



ICAR-IARI, ASSAM NEWSLETTER

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From the Director's Desk



It is with great pride and joy that I present the April-June 2025 issue of our newsletter-capturing a season of progress, partnership, and promise at ICAR-IARI, Assam.

This quarter was especially memorable as we celebrated our 9th Foundation Day-a moment to honour our journey and renew our commitment to agriculture and rural development in the Northeast. Distinguished guests from government, academia, and farming communities joined us to applaud the institute's impact and reaffirm our shared vision for a Second Green Revolution in the region.

We strengthened our collaborations through new MoUs with Assam Agricultural University and the Dhemaji District Commissioner's Office-paving the way for deeper research, training, and outreach. Our infrastructure also took a leap forward with expanded library resources, modern farm machinery, and a state-of-the-art modular cold room to support research and teaching.

Innovation remained a hallmark of this quarter. The 3rd Institute Research Council meeting showcased forward-thinking projects tailored to the Northeast's unique needs, highlighting our scientists' creativity and dedication. Our students enriched their learning through hands-on fieldwork, excursions, and active participation in sustainability initiatives.

Outreach continues to be our heart and soul. Through the Vikshit Krishi Sankalp Abhiyan and other programs, we reached thousands of farmers, translating science into practice and building stronger community ties. In the near future, we will be playing a lead role in the Seed and Pulse Mission by ensuring timely supply of quality seeds and promoting pulse cultivation as part of our commitment to nutrition security. As an institute of national and regional importance, IARI-Assam will play a leading role for seed production and dissemination in the Northeast, and will drive varietal adoption, strengthen seed system, and provide farmer training to boost productivity and resilience.

The achievements of our faculty, staff, and students this quarter reflect the collective talent and commitment driving our mission. I am deeply grateful to ICAR leadership, our partners, and the community for their unwavering support. As we move forward, let us stay united, innovative, and community-focused-guided by the values that define us and inspired by the vision we share.

Dr. Ch. Srinivasa Rao, Director & Vice-Chancellor



HIGHLIGHTS

IARI-Assam Celebrated its 9th Foundation Day

ICAR-Indian Agricultural Research Institute, Assam proudly celebrated its 9th Foundation Day on 26th May 2025 with great enthusiasm, reverence, commemorating service and impactful contributions to agricultural research, education, and rural development in the Northeast region. The occasion highlighted the institute's ongoing commitment to fostering innovation and growth in the agricultural and allied sector. The



event was graced by dignitaries, scientists, farmers, and students, who witnessed on the institute's remarkable progress in infrastructure development, academic excellence, capacity building, and community outreach. The Chief Guest, Dr. Ranoo Pegu, Minister of Education, Government of Assam, delivered the keynote address, applauding the institute's transformative impact in this remote region and emphasizing its potential to lead a second Green Revolution. He reiterated the unwavering support of the state government for the institute's efforts in advancing sustainable agricultural development. The Guest of Honour, Shri Rahul Suresh Javir, District Commissioner of Dhemaji, emphasized the potential of ICAR-IARI Assam to enhance farmers' livelihoods through cluster-based development approaches. Shri Tapan Kr. Gohain, Registrar of Assam Agricultural University, highlighted and emphasized the importance



of developing academic and research collaborations to further strengthen the region's agricultural sector.

Dr Ch. Srinivasa Rao, Director and Vice-Chancellor, ICAR-IARI, outlined the institute's mission to drive the second Green Revolution in the NEH region. He emphasized the importance of integrated research, education, extension, training, and public-private partnerships to empower agricultural stakeholders, startups, and farmer producer organizations (FPOs) as

well as ensuring environmental sustainability.

The occasion also featured the release of institute publications and the presentation of awards recognizing outstanding contributions by scientists, staff, farmers, students and media personnel. The Foundation Day marked a significant milestone in IARI Assam's journey towards transforming the agricultural landscape of Assam and the broader Northeast region.

ICAR-IARI, Assam Signs MoU with DC-Dhemaji and AAU-Jorhat

In a significant step towards strengthening agricultural research, training, and outreach in Assam, ICAR-Indian Agricultural Research Institute (IARI), Assam signed two Memorandum of Understanding (MoU) on 26th May, 2025. One MoU with Assam Agricultural University (AAU), Jorhat which aims to foster collaboration in research, academics and

extension activities. Another MoU was signed with the Office of the District Commissioner, Dhemaji to foster collaborative initiatives such as short-term training programs for state government employees, infrastructure development, applied research under RKVY, and academic-cum-cultural exchanges.



INFRASTRUCTURE DEVELOPEMENTS

Expansion of Knowledge Resources at the Library

The Institute Library significantly expanded its collection during the April-June quarter. A total of 81 new e-Books were added, covering a wide range of subjects including Agronomy, Horticulture, Soil Science, Agricultural Engineering, Plant Pathology, Seed Science, Entomology, Meteorology, Irrigation, Food Science, Microbiology, Environmental Science, Livestock and Sustainable Agriculture. Additionally, 140 new textbooks (comprising 683 copies in total) were incorporated, spanning diverse disciplines within Agriculture and Allied Sciences viz. Agronomy, Soil Science, Plant Breeding, Genetics, Seed Science, Plant Pathology, Entomology, Horticulture, Forestry, Agricultural Engineering, Irrigation, Animal Husbandry, Dairy Technology, Agricultural Extension, Agricultural Economics, Microbiology, Food Science, Fisheries Science, Agricultural Statistics and Remote Sensing. This enriched collection is aimed to support the academic and research pursuits of students, scholars, and faculty members across various domains of agricultural science.



Water Tankers, Trailer and Farm Implements Procured

ICAR-IARI, Assam has strengthened its infrastructure by procuring a range of modern agricultural machineries to support research, education, training, and demonstration activities. The newly acquired equipment includes a rotavator, disk harrow, reversible MB plough, reaper binder, ridge-cum-bund former, semi-automatic potato planter, sub-soiler, and seed-cum-fertilizer drill. These

machines are intended to promote mechanized farming, improve input efficiency, and support conservation agriculture practices suitable for the North-Eastern region. The initiative will enhance field-level research, facilitate hands-on training for farmers and students, and contribute to the Institute's broader objective of advancing sustainable and precision agriculture through technology-led interventions.



Rotavator



Semi-automatic potato planter



Reversible MB plough



Reaper binder



Seed-cum-fertilizer drill



Semi-automatic potato planter

Establishment of Modular Cold room at ICAR-IARI Assam

A modular cold room has been established at ICAR-IARI Assam with an installed capacity of 5 MT. The cold room is a chiller type with a storage temperature range of 3-20°C and RH of 60-90%. It is equipped with a humidifier and a standby outdoor unit to ensure uninterrupted functioning. The cold room

has been funded by the Agricultural Education Division of the ICAR to strengthen higher agricultural education at the institute. The cold room is being used to teach students on postharvest storage behaviour of different fruits, vegetables, and flowers, and also in experimental studies of the institute.



RESEARCH

IARI-Assam Hosts 3rd IRC Meeting

The third Institute Research Council (IRC) meeting of ICAR-Indian Agricultural Research Institute, Assam, was held on 23-24 May 2025 under the chairmanship of Dr. Ch. Srinivasa Rao, Director, IARI. In his inaugural address, Dr. Rao emphasized the critical role of adopting a holistic and integrated research approach to transform the agricultural landscape of the North Eastern Region. The meeting was graced by the presence of Dr. C. Viswanathan, Joint Director (Research), IARI, who provided valuable guidance to further strengthen the institute's research initiatives. A total of 28 ongoing institutional research projects, aligned with priority areas relevant to the region, were thoroughly reviewed. The deliberations focused on ensuring that project outcomes contribute to promoting sustainable agricultural development across the northeastern states, including Assam. Additionally, five new institute research



projects were initiated during the meeting which further reinforcing the institute's commitment to region-specific innovation. Progress of external funded projects were also discussed during the IRC. Dr. Lohit Kumar Baishya, Scientist In-charge, IARI-Assam, shared his insights during the session. Dr. Arpan Bhowmik served as Member Secretary of the 3rd IRC. Active participation from all divisional heads and scientists greatly enriched the discussions and outcomes of the IRC meeting.



