



DBT Sponsored Two-day National Seminar
on
RECENT ADVANCES IN APPLIED BIOLOGY (RAAB-2025)
Organised By
Eco-Club in collaboration with IQAC, and Tihu College Science Forum,
Tihu College, Tihu, Assam, India
15 and 16 September, 2025

Schedule & Programme

Venue: Tihu College, Tihu-781371, Nalbari, Assam



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for Google map location of Tihu College, Tihu, Assam)**

Agenda

Recent Advances in Applied Biology (RAAB-2025)

Day-1(15.09.2025)

Time in IST: (IST=UT+05:30 hrs)

9.00 hr - 9.30 hr	:	Registration and Refreshment
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Inaugural Session

Venue: K. C. Deka, Memorial Auditorium, Tihu College, Tihu (North Campus)

		Opening Session of the Seminar
		<u>Chief Guest:</u> Prof. Nani Gopal Mahanta , Honourable Vice Chancellor, Gauhati University
		<u>Guest of Hounor:</u> Prof. Mohan Chandra Kalita , Honourable Vice Chancellor, Krishnaguru Adhyatmik Visvavidyalaya, Nasatra, Barpeta
		Prof. Dhanapati Deka , Honourable Vice Chancellor, Bhattadev University, Bajali
		<u>Distinguished Guest:</u> Dr. Shahaj Uddin Ahmed , Scientist F & Director, Global Innovation Directorate- International Cooperation, DBT, Govt. of India
9.30 hr - 11.10 hr	:	
11.10 hr - 11.45 hr	:	Keynote Speech by Prof. Probodh Borah , Professor, Animal Biotechnology College of Veterinary Science, Guwahati, Assam
11.45 hr - 11.55 hr	:	President's Speech and Concluding remarks
11.55 hr - 12.00 hr	:	Vote of thanks
Tea Break		

Technical Sessions

Day-1(15.09.2025)

Session I & II will be in Parallel

Venue for Technical Sessions: Academic Block-2, Tihu College, Tihu (South Campus)

Session-I		
Venue: First Floor (Academic Block-2)		
Chairperson: Prof. Dwaipayan Bharadwaj		Mode
12.30 hr-13.00 hr	: Invited Speech: <i>Antibiotic Resistance in Gram-Negative Bacteria and Strategic Approaches to Control</i> by Prof. Pankaj Chetia , Dibrugarh University, Dibrugarh, Assam.	Offline
13.00 hr-13.10 hr	: <i>Phytochemical investigation and evaluation of the antioxidant activity of Nymphaea nouchali Burm. f. and Ipomoea aquatica Forssk</i> by Baibhabhi Kashyap , Cotton University, Guwahati , Assam	
13.10 hr-13.20 hr	: <i>Parthenium hysterophorus seeds show high seed vigour, and leaf extracts are phytotoxic to farm crops</i> by Mahesh Das , Sipajhar College, Darrang, Assam	
