sabarkantha district.
Phenology	Flowering: December-March Fruiting: April
Uses	Ornamental, Fruits, Medicinal, Fodder, Fuel wood

Couroupita guianensis Aubl.

kailash pati



Botanical Name	<i>Couroupita guianensis</i> Aubl.
English Name	Cannon ball tree
Common/Local Name	kailashpati
Family	Lecythidaceae
Total No. of tree available in campus	29
Distribution	Planted in gardens and Botanical Gardens and Arboretums; Antarsuba Ayurvedic Garden, Sabarkantha and Sachivalaya Campus, Gandhinagar. The M. S. University campus, Arboretum and Botanical Garden as well as Sayaji Garden in Baroda. Wadia Palace Arboretum in Rajpipla.
Phenology	Flowering: September-November Fruiting: October-February
Uses	Ornamental, Medicinal

***Dalbergia cochinchinensis* Pierre ex Laness.**

Thailand rosewood



Botanical Name	<i>Dalbergia cochinchinensis</i> Pierre ex Laness.
English Name	Thailand rosewood
Common/Local Name	Dalbergia
Family	Fabaceae
Total No. of tree available in campus	184
Distribution	It is a tree yielding valuable hardwood, found in Cambodia, Laos, Thailand, and Vietnam
Phenology	Flowering: April-June Fruiting: July
Uses	Nitrogen fixing, Fodder, Timber, Furniture

Dalbergia sisso Roxb. Ex DC.

Sisoo, Moto sisam



Botanical Name	<i>Dalbergia sisso</i> Roxb. Ex DC.
English Name	Sisoo
Common/Local Name	Sisoo, Moto sisam
Family	Papilionaceae
Total No. of tree available in campus	04
Distribution	Planted seldom in forests. Planted as avenue tree and in afforestation areas. Gimar forests, Chhotaudepur forests Planted commonly in districts of Amreli, Junagadh, Mehsana and Narmada. Sharnlaji area and Vijaynagar forests of Sabarkantha district
Phenology	Flowering: March-April Fruiting: July
Uses	House building, Doors, Window, Furniture, Musical instruments, Fodder, Medicinal

Delonix regia (Boj) Raf.

Gulmohar



Botanical Name	<i>Delonix regia</i> (Boj) Raf.
English Name	The flameboyant tree, Fire tree, Flame tree
Common/Local Name	Gulmohar
Family	Caesalpiniaceae
Total No. of tree available in campus	251
Distribution	Planted in gardens and along road sides; Planted in Vansada NP and Ratanmahal WLS and Chhotaudepur forests, Sharnlaji area and Vijaynagar forests of Sabarkantha district
Phenology	Flowering: March-July Fruiting: April-August
Uses	Ornamental, Gardens & avenue, Gum

***Drypetes roxburghii* (Wall.) Hurus.**

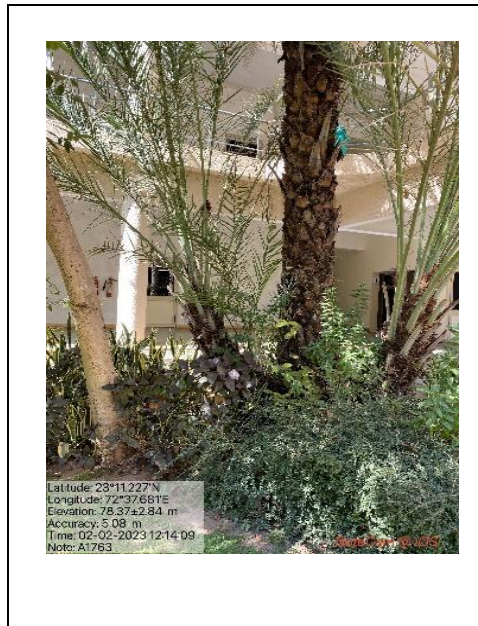
Putranjiva



Botanical Name	<i>Drypetes roxburghii</i> (Wall.) Hurus.
English Name	Lucky bean tree
Common/Local Name	Putranjiva
Family	Putranjivaceae
Total No. of tree available in campus	74
Distribution	Wild in some forests at Pavagadh and Chhotaudepur in Central Gujarat and Vireshwar in North Gujarat. Planted at times along roads. Vijayanagar forests of Sabarkantha district.
Phenology	Flowering: July-Dec.
Uses	Medicinal, Oil, Fodder

Elaeis guineensis Jacq.

Oil Palm



Botanical Name	<i>Elaeis guineensis</i> Jacq.
English Name	African oil palm
Common/Local Name	Oil Palm
Family	Arecaceae
Total No. of tree available in campus	01
Distribution	Oil Palm planted in Botanical Garden, M. S. University, Vadodara
Phenology	Flowering: January-October Fruiting: September
Uses	Palm oil, Soap manufacture, Bio fuel

Emblica officinalis Gaertn.

Amla



Botanical Name	<i>Emblica officinalis</i> Gaertn
English Name	Indian gooseberry
Common/Local Name	Amla
Family	Euphorbiaceae
Total No. of tree available in campus	34
Distribution	Occasional in deciduous forests, also planted in gardens and along roadsides. Dakor (Kanitkar), Dangs, Vansada NP, forests of Waghai and Khatanal, Vyara and Chhotaudepur, Ratanmahal WLS, Girnar forests, Barda and Ranpara WLS (Rajkot) Commonly planted in Amreli, Bhavnagar, Porbandar, Surendranagar and Gandhinagar districts
Phenology	Flowering: March-May Fruiting: November-March
Uses	Wood, Fruit, Medicinal, Fodder, Green manure

Erythrina variegata L. var.

Pangaro



Botanical Name	<i>Erythrina variegata</i> L. var.
English Name	Indian coral tree
Common/Local Name	Pangaro
Family	Papilionaceae
Total No. of tree available in campus	16
Distribution	Planted in Junagadh Agricultural University's Botanical Garden
Phenology	Flowering: February-April Fruiting: May-July
Uses	Rafts, Canoes, Pulp & paper, Fence, Fibre, Fodder

***Fatsia polycarpa* Hayata**

Many fruited atralia



Botanical Name	<i>Fatsia polycarpa</i> Hayata
English Name	Many fruited atralia
Common/Local Name	Fatsia polycarpa
Family	Araliaceae
Total No. of tree available in campus	01
Distribution	Native to Sulawesi, Moluccas, Papuaia, Queensland
Phenology	Flowering: Summer Fruiting: Summer
Uses	Ornamental, Gardens & avenue, Road side avenue

Ficus benghalensis L.

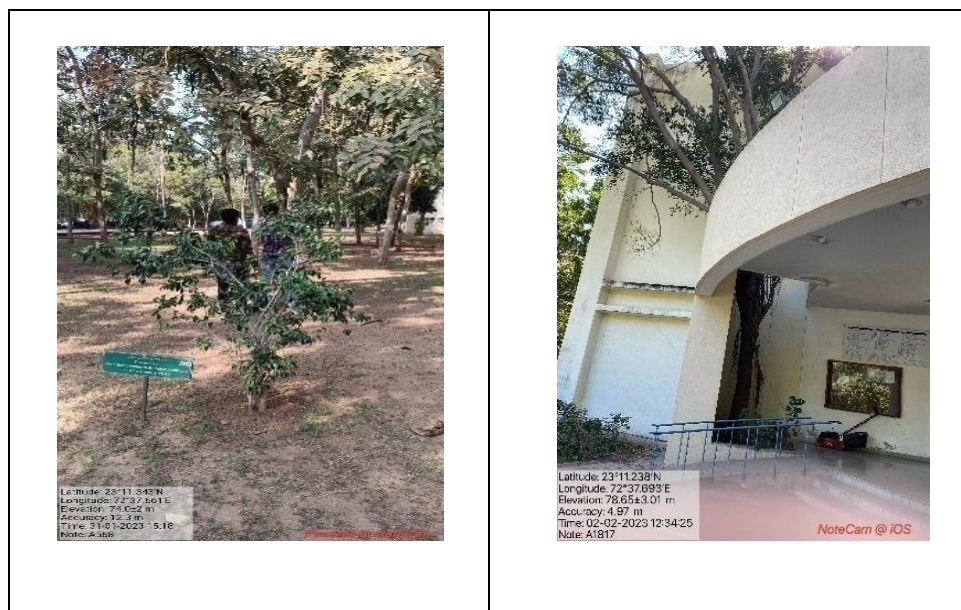
Vad



Botanical Name	<i>Ficus benghalensis</i> L.
English Name	Banayan tree
Common/Local Name	Vad
Family	Moraceae
Total No. of tree available in campus	08
Distribution	Throughout Gujarat
Phenology	Flowering: November-January Fruiting: Jan-Feb
Uses	Medicinal, Fodder, Fuelwood

Ficus benjamina L.

Benjamina



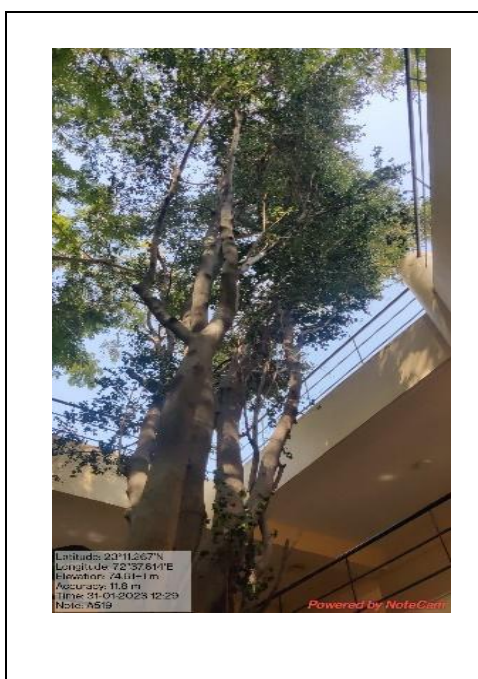
Botanical Name	<i>Ficus benjamina</i> L.
English Name	Weeping fig, Benjamin fig
Common/Local Name	Benjamina
Family	Moraceae
Total No. of tree available in campus	02
Distribution	Planted in Indroda Park, Gandhinagar.
Phenology	Flowering: November-January Fruiting: Jan-Feb
Uses	Medicinal, Fibre, Fuel wood

***Ficus longifolia* Schott**
Banana leaf fig, Ficus alii



Botanical Name	<i>Ficus longifolia</i> Schott
English Name	Banana leaf fig, Ficus alii
Common/Local Name	Ficus longifolia
Family	Moraceae
Total No. of tree available in the campus	04
Distribution	Native to Brazil
Phenology	Flowering: Summer Fruiting: Summer
Uses	Bonsai, Ornamental, Garden hedgerow, Medicinal

***Ficus microcarpa* L. f.**
Nandrak Vad
(Endangered & Rare Specie)



Botanical Name	<i>Ficus microcarpa</i> L. f.
English Name	Chinese banayan, Indian laurel
Common/Local Name	Nandrak Vad
Family	Moraceae
Total No. of tree available in campus	01
Distribution	Often planted along the roads. Recorded as rare in Narayan Sarovar Sanctuary
Phenology	Flowering: November-January Fruiting: Jan-Feb
Uses	Bonsai, Ornamental, Garden hedgerow, Medicinal

Ficus racemosa L.

Umro



Botanical Name	<i>Ficus racemosa</i> L.
English Name	Cluster fig, Gular
Common/Local Name	Umro
Family	Moraceae
Total No. of tree available in campus	06
Distribution	Throughout Gujarat
Phenology	Flowering: November-January Fruiting: Jan-Feb
Uses	Pickles, Traditional liquor, Medicinal

Ficus religiosa L. Forssk.

Piplo



Botanical Name	<i>Ficus religiosa</i> L. Forssk
English Name	Pipal tree, Sacred fig, Bodhi tree
Common/Local Name	Piplo
Family	Moraceae
Total No. of tree available in campus	03
Distribution	Throughout Gujarat
Phenology	Flowering: November-January Fruiting: Jan-Feb
Uses	Traditional medicine, Trunk used as land levelling, religious importance

Gliricidia sepium (Jacq.) Steud.

Gliricidia



Botanical Name	<i>Gliricidia sepium</i> (Jacq.) Steud.
English Name	Quick stick
Common/Local Name	Gliricidia
Family	Fabaceae
Total No. of tree available in campus	23
Distribution	Planted in gardens and seldom along roads; an ornamental, Barda WLS. Planted in Indroda Park, Gandhinagar. Girnar forest near Willington Dam (Pers. Comm. Dhruj). Along roads in Gandhinagar and also along Mahatma Gandhi Express highway between Ahmedabad-Baroda
Phenology	Flowering: December-April Fruiting: February-May
Uses	Fencing, Fodder, Firewood, Green manure, Soil stabilizer, Poles

Gmelina arborea L.

Sevan



Botanical Name	<i>Gmelina arborea</i> L.
English Name	White teak
Common/Local Name	Sevan
Family	Verbenaceae
Total No. of tree available in campus	50
Distribution	Throughout Gujarat
Phenology	Flowering: January-April Fruiting: April-May
Uses	Furniture, Construction, Boat building, Agricultural implement, Toys, Frames, Boxes, Plywood, Paper, Medicinal, Fodder and Fuelwood

Grevillea robusta A. Cunn.

Silver oak



Botanical Name	<i>Grevillea robusta</i> A. Cunn.
English Name	Silver oak
Common/Local Name	Silver oak
Family	Proteaceae
Total No. of tree available in campus	05
Distribution	Often planted in gardens and as an avenue tree. Vijaynagar forests in Sabarkantha
Phenology	Flowering: March-May Fruiting: June
Uses	Furniture, Plywood, Cabinet making, Building construction, Railway carriages, Gum, Tannins, Pulp, Firewood, Nector for honey bee

Hippomane mancinella L.

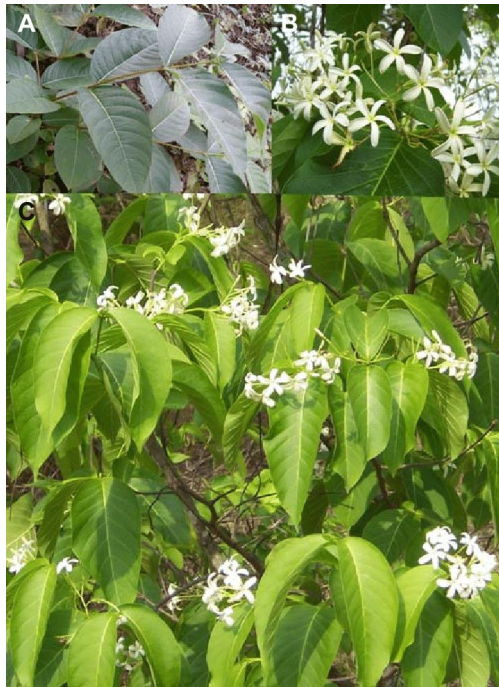
Little apple



Botanical Name	<i>Hippomane mancinella</i> L.
English Name	Little apple
Common/Local Name	Hippomane mancnilla
Family	Euphorbiaceae
Total No. of tree available in campus	02
Distribution	One large tree is present in Sayaji Garden, M. S. University Vadodara. There are two trees planted in Kirti Mandir Compound, in Social Forestry Nursery. Also planted in Arboretum of Junagadh Agicultural University
Phenology	Flowering: December-April Fruiting: June
Uses	Wind break, Soil erosion

Holarrhena antidysenterica var. *macrantha* Kerr

Indrajau



Botanical Name	<i>Holarrhena antidysenterica</i> var. <i>macrantha</i> Kerr
English Name	Bitter oleander
Common/Local Name	Indrajau
Family	Apocynaceae
Total No. of tree available in campus	01
Distribution	Native to Southern Africa, South East Asia
Phenology	Flowering: April- May Fruiting: May-July
Uses	Medicinal

Holoptelea integrifolia Planch.

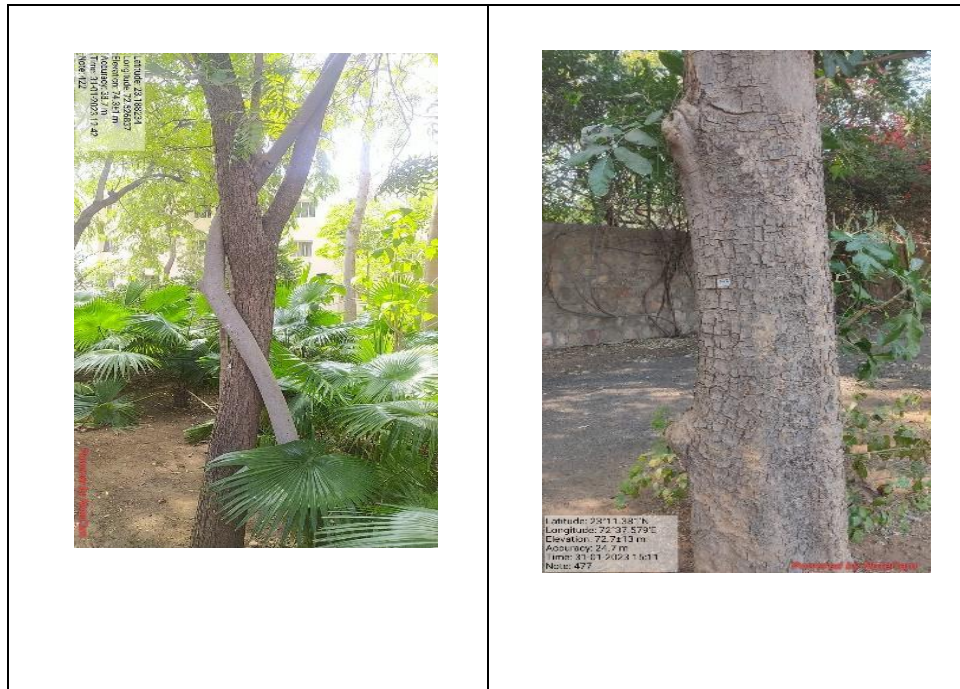
Kanji, Khanjho



Botanical Name	<i>Holoptelea integrifolia</i> Planch
English Name	Indian elm
Common/Local Name	Kanji, Khanjho
Family	Ulmaceae
Total No. of tree available in campus	176
Distribution	Native to Indian sub continent
Phenology	Flowering: Feb-March Fruiting: May
Uses	Broom handels, Low cost furniture, Plywood, Match boxes, Paper and pulp, Fuelwood, Fodder

Kigelia pinnata (Jacq.)

Cucumber tree



Botanical Name	<i>Kigelia pinnata</i> (Jacq.)
English Name	Cucumber tree
Common/Local Name	Cucumber tree
Family	Bignoniaceae
Total No. of tree available in the campus	91
Distribution	Native to Africa
Phenology	Flowering: throughout year Fruiting: throughout year
Uses	Timber, Skin care products, Ornamental, Beverage

Lagerstroemia speciosa (L.) Pers.

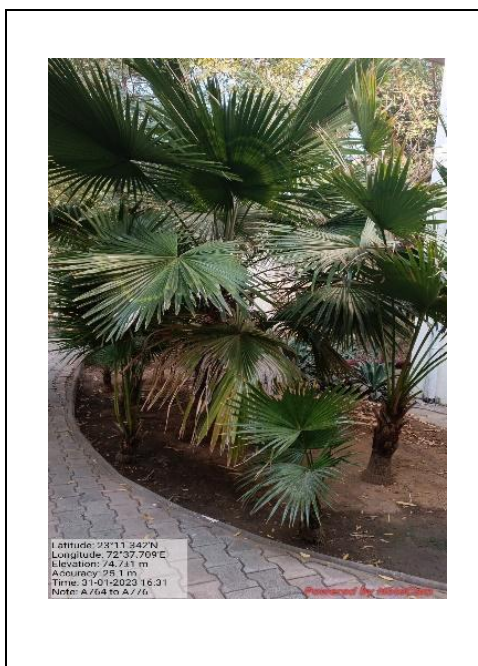
Bondaro



Botanical Name	<i>Lagerstroemia speciosa</i> (L.) Pers.
English Name	Pride of india
Common/Local Name	Bondaro
Family	Lythraceae
Total No. of tree available in campus	02
Distribution	Planted in Sachivalaya Campus, Garden of Sector 29 and Indroda Park in Gandhinagar, Sayaji Garden and Khanderao Market in Vadodara, Botanical Garden, Waghai
Phenology	Flowering: March-June Fruiting: April-November
Uses	Planks, Beams, Boats, Railway wagon, Boxes, Furniture, Ornamental, road side avenue

Latania lontaroides (Gaertner) H. E. Moore

Fan Palm



Botanical Name	<i>Latania lontaroides</i> (Gaertner) H. E. Moore
English Name	Fan Palm
Common/Local Name	Fan Palm
Family	Arecaceae
Total No. of tree available in campus	13
Distribution	Indian sub continent
Phenology	Flowering: Spring Fruiting: Spring
Uses	ornamental, Gardens & avenue, Road side avenue

Leucaena leucocephala (Lam) de Wit

Subabul



Botanical Name	<i>Leucaena leucocephala</i> (Lam) de Wit
English Name	House tamarind, White babool
Common/Local Name	Subabul
Family	Mimosaceae
Total No. of tree available in campus	12
Distribution	Planted in Ratanmahal WLS!', Khatana and Waghai, Chhotaudepur forests also common among districts of Amreli, Rajkot, Junagadh, Bhavnagar, Porbandar, Jamnagar, Kachchh, Surendranagar, Banaskantha, Mehsana, Gandhinagar, Ahmedabad, Sabarkantha, Dahod, Panchmahal, Kheda, Anand, Bharuch, Surat and Navsari, Sharnlaji area of Sabarkantha district.
Phenology	Flowering: May-November Fruiting: May-February
Uses	Fuel wood, Pulp wood, Poles, Fodder, Green manure

Limonia acidissima L.

Kothi



Botanical Name	<i>Limonia acidissima</i> L.
English Name	Elephant apple
Common/Local Name	Kothi
Family	Rutaceae
Total No. of tree available in campus	16
Distribution	Throughout the valley of Tapi river. self-sown, wild or planted. Ratanmahal WLS, Chhotaudepur forests. Planted in Patan, Ahmedabad, Dahod, Panchmahal, Kheda, Anand and Vadodara districts.
Phenology	Flowering: March-July Fruiting: March-December
Uses	Pickles, Juice, Religious

***Livistona mariae* F. Muell.**

Livistonia mariae



Botanical Name	<i>Livistonia mariae</i> F.Muell.
English Name	Red cabbage palm
Common/Local Name	<i>Livistonia mariae</i>
Family	Arecaceae
Total No. of tree available in campus	01
Distribution	Central Australia
Phenology	Flowering: May-June Fruiting: September
Uses	Ornamental, Gardens & avenue, Road side avenue

Madhuca longifolia Macb.

Mahudo



Botanical Name	<i>Madhuca longifolia</i> Macb.
English Name	Mahua, Butter tree
Common/Local Name	Mahudo
Family	Sapotaceae
Total No. of tree available in campus	10
Distribution	Throughout in dry deciduous forests, less frequent in scrub forests. Plentiful in Gujarat. Valsad forests, Dangs, Vansada NP, Waghai and Khatana, Vyara, Chhotaudepur, Ratanmahal WLS, Rampara WLS. Planted commonly in Anand district
Phenology	Flowering: January-April Fruiting: April-July
Uses	Beams, doors & window, posts, car wheels, sports goods, furniture, agricultural implements, drums, mahua oil, oil cake, local wine

***Magnolia champaca* (L.) Baill. Ex Pierre**

Champo



Botanical Name	<i>Magnolia champaca</i> (L.) Baill. Ex Pierre
English Name	Champak
Common/Local Name	Champo
Family	Magnoliaceae
Total No. of tree available in campus	65
Distribution	Native to Indomalayam realm
Phenology	Flowering: June-September Fruiting: October
Uses	Worship, Perfume, Oils, Ornament, Timber

***Mangifera indica* (L.)**

Ambo



Botanical Name	<i>Mangifera indica</i> (L.)
English Name	Mango
Common/Local Name	Ambo
Family	Anacardiaceae
Total No. of tree available in campus	14
Distribution	Throughout Gujarat
Phenology	Flowering: December-May Fruiting: February-July
Uses	Fruits, Juice, Pickles, Musical instruments, Plywood

Manilkara hexandra (Roxb.)

Rayan



Botanical Name	<i>Manilkara hexandra</i> (Roxb.)
English Name	Rayan
Common/Local Name	Rayan
Family	Sapotaceae
Total No. of tree available in campus	79
Distribution	Throughout Gujarat
Phenology	Flowering: April-May Fruiting: June
Uses	Fruits, Gate posts, Construction work, Beams, Fodder

Melia azedarach L.

Bakan neem



Botanical Name	<i>Melia azedarach</i> L.
English Name	Bead-tree, Bastard cedar, Persian lilac
Common/Local Name	Bakan neem, Bakayan neem
Family	Meliaceae
Total No. of tree available in campus	11
Distribution	Throughout Gujarat
Phenology	Flowering: Spring Fruiting: Spring
Uses	Timber, Anti-fungal, Fodder, Medicinal, Insecticide

Melia dubia Cav.

Nimbara



Botanical Name	<i>Melia dubia</i> Cav.
English Name	Malabar neem
Common/Local Name	Limbara, Nimbara
Family	Meliaceae
Total No. of tree available in campus	32
Distribution	Valsad, Dangs, Rajpipla and Chhotaudepur. Also found in Vansda NP and Shoolpaneshwar WLS.
Phenology	Flowering: March-April Fruiting: April-June
Uses	Medicinal, Timber, Plywood, Packing cases, Planks, Agricultural implements, Match boxes

Mimusops elengi L.

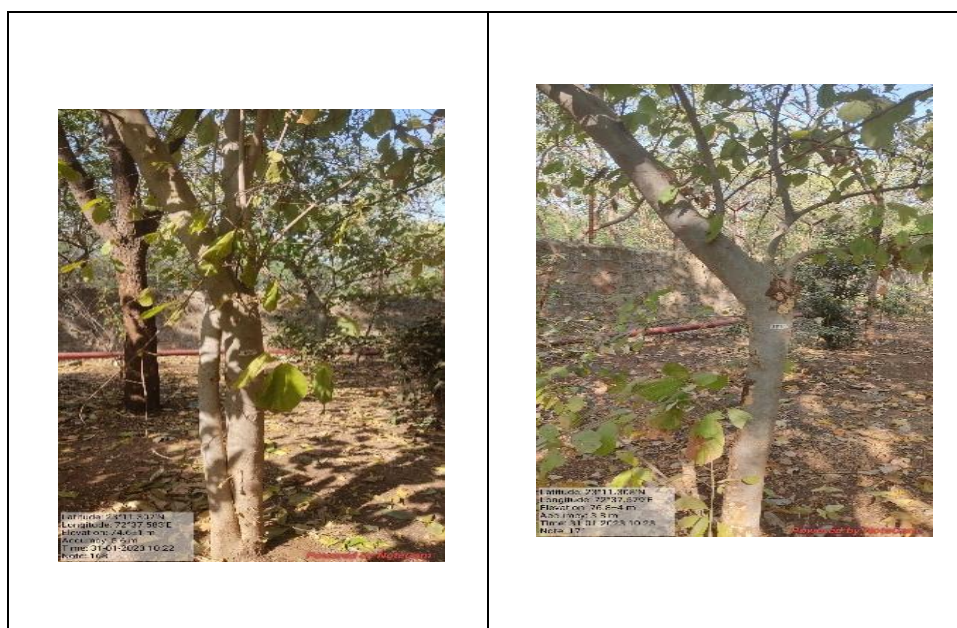
Borsalli



Botanical Name	<i>Mimusops elengi</i> L.
English Name	Spanish cherry, Bullet wood
Common/Local Name	Borsalli
Family	Sapotaceae
Total No. of tree available in campus	60
Distribution	Planted in gardens and along roads. More common in orchards of South Gujarat. Also in Vijaynagar forests of Sabarkantha district
Phenology	Flowering: June-October Fruiting: October-March
Uses	Medicinal, Fruits, Wood, road side avenue

Mitragyna parvifolia (Roxb.) Korth.

Kalam



Botanical Name	<i>Mitragyna parvifolia</i> (Roxb.) Korth.
English Name	Kaim tree
Common/Local Name	Kalam
Family	Rubiaceae
Total No. of tree available in campus	69
Distribution	Throughout in deciduous forests, sometimes also planted in gardens. Baroda, Dabhoi, Dangs, Vansada NP, Waghai and Khatana, Vyara, Rajpipla and Chhotaudepur forests, Ratanmahal WLS, Girnar forests and Rampara WLS.
Phenology	Flowering: April-August Fruiting: October-March
Uses	Building construction, Planks, rafts, Agricultural implements, Furniture, Match boxes, School implements, Fodder, Fuel

Murraya koenigii (L.) Sprengel

Mitho Limdo



Botanical Name	<i>Murraya koenigii</i> (L.) Sprengel
English Name	Curry tree
Common/Local Name	MithoLimdo
Family	Rutaceae
Total No. of tree available in campus	06
Distribution	Planted in gardens or near houses. Vijaynagar forests of Sabarkantha district.
Phenology	Flowering: March-May Fruiting: February-April
Uses	Cooking, Medicinal, Spices

Murraya paniculata (L.) Jack

Kunti



Botanical Name	<i>Murraya paniculata</i> (L.) Jack
English Name	Orange jasmine
Common/Local Name	Kamini, Kunti
Family	Rutaceae
Total No. of tree available in campus	09
Distribution	Throughout Gujarat
Phenology	Flowering: Summer Fruiting: Summer
Uses	Ornamental, Gardens & avenue, Road side avenue

Neolamarckia cadamba (Roxb.) Bosser

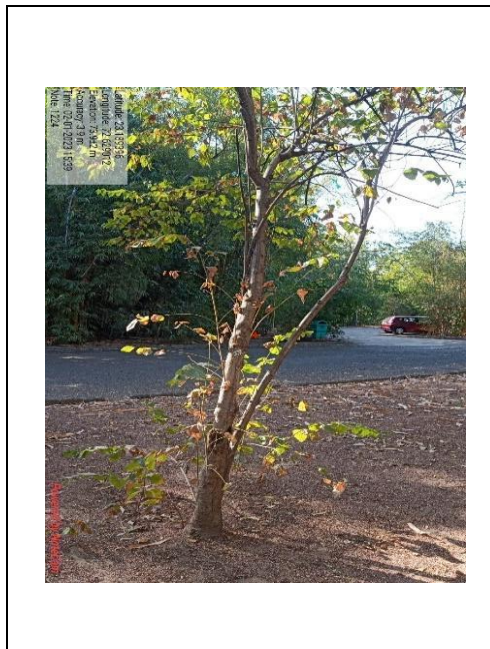
Kadam



Botanical Name	<i>Neolamarckia cadamba</i> (Roxb.) Bosser
English Name	Burflower tree, Laran
Common/Local Name	Kadam
Family	Rubiaceae
Total No. of tree available in campus	05
Distribution	Planted in gardens and public places throughout the state.
Phenology	Flowering: November-February Fruiting: March
Uses	Ornamental, Plywood, Paper & pulp, Boxes, Dye, Fodder, Timber

Nyctanthus arborescens L.

Parijat



Botanical Name	<i>Nyctanthus arborescens</i> L.
English Name	Night flowering jasmine
Common/Local Name	Parijat
Family	Oleaceae
Total No. of tree available in campus	01
Distribution	South Asia
Phenology	Flowering: August-December Fruiting: January
Uses	Medicinal, Ornamental, Garden landscaping, Road side avenue

Parkia roxburghii G. Don

Parkia



Botanical Name	<i>Parkia roxburghii</i> G. Don
English Name	Tree bean
Common/Local Name	Parkia
Family	Fabaceae
Total No. of tree available in campus	13
Distribution	South east Asia
Phenology	Flowering: September-October Fruiting: December
Uses	Firewood, Lumer, Ornamental, Food

Peltophorum pterocarpum (DC.) K. Heyne

Sonmohor



Botanical Name	<i>Peltophorum pterocarpum</i> (DC.) K. Heyne
English Name	Yellow flame tree
Common/Local Name	Sonmohor
Family	Fabaceae
Total No. of tree available in campus	196
Distribution	All over Gujarat
Phenology	Flowering: May-August Fruiting: June-August
Uses	Ornamental, Gardens & avenue, Fodder

Phoenix sylvestris (L.) Roxb.

Khajuri



Botanical Name	<i>Phoenix sylvestris</i> (L.) Roxb.
English Name	Date palm
Common/Local Name	Khajuri
Family	Arecaceae
Total No. of tree available in campus	03
Distribution	Throughout Gujarat
Phenology	Flowering: January-March Fruiting: March-June
Uses	Edible ,Forks, Brooms, Sap, Ornamental, Landscaping, Road side avenue

***Pithecellobium dulce* (Roxb.) Benth.**

Mithi ambali



Botanical Name	<i>Pithecellobium dulce</i> (Roxb.) Benth.
English Name	Manila tamarind, Monkey pod tree
Common/Local Name	Mithi ambali
Family	Fabaceae
Total No. of tree available in campus	03
Distribution	Throughout Gujarat
Phenology	Flowering: November-April Fruiting: December-June
Uses	Fruits, oil, Medicinal

***Polyalthia longifolia* Sonn.**

Asopalav



Botanical Name	<i>Polyalthia longifolia</i> Sonn.
English Name	The budhha tree/Mast tree
Common/Local Name	Asopalav, False asoka
Family	Annonaceae
Total No. of tree available in campus	27
Distribution	Throughout Gujarat
Phenology	Flowering: December-June Fruiting: April-August
Uses	Ornamental decoration, road side avenue

Pongamia pinnata (L.) Pierre

Karanj



Botanical Name	<i>Pongamia pinnata</i> (L.) Pierre
English Name	Ponga oil tree, Indian beech tree
Common/Local Name	Karanj
Family	Papillonaceae
Total No. of tree available in campus	251
Distribution	Common along the river banks and nalas. Also planted as an avenue tree. Dangs, Rajpiplal, Ratanmahal WLS, Chhotaudepur and Girnar forests, Barda WLS; planted commonly in Porbandar, Ahmedabad and Navsari districts
Phenology	Flowering: April-June Fruiting: March-May
Uses	Agricultural implements, Bio diesel, Soap making, Tanning industry, Fertilizer, Medicinal

Prosopis cineraria Druce.

Khijado



Botanical Name	<i>Prosopis cineraria</i> Druce.
English Name	Khejri
Common/Local Name	Khijado
Family	Mimosaceae
Total No. of tree available in campus	11
Distribution	Throughout Gujarat
Phenology	Flowering: October-March Fruiting: March-August
Uses	Food, Fodder, Fuelwood, Agricultural implements, House building

Prosopis juliflora (Swartz) DC.

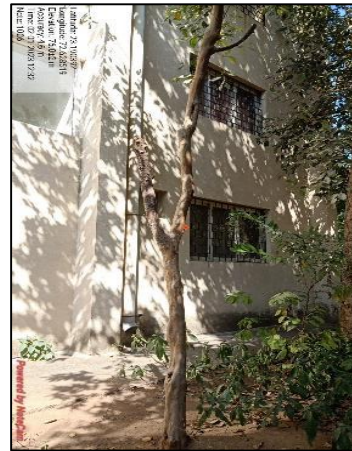
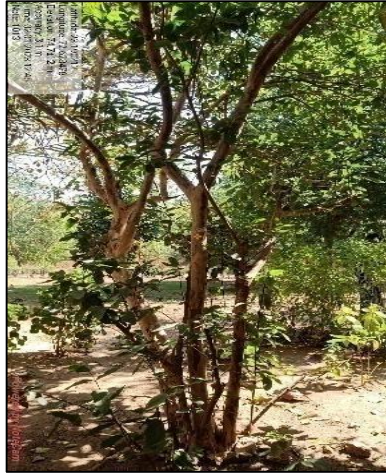
Gando baval



Botanical Name	<i>Prosopis juliflora</i> (Swartz) DC.
English Name	The mesquite tree
Common/Local Name	Gando baval, Vilayati babul
Family	Mimosaceae
Total No. of tree available in campus	11
Distribution	Coastal areas of Saurashtra and South Gujarat. There exists little information about the plantation of this species. Its extent of distribution is narrow in Saurashtra
Phenology	Flowering: Nov.-Feb. Fruiting: March-April
Uses	Agricultural implements, Fence posts, Furniture, Doors, window, Fuelwood, Pulpwood, Charcoal, Fodder

Psidium guajava L.

Jamphal



Botanical Name	<i>Psidium guajava</i> L.
English Name	Guava
Common/Local Name	Jamphal
Family	Myrtaceae
Total No. of tree available in campus	8
Distribution	Planted commonly in districts of Amreli, Rajkot, Porbandar, Jamnagar, Kachchh, Banaskantha, Mehsana, Patan, Ahmedabad, Sabakantha, Panchmahal, Kheda, Anand, Vadodara and Valsad
Phenology	Flowering: March-May Fruiting: June- July
Uses	Fruits, Medicinal, Fodder

Pterospermum acerifolium L. Wild.

Kanak Champo



Botanical Name	<i>Pterospermum acerifolium</i> L. Wild.
English Name	Bayur tree, Karnikara tree
Common/Local Name	Kanak Champo
Family	Malvaceae
Total No. of tree available in campus	13
Distribution	Shamlaji area and Vijaynagar forests. of Sabarkantha district. Wadia Palace Arboretum, Rajjipla. Planted in gardens of major cities.
Phenology	Flowering: Dec.-Mar. (Flowers) Fruiting: May
Uses	Leaf plates, Medicinal, Planks, Religious purpose, Boxes

***Salvadora oleoides* Decne.**

Pilu



Botanical Name	<i>Salvadora oleoides</i> Decne.
English Name	Large pilu, Toothbrush tree
Common/Local Name	Pilu
Family	Salvadoraceae
Total No. of tree available in campus	01
Distribution	India, Pakistan
Phenology	Flowering: March- April Fruiting: May-June
Uses	Toothbrush, Medicinal, Fodder

***Samanea saman* (Jacq.) Merr.**

Rato-Sarasdo



Botanical Name	<i>Samanea saman</i> (Jacq.) Merr.
English Nam	Monkey pod tree, Saman
Common/Local Name	Rato-Sarasdo
Family	Mimosaceae
Total No. of tree available in campus	55
Distribution	Planted along roads and in gardens. Also commonly planted along railway lines and canals. Found in Girnar forests and Waghai
Phenology	Flowering: April-July; Monsoon
Uses	Fodder, Fuel wood Road side avenue

Sapindus mukorossi Gaertn

Aritha



Botanical Name	<i>Sapindus mukorossi</i> Gaertn
English Nam	Soapnut tree
Common/Local Name	Aritha
Family	Sapindaceae
Total No. of tree available in campus	30
Distribution	It is present in 8 preservation plots, mainly in Vyara and Rajipla in South Gujarat and Sharnlaji area in Sabarkantha district.
Phenology	Flowering: May-June Fruiting: June-September
Uses	Timber, Charcoal, Soap manufacture, Insecticide, Medicinal

Senna siamea (Lam.) Irwin et Barneby

Kashid



Botanical Name	<i>Senna siamea</i> (Lam.) Irwin et Barneby
English Name	Iron wood tree
Common/Local Name	Kashid
Family	Caesalpiniaceae
Total No. of tree available in campus	402
Distribution	Girnar forests and planted commonly in districts of Junagadh, Mehsana, Sabarkantha, Gandhinagar, Dahod, Bharuch and Narmada. It is present in 4 out of 37 preservation plots. Shamlaji area of Sabarkantha district.
Phenology	Flowering: September-December Fruiting: December-January
Uses	Fuelwood, Charcoal, Pulp and paper, Fodder

Spathodea campanulata P. Beauv.

Spathodea



Botanical Name	<i>Spathodea campanulata</i> P. Beauv.
English Name	African tulip tree
Common/Local Name	Spathodea
Family	Bignoniaceae
Total No. of tree available in campus	79
Distribution	Planted in garden and along roads throughout the state.
Phenology	Flowering and Fruiting: Nov.-April
Uses	Toothpicks, Boxes, Ornamental

Stebulus asper Lour.

Harero



Botanical Name	<i>Stebulus asper</i> Lour.
English Nam	Toothbrush tree
Common/Local Name	Harero
Family	Moraceae
Total No. of tree available in campus	1
Distribution	The extent of occurrence of this species is very wide as it occurs in South and North Gujarat. The area of occupancy of this species is moderate among open forests, ravines and waste lands of the state.
Phenology	Flowering: November-March Fruiting: February-April
Uses	Paper, Medicinal

Sterculia foetida L.

Jangli badam



Botanical Name	<i>Sterculia foetida</i> L.
English Nam	Wild almond
Common/Local Name	Jangli badam
Family	Malvaceae
Total No. of tree available in campus	5
Distribution	Planted in Sayaji Garden and Botanical Garden, M. S. University of Baroda, Gujarat University, Ahmedabad and Agricultural Universities of Anand and Junagadh; J N J College, Nadiad; Government College, Gandhinagar and many private places in Surat, Ahmedabad, Rajkot
Phenology	Flowering: Feb-May Fruiting: May-Aug
Uses	Timber, Medicinal, Gum. Tannin

Swietenia mahagoni (Linn.) Jacq.

Mahagony



Botanical Name	<i>Swietenia mahagoni</i> (Linn.) Jacq.
English Nam	Spanish mahogany
Common/Local Name	Mahagony
Family	Meliaceae
Total No. of tree available in campus	5
Distribution	Planted in Junagadh Agriculture University's Botanical Garden and Madhadibaug, Junagadh (Pers. Comm. Dhruj). Indroda Park, Gandhinagar and also in Sayaji Garden and M. S. University's Botanical Garden, Vadodara
Phenology	Flowering and Fruiting: April-Nov
Uses	Furniture, Cabinet, Ship building, Plywood, Interior decoration, Pianos

***Syzygium cumini* L. Skeels.**

Jambu



Botanical Name	<i>Syzygium cumini</i> L. Skeels.
English Nam	Black plum
Common/Local Name	Jambu
Family	Myrtaceae
Total No. of tree available in campus	44
Distribution	Dangs, Vansada NP, Waghail and Rajpipla forests, Ratanmahal WLS, Chhotaudepur and Girnar forests. Commonly planted in some districts like Amreli, Surendranagar, Banaskantha, Mehsana, Patan, Gandhinagar, Ahmedabad, Kheda, Anand and Narmada
Phenology	Flowering: Jan.-April Fruiting: Feb.-May
Uses	Fruits, Medicinal, Door frames, Agricultural implements, Fence posts, Plywood, Fuelwood

***Tabebuia aurea* (Silva manso) Benth. & Hook. F. ex S. Moore**

Tabebuia aurea



Botanical Name	<i>Tabebuia aurea</i> (Silva manso) Benth. & Hook. F. ex S. Moore
English Name	Caribbean trumpet tree
Common/Local Name	Tabebuia aurea
Family	Bignoniaceae
Total No. of tree available in campus	22
Distribution	Planted in most of the cities in public and private gardens in the state
Phenology	Flowering and Fruiting: March-April
Uses	Ornamental, Fodder, Avenue

***Tabebuia rosea* DC.**

Tabebuia rosea



Botanical Name	<i>Tabebuia rosea</i> DC.
English Nam	Rosy trumpet tree
Common/Local Name	Tabebuia rosea
Family	Bignoniaceae
Total No. of tree available in campus	50
Distribution	Salvador
Phenology	Flowering and Fruiting: Dec-January
Uses	Medicinal, Ornamental, Road side avenue

Tamarindus indica L.

Khati amali



Botanical Name	<i>Tamarindus indica</i> L.
English Nam	The tamarind tree
Common/Local Name	Khatiamali
Family	Caesalpiniaceae
Total No. of tree available in campus	109
Distribution	Throughout planted or self-sown, rarely wild in dense forests. Dangs, Rajpipla, Vansada NP, Waghai and Khatanal, Ratanmahal WLS, Barda WLS, Chhotaudepur and Girnar forests, Narayan Sarovar Sanctuary in Kachchh.
Phenology	Flowering: March-July Fruiting: April-Nov
Uses	Fruits, Medicinal, Plywood, Fuelwood, Avenue, Ornamental

***Tecomella undulata* (Smith) Seem**

Ragat Rohida



Botanical Name	<i>Tecomella undulata</i> (Smith) Seem
English Nam	Teak of marwar
Common/Local Name	Ragat Rohida
Family	Bignoniaceae
Total No. of tree available in campus	1
Distribution	Rajpipla, North Gujarat, Saurashtra and Kachchh Gujarat. Banas river (Vaupell ex Graham, Dalzell & Gibson). Vansada NP, Waghai forests, Chhotaudepur forest
Phenology	Flowering: Dec-April Fruiting: Feb-April
Uses	Furniture, Agricultural implement, Carving work, Medicinal, Fodder, Tanning, Gum

***Terminalia arjuna* (Roxb. ex DC.) Wight. & Arn.**

Arjun



Botanical Name	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight. & Arn.
English Nam	Arjun
Common/Local Name	Arjun sadad
Family	Combretaceae
Total No. of tree available in campus	10
Distribution	The extent of occurrence of this species is very wide as it is distributed in S. Gujarat, N. Gujarat and Saurashtra forests, but it is very sparsely distributed that has resulted in less area of occupancy of this specie.
Phenology	Flowering: March-April Fruiting: May-Nov
Uses	Timber, Insecticide, Medicinal, Charcoal

Terminalia bellirica Roxb.

Baheda



Botanical Name	<i>Terminalia bellirica</i> Roxb.
English Name	Belleric myrobalan tree
Common/Local Name	Baheda
Family	Combretaceae
Total No. of tree available in campus	8
Distribution	This species has dense population in the central and S. Gujarat. Its extent of distribution in the state is wide as it is recorded from S. to N. Gujarat and Saurashtra. It has moderate area of occupancy as compared to the state forests.
Phenology	Flowering: April-May Fruiting: November-February
Uses	Triphala medicine, Soap, Gum, Dyeing, Pulp, timber

Terminalia catappa L.

Desi badam



Botanical Name	<i>Terminalia catappa</i> L.
English Name	Almond tree
Common/Local Name	Desi badam
Family	Combretaceae
Total No. of tree available in campus	33
Distribution	Planted in gardens throughout the state. Also, in Rampara WLS (Rajkot) and in districts of Porbandar, Sabarkantha, Dahod, Panchmahal and Vadodara. Shamlaji area, and Vijaynagar forests of Sabarkantha district. Over 60,000 trees have been estimated in non-forests areas of Gujarat
Phenology	Flowering and Fruiting: December-May
Uses	Medicinal, Fruits, Wood

Terminalia chebula Retz.

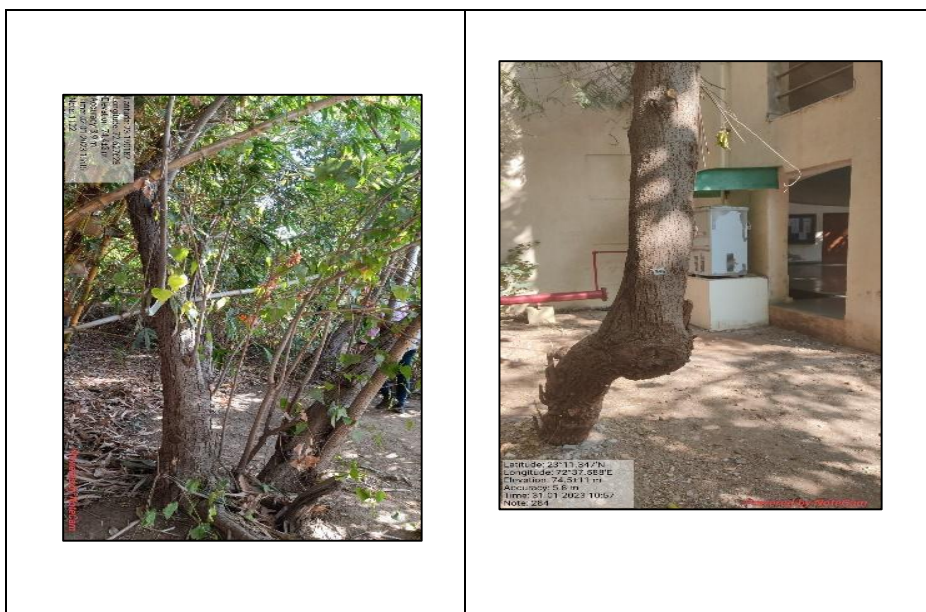
Harde



Botanical Name	<i>Terminalia chebula</i> Retz.
English Name	chebulic myrobalan tree
Common/Local Name	Harde
Family	Combretaceae
Total No. of tree available in campus	2
Distribution	It has very wide extent of occurrence in the state except Kachchh region. This species is present very sparsely and has very low number in the state forests.
Phenology	Flowering: May-June Fruiting: November-March
Uses	Triphala medicine, Pulp, Tannin, timber

Thespesia populnea (L.) Sol. Ex Correa

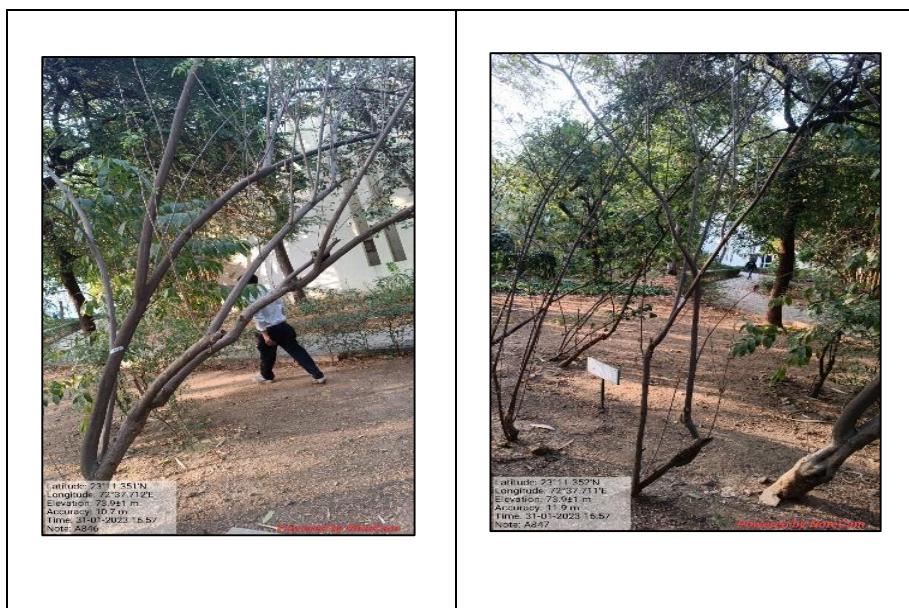
Paras piplo



Botanical Name	<i>Thespesia populnea</i> (L.) Sol. Ex Correa
English Nam	Pacific rosewood
Common/Local Name	Paras piplo
Family	Malvaceae
Total No. of tree available in campus	14
Distribution	It has been recorded from the 2 forest tracks that belong to Ambaji in Banaskantha and Dholvani range in Sabarkantha. In Diu, it is found in wild
Phenology	Flowering and Fruiting: Mostly throughout the year
Uses	Religious sculpture, Musical instruments, Drums, House parts

Vitex negundo L.

Nagod

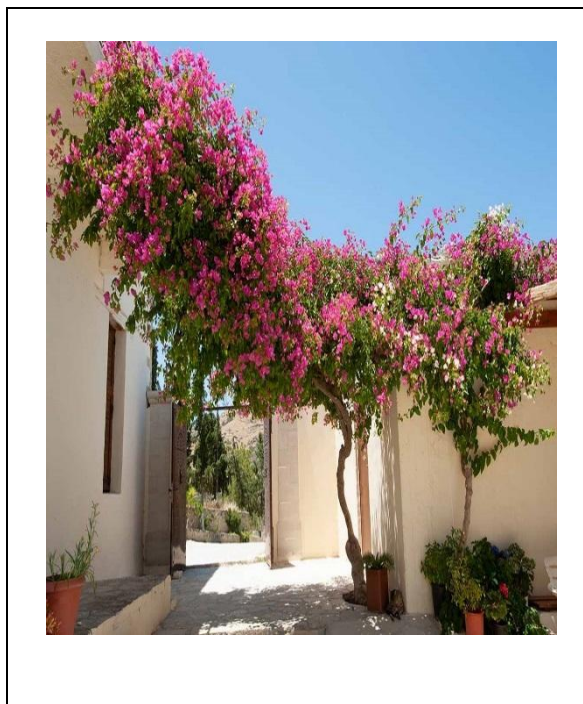


Botanical Name	<i>Vitex negundo</i> L.
English Name	Chinese chaste tree, Five leaved chaste tree
Common/Local Name	Nagod
Family	Lamiaceae
Total No. of tree available in campus	3
Distribution	Throughout the river beds and waste lands: Common, occasionally cultivated. Chhotaudepur forest, Barda WLS, planted commonly in Surat district
Phenology	Flowering: June-August Fruiting: : December-January
Uses	Medicinal, the paste of leaves is applied on skin sores. The flowers are used as medicine on diarrhea, cholera and liver disorders

8.2 Shrubs

***Bougainvillea spectabilis* Comm. Ex Juss.**

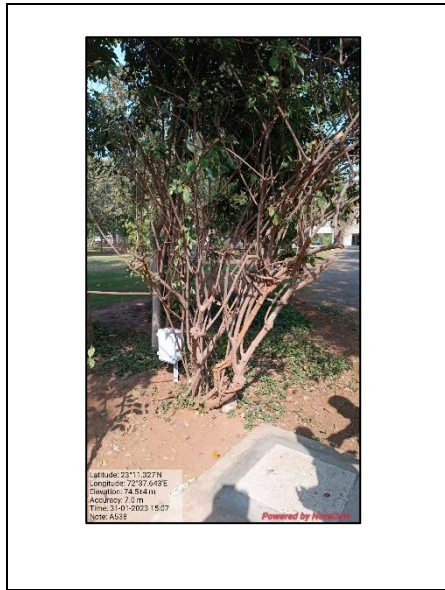
Bougainvillea



Botanical Name	<i>Bougainvillea spectabilis</i> Comm. Ex Juss.
English Nam	Bougainvillea
Common/Local Name	Bougainvillea
Family	Nyctaginaceae
Total No. of tree available in campus	1
Distribution	Throughout the river beds and waste lands: Common, occasionally cultivated. Chhotaudepur forest, Barda WLS, planted commonly in Surat district
Phenology	Flowering : Throughout year
Uses	Ornamental, Landscaping, Salt tolerance, road side avenue

Hamalia patens Jacq.

Hemalia



Botanical Name	<i>Hamalia patens</i> Jacq.
English Nam	Fire bush
Common/Local Name	Hemalia
Family	Rubiaceae
Total No. of tree available in campus	1
Distribution	Throughout the river beds and waste places: Common, occasionally cultivated. Chhotaudepur forest, Barda WLS, planted commonly in Surat district
Phenology	Flowering: October- December Fruiting: February
Uses	Pollen & nectar, Folk medicinal, Ornamental, Road side avenue

Jacaranda mimosaeifolia D. Don.

Jacaranda



Botanical Name	<i>Jacaranda mimosaeifolia</i> D. Don.
English Nam	The mimosa leaved jacaranda
Common/Local Name	Jacaranda
Family	Bignoniaceae
Total No. of tree available in campus	3
Distribution	Throughout the river beds and waste places: Common, occasionally cultivated. Chhotaudepur forest, Barda WLS, planted commonly in Surat district
Phenology	Flowering: April-May Fruiting: June-September
Uses	ornamental, Gardens & avenue

Jatropha gossypifolia L.

Jatropha



Botanical Name	<i>Jatropha gossypifolia</i> L.
English Name	Bellyache bush
Common/Local Name	Jatropha
Family	Euphorbiaceae
Total No. of tree available in campus	5
Distribution	Throughout the river beds and waste places: Common, occasionally cultivated. Chhotaudepur forest, Barda WLS, planted commonly in Surat district
Phenology	Flowering: Flowering throughout the year Fruiting: Flowering throughout the year
Uses	Medicinal

Pavetta indica L.

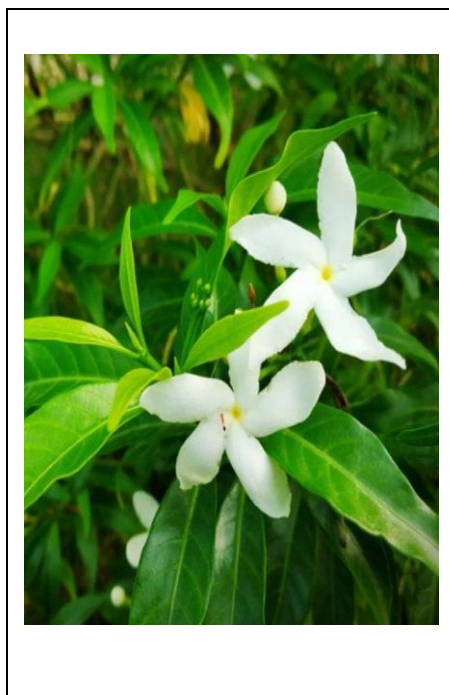
Pavetta



Botanical Name	<i>Pavetta indica</i> L.
English Name	Indian pavetta
Common/Local Name	Pavetta
Family	Rubiaceae
Total No. of tree available in campus	01
Distribution	India, Sri lanka, South East Asia
Phenology	Flowering: October-September Fruiting: September-December
Uses	Medicinal, Ornamental, Landscaping, Road side avenue

Tabernaemontana divaricata R. Br. Ex Roem. & Schult.

Tagar



Botanical Name	<i>Tabernaemontana divaricata</i> R. Br. Ex Roem. & Schult.
English Nam	Pinwheel flower, East india rosebay
Common/Local Name	Tagar
Family	Apocynaceae
Total No. of tree available in campus	3
Distribution	Throughout the river beds and waste places: Common, occasionally cultivated. Chhotaudepur forest, Barda WLS, planted commonly in Surat district
Phenology	Flowering: June-July Fruiting: July-September
Uses	ornamental, Gardens & avenue, Road side avenue

***Tecoma stans* (L.) Juss. Ex Kunth**

Tecoma



Botanical Name	<i>Tecoma stans</i> (L.) Juss. Ex Kunth
English Name	Yellow trumpet bush tree
Common/Local Name	Tecoma
Family	Bignoniaceae
Total No. of tree available in campus	16
Distribution	Native of America
Phenology	Flowering: Throughout year Fruiting: Early summer
Uses	Ornamental, Construction of furniture & canoes, Firewood, Medicinal, Fodder

8.3 Herbs

Agave americana L.

Ketki



Botanical Name	<i>Agave americana</i> L.
English Name	Agave, Century plant
Common/Local Name	Ketki
Family	Asparagaceae
Total No. of tree available in campus	1
Distribution	Throughout the river beds and waste places: Common, occasionally cultivated. Chhotaudepur forest, Barda WLS, planted commonly in Surat district
Phenology	Flowering: Monsoon Fruiting: Monsoon
Uses	Food, Fiber, Beverages, Tequila, Ornament

8.4 Grasses

Bambusa striata Lodd. ex Lindl.

Bamboo



Botanical Name	<i>Bambusa striata</i> Lodd. ex Lindl.
English Name	Golden bamboo
Common/Local Name	Bamboo, Vansh, Pilo bamboo
Family	Poaceae
Total No. of tree available in campus	181
Distribution	Throughout the river beds and waste places: Common, occasionally cultivated. Chhotaudepur forest, Barda WLS, planted commonly in Surat district
Phenology	Flowering: Ones in a life Fruiting: Ones in a life
Uses	Furniture, Agricultural tools, Bows, Fishing nets, Paper pulp, Pickles, Medicinal, House construction, Basket, Musical instruments, Ornamental, Fodder

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