



**BOTANICAL SOCIETY
OF ASSAM**



INTERNATIONAL CONFERENCE

on

“Emerging Frontiers in Biological Sciences: A focus on Climate Change, Agrotechnology, and Entrepreneurship”

Date: 15th to 17th May, 2024

Join Zoom Meeting

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Meeting ID: 856 1013 1412

Passcode: 2345

PROGRAMME SCHEDULE

DATE	VENUE	TIME	PROGRAMME
15.05.24	Central Auditorium	8.30 am onwards	Registration
		9.30 am	Inviting Dignitaries to the Dias
		9.32 am	The lighting of ceremonial lamp and Saraswati Bandana
		9.37 am	Welcome address
		9.40 am	Speech by Prof. R. K. Sharma, Advisor USTM
		9.43 am	Speech by Prof. G. D. Sharma, Honorable Vice-Chancellor, USTM
		9.47 am	Speech by Honourable Chancellor, Mr. M. Hoque, USTM
		9.50 am	Brief introduction of the chief guest
		9.55 am	Vote of thanks
		10.00 - 10.20 am	Tea Break
15.05.24	C Block NKC Auditorium	10.20 am	Chairperson: Prof. D. K. Sharma Department of Zoology, USTM Co-Chairperson: Dr. Y. K. Mohanta
		10.25 -11.05 am	Keynote address by Dr. A. K. Sharma Director General, NECTAR
		11.05 -11.50 am	Plenary lecture 1: Prof. S. J. Joshi Deputy Director, Amity Institute of Microbial Technology and Former Deputy Director, Central analytical and application research unit Sultan Quaboos University, Oman
		11.50 – 12.25 pm	Plenary lecture 2: Prof. P.P. Baruah Department of Botany Gauhati University Assam-781014

		12.25pm-1.10pm	Plenary lecture 3: Prof. Mahesh Narayan (online) Department of Chemistry and Biochemistry, UTEP, El Paso, TX, 79968 USA
		1.10 – 2.00 Pm	Lunch
		2.00 pm-3.30 pm	Technical Session 1A,1B, 1C (offline)
		3.30 pm-5.00pm	Technical Session 1D, 1E, 1F (offline)
		5.30 pm onwards	Cultural programme
		7.00 - 8.00 pm	Dinner
		9.00 - 10.00 am	Breakfast
16.05.24	C Block NKC Auditorium	10.10 am	Chairperson: Prof. Hilloljyoti Singha Professor, Department of Zoology, Bodoland University, Kokrajhar (BTR), Assam Co-Chairperson: Dr. T. Bhuyan
		10.15-11.00am	Plenary lecture 4: Prof. M. N. V. Prasad (online) University of Hyderabad 500046, Telangana, India
		11.05-11.50 am	Plenary lecture 5: Dr. Debajit Thakur (offline) Institute of Advanced Study in Science and Technology, Guwahati, Assam
		11.50 – 12.00 pm	Tea Break
		12.00 1.30 pm	Technical Session 2A, 2B (offline)
		1.30-2.30 pm	Lunch
		2.30-3.15 pm	Plenary lecture 6: Prof. Giulia Guerriero (online) Federico II University, Naples (Italy)
		3.20-5.00 pm	Technical Session 2C, 2D, 2E (online)
17.05.24	C Block NKC Auditorium	9.30 am	Chairperson: Prof. Dr. B. K. Singh Former Director, Central Silk Board, Guwahati Co-Chairperson: Dr. Sony Kumari
		9.35-10.20 am	Plenary lecture 7: Dr. Kartik Neog Director, Scientist D & Head. MESSO, Guwahati
		10.30-11.15 am	Plenary lecture 8: Prof. Lohit Kumar Baishya (offline) In-Charge IARI Assam & Head (NRM) ICAR-Indian Agricultural Research Institute (IARI) Dhemaji, Assam-787034
		11.20-12.05 pm	Plenary lecture 9: Dr. Pankaj Bharali Scientist B, CSIR-North East Institute of Science and Technology, Pulibor, Jorhat, Assam 785006.
		12.10 -1.30 pm	Technical Session 3A (offline)
		3.00 - 5.00 pm	Valedictory function

Oral Presentation (15.05.2024)

Technical Session: 1A- 2.10-3.40 pm

Venue I: NKC Auditorium

CHAIRPERSON: PROF. TAPAN DATTA

CO-CHAIRPERSON: DR. JURIMONI SHAYAM

RAPPORTEUR: MS MARCHIA K SANGMA

THEMES: 1. Exploring Biodiversity: A Journey Through Systematics

THEMES: 2. Community-Based Conservation

S.No.	Authors	Title
	Prof. Hilloljyoti Singha	Lead talk
1	Niharika Saikia, Arup Nama Das and Aditya Das	Diversity of Wetland Birds in Neamati-Kokilamukh Wetlands Area of Jorhat District, Assam, North Eastern India
2	Annielarie L Lyngkhoi and Saikat Majumdar	Plant Species diversity of home gardens and its contribution to Sustainable Agriculture in Mairang Block, Eastern West Khasi Hills, Meghalaya
3	Barnali Das and Himu Roy	The family Zingiberaceae Martinov from Garbhanga Reserve Forest of Assam, India: A Taxonomic Study
4	Himamani Kalita and Partha Pratim Baruah	Diversity assessment of Charophytes from Amchang Wildlife Sanctuary: A Protected Area of Assam, India
5	Ruby Doley and Satya Nath Doley	Exploring the Rich Floristic Diversity of Dirgheswari in Kamrup, Assam, India
6	Dorothy Goswami and Nijara Goswami	Study on plant species associated with <i>Mesua assamica</i> (King & Prain) Kosterm. – an endangered species of Assam
7	Makbul Alom and Nazir Ahmad Bhat	Diversity and Distribution of the Genus <i>Pyrenaria</i> in North-East India.
8	Rashidul Islam, Thoishna Huidrom and Mercyful Cindy R. Marak	Study on the butterfly abundance in Garbhanga Reserved Forest of Assam, India
9	Saurabh Mardi	Where art thou cheetal in Raimona National Park: A preliminary study
10	Karabi Barman and Jyotishman Deka	Leaf trait characteristics of <i>Quercus griffithii</i> Hook.f. & Thomson ex Miq. (Paisang) along altitudinal gradient of Eastern Himalaya, India

Oral Presentation (15.05.2024)

Technical Session: 1B- 2.10-3.40 pm

Venue II: Room No-D201-C Block

CHAIRPERSON: DR. J.D. RAJKUMARI

CO-CHAIRPERSON: DR. UTPAL CHOWDHURY

RAPPORTEUR: MS LANUJUNGLA PONGEN

THEMES: 1. Genetic Diversity and Breeding Innovations

THEMES: 2. Gene Regulation and Expression

THEMES: 3. Biological Data Science

S.No.	Authors	Title
	Dr. Aniruddha Sarma	Lead talk

1	Takhelmayum Priyadini Devi, Bedabati Chowdhury and Md Aminul Islam	Estimation of genetic variability and character association of agronomical traits of <i>Curcuma caesia</i> Roxb
2	Subashi Sandhya Thakur and Amilia Nongbet	Evaluating the Cytogenotoxic Potential of <i>Embeliaribes</i> Aqueous Extract in <i>Allium cepa</i> Root Meristem Cells
3	Jahnabi Gogoi and Tikam Singh Rana	Genetic diversity of <i>Urariapicta</i> (Jacq.) Desv. ex DC. (Fabaceae) in India
4	Jinu Devi Rajkumari, Nayana Haloi and James Basumatary	Karyotype diversity and evolutionary relationship of some edible aroids (Araceae) species of Assam
5	Sourav Bhattacharjee and Jinu Devi Rajkumari	Karyotypic analysis of some genotypes of <i>Ixora coccinea</i> L.
6	Shruti Dasgupta, Shaswatee Bhattacharjee and P.P. Baruah	Biological Data Science, Nitrogen mediated lipid enhancement in <i>Geminella</i> sp.
7	Priyakshi Hazarika, Nilamjyoti Kalita and P. P. Baruah	Biological Data Science, Chemical treatment assisted copper biosorption by <i>Leptolyngbya ectocarpi</i> under in vitro condition
8	Aniket Das, Nilamjyoti Kalita and P. P. Baruah	Biological Data Science, Copper mediated growth behaviors of <i>Leptolyngbya ectocarpi</i>
9	Nilofer Sheikh, Pallabika Dihingia and Chinta Mani Sharma	GC-MS and molecular docking analyses of phytochemicals from the underutilized plant species of the genus <i>Dioscorea</i> from N.E. India
10	Werina Ingtipi, Daradi Goswami and Sayantan Saha	Assessment of some anti-nutritional properties of few edible aroid's species of Assam

Oral Presentation (15.05.2024)

Technical Session: 1C- 2.10-3.40 pm

Venue III: Room No-E113-E Block

CHAIRPERSON: PROF. N. DEVI

CO-CHAIRPERSON: DR. SANJIB BARUAH

RAPPORTEUR: DR BARASA MALAKER

THEMES: 1. Ethnobiology and Indigenous Knowledge

THEMES: 2. Environmental Sustainability through Traditional Practices

S.No.	Authors	Title
	Dr. Sanjib Baruah	Lead talk
1	Nayan Pathak, Abu Sharif Hilali and Anamika Kalita	Folklore herbal remedies used by the people of Barkhetri Sub-division, Nalbari, Assam
2	Snigdha Saikia, Nibedita Das and Amal Bawri	A Review on Ethnomedicinal plants (Genus <i>Solanum</i> L.) of Meghalaya, India: used in the treatment of <i>Diabetes Mellitus</i>
3	Marufa Ibnat and Kuno Chuzho	Ethnobotanical, Phyto-chemical and pharmacological aspects of Zingiberaceae species with special emphasis of <i>Curcuma aromatica</i> and <i>Kaempferia galanga</i>
4	Bonchi Marak, Amilia Nongbet and Nazir Ahmad Bhat	An Ethnobotanical Exploration of the Garo Tribe's Medicinal Flora in South Garo Hills, Meghalaya
5	MindarIngti and Bedabati Chowdhury	Study of ethnomedicinal plants for treatment of various diseases used by the traditional healer of Mayong Area of Morigaon district of Assam.
6	Juli Gogoi	Assessment of Medicinal Plant Diversity of Majuli College Campus, Kamalabari, Majuli
7	P. Nath, S.I. Bhuyan and M.R. Das	Traditional conservation practices by the Tiwa Tribe of Assam

8	Shaswatee Bhattacharjee and P.P. Baruah	<i>Scenedesmus</i> sp.: A potent microalga for sustainable biodiesel production
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Oral Presentation (15.05.2024)

Technical Session: 1D- 3.40 pm-5.10pm

Venue I: NKC Auditorium

CHAIRPERSON: PROF. P.P. BARUAH

CO-CHAIRPERSON: DR. JYOTISHMAN DEKA

RAPPORTEUR: MS TAKHELMAYUM PRIYADINI DEVI

THEMES: 1. Biological Monitoring of Ecosystem Health

THEMES: 2. Harmony in Flux: Nurturing Ecology Amidst Climate Change

THEMES: 3. Biological Responses to Climate Variability

THEMES: 4. Aquatic Biology and Bioreclamation

S.No.	Authors	Title
	Dr. Rebecca Daimari	Lead talk
1	Marchia K. Sangma and Mautushi Das	Bioreclamation of mine waste water by filamentous green algae in Simsang River of Garo hills, Meghalaya
2	Priyanka Kalita and Jimmy Y Yumnam	Relationships between Phytosociological Attributes and Carbon Stock of Tree Species in a Tropical Moist Deciduous Forest of Assam, Northeast India
3	Jafrin Farha Hussain and Sabitry Bordoloi	An insight into the dwindling Basistha hill stream and the unique fish fauna it inhabits
4	Priyanka Bhuyan, M.R. Das and S.I. Bhuyan	Changes in the soil pH and other chemical parameters under different Forest Sites of Behali Wildlife Sanctuary, Assam
5	Anima Kutum, Pranita Hajong and S.P Saikia	Seasonal Variation of Aquatic Macrophytes in relation to water parameters of Herharibeel, Golaghat, Assam
6	Klimchari Rongpipi and Pranita Hajong	Review on Freshwater Algal Flora of the Hill District of Assam, Northeast India
7	Clarify C Marboh and Jyotishman Deka	An Assessment of Soil Microbial Respiration associated with Surface Coal Mining Area of Meghalaya, N.E India
8	Ilinti Mary Syiem and Jyotishman Dekai	Assessing Soil Organic Carbon Content in a Coal Mining Area of Meghalaya, N.E India
9	Hunmily Teronpia, Partha Pratim Baruah and Dandadhar Sarma	Eco-Friendly Feeding: Exploring Microalgae as a Sustainable Alternative in Fish Farming
10	Bonani Deori and Baharul Islam	Exploring Sustainable Wetland Management for Climate Change Mitigation: A Comprehensive Legal Study
11	Parbin Nahar Begum and Eahya Al Huda	Impact of Climate Change on Various Hydrometeorological factors in the Manas River Basin: A Comprehensive Study of Environmental Consequences and Conservation Strategies
12	Bulbul Acharjee, Deepshikha Baruah, Parag Deka and Gargee Kashyap	Climate change and its impact on fish and fisheries - an overview
13	Kavita Basumatary, Dharmeswar Barman and Pradip Kumar Baruah	Assessing the impact of Climate Change on Macrophyte Diversity in Urpad Beel

Oral Presentation (15.05.2024)

Technical Session: 1E-3.40 pm-5.10pm

Venue II: Room No-D201-C Block

CHAIRPERSON: PROF. K. TAYUNG

COCHAIRPERSON: DR. PAPORI DEVI

RAPPORTEUR: DR. MANJIT RAY

THEMES: 1. Microbial Interactions: Implications for Health, Agriculture, and Climate

THEMES: 2. Biological Pest Control: Sustainable Alternatives to Chemical Solutions

THEMES: 3. Symbiotic Agriculture: Harnessing Microbial Partnerships for Crop Health

S.No.	Authors	Title
	Dr. Arun Dutta	Lead talk
1	Pranami Bharadwaj and Debajit Thakur	Bioprospecting Endophytic Actinomycetia from Tea plants (<i>Camellia</i> spp.) for Plant Growth Promotion, Antagonistic Potential and Bioformulation for Sustainable Tea Productivity
2	Momita Basumatary and Shabiha Nudrat Hazarika	Harnessing Microbial Innovations: Revolutionizing Tea Health and Sustainability
3	Pranjal Morang	In vitro Solubilisation of Rock Phosphate (P ₂ O ₅) by Soil Fungi Isolated from Tea Agroecosystem.
4	Ipsita Bhattacharjee and P. K. Baruah	Comparison of locally available carbon sources for hyperproduction of citric acid using the method of induced mutation
5	Debajit Saikia, Satya Ranjan Sarma and P.K. Baruah	Studies on the Structural and Molecular Profiles of <i>Fusarium solani</i> , the Pathogenic Instigator of <i>Fusarium</i> Dieback Disease in Tea (<i>Camellia sinensis</i> (L.) O. Kuntze)
6	Apurba Das, Ashok Bhattacharyya, Ranjan Das, D.J. Nath, R.C. Boro, Dhananjay Singh and Dipen Adhikari	Biocontrol prospective of native rhizospheric microbiota to induce systemic defense in Soybean (<i>Glycine max</i> (L.) Merr.) defied with charcoal rot and water stress
7	Sukanya Das and Diganta Narzary	Biocontrol of <i>Fusarium</i> wilt in brinjal using soil yeasts <i>Papiliotrema laurentii</i> and <i>Saitozyma podzolica</i>
8	Nilam Sarma, Suresh Deka and Hemen Deka	Impact of carbon and nitrogen sources on rhamnolipid production and management of <i>Colletotrichum gloeosporioides</i>

Oral Presentation (15.05.2024)

Technical Session: 1F- 3.40 pm-5.10pm

Venue III: Room No-E113-E Block

CHAIRPERSON: PROF. MINA RAM NATH

CO-CHAIRPERSON: DR. HEMEN CH. MAZUMDAR

RAPPORTEUR: DR. JAYABRATA SAHA

THEMES: 1. Nutrient Uptake and Metabolism in Plants

THEMES: 2. Adaptive Strategies: Biological Responses to Environmental Stress

S.No.	Authors	Title
	Dr. Afrida Hussain	Lead talk
1	Milton Ahmad and Nazir Ahmad Bhat	Allelopathic Effects of some common weeds on Seed Germination, Growth and Biochemical Composition in <i>Brassica nigra</i> L. and <i>Oryza sativa</i> L.
2	Mriganka Shekhar Kashyap and Mehzabin Rehman	Effects of magnesium on the morpho-physiological parameters of rice (<i>Oryza sativa</i> L.) and it's antioxidant defense mechanism
3	Sashi Prava Devi	Variation of Soil Enzymatic activities in Petroleum Hydrocarbon Contaminated soil

4	Runa Rahman and Hrishikesh Upadhyaya	Impact of functionalized Zinc oxide nanoparticles (ZnO NP) on growth of rice seedling (<i>Oryza sativa</i> L.)
5	Insan Ara Rahman	Use of PCR-RFLP profile for constructing Phylogenetic Tree to determine the Evolutionary relationships of wild Solanums
6	Ankumoni Dutta and Anupom Borah	Garcinol ameliorate cognitive dysfunctions and accumulation of beta amyloid in arsenic exposed mice
7	Bandita Talukdar and Dandadhar Sarma	Morphological and histological changes in Gills, kidney and liver of fish <i>Channa punctata</i> (Bloch) exposed to Acid mine drainage
8	Nilamjyoti Kalita and Partha Pratim Baruah	Cu ²⁺ removal efficacy of <i>Scytonema guyanense</i> : a potent cyanobacteria for bioremediation
9	Sumi Das, Kandarpa Kumar Saikia and Sandeep Janghu	Potential Application of Lemon peel on Pectin, Essential oil and in Food Nanotechnology
10	SarangthemNolini Chanu and Mehzabin Rehman	Legumes as a Research Frontier for Sustainable Agriculture: A Review
11	SabnoorYeesrin Jyoti and Bhaben Tanti	Temperature stress induced morpho-physiological response in some traditional Citrus germplasms of Assam, India
12	Dipanjali Ray and Sandeep Das	Screening of some high yielding rice varieties of Assam, India, for their response to cadmium induced Abiotic stress

Oral Presentation (16.05.2024)

Technical Session: 2A- 12.00 1.30 pm
Venue II: Room No-D201-C Block

CHAIRPERSON: PROF. A. K. SHARMA

CO-CHAIRPERSON: DR. SUDORSHANA BORA

RAPPORTEUR: MR MAKBUL ALOM

THEMES: 1. Herbal Medicine in Traditional Healings

THEMES: 2. Transforming Agriculture for a Sustainable Future

THEMES: 3. Phytochemical Screening and Drug Discovery

S.No.	Authors	Title
	Dr. Puranjoy Mipun	Lead talk
1	Nita Wary and Silistina Narzari	Proximate nutrients and Atomic Absorption Spectroscopy mineral analysis of <i>Apis mellifera</i> honey from Bodoland Territorial Region (BTR), Assam
2	Kamallochan Barman, Lobsang Tashi, Nargis Akhtar, Abdul Motaleb, Ruksana Islam, Rahel Debbarma, Sazedur Rahman, Sudarshana Borah Khanikor and Sony Kumari	Investigation on Antimicrobial and Antioxidant properties of <i>Curcuma caesia</i> Roxb.
3	Jonali Brahma, AnuckIslary and Subhajit Ray	Phytochemical and Functional Characterization of <i>Garcinia</i> species: An underutilized fruit sourced from Bodoland territorial Region (BTR) of Assam, India
4	Aditya Bora, Pallab Kalita and Mustaf Alam Laskar	Evaluation of antioxidant properties and preparation of a transdermal patch from <i>Ficus hispida</i>
5	Lanujungla Pongen and Amilia Nongbet	Phytochemical Profiling and Evaluation of Antioxidant and Antibacterial Potentials in <i>Ilex venulosa</i> Hook. f. Leaf Extracts
6	Geetika Kalita and Highland Kayang	Role of Essential Oil of <i>Litsea cubeba</i> (L.) seeds as natural insecticide against aphids

7	Phirose Kemprai and Saikat Haldar	A 1H NMR Spectroscopic Method for the Quantification of Propenylbenzenes in the Essential Oils: Evaluation of Key Odorants, Antioxidants and Post-harvest Drying Techniques for <i>Piper betle</i> L.
8	Jibanjyoti Panda, Pinku Chandra Nath and Yugal Kishore Mohanta	Developing therapeutic foods by formulating symbiotic microcapsules using wild edible mushrooms (<i>Termitomyces</i> sp. and <i>Russula</i> sp.) as prebiotic resources
9	Bishali Gogoi and Nibedita Das	Antimicrobial and Phytochemical Screening of Ethnomedicinal Plants for the Formulation of Herbal Bath Soap
10	Dhritiman Das and Bhaargav Kumar Dutta	Farm-to-Fork Indoor Vertical Farming: A case study of climate resilient agribusiness from Guwahati, Assam

Oral Presentation (16.05.2024)

**Technical Session: 2B- 12.00 1.30 pm
Venue I: NKC Auditorium**

CHAIRPERSON: DR. DEBAJIT THAKUR

COCHAIRPERSON: DR. YUTIKA NARZARY

RAPPORTEUR: DR. BULBUL ACHARJEE

THEMES: 1. Microbial Interactions: Implications for Health, Agriculture, and Climate

THEMES: 2. Biological Pest Control: Sustainable Alternatives to Chemical Solutions

THEMES: 3. Symbiotic Agriculture: Harnessing Microbial Partnerships for Crop Health

S.No.	Authors	Title
	Dr. Bidisha Sarma	Lead talk
1	Nilufa Afruza and Dhritiman Chanda	The potential use Arbuscular Mycorrhiza (AM) fungi for the sustainable cultivation of medicinal plants in Ri-Bhoi District, Meghalaya
2	T Menangrichet Jamir and Dhritiman Chanda	The Potential use of Plant Growth Promoting Rhizobacteria (PGPR) for the cultivation of rare and endangered medicinal plants under stress climatic conditions of Mokokchung Nagaland: A Review
3	Puja Roy and Jintu Rabha	Isolation of bacteria from termite gut and evaluation of their lignocellulolytic and LDPE degrading potential
4	Hunmili Hansepi and Jintu Rabha	Studies on the potential of soil yeast isolates to control leaf spot of Brinjal
5	S S Zaman and H Kayang	Assessing the plant growth promoting potential of Rhizospheric bacteria in <i>Zingiber rubens</i> Roxb. across two districts in Meghalaya, India
6	S. Kalita, J. Shyam, H. C. Majumdar and U. Chowdhury	Isolation of Endophytic Fungi from different varieties of <i>Piper betle</i> L. leaf and qualitative screening of phytochemicals
7	Mairingdi Jarambusa and Pradip Kumar Baruah	Macrofungal diversity and ecology of Borail Reserve Forest of Dima Hasao district of Assam
8	Mamun Hasan Barbhuiya	Dealing with Antibiotic Resistance and Coping with Climatic Resilience
9	Rupshikha Patowary	Biosurfactant producing bacterium <i>Pseudomonas aeruginosa</i> S07 as potential degrader of Carbofuran

Oral Presentation (17.05.2024)

**Technical Session: 3A- 12.10 am-1.30pm
Venue I: NKC Auditorium**

CHAIRPERSON: PROF. S.R. PATGARI

COCHAIRPERSON: DR. DEBOJA SHARMA

RAPPORTEUR: MR AMLAN JYOTI GOGOI**THEMES: 1.** Agrotechnology and Biotechnology**THEMES: 2.** Transforming Agriculture for a Sustainable Future**THEMES: 3.** Eco-friendly Biotechnological Innovations**THEMES: 4.** Biosecurity in Agrotechnology: Safeguarding Global Food Systems

S.No.	Authors	Title
	Dr. Bula Chowdhury	Lead talk
1	Kishor Kumar Das and Raj Paul	Revolutionizing Agriculture in North Eastern India: AI-Powered Solutions for Sustainable Farming
2	Jesika M Sangma and Saikat Majumdar	Impact of Sustainable Agriculture on food security and poverty reduction in Samanda Block, East Garo Hills, Meghalaya
3	Effilyncy Lyngdoh Mawphlang and Saikat Majumdar	Improving Agricultural Productivity through Integrated Farming System (IFS) towards Sustainable Agriculture in Myllem Block, East Khasi Hills District, Meghalaya
4	Nabanita Baruah and Kandarpa Kumar Saikia	Preservation of over-ripe banana of <i>Musa balbisiana</i> Colla through wine production as a measure of waste management
5	Rohit Kumar Singh, Akalesh Kumar Verma, Manashpratim Talukdar and Namram Sushindrajit Singh	Optimizing nucleus material properties to enhance nacre formation and quality in freshwater pearl farming
6	Bijoy Sankar Goswami and Pradip Kumar Baruah	Comparative study on yield of potatoes under zero tillage rice straw mulching and conventional tillage in Barpeta District of Assam
7	Happymani Rabha, Jibanjyoti Panda and Yugal Kishore Mohanta	Sustainable valorization of Banana peels: a promising byproduct for food and pharmaceutical industry
8	Rajib Ratan Kashyap, Hatarkhi Mwchahary, Fangleng Narzary and Dulur Brahma	Plant-Based Biological Pest Control in Ericulture: A Sustainable Approach in Kokrajhar District
9	Sweety Kalita, Santosh Kumar and Avik Mukherjee	Development of edible coatings from chitosan and gelatin incorporated with nano-emulsified carvacrol for prolonging shelf-life of chicken breast fillet
10	Anand Basumatary and AnuckIslary	Nutritional composition of Gulsha Tengra (<i>Mystuscavasius</i>) cultivated in Biofloc Technology System in Northeast Region, India
11	P. T. Das, Me-E-SankiyooPassah, B. Saikia, B. K. Handique, K.K. Sarma and S. P. Aggarwal	Soil fertility mapping using Geo-spatial technology for sustainable agriculture in Sikkim

Poster Presentation (15.05.2024)**Technical Session: 1A- 2.00pm-4.00pm****Venue III: Room No-E101-E Block****JUDGES: PROF. MANJU RANI DEVI, PROF. RANEE DAS AND DR. MANDIRA SARMA****THEMES: 1.** Biodiversity & Systematics**THEMES: 2.** Ecology, Environment & Climate change**THEMES: 3.** Biological Responses to Environmental Stress**THEMES: 4.** Plant Physiology & Biochemistry**THEMES: 5.** Transforming Agriculture for a Sustainable Future**THEMES: 6.** Microbial Interactions

S.No.	Authors	Title
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1	Niranjan Roy, Arun Kumar Dutta and Bhaben Tanti	<i>Lactarius hatsudake</i> and <i>Russula straminella</i> : Two new geographical records of the family Russulaceae from India
2	Astha Das Borah and Afrida Hussain	Pyrrrolizidine: A natural alkaloid detection in tea leaves of some age-old tea gardens of Dibrugarh district
3	Trishna Moyi Das	Understanding the Impacts of Climate Change: Challenges and Solutions
4	Karishma Saikia and Nazir Ahmad Bhat	Enhancing Salt Stress Tolerance in Sesame (<i>Sesamum indicum</i> L.) via Calcium Application: Insights into Growth and Biochemical Responses.
5	Piucha Kalita and Afrida Hussain	Quantifying Lawsone Levels: A Comparative Study in Polluted and Non-polluted Zones of Assam
6	Prahelika Gogoi and Pradip Kumar Baruah	Isolation and identification of actinomycetes from forest soil, Teok, Jorhat, Assam
7	Rudrani Sinha and Pradip Kumar Baruah	Isolation and identification of Actinobacteria from soil samples of Jhanji river bed, Teok, Jorhat, Assam
8	Archana Saikia and Manoj Barthakur	Investigation of Endophytic Fungi from <i>Costus speciosus</i> (Koen ex. Retz.) and their Antimicrobial Activity
9	Sukanya Sarma and Partha Pratim Baruah	Assessment of Algal Biochemical Responses to Pb ²⁺ ion Stress in Brick Kiln Regions of Assam
10	Ridwan Asif Laskar and Mehzabin Rehman	Comparative analyses of cold stress induced antioxidant responses on Buro and Moricha rice varieties of Assam, India
11	Gouranga Boruah, Riya Salam, Rahel Debbarma, Sudarshana Borah Khanikor and Sony Kumari	Investigation on Antimicrobial and Antioxidant properties of <i>Streblus asper</i> Lour with special reference to periodontal diseases
12	Bhanita Das, Barsha Rani Gogoi, Oliulla, Mofida Bin Ahmed and Sudarshana Borah Khanikor	Evaluation of in vitro antioxidants and anti-inflammatory activities of an ethnomedical plant of Meghalaya
13	Bhabani Dasa and Prapty Das	Potential application of waste citrus peels as wide range of natural antimicrobial agent
14	Tajmin Sultana and Afrida Hussain	Comparative Study of Presence of Phytochemicals in Fresh and Commercial Powder of Henna Leaves
15	Abul Kashem and Nazir Ahmad Bhat	A Comprehensive Analysis of Chemical Composition and Bioactivity of <i>Pogostemon benghalensis</i> (Burm.f.) Kuntze Essential Oils: Exploring Therapeutic Potential Beyond Aromatics.
16	Sekhar Suman Deka and Nazir Ahmad Bhat	Antimicrobial Activity and Chemical Analysis of <i>Flemingia strobilifera</i> and <i>Acmella uliginosa</i> Leaf Extracts: Implications for Herbal Ointment Formulation
17	Sagarika Goyari and Manoj Barthakur	Antifungal Activity of an Endophytic Bacteria <i>Bacillus subtilis</i> MB1 Isolated from <i>Houttuynia cordata</i>
18	Dhirunabh Swargiary, Meghna Jaiswal, and Manoj Barthakur	Endophytic Fungal Diversity of <i>Houttuynia cordata</i> Thunb. and its Antifungal activity against fungal plant pathogens

N.B: Poster Size will be 120 cm by 90 cm.

Online Presentation (16.05.2024)

Technical Session: 2C- 3.20-5.00 pm

Venue II: Room No-D201-C Block

CHAIRPERSON: DR. NIZORA GOSWAMI

CO-CHAIRPERSON: DR. AMINUL ISLAM

THEMES: 1. Traditional knowledge system for utilization and conservation of Biodiversity.

THEMES: 2. Ecology, Environment & Climate change

THEMES: 3. Microbial Interactions

THEMES: 4. Biological Responses to Environmental Stress

THEMES: 5. Biosecurity in Agrotechnology

Join Zoom Meeting

<https://us06web.zoom.us/j/82007083087?pwd=8NuMQfTmhtFibGIR2vH3SLstA5X9Ql.1>

Meeting ID: 820 0708 3087

Passcode: 2345

S.No.	Authors	Title
	Dr. Amir Raina	Lead talk
1	Puja Das, Radha Krishnan Kesavan and Prakash Kumar Nayak	Artificial neural network modelling of thermosonic-assisted juice processing from indigenous plants source of Northeast India
2	Nelson Debbarma and Nibedita Das	Allelopathic potential of summer weeds on germination and growth performance of rice (<i>Oryza sativa</i> L.) and chickpea (<i>Cicer arietinum</i> L.)
3	Mallika Gogoi	Edible silkworm species: Nutrients and anti-nutrients
4	Dwimusri Brahma and Bedabati Chowdhury	Effects of exogenous application of Indole-3- acetic Acid (IBA) And Salicylic acid on the growth and physiology of Marigold (<i>Tagetes erecta</i>) grown under Cadmium (CdCl ₂) stress
5	Suman Mehjebin	A checklist of avian species spotted near Madan Kamdev temple, Assam, India
6	Rizumoni Sultana and Nazir Ahmad Bhat	Characterization of Citrus Species from Assam, India: Anatomical, Floral, and Chemical Insights
7	Suraksha Chanotra, Lila Kanto Lahon, Lopa Mudra Guha and Kartik Neog	Correlation studies on prolonged dry spell and food utilization indices in muga silkworm, <i>Antheraea assamensis</i> Helfer.
8	George Kennedy Dkhar and Bedabati Chowdhury	Antioxidant and antifungal activity of essential oil from <i>Elsholtziablanda</i> (Benth.) Benth from Meghalaya
9	Bandita Pathak, Mohan Chandra Kalita and Debasish Borbora	Combating <i>Aspergillus</i> and Aflatoxin Contamination: The role of plant extracts in enhancing food safety
10	Mahanta M. P., Das, P. T., Handique, B. K., Sarma K.K. and Aggarwal S. P.	Mapping of suitable areas for mustard to increase crop intensity in Arunachal Pradesh using geospatial technology
11	Himadri Sarkar and Bedabati Chowdhury	Effect of ZnOnanparticle on the growth and physiology of tomato (<i>Solanum lycopersicum</i>) growing under Salt (NaCl) stress
12	Kohinoor Naz Laskar and Bedabati Chowdhury	Effect of ZnOnanparticle physiology and secondary metabolite composition of fenugreek (<i>Trigonella foenum-grecum</i> L.)
13	Purnima Chouhan and Dhritiman Chanda	Isolation and characterization of vesicular and arbuscular mycorrhiza (VAM) from some vegetables in Kamrup district of Assam.
14	Mitali Baruah	Climate Change and Biodiversity Preservation of <i>Senna</i> Species in the Kamrup (Metro) District of Assam
15	Anamika Begum and Bedabati Chowdhury	Effects of exogenous application of Indole-3- butyric Acid (IBA) and Salicylic acid on the physiology and production of Brinjal (<i>Solanum melongena</i> L.) grown under Cadmium (CdCl ₂) stress
16	Disha Hazarika and Priyanka Shankarishan	Identification of potential anticancer bioactive compound from <i>Amaranthus viridis</i> through GC-MS analysis and molecular docking study.

17	Tina Debbarma and Mehzabin Rehman	Effect of cadmium on morpho-physiological parameters and antioxidant defense mechanism of Chickpea (<i>Cicer arietinum</i> L.) of Assam, India
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Online Presentation (16.05.2024)

Technical Session: 2D- 3.20-5.00 pm

Venue I: NKC Auditorium

CHAIRPERSON: DR. MANOJ BORTHAKUR

CO-CHAIRPERSON: DR. SUFIYAN AHMED TAPADAR

THEMES: 1. Traditional knowledge system for utilization and conservation of Biodiversity.

THEMES: 2. Ecology, Environment & Climate change

THEMES: 3. Microbial Interactions

THEMES: 4. Biological Responses to Environmental Stress

THEMES: 5. Biosecurity in Agrotechnology

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<https://us06web.zoom.us/j/84762341932?pwd=YnleIgdEa2iziAOvUzenCZjxbSh2zI.1>

Meeting ID: 847 6234 1932

Passcode: 2345

S.No.	Authors	Title
	Dr. Aabid Hussain Mir	Lead talk
1	Dharitri Borgohain	Algal role in mitigation of climate change
2	Bindia Debbarma and Eahya Al Huda	Trends of Rainfall Variability in Haora River Basin, Tripura, India
3	Dhuba Joyti Narzary and Milu Rani Das	Effect of glycine betaine and zinc oxide nano particle on germination percentage (%) and seed vigour index of some traditional bodo rice (<i>Oryza sativa</i> L.) under saline condition
4	Jahnvi Bhandari and Nidhi Saxena	International Environmental Laws for Addressing Sustainable Solid Waste Management
5	Wahida Hassan and Milu Rani Das	Biochemical studies of <i>Delonix regia</i> leaf extract as a leaf manure
6	Mehetaz Afrin and Bedabati Chowdhury	Evaluation of the effects of exogenous application of Indole-3- acetic Acid (IAA) And water hyacinth (<i>Eichhornia crassipes</i>) extracts on the physiological and biochemical parameters of <i>Capsicum frutescens</i> under Cadmium (CdCl ₂) stress conditions
7	Lohita Bhandari	Environmental Laws and Climate Change with Reference to Article 21 of the Constitution of India
8	Vanisha Pusein and Mehzabin Rehman	Genotoxic and cytotoxic effect of magnesium on mung bean (<i>Vigna radita</i>) and onion (<i>Allium cepa</i>)
9	Puspanjali Chetia and Arun Chettri	How Does the pH of Tree Bark Change with the Presence of the Epiphytic Bryophytes in the interaction with Trunk Inclination?
10	Priyanku Mili and Nazir Ahmad Bhat	Exploring the Bounty: Wild Edible Plants and Livelihoods in Mising community of Dhakuakhana, Assam
11	Jiten Narzari	Transforming society through Agro-ecology: A case Study on Papum Pare Agro-Eco project in Arunachal Pradesh
12	Him Shikha Devi and Nibedita Das	Phytochemical and Antioxidant Activities of Khar: An Indigenous Herbal Soda of Dhubri, Assam
13	Doli Goswami and Dhritiman Chanda	Study on the diversity of phylloplane microflora and its importance as pollution indicator in two tea gardens of Nagaon, Assam

14	Tabasum Fatima Nasrin and Dhritiman Chanda	Isolation and characterization of some pathogenic fungi in some fruits of Darrang district of Assam for the post-harvest preservation
15	Pratisha Das and P. P. Baruah	A comparative study on biochemical responses of Guava and Citrus to <i>Cephaleuros</i> sp. infection
16	Samina Yasmin and Milu Rani Das	Assessing the <i>Moringa oleifera</i> Leaf Extract as a Biostimulant to Supplement chemical Fertilizers
17	Gargee Kashyap, Bulbul Acharjee and Parag Deka	A study on physico-chemical parameters at Chandubi Lake

Online Presentation (16.05.2024)

Technical Session: 2E- 3.20-5.00 pm

Venue III: Room No-E113-E Block

CHAIRPERSON: DR. SAFIQL ISLAM

CO-CHAIRPERSON: DR. NILOFER SHEIKH

THEMES: 1. Traditional knowledge system for utilization and conservation of Biodiversity.

THEMES: 2. Ecology, Environment & Climate change

THEMES: 3. Microbial Interactions

THEMES: 4. Biological Responses to Environmental Stress

THEMES: 5. Application of Biotechnology in Utilization and conservation of Biodiversity.

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<https://us05web.zoom.us/j/83906889495?pwd=HHOe85cN669P16JZ40gMzreFzyKRfX.1>

Meeting ID: 839 0688 9495

Passcode: B6FU3Z

S.No.	Authors	Title
	Dr. Jintu Rabha	Lead talk
1	Selina Akhtar and Milu Rani Das	Effect of nano particle on seed germination of Bhut Jolokia (<i>Capsicum chinense</i> Jaqc.)
2	Rabina Gurung and Arun kumar Rai	Isolation of actinomycetes from the rhizosphere of <i>Artemisia vulgaris</i> L. and its Antifungal activity
3	Priyanka Mech and Dhritiman Chanda	Isolation of <i>Alternaria brassicicola</i> from leaf spot disease of cabbage and bio-efficacy of some plant extracts for its control
4	Binu Gogoi and Arun Kumar Rai	Antimicrobial potential of endophytic fungi PARLF1 isolated from medicinal plant <i>Astilbe rivularis</i> of Sikkim Himalayan Region
5	Toli Bagra and Mehzabin Rehman	Effect of cadmium on morpho-physiological parameters and antioxidant defense mechanism of rice landraces of Assam, India
6	Kuldeep Kumar and Bidisha Sharma	A brief report on Air microfungi isolated from the banks of Digholipukhuri, Guwahati, Assam
7	Shwetosmita Nath	Green Gold as a key to sustainable future- an approach towards SDGs
8	Himashree Hazarika and Dhritiman Chanda	Isolation and Characterization of Vesicular Arbuscular Mycorrhiza (VAM) from two different paddy fields of Nagaon, Assam
9	Monisa Ghosh and Bidisha Sharma	A Brief Report on Rhizospheric Fungi Isolated from The Banks of DighaliPukhuri, Guwahati, Assam
10	Sheheto Kotso and Milu Rani Das	Seed Priming with Phytohormones: An Effective Approach for the mitigation of Abiotic Stress
11	Sheikh Runima Begum and Mautushi Das	Effect of Zinc Oxide Nanoparticles on the growth of <i>Microcystis aeruginosa</i> -“Kutzing”: An expertimental approach
12	Moon Das and Nazir Ahmad Bhat	Ethnobotanical Exploration of Traditional Medicinal Plants in Assam, India: Unveiling Therapeutic Insights from Local Knowledge

13	Tanmoy Ghosh and Bidisha Sharma	A brief report on AM Fungi isolated from the banks of DighaliPukhuri, Guwahati, Assam.
14	Barnali Das and Himu Roy	The family Zingiberaceae Martinov from Garbhanga reserve forest of Assam, India: A taxonomic study
15	Niki Sonowal and Dhritiman Chanda	Effect of water pollution in the diversity of pathogenic bacteria in some polluted water samples of Kamrup district, Assam
16		

***N.B:* Each participant will be given 6 minutes for presentation and 2 minutes for discussion.**