

## BOTANY: DEPARTMENTAL ACTIVITY

YEAR:2022-23

- **Botanical Society of Bengal: Maiden Outreach Event**

THE Botanical Society of Bengal selected our college to launch its social outreach programme on December 17, 2022. The objective of this event was to get in touch with both honours and general undergraduate students of our department through an awareness programme entitled “Plants and Society” that covered diverse fields of botany and their potential role in entrepreneurship. The popular lectures by Prof. Ruma Pal, President of the Society, followed by Prof. Santanu Pal and Dr. Debabrata Maity, all from the University of Calcutta, and Dr. Biswajit Ghosh, from RMKVC College, Rahra, were followed by a live demonstration of algal culture and a plethora of algal products, as a novel plant resource for creating new business innovations and opportunities (see figs.).



- **A Workshop Conducted by Our Alumnus**

The department organized on November 17, 2022, a hands-on training workshop in herbarium techniques for the Honours students. Dr Shuvadeep Majumdar, Assistant Professor, Dept. of Botany, Parimal Mitra Smriti Mahavidyalay, and an alumnus, was the resource person. The initial session in Vivekananda Sabhaghar provided the students with an in-depth impression of herbaria and its specimens. The next session involved the collection of plant specimens in the college campus (see fig.). Finally, the nuances of preparing herbarium specimens were aptly demonstrated in the General Laboratory of the department (see fig.). The participants prepared 10 herbarium specimens now deposited in the departmental herbarium.



- **A Himalayan Voyage for Excursion: Sittong the “Orange Village”**

This year, like every year, the department organised an excursion to the Darjeeling hills of the Eastern Himalayas, from May 12 to 17, 2023. Dr Sutapa Kumar (Rai), Prof. Meenakshi Mukhopadhyay and Dr Kuntal Narayan Chaudhuri escorted and guided eleven Botany Honours fourth-semester students at (Middle) Sittong, Kurseong, West Bengal.



- **Our Students at the Science Fair in the First Botanical Congress (2023) organised by the Botanical Society of Bengal in collaboration with the University of Calcutta**

The students of our department represented the college at the Science Fair for school students on the second day of the First Botanical Congress (2023) of the Botanical Society of Bengal, at the Ballygunge campus of the University of Calcutta, on March 24, 2023 (see fig.). Our pavilion, named “The Green Window” was an endeavour to explore art in life, bring science to society, and nurture participants demonstrated simple plant-based innovations as sustainable living models: “Reviving a Dying Art: Traditional Vegetable Dyes from Plants”, “Herbal Cosmetics: The Natural Way to Beauty” and “Reduce, Reuse, Recycle: Eco-friendly Seed Paper Pens”; and received the President’s Special Prize after the Botanical Congress.



- **Workshop on Plants as Indicators of Air Pollution**

THE department along with the IQAC of the college organized a State-Level Workshop entitled “Understanding the Urban Air Pollution through Plant’s Responses” on May 7, 2022. The invited resource person was Dr. Abhijit Sarkar, Assistant Professor, Dept. of Botany, University of Gour Banga, Malda, who works in the field of stress biology in microbes and plants, specializing in urban air pollution and its mitigation through higher plants. At the gathering in Vivekananda Sabhaghar, Dr. Sarkar delivered a detailed talk on air pollution and its harmful effects on plants. This was followed by a hand-on session in the General Laboratory and Instrument Room of the department.



- **A Talk by Our Alumna**

The department also organized an International seminar entitled “Understanding Angiosperm Evolution: A Cytogenetics Perspective” on April 21, 2022. The resource person was Dr. Sreetama Bhadra, an alumna (batch of 2005). Presently, she is sDIV Postdoctoral Researcher at the German Centre for Integrative Biodiversity Research, Halle Jena-Leipzig, Germany. Earlier, she had worked as a post-doctoral researcher at the Xishuangbanna Tropical Botanical Garden, in China, and the Central European Institute of Technology, Czech Republic. Her engaging and enlightening talk focused on the current understanding the role of genome size and polyploidy on the adaptation, distribution and evolution of plants in general, and the angiosperms in particular.





## YEAR: 2021-22

- **Excursion to the Himalayas: Tea Terrains of Pokhriabong**

After three years, the department once again organised an excursion to the Darjeeling hills of the Eastern Himalayas, from May 11 to 15, 2022. Off the beaten track, Dr. Sutapa Kumar (Rai), Prof. Meenakshi Mukhopadhyay and Dr. Kuntal Narayan Chaudhuri guided sixteen Botany Honours



fourth-semester students at Pokhriabong, Darjeeling, West Bengal. This lush green valley of the Darjeeling hills, nested on the edge of the forested Nagri Spur, is dotted with eight tea estates, dhupi plantations and hamlets of tea workers. The monotony of this monoculture is broken by tracts of virgin mixed temperate forest. The rich flora of the Eastern Himalayas was documented during a field study with Mr. Dipchen Bhutia, the local guide, along a trekking trail (1,571 to 1,700 m) from Shikari Busty to Avongrove Tea Estate

(see fig.). Two economically valuable introduced species tea (*Thea sinensis*) and dhupi (*Cryptomeria japonica*), dominated the landscape, but a rich diversity of weeds, both native and alien, were also recorded. Many of these are valuable in local ethnomedicinal practices. Native home and kitchen gardens were found to be repositories of wild and cultivated edible, medicinal and ornamental plants. Finally, tea processing was observed during a visit to the tea factory.

## YEAR: 2020-21

### A National Webinar on Ethnobotany

The department, in collaboration with the IQAC of the college, successfully organized a National Webinar entitled “Ethnobotanical Study of Traditional Knowledge: The Key to Better Future” on August 8, 2020. The resource person was Prof. Abhaya Prasad Das, Adjunct Professor, Dept. of Botany, Rajiv Gandhi University, Itanagar, Arunachal Pradesh. In his talk, Prof. Das shared his vast experience in and profound insights on the ethnobotanical wealth of India in general, and the Eastern Himalayas in particular.

**National Webinar**  
**ETHNOBOTANICAL STUDY OF TRADITIONAL KNOWLEDGE**  
**THE KEY TO BETTER FUTURE**

Jointly Organized By  
**Department of Botany and IQAC, Vivekananda College, Thakurpukur**  
On 08.08.2020 from 4 PM to 6 PM  
Venue: Google Meet  
Registration link: <https://forms.gle/3YU134543>

**ORGANISING COMMITTEE**  
Chief Patron: Dr. Tapan Kumar Poddar (Principal)  
Patron: Dr. Suman Prasad Mishra (IQAC)  
Joint Organizers: Dr. Animesh Mukherjee (Head), Dr. Anup Kumar Paul  
Organizing Secretary: Dr. Sutapa Kumar Rai  
Other Members: Prof. Meenakshi Mukhopadhyay, Dr. Kuntal Narayan Chaudhuri, Mrs. Anita Das, Mrs. Shikha Mukherjee, Mrs. Indira Ray

**FACULTY MEMBERS, RESEARCH SCHOLARS AND STUDENTS ARE WELCOME**  
Maximum number of participants is 750 on a first-come first-served basis.  
Last date of registration is 04.08.2020.  
Meeting link will be sent by e-mail to the participants on 04.08.2020.  
Link of the meeting form will be sent by e-mail after completion of the webinar.  
A certificate will be provided to registered participants only after the submission of the feedback form.  
For updates visit the website please visit the link: [www.vivekananda.org](http://www.vivekananda.org)

**Resource Person**  
**PROF. ABHAYA PRASAD DAS**  
Adjunct Professor  
Dept. of Botany  
Rajiv Gandhi University  
Itanagar  
Arunachal Pradesh

**Third Alumni Talk Series**  
WEBINAR ON  
**Herbarium Methodology and Techniques**  
27th February 2021 (Saturday) 4 to 6 PM  
Joining link: <https://meet.google.com/eqd-rtbv-vgp>  
RESOURCE PERSON  
**Dr. Shuvadeep Majumdar**  
Assistant Professor, Dept. of Botany, Parimal Mitra Sankul Mahavidyalaya, Jalpaiguri

**Patron**  
**Dr. Tapan Kumar Poddar**  
Principal, Vivekananda College, Thakurpukur

Jointly Organize By  
**The Department of Botany, Vivekananda College, Thakurpukur**  
Along with the Alumni Association of the Department of Botany, Vivekananda College

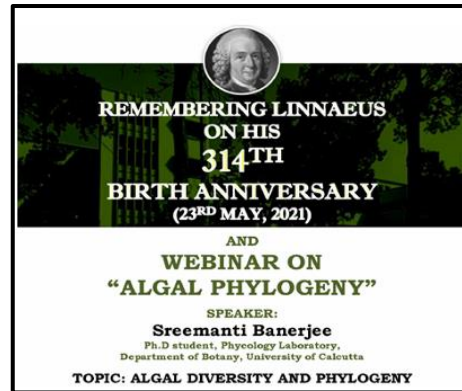
### A webinar on Herbarium Methodology and Techniques

The department and its Alumni Association invites eminent alumni to their Alma Mater to share their academic achievements and inspire our students. The lockdown had deprived students of field studies. Thus, a webinar was organized on Herbarium Methodology and Techniques on February 21, 2021. The resource person was Dr. Shuvadeep Majumdar, Assistant Professor, Dept. of Botany, Parimal

Mitra Smriti Mahavidyalaya, an alumnus (batch Study of Traditional Knowledge: The Key to Better Future” on August 8, 2020.

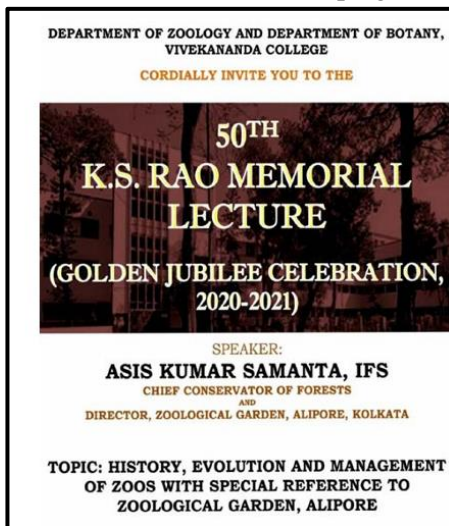
- **A Virtual Talks by Our Alumnus**

On the occasion the 314th birth anniversary of Carolus Linnaeus, a webinar on Algal Phylogeny was organized on May 23, 2021. The resource person was Smt. Sreemanti Banerjee, Ph.D. student at the Phycology Laboratory, Dept. of Botany, University of Calcutta, an alumna of this department.



- **Golden Jubilee: The 50th KS Rao Memorial Lecture**

November 29, 2020, was a poignant yet red lettered day in the history of the department of



Biological Sciences of this college. Unfortunately, half a century ago, KS Rao, a promising undergraduate student had passed away in an accident while collecting sea urchins near the beach during a field study in far-away Kanyakumari, Tamil Nadu. His teachers, batch mates and all the stakeholders of the present departments of Botany and Zoology have kept his memory alive by inviting prominent scientists to deliver lectures to enrich us. This has remained an unbroken tradition for the last five decades. The 50th KS Rao Memorial Lecture (Golden Jubilee celebration) was jointly organized with the department of Zoology on January 9, 2021, using the in the virtual platform. The resource person was Sri Asis Kumar Samanta, IFS, Chief Conservator of Forests and

Director, Zoological Garden, Alipore, Kolkata. He delivered the lecture entitled “History, Evolution and Management of Zoos with special reference to Zoological Garden, Alipore”

- **Beating the Lockdown Blues**

- The COVID-19 pandemic had a far-reaching bearing not only on our bodies but also on their minds. As teaching and learning gradually adapted itself to the virtual space, a handful of innovative measures during the lockdown period tried to draw them into the real world. World Music Day was observed on July 21, 2020, with the compilation of a video of vocal and instrumental performances by the students, teachers, and alumni, entitled the “**Garden of Melodies.**”



- On Independence Day, 2020, another video was similarly compiled that featured songs, poetry, dance and art. A documentary short film competition entitled “Plant Short Stories” was organized among the departmental students for the theme “Lockdown and the Plant World around Us”. **These were screened as part of the celebrations of World Environment Day.**



## YEAR: 2019-20

- **An Excursion to the Eastern Himalayas: Darjeeling and Chota Mangwa**

An excursion to the Darjeeling Hills, Darjeeling, West Bengal, from February 10 to 15, 2020, with twenty Botany Honours fourth-semester students guided by Prof. Meenakshi Muphpadhyay and Dr. Asis Kumar Pal. The rich Eastern Himalayan flora was documented during the fieldwork in and around Darjeeling Town (see figs.). The Darjeeling Himalayan Region, aptly called the “Queen of the Hills,” is on the south-western edge of the Eastern Himalayas. With about 40% forest cover, the broad altitude range of 150 m to 3,600 m favours a wide array of climatic zones with luxuriant vegetation and diverse flora. The Lloyd Botanic Garden (established in 1878) is located in the heart of this hill station and houses a conservatory, herbarium and orchidarium. The team also visited the Lepcha hamlet of Chota Mangwa (1,768 m), nestled atop a forested ridge overlooking the confluence of the rivers Teesta and Rangeet, as well as the Orchid Research Station of Takdah (1,602 m) harbouring an enviable collection of epiphytic and terrestrial orchid species of the Eastern Himalayas.



- **Notable Achievements by Our Alumnae**

These are indeed a couple of silver linings in the middle of a global gloom. The department members feel proud of two noteworthy achievements by two of our alumnae, both from batch of 2006. Ms. Urmi Chakraborty, Senior Research Associate at Pivot Bio, Berkeley, California, USA, has recently published a research article along with her co-investigators in the prestigious periodical Nature—the leading multidisciplinary science journal in the world. This research paper is entitled “Action of a Minimal Contractile Bactericidal Nanomachine.” Dr. Suvarthi Das, Postdoctoral Fellow at Stanford University, California, USA, has become part of a large-scale immunity test against COVID-19. During this mammoth exercise, the first of its kind in America, this team of 300 scientists, doctors and health workers led by Prof. Eran Bendavid are testing 3,200 people in Santa Clara, California, to devise sustainable mitigation methods and policies.

## YEAR: 2018-19

- **An Excursion to the Eastern Himalayas: Rishyap and Lava**

The department organised an excursion to Rishyap and Lava, Kalimpong, West Bengal, from November 15 to 21, 2018, with 29 Botany Honours second year students guided by Dr. Asis Kumar Pal and Dr. Ashutosh Mukherjee. The rich flora of the Eastern Himalayas was documented during the



fieldwork including a trek from Rishyap to the hilltop of Tiffin Dara along the Neora Valley National Park (see figs.). Rishyap (2,360 m) is a Lepcha hamlet nested on a forested slope of the Neora valley. Lava (2,138 m) is a hill station near the entry point to the Neora Valley National Park. The excursion team visited the Lava Research Station, a silviculture unit harbouring a rich collection of commercially- and medicinally important plant species of this region.

- **The 49th KS Rao Memorial Lecture and Photo Contest**

The Memorial Lecture was jointly organized with the Department of Zoology in the Vivekananda Sabhaghar of the college.

Prof. Ruma Pal, Professor, Department of Botany, Calcutta University, was the Chief Guest on this occasion. She delivered the memorial lecture entitled: “Algae in Aquatic Ecosystem: Diversity and Biotechnology.” Prof. Sirsendu Gayen, Convenor, Photography Cell of the college, adjudicated the 1st position to Santanu



Das (1st-semester student, Arts General), 2nd position to Ahana Bera (3rd-semester student, Zoology) and 3rd position to Adil Chowdhury (3rd-year student, Zoology). The “honourable mention” list includes Shrutarshi Maiti (3rd semester student, Botany).

- **An Excursion to the Palani Hills (Southern Western Ghats)**

- The department organised an excursion to Kodaikanal, Tamil Nadu, from October 30



to November 6, 2017, with eighteen Botany Honours second year students guided by Dr. Sutapa Kumar (Rai) and Dr Kuntal Narayan Chaudhuri. The rich flora of the Southern Western Ghats was documented during the urban trails around the Kodai Lake and the forest trails at the Tiger Shola Reserve Forest and the Berijam Lake and Reserve Forest. Reserve Forest Kodaikanal Wildlife Sanctuary, is 20 km from the town. There is a botanic garden, Bryant

Park, built in 1908 by a forest officer HD Bryant after whom it is named.

- **Farewell to Sri Dushasan Jena**

On February 28, 2018, the departmental staff, both present and former, gathered in the Honours Laboratory to felicitate Sri Dushasan Jena, on his retirement after serving the department for more than 40 years. With his well-known “green fingers,” he had devotedly nurtured most of the important plants of ell-known “green fingers,” he had devotedly nurtured most of the important plants of our college campus over the decades.