Chilli Germplasm Received under Material Transfer Agreement

As part of a significant research initiative, ICAR-IARI, Assam, entered into a Material Transfer Agreement (MTA) with ICAR-IIVR, Varanasi, and ICAR-NBPGR, New Delhi, for the procurement of several chilli germplasm accessions. These materials would support ongoing research aimed at the genetic improvement of chilli varieties suited to the Northeastern region. Total 100 germplasms have been received 50 each from ICAR-IIVR and ICAR-NBPGR respectively. The germplasm will be utilized for studying morphological, biochemical, and

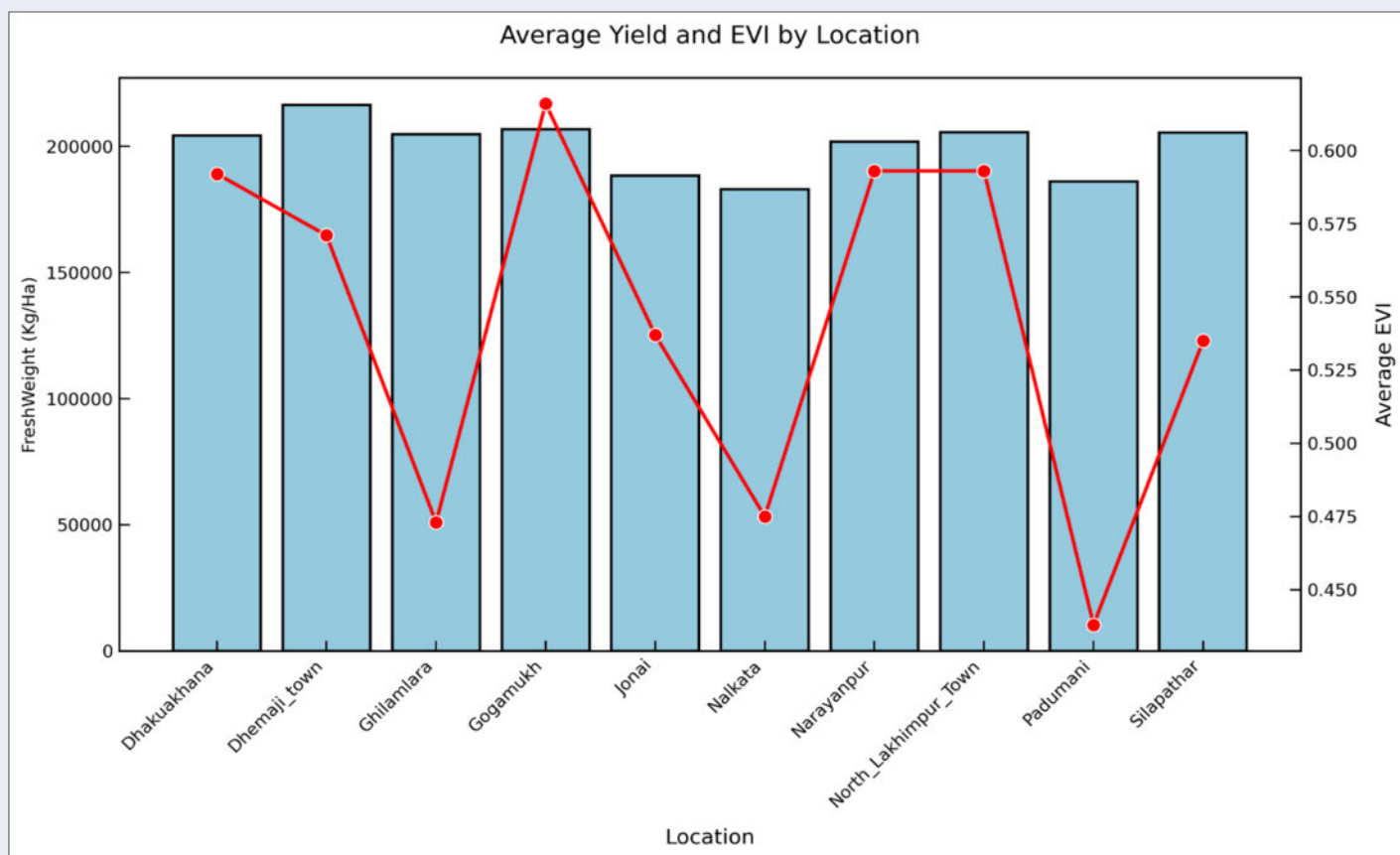
disease resistance traits, as well as for conducting genetic diversity analysis using molecular markers. The seeds were officially received by Dr. Ramavath Ramesh Babu, Scientist (Vegetable Science), and a dedicated committee has been constituted to oversee formalities and ensure compliance related to germplasm utilization. This collaboration emphasizes IARI-Assam's commitment to advancing crop improvement and regional adaptation research.

Important Research Highlights

REMOTE SENSING-BASED PREDICTION OF CROP PERFORMANCE IN AGRI-HORTI CROPS OF NORTH-EASTERN REGIONS

This study aimed to enhance pineapple yield prediction in Assam’s North Bank Plain Zone, contributing 15% of India’s pineapple output by integrating Sentinel-2 and Landsat-9 satellite data with machine learning models. Conducted in Dhemaji and North Lakhimpur districts during the 2023 harvest season, field data from 100 samples (FW: 150,000–249,500 kg/ha) were used to correlate seven vegetation indices (e.g., EVI, NDRE, GNDVI) with fresh weight (FW) of above-ground biomass. Among five models tested, XGBoost achieved the highest accuracy

($R^2=0.92$, RMSE=9,500 kg/ha), followed by Random Forest ($R^2=0.91$), while linear models underperformed due to non-linear relationships. Validation showed XGBoost remained robust pre-monsoon ($R^2=0.68$), but accuracy declined post-monsoon due to phenological shifts and vegetation interference. The study highlights the potential of remote sensing and AI in precision agriculture, supporting SDG 2, and recommends incorporating environmental covariates and time-series data to improve model scalability across diverse agro-ecosystems.



ASSESSMENT OF LIVELIHOOD DIVERSIFICATION OF FARMERS UNDER RAINFED ECOSYSTEM IN NORTH EAST INDIA

Livelihood diversification is a continuous adaptive cycle in which household’s add new practices, maintain existing once or drop other one, thus retaining diverse and evolving livelihood portfolios. Surveys are being conducted both in person and through Google form based on the developed questionnaire keeping in mind the list of potential factors. Total 340 observations were recorded including 209 through direct survey and 131 from Google form. Majority of the farmers

are either marginal or small or semi medium farmers. Regarding entrepreneurship tendency around 29.82% of farmers are showing entrepreneurial behaviour. Majority of the farmers are having credit accessibility. The mean dependency ratio among the 340 observations is 0.54 and the modal family size is five. Regarding income, majority of the farmers’ income lies below 3.00 lakh per annum. Based on the data collected, a stepwise logistic regression model has been performed and ten

most significant drivers of livelihood diversification viz. age, gender, education, dependency ratio, family type, land holding, family size, entrepreneur tendency, credit accessibility and income have been selected and the final model has been fitted. The fitted model is able to explain 69-78% variation in the data. Based on the data Simpson Diversification Index (SDI) was calculated. The SDI result, incorporating total food crop revenue, cash crop income, natural resource income, livestock income, remittance income, non-farm wage income, farm wage income, self-employment income, and other household income sources, was determined to be 0.43 which indicates that although the household livelihood are moderately diversified still there are huge scope to diversify the livelihood of the farmers for sustainable income generation. During survey, it has been observed that the main hindrance for livelihood diversification is

