# A REPORT ON

# THE BOTANICAL FIELD STUDY TOUR AT DIGHA AND ADJACENT AREA, WEST BENGAL, INDIA



Submitted to the department of Botany, Kashipur Michael Madhusudan Mahavidyalaya, in partial fulfillment for B.Sc. 1<sup>st</sup> semester examination

Submitted by:

## Menaka Mahato

Roll- 727 Registration No. 007783 of 2022-23 1<sup>st</sup> Semester Department of Botany Kashipur Michael Madhusudan Mahavidyalaya

#### **CONTENTS**

- **1. INTRODUCTION**
- 2. ACKNOWLEDGEMENT
- **3. CERTIFICATE**
- 4. TOUR DIARY
- **5. REQUIREMENTS**
- 6. LIST OF COLLECTED SPECIMENS
- 7. CONCLUSION

#### **INTRODUCTION**

Botanical field studies play a crucial role in understanding and preserving plant life, ecosystems, and the environment. Botanical field studies help in identifying and documenting plant species diversity in various habitats. This information is essential for conservation efforts, including the identification of endangered, threatened, or rare species and their habitats.

Plants are foundational to ecosystems, providing food, shelter, oxygen, and other ecosystem services. Botanical field studies help in understanding the relationships between plants and their environment, including interactions with other organisms, nutrient cycling, and ecosystem dynamics.

Many plants have medicinal properties or economic value. Botanical field studies can identify new plant species with potential medicinal compounds, as well as traditional uses of plants by local communities. Additionally, they can inform sustainable harvesting practices for economically valuable plants.

Overall, botanical field studies are essential for advancing scientific knowledge, informing conservation policies and practices, and fostering sustainable relationships between humans and the natural world.

The botanical field assessment conducted in Digha, West Bengal, aimed to survey and documents the plant flora diversity in the area. A comprehensive analysis was carried out, including species identification, habitat assessment, and ecological observations. The findings provide valuable insights into the richness, distribution, and conservation status of plant species within the study area. The field study was conducted by dept. of Botany, Kashipur Michael Madhusudan Mahavidyalaya on November 27, 2022.

#### ACKNOWLEDGEMENT

It is with great pleasure that I express my deepest gratitude to the Department of Botany, Kashipur Michael Madhusudan Mahavidyalaya for organizing a Botanical study tour at Digha coast, West Bengal. My sincere thanks go to my guides sir Bubai Bera, madam Anusuya Banerjee for giving me time to time suggestions, advice and inspiration for making the tour a grand success. I am also thankful to Debes Naskar sir and Partha Sarathi Mahatha sir for their valuable suggestions during fieldwork. I would also take this opportunity to thanks my classmates for their kind co-operation during the field study rendered to me throughout the tour.

You're sincerely,

Menaka Mahato

**Menaka Mahato** 1<sup>st</sup> Semester (2022-23)

Department of Botany

Kashipur M. M. Mahavidyalaya

# **CERTIFICATE**

This is to certify that......Menaka Mahato.....has duly participated in the BOTANICAL FIELD EXCURSION to ......Digha and adjacent area....as per the syllabus given by the Sidho-Kanho-Birsha University.

He/she is a bonafide student of this college offering 2<sup>nd</sup> semester Botany as programme subject.



Bubai Bera

Head of Department

Kashipur M. M. Mahavidyalaya

### AIM AND OBJECTIVE OF THE FIELD EXCURSION

- 1. To observe and collect the plant species from study site.
- 2. To study the natural habitats and characters of the plants found in the area

3. To collect some plant species for herbarium preparation and submission for examination.

#### **TOUR DIARY**

On 27th November, 2022, nine of us and our beloved teachers Bubai Bera sir, Anusua Banerjee madam, Debes Naskar sir, Partha Sarathi Mahatha sir met each other 9:00 a.m. in the college campus. From there we hired a vehicle and started out at 9:30 a.m. We reached Adra railway station, and by express train, we started our journey at 11:30 a.m. On the same day, at 12:30 p.m., we reached Digha station, and then we started our field observation at the seashore and collected plant specimens. The next day (November 28, 2022), we again visited the different coastal zones and made observations and collected the plant specimens. On November 29, 2022, we returned to our college campus.

The students who participated in tour are –

```
Menaka Mahato (1<sup>st</sup> sem)
Shreya Dey (1<sup>st</sup> sem)
Ajoy Gorai (1<sup>st</sup> sem)
Sanu Das (1<sup>st</sup> sem)
Suraj Nag (1<sup>st</sup> sem)
Sourav Karmakar (3<sup>rd</sup> sem)
Sourav Mandal (3<sup>rd</sup> sem)
Bishnu Dey (3<sup>rd</sup> sem)
Bishnu Dey (3<sup>rd</sup> sem)
Mahendra Narayan Dubey (5<sup>th</sup> sem)
Sounak Goswami (5<sup>th</sup> sem)
Dipak Bauri (5<sup>th</sup> sem)
```

## **REQUISETES FOR THE FIELD OBSERVATION**

The following equipments are used the field study -

- 1. Knives
- 2. Forceps
- 3. Scissors
- 4. Magnifying lenses
- 5. Portable plastic container
- 6. Herbarium press
- 7. Formaldehyde
- 8. Scale
- 9. Notebook, pen, pencil
- 10. Camera

SI.	Plant species	Family
No.		
1.	Ipomoea pes-caprae	Convolvulaceae
2.	Crotalaria spectabilis	Fabaceae
3.	Solanum torvum	Solanaceae
4.	Solanum sisymbriifolium	Solanaceae
5.	Acalypha indica	Euphorbiaceae
6.	Pedalium murex	Pedaliaceae
7.	Bischofia javanica	Phyllanthaceae
8.	Ceiba pentandra	Malvaceae
9.	Calotropis gigantean	Apocynaceae
10.	Casuarina equisetifolia	Casuarinaceae
11.	Pandanus sp	Pandanaceae
12.	Mikania micrantha	Asteraceae
13.	Clerodendrum indicum	Verbenaceae
14.	Plumeria pudica	Apocynaceae
15.	Tecoma stans	Bignoniaceae
16.	Clusia rosea	Clusiaceae
17.	Mansoa alliacea	Bignoniaceae
18.	Phoenix sylvestris	Arecaceae
19.	Argemone mexicana	Papaveraceae
20.	Senna siamea	Fabaceae
21.	Senna alata	Fabaceae
22.	Caesalpinia pulcherrima	Fabaceae

List of plant species and their families observed at the study site -

Photographs of the field study-



Fig 1: Group photo of the field guides and students



Fig 2: Students observing the plant species at the Digha seashore

Some of the photographs of plant species found in the Digha and adjacent area -

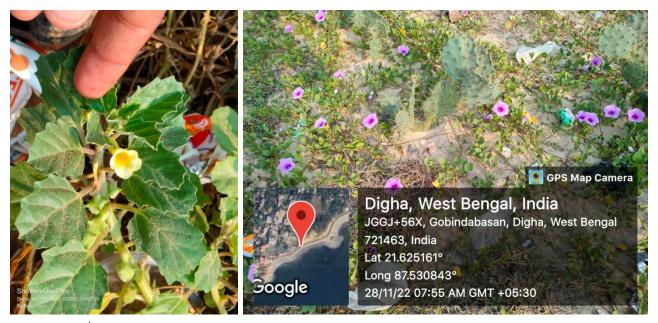


Fig 1: *Peda lium murex* 

Fig 2: Ipomoea pes-caprae



Fig 3: *Ipomoea pes-caprae* 



Fig 4: Solanum sisymbriifolium



Fig 5: Acalypha indica

Fig 6: Solanum torvum

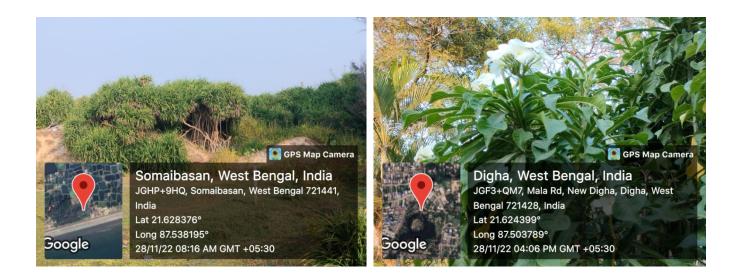


Fig 5: Pandanus sp.

Fig 6: Plumeria pudica

#### **CONCLUSION**

Our study tour was very interesting, and we learned a lot about the plant composition and their distribution at Digha Sea Beach and the adjacent area. The student participants interacted in a very well-disciplined manner and cooperated well with the teacher guides, and overall, the tour was a grand success. We realized that observing the flora in its natural forms made us things vivid enhancing the classroom lecture and laboratory experiments.