

BOTANY FEST 2020

Tour report Submitted by Chirag D. Tank

B. Sc. Botany Sem – 6



January 22 to 26, 2020



BAHAUDDIN GOVERNMENT SCIENCE COLLEGE

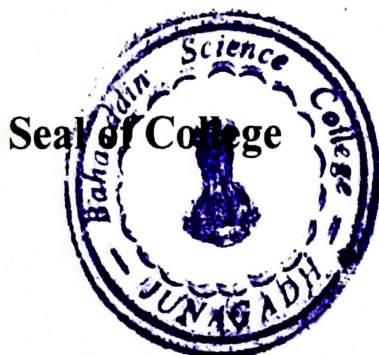
OPP. BHUTNATH TEMPLE, JUNAGADH (GUJARAT) -362001, Website: www.bahauddinscience.edu.in

Phone: 0285 2675731, Email: Principal.bsc@gmail.com

CERTIFICATE

This is to certify that the Botany Study Tour report submitted by **Tank Chirag Dayabhai** (Roll no 22) to the Department of Botany, Bahauddin Science College, Junagadh is the work towards partial fulfilment of the syllabus as prescribed by the Bhakta Kavi Narsinh Mehta University for the year 2019- 20.

Date : 20/02/2020




(Dr. R. C. Viradia)

Head of Department,
Bahauddin Science College, Junagadh

Acknowledgement

The words of thanks could not express the devotion to our fest organizers South Dang Forest Division, Dang and MS University, Vadodara, Gujarat. Under whose guidance, we got knowledge about the flora of Waghai Botanical Garden, South Dang.

My special thanks to my tour mates for making entire tour so enjoyable. This tour was a surely a memorable experience for us.

My sincere thanks to **Dr. R. C. Viradia sir** Head of Botany Department and Our Principal Madam of Bahauddin science College, Junagadh who permitted us to go on study tour at Waghai Botanical garden, Dang.

I would like to thank to members and volunteer committee of **BOTANY FEST '20** for food and accommodations. I would like to thank to Dr. P. S. Nagar and Shabsir Management and provides us best experience of the Fest. I'm Thankful to **Digvijay Parmar** and **Manish Jani** to help us to guide in activities.

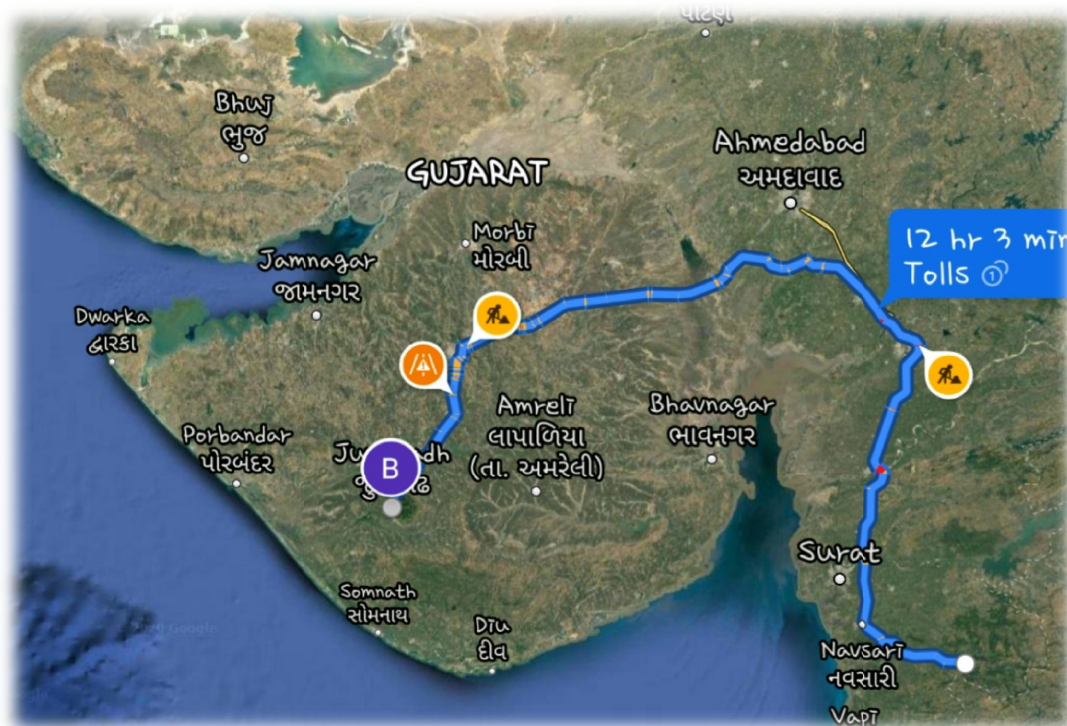
I consider myself truly blessed to be trained under such an esteemed Department of Botany. I have to Express my feelings, no doubt by words of 'Thanks' though it is very small to Express my healthy feelings.

Introduction

The department of Botany carried out a study cum collection tour(**Botany fest**)during 6th semester. The tour applies study of environmental, ecological and local flora as well as fauna. It also includes preparation of herbarium and sample collection. The Department of Botany provides the compulsion for graduate students to attend the tour. 5 students of plant science accompanied the tour. The tour was organized under the kind and expert guidance of our respected sir **Dr. Nagar and Shah**, whose warm and friendly nature provides a lot of enjoyment and inspiration during the course of our program. Thus education tour is of vital importance as Practical Practical knowledge grained.

The tour had been a circular route starting form Junagadh - Waghai-Saputara- Junagadh. The tour program was for 4 days covering WAGHAI BOTANICAL GARDEN AND SAPUTARA HILL STATION of Dang district. The planned traveling was for 4 days approximately covering of 634.1 kms, majority of which has been traveled by Bus route. Following page shows the Botany fest planning program.

Waghai Botanical garden Map



COMPREHENSIVE PROGRAM OF THE EDUCATIONAL TOUR 2019-20 B. Sc. BOTANY,

BOTANY FEST 2020, WAGHAI BOTANICAL GARDEN, DANG.

Date : 22/01/'20

- Journey started at 04 : 00 PM by bus Junagadh to Rajkot (Sastri medan)
- At 08 : 00 PM Gondal - Nasik arrives, we traveled up to Waghai.

Date : 23/01/'20

- We reach waghaiat 10:30 AM, from waghai bus stop to khilad camp site we walk through the river bank.
- At 11:00 o'clock regeneration is done and kit was distributed.
- After lunch and rest, we visited Waghai Botanical garden, waghai at 01:30 PM.

Date : 24/01/'20

- At 04:00AM morning according to schedule of Botany Fest '20 , activity of **River- Rafting** is started.
- Across the river from forest we collected some food, herbs material which is used in next activity named **Chef of Dang** at 09:00 AM.
- After lunch further activity named Expectation vs Reality, Audio-Visual, was conducted.
- At night **Cultural activity** is done.
- After all at 10:00 PM night walk was arranged.

Date : 25/01/'20

- At morning 06:00 AM we reached Waghai Botanical garden by Forest walk, and First activity of the day **Phytohunt** is done.
- After Natural painting under Pragvadand taking Lunch Art and crafts, Fashion designer of Forest , ramp walk, Natural cosmetics Display is done under time of 01:45AM to 06:00 PM.
- Parliament of Jungle program about 2:20 hour is ended at 08:30 PM.
- Certificate is distributed and valedictory function is over at about 09:40 PM.

Date : 26/01/'20

- In the Camp fire exact 12:00 AM Republic Day is celebrated and antaxari game is played, camp fire over at 01:40 AM.
 - Our further journey to saputara hill station is started at 06:00 AM.
 - In saputara we Enjoy many places like Sunrise point, Sunset point, Rose garden, Echo point, Boating lake, Paragliding and Table point, Honeybee Culture center, etc.
- We return to bus stop near about 05:00 PM O'clock and return to Junagadh at 09:00AM morning of 27/01/'20

Day 1 : 23/01/'20 Waghai Botanical Garden, Waghi, Dang



The waghai Botanical garden was established by the forest development in 1st may 1966.

It is largest garden in Gujarat spread over an area of 24 Hectares. Garden has a systematic network of road with a stretch of 7.50 km in lenth. The climate detail of WBG includes, average rainfall between 1600mm to 2000mm, min.

Temp. Is of 10°C(December, January) and Max. Temp. Goes up to 45°C(June, July) has been recorded.

Botanical garden are important centers for education. It is rich in floristics diversity having wide variety of plant species. Garden has beautiful, natural and silent ambience, also you can see the plants which we only heard about and also the plants which can't found in urban area. With plants you can also see variety of insects and birds whose home is this garden. If you don't know about the plants, Floral Detailed tables and charts are useful to get information of trees of WBG. Herbarium is also very unique as it has more than 3000 herbarium specimens Collected.

WBG is place where you can see more than 100 year old and more than 100ft. Tall trees. 29 exclusive plants species that are present only in WBG across whole Gujarat. Total 50 roads in Garden are well planned with particular plants Species belonging to particular road. So you can walk on interesting roadlike Indeajav road, Sita Ashok road, and Silver oakroadinsteadofparticularcityroad.Gardeniswelldecoratingwithbeautifulorna mentalfloweringplantswhichenhanceitsbeautythatyoucanfeelatstepswhenouen terinGarden.