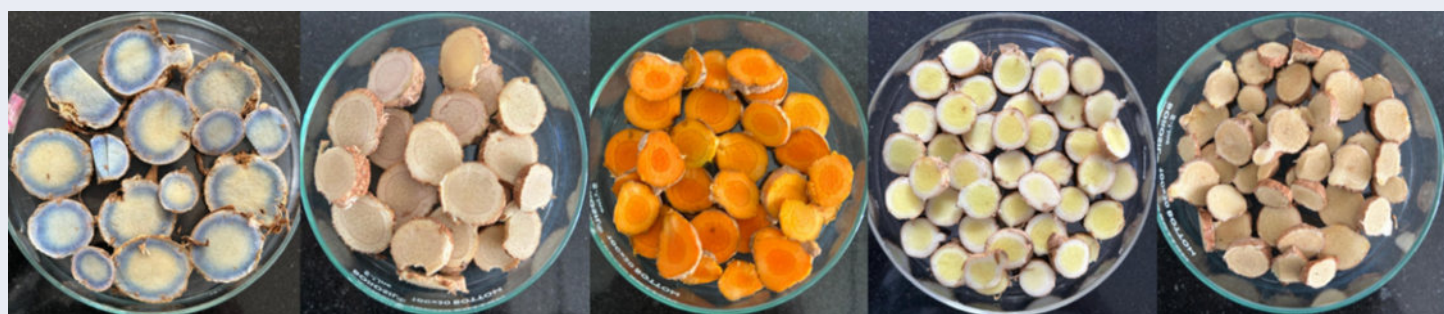


the lack of proper knowledge. Therefore to improve the knowledge and skill level of farmers for diversification of livelihood a number of training, awareness programme, field days and farmers-scientist interaction have been carried out. Beside, in order to support the farmers different inputs were also given to selected farmers.

NUTRITIONAL AND PHYTOCHEMICAL CHARACTERIZATION OF *CURCUMA SPP.* FROM THE NORTHEASTERN REGIONS OF INDIA

The sub-Himalayan region of Northeast India hosts a rich but underexplored diversity of *Curcuma* species. This study evaluated five pigmented species, viz. *C. longa*, *C. amada*, *C. caesia*, *C. aromatica*, and *C. angustifolia* for their nutritional, phytochemical, and mineral profiles, revealing significant interspecies variation. *C. angustifolia* demonstrated the highest carbohydrate (61.7%) and protein (7.8%) content, along with elevated levels of iron (391 ppm), zinc (122 ppm), and potassium, indicating its potential for infant foods and dietary supplements. In contrast, *C. longa* (Lakadong

turmeric) showed superior phytochemical richness, with the highest curcuminoids (5.1%), phenolics (69.3 mg/g GAE), and antioxidant activity (FRAP: 513.3 $\mu\text{mol Fe}^{2+}$ /g), supporting its use in functional foods and nutraceuticals. Multivariate analyses (PCA and heatmaps) revealed distinct species-specific metabolic clusters. This is the first comprehensive nutritional and mineral profiling of *C. angustifolia*, emphasizing its relevance for micronutrient enrichment and the need to conserve and utilize Northeast India's indigenous *Curcuma* biodiversity for health and value-added applications.



Blue turmeric –(*Curcuma caesia*)

East Indian Arrowroot-
(*Curcuma angustifolia*)

Turmeric- (*Curcuma longa*)

Mango ginger – (*Curcuma amada*)

Wild turmeric - (*Curcuma aromatica*)

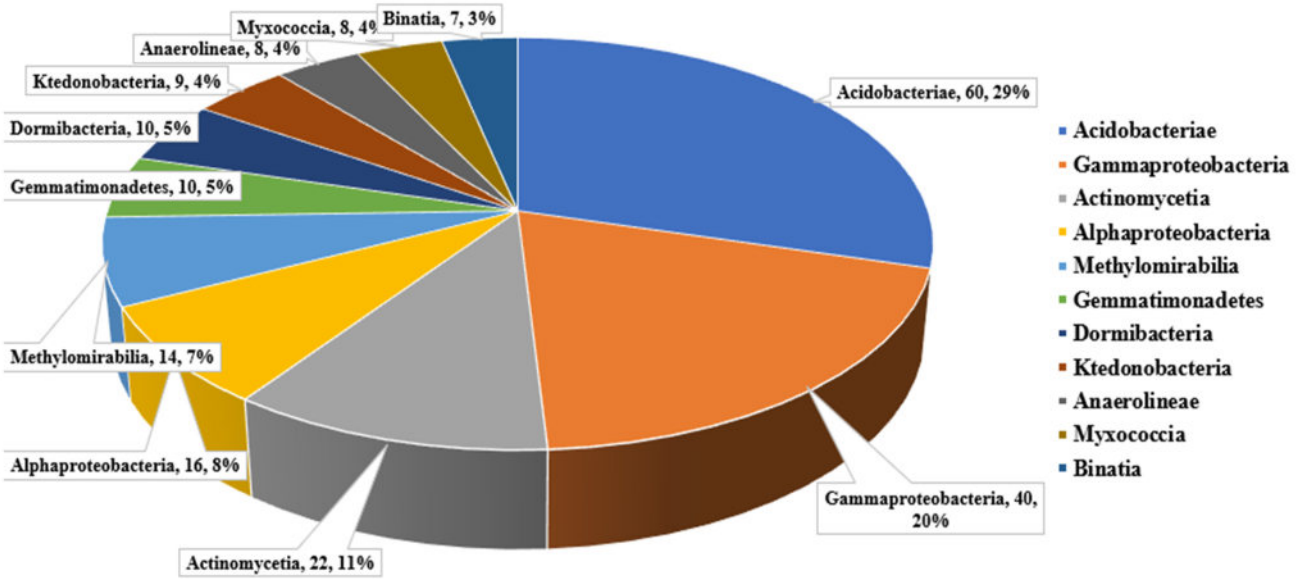
EXPLORATION OF ACID TOLERANT RHIZOBACTERIA FOR PLANT GROWTH PROMOTION POTENTIAL IN RICE

Soil samples were collected from the rice rhizosphere. Rhizobacteria were isolated from rice rhizosphere using standard microbiological techniques, resulting in a large number of distinct isolates. These isolates were purified through repeated streaking to

obtain pure cultures and were stored for further studies. In addition to culture-dependent methods, metagenomic analysis of the same soil samples was conducted to assess the total microbial diversity, including both culturable and unculturable microorganisms. The metagenomic results

revealed a rich and diverse microbial community, with a dominant presence of species belonging to the classes Acidobacteria and Proteobacteria, indicating

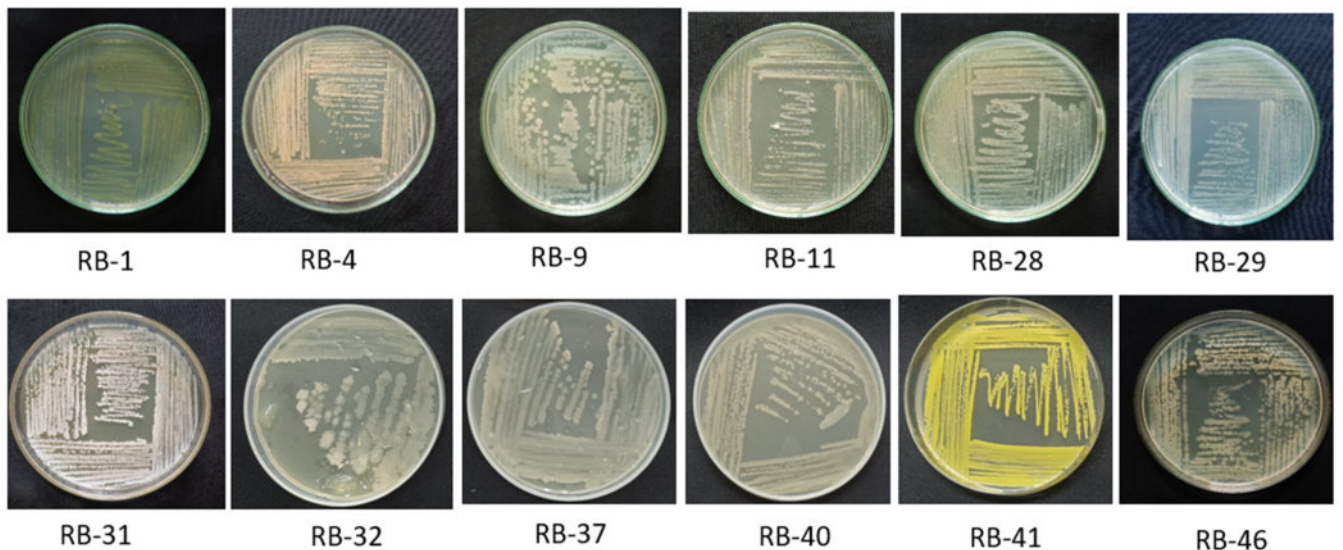
bacteria belonging to acid-tolerant and plant growth-promoting.