13.20 hr-13.30 hr	: <i>Hepatotoxic Effects of Chlorpyrifos in Channa Punctata</i> by Nayana Baruah , Darrang College, Tezpur, Assam	
13.30 hr-13.40 hr	: <i>Diversity of polypore fungi in Manas National Park</i> by Narayan Sarkar , Tihu College, Tihu, Assam	
Session-II		
Venue: Second Floor (Academic Block-2)		
Chairperson: Prof. Probodh Borah		Mode
12.30 hr-13.00 hr	: Invited Speech: <i>Wild Mushrooms of Northeast India: Need of Scientific Interventions for their Bioprospection, Safety Profiling and Commercialization</i> by Prof. S.R. Joshi , NEHU, Shillong, Assam.	Offline
13.00 hr-13.10 hr	: <i>Traditional Markets as Biodiversity Hubs: Insights from Assam and Tripura</i> by Monjit Das , Bodoland University, Kokrajhar, Assam	
13.10 hr-13.20 hr	: <i>Insights into the pharmacokinetic, pharmacodynamics and toxicological profiling of pesticides by the application of computational tools</i> by Bhanushree Baishya , PDUAM, Tulungia, Bongaigaon, Assam	
13.20 hr-13.30 hr	: <i>A study on the toxicological effects of municipal sewage water of the Mora Bharali River on Channa punctata (Bloch)</i> by Swapnanil Sarma , Darrang College, Tezpur, Assam	
13.30 hr-13.40 hr	: <i>Implementable Digital Platform Based Assessment Tools with Instant Feedback to Facilitate Self-Regulated Learning of School-Level Biology</i> by Jimli Sarma , Tezpur University, Tezpur, Assam	
Lunch Break: 13.40 hr -14.30 hr		
<u>Session III & IV will be in Parallel</u>		
Session-III		
Venue: First Floor (Academic Block-2)		
Chairperson: Prof. Pankaj Chetia		Mode
14.30 hr-15.00 hr	: Invited Speech: <i>Dissecting the complexity of metabolites biosynthesis in Bhut jolokia and other Capsicum species</i> by Prof. Nirala Ramchiary , JNU, New Delhi	Offline
15.00 hr-15.10 hr	: <i>Impact of Substrates on Anti-fungal potential of Rhamnolipid against Sclerotinia sclerotiorum</i> by Nilam Sarma , Gauhati University, Assam	
15.10 hr-15.20 hr	: <i>Assam Traditional Ethnomedical Practices: A study among the Bodo tribes of Assam</i> by Himani Ramchiary , M. C. College, Barpeta, Assam	
15.20 hr-15.30 hr	: <i>Habitat Preference of Golden Jackal (Canis Aureus) in a Human Dominated Landscape of Barpeta Town, Assam</i> by Darshana Das , M. C. College, Barpeta, Assam	

