



গড়গাঁও মহাবিদ্যালয়

GARGAON COLLEGE

NAAC accredited with 'B' Grade

## **BOTANY lecture series Report**

Date: 18<sup>th</sup> June, 2023 to 26<sup>th</sup> June, 2023

Time: 7 p.m

Organizers: Botany Department, Gargaon College

Mode: Online (Zoom Platform)

No. of Participants: 136

Resource person:

Sl. No.	Name of the Resource Person	Date and Time	Topic	Designation
1	Dr. Rajib Gogoi	18-06-2022	Biodiversity and its Potential in North East India.	Regional Head, Botanical Survey of India-SHRC, Gangtok
2	Dr. Ashish Kar	19-06-2022	Plants & Indigenous Knowledge System.	Ph. D, Fellow (Scientist) & Area Convenor, TERI, NERC, Guwahat
3	Dr. Banashree Medhi	20-06-2023	Mushroom Cultivation - A profitable activity.	Subject Matter Specialist (Plant Protection), Krishi Vigyan Kendra, Sivasagar, Assam
4	Mr. Bibit Dehingia,	21-06-2023	Wildlife Conservations and Management.	AFS, Range Forest Officer TR and KNP
5	Mr. Janardan Boruah	22-06-2023	Sericulture: A profitable activity.	Manager, Government Sericulture Farm, Titabar, Jorhat, Assam
6	Mr. Devanjali Bora	23-06-2023	Medicinal Plant & Human Disease.	Senior Scientist & Research Officer (Botany), NEHAR, CARI Guwahati, Assam
7	Dr. Sadhan Kr. Basumatary	26-06-2023	Paleobotany and Plant Evolution.	Scientist E, Birbal Sahni Institute of Palaeosciences, Luknow

Nature of Activity: Entrepreneurship, IKS, Life Skill, MoU, Alumni Talk, Research trend

Objective of the Programme:

1. To encourage students and to give an insight about the various career prospects in the field of Botany.
2. To enrich the students about indigenous knowledge systems and their livelihood scope.
3. The series also provided an opportunity to the students to get an idea about various research opportunities.

## Brief Report:

The Botany Department of Gargaon College organised a Lecture series on different aspects related to Botany for the benefit of students. The series was addressed by the Vice Principal of Gargaon College, Dr. Rina Handique. In her speech she welcomed all the esteemed resource persons and thanked the organisers for taking up the initiative. The coordinator of the series and Head, Department of Botany, Gargaon College Dr. Dimbeshwar Das introduced all the speakers to the participants. On the first day Dr. Rajib Gogoi briefly explained his journey as a plant taxonomist. He also talked about his publications and precisely gave an insight about Plant Taxonomy and how to identify plants. The students' awareness of local plant resources in Indigenous knowledge systems and their potential futures was enhanced by Dr. Asish Kar on the second day. He discussed the development of IKS, the several medications that were found in India using traditional knowledge, the potential of IKS in agriculture, the use of flowers as vegetables, and other topics. He also highlighted the harvest and revenue from the cultivation of packing leaves. The third day's speaker, Miss Banashree Medhi, discussed mushroom farming as a profitable business. She gave an explanation of mushrooms, including how to recognise them, their nutritional value, and finally the business potential it presented. On the fourth day, Alumni of the department, Mr. Janardan Baruah gave a discussion about sericulture and inspired the students to pursue it. Mr. Devanjal Bora presented a talk on the research trends in traditional knowledge of medicinal plants. Mr. Bibit Dehingia, on the second last day of the series talked about the conservation of wildlife and wildlife protection. The final lecture in the series was given by Dr. Sadhan Kr. Basumatary who spoke on palaeobotany and plant evolution and enlightened the students with the scope of studying palaeobotany.

The seven-day long series was moderated by Mrs. Sangeeta Chetia and Miss Sandeepa Agarwalla, Assistant Professor, Department of Botany, Gargaon college.