Graphical representation of distribution of different classes of bacteria



Morphologically different colonies were streaked on fresh agar plate to obtain pure culture of isolates

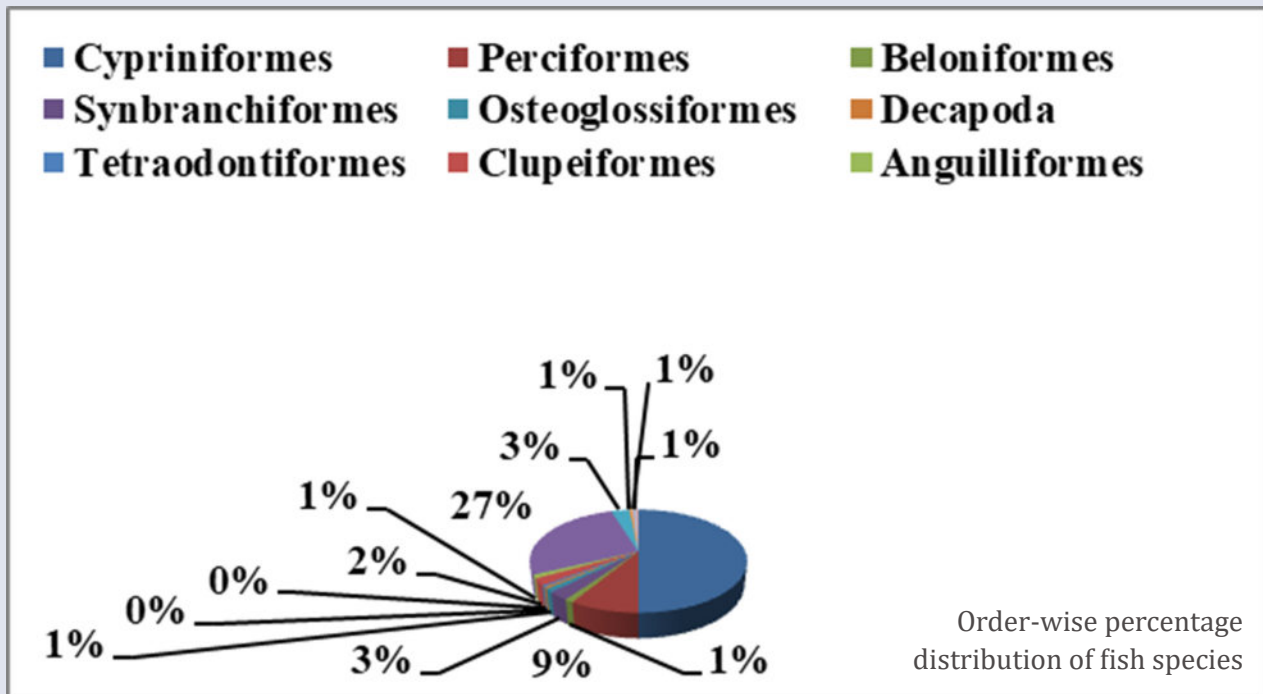


Bacterial isolates from rhizosphere soil of rice

ASSESSMENT OF FISH DIVERSITY, FISHERY RESOURCES AND AQUACULTURE AVENUES FOR IMPROVING SELF-SUSTENANCE OF FISHER-FOLK IN UPPER REACHES OF THE BRAHMAPUTRA VALLEY

As part of the project, 35 fish harvesting sites, landing centres, markets, and fishing villages were surveyed, documenting 184 fish species across 38 families, 14 orders, and 96 genera, including carps, catfishes, air-breathing fishes, eels, mahseer, and miscellaneous groups. Most species (75%) were categorized as Least Concern by IUCN, with three species identified as endangered and none facing extinction. Of the recorded species, 53 had both food and ornamental value, 51 were consumed as food, 23 were exclusively

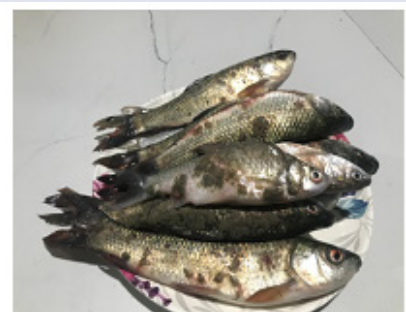
ornamental, and three had high sports value. An ICAR-IARI Fish Repository was developed with collected specimens, and barcode preparation is underway for easy field identification. Over 2,00,000 quality fish seeds (GI catla, Jayanti rohu, Amur common carp, and others), 500 kg lime, 500 lemon plants, and supplementary feed (26–28% protein) were distributed, benefiting more than 500 fish farmers. Additionally, over 300 farmers were trained in carp farming, ornamental fisheries, integrated farming systems (IFS), and fish processing.



IDENTIFICATION AND DOCUMENTATION OF COMMONLY OCCURRING FISH DISEASES IN DHEMAJI AND LAKHIMPUR DISTRICTS OF ASSAM

The present study, conducted in the Lakhimpur and Dhemaji districts along the northern bank of the Brahmaputra River, aimed to identify and document prevalent fish diseases. Surveys were carried out

in major daily and weekly fish markets, including Dhemaji-Gogamukh, Mohori Camp, Rajali, Milan Nagar, and Khelmati, where samples from diseased fish were collected. The analysis revealed a range of diseases:



Sample Collection



Argulosis



Lernaecosis



Abnormal Dropsy

bacterial infections such as abdominal dropsy, ulcer disease (Aeromoniasis), columnaris, and fin and tail rot primarily affecting bottom-dwelling species; parasitic infestations like argulosis and lernaecosis which are

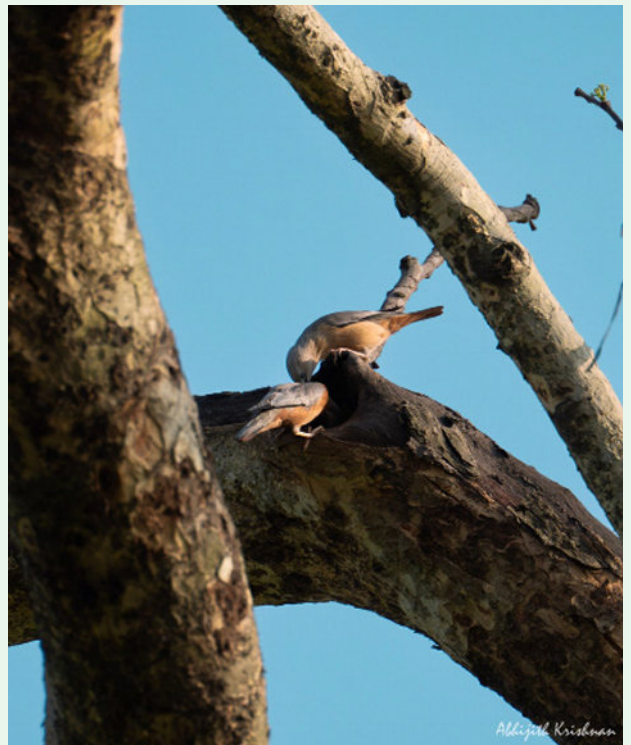
common in carps; fungal infections such as cotton wool disease and Achlya; and a nutritional disorder, Pinhead Disease, indicating a broad spectrum of health issues impacting fish in these regions.