Session-IV		
Venue: Second Floor (Academic Block-2)		
Chairperson: Prof. S.R. Joshi		Mode
14.30 hr-15.00 hr	: Invited Speech: Biorefineries as a Driver for Biodiversity Conservation: Opportunities and Challenge by Prof. Kannan Pakshirajan , IIT Guwahati, Assam	Offline
15.00 hr-15.10 hr	: <i>Angustopila elevata</i> (Thompson & Upatham, 1997) is a junior synonym of <i>A. milium</i> (Benson, 1853) and is currently one of East Asia's most widespread snails, Nipu Kumar Das , Kamrup College, Chamata, Nalbari, Assam	
15.10 hr-15.20 hr	: <i>Perceptions and Conservation Intentions of Local Communities toward the Assam Roofed Turtle in the Brahmaputra River of Kaziranga Tiger Reserve</i> by Sanjenbam Joel Singh Assam Royal Global University, Guwahati, Assam	
15.20 hr-15.30 hr	: <i>Grasslands in Peril: Multi-Decadal Land Cover Change Reveals Riverine Grassland Loss in Dibru-Saikhowa National Park within the Brahmaputra Flood plains</i> by Imon Abedin , Bodoland University, Kokrajhar, Assam	
Tea Break: 15.30 hr-15.40 hr		
<u>Session V & VI will be in Parallel</u>		
Session-V		
Venue: First Floor (Academic Block-2)		
Chairperson: Prof. Nirala Ramchiary		Mode
15.40 hr-15.50 hr	: <i>Diversity and Distribution of Wild Silk Moths (Lepidoptera : Saturniidae) in Assam</i> , by Alo Saha , B.B.K. College, Nagaon, Barpeta, Assam	Offline
15.50 hr-16.00 hr	: <i>Assam Freshwater mollusc diversity and associated environmental conditions in the West Nalbari Region, Assam</i> , by Angaraj Barman , Kamrup College, Chamata, Nalbari, Assam	
16.00 hr-16.10 hr	: <i>A comparative review on biochemical indices of traditionally prepared alcoholic beverages by the Tribal Communities of North East India</i> by Mohua Kashyap , Assam University, Diphu Campus, Assam	
16.10 hr-16.20 hr	: <i>A Study on Ethnomedicinal Knowledge and Practices among the Bodo Community in Bajali District, Assam</i> by Maina Basumatary , Gauhati University, Guwahati, Assam	
16.20 hr-16.30 hr	: <i>Study Of Repulsive Activity Of Leaf Extracts Of Citronella Grass (Cymbopogon Citratus), Curry Leaf (Bergera Koenigii) And Bushy Lippia (Lippia Alba) On Rice Weevil (Sitophilus oryzae)</i> Sima Sarma , M. C. College, Barpeta, Assam	
Session-VI		
Venue: Second Floor (Academic Block-2)		
Chairperson: Prof. Kannan Pakshirajan		Mode
15.40 hr-15.50 hr	: <i>Biodiversity of Soil Algae in Disturbed Habitats: A Case Study from Tinsukia Coal Mines</i> by Arjun Adhikari , M. C. College, Barpeta, Assam	Offline
15.50 hr-16.00 hr	: <i>Diversity of termites in the Nongkhyllem Wildlife Sanctuary of Meghalaya, India</i> by Khirod Sankar Das , Bhawanipur Anchalik College, Bhawanipur, Bajali, Assam	
16.00 hr-16.10 hr	: <i>Implementation of indigenous nest boxes for the Conservation of House Sparrow Passer domesticus and Eurasian Tree Sparrow P. montanus</i> by Juman Das , M. C. College, Barpeta, Assam	
16.10 hr-16.20 hr	: <i>Impact of refrigeration on essential oil constituents of Citrus aurantifolia Peel</i> by Hiyangana Das , Bhattadev University, Bajali, Assam	
16.20 hr-16.30 hr	: <i>Conservation of Fishery resources potential in the Brahmaputra River Drainages of Northeast, India</i> by Manmi Kalita , Bhattadev University, Bajali, Assam	
End of Day-1		

Technical Sessions

Day-2(16.09.2025)

Session VII & VIII will be in Parallel

Venue for Technical Sessions: Academic Block-2, Tihu College, Tihu (South Campus)

Session-VII		
Venue: First Floor (Academic Block-2)		
Chairperson: Dr. Bulbuli Khanikar		Mode
10.00 hr-10.30 hr	: Invited Speech: <i>Importance of Biodiversity Measurement: Understanding of Rare and Common Species</i> by Dr. Kuladip Sarma , Gauhati University, Guwahati, Assam	Offline
10.30 hr-10.40 hr	: <i>Threads of Tradition towards Modernity: Conglomeration of Indigenous Knowledge and Regional Practices with Scientific Technology in Assam's Silkworm Rearing: A Review</i> by Silpi Sikha Borah , Assam Downtown University, Guwahati, Assam	Online
10.40 hr-10.50 hr	: <i>First report of Rhynchocoris humeralis Thunberg 1783, from Guwahati Assam</i> , by Santana Saikia , Handique Girls' College, Guwahati, Assam	
10.50 hr-11.00 hr	: <i>Valorizing Pati Duck (Anas platyrhynchos domesticus L) excreta into Biochar to Boost Chickpea (Cicer arietinum L.) Growth</i> by Kumar Kritartha Kaushik , The Assam Royal Global University, Guwahati, Assam	
11.00 hr-11.10 hr	: <i>Anti-hyperglycemic and Anti-inflammatory effects of Phlogacanthus thyrsoformis flower extract in high-fat diet and streptozotocin-induced diabetic rats</i> by Rajashree Deka , Bhattadev University, Bajali, Assam	
11.10 hr-11.20 hr	: <i>Evaluation of morphometric and meristic variations in different fish species of family Bagridae from the Beki River, Assam, India</i> by Parmita Sarma , Bhattadev University, Bajali, Assam	
Session-VIII		
Venue: Second Floor (Academic Block-2)		
Chairperson: Prof. Jogen Chandra Kalita		Mode
10.00 hr-10.30 hr	: Invited Speech: <i>Genetic basis of human diseases: Functional Genomics of Childhood obesity in rural and urban India</i> by Prof. Dwaipayan Bharadwaj , Sister Nivedita University, Kolkata	Offline
10.30 hr-10.40 hr	: <i>Bone tissue alterations in Guinea pig due to refinery sludge insultations</i> by Bidyut Kumar Das , Nalbari College, Nalbari, Assam.	Online
10.40 hr-10.50 hr	: <i>An evaluation of toxic potential of dimethyl phthalate on male reproductive system</i> by Suman Choudhury , Gauhati University, Guwahati, Assam	
10.50 hr-11.00 hr	: <i>Combined efficacies of L-ascorbic acid and α-Tocopherol on 1,4- Benzoquinone induced oxidative stress in the liver of male wistar rats</i> by Ritu Mishra , Nalbari College, Nalbari, Assam	
11.00 hr-11.10 hr	: <i>Assessment of Glyphosate-Induced Morpho-Physiological and Biochemical Stress Responses in Oryza sativa L. Seedlings</i> , by Preeti Deury , Rangia College, Rangia, Assam	
11.10 hr-11.20 hr	: <i>Ionophores: Bridging Ion Transport Mechanisms and Therapeutic Innovation</i> , by Disha Lahon , Girijananda Chowdhury University, Tezpur Campus, Assam	
Tea Break: 11.20 hr -11.30 hr		
<u>Session IX, X & XI will be in Parallel</u>		
Session IX:		
Venue: First Floor (Academic Block-2)		
Chairperson: Dr. Suresh Bharali/ Dr. Bulbuli Khanikar		Mode
11.30 hr-12.00 hr	: Invited Speech: Dr. Bulbuli Khanikar, Gauhati University, Guwahati, Assam	Offline
12.00 hr-12.10 hr	: <i>P-T3-38 Integrated Phytochemical Profiling and In Silico Molecular DockingBased Evaluation of the Antimicrobial Potential of Adhatoda vasica Leaves</i> by Asish Bhaumik ,	

		Girijanana Chowdhury University, Tezpur Campu, Tezpur, Assam	
12.10 hr-12.20 hr	:	<i>Ethnomedicinal plants and traditional knowledge of Jolha (or Jalah, Julaha) people in South Salmara -Mankachar District of Assam</i> by Hamida Khatun , South Salmara College, South Salmara Mankachar, Assam	Online
12.20 hr-12.30 hr	:	<i>Weed Diversity of Pathsala Area of Bajali District, Assam</i> by Biju Borkataki , B.H. College, Howly, Barpeta, Assam	
12.30 hr-12.40 hr	:	<i>Towards Sustainable Management: An Ecological Study of Weeds in Horticultural and Paddy Fields of Kamrup District, Assam</i> by Nayanika Devi , University of Science and Technology, Meghalaya	
12.40 hr-12.50 hr	:	<i>Comparative Phytochemical Profiling and Chemotaxonomic Analysis of Six Senna Species from Assam, India: Implications for Traditional Medicine and Biodiversity Conservation</i> by Mitali Baruah , Assam Royal Global University, Guwahati, Assam	
12.50 hr-13.00 hr	:	<i>Comparative Analysis of Physico-Chemical parameters and Ichthyofaunal Diversity of Dhir Beel and Diplai Beel in Kokrajhar District, Assam</i> by Innifa Hasan , Handique Girls' College, Guwahati, Assam	
13.00 hr-13.10 hr	:	<i>Determination of bioactive compounds in extract of Zanthoxylum oxyphyllum Edgew leaf using GCMS technique</i> by Seema Khakhalary , B.H. College, Howly, Barpeta, Assam	
13.10 hr-13.20 hr	:	Proximate Content of Cassava Differs under Two Conventional Fertilizer Regimes by Tapasri Nath , Gauhati University, Guwahati, Assam	
13.20 hr-13.30 hr	:	<i>Exploring Stochastic Models for Sustainable Agriculture: A Conceptual Approach</i> Bhupakhi Deka , Bhattadev University, Bajali, Assam	
Session -X Venue: Second Floor (Academic Block-2)			
Chairperson: Prof. Dwaipayan Bharadwaj			Mode
11.30 hr-12.00 hr	:	Invited Speech: Prof. Jogen Chandra Kalita, Gauhati University, Guahati, Assam	Offline
12.00 hr-12.10 hr	:	<i>Hydrogen Peroxide Detection using Nanoparticle Modified Pt-electrode and its Biological Application</i> Kangkana Deka , Tihu College, Tihu, Assam	
12.10 hr-12.20 hr	:	<i>A Comparative Analysis of Oyster Mushroom Cultivation and Yield on Various Substrates</i> by Madhusmita Sarma , Bhattadev University, Bajali, Assam	
12.20 hr-12.30 hr	:	<i>Diversity and Taxonomy of Amphibia of Dehing Patkai National Park</i> by Jyoti Soreng , Assam Don Bosco University, Sonapur, Assam	
12.30 hr-12.40 hr	:	<i>Diversity of weedy genus Ludwigia in the paddy field of Nalbari district, Assam</i> by Namita Deka , Nalbari College, Nalbari, Assam	
12.40 hr-12.50 hr	:	<i>Histopathological Study of Brain and Kidney of Heteropneustes fossilis (Bloch, 1794) Exposed to Sub lethal Concentration of Fipronil</i> by Likimani Deka , Bhattadev University, Bajali, Assam	
12.50 hr-13.00 hr	:	<i>Evaluation of phytoconstituents and DPPH radical scavenging activity of crude extract of Acmella paniculata</i> by Jyotishikha Das , M. C. College, Barpeta, Assam	
13.00 hr-13.10 hr	:	<i>Small Indigenous Fishes of foothills of Himalayan region, in Baksa District, Assam and Its conservation status</i> by Ishan Jyoti Kalita , Bhattadev University, Bajali, Assam	
13.10 hr-13.20 hr	:	<i>Anti-Asthmatic Ethnomedicinal Plants Used By The Bodo Tribe Of Baksa District Of Assam, India</i> , Krishangi Goswami , Bhattadev University, Bajali, Assam	
13.20 hr-13.30 hr	:	<i>Ethnobotanical Study of Aromatic Plants Used in Culinary and Medicinal Practices among the Bodo Tribes of Baksa, Assam, India</i> by Momita Boro , Barama college, Barama, Assam	
Session- XI Venue: First Floor (Academic Block-2)- History			
Chairperson: Dr. Kuladip Sarma/Dr. Anil Boro			Mode
11.30 hr-12.00 hr	:	Invited Speech: <i>Integrative OMICs Approaches for Understanding the Complexity of Gallbladder Cancer in Assam</i> by Dr. Pankaj Barah , Tezpur University, Tezpur, Assam	Online
12.00 hr-12.10 hr	:	<i>Phyto-based Dietary Compounds as Functional Food Supplements for Neuromodulation</i> Chayanika Devi , Baihata Chariali, Kamrup, Assam	
12.10 hr-12.20 hr	:	<i>Analysis on the ethno-medicinal significance of the well-known superfood Euryale ferox in Ganak beel, Golaghat district, Assam</i> by Anima Kutum , USTM, Meghalaya	
12.20 hr-12.30 hr	:	<i>Piper betleoides C. DC.: Edible Source of Betel-scented Sesquiterpene Rich Essential Oil</i> by Phirose Kemprai , Debraj Roy College, Golaghat, Assam	
12.30 hr-12.40 hr	:	<i>Conservation of Biodiversity for Sustainable Development</i> by Bipul Kr. Das , Swahid Smriti Mahavidyalaya, Belsor, Nalbari, Assam	

12.40 hr-12.50 hr	:	In vitro antioxidant activities of muga silkworm pupae <i>Antheraea assamensis</i> by Meetali Deori , Nalbari College, Nalbari, Assam	
12.50 hr-13.00 hr	:	<i>Use of modern agricultural methods by the farmers of Baksa district and its impact on sustainable agriculture</i> by Benudhar Kalita , Swahid Smriti Mahavidyalaya, Belsor, Nalbari, Assam	
13.00 hr-13.10 hr	:	<i>Study on Some Ethnomedicinal Plants of Tihu Block, Nalbari, Assam</i> by Jayanta Kr Das , Barama College, Barama, Assam	Offline
13.10 hr-13.20 hr	:	<i>Targeting the NO–cGMP Pathway: In-Silico Investigation of Isoliquiritigenin in the management of Erectile Dysfunction</i> by Queen Saikia , Mangaldai College, Mangaldai, Assam	
13.20 hr-13.30 hr	:	<i>Ethno-Medicinal Studies on Sonowal Kachari Inhabitant Areas of Sadiya Co-District, Tinsukia (Assam)</i> Dipjyoti Kalita , Sadiya College, Assam	
Lunch Break: 13.30 hr-14.15 hr			
Session XII, XIII & XIV will be in Parallel			
Session-XII			
Venue: First Floor (Academic Block-2)			
Chairperson: Dr. Chabin Ch. Thakuria			Mode
14.15 hr-14.25 hr	:	<i>The missing ‘Urban Trees’ of Tihu Town: Heritage, Reality and Challenges</i> , Diganta Deka , Tihu College, Tihu, Assam	Offline
14.25 hr-14.35 hr	:	<i>Importance of Genetics in Wildlife Conservation and Management</i> by Rita Choudhury , Tihu College, Tihu, Assam	
14.35 hr-14.45 hr	:	<i>Green synthesis and characterisation of silver nanoparticles using <i>Bonnaya ruelloides</i> (Colsm.) Spreng extract and evaluation of their antimicrobial activity</i> by Madhusmita Nath , Tihu College, Tihu, Assam	
14.45 hr-14.55 hr	:	<i>Comparative Expression Profiling of the SOD gene in High-Yielding Rice Cultivars under Cadmium (Cd) Stress in Assam</i> by Dipanjali Ray , Tihu College, Tihu, Assam	
Session-XIII			
Venue: First Floor (Academic Block-2)- History			
Chairperson: Dr. Gunindra Nath Choudhury			Mode
14.15 hr-14.25 hr	:	<i>A Review on Ethnobotanical Medicinal Plants used by the Bodo Community of BTR, Assam</i> by Barasha Narzary , Tihu College, Tihu, Assam	Offline
14.25 hr-14.35 hr	:	<i>Pharmaceutical and Ethnomedicinal Significance of <i>Phlogacanthus thyrsiflorus</i> Nees. with Emphasis on Conservation Strategies</i> Dipandita Das , Tihu College, Tihu, Assam	
14.35 hr-14.45 hr	:	<i>Nutritional significance of small indigenous fish (SIF) and their contribution to rural livelihoods</i> by Adity Deka , Tihu College, Tihu, Assam	
14.45 hr-14.55 hr	:	<i>Embracing Sustainable Development: Balancing Prosperity, Planet and People for a Resilient Future</i> by Juri Kashyap , Tihu College, Tihu, Assam	
Session-XIV			
Venue: Second Floor (Academic Block-2)			
Chairperson: Dr. Bulbuli Khanikar			Mode
14.15 hr-14.35 hr	:	Invited Speech: <i>Use of non-invasive samples in wildlife genetic studies through microsatellite markers</i> by Dr. Puranjit Das , Bhattadev University, Bajali, Assam	Offline
14.35 hr-14.55 hr	:	Invited Speech: <i>Microbial Diversity and Probiotic Potential of Mising Fermented Foods in Assam: Integrating Metagenomic Profiling with Ethno-cultural Knowledge</i> by Dr. Puranjoy Mipun , Bhattadev University, Bajali, Assam	
Tea Break: 14.55 hr-15.00 hr			
Session-XV			
Venue: Second Floor (Academic Block-2)			
15.00 hr-15.45 hr	:	Valedictory Session	Offline
End of the Seminar			