Link of Youtube: Day 1: <https://www.youtube.com/live/xVkzMr06nw0?si=FwfT5dH1WctVwZzD>

Day 2: <https://www.youtube.com/live/Zl7sBGm3Blw?si=BMd922V47OjxzCyW>

Day 3: [https://www.youtube.com/live/OMm5wxZF6Vc?si=AIPMUIH\\_WycxDoqp](https://www.youtube.com/live/OMm5wxZF6Vc?si=AIPMUIH_WycxDoqp)

Day 4: No link due to network issues

Day 5: <https://www.youtube.com/live/ZslzuQkb6J8?si=nlN2wpdjzWVb-4IU>

Day 6: <https://www.youtube.com/live/NI9AeH9mKm8?si=mvU6WNQeimtFNAz2>

Day 7: [https://www.youtube.com/live/\\_Jfa3QbwlhE?si=-wdRbyueTnj2gtbZ](https://www.youtube.com/live/_Jfa3QbwlhE?si=-wdRbyueTnj2gtbZ)

Flyer:

Registration Link:

<https://forms.gle/P1ZkdNobuFnDR2Af9>

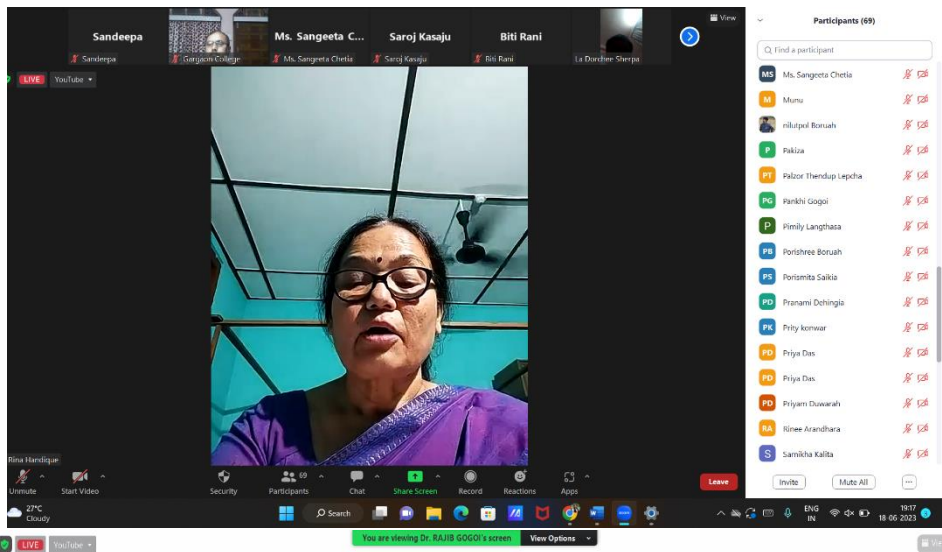
Participants list:

<https://docs.google.com/spreadsheets/d/1ZzReI7VDcQsmCeU2w7XPlaxYgKOxD4lmtgpjOBgO3/edit?usp=sharing>