EDUCATION AND STUDENTS' ACTIVITIES

Exploring Avian Biodiversity: A Bird Walk through IARI-Assam's Wild Side

On 5th May 2025, B.Sc. Agriculture (1st Year, 2nd Semester) students of ICAR-Indian Agricultural Research Institute, Assam, participated in a unique Bird Walk as part of their Environmental Science and Disaster Management course. Organized under the guidance of Dr. Abhijit K. P. and Mr. Umakanta Dash, the event provided an opportunity to the students with an immersive, field-based learning experience amidst the rich natural biodiversity of IARI-Assam's experimental fields.

During the walk, students observed and documented several endemic and elusive bird species native to the Eastern Himalayas. Notable sightings included the Asian Barred Owlet (Cuckoo Owlet), the striking Oriental Cuckoo-shrike, the graceful Red Collared Dove, and the vibrant Indochinese Roller. This engaging hands-on activity not only enhanced the students'



understanding of avian diversity, ecosystem dynamics, and their role in agro-ecosystems but also strengthened

a deeper appreciation for biodiversity conservation and sustainable ecosystem management.

Insect Safari: Practical Learning for UG Students

On 9th May 2025, a field excursion was organized for first-year B.Sc. Agriculture students enrolled in the course “Fundamentals of Entomology.” A total of 25 students participated in the excursion, which took place in a forest range near Rupohi Village, providing a valuable opportunity for field-based learning and hands-on exposure to insect biodiversity. Under the guidance of Mr. Kishore Chandra Sahoo, Dr. Abhijith K. P., and Mr. Umakanta Dash, students were introduced to various insect collection techniques, including sweep netting, hand-picking, and trap setting. This practical session enabled them to observe and collect a different insect species in their natural habitats, reinforcing theoretical knowledge through direct experience. The excursion significantly enhanced the students’ understanding of entomological practices and instilled a keen interest in the in the field of insect biodiversity studies.



“PRAKRUTI” - Students Launch Green Club for Sustainable Campus Farming

Under the visionary leadership of Hon’ble Director Dr. Ch. Srinivasa Rao, the students of ICAR-IARI, Assam have proudly launched “PRAKRUTI”, a student-led green club aimed at promoting sustainability, hands-on learning, and campus-based vegetable cultivation. With a vibrant team of 50 enthusiastic students, Prakruti is rooted in the spirit of “learning by doing.” Utilizing their free hours productively, the students are actively engaged in land preparation, crop nurturing, and cultivation of a variety of vegetables within the ICAR-IARI-Assam campus. The crops currently under cultivation include: Cucumber, Coriander, Chilli, Amaranthus, Bhendi (Okra), Watermelon, Beans, and Ridge Gourd. The initiative not only strengthens



practical agricultural skills among students but also fosters teamwork, environmental consciousness, and food security awareness. Through PRAKRUTI, the

students of ICAR-IARI, Assam are cultivating not just crops, but also a sense of community, responsibility, and a greener tomorrow.

Rhythm & Roots: A Cultural Tapestry Celebrating IARI Assam's 9th Foundation Day

On the serene evening of May 26, 2025, the campus of ICAR-IARI Assam in Dirpai Chapori, Gogamukh, transformed into a vibrant mosaic of culture and tradition as the institute celebrated its 9th Foundation Day. Marking the occasion "Rhythm & Roots," a cultural extravaganza orchestrated by Qala- the Cultural Club of IARI-Assam.



The event was graced by the esteemed presence of Hon'ble Director, Dr. Ch. Srinivasa Rao and Joint Director (Research), Dr. C. Viswanathan, whose presence underscored the significance of the occasion. Faculty, staff, and students gathered in unison, their spirits high and hearts aligned in celebration. The evening unfolded

with mesmerizing performances that echoed the rich heritage of Assam and the diverse cultural tapestry of India. B.Sc. and M.Sc. students took center stage, their enthusiasm and talent weaving a narrative of unity, pride and cultural harmony. The cultural programme was coordinated by Dr. Azhaguraja M, Chairman, Cultural Committee, and Dr. Mythra, Member Secretary, along with other members of the Cultural Committee who ensured the seamless execution of the event. The melodies lingered, the rhythms resonated, and the roots of tradition grew deeper, making it an evening etched in the annals of ICAR-IARI Assam's history, reflecting the institute's commitment to celebrating heritage alongside academic excellence.

Students Observe World Environment Day with Campus Beautification Drive

On the occasion of World Environment Day on 5th June, 2025, the students of ICAR-IARI, Assam actively participated in a campus beautification and landscaping initiative. Demonstrating their commitment to environmental stewardship, the students engaged in land preparation and plantation activities aimed at enhancing the aesthetic and ecological value of the campus. The initiative not only celebrated the global theme of environmental protection but also reinforced the institute's dedication to creating a green, vibrant, and sustainable learning environment.



'Riwayat' – Welcoming the UG Batch of 2024–25 at IARI-Assam

On 25th June 2025, the undergraduate students of ICAR-IARI, Assam warmly welcomed the newly admitted UG batch of 2024–25 through a vibrant and memorable fresher's party titled 'Riwayat'. The day commenced with

the inauguration of the Fresher's Day banner, witnessed by enthusiastic students and faculty members, setting the tone for the celebrations. The formal event in the evening began with the lighting of ceremonial candles,

followed by insightful addresses delivered by Dr. Lohit K. Baishya, Scientist In-Charge, and Dr. S. Manivanan, UG Coordinator. The event was a perfect blend of fun, talent, and creativity, featuring an exciting lineup of performances and interactive sessions. Highlights included a ramp walk, solo and group dance performances, solo singing, stand-up comedy, and engaging games—all enthusiastically presented by the first-year students.

‘Riwayat’ truly reflected the unity, energy, and vibrant campus spirit of ICAR-IARI, Assam. The celebration was a grand success, leaving behind cherished memories filled with joy, camaraderie, and laughter.



Field of Glory 2024–25: IARI-Assam Hosts Its Maiden Annual Sports Meet

“Field of Glory 2024–25”, the maiden Annual Sports Meet, was held amongst the students of IARI Assam to inculcate the virtues of healthy competition, teamwork, and sportsmanship. The event witnessed close battles among the students in four groups vying for top honours in several outdoor and indoor sports such as Volleyball, Shotput, Discus throw, Track and field events, Badminton, Chess, Carrom etc. At the end, it was the ‘Green Gladiators’ who emerged victorious as the overall Champions, followed by ‘Orchard Knights’ as Runner up. The sports meet was organized by the Sports, Literary, and Cultural Committee with close coordination of the Sports Club. It marked a significant milestone in the institute’s journey towards fostering a culture of physical well-being, camaraderie, and personal growth. “Field of Glory” not only celebrated athletic excellence but also reinforced the values of unity and perseverance among the student community.



EXTENSION AND CAPACITY BUILDING

Demonstration-cum-Training Programme on Biochar Preparation

A “Demonstration-cum-Training Programme on Biochar Preparation using Indigenous Wastes” was conducted on 28th May 2025 at ICAR-Indian Agricultural Research Institute, Assam. The event was honoured by the presence of Dr. Dillip Kumar Jha, Principal, Gogamukh College as the Guest of Honour. Dr. Jha emphasized the significance of organic manure in promoting human health. Dr. L. K. Baishya, Scientist-in-charge, IARI Assam highlighted the concept of biochar to the farmers and assured institutional support for the agricultural development of the region. A leaflet highlighting biochar production techniques and its benefits was also released on the occasion.



During the programme, the farmers were exposed to a hands-on demonstration of biochar production method. Mr. Umakanta Dash delivered a presentation on “Integration of Jeevamruta Application with Biochar”, followed by Dr. Prabhat Pramanik on “Method of Application of Biochar”, and Dr. A.K. Srivastava on “Significance of Biochar in Enhancing Soil Health.” The programme benefitted 27 farmers. Heads and other staff of IARI Assam also participated during the inaugural session. The programme was coordinated by Dr. Prabhat Pramanik, Mr. Umakanta Dash and Mr. Kishore Chandra Sahoo and Dr. L.K. Baishya.



IARI-Assam Joins Vikshit Krishi Sankalp Abhiyan to Empower Farmers in Dhemaji District

ICAR-IARI, Assam actively participated in the Vikshit Krishi Sankalp Abhiyan from 29th May to 12th June 2025 across Dhemaji district, in collaboration with KVK Dhemaji and District Line Departments. **The programme aimed to promote awareness and adoption of scientific farming practices across 54 Gram Panchayats**, engaging with thousands of farmers in different villages.



The campaign commenced with visits to Jindhal, Batghoria, Gohain Gaon, and Batuamukh Gram Panchayats on Day 1. Over the following days, ICAR-IARI Assam scientists, divided into teams, covered key Gram Panchayats including Simen Chapori, Kulajan, Telam, Akajan, Jonai, Dekapam, Kemi Jhelam, Gali



Sikari, Rajakhana, Siga, Laimekuri, Missamora, Ujoni Sissitongani, Somkong, Naoni Sissitongani, Sile, Dimow, Betonipam, Simenmukh, Sripani, Malinipur, Silasuti, Silapathar, Muktiar, Sissiborgaon, Modhya Mingmang, Modhya Sissitongani, Nalbaro, Naharbari, Kachutali, Gogamukh, Mingmang, Joyrampur, Amguri, Bhebeli, and Borlong. Despite hot and humid weather conditions, enthusiastic participation from farmers was witnessed throughout the campaign. The final day of the campaign, 12th June, saw outreach in Naruathan, Hatigarh, Chamrajan, and Ajuha Gram Panchayats. The event at

Naruathan was graced by Hon'ble Member of Parliament Shri Pradan Baruah, who emphasized the crucial role of scientific agriculture in ensuring both productivity and sustainability. The campaign proved to be a successful initiative in disseminating agricultural knowledge, motivating farmers to adopt improved farming practices, and strengthening grassroots-level connections between research institutions and farming communities in Assam. **During the campaign total 657 villages and 17,890 farmers were covered.** A number of researchable issues were identified during the campaign through direct scientist-farmers interaction. The campaign got a wide

outreach beyond Assam under the visionary leadership of Dr. Ch. Srinivasa Rao, Director, IARI. The event was graced by the **Hon'ble Agriculture Minister and Social Justice Minister of the Delhi Government**, and featured interactive sessions between IARI scientists and farmers, primarily focused on Kharif crop planning and the adoption of advanced agricultural technologies. The impactful interactions were covered by **Doordarshan's Kisan Channel**, highlighting IARI's efforts in translating scientific research into practical solutions at the grassroots level, under the visionary leadership of the **Director and Vice-Chancellor, ICAR-IARI.**



news and social media coverage in the local and regional news channels and papers including DD News Assam. From IARI Assam the team involved in the campaign consisting of Dr. Arpan Bhowmik (Chairman), Mr. Bhagirath Das, Mr. Umakanta Dash, Dr. Ramesh Babu, Dr. Abhijit K. P., Dr. Ravi Bhushan Prasad, Dr. Manish Pandey and Dr. Madhav Chaudhary.



As part of the nationwide campaign, ICAR-IARI, New Delhi also organized a Viksit Krishi Sampark Abhiyan programme on **29th May 2025** at Dariapur village, Haryana, reinforcing its commitment to farmer

Scientist-Farmer Interaction Meeting under BAERC Upper Assam Chapter

On 24th June 2025, a Scientist-Farmer Interaction Meeting was organized at IARI-Assam under the banner of the Upper Assam Chapter of the Bhartiya Agro Economic Research Centre (BAERC)- a registered society dedicated to contributing towards agricultural policy development. The event facilitated meaningful dialogue between researchers and farmers, aiming to bridge the gap between scientific innovation

and field-level application. A total of 25 farmers actively participated in the meeting, sharing their experiences, challenges, and expectations, while receiving insights and guidance from scientists to enhance agricultural productivity and sustainability. The interaction meeting was coordinated by Dr. S. Manivannan. Dr. Rachit Saxena, Dr. Arpan Bhowmik, Dr. Sunil Mandi, Mr. Raghavendra H. R. were also involved in the coordination of the interaction meeting. Mr. Jitender Gaithe also participated in the meeting.



HAPPENINGS AT IARI-ASSAM

IARI-Assam Reviews Progress, Charts Future Growth

A review meeting to assess the progress of academic, research, training, administrative, and operational activities at ICAR-IARI, Assam was held on 28th May 2025 through virtual mode, under the chairmanship of Hon'ble Director & Vice-chancellor, Dr. Ch. Srinivasa Rao, in the gracious presence of Hon'ble Joint Director and the entire working committee from ICAR-IARI New Delhi. During the meeting, comprehensive discussions were held on various functional aspects of the institute. The Hon'ble Director provided insightful guidance to ensure the smooth functioning of ICAR-IARI, Assam and offered key suggestions to enhance

institutional performance and impact. Special emphasis was placed on encouraging young scientists to strengthen their research outputs and engage in high quality as well as impactful scientific work aligned with regional and national priorities. The meeting saw witnessed active participation from all officers and staff of ICAR-IARI, Assam. Additionally, Joint Directors and members of the working committee from ICAR- IARI-New Delhi also joined the session virtually, contributing to a comprehensive review and strategic planning session aimed at fostering the growth and development of the institution.

Team IARI-Assam at ICAR Eastern Zonal Sports Meet 2024

The sports contingent of ICAR-IARI-Assam participated in the ICAR-Eastern Regional Sports Competition, held from 6th to 9th May 2025 at ICAR-IVRI, Izatnagar, Uttar Pradesh. Despite being a relatively small team, the IARI-Assam contingent exhibited remarkable enthusiasm, dedication, and sportsmanship across various indoor and outdoor events. Their spirited participation not only showcased the institute's growing emphasis on physical well-being and extracurricular engagement but also marked ICAR-IARI, Assam's vibrant presence at the zonal level. The event served as an excellent platform to foster camaraderie, team spirit, and healthy competition among ICAR institutes in the Eastern Zone.



Exposure Visit of School Students at IARI-Assam

On 20th May 2025, 12 number of Class 11 students from Diamond Mission School, accompanied by their teachers, visited IARI-Assam as part of an educational exposure tour. During their visit, the students were introduced to various academic, research, and infrastructural facilities of the institute. They were briefed about the diverse activities and contributions of IARI-Assam in the field of agricultural science. Special emphasis was laid on encouraging students to consider Agricultural Education as a promising career path. The programme was coordinated by Dr. Lohit Kumar Baishya, Dr. Arpan Bhowmik, and Dr. Bornalee Handique, who ensured an engaging and informative experience for the students.



Director Joins Hand with Students in Swachh Bharat Drive

A Swachh Bharat Cleanliness drive was organized at ICAR-IARI, Assam on 23rd May 2025 by the students and staff of the institute. The campaign was inaugurated by Dr. Ch. Srinivasa Rao, Director, IARI, who also addressed the students on the occasion. In his address,

Dr. Rao emphasized the significance of the Swachh Bharat and Clean India Missions, encouraging students to adopt cleanliness as a regular practice both within the campus and hostel premises. He encouraged the students to become role models in promoting hygiene

and environmental responsibility, inspiring others through their actions. He also proposed that all students should dedicate at least two hours every month towards campus cleaning activities as part of their commitment to social responsibility and community service. The event witnessed active participation from both students and staff, reflecting ICAR-IARI, Assam's commitment to develop a clean and green environment through collective effort and awareness.



The programme commenced with the Swachh Bharat Pledge, followed by a massive cleanliness drive across the campus. Around 150 students and staff members actively participated in cleaning up plastic waste and other litter, making the initiative a great success and reaffirming IARI-Assam's commitment to a cleaner, greener future.



In a similar initiative, as part of the Swachh Bharat Abhiyan, the students of ICAR- IARI-Assam once again demonstrated their dedication by participating in a campus cleaning drive on 7th June 2025. The activity was conducted under the leadership of Dr. S. Manivannan, UG Coordinator, and witnessed enthusiastic involvement from undergraduate students. The initiative aimed to inculcate a sense of responsibility and awareness towards cleanliness, environmental hygiene and community service among the student community. Through such efforts, ICAR-IARI, Assam continues to reinforce the core values of the Clean India Mission, promoting a cleaner, greener and more sustainable campus environment.

IARI-Assam Celebrates International Yoga Day

ICAR-IARI, Assam celebrated International Yoga Day with great enthusiasm on 21st June 2025 at the IARI Assam campus, aligning with this year's theme: "Yoga for One Earth, One Health."



The event was graced by Dr. Anil Pegu, Veterinary Officer, Gogamukh, as the Chief Guest. The yoga session was conducted under the coordination of Dr. Lohit Kumar Baishya, Dr. Deepjyoti Baruah, and Dr. Ch. Jamkhokai Mate. A total of around 150 participants, including officers, staff, and students, actively took part in the session. The event successfully reinforced the importance of integrating yoga into daily life as a means to achieve holistic health, inner harmony, and sustainable



living. The participants performed a number of ashanas of Yoga based on the Common Yoga Protocol, showcasing dedication, unity and discipline in promoting physical and mental well-being. Some of the ashanas performed are:

Standing: Forward and backward bending, right and left bending, neck rotation, shoulder stretch and rotation, trunk and knee movement, Tadasana, Trikonasana, Vrksasana, Tirjok Tadasana, Utkatasana, Kotisakrasana, Parsokunasana, Veerbhadrasana 1 & 2, Ardha Cakrasana, Pada Hastasana.

Sitting: Bhadrasana, Butterfly, Vajrasana, Ardha

Ustrasana, Ustrasana, Sasakasana, Uttana Mandukasana, Vakrasana, Dhyanasana, Dandasana, Cow pose, Cat pose, Scorpio/ Lionasana etc.

Lying on Floor: Makarasana, Bhujangasana, Salabasana, Setubandhasana, Dhanurasana, Uttana Padasana,

Markatsana, Ardha Halasana, Pawanmuktasana, Savasana, Sarbangasana

Pranayam: Omkar, Bhotrika, Kapalbhathi, Anulom Vilom, Nadisodhana Pranayama, Bhramori, Ujjairi, etc.

Hindi Workshop to Promote Use of Official Language

A one-day Hindi Workshop was organized by the Hindi Cell, ICAR-IARI, Assam on 30th June 2025 in the Board Room of the institute. The workshop focused on the topic “Rules and Regulations in Use of Hindi as Official Language”

The primary objective of the workshop was to create awareness and encourage the effective use of Hindi in official communication. A total of 22 participants, including scientists, administrative officers, and technical staff, attended the session. The workshop was coordinated by Mr. Saroj Kumar Singh and Dr. M. B. Chaudhary. During the session, Mr. Saroj Kumar Singh delivered an insightful and informative lecture covering various aspects of official language policy, including rules governing Hindi usage, official correspondence, file noting, notifications, and communication practices. The event reflected the ICAR-IARI, Assam’s commitment to



promoting the use of Hindi in day-to-day administrative and scientific operations, in alignment with the Government of India’s Official Language Policy. Such initiatives play a crucial role in strengthening linguistic inclusivity and administrative efficiency within the institute.

NSS Activities: Volley Ball Exhibition Match for Health & Fitness

A volley ball match was organized between students and scientists of ICAR-IARI Assam on 27th June 2025 (1500-1730 hrs) under a NSS theme on “Health and Fitness”. Apart from 16 players as participants, more than 90 students were volunteers and 20 as attendees. The Scientist In-charge Dr. Lohit Kr. Baishya spoke on the importance of sports in the well being of human life



and advised the students for further participation in sports and games activities of the institute. Dr. Alemwati Pongener, Dr. Deepjyoti Baruah, Dr. S. Manivannan and Dr. Ch. Jamkhokai Mate, Scientists of the institute addressed

the gathering to take up sports and games as an essential part of NSS in the institute. They further suggested the students to build a strong body to develop a strong mind. The students/volunteers agreed to participate and conduct such activities in other sports and games categories in near future for keeping themselves fit, strong and healthy.

The volleyball match henceforth was initiated with a strong message on the importance of sports and games in human health, followed with warm up exercises by an expert trainer Mr. Dhyanjyoti Doley (Physical Education), the volleyball match and lastly concluded with prize distribution (Annual Sports Meet’ 2024-2025) and light refreshment.



Field Visit to Innovative Mushroom Farmer in Gogamukh

On a recent field visit, a team from ICAR-IARI, Assam, comprising Dr. Arpan Bhowmik, Dr. Sunny Arya, and Mr. Jitendra Singh Gaithe, visited the farm of Mr. Milan Chhetri, a beneficiary under IARI's input distribution programme, located at Dirpai Chapori, Gogamukh. The visit focused on assessing Mr. Chhetri's mushroom cultivation activities and the utilization of the agricultural sprayer provided by the institute. The team was impressed by his well-managed mushroom production unit and his innovative approach to farming. Mr. Chhetri has developed a custom-made tool to facilitate lentil farming, reflecting his ingenuity and dedication to improving agricultural practices. In addition to mushroom cultivation, he also practices vermicomposting and floriculture, adding diversity to his farm operations. He expressed his gratitude to ICAR-IARI-Assam for its continuous support and technical guidance, noting that the sprayer has been highly beneficial to his farm work. ICAR-IARI, Assam remains committed to encouraging and supporting such progressive and innovative farmers like Mr. Chhetri who serve as role models for sustainable and diversified agriculture in the region.



VISIT OF DELEGATES AND MEETINGS

Official Language Dept. Deputy Director Engages with IARI-Assam

A significant meeting was held at ICAR-IARI, Assam, on April 29, 2025, with Shri Rajiv Kumar Nayak, Deputy Director (Execution), Northeast Region, Department of Official Language, Ministry of Home Affairs, Government of India. During the meeting, Shri Nayak reviewed the progress of government work in Hindi implementation in government work at the institute and provided valuable guidance to employees on further strengthening the use of Hindi as the official language in administrative and scientific communication. The session witnessed active participation from all staff



members of ICAR-IARI, Assam, reflecting the institute's commitment to aligning with the Government of India's Official Language Policy and promoting linguistic inclusivity in its day-to-day operation.

Review Meeting with NPCC on Infrastructure Development

On 22nd May 2025, Dr. Ch. Srinivasa Rao, Hon'ble Director, ICAR-IARI, chaired a review meeting with the National Projects Construction Corporation (NPCC) to assess the progress of ongoing construction and related activities at ICAR-IARI-Assam. The meeting was attended by Dr. V. Chinnusamy, Hon'ble Joint Director (Research), along with officials from NPCC, and work committee members from ICAR-IARI New Delhi and Assam. Discussions focused on the current status of infrastructure development, adherence to timelines, and quality assurance measures to ensure the timely and efficient execution of construction works. The meeting highlighted the institute's firm commitment to accelerating campus development in line with its vision to establish ICAR-IARI-Assam as a premier hub for

agricultural research, education and innovation in the Northeast region.



Board of Studies Meeting

The Board of Studies (BoS) meeting was held on 24th May 2025 at ICAR-IARI, Assam, under the chairmanship of Dr. Ch. Srinivasa Rao, Hon'ble Director, ICAR-IARI. The meeting focused on academic planning, curriculum development, and strengthening of teaching and student research programmes at ICAR-IARI-Assam. It provided a platform for academic leaders and faculty members to review existing academic frameworks and propose strategic enhancements to meet the evolving needs of agricultural education and research in the region. The deliberations highlighted the institute's unwavering commitment to academic excellence, innovation and continuous improvement in alignment with national educational priorities and the vision of

transforming ICAR-IARI, Assam into a leading centre of agricultural learning and research in the Northeast. Dr. L. K. Baishya, Dr. S. Manivannan, Dr. Arpan Bhowmik, Dr. Prabhat Pramanik and Dr. Sunil Mandi attended the meeting as a Board of Studies member of IARI Assam.



Dean and Associate Deans Visit IARI-Assam for Academic Interaction

On 24th May 2025, Dr. Anupama Singh, Joint Director (Education) and Dean, ICAR-IARI, New Delhi, visited IARI-Assam and held an interactive session with the scientists to discuss various key issues related to academic activities and institutional development. During the interaction, Dr. Singh emphasized the importance of establishing Experiential Learning Units (ELUs) to enhance hands-on learning and skill development among students. She elaborated on several ELU models that can be effectively implemented at ICAR-IARI-Assam, encouraging faculty members to initiate innovative, student-centric learning platforms aligned with contemporary educational needs. The meeting was also attended by Associate Deans: Dr. Atul Kumar (PG) and Dr. Harshawardhan Choudhary (UG), who

contributed to the discussions, focusing on strategies for academic strengthening, curriculum enrichment and capacity building. The visit marked a significant step towards aligning ICAR-IARI-Assam's academic vision with the broader goals of ICAR-IARI and reinforcing the institute's commitment to academic excellence and future-ready agricultural education.



Facilities Used: Regional Committee Meeting on Assam–Arunachal Border Issue Held at IARI-Assam

The 5th Meeting of the Regional Committees on the Assam–Arunachal Pradesh border issue, concerning the districts of Dhemaji, Lower Siang, and East Siang,



was held on 17th June 2025 in the Board Room of ICAR-IARI, Assam. The meeting brought together key political representatives from both states to deliberate on matters related to inter-state boundaries and foster mutual understanding and resolution.

AWARDS AND RECOGNITIONS

Dr Ch Srinivasa Rao Director and Vice Chancellor of IARI spoke on Innovations in Agricultural Education in IARI and India in Zee News TV Channel in which Education experts and Education Policy makers participated. on 28th April, 2025



Dr. Ch. Srinivasa Rao, Director and Vice Chancellor, IARI served as the chief guest during the 38th Convocation at UAS Dharwad on 14th May, 2025.



Dr. Arpan Bhowmik received National Academy of Agricultural Sciences (NAAS) Associateship Award.



Dr. Viswanathan Chinnusamy, IARI, Physiologist
PUSA DST RICE 1
Gene targeted: DST (DROUGHT AND SALT TOLERANCE)

Rice Varieties Released

#Historic Day in Indian Science and Agriculture May 04, 2025. India will release two #GenomeEdited_Rice varieties, developed by Indian Council of Agricultural Research. Let us celebrate two scientists, Viswanathan Chinnusamy and Satendra K Mangrauthia, who have developed these varieties at ICAR-Indian Agricultural Research Institute and Indian Institute of Rice Research, respectively. With this, India joins the USA and Japan to have commercially available genome-edited crops.

Union Agriculture Minister,
Shri Shivraj Singh Chouhan
will release
two genome edited rice varieties developed by ICAR,
the first ever, such achievement in the country using cutting-edge genome editing technology.




Dr. Satendra K Mangrauthia, IIRR, Biochemist
DRR DHAN 100 (KAMAJA)
Gene targeted: Gm1 (GRAIN NUMBER 1) = CXX2 (CYTOKININ OXIDASE)

IARI-Assam proudly acknowledges the remarkable achievement of Dr. Viswanathan Chinnusamy, Joint Director (Research), ICAR-IARI, for his pivotal role in the development of

the genome-edited rice variety PUSA DST RICE 1, which demonstrates enhanced drought and salt tolerance by targeting the DST gene. This breakthrough marks a historic milestone for India as it joins the ranks of the USA and Japan in releasing commercially available genome-edited crops.

The following awards were presented on occasion of the 9th foundation day of the institute.

- Best Scientist of the year: Dr. Arpan Bhowmik
- Best Young Scientist (Men) award: Mr. Akshay Kumar H. M. and Mr. Kishore Chandra Sahoo
- Best Young Scientist (Women): Dr Sumalatha A Reddy
- Best Administrative Staff: Mr. Saroj Kumar Singh
- Best Technical Staff: Mr. Sanjay Kumar
- Best Student (First Year): Miss Abhija S. and Miss Shivangi Singh
- Best Student (Second Year): Miss Manisha Malik
- Best Student (Third Year): Mr. Kimshuk Somvanshi
- Best Farmer (Men): Mr. Pankaj Uppadhaya
- Best Farmer (Women): Miss Renuka Deukota
- Best Press/Media Person: Mr. Amit Ramchiary
- Best Coordinating Institution: Assam Agricultural University, Jorhat
- Best Coordinating State Government Officer: Mr. Rahul Suresh Javir, IAS and DC, Dhemaji

- Dr. Amjad K Balange recognized as reviewer for a peer reviewed journal “Scientific Report” from Springer Nature.
- Dr. A. K. Balange acted as External Examiner for the PhD Comprehensive Viva-Voce examination at Faculty of Fisheries Science, AAU, Raha, Nagaon, Assam and Curtin University, Perth, Western Australia.
- Dr. A. K. Balange acted as Reviewer of Externally funded project at Rajiv Gandhi Science & Technology Commission (RGSTC), Mumbai, Maharashtra
- Dr. Chethan C R received Best Research Paper Award (First) for the year 2025, by ICAR Directorate of Cashew Research, Puttur.
- Dr. Chethan C R selected as “Editor” for the prestigious journal “Indian Journal of Weed Science” published by Indian Society of Weed Science, Jabalpur.
- Dr. Rahul Singh served as Co-Organizing Secretary and Technical Committee Member in the 12th National Seminar on “Futuristic Agriculture: Technology, Sustainability and Beyond,” held from 22-24 May, 2025 at Umiam, Meghalaya. Dr. Rahul Singh received Best Extension Professional Award in recognition of my contributions to the field of Agricultural Extension.
- Dr A K Srivastava acted as selection committee expert for appointment of Associate Professor Soil science

- at Maharana Pratap university of Horticulture, Karnal Haryana on April 21, 2025.
- Dr. Rahul Singh has been nominated as a member of the National Level Execution Committee for Viksit Krishi Sankalp Abhiyaan (May 29–June 12, 2025).
- Dr. Akkalarreddy Sumalatha received best oral presentation Award for the Oral paper entitled ‘Genetic inheritance and identification of Molecular markers linked to Male sterility in African Marigold (*Tagetes erecta*) in the International Conference on Ornamental Horticulture (ICOH 2025), organised by Department of FLA, HC&RI, TNAU, Coimbatore, 26-28 June, 2025, Tamil Nadu.



CONFERENCES, SEMINARS, SYMPOSIA & WORKSHOPS

Participation in Training/Workshop/Conference

Sl No	Title	Mode	Organizer/Venue	Date and Duration
1.	National Brainstorming workshop on Next-Gen Agricultural Physics: Innovations for Sustainable Growth (National). Participant: Sunny Arya	Offline	ICAR- Indian Agricultural Research Institute, New Delhi	Date: 28- 30 June, 2025 Duration: 03 days
2.	12th National Seminar on “Futuristic Agriculture: Technology, Sustainability and Beyond,” held from 22nd to 24th May, 2025 at Meghalaya. ICAR Research Complex for NEH Region, Umiam, Meghalaya Participant: Dr. Rahul Singh	Offline	Society for Community Mobilization for Sustainable Development, Central Agricultural University, Imphal, and ICAR Research Complex for NEH Region, Umiam, Meghalaya.	Date: 22-24 May, 2025 Duration: 03 Days

Paper Presented in Conferences/Seminars/Symposium

- Dr. Sunny Arya: Oral presentation of paper entitled “Plant Expert: A custom AI expert system for pesticide recommendation” at the National Brainstorming Workshop on “Next-Gen Agricultural Physics: Innovations for Sustainable Growth”, held during 28-30th June, 2025 at ICAR-IARI, New Delhi.
- Dr. Sunny Arya: Poster presentation of paper entitled “Inundated area monitoring using satellite-based microwave remote sensing of flood prone districts of upper Assam” at the National Brainstorming Workshop on “Next-Gen Agricultural Physics: Innovations for Sustainable Growth”, held during 28-30th June, 2025 at ICAR-IARI, New Delhi.
- Sumalatha A. ‘Genetic inheritance and identification of Molecular markers linked to Male sterility in African Marigold (*Tagetes erecta*) in the International Conference on Ornamental Horticulture (ICOH 2025), organized by Department of FLA, HC&RI, TNAU, Coimbatore, 26-28 June, 2025, Tamil Nadