



WAGHAI BOTANICAL GARDEN



WAGHAI BOTANICAL GARDEN



Concept By
Shri Dinesh Rabari, GFS
Superintendent, Waghai Botanical Garden
South Dang Forest Division

Design By
Pratik M. Gajjar

Compiled By
Roshan Parmar JRF
M.S. University Baroda

Acknowledgment

At the foremost we would like to give tribute to all those unknown foresters and researchers who have contributed to the real treasure of Waghai Botanical Garden since its inception.

This book has been compiled by the valuable assistance and ideas of Shri. M. J. Parmar (IFS), Chief Conservator of Forests, Valsad Circle. We would like to thank Dr. Dheeraj Mittal (IFS), DCF, South Dang Forest Division, Ahwa (2015-2018) and Shri.D.B.Trivedi (GFS), DCF, South Dang Forest Division, Ahwa-Dangs for their valuable assistance and continuous support.

We are thankful to Prof. B. G. Vashi Botanist, Botanical Garden, Waghai (Dangs) (1973-1980) for giving his value able inputs.

Late Mr. J. V. Aras (IFS) ACF Botanical Garden Waghai during (1973-1978) without his hard work and pain taking knees Garden would not be able to stand upon.

We would like to thank Late Mr. Gangaram who has taken care about all the plant species which were laid in the garden during that period. Our thanks are due to Late Mr V. P. Gosavi, Forester of the Garden during (1971-1979) the real artist and sculpturist of the garden.

Thanks are due to Retd. Prof. Minoor Parabia, for sharing his valuable knowledge and observations on Waghai Botanical Garden.

Thanks are due to Mr. Pratik Pandya, Mr. Kiran Patel, forest guides Mr. Lasu and Kasu bhai and other staff of Waghai Botanical Garden (WBG) who went updating us with the latest information on the plants.

We are thankful to Mr. Karan Rana, Ms. Mittal Bhatt, Mr. Aakash Vanzara, Mr. Ankur Rajwadi and Mr. Paresh Patil, who have contributed immensely for the identification of various plant species. We are also thankful to all Forest Officials of Gujarat and to the local guide for sharing their valuable field knowledge.

And finally – our special thanks to Dr. P.S. Nagar, Associate professor, Department of Botany, The Maharaja Sayajirao university of Baroda for his assistance and guidance and sharing valuable knowledge.



Introduction

Botanical gardens are important centers for education. There are 1600 botanical gardens in the world which, between them, maintain the largest collection of plant species outside nature. As many as 60000 of these plant species may be threatened with genetic impoverishment or even extinction within the next 30-40 years. Threats include factors such as habitat loss and fragmentation, invasive species, over-exploitation of plant and animal species, pollution of soil, water and atmosphere, global climate change, industry, agriculture and forestry. Botanical gardens have an obvious and vital role to play in conserving plants but conservation cannot succeed without education. Gardens are uniquely placed to teach people about the importance of the plants in our lives and in the global ecosystem. Botanical gardens basically are place of collection cultivation and display of floral diversity. Over a period of time botanical garden have been established as institutions expanding their roles for the purpose of education and research, conservation, sustainable use, tourism and recreational activities and production on of plant based products. Botanical garden developed and flourished through a long tradition of exchanging, studying, displaying and conserving plants from around the world. They have served as places of serenity and wonder and centers of medical and taxonomic research. Botanical garden has also played a center role in the historical distribution of useful plants worldwide. In current scenario as plant species worldwide are declining due to a potent mixture of threats –habitat degeneration and loss invasive alien species, overexploitation, pollution and climate change ex situ conservation is becoming a vital rationale for existing botanical gardens and the further development of new botanical garden.



Today, individual botanical gardens place varying emphases on local or global plant diversity, public education and horticulture, in situ conservation initiatives, ex situ conservation techniques and investigation of new environmentally sustainable uses of plants. All of these activities fall within the scope of the United Nations Convention on Biological Diversity (CBD), an international framework convention that has led to the development of many new national laws, policies and initiative around the world. Botanical gardens provide important bridges between the

researcher and conservationist, government authorities, local communities and pharmaceutical industries. These links are valuable to society, need to be recognized and considered.

Botanical garden exchanging plant material across regional boundaries require a good understanding of the many, sometimes contentious issues that surround access to genetic resources and the sharing of benefits derived from their use, including the concept of prior informed consent and fair and equitable benefits-sharing, The CBD approach-stressing benefits-sharing, scientific and technical cooperation and technology transfer-relies on partnership and communication between providers and users of biodiversity; gardens can provide many inspiring examples of successful partnership, and should continue to create more. Botanical gardens also need to demonstrate to government how vital their contributions are towards implementation of the CBD's objectives. It is crucial that botanical gardens understand the legal, social and ethical implications of this global treaty to continue their work constructively and reputably. Further, there is need to establish the Botanical gardens as gene pool centers.



Waghai Botanical Garden (WBG)

Waghai Botanical Garden is developed with the valuable inputs of Retd. Prof. B. G. Vashi Botanist, Botanical Garden, Waghai (Dangs) (1973-1980) and Late Mr. J. V. Aras (IFS) ACF Botanical Garden Waghai (1973-1978). Without their hard work and pain taking knees Garden would not be able to stand upon. Late Mr. Gangaram has taken care about all the plant species which were laid in the garden during that development period. Late Mr V. P. Gosavi, Forester of the Garden (1971-1979) was the real artist and sculpturist of the garden. Retd. Prof. Minoo Parabia is also the person who sharing his valuable knowledge and observations on exclusive trees of WBG. Mr. Pratik Pandya, Mr. Kiran Patel, forester, guides Mr. Lasu and Kasu bhai and other staff of Waghai Botanical Garden (WBG) who went updating the development in Waghai Botanical Garden.

WBG is situated near about 2 Km from Waghai on Waghai-Saputara Road in Dangs District, Gujarat. It is largest garden in Gujarat spreads over an area of 24 Hectares. Waghai Botanical Garden has a systematic network of roads with a stretch of 7 Km in length. The climate detail of WBG includes, average rainfall between 1600 mm to 2000 mm; average minimum temperature is of 10 °C (December, January) and maximum temperatures goes up to 45 °C (June, July) has been recorded.





Map of Waghai Botanical Garden

The Waghai Botanical Garden is divided into 12 different plots, which represent all forest types occurring in India as classified by Champion and Seth as shown in map. Various trees have been introduced in the Garden, from various biogeographical zones of India and from other tropical countries. Waghai Botanical Garden is rich in floristic diversity having wide varieties of plant species. Garden has beautiful, natural and silent ambiance. You can see the plants which we only heard about and also the plants which cannot found in urban area.

With plants you can also see variety of insects and birds whose home is this garden. WBG is place where you can see more than 100 years old trees, more than 100 ft. height trees. You can see more than 25 exclusive plant species that are only present in WBG across whole Gujarat. Roads in garden are well planed with particular plant species belongs to particular road. So you can walk on interesting road like Shetur road, bhilamo road, champo road instead of particular city roads. Garden is well decorating with beautiful ornamental flowering plants which enhance its beauty that you can feel at the step when you enter in garden.

Details of different plots & Facilities present in WBG.

Evergreen Plot:

Evergreen plot is a mimic of forest type observed in Southern and North Eastern part of India. This plot has more than 328 plant species which includes plants like Hopea Ponga, Artocarpus heterophyllus, Duabanga grandiflora etc. (Annexure 8)

Moist Deciduous Plot:

The plot is prepared by considering forest species available in the Southern Western Ghats, North India and Andaman & Nicobar Island. It has more than 323 plant species such as *Lagerstromia indica*, *Shorea robusta*, *Dillenia indica*, *Albizia procera* etc. (Annexure 3)

Dry Deciduous Plot:

Dry Deciduous plot has vegetation similar to that of forest type of Madhya Pradesh, Gujarat, Andhra Pradesh, Karnataka, Tamilnadu, and Punjab which comprises of more than 42 species. The representative species in such forest type are *Terninalia arjuna*, *Anogeissu latifolia*, *Diosphyros montana*, *Semicarpus anacardium*, etc. (Annexure 2)

Scrub and Thorn Plot:

This plot includes plants found in forest of Madhya Pradesh, Maharashtra, Andhra Pradesh and Rajasthan. This plot represents 101 plant species few examples are *Acacia pinnata*, *Zizyphus mauritiana* etc. (Annexure 6)

Arid Zone Plot:

The plot comprised of environment than that of arid zone of India as found in North Gujarat and Rajasthan. More than 114 plant species of the respective forest types were planted in this plot. The vegetation of the plot includes species like *Cappris zeylanica*, *Tamrix indica*, *Opuntia ficus-indica* and some perennial grasses.

The plot comprised of environment than that of arid zone of India as found in North Gujarat and Rajasthan. More than 114 plant species of the respective forest types were planted in this plot. The vegetation of the plot includes species like *Cappris zeylanica*, *Tamrix indica*, *Opuntia ficus-indica* and some perennial grasses. (Annexure 5)

Taxonomy Plot:

The plot was developed for the identification, nomenclature and classification of plant kingdom. The significance of the plot is to provide insight details of the complexity in plant diversity with the help of many plant species herbaria present in the WBG. (Annexure 1)

Medicinal Plot:

This plot was added to the garden in subsequent years of its formation. It has collection of 257 species which have medicinal usages in Ayurveda, Unani, Siddha, Homeopathy and modern medicines. (Annexure 7)

Arogyvan:

This plot is also added to WBG and Inaugurated by Honorable chief minister shri. Narendra Modi. This plot harbors medicinal herb, shrub and tree plant species. It is divided in three parts like herb, shrub and tree plot. It is a largest plot of WBG and give information's of uses of plants as it has sign board assign to each and every plant.

Bamboo Plot:

The plot comprised of 6 bamboo species found in different regions of India, such as Bamboosa tulodies, Bamboosa vulgaris etc.(Annexure 4)

Dangs Plot:

This plot represents the species occurring in Dang forest. It has more than 468 species.

Cacti and Succulent Plot:

Cacti and succulents have always attracted people across world. The plot includes 142 different varieties of Cacti and Succulents.

Tuber Plot:

In Tuber plot you can see different type of tuberous plant and also get the knowledge of its uses.(Annexure 7)

RET & E Plot:

This plot represents the rare, endangered, threatened & endemic plant species of Gujarat.

Palm Plot:

Palm plot will show you variety of palm species from all over India.

Fruit Plot:

A fruit which we consume in day to day life but don't know from which tree it belongs then fruit plot is must to visit in WBG.

Aquatic Pond:

Aquatic pond is also rich with different types of aquatic plant species.

Orchid House:

Orchid house is also another attraction in WBG where you can see different types of ornamental and wild Orchid. Your inside photographer will must wake up to capture images, when you see the glorious beautiful flowers.

Rose Garden:

Rose Garden is another attraction as it has variety colors of rose flowers plant.

Pragvad (Unique tree of WBG):

Sacred Plants are also the reason to visit WBG as it has Pragvad; it's a pleasure to see its unique canopy and feel the nature vibes when to seat under it.

Library and Herbarium Room:

WBG has Library of 552 books which includes books on different Flora, Horticulture, Floriculture, Agriculture and the published forest reports. The Herbarium is a unique, having collection of Dr. R. I. Patel - An eminent Taxonomist of Gujarat. There are 3644 plant specimens belonging to 3245 Dicot, 399 Monocot and 2 Pteridophyte. The collection is mainly of Dr. B. G. Vashi, Dr. J. R. Parmar and Mr. K. L. Dubey.

Bhagat Hut:

You can see Variety types of seeds of plants that are present in WBG in Bhagat hut present at arogyvan.

Nursery & Green House:

In situ conservation of variety of plant species present in WBG is done at this place.

Dangs Kutir:

Here you can get glimpse of Tradition and culture of Dang District.

Souvenir Shop:

It is a place where you can buy unique & traditional gift items, wallpapers, boutique items, bamboo items and much more which represent Dangs and Botany. A Must visit in WBG.

Canteen:

It provides you indigenous food items.

Kitchen Area:

This place provides you space for making own food and dining.

Children Play Area:

It has slider, swing chair, rope climbing, joy train and Archery. Children can enjoy them self in this.

Selfie Zone:

To step up with current scenario WBG recently developed Selfie zone for tourist and visitors.

Parking:

Large space in front of garden is dedicated for the parking of vehicles.

Biodiversity Interpretation Center:

This the place where meetings, seminars and exhibitions take place related to Botany, Biodiversity and forestry.

Heritage Rest House:

Heritage rest house is also well developed maintain with attractive garden and landscape.

New initiatives

DANG E-HERBAIUM (www.waghaibotanicalgarden.in)

It is a unique electronic herbaria having collection of Dr. R. I. Patel - An eminent Taxonomist of Gujarat. There are 3644 plant specimens belonging to 3245 Dicot, 399 Monocot and 2 Pteridophytes. The collection is mainly of Dr. B. G. Vashi, Dr. J. R. Parmar and Mr. K. L. Dubey. This is a useful reference website for Students, Research scholars, Forest Guards, Forest officials, Herbalist, Ayurvedacharya, Environmentalist visiting Garden.



About Botanical Garden

Botanical Garden is situated about 2 Km. away from Waghai, on Waghai-Saputara Road in District Dang, Gujarat State. It Spreads over an area of 24 Ha. It is the largest garden in Gujarat. It was established in 1966. This Botanical Garden has systematic network of roads spreading 7 Km in length. This area receives about 2600 mm to 2000 mm rainfall during rainy season. Average minimum and maximum temperatures are 10°C to 43°C.

This E-Herbarium website was officially launched by Shri. S. M Patel (IFS), Chief Conservator of Forest, Valsad Circle, during the Botany Fest 2017.



S. No.	Family Name	Bot. Name	Sub-Fam.	Total Spec.	Status
1	Mimosaceae	Albizia	genibone	1	Specimen
2	Mimosaceae	Albizia	genibone	1	Specimen
3	Mimosaceae	Albizia	genibone	1	Specimen
4	Mimosaceae	Albizia	genibone	1	Specimen
5	Mimosaceae	Albizia	genibone	1	Specimen
6	Mimosaceae	Albizia	genibone	1	Specimen
7	Mimosaceae	Albizia	genibone	1	Specimen
8	Mimosaceae	Albizia	genibone	1	Specimen
9	Mimosaceae	Albizia	genibone	1	Specimen
10	Mimosaceae	Albizia	genibone	1	Specimen
11	Mimosaceae	Albizia	genibone	1	Specimen
12	Mimosaceae	Albizia	genibone	1	Specimen
13	Mimosaceae	Albizia	genibone	1	Specimen



Specimen Details:

- Specimen No. 12345
- Family Name: Mimosaceae
- Bot. Name: Albizia genibone
- Sub-Fam.: genibone
- Total Spec.: 1
- Status: Specimen

Photograph of the specimen showing a branch with leaves and a flower.

Highlights of E-Herbaria:

All the plant specimens are well arranged in alphabetical manner based on their family along with their other taxonomical details.

The website contains all the necessary information about plant starting from its botanical name, their family, its English name subspecies, variety name, and local names, also the time of flowering and fruiting, with some general information about the plant.

Herbarium images are of high resolution with zoom facility to observe the minute morphological details of respective plant species for example their leaf margin, apex, stem striation, and hairs if present.

The website also provides information regarding plants site of locations or collection site, collector's name, date of the collection and some of the key specific information about its taxonomic identification.

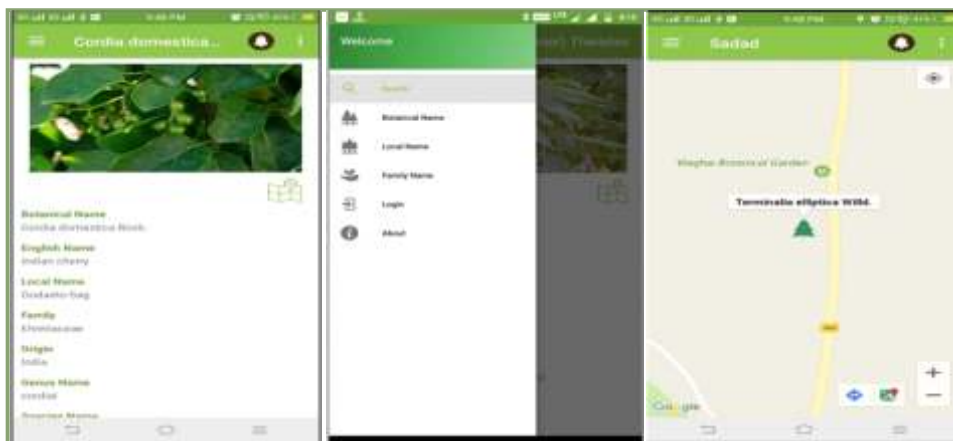
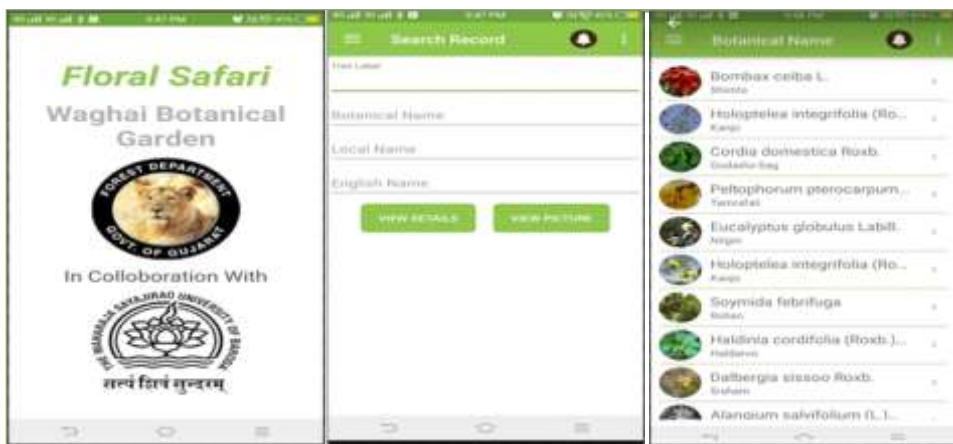
NUMBERS OF VISITORS

Sr. No.	Year	No. of Visitors
1	2001-2002	1,17,593
2	2002-2003	1,14,999
3	2003-2004	1,13,710
4	2004-2005	1,24,957
5	2005-2006	1,27,675
6	2006-2007	1,30,821
7	2007-2008	1,17,983
8	2008-2009	1,54,739
9	2009-2010	1,86,944
10	2010-2011	2,13,298
11	2011-2012	2,37,668
12	2012-2013	3,44,125
13	2013-2014	3,16,675
14	2014-2015	3,15,434
15	2015-2016	2,90,752
16	2016-2017	2,60,839
17	2017-2018	2,87,268
18	30 th Jun-2018.....	86,817

Floral safari

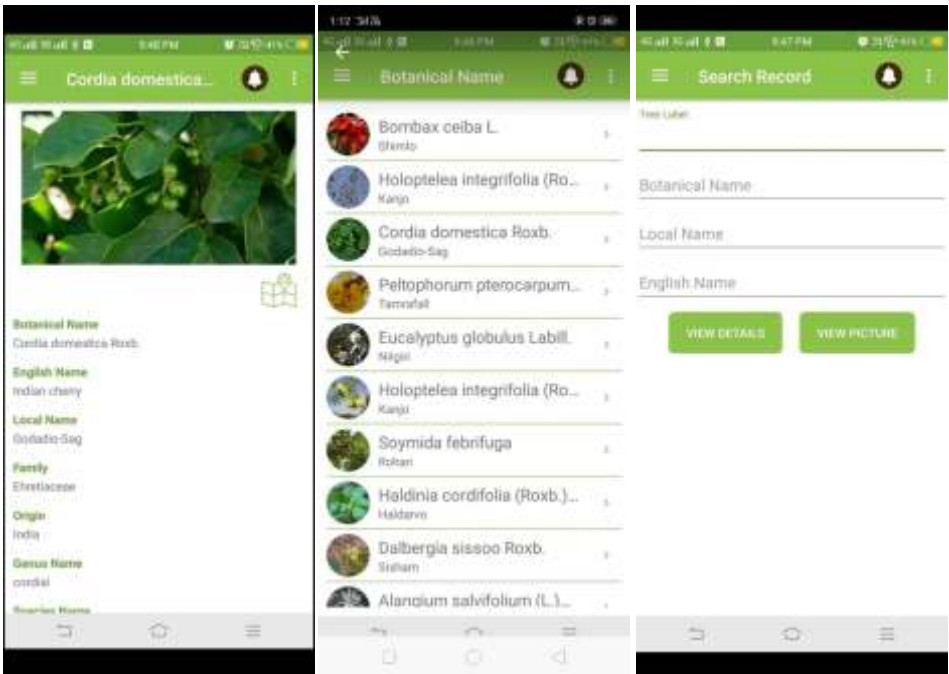
Floral safari is an android based programmed for the trees of Waghai Botanical Garden. The application provides information on the scientific details of plant i.e. local name, family, origin, meaning of scientific names, phenology, and medicinal and consumable uses.

All together details of 274 plant species are tagged in WBG of which 242 plants are dicots and 32 plants are monocots.



Benefits of the software

- Awareness about common, rare, endangered and threatened trees.
- Practical way for identification of plant species.
- Indigenous plant diversity is studied in field.
- Why trees should be conserved?
- Understanding the canopy and bark ornamentation.
- To study the morphological variation with respect to time prevailing in the plants.
- Aesthetic values of different trees.
- Medicinal uses of trees.
- Description on the seeds of different trees and to differentiate them from every species point of view.
- Trees usefulness for landscape planning.



Floristic diversity of waghai botanical garden

Waghai Botanical Garden is rich in floristic diversity having wide varieties of plant species. In order to understand the diversity of WBG a project on Floristic diversity of Waghai Botanical Garden was taken up for study in August 2017. Till now 592 different plant species have been collected, identified, herbariums have prepared & have been uploaded on Dangs E-herbaria. A total of 1340 herbarium specimens were prepared with all the notes and information. It is digitized with unique barcode number and scanned with high resolution image quality.

(Webpage: - www.waghaibotanicalgarden.in)



Orchid conservation & plantation

Orchids are the most highly evolved flowering plants which exhibits an incredible range of diversity in size, shape and color of their stunning flowers. Variety of wild Orchids are found in Dang forest. These Orchids are collected, identified and conserve in the WBG. There are 19 species of orchids have been conserved of which 9 are epiphyte and 10 are terrestrial.







Exclusive trees of waghai botanical garden

Waghai Botanical Garden is rich in floristic diversity having wide varieties of plant species. In order to understand the diversity of WBG a project on “Floristic diversity of Waghai Botanical Garden” was taken up for study in August 2017. During this project team of Maharaja Sayajirao university of Baroda under the guidance of Dr. P.S. Nagar identified 29 exclusive tree species in WBG. These all plants are introduced and all are well grown here. These all tree species are exclusively found only in Gujarat at WBG.



List of Exclusive plants of WBG with its Details.

Sr. No.	Botanical Name	Family	Common Name	Local Name	Fl. – Fr.
1	<i>Duabanga grandiflora</i> (DC.) Walp.	Lythraceae	Duabanga	Duvalbanga	December – April
2	<i>Hopea ponga</i> (Dennst.) Mabb.	Moraceae	Ponga	Kavshi	October – March
3	<i>Uvaria littoralis</i> (Blume) Blume	Annonaceae	South-Indian Uvaria	Uvaria	November – February
4	<i>Olea dioica</i> Roxb.	Oleaceae	Rose Sandalwood	Parjamb	October – March
5	<i>Parmentiera cereifera</i> Seem.	Bignonaceae	Candle Tree	Pencil Tree	October – March
6	<i>Cleistanthus collinus</i> (Roxb.) Benth. ex Hook.f.	Phyllanthaceae	Garari	Garari	October - December.
7	<i>Glochidion ellipticum</i> Wight	Phyllanthaceae	Bhoma	Bhoma	October – January
8	<i>Ficus microcarpa</i> L.f.	Moraceae	Laurel Fig, Chinese Banyan	Pragvad, NandrakVad	March – June
9	<i>Antidesma acidum</i> Retz.	Moraceae	Black Currant Tree	Aamri, Dhakki, Khatua	March – June
10	<i>Antidesma ghaesembilla</i> Gaertn.	Phyllanthaceae	Black Currant Tree	Aamri, Dhakki, Khatua	March – January
11	<i>Ardisia solanacea</i> (Poir.) Roxb.	Primulaceae	Shoebutton Ardisia, Duck's eye	Bugdi, Dikna	March – January

12	<i>Carallia brachiata</i> (Lour.) Merr.	Rhizophoraceae	Freshwater Mangrove		October – February
13	<i>Chloroxylon swietenia</i> DC.	Rutaceae	East Indian Satinwood	Behru, Halda	January – April
14	<i>Diospyros malabarica</i> (Desr.) Kostel.	Ebenaceae	Gaub, Malabar Ebony	Timburi	March – May
15	<i>Elaeocarpus sphaericus</i> Gaertn. K. Schum.	Elaeocarpaceae	Bead tree	Rudraksh	May-June; November-December
16	<i>Erinocarpus nimmonii</i> J. Graham	Malvaceae	Jangli Bhendi, Nimmo's Erinocarpus	KadviBhindi, JangliBhindi	August – September
17	<i>Falconeria insignis</i> Royle	Euphorbiaceae	Tiger's Milk Spruce, Chinese Tallow	Sherod	December – May
18	<i>Vitex altissima</i> L.f.	Lamiaceae	Peacock chaste tree	Nagod ni jat	March – April
19	<i>Chukrasia tabularis</i> A.Juss.	Meliaceae	Chittagong Wood, Indian Redwood	Toon ni jat	July – October
20	<i>Artocarpus hirsutus</i> Lam.	Moraceae	Aini	Wild Jackfruit	July – October
21	<i>Memecylon umbellatum</i> Burm. f.	Melastomataceae	Delek air tree, Ironwood tree	Kaya	March – April
22	<i>Psydrax umbellata</i> (Wight) Bridson	Rubiaceae	Umbelled Canthium	Arsul	March – May
23	<i>Vateria indica</i> L.	Dipterocarpaceae	The Indian Copal Tree	Badasal	March – April
24	<i>Wendlandia heynei</i> (Schult.) Santapau & Merchant	Rubiaceae	Heyne's Wendlandia	Tilya	March-April
25	<i>Holigarna armottiana</i> Hook.f.	Anacardiaceae	Black Varnish Tree	Rambiba	March-April
26	<i>Shorea robusta</i> Gaertn	Dipterocarpaceae	Sal	Sal	March-April
27	<i>Croton tiglium</i> L.	Euphorbiaceae	Croton	Croton	March-April
28	<i>Bischofia javanica</i> Blume	Phyllanthaceae	Bishop Wood	Bischofi	March-April
29	<i>Pterygota alata</i> (Roxb.) R.Br.	Malvaceae	Buddha Coconut	Eastwood	March-April



Holigarna arnottiana



Shorea robusta



Croton tiglium



Bischofia javanica



Pterygota alata



Macaranga peltata



Duabanga grandiflora



Hopsea ponga



Uvaria littoralis



Olea dioica



Parmentiera cereifera



Cleistanthus collinus



Glochidion ellipticum



Ficus microcarpa



Antidesma acidum



Antidesma ghaesembilla



Ardisia solanacea



Carallia brachiata



Chloroxylon swietenia



Diospyros malabarica



Elaeocarpus sphaericus



Erinocarpus nimmonii



Falconeria insignis



Vitex altissima



Chukrasia tabularis



Artocarpus hirsutus



Memecylon umbellatum



Psydrax umbellata



Vateria indica



Wendlandia heynei

Botany fest

An innovative way of learning Botany in Forest

Waghai Botanical Garden (WBG) is a unique heritage site with innumerable plant species from lower to higher plant species. BOTANY FEST is an initiative to motivate younger generation towards the beauty of plants occurring in Waghai Botanical Garden. WBG harbors more than 60 species which are unique to Gujarat, in the sense they occur only in WBG. The objective of the event is to give a platform to students, researchers, teachers, and faculties from different parts of Gujarat to share information, knowledge and experiences on plant diversity. Thus to promote interest in Botanical Treasure BOTANY FEST is a hub for many challenging games like, Phyto hunt (Finding of the different plants with given clues), Bhujjo to jane (Tag the state/National/World Trees), Mahek hamari pehchan tumhari (Identification of plants with their natural smells), Chief of the Botany (Collecting plants from natural resources and making food in more of a natural way) Pushpa Sheraz (to perform an act on plant morphology, without speaking.) Enlightenment under Pragvad (Story of an ancient Indian tree Pragvad), Nagme Phool ki Yado ke (Identification of different plants by rhythms of songs, and video), (Kudrat ka kahajana (Plant Craft), Prakruti ki loksabha (Parliament of Botany). First BOTANY FEST ever in India was organized by South Dang Forest Division in collaboration with The Maharaja Sayajirao University Vadodara at Waghai Botanical Garden in 2017. With the popularization the Second BOTANY FEST took place in 2018.

BOTANY FEST is attended by 20 prime Institutes which include University from Agriculture, Botany, Biosciences, Life Sciences, Agriculture, Ayurveda, Forestry, and Colleges dealing with the above subjects.





Botany Fest -2017



Phyto Hunt (Memory Game)



Kudrat Ka Khajana (Plant Craft)



Mahek Hamari Pehchan Tumhari (Identification of plants with their natural smells)



Botany Ki Loksabha (Parliament of Botany)



Kaun Banega Best Botanist (KBBB)



Hulund Mata Ki Kahani (unique story of plant conservation)



Plant For The Planet (Rare and endangered tree plantation)



Plant For The Planet (Rare and endangered tree plantation)





Botany Fest -2018



Phyto Hunt (finding of the different plants with given clues)



Bhujo To Jane (tag the State/National/World Trees)



Mahek Hamari
Pehchan Tumhari
(Identification of plants
with their natural smells)



Pushpa Sheraz (to perform an act on plant morphology)



Chef of Botany (collecting plants & making food in natural way)



Enlightenment under Pragvad



Nagme Phool Ki Yadoke
(identify plants by rhythms of songs, and video)



Kudrat Ka Khajana (plant craft)



Prakruti Ki Loksabha (Parliament of Botany)



Documentary on sacred plant of Dangs i.e. *Vigna vexilata*



Plant for the Planet (rare and endangered tree plantation)



Facilities at Waghai Botanical Garden

Canteen



Souvenir Shop



Heritage Rest house



Children play Area



Parking





Heritage trees of Waghai Botanical Garden

A heritage tree is typically a large, individual tree with unique value, which is considered irreplaceable. The major criteria for heritage tree designation are age, rarity, and size, as well as aesthetic, botanical, ecological, and historical value. Heritage trees are designated to place limits upon the removal of these trees, and are oriented towards a specific tree, not an entire forest. Heritage trees are required to be preserved and maintained in a state of good health.

1. *Adina cordifolia*:

Haldu is a deciduous tree that can grow well over 20 meters high. Oppositely arranged leaves are broadly oval in shape, heart-shaped at the base and pointed at the tip. The flowers may be insignificant individually but are very pretty when they bloom together in balls with a circumference of 2 to 3 cm. They are usually yellow in color often tinged with a shade of pink. Haldu is at its blossoming best during winter. The bark of the tree acts as an antiseptic. Flowering: June-August.

2. *Albizia procera*:

White siris is native to moist deciduous and semi evergreen hill forests, swamp forests, and lowland savanna woodlands in Asia from northern India through southeast Asia. It is a fast-growing deciduous tree that generally reaches 10 to 20 m in height and has a straight to somewhat curved stem, smooth light brown to light greenish gray bark, and a spreading thin crown. Flowering generally occurs during the rainy season.

3. *Ficus amplissima*:

Also known as the Indian Bat tree, Indian Bat fig, Pimpri, Pipri or Pipali is a tree species of flowering plants that belongs to Moraceae, the fig or mulberry family. It is most commonly planted to provide shade in coffee plantations due to its dense and wide foliage. The ripened figs attract many birds, especially during the spring. *Ficus amplissima* is associated with a fig wasp, an agaonid wasp which acts as its sole pollinator as this wasp lays its eggs only on trees of this species.

4. *Ficus religiosa*:

Peepal is unrivalled for its antiquity and religious significance. No other tree is claimed to have such long life - one in Sri Lanka, said to have been planted in the year 288 B.C., still lives and flourishes. Hindus associate the tree with the three gods Brahma, Vishnu and Shiva, Vishnu being reputed to have been born under a Peepul, which is therefore Vishnu himself in the form of a tree. Leaves leathery 4-8 inches long by 3-5 inches wide, somewhat egg-shaped or rounded, tailed at the tip and heart-shaped at the base, or sometimes rounded.

5. *Madhuca longifolia*:

Mohwa is one of the most important of Indian forest trees, not because it may possess valuable timber - and it is hardly ever cut for this purpose - but because of its delicious and nutritive flowers. It is a tree of abundant growth and, to the people of Central India, it provides their most important article of food as the flowers can be stored almost indefinitely. It is large and deciduous with a thick, grey bark, vertically cracked and wrinkled. Most of the leaves fall from February to April, and during that time the musky-scented flowers appear.

6. *Mitragyna parviflora*:

Kaim is a tree native to India. Can be thought of the Indian cousin of the Thai born Kratom (*M. speciosa*), more popular in the West. This is the true Kadamb which appears in Lord Krishna stories, rather than the tree which is now known as Kadamb. *Mitragyna* species are used medicinally as well as for their fine timber throughout the areas they grow. Kaim reaches heights of 50 feet with a branch spread of over 15 feet. Flowers are yellow and grow in ball-shaped clusters. The flowers are very fragrant, and remind one of the better known Kadam flowers.

7. *Pterocarpus marsupium*:

Indian Kino Tree is a deciduous tree, up to 30 m tall, bark 10-15 mm, surface grey or grayish-black, rough, deeply vertically cracked, exfoliations small, irregular, fibrous; blaze pink; exudation blood-red. Parts of the Indian Kino Tree (heart wood, leaves and flowers) have long been used for their medicinal properties in Ayurveda. The heart wood is used as an astringent and in the treatment of inflammation. The wood and bark of the tree are known for their anti-diabetic activity.

8. *Tectona grandis*:

A very popular timber tree, teak is native to India and Burma to Java. It is a deciduous tree attaining a very large size. However, in cities it might be seen on the roadside as a medium sized tree with large leaves. Teak is considered a good quality wood for furniture. The flowers come in large numbers in lax clusters at the end of branches. They are white and rather small. Flowers appear in monsoon, fruit ripens in winter. From November to January, the tree is leafless.

9. *Terminalia tomentosa*:

Asan, Indian Laurel or Silver grey wood is a deciduous tree, reaching up to 30 m high. It is mostly suitable for Moist and dry deciduous forests. Flowering and fruiting period of *Terminalia tomentosa* is from April-May. As the tree stands bare during winter (November to February), it can only be identified by its fissured and cracked bark and for this reason is sometimes known as crocodile bark tree.





Adina cordifolia



Terminalia tomentosa



Terminalia tomentosa



Ficus religiosa



Ficus religiosa



Pterocarpus marsupium



Terminalia tomentosa



Albizia procera



Myrtagyna parviflora



Pterocarpus marsupium



Ficus religiosa



Tectona grandis

Waghai Botanical Garden Team

Shri M. J. Parmar, IFS
CCF, Valsad Circle, Valsad

Shri D. B. Trivedi, GFS
DCF, South Dang Forest Div.,
Ahwa.

Shri Dinesh Rabari, GFS
ACF / Superintendent, Waghai Botanical Garden,
South Dang Forest Department, Ahwa - Dangs.

Shri Rahul Karmata
Beat Guard,
Waghai Botanical Garden

Ms. Geeta Gohel
Beat Guard,
Waghai Botanical Garden

Shri Kiran Patel
Forester,
Waghai Botanical Garden



Annexure 1 (List of Plants in Taxonomy Plot)

Sr.No.	Family	Name of the Existing Species	Local Name
1	Fabaceae	Albizia procera	Kilai
2	Fabaceae	Dalbergia latifolia	Sisam
3	Fabaceae	Abrus precatorius	Chanothi
4	Fabaceae	Pterocarpus marsupiu Var Acuminata	Biyo
5	Fabaceae	Bauhinia Acuminata	Hared Bohinia,Hoi
6	Fabaceae	Derris Scandens	Kesia,Motha
7	Fabaceae	Samanea Saman	Raintree
8	Apocynaceae	Plumeria Rubra	Khachampo
9	Apocynaceae	Nerium indicum	Lalkarena
10	Dilleniaceae	Dillenia Pentagyna	Karvad
11	Menispermaceae	Coculus hirsutus	Jaijamani
12	Tamaricaceae	Tamarix aphylla	Chichhi
13	Rosaceae	Rosa alba	Veli gulab
14	Sterculiaceae	Helicteris isora	Mardasingi
15	Sterculiaceae	Sterculia urens	Kadhayo
16	Myrsinaceae	Ardisia Solanacea	Batkutti,Diknagugadi
17	Asteraceae	Euootarium triplinerve	
18	Verbenaceae	Clerodendrum intermi	Kadvi Mendi
19	Lamiaceae	Vitex negundo	Nagod
20	Oleaceae	Nyctanthebutistis	Parijatak
21	Oleaceae	Jasminum Sambac	Batmogaro
22	Nyctaginaceae	Boufainvillea Spectabilis	Boganveli
23	Euphorbiaceae	Euphorbia tirucalli	Kharsandi Thor
24	Poaceae	Andropogon oliganthus Hochst	Rush,rohisar
25	Poaceae	Hygriruzaa	
26	Asclepiadaceae	Hemidesmus indicus	Anandmulu
27	Asclepiadaceae	Calotropis procera	NanoAakado

28	Combretaceae	<i>Guisoualis indica</i>	Zumkaval, Rangunvel
29	Combretaceae	<i>Terminalia Chebule</i>	Hared
30	Combretaceae	<i>T. arjuna</i>	Arjun Sadad
31	Aristolochiaceae	<i>Aristolochia tracteolata</i>	Kaldamari, Gandhati
32	Malpighiaceae	<i>Hiptage bughalensis</i>	Madhvilata
33	Crassulaceae	<i>Sryophuslum pinnatum</i>	Panputti
34	Flacourtiaceae	<i>Flacourtia indica</i>	
35	Capparidaceae	<i>Crateva nurvala varnurvala</i>	Dolli
36	Robiaceae	<i>Mussaenda lutea</i>	Musenda
37	Palmae	<i>Caryota urens</i>	Fishfarm, shivjata
38	Cassurinaceae	<i>Cassurina equisetifolia</i>	Shoru
39	Simaroubaceae	<i>Ailanthus excelsa</i>	Moto Arduso
40	Burseraceae	<i>Garuga pinnata</i>	Kakad
41	Scrophulariaceae	<i>Russlia rotundifolia</i>	Rasili
42	Costaceae	<i>Costus Speciosus</i>	Pevto
43	Zingiberaceae	<i>Zingiber Cernuum</i>	Shindada
44	Agavaceae	<i>Agave americana var.</i>	Ketki
45		<i>Marginata</i>	Ketki
46		<i>Smilax zeylanica</i>	Ketki
47		<i>Sensevieria sp.</i>	Ketki
48	Apiaceae	<i>Trachyspermum ammi</i>	Ajmo
49	Tiliaceae	<i>Grewia hirsute</i>	Khad-dhaman
50	Alangiaceae	<i>Alangium salvifolium</i>	Ankol
51	Sapindaceae	<i>Sapindus laurifolius</i>	Aritha
52	Sapindaceae	<i>Schleichera Oleosa</i>	Kosim
53	Rhamnaceae	<i>Zizyphus rugosa</i>	Velibore
54	Bignoniaceae	<i>Spathodia Campanulata</i>	Spathodia
55	Bignoniaceae	<i>Tecoma radicans</i>	tilotama
56	Sapotaceae	<i>Manilkara hexandra</i>	Rayan
57	Santalaceae	<i>Santalum album</i>	Chandan

58	Myrtaceae	Psidium guajava	Jamfal
59	Loganiaceae	Strychnos nux-vomica	Nirmali
60	Boraginaceae	Cordia gharaf	Nanigundi
61	Annonaceae	Milliusa tomentosa	Humbha, Umbhi
62	Annonaceae	Poyalthia longifolia	Asopalav
63	Annonaceae	Annona reticulata	Ramfal
64	Anacardiaceae	Anacardium occidentale	Kaju
65	Stilaginaceae	Aritidesma ghaembille	Umtao
66	Malvaceae	Kydia calycina	Varing
67	Cactaceae	Opuntia elatior	Fafda thor
68	Rutaceae	Eagle marmelos	Beli, Bel
69	Lythraceae	Lagerstroemia indica	Chinalmedi
70	Amaryllidaceae	Crinum asiaticum	Nagdhaman
71	Pinaceae	Pinus caribaea, p. pentula	Chirpine
72	Cupressaceae	Cupressus spp.	Chirpine
73	spp.	Juniperus	Chirpine
74	Taxodiaceae	Cryptomeria japonica	Japani Sider
75	Pontederiaceae	Eichhornia crassipes	Jalkumbhi, water Cancer
76	Vitaceae	Leea indica	Dani
77	Celastraceae	Cassine glauca	Anand, Alan
78	Hydrocharitaceae	Ottelia alismoides	Anand, Alan
79	Passifloraceae	Passiflora foetida	Kutharvel
80	Acanthaceae	Ruelliasia. sp.	Kutharvel
81	Averrhoaceae	Averrhoa carambola	Khathi mithi Kamrakh
82	Bixaceae	Bixa orellana	Sinduriu
83	Boraginaceae	Cordia sp.	Gundo
84	Convolvulaceae	Merremia turpethum	Kasothar
85	Clusiaceae	Garcinia indica	Kokam
86	Magnoliaceae	Michelia sp.	Champo
87	Bignoniaceae	Millettia tamiensis	Akashnim

88	Moraceae	Morus alba	Sethur
89	Pandanaceae	Pandanus	
90	Plumbaginaceae	Plumbago zeylanica	Safed Chitrak
91	Proteaceae	Grevillea robusta	Silver oak
92	Punicaceae	Punica granatum	Dadam
93	Ranunculaceae	Clematis sp.	Morvel
94	Solanaceae	Datura innoxia	Kalo Datura
95	Turneraceae	Turnera ulmifolia	
96	Moraceae	Ficus racemosa	Umbro
97	Vitaceae	Cissus Quadrangularis	Had-Sankad
98	Araceae	Monstera sp.	Monstera
99	Cannaceae	Canna	
100	Cyperaceae	Cyperus spp.	Sedge
101	Musaceae	Ensete Superbum	Jangli Kel
102	Orchidaceae	Vanda roxburghii	Vando

Annexure 2 (List of Plants in Dry Deciduous Plot)

Sr.No.	Family	Name of the Existing Species	Local Name
1	Leguminosae	Acacia chundra (A.catechu)	Khar
2	Fabaceae	A. eburnea	Khar
3	Liliaceae	A. jacquemontii Benth	Rathobabal
4	Mimosaceae	A. nilotica var. indica	Deshi babal, pabul
5	Mimosaceae	A. intsia	Chilar
6	Fabaceae	A. polyacantha	Gubita
7	Leguminosae	A. sinuata	Shikkai, Indian Soapnut tree
8	Acanthaceae	Adhatoda vasica	Ardusee
9	Alangiaceae	Alangium salvifolium	Ankol
10	Fabaceae	Albizia procera	Kilai
11	Combretaceae	Anogeissus latifolia	Dhamib
12	Maliaceae	Aphana mixis polystachya	
13	Myrsinaceae	Ardisia solanacea	Dikana-bugadi
14	Poaceae	Bambusa arundinacea	Katas Vans
15	Leguminosae	Bauhinia racemosa	Ashiithro
16	Bambacaceae	Bomjax ceiba	Savar, Simado
17	Phyllanthaceae	Braynia retusa	Kamboi, Kadikamboi
18	Euphorbiaceae	Bridelia retusa	Aasnn
19	Fabaceae	Butea monosperma	Khakaro, flame of forest
20	Fabaceae	Cassia sp.	
21	Palmae	Caryota urens	Fish farm, shivjata
22	Lecythidaceae	Careya arborea	Kumbi
23	Celastraceae	Celastrus paniculatus	Mal Kangani vel
24	Boraginaceae	Cordia gharaf	Nami gundi
25	Euphorbiaceae	Cryptolepis buchanani roem	
26	Leguminosae	Dalbergia lenceolaria	Dandosa
27	Dilleniaceae	Dillenia pentagyna	Karvad

28	Dioscoreaceae	Diospyros melanoxylon	
29	Ebenaceae	Diospyros melanoxylon	Timbru
30	Apocynaceae	Dregia volubilis	Dodi
31	Musaceae	Ensete superbum	Jungli Ked
32	Euphorbiaceae	Euphorbia tirucalli	Karsani thor
33	Moraceae	Ficus hispida	Bhonia Umbro
34	Flacourtiaceae	Flacourtia indica	
35	Rubiaceae	Aardenia jasminoides	
36	Rubiaceae	B.resimifera (G.lucida)	Dikamali
37	Tiliaceae	Brewia hirsuta	Khad dhamni, dhani
38	Tiliaceae	B.tiliaefolia	Dhaman
39	Fabaceae	Hardwickia binnata	Anjan
40	Bignoniaceae	Hetephrogria sp.	
41	Apocynaceae	Wrighia tinctoria	Kudi Indrajav
42	Rubiaceae	Hymenodyctyon excelsum	Kadvai
43	Bignoniaceae	Jacaranda mimosifolia	Jakaranda
44	Euphorbiaceae	Securinega virosa	Kamboi, pichrund
45	Malvaceae	Kyedia calycina	Varang
46	Lythraceae	Lagerstroemia	Bhondaro
47	Lythraceae	L. speciosa	Nano bhondaro
48	Rutaceae	Feronia limonia	Kothi
49	Sapotaceae	Monikara hexandra	Rayan
50	Meliaceae	Melia azedarach	Limbaro
51	Magnoliaceae	Michelia champaca	Sonari champo
52	Bignoniaceae	Millingtoniaortansis	Akashneem
53	Rubiaceae	Mitragyna parviflora	Kalam
54	Rubiaceae	Morinda tomentosa	Aal, Aladi
55	Nyctaginaceae	Nyctanthus arbor-tristis	Parijatak

56	Lamiaceae	<i>Occimum americanum</i>	Ajulo
57	Passifloraceae	<i>Passiflora foetida</i>	Kuthervel
58	Euphorbiaceae	<i>Phyllanthus emblica</i>	Ambala
59	Papilionaceae	<i>Ougenia Oognensis</i>	Tannach
60	Papilionaceae	<i>Ptilostigma Malabanicum</i>	Aatti chamol
61	Mimosoideae	<i>Pithecolobium dulce</i>	Gorasambli
62	Apocynaceae	<i>Plumeria rubra</i>	Khadchambo
63	Fabaceae	<i>Pterocarpus Marsupium var. acuminata.</i>	Biyo
64	Lamiaceae	<i>P. santalinus</i>	Lal chandan
65	Euphorbiaceae	<i>Putranjiva roxbghii</i>	Putranjiva,Putravanti
66	Sterculiaceae	<i>Pterygota alata</i> (<i>Sterculia alata</i>)	Stov-wood
67	Fabaceae	<i>Sapium insigne</i>	Thura,Dhudhala
68	Meliaceae	<i>S. sebiferum</i>	Vilaiti sisam
69	Leguminosae	<i>Sareca asoca</i>	Sacho ashok
70	Euphorbiaceae	<i>Securinea virosa</i>	Safed Pichurned
71	Anacardiaceae	<i>Semecarpus anacardium</i>	Bhilamo
72	Liliaceae	<i>Smilax zaylonica</i> linn	Ugsee
73	Meliaceae	<i>Soyimida febrifuga</i>	Rohan
74	Sterculiaceae	<i>Steuilia urens</i>	Kadhayo
75	Bignoniaceae	<i>Stereospermum tetragonum</i>	
76	Loganiaceae	<i>Stychnos nux-vomica</i>	Nirmadi
77	Meliaceae	<i>Swietenia macrophylla</i>	Mahogani
78	Leguminosae	<i>Tephrosia candida</i>	
79	Combretaceae	<i>Terminalia arjuna</i>	Arjun,sadad
80	Combretaceae	<i>T.chebula</i>	Harde
81	Ulmaceae	<i>Trema orientalis</i>	Godi
82	Verbenaceae	<i>Vitex negundo</i>	Nagod
83	Rhamnaceae	<i>Zizyphus oenoplia</i>	Veli boar
84	Rhamnaceae	<i>Z. rugosa</i>	Toran boar

Annexure 3 (List of Plants in Moist Deciduous Plot)

Sr.No.	Family	Name of the Existing Species	Local name
1	Sterculiaceae	Abroma augsta sterculiaceae	Ulatkambal
2	Mimosaceae	Acacia caesia	Devanagari
3	Mimosaceae	A. lenticularis	
4	Fabaceae	A. sp.	
5	Fabaceae	Atrocarpus fraxini folius	Kenya
6	Bombacaceae	Adansonia digitata	Buthjad,Kalp-vrush,Gelujad
7	Fabaceae	Adenanthera microsperma	Nani ratangunj
8	Rubiaceae	Adina cordifolia	Hadix,Haldu
9	Rutaceae	Aegle marmelos	Bili
10	Fabaceae	Albizia chinensis	Silktree
11	Fabaceae	A. lebbeck	Kado siries
12	Fabaceae	A. molluccang	
13	Fabaceae	A. procera	Kilai
14	Fabaceae	A. rehardiana	
15	Fabaceae	A. stipulata	
16	Euphorbiaceae	Aleurities fordii	
17	Apocynaceae	Alstonia scholaris	Sapthparani
18	Anonaceae	Anona squamosa	Sitafal
19	Stiaginaceae	Antidesma ghesacmbilla	Umtavo
20	Soanaceae	Ardisia solancea	
21	Poaceae	Bambusa arundinaceae	Katas vans

22	Sapotaceae	<i>Bassia latifolia</i>	Mahudo
23	Fabaceae	<i>Bauninia acuminata</i>	
24	Fabaceae	<i>B. purpurea</i>	Swethkanchanar, Devkanchan
25	Euphorbiaceae	<i>Bischofia javanica</i>	Panial, Bokey
26	Fabaceae	<i>Bolusanthus sp.</i>	
27	Bombacaceae	<i>Bombex ceiba</i>	Sawar
28	Bombacaceae	<i>B. insigne</i>	Safed Sawar
29	Moraceae	<i>Broussonetia papyrifera</i>	Paper mulbari
30	Fabaceae	<i>Butea monosperma</i>	Kakro
31	Caesalpinjiaceae	<i>Caesalpinia coriata</i>	Babadi
32	Caesalpinjiaceae	<i>C. crista</i>	Kachka
33	Fabaceae	<i>Caesalpinia ferrea</i>	
34	Fabaceae	<i>C. sappan</i>	Patang
35	Asclepiadaceae	<i>Calotropis procera</i>	Akado
36	Combretaceae	<i>Calycopteris floribunda</i>	Baguli
37	Rhizophoraceae	<i>Carllia branchiitta</i>	
38	Acanthaceae	<i>Carvia callosa</i>	Karo, kaveri
39	Samydaleae	<i>Caxsearia elliptica</i>	Tohndood
40	Samydaleae	<i>C. esculenta var. acuminata</i>	Tohndood
41	Caesalpinjiaceae	<i>Cassia fistula</i>	Garmalo
42	Caesalpinjiaceae	<i>C. surattensis</i>	
43	Caesalpinjiaceae	<i>Cassia sp.</i>	
44	Celastraceae	<i>Celastrus paniculata</i>	Mal kangni vel
45	Rutaceae	<i>Chlorooxylon swietenia</i>	
46	Bombacaceae	<i>Chorisia speciosa</i>	Kapok
47	Euphorbiaceae	<i>Cleistanthus collinus</i>	Dhararo
48	Burseraceae	<i>Commiphora weitti</i>	Gugad, gadgugad

49	Boraginaceae	Cordia dichotoma	Moto gundo
50	Costaceae	Costus speciosus	Pevto
51	Bixaceae	Cochlospermum gossypium	Ganaria
52	Rubiaceae	Coffea benghalensis	Ganaria
53	Bignoniaceae	Crescentia cujete	Calabash troel
54	Asclepiadaceae	Cryptolepis buchanani	Kalvi
55	Asclepiadaceae	C. gandiflora	Rubber vel
56	Moraceae	Cudrania javanensis	Bhanda
57	Euphorbiaceae	Croton obtongifolius	Gunsur
58	Fabaceae	Dalbergia latifolia	Sisam
59	Fabaceae	D. lanceolaria	Pathrado
60	Fabaceae	D. sisoo	Sisoo
61	Poaceae	Dendrocalamus strictus	Manvel Bamboo
62	Leguminosae	Desmodium pulchellum	Alam
63	Fabaceae	D.sp.	
64	Cilleniaceae	Dillenia indica	Chalta
65	Dilleniaceae	Dillenia pentagyna	Karvad
66	Ebenaceae	Diospyros Cordifolia	Dhaki
67	Musaceae	Ensete suoerbum	Jungli Ked
68	Mimosaceae	Entolobium timbauva	
69	Fabaceae	Erythrina indica(E.variegata)	Ongaro
70	Fabaceae	E.lithosperma	
71	Fabaceae	E.superba	Kagalio kakaro
72	Asteraceae	Epatorium triplinerve	
73	Moraceae	Ficus asperrima	Pimro,sand paper tree
74	Moraceae	F.cunia	Kenwanua
75	Moraceae	F.hispida	Ded umro
76	Moraceae	F.racemosa	Umpro,gular
77	Moraceae	F.rostrata	
78	Moraceae	F.rumphii	Pair

79	Moraceae	E.reliidiosa	Pipado
80	Sapindaceae	Filicum decipiens	Philisiam
81	Clusiaceae	Garcinia indica	Kokam
82	Rubiaceae	Gardenia gummifera	Dikemali
83	Rubiaceae	G. roginifera	jungli chambo
84	Rubiaceae	G. turgid	Gungli,Fanthra
85	Burseraceae	Garuga pinnata	Kakad
86	Verbenaceae	Gmelina arborea	Sivan
87	Verbenaceae	G. asiatica linn	
88	Tiliaceae	Grewia laevigata	Saimul,Dhaman
89	Tiliaceae	G..sapida	Khursi
90	Sterculiaceae	Guazuma tomentosa	Koti rudraksh
91	Caesalpinaceae	Haematoxylon Campechianum	
92	Sterculiaceae	Helicters isora	Murda singi
93	Asclepiadaceae	Hemidesmus indicus	Moti uparsali
94	Bignoniaceae	Heterophragma	
95	Bignoniaceae	H. quadrilater	Varas,padar
96	Malvaceae	Hibiscus mutabilis	Bola, chelva
97	Malvaceae	Hibiscus tiliaceae	Bola, chelva
98	Urticeae	Holoptelia integrifolia	Chelbil,papado
99	Leguminosae	Indigofera cassioides	
100	Convolvulaceae	Ipomoea pestigridis	Vagpati
101	Fabaceae	Jasminum arborescens	Jungle jui
102	Fabaceae	J. malaboricum	Jungle jui
103	Fabaceae	J. officinalis	Mogra
104	Sapindaceae	Koetreuteria paniculata	Golden rain tree
105	Malvaceae	Kydia calycina	Varing
106	Lythraceae	Lagestromia floribunda	Tarweed
107	Lythraceae	L. parvindora (Ilanceolata)	Jungle bondaro
108	Lythraceae	L. speciosa	Nano bondaro

		Modad
109	Anacardiaceae	L.anea coromandelica
110	Leguminosae	L.asiobema sp.(Bauhina sp.)
111	Leeaceae	Leea indica merr
112	Bignoniaceae	Macfadyenanguis-cacti
113	Euphorbiaceae	Mallotus philippinensis muell
114	Myrsinaceae	Maesua indica
115	Bignoniaceae	Markhaia stipulata seem
116	Meliaceae	Melia birmanica
117	Rubiaceae	Meyna laxiflora
118	Meliaceae	Melia Composita
119	Leguminosae	Millettia stipulate
120	Leguminosae	M.splendens
121	Rubiaceae	Mitragyna parvifolia
122	Rutaceae	Moribda tommtosa
123	Moraceae	Morus alba
124	Rutaceae	Murraya paniculata
125	Bignoniaceae	Parmentiera cereifera
126	Pandanaceae	Pandanus Tectorius
127	Fabaceae	Pilostigma malabaricum
128	Piperaceae	Piper nigrum
129	Palmae	Phoenix sp.
130	Palmae	P. sylvestris australis
131	Poaceae	Phragmites
132	Euphorbiaceae	Phyllanthus emblica
133	Fabaceae	Piscidia erythrina
134	Anacardiaceae	Pleiogynim cerasiferum
135	Annonaceae	Polyalthia Suberosa
136	Fabaceae	Pongamia glabra
		Dini
		Nukvel,vagnugi
		Sendri,kapilo
		Chadki
		Burmanium
		Al,Aalu,Aala
		Limbaro
		Gunj
		Kalam
		Aal
		Setur
		Kunti,Kamini
		Candaltrea
		Keydo
		Katti chamal
		Black Kali meri
		Kajur
		Devnal
		Amla

137	Rosaceae	Prunus cerasoides	
138	Fabaceae	Procarpus marsupium Var.acuminata	Bivalo,Boi
139	Rosaceae	Pyrus pashia	Megul
140	Anacardiaceae	Rush lancea	
141	Areaceae	Sabal maxicana	Sabal palm
142	Areaceae	S. palmetto	Tad
143	Fabaceae	Samanea saman	Rain tree
144	Sapindaceae	Sapindus mukorossi	
145	Theaceae	Sachima wallichii	
146	Anacardiaceae	Schin binthifollius	Schnus
147	Sapindaceae	Schleichera oleosa	Eosim,kusum
148	Dipterocarpa Ceae	Shorea robusta	Sal
149	Solanaceae	Solanum nigrum	Ubhiringani
150	Meliaceae	Soyimida febrifuga	Rohan
151	Sterculiaceae	Sterculia colorata	Kodaro
152	Sterculiaceae	S. foetida	Jangali Badam
153	Sterculiaceae	S. pallens	
154	Myrtaceae	Syzygium cumini	Jambooo
155	Myrtaceae	S. rubicundrum	Van Jamboo
156	Bignoniaceae	Tabebuia aurea	
157	Fabaceae	Tamarindus indica	Imiam,Amali
158	Verbenaceae	Tectona grandis	Sag,sagvan
159	Fabaceae	Teramunus labilis	Jungli val,pidan
160	Combretaceae	Terminalia arjuna	Arjun sadad
161	Combretaceae	Terminalia crenulata	Arsadad
162	Combretaceae	T. microcarpa var	Behdo
163	Combretaceae	Terminalia oliveri	

164	Acanthaceae	Thunbergia alata	
165	Acanthaceae	T. stans	
166	Cannabaceae	Trema orientalis	Goli
167	Euphorbiaceae	Travia ploycarpa(T.mudiflora)	Pitar
168	Anacardiaceae	Uvaria macroohylla	Kota jamboo
169	Rhamnaceae	Ventilago denticulata willd	Asaivel
170	Verbenaceae	Vitex pubescens	Dhalasinda
171	Apocynaceae	Wrightia tinctoria	Kudi
172	Rubiaceae	Xeromphis sp.	
173	Rhamnaceae	Zizyphus glabrata	
174	Rhamnaceae	Z. nummularia	Borghat, Gatlboro
175	Vitaceae	Vitis Linnaeus	
176	Combretaceae	Combretum decandrum	Arikota
177	Combretaceae	Combretum sp.	
178	Lamiales	Clerodendruminfortumatum	Bhandira

Annexure 4 (List of Plans in Bamboo plot)

Sr.No.	Name of the species	Family	Local Name
1	Arundinaria disticha	Poaceae	Draf bamboo
2	Bambusa tulda	Poaceae	
3	B. vulgaris	Poaceae	Golden bamboo
4	B. nutans	Poaceae	
5	B. ventricosa	Poaceae	Beer bottle bamboo
6	B. polymorpha	Poaceae	
7	B. arundinacea	Poaceae	Spiny giant bamboo

8	<i>B. oliveriana</i>	Poaceae	Gracefal bamboo
9	<i>B. sp.</i>	Poaceae	
10	<i>Dendrocalamus membranaceus</i>	Poaceae	
11	<i>Dinochlon maclellandii</i>	Poaceae	Climbing bamboo (died)
12	<i>Dendrocalamus Strictus</i>	Poaceae	Male bamboo
13	<i>D. Calostachys</i>	Poaceae	
14	<i>D. giganteous</i>	Poaceae	Giant bamboo
15	<i>Oxytenanthera abioinaka</i>	Poaceae	
16	<i>Saccharum arundinaceum</i>	Poaceae	

Annexure 5 (List Of Plants in Arid Zone Plot)

Sr.No.	Name of the species	Family	Local Name
1	<i>Acacia eburnea</i>	Fabaceae	
2	<i>A. jacquemontii</i>	Fabaceae	Rotho bavad
3	<i>A. tomentosa</i>	Fabaceae	
4	<i>A. leucophloea</i>	Fabaceae	Harmo babal
5	<i>A. ferruginea</i>	Fabaceae	Katti
6	<i>A. auriciformis</i>	Fabaceae	ngali babal
7	<i>A. sp.</i>	Fabaceae	Australian Acasia
8	<i>Albizia amara var.amara</i>	Fabaceae	
9	<i>Abrus precatorius</i>	Fabaceae	Gunja,Chanoti
10	<i>Anogeissus pendula</i>	Combretaceae	Dhavo,Dhankara
11	<i>Artocarpus integrifolia</i>	Moraceae	Fanas
12	<i>Bombax ceiba</i>	Bobaceae	Simado
13	<i>Calotropis procera</i>	Asclepiadaceae	Akado
14	<i>Capparis decidua</i>	Capparidaceae	Keido

15	Calotropis gigantea	Asclepiadaceae	Safed Akado
16	Cordia dichotoma	Boraginaceae	Nani Gundi
17	C. rothii (c. gharaf)	Boraginaceae	Gugad
18	Commiphora weighcii	Bursaraceae	Karanj vel
19	Deris scandeus	Leguminosae	
20	Dalbergia sisoo	Fabaceae	Sisoo
21	Ehretia leavis	Ehretiaceae	Datarango
22	Ehsete superbum	Musaceae	Jungli ked
23	Euphorbia neriifolia	Euphorbiaceae	Bungra thore
24	E. tirucalli	Euphorbiaceae	Karashani thore
25	Ficus racemosa	Moraceae	Umro
26	Holoptelea integrifolia planch	Ulmaceae	Papado, chilbil
27	Murraya paniculata	Rutaceae	Kunthi
28	Pandanus tectorius	Pandanaceae	Kevdo
29	Phoenix vestra	Palmae	Kajure
30	Saccharum sp.	Poaceae	
31	Tamarix troupiisyn	Tamaricaceae	
32	T. sp.	Tamaricaceae	
33	Tecomella undulata	Bignoniaceae	Ragat rohido
34	Terminalia crenulata	Combretaceae	Sadad
35	Thubergia fragrans	Acanthaceae	
36	Xeromphis spiosa	Rubiaceae	Mindhani
37	Zizyphus Mauritiana	Rhamnaceae	Boar

Annexure 6 (List of Plans in Scrub and Thorn Plot)

Sr.No.	Name of the species	Family	Local Name
1	<i>Abrus precatorius</i>	Fabaceae	Chanoti
2	<i>Acacia chundra (catechu)</i>	Fabaceae	Khair
3	<i>A. Famesiana</i>	Fabaceae	Talbavad
4	<i>A. junucita</i>	Fabaceae	
5	<i>A. jacquemontii</i>	Fabaceae	Rathobavad
6	<i>A. latronum</i>	Fabaceae	
7	<i>A. leucophloa</i>	Fabaceae	Harmobavad,samadi
8	<i>A. nilotica</i>	Fabaceae	Deshibavad
9	<i>A. pinnata</i>	Fabaceae	Chilar vel
10	<i>A. plainifonds</i>	Fabaceae	Chatribavad
11	<i>A. senegal</i>	Fabaceae	Goradiobavad
12	<i>A. tortilis</i>	Fabaceae	
13	<i>Achyranthes spasera</i>	Amarantaceae	Aghedo
14	<i>Adhatoda vasica</i>	Acanthaceae	Arduce
15	<i>Aegle mameelos</i>	Rutaceae	Bili
16	<i>Alianthus excelsa</i>	Simaroubaceae	Harduso
17	<i>Albizia odoratissima</i>	Mimosae	Dhodosereites
18	<i>A lebeck</i>		Kalosereites
19	<i>Alangium savifolium</i>	Alangiaceae	Ankhole
20	<i>Anogeissus latifolia</i>	Combretaceae	Dhamdo
21	<i>A. pendula</i>	Combretaceae	
22	<i>A. sericea</i>	Combretaceae	Dhavo
23	<i>Azadirachata indica</i>	Meliaceae	Limdo,neem
24	<i>Bambusa arundinaceae</i>	Araminae	Katas vans
25	<i>Bauhniatomntosa</i>	Flaceae	Pido ashitro
26	<i>Bombax ceiba</i>	Bomacaceae	Savar

27	<i>Boswellia serrata</i>	Burseraceae	Salaigugad
28	<i>Bridelia retusa</i>	Euphorbiaceae	Asan
29	<i>Butea monosperma</i>	Papilionaceae	Kakaro
30	<i>Calotropis procera</i>	Asclepiadaceae	Rathoakado
31	<i>Capparis sapiria</i>	Capparidaceae	Kadikandial
32	<i>Carrisa carandas</i>	Apocynaceae	Karmda
33	<i>Cassia auriculata</i>	Caesalpinaceae	Avad
34	<i>C.spv</i>	Caesalpinaceae	
35	<i>Cassine glauca</i>	Celastraceae	Buthjad
36	<i>Celastrus paniclata</i>	Celastraceae	Malkangani vel
37	<i>Combretum decandrum</i>	Combretaceae	Bokad vel
38	<i>Cocculus hirsutus</i>	Menispermaceae	Jal Jamani, Vevadi vasan vel
39	<i>Commiphora wightii</i>	Burseraceae	Gad gugad
40	<i>Cordia dichotoma</i>	Boraginaceae	Gundhi
41	<i>Clerodendron inerme</i>	Verbenaceae	Kadvi medi
42	<i>C.phalomidis</i>	Verbenaceae	Arani
43	<i>Cryptolepis buchanni</i>	Asclepiadaceae	Rubberveladi
44	<i>Derris scandens</i>	Leguminosae	Karanch vel
45	<i>Diospyros melanoxylon</i>	Ebenaceae	Timberu
46	<i>Erythrina indica</i>	Papilionaceae	Pongaro
47	<i>Euphorbia antiqorum</i>	Euphorbiaceae	Thoridu
48	<i>E. ligularia</i>	Euphorbiaceae	
49	<i>E. nerifolia</i>	Euphorbiaceae	Thore
50	<i>E. tirucalli</i>	Euphorbiaceae	Karsani thore
51	<i>Ficus racemosa</i> linn	Moraceae	Gular, Umbro
52	<i>F. hispida</i>	Moraceae	Ded umro
53	<i>Flacourtia indica</i>	Flacourtiaceae	
54	<i>Gmelina arborea</i>	Verbenaceae	Siven
55	<i>Grewia hirsute</i>	Tiliaceae	Khad dhamani
56	<i>G. tiliaefolia</i>	Tiliaceae	Dhaman

57	Heterophragma quadriloculare	Bignoniaceae	Vorax
58	Holoptelea integrifolia	Ulmaceae	Papado,kanji
59	Indigofera cassioides	Leguminosae	
60	Latana camara var.aculeata	Verbenaceae	Lentana
61	Leoceana leucocephala	Fabaceae	Kubavad,subavad
62	Mimosa pudica	Fabaceae	
63	Morinda tomentosa	Rubiaceae	Aal
64	Morinda Oleifera	Moringaceae	Kadvosaragu
65	Mucunapurrita	Fabaceae	Kuwach
66	Nerium indicum	Apocynaceae	Karana
67	Opuntia elatior	Cactaceae	Hatlothore
68	Phoenix sylvestris	Palmae	Kajur
69	Embllica officinalis	Euphorbiaceae	Amda,avala
70	Polygonum glabrum	Polygonaceae	Sinori
71	Prosopis cineraria	Fabaceae	Samadi,Hijado
72	P. juliflora	Fabaceae	Eantobavalo
73	Tecomella undulata	Bignoniaceae	Ragatrohido
74	Trema orientalis	Cannabaceae	God.godi
75	Revia rypocraiteriaformis	Convulualaceae	Fang
76	Salvedora oleoides	Salvaderaceae	Pilodi
77	Santalum album	Santalaceae	Chandan
78	Schinus terebinthifolius	Anacaediaceae	
79	Securinea virosa	Euphorbiaceae	Sinvi
80	Sesbenia grandiflora	Papilionaceae	Agathio
81	Spondias pinnata	Anacaediaceae	Katambo
82	Strychnos potatorum	Loganiaceae	Nirmali,jerkochla
83	Ventilago denticulata	Rhamnaceae	Asaivel
84	Vitex nigundo	Verbenaceae	Nagod
85	Woodfordia fruticosa	Lythraceae	Dhaiti
86	Wirghtia formentera	Apocynaceae	Kedikudi

87	Xeromphis spinosa	Rubiaceae	Gelamindan
88	K. uliginosa	Rubiaceae	Gogada
89	Zizyphus glaberrima	Rhamnaceae	Ghatbor
90	Z. mauritiana	Rhamnaceae	Bor
91	Z. nummularia	Rhamnaceae	Chainbore,ghatbore

Annexure 7 (List of Plants in Medicinal Plot)

Sr.No.	Name of the species	Family	Local Name
1	Abrus precatorius	Fabaceae	Chanoti
2	Acacia chundra	Fabaceae	Khair
3	A. pennata	Fabaceae	Khair vel
4	Adhatoda vasica	Acanthaceae	Ardusee
5	Acalypha indica	Euphorbiaceae	
6	Adina cordifolia	Rubiaceae	Hed, haldu
7	Aegle marmelos	Rutaceae	Bili
8	Ailanthus excelsa	Simanoubaceae	Arduso
9	Albizia lebeck	Mimosae	Kalo chiras
10	A. procera	Mimosae	Kilai
11	Aloe barbadensis	Liliaceae	Kuvarpadu
12	Alpinia galanga	Santaminaceae	Elcho
13	Alstonia scholaris	Apocynaceae	Satparni
14	Andropogon citratus var.1	Poaceae	Lilicha
15	Andropogon citratus var.2	Poaceae	Lili buthrun cha.
16	Asquarrosus	Poaceae	Khaskhassgass
17	Ananas comosus	Bromeliaceae	Ananas
18	Acacia ferruginea	Fabaceae	Katti

19	Anona squamosa	Anonaceae	Sitafal
20	Antidesma ghaesembilla	Euphorbiaceae	Umatavo
21	Areca catechu	Palmae	Sopari
22	Argyrea speciosa	Convolvulaceae	Samudrhosh
23	A.sericea	Convolvulaceae	Dhavel
24	Aristolchia sp.	Aristolochiaceae	Batakvel
25	Artocarpus heterophyllus	Moraceae	Fanas
26	Asparagus racemosus var.javanicus	Liliaceae	Satavari
27	Averrhoa carambola	Oxalidaceae	Kamrak
28	Azadirachta indica	Melastomaceae	Limda, neem tree
29	Barleria prionitis	Acanthaceae	Pilo Kata sherio Vajradanathi
30	Basella rubra	Basellaceae	Poinivel, poibaji
31	Madhuka indica	Sapotaceae	Mahudo
32	Bauhinia purpurea	Fabaceae	Devkanchan
33	B. racemosa	Fabaceae	Ashitro
34	B. variegata	Fabaceae	Kanchanar
35	Bixa orellana	Bixaceae	Sindurio
36	Bomax ceiba	Bomacaceae	Savar, simalo
37	Bridelia retusa	Euphorbiaceae	Asan
38	Broussonetia papyrifera	Moraceae	Pappermulbery
39	Bryophyllum pinnatum	Crassulaceae	Jakmehayat, panfutti
40	Buchanania lanzan	Anacardiaceae	Charoli
41	Bursera delpechiana	Bursaceae	Linolon oil tree
42	Butea monosperma	Papilionaceae	Palas
43	Calotropis gigantea	Asclepiadaceae	Moto akado Nano akado
44	C. procera	Asclepiadaceae	Moto akado Nano akado
45	Caesalpinia sepiaria	Leguminosae	Chilarvel
46	Canavalia gladiata	Leguminosae	Ambo tarvadi, Abuvel
47	Carallia brachiata	Rhizophoraceae	Kirpa
48	Careya arborea	Lecythidaceae	Kumbi

49	<i>Cassia auriculata</i>	Fabaceae	Aval,Aver
50	<i>C. fistula</i>	Fabaceae	Garzalo
51	<i>C. angustifolia</i>	Fabaceae	Sommukhi
52	<i>C. occidentalis</i>	Fabaceae	Kasundro
53	<i>Celastrus paniulata</i>	Clastraceae	Malkangani
54	<i>Centella asiatica</i>	Umbelliferae	Brami
55	<i>Cinnamomum</i>	Lauraceae	Taj
56	<i>Cissmpelos pareiral</i>	Menispermaceae	Pahadvel,Kalipatt
57	<i>Citrus medica</i>	Rutaceae	Bijeru
58	<i>C. medica var. acida</i>	Rutaceae	Kagdilimbu
59	<i>C. sinensis</i>	Rutaceae	Mosambi
60	<i>Clerodendrum inerme</i>	Verbenaceae	Kadvimedhi
61	<i>Clerodendrum infortunatum</i>	Verbenaceae	Kadvimedhi
62	<i>C. phlomides</i>	Verbenaceae	Arani,Aini
63	<i>Clitoria ternatea</i>	Fabaceae	Gokani,Gali
64	<i>Clematis hedysarifolia</i>	Ranunculaceae	Morvel
65	<i>Cocculus hirsutus</i>	Menispermaceae	Vevdi,Vasanvel
66	<i>Cocos nucifera</i>	Palmae	Nariyen Kalpavrush
67	<i>Coffea arabica</i>	Rubiaceae	Coffee plant
68	<i>Coleus aromaticus</i>	Lamiaceae	Ajmod
69	<i>Commiphora Mukul</i>	Buseraceae	Gugal
70	<i>Corida dichotoma</i>	Boraginaceae	Gundhi
71	<i>Costus spectosus</i>	Costaceae	Pevato
72	<i>Croton oblongifolius</i>	Euphorbiaceae	Akh
73	<i>Cryptostegia grandiflora</i>	Asclepiadaceae	Kharidodi
74	<i>Curcuma domestica</i>	Zigiberaceae	Haldar
75	<i>Cymbopogon martinii</i>	Araminae	Rosagass
76	<i>Dalbergia latifolia</i>	Fabaceae	Sisam
77	<i>D. Sisoo</i>	Fabaceae	Sisoo
78	<i>Datura</i>	Solanaceae	Kalo daturro

				Safed daturo
79	D. Fastuosa	Solanaceae		Dukkarkanth, Varhehikund
80	Dioscorea bulbifora	Dioscoreaceae		Kudvel, Kudakantha
81	D. Pentaphylla	Dioscoreaceae		Datarango
82	Enertia lavis	Enretiaceae		Kadinali
83	Enicostemma litterale	Gentianaceae		Aayapan
84	Eupatorium tripllnerve	Asteraceae		Bungrator
85	Euphobia merifolia	Euphorbiaceae		Kharsanitor
86	E. tirucelli	Euphorbiaceae		
87	Eclipta cresta	Asteraceae		
88	Ficus racemosa	Moraceae		Umbro
89	Placourtia indica	Flacourtiaceae		
90	Gardenia resiniflua	Rubiaceae		Dinkaraja
91	Garcinia indica	Clusiaceae		Kokam
92	Guruga pinnata	Bursaceae		Kakad
93	Gloriosa superba	Liliaceae		Vadvadio, kadkudi
94	Glycyrrhiza glabra	Papilionaceae		Jetimadh
95	Gmelina asiatica	Verbenaceae		Sivan
96	Grewia asiatica	Tiliaceae		Falsa
97	G. hirsuta	Tiliaceae		Khaddhaman
98	G. macrocos	Tiliaceae		Esar
99	G. tillaeifolia	Tiliaceae		Dhaman
100	Gymnema sylvestreo	Asclepiadaceae		Dhaman
101	Habenaria Susannae	Orchidaceae		Vagchevdo
102	Hamatoxylon Campechianum	Fabaceae		Pathag
103	Hardwickia binata	Caespliniaceae		Anjan
104	Helicters isora	Sterculiaceae		Mardasingi
105	Hemidesmus indicus Var. 1&2	Asclepiadaceae		Uparsali
106	Heterophoragma adenophy 11un	Bignoniaceawe		Modhsingi
107	Hibiscus cannabinus	Malvaceae		
108	Helianthus annas	Astersceae		Suryamukhi

109	Hiptage benghaensis	Malpighiaceae	Maidivilata
110	Holoptelea Integrifolia	Ulmaceae	Papado
111	Holostemma rheedianum	Asclepiadaceae	Khirvel
112	Holarhena antidysenterica	Apocyanaceae	Kadvo Indgagav
113	Hymenodyction excelsum	Rubiaceae	Kadvai
114	Ichhocarpus frutescens	Apocyanaceae	Krushnasariva
115	Ixora parviflora	Rubiaceae	
116	I. cpcinea	Rubiaceae	Nevri
117	Jesminum grandiflorum	Oleaceae	Vanjuei
118	Jatropha Curcus	Euphorbiaceae	Ratanjoth, Vilaiti Erando
119	Stercospemum personatum	Bignoniaceae	Padar
120	Kydia calycina	Malvaceae	Varing
121	Lennea Coromenedelica	Anacardia	Modad
122	Lantana camara var aculeata	Verbenaceae	Lentana
123	Lawsonia alba	Lythraceae	Lalmendi,hina
124	Litchi chinensis (Nepheliam litchi)	Sapindaceae	Licchi
125	Vinca rosea Var.1&2	Apocyanaceae	Sadasuhamini Barmasi
126	Mangifera indica	Anacardiaceae	Ambo
127	Achrus zapota	Sapotaceae	Chiku
128	Manihot esculenta	Euphorbiaceae	Tapioca
129	Malia Composita	Meliaceae	Limbaro
130	Mentha viridis	Lamiaceae	Pudina
131	Merremia turpethum	Convolvulaceae	Nasothar
132	Mesua ferrea	Guttiferae	Nagkesar
133	Mimosa pudica	Mimosae	Lajvanti,lajamani
134	Manilkara hexandra	Sapotaceae	Rayan
135	Mitragyna parvifolia	Rubiaceae	Kalam
136	Moringa concanensis	Moringaceae	Kadvo sargovo
137	Moringa pterygossperma	Moringaceae	Mito sargovo
138	Mucuna pruriens	Fabaceae	Kuvach

139	Mundulea suberosa	Fabaceae	Supli,supti
140	Murraya koenigi	Rutaceae	Curry neem
141	M. paniculata (M.exotica)	Rutaceae	Kunthi
142	Musa paradisiaca Var Sapiantum	Musaceae	Kel
143	Myrtus communis	Myrtaceae	Mendhi
144	Ocimum basilicum var thysiflora	Lamiaceae	Damaro
145	O. gratissimum	Lamiaceae	Ramtulsi,shamtulsi
146	Opuntia elatior	Cactaceae	Hatlothor
147	Oroxylum indicum	Bignoniaceae	Tettu
148	Panacratium carebacum	Amaryllidaceae	Gardenilli
149	Passiflora foetida	Passifloraceae	
150	Pedilanthus tithymalooides	Euphorbiaceae	Dhudlothor
151	Peucedanum grande	Apiaceae	Barali
152	Phyllanthus acidus	Euphorbiaceae	
153	P. emlica	Euphorbiaceae	Amla,Avala
154	Piliostigma foveolatum	Fabaceae	Khat chamoli,khatambo
155	Piper longum	Piperaceae	Lindi pippier
156	P. nigrum	Piperaceae	Kali mari
157	Plantago ovato	Plantaginaceae	Eshabgul
158	Plumbago zeylanica	Plumbaginaceae	Safed chitrak
159	Psidium guava	Myrtaceae	Jamfal,Amrudh
160	Pterocarpus marsupium	Fabaceae	Blo
161	Pueraria lobata	Fabaceae	Kudzu bean
162	P. tuberosa	Fabaceae	Bhoyekolu
163	Punica granatum	Punicaceae	Fulhadam
164	Putranjiva eoxburghii	Euphorbiaceae	Putranjiva
165	Rauwolfia canescens	Apocynaceae	Moti sarpagandha
166	R. Serpentina	Apocynaceae	Nani sarpagandha
167	Ricinus communis	Euphorbiaceae	Divele
168	Saccharum sp.	Poaceae	Kasado

169	<i>Santalum album</i>	Santalaceae	Chandan, Sukad
170	<i>Sapindus laurifolia</i>	Sapindaceae	Arida, Rida
171	<i>Saraca asoca</i>	Fabaceae	The great Ashok
172	<i>Schinus ferbinthifolium</i>	Anacardiaceae	
173	<i>Semecarpus anacardium</i>	Anacardiaceae	
174	<i>Smilax zaylanica</i>	Liliaceae	Bhilamo Sarsa parilla
175	<i>Soyimida febrifuga</i>	Maliaceae	Rohan
176	<i>Spilanthes oleraceae</i>	Asteraceae	Akkalgaro, Marati
177	<i>S. acmella</i>	Asteraceae	Jungli mertii Vavading
178	<i>Solanum nigrum</i>	Solanaceae	Khataambo
179	<i>Spondias mangifera</i>	Anacardiaceae	
180	<i>Stechy taroheta indica</i>	Verbenaceae	
181	<i>Sterculia villosa</i>	Sterculiaceae	Khadayo
182	<i>Stereospermum persontium</i>	Bignoniaceae	Padar
183	<i>Strychnos nux-vornmica</i>	Strychnaceae	Nirmadi
184	<i>Syzygium cumini</i>	Myrtaceae	Jambudo
185	<i>Tamarindus</i>	Fabaceae	Amali, Tamarind
186	<i>Tecton grandis</i>	Verbenaceae	Sag.
187	<i>Tephrosia purpurea</i>	Fabaceae	Zil, sarpango
188	<i>Terminalia tomentosa</i>	Combretaceae	Sadad
189	<i>T. bellirica</i>	Combretaceae	Beda
190	<i>T. chebula</i>	Combretaceae	Harde
191	<i>Tinospora cordifolia</i>	Menispermaceae	Galo
192	<i>Uraria picta</i>	Fabaceae	Pidvan
193	<i>Vallisneria spiralis</i>	Apocynaceae	Veteris
194	<i>Ventilago denticulata</i>	Rhamnaceae	Asaivel
195	<i>Vitex negundo</i>	Lamiaceae	Nagole
196	<i>Cissus quadrangularis</i>	Vitaceae	Hadsakad, somvel
197	<i>Woodfordia fruticosa</i>	Lythaceae	Dhaithi
198	<i>Xeromphis spinosa</i>	Rubiaceae	Mindan

199	<i>X. uliginosa</i>	Rubiaceae	Gogada
200	<i>Zanthoxylum rhetsa</i>	Rutaceae	Chiffal
201	Piper betle	Piperaceae	Nagarvel, pan
202			Lasan pan
203			Lasan vel
204	<i>Terminalia catappa</i>	Combreceae	Badam
205	<i>Argyrea hirsuta</i>	Convolvulaceae	
206	<i>Anacardium occidentale</i>	Anacardiaceae	Kaju, Cashawtnot

Annexure 8 (List of Plants in Evergreen Plot)

Sr.No.	Name of the species	Family	Local Name
1	<i>Acacia auriculiformis</i>	Fabaceae	Bangali bavad
2	<i>A. sinuata (A. concinna)</i>	Fabaceae	Sikakai
3	<i>Acrocarpus fraxinifolius</i>	Fabaceae	
4	<i>Albizia lebeck</i>	Fabaceae	Kalories, the siris tree
5	<i>Achras sapota</i>	sapotaceae	Chika
6	<i>Adina cordifolia</i>	Rubiaceae	Haldu
7	<i>Albizia procera</i>	Fabaceae	Kilai
8	<i>Amora rohituka</i>	Meliaceae	
9	<i>Alstonia scholaris</i>	Apocynaceae	Saptarni
10	<i>Anamirta paniculata</i>	Menispermaceae	Kakal
11	<i>Argyrea nervosa</i>	Convolvulaceae	Samudrashosh
12	<i>Ardisia solanaceae</i>	Myrsinaceae	
13	<i>Areca triandra</i>	Palmae	Sopari
14	<i>Artocarpus integrifolia</i>	Moraceae	Fanas
15	<i>Artocarpus odoratissimus</i>	Moraceae	Lilo chambo
16	<i>Artocarpus incisa</i>	Moraceae	Vilatifanas
17	<i>A. hirsuta</i>	Moraceae	Arni

18	<i>Asparagus racemosus</i>	Liliaceae	Satavari
19	<i>Barringtonia asiatica</i>	Lecythidaceae	
20	<i>Bauhinia racemosa</i>	Fabaceae	Ashitio
21	<i>Bixa orellana</i>	Bixaceae	Sindurio
22	<i>Breynia patens</i>	Euphorbiaceae	Camboi
23	<i>Boswellia Sarrata</i>	Bursaceae	Salai
24	<i>Canarium strictum</i>	Bursaceae	
25	<i>Caesalpinia sp.</i>	Fabaceae	
26	<i>Bombax pentandrum</i>	Bombacaceae	
27	<i>Calamus flagellum</i>	Arecaceae	Nethar
28	<i>Carallia branhiata</i>	Rhizophoraceae	Kirpa
29	<i>Caryoteureus</i>	Mesembryanthemaceae	Fishfam,shivjeta
30	<i>Callistemon lanceolatus</i>	Myrtaceae	Bottlebrush
31	<i>Carissa congesta</i>	Apocynaceae	Karamda
32	<i>C. Spinerum</i>	Apocynaceae	
33	<i>Cassia sp.</i>	Fabaceae	
34	<i>Chukrasia tabularis</i>	Meliaceae	Chiknasia
35	<i>Cedrelaodorata</i>	Meliaceae	The toon tree
36	<i>Cleistanthus collinus</i>	Euphorbiaceae	Tarari,Dhararo
37	<i>Cinnamomun seylanitum</i>	Lauraceae	Taj
38	<i>Cipadessa fruticosa</i>	Meliaceae	Henbili
39	<i>Citron medica</i>	Rutaceae	Limbu
40	<i>Clematis gouriana</i>	Ranunculaceae	Horevel
41	<i>Clerodendrum sp.</i>	Verbenaceae	
42	<i>Croton sp</i>	Euphorbiaceae	
43	<i>Cocculus macrosarpus</i>	Memispermaceae	
44	<i>Commiphora wightii</i>	Bursaceae	Gugad
45	<i>Cordia dichotoma</i>	Boraginaceae	Gundhi
46	<i>Costus speciosus</i>	Costaceae	Pevato
47	<i>Combretum extensum</i>	Combretaceae	

48	<i>Cycas rumphii</i>	Cycadaceae	Cycus
49	<i>Crimum asiaticum</i>	Amaryllidaceae	Nagdaman
50	<i>Derris robusta</i>	Leguminosae	
51	<i>D. scandeus</i>	Leguminosae	Karanrhvel
52	<i>Dillenia indica</i>	Dilleniaceae	Chalta
53	<i>Dracaena sp.</i>	Agavaceae	
54	<i>Diospyros macrophylla</i>	Ebenaceae	Chinna dhuvari
55	<i>Duabanga sonnesatioides</i>	Lythraceae	Dhuvabenga
56	<i>Ensete superbum</i>	Muscaceae	Jungli kel
57	<i>Eucalyptus globulus</i>	Myrtaceae	Nilgiri
58	<i>E. hybrids</i>	Myrtaceae	Nilgiri
59	<i>E. candolences</i>	Myrtaceae	
60	<i>Eupatorium reevesii</i>	Asteraceae	
61	<i>Ephorbia sp.</i>	Euphorbiaceae	
62	<i>Evodia roxburghiana</i>	Rutaceae	
63	<i>Feronia elephantum</i>	Rutaceae	Kotti
64	<i>Ficus benjamina</i>	Moraceae	
65	<i>F. krishnae</i>	Moraceae	Krishna vad
66	<i>F. elastica</i>	Moraceae	Rubber, Indian
67	<i>F. benglensis</i>	Moraceae	Vad
68	<i>Ficus hispida</i>	Moraceae	Boie umbro
69	<i>Fracamosa</i>	Moraceae	Umbro
70	<i>F. retusa</i>	Moraceae	
71	<i>Filicium decipiens</i>	Sapindaceae	Philisiam
72	<i>Flacourtia sp.</i>	Flacourtiaceae	
73	<i>Gardenia sp.</i>	Rubiaceae	
74	<i>Garcinia morella</i>	Guttiferae	Kokam
75	<i>Gentum scandens</i>	Gentaceae	
76	<i>Grevillea robusta</i>	Proteaceae	Silk oak
77	<i>Gymnema sylvestre</i>	Asclepiadaceae	Madunashini

78	<i>Grewia microcos</i>	Tiliaceae	Asar
79	<i>Gymnosporia rothiana</i>	Celastraceae	
80	<i>Heligarna arnotiana</i>	Anacardiaceae	
81	<i>Holoptelea integrifolia</i>	Ulmaceae	Papado
82	<i>Hemiltonian suaveolens</i>	Rubiaceae	
83	<i>Ipomoea indica</i>	Convolvulaceae	
84	<i>Ixora nigricans</i>	Rubiaceae	
85	<i>I. brachiata</i>	Rubiaceae	
86	<i>Jasminum malabaricum</i>	Oleaceae	Jungli juie
87	<i>J. sp.</i>	Oleaceae	
88	<i>Justicia montanum</i>	Acanthaceae	
89	<i>Kalanchoe pinnata</i>	Crassulaceae	Panputti
90	<i>Lannea sp.</i>	Anacardiaceae	
91	<i>Lagerstromia hypoleuca</i>	Lythraceae	
92	<i>L. speciosa</i>	Lythraceae	Nano pondaro
93	<i>Leea indica</i>	Vitaceae	Dini
94	<i>Lantana camara var. aculeata</i>	Verbenaceae	Lantena
95	<i>Ligustrum neiggherense</i>	Oleaceae	
96	<i>Linociera malabarica</i>	Oleaceae	Headi, Alam
97	<i>Loranthus longiflorus</i>	Loranthaceae	Vando
98	<i>Lophopetalum wightianum</i>	Celastraceae	
99	<i>Macaranga peltata</i>	Euphorbiaceae	
100	<i>Mechilus macrantha</i>	Lauraceae	
101	<i>Madhuca indica</i>	Sapotaceae	Mahudo
102	<i>Maesa indica</i>	Myrsinaceae	Chatki
103	<i>Manihot glaziovii</i>	Euphorbiaceae	Sira rubber
104	<i>Manilkara hexandra</i>	Sapotaceae	Rayan
105	<i>Mangifera indica</i>	Anacardiaceae	Ambo
106	<i>Mimocylon edule (M. umbellatum)</i>	Melastomataceae	Anjan
107	<i>Mesua ferrea</i>	Calophyllaceae	Nagkeshar

108	<i>Meioneurum cucullatum</i>	Poaceae	Vagati
109	<i>Meyna laxiflora</i>	Rubiaceae	Alav
110	<i>Mimosa biglandulosa</i>	Fabaceae	Chandufal
111	<i>Mimusops elengi</i>	Sapotaceae	Borselli, Bakul
112	<i>Murraya Kochigii</i>	Rutaceae	Kadi neem
113	<i>Mucuna migra</i>	Fabaceae	Kuwatch
114	<i>Mussaenda luteola</i>	Rubiaceae	Mushanda
115	<i>M. frondosa</i>	Rubiaceae	
116	<i>Musa paradisiacal</i>	Musaceae	Kel
117	<i>Michelia champaca</i>	Magnoliaceae	Sonerichambo, pidochambo
118	<i>M. nilagirica</i>	Magnoliaceae	Safedchambo
119	<i>Myristica beddomei</i>	Myristicaceae	
120	<i>M. fragrans</i>	Myristicaceae	
121	<i>Nauclea missionis</i>	Rubiaceae	
122	<i>Pajanelia rheedii</i>	Bignoniaceae	Aranthal
123	<i>Pandanus tectorius</i>	Pandanaceae	Kevdo
124	<i>Passiflora foetida</i>	Passifloraceae	
125	<i>Pedilanthus tithymeloides</i>	Euphorbiaceae	Dhudlothor
126	<i>Pinus patula</i>	Pinaceae	Pina
127	<i>Poeciloneurum indicum</i>	Guttiferae	Puthan Koili
128	<i>Polygonum glabrum</i>	Polygonaceae	
129	<i>Polyalthia longifolia</i>	Anonaceae	Ashopalo
130	<i>Polyalthia var. pendula</i>	Anonaceae	Pendula
131	<i>Pterospermum acerifolium</i>	Sterculiaceae	Kanakchambo
132	<i>Punica granatum</i>	Punicaceae	
133	<i>Putranjiva roxburghii</i>	Euphorbiaceae	Putranjiva
134	<i>Randia sp.</i>	Rubiaceae	
135	<i>Roystonea regia</i>	Arecaceae	Bottlepalm
136	<i>Samanea saman</i>	Fabaceae	Raintree
137	<i>Santalum album</i>	Santalaceae	Chandan

138	Sapindus laurifolia	Sapindaceae	Aritha,rita
139	Saraca asoca	Fabaceae	Ashok
140	Scutia indica	Rhamnaceae	
141	Smilax zeylanica	Liliaceae	Ukshee
142	Spondias qxillarlis	Anacardiaceae	Katambo
143	Stachystarpheta india	Verbenaceae	
144	Staphlea emodi	Staphyleaceae	
145	Syzygium cumini	Myrtaceae	Jambudo
146	S. heneanum	Myrtaceae	
147	Tecoma stans	Bignoniaceae	
148	Terminalia Myriocarpa	Combretaceae	
149	T. chebula	Combretaceae	Harde
150	T. arjuna	Combretaceae	Arjun
151	Theobroma cacao	Sterculiaceae	Cocoplant
152	Trema orientalis	Cannabaceae	Thodi
153	Trewia polycarpa (T. nudiflora)	Euphorbiaceae	Pitar
154	Vateria indica	Dipterocarpaceae	Dhup
155	Vallis solanaceae (V.heyneii)	Apocynaceae	
156	Vitex altissima	Verbenaceae	
157	Wendlandia notoniana	Rubiaceae	
158	Woodfordia fruticosa	Lythraceae	Dhaiti
159	Xeromphis spinosa	Rubiaceae	Mindhan
160	Zingiber cassumunar	Zingiberaceae	Heldar
161	Zizyphus oenoplia	Rhamnaceae	Velibore
162	Areca triandra	Palmae	Sopari

References

- Hidayathulla et al. (2011). Phytochemical evaluation, antioxidant and antibacterial activity of seed wings of *Hopea ponga* (Dennst.) Mabblerly. *Journal of Pharmacy Research*, 4(8):2793-2795.
- Jain, P. P.; Dobhal, N. P. and Ayyar, K. S (1988). Chemical characterization of *Olea dioica* Roxb. seed oil. *Indian Forester*, 114(12), 882-3.
- Nagar, P. S. (2008). Medicinal plants of Saurashtra, Gujarat. Bishen Singh Mahendra Pal Singh. Dehradun, India.
- Nayar, T.S., Beegam, Rasiya, A. and Sibi M. (2014). Flowering Plants of the Western Ghats. Awaharlal Nehru Tropical Botanical Garden and Research Institute, Palode, Thiruvanthapuram.
- Sehgal, A. B. (2015). Hitherto Unknown Uses of Plants by Indigenous People of Himachal Pradesh. *Global Journal of Interdisciplinary Social Science*, Spain. G.J.I.S.S., 4(3):164-167.
- Shah, G.L. (1978). Flora of Gujarat State, Part I and Part II. Sardar Patel University Press, Vallabh Vidhyanagar.
- Shivrama Karantha pilikula nisargadhama, Conserving biodiversity heritage & culture. <http://www.pilikula.com>
- Shukla R., Chakravarty M., Gautam M. (2008) Indigenous medicine used for treatment of gynecological disorders by tribal of Chhattisgarh, India. *Journal of Medicinal Plants Research* Vol. 2(12), pp. 356-360.
- Singh, P. Karthigeyan K., Lakshminarasimhan P. and Dash S. S. (2015). Endemic Vascular Plants of India. Botanical Survey of India, Kolkata.
- Suryanarayana, B. (1968). A contribution to the flora of Dangs forest, Gujarat, Part I, II, and III, PhD thesis submitted to Sardar Patel University, Vallabh Vidhyanagar, Gujarat.
- Tadvi, D. S. (2013). Floristic diversity of Dangs. Phd. thesis. M. S. University, Baroda, Vadodara.
- Thang, Tran D. et al. (2014). Constituents of Essential Oils from the Leaves and Stem Barks of *Uvaria rufa* and *Uvaria cordata* (Annonaceae) from Vietnam. *Journal of Essential Oil-Bearing Plants* 17(3):427-434.

Tsukiyama, Muneo (2010). Effect of *Duabanga grandiflora* for Human Skin Cells. *American Journal of Chinese Medicine*, 38(2):387-399.

Yamamura, Nono and Chikuyama, Munehisa (2011). Uses of *Parmentiera* plant extracts having antioxidant, anti-inflammatory, skin-lightening, moisturizing effects, etc. *Jpn. Kokai Tokkyo Koho, JP 2011246376 A 20111208*.

Acronyms

e-Flora of India (2014). Botanical Survey of India; Government of India, Ministry of Environment and Forest & climate change. <http://efloraindia.nic.in>

e-Floras (2018). <http://www.eflora.org>

Flowers of India: <http://www.flowersofindia.net>

Indian Biodiversity Portal, Biodiversity of India
<https://indiabiodiversity.org>

Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA.

Sci Finder, (2018). <https://scifinder.cas.org/scifinder/login> American Chemical Society.

The Plant List (2013). <http://www.theplantlist.org>,

Useful Tropical Plants Database (2014).
<http://www.tropical.theferns.info> by: Ken Fern.





Contact Us:
Waghai Botanical Garden
www.waghaibotanicalgarden.in

Deputy Conservator of Forest
South Dang Forest Division
Dang- 394710 Gujarat
Phone: 0285-2631044
dcfdangsouth16@gmail.com

Superintendent-
Waghai Botanical Garden
South Dang Forest Division
Dang- 394730 Gujarat
dinesh.rabari@gmail.com