WAGHAI BOTANICAL GARDEN



❖ Detail of Different plots

1) Evergreen Plot: This plot has more than 228 plants species which includes plants like *Hopea ponga*, *Arthocarpus heterophyllus*, *Duabanga grandiflora*, etc.



2) Scub and thorn Plot: This plot represents 101 plant species few examples are *Acacia pinnata*, *Zizipus mauritiana*, etc.



3) Taxonomy Plot: The plot is developed for identification, nomenclature and Classification of plant Kingdom. There are 123 species like *Terminalia belerica*, *Albizia saman*, etc.



4) Fruit Plot: This plot includes the different fruit plant Species like *Manikara hexandra*, *syzygium cumini*, etc.



5) Moist Deciduous Plot: it has more than 323 plant Species such as *Shorea robusta*, *Dilienia indica*, etc.



6) Medicinal Plot: this plot has 257 species which have medicinal usages in Ayurveda, Unani, Homeopathy, and modern medicine like *Rauvolfia serpentine*, *Withania somnifera*, etc.



7) Tuber Plot: In the tuber plot you can see total 50 different types of tuberous plant like *Vigna vexillata*, *Gloriosa superba*, etc.



8) Plam Plot: This plot will show the variety of palm Species from all over india more than 30 species are present like *Cocos nucifera*, *Caryota urens*, etc.



9) Dry Deciduous Plot: It has more than 42 species like *Terminalia arjuna*, *Diosphyros montana*, *Semicarpus anacardiyum*, etc.



10) Dangs Plot: This plot represents the Species occurring in Dangs forest. It has more than 468 Species like *Albizia procera*, *Tectona grandis*, etc



11) Cacti and succulents Plot : The plot includes 142 different varieties of Cacti and succulents like *Opuntia elatior*, *Mammillaria longimamma*, etc.



12) RET & E Plot : This plot represents the Rare, Endangered, Threatened and Endemic plants Species of Gujarat like *Curculigo orchioidea*, *Dolichandrone falcata*, etc.



13) Arid zone/ Shrub Plot: More than 114 plants Species respective forest type were planted in this plot. The vegetation comprises of Capparis zeylanica, Tamarix indica, and some Perennials grasses.



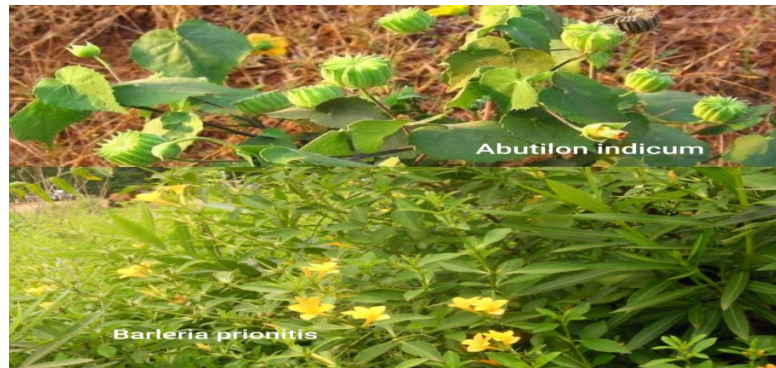
14) Bamboo Plot : The plot comprising of 25 species of bamboo found in Different regions of india. Such as Bamboosa tuldodies, bamboosa vulgaris, etc.



15) Rose Plot : This plot has variety colours of rose flowers plants like Rosa indica, Rosa rosa etc.



16) Arogyavan Plot : This plot has a total 132 medicinal herb and shrub species. It is largest plot of WBG and give information of uses of Plant like *Barleria prionitis*, *Abutilon indicum*, etc.



EXCLUSIVE TREE OF WAGHAI BOTANICAL GARDEN

➤ Here is the list of the 29 plants found Exclusively in waghai botanical garden:

1. *Duabanga grandiflora* (DC.) Walp., Lythraceae
2. *Hopea ponga*(Dennest.) Mabb., Moraceae
3. *Uvaria littoralis* (Blume) Blume, Annonaceae
4. *Olea dioica* Robx. Oleaceae
5. *Parmentiera cereifera* Seem. , Bignoniaceae
6. *Cleistanthus collinus*(Roxb.) Benth. ex Hook.F. , Phyllanthaceae
7. *Glochidion ellipticum* Wight, Phyllanthaceae
8. *Ficus microcarpa* L.f., Moraceae
9. *Antidesma acidum* Retz., Moraceae
10. *Antidesma ghaesembilla* Gaertn., Phyllanthaceae
11. *Ardisia solanacea*(Poir.) Roxb. Primulaceae
12. *Carallia brachiata*(Lour.) Merr., Rhizophoraceae
13. *Chloroxylon swietenia*DC., Rutaceae

14. *Diospyros malabarica*(Desr.) Kostel, Ebenaceae
15. *Elaeocarpus sphaericus* Gaertn. K. Schum., Elaeocarpaceae
16. *Erinocarpus nimmonii* J. Graham, Malvaceae
17. *Falconeria insignis* Royle, Euphorbiaceae
18. *Vitex altissima* L.f., Lamiaceae
19. *Chukrasia tabularis* A.Juss., Meliaceae
20. *Artocarpus hirsutus* Lam., Moraceae
21. *Memecylon umbellatum* Burm.f., Melastomataceae
22. *Psydrax umbellata*(Wight) Bridson, Eubiaceae
23. *Vateria indica* L., Dipterocarpaceae
24. *Wendlandia heynei*(Schult.) Santapau & Marchnat, Rubiaceae
25. *Holingarna arnottiana* Hook.f. Anacardiaceae
26. *Shorea robusta* Gaertn, Dipterocarpaceae
27. *Croton tiglium* L., Euphorbiaceae
28. *Bischofia javanica* Blume., Phyllanthaceae
29. *Pterygota alata*(Roxb.) R. Br., Malvaceae

Event(Activity)sof Day 1 Night Session

- ❖ **Night walk** : After visiting WBG and knowing more about plants diversity, our last activity of the day was night walk in which all the teams are walk in the jungle in dark night without any light source and without making little bit of noice or sound. One forest guard and officer were with is to guide us the path in Forest at night.

Day 2 Morning Session



- ❖ **River Rafting** : In this activity, Bamboo sticks were provided to us from which we make a raft, by this raft we have to cross the **Ambica river**. In this activity our skills of Boat making and Swimming is performed.



- ❖ **Hill-climbing** : After crossing river, at opposite bank of ambica river forest area is started. We will have to Climb the hills and collect the flags of our team **Bixa**, Total 4 flags have to Collecty to end the activity of Hill Climbing.

❖ **Chef of Dang :** Continuously with hill climbing material of our next activity Chef fo Dang is Collected, for the collection we had knowledge of Eatable/Useful plants for Food,like gram, ladyfingers, oxalis,etc We collected.



❖ **Fashion designer of Forest:** At the time of returning from Forest, we collected the material used for next activity **Garland designer** of Forest. In which we collected fruits, seeds, bark of trees, leaves of *Tectona grandis* for ornamentation and decoration of our Model.



Day 2 Afternoon Session

- ❖ **Expectation vs Reality :** In this activity particular team chose a member having skills of drawing, who follow the instructions of their teammates for drawing the picture that provided.
- ❖ **Audio- Visuals :** This activity is divided into two parts, in first part One audio Song is played and Participants have to find out the plants name in that song. IN next part the Participants team who qualified in first part are viewed a video, participants have to find out plants comes in that video clip.

Day 2 Night Session

- ❖ **Cinematographic film making :** For Innovation and Nature event, participants have to make a cinematographic film based on the innovation that is based on or inspired from nature. Like the helicopter, water coolers, engines, power plants etc based on physics, technology, computer

sciences etc. It could be your own innovation also. Most of the participants performed plant based idea and innovation clip.

Day 3 Morning Session

- ❖ **Phytohunt** : This is one of the best activity of the fest in which first of all particular team have to solve the puzzle form which team get the map of the whole Botanical Garden from which 1 to 10 clues are displayed, participants have to follow the clues to get final clues from which end the activity. Clues are Plants, or part of plant like leaves, fruit, seed, bark flower or Characteristics of particular plant like uses, classification etc. Participants have to find out plants having character related to clues. All the clues are randomly distributed in whole Botanical garden.



Day 3 Afternoon Session

- ❖ **Parliament of jungle:** Last activity of the Botany fest in all the teams were divided to two groups Ruler and Opponent. Ruler have to give the Bill of the district constituting educational, developmental and agricultural and Foresters etc. like budgets. Opponents team oppose the content and budget of the Ruler team. The debate is continuing, if opponents wins they have to give new bills with reasons. Otherwise Ruler rules.



- ❖ **Valedictory Function:** All the organizers, faculty and Volunteer of the fest were dignified and certificates were distributed.



Day 4 Saputara

- ❖ **Hill- station:** There are many places to explore in nature at Saputara like Sunrise point, Sunset point, Rose garden, Echo point, Boating lake, Paragliding and Table point, Honey bee Culture center, etc.



Thank you