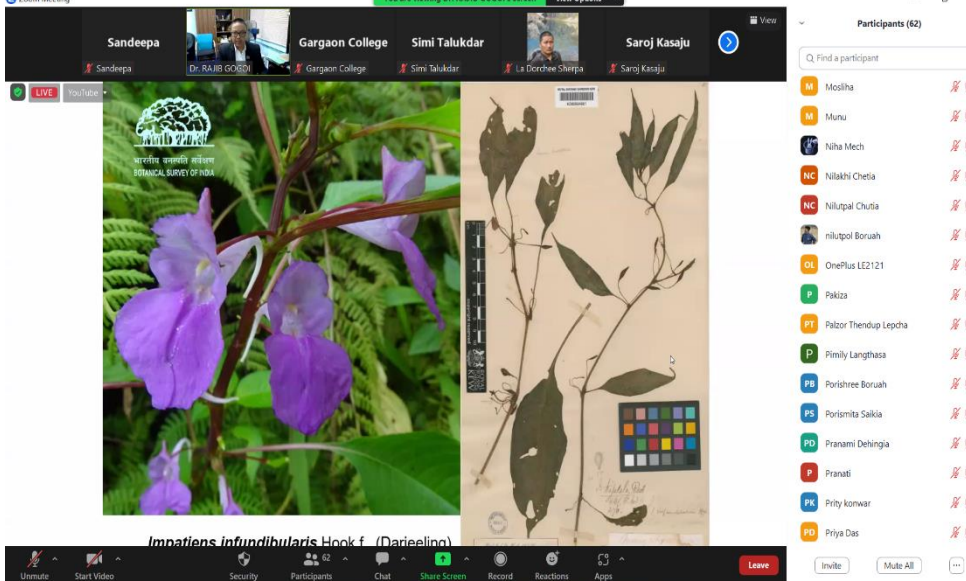
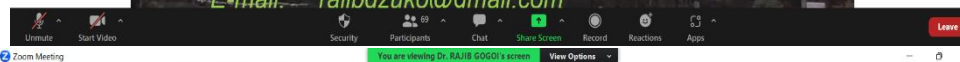
A	B	C	D	E	F	G
Timestamp	1. Name of the Participants	2. Gender	3. Name of the Institution/College Studied/Studying/Working	4. Address of the Institution/College	5. Name of the Department	6. Designation
6/17/2023 7:08:20	Sumit Das	Male	Arunachal University of Studies.	Knowledge City,Namsai, Arunachal F	Botany	Student
6/18/2023 19:05:07	Puja Saikia	Female	Assam University Diphu Campus	Assam University Diphu Campus	Life science and Bioinformatics	Student
6/16/2023 15:58:25	BIBHUTI BURAGOHAIN	Male	Assam University Diphu Campus	DIPHU	Life science and Bioinformatics	Student
6/18/2023 16:38:11	Kabyashree Tamuly	Female	Assam University Diphu Campus	Diphu	Life science and Bioinformatics	Forest Ranger
6/17/2023 1:41:36	Syeda Afrin Mumtahina Hussain	Female	B. Borooh College	Ulubari, Guwahati	Botany	Student
6/18/2023 18:46:00	Bhriгу Hazarika	Male	DHSK College	RKB path	Botany	Student
6/16/2023 13:38:27	BIKASH SINGH	Male	Dibrugarh University	DIBRUGARH	DEPARTMENT OF LIFE SCIENCES	Student
6/16/2023 13:37:06	CHINMOYEE CHAKRABORTY	Female	Dibrugarh University	Dibrugarh	DEPARTMENT OF LIFE SCIENCES	Student
6/16/2023 13:35:13	KAUSHIK KUMAR MECH	Male	Dibrugarh University	DIBRUGARH	DEPARTMENT OF LIFE SCIENCES	Student
6/16/2023 23:25:58	Barbie Goswami	Female	Dibrugarh University	Dibrugarh, Assam	Life Sciences	Student
6/17/2023 16:33:11	Subhajyoti Gohain	Male	Digboi College	Digboi , Tinisukia	Life Sciences	Student
6/16/2023 23:50:03	Sumangal Rajkonwar	Male	Digboi College	Digboi Tinsukia	Life Sciences	Student
6/16/2023 18:22:31	Tinamoni Hazarika	Female	Duliajan College	Jayanagar, Duliajan, Dibrugarh. Pin.:	Botany	Assistant Professor
6/18/2023 20:08:24	Hritik Raj Gogoi	Male	Gargaon College	Simaluguri	Zoology	Student
6/19/2023 19:10:37	Nawab Sami Ali	Male	Gargaon College	Simoluguri	Botany	Student
6/16/2023 17:13:34	Madhujya Gogoi	Male	Gargaon College	Gargaon College,Simaluguri	Botany	Student
6/16/2023 16:57:14	Arfa Ahmed Bora	Female	Gargaon College	Simaluguri	Botany	Student
6/16/2023 14:14:14	Azhara Akhtar	Female	Gargaon College	Gargaon,Balighat	Botany	Student
6/17/2023 21:28:55	Bikram Sing Regon	Male	Gargaon College	Simaluguri	Botany	Student
6/16/2023 17:27:27	Bitikha Gogoi	Female	Gargaon College	Simaluguri	Botany	Student
6/16/2023 17:13:59	Borasha Chutia	Female	Gargaon College	Simaluguri	Botany	Student
6/17/2023 21:33:06	Chimon Changmai	Male	Gargaon College	Simaluguri	Botany	Student
6/16/2023 14:08:59	Deepshikha Kalita	Female	Gargaon College	Simaluguri,Dist :Sivasagar(Assam)	Botany	Student
6/16/2023 14:05:19	Geetashree Borboruah	Female	Gargaon College	Simaluguri- 785686,assam	Botany	Student



# Photographs of the Programme: Day 1



## BIODIVERSITY OF NORTH EAST INDIA *My journey as a Plant Taxonomist*



# Day 2

Zoom Meeting | You are viewing Gargaon College's screen | View Options

Sandeepa | Sandeepa Agar... | Gargaon College | 75602af5 | Ashish Kar

**teri**

## LOCAL PLANT RESOURCES: IN TRADITIONAL KNOWLEDGE SYSTEM AND LIVELIHOOD SCOPE

Ashish Kar, Ph.D  
Fellow (Scientist) & Area Convenor  
The Energy and Resources Institute (TERI),  
Northeastern Regional Centre,  
VIP Road, Chachal, Guwahati, Assam

Participants (34)

- Sandeepa (Co-host, me)
- Gargaon College (Host)
- Ashish Kar (Co-host)
- Sandeepa Agarwalla (Co-host)
- 75602af5
- Anamika
- Anirban Kashyap
- Azhara Akhtar
- Barakha
- Bornali Chetia
- Deepshikha Kalita
- gayatri Gogoi
- Jenshmita Saikia
- Krish Dutta
- Lakshmita das
- Lucky Rajkumari

Unmute | Start Video | Security | Participants | Chat | Share Screen | Record | Reactions | Apps | Leave | Invite | Mute All

26°C Cloudy | Search | ENG IN | 19:12 19-06-2023

Zoom Meeting | You are viewing Gargaon College's screen | View Options

Sandeepa | Gargaon College | Ashish Kar | Sandeepa Agar... | Porismita Saikia | Barakha

### Natural Dye yielding plant

*Myrica esculenta* (Naga tenga) - Stem bark (yellow)

*Artocarpus lakoocha* - Stem bark (yellow/red)

*Garcinia morella* - Latex (yellow)

*Mallotus philippensis* - Fruit (Orange)

Participants (38)

- Sandeepa (Co-host, me)
- Gargaon College (Host)
- Ashish Kar (Co-host)
- Sandeepa Agarwalla (Co-host)
- 75602af5
- Anamika
- Anirban Kashyap
- Ashim borah
- Bakshista Chetia
- Barakha
- Echa Mech
- gayatri Gogoi
- Jenshmita Saikia
- Krish Dutta
- Lucky Rajkumari
- Mosliha

Unmute | Start Video | Security | Participants | Chat | Share Screen | Record | Reactions | Apps | Leave | Invite | Mute All

26°C Cloudy | Search | ENG IN | 19:43 19-06-2023

# Day 3

The image shows a Zoom meeting interface. At the top, a status bar indicates "LIVE" on YouTube and "You are viewing kkk darrang's screen". The main content is a Microsoft PowerPoint presentation titled "Mushroom cultivation - A profitable activity". The slide features a photograph of mushrooms and text identifying the presenter as Dr. Banashree Medhi, Subject Matter Specialist (Plant Protection) at Krishi Vigyan Kendra, Sivasagar, Assam Agricultural University. A sidebar on the right lists participants, with "Gargaon College" highlighted in a yellow box. Below the presentation, a smaller window shows a slide titled "Why Mushroom business is important?" with bullet points about market value and profit margins. The bottom of the screen displays the Zoom meeting controls, including Unmute, Start Video, Security, Participants (32), Chat, Share Screen, Record, Reactions, and Apps. The system tray at the very bottom shows the date and time as 20:05 on 20-06-2023.

**Mushroom cultivation - A profitable activity**

Dr. Banashree Medhi  
Subject Matter Specialist (Plant Protection)  
Krishi Vigyan Kendra, Sivasagar  
Assam Agricultural University

**Participants (32)**

- S Sandeepa (Co-host, me)
- GC Gargaon College (Host)
- KD kkk darrang (Co-host)
- DB Dr. BANASHREE Medhi (Co-host)
- SA Sandeepa Agarwalla (Co-host)
- SC Sangeta Chetia (Co-host)
- A Anjan Konwar
- AA Azhara Akhtar
- B Barakha
- BB BIBHUTI BURAGOHAIN
- DK Darchana Konwar
- JS Jenishmita Saikia
- JP Jhormali phukon
- LD Lakshmita das
- MR Mina Robidas

**Why Mushroom business is important ?**


- The global mushroom market was valued at 12.74 million tons (MT) in 2018 and is projected to reach 20.84 million tons (MT) by 2026, exhibiting a CAGR of 6.41% in the forecast period.
- High Benefits cost ratio of the mushroom
- Mushroom business profit margin : profit margin between 30% to 60% in every condition.

# Day 4

**3. Silkworm Rearing Techniques**

**Indoor rearing – Mulberry & Eri**

1. Well ventilated fly proof house.
2. Room Disinfection.
3. Kept the Dfls in medium cool place.
4. 23°C to 28°C and 75% to 85% relative humidity for better growth.
5. Feed on time.
6. Feed tender leaf in 1<sup>st</sup> & 2<sup>nd</sup> instar.
7. Medium leaf to 3<sup>rd</sup> & 4<sup>th</sup> instar.
8. Matured leaf to 5<sup>th</sup> instar.
9. harvest the ripen worms and kept in a dry leaf chamber called Jhali to form cocoon.



**Outdoor rearing – Muga & Tasar**

1. Tie the dfls/Kharika around the trunk of the food plant.
2. Protect the worms from predators.
3. Transfer the worms to the suitable foodplant if needed.
4. Harvest the ripen worms and kept in a dry leaf chamber called Jhali to form cocoon

**SILKWORM NATURE**

- Four Moults
- Five Instar
- Metamorphosis



# Day 5

LIVE YouTube



Recent Advances in Research on Traditional Knowledge of Medicinal Plants in the light of Sustainable Development Goals (SDG)

**Lecture series on Botany**  
**Gargaon College**

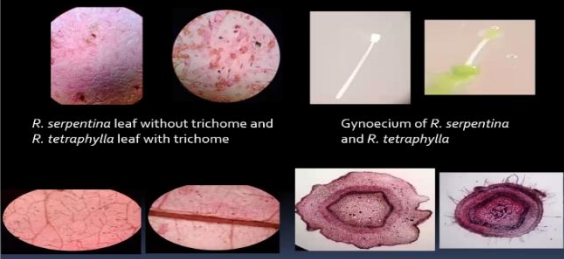
Presented by-  
Devanjal Bora  
Senior Scientist (Botany)  
North East Herbarium of Ayurveda Research (NEHAR)  
Central Ayurveda Research Institute, Guwahati (Assam)  
Ministry of Ayush, Govt. of India

Devanjal Bora

Zoom Meeting You are viewing Devanjal Bora's screen View Options

LIVE YouTube

Morphological and Anatomical differentiation



*R. serpentina* leaf without trichome and *R. tetraphylla* leaf with trichome

Gynoecium of *R. serpentina* and *R. tetraphylla*

Leaf venation of *R. serpentina* and *R. tetraphylla*

Stem anatomy of *R. serpentina* and *R. tetraphylla*

Devanjal Bora

Unmute Start Video Security Participants 37 Chat Share Screen Record Reactions Apps

30°C Mostly cloudy

## Wildlife Conservation in Medieval India

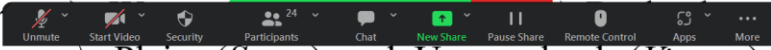
The rhinoceros existed in the plains of the Indus valley in the vicinity of Mohan-jo-Daro 5000 years ago.

The swamp deer or barasingha was found in Mehrgarh in Baluchistan till around 800 BC

King Ashoka made a law in the matter of preservation of wildlife and environment. He was the establishment of hospital for medical treatment for human and animals; presumably the first of the “Veterinary hospital” in the world.

The *Arthasastra* divided the country between the Himalayas and the oceans into various kinds of regions - Forests (*Aranya*), Village areas (*Gramya*), Mountains (*Parvata*), Plains (*Sama*) and Uneven lands (*Visawa*).

A screenshot of a Zoom meeting interface. At the top, the name 'Sandeepa' is displayed. Below it, a small video thumbnail shows a person with the device name 'OnePlus CPH2381'. The participant list includes: 'Ms. Sangeeta C...', 'Ms. Sangeeta Chetia', 'Sandeepa Agar...', 'Sandeepa Agarwalla', 'DIMBESHWAR...', and 'DIMBESHWAR DAS'. A red 'Stop Share' button is visible at the bottom of the interface.



# Day 7

Zoom Meeting interface showing a presentation on fossils and a field site. The presentation includes images of macrofossils and microfossils, and a photograph of an excavation site at Nongkhum river island, West Khasi Hills.

**FOSSILS**

**MACROFOSSILS**

**MICROFOSSILS**

**Nongkhum river island, West Khasi Hills**

**Participants:**

- Sandepa (Gargaon College)
- Pollob sahu (Nilupol Boruah)
- Nayanmoni Chetia
- Sonia Koiri
- DIMBESHWAR DAS (Birekananda Ghosh)
- Sandepa Agarwalla
- Shyamol
- Azhara Akhtar
- Mosliha
- Sangeeta Chetia (Sankha Kalita)
- Niha Mech (Echa Mech)
- Barakha
- Pranati (gayatri Gogoi)
- BIBHUTI BURAGOHAIN

**Participants (Second Meeting):**

- Sandepa
- Pollob sahu
- Nayanmoni Chetia
- Sandepa Agarwalla
- Mosliha
- Sangeeta Chetia (Sankha Kalita)
- Barakha
- Pranati (gayatri Gogoi)
- Dr. RAJIB GOGOI (Dr. RAJIB GOGOI)
- Porismita Saikia (Porismita Saikia)
- Darchana Konwar
- Gargaon College
- Khusboo Agarwal (Connecting to audio...)
- Azhara Akhtar
- Shyamol
- Prity konwar
- Jenishmita Saikia

System tray: 34°C Haze, Search, Participants: 23, Chat, Share Screen, Record, Reactions, Apps, ENG IN, 17:39, 26-06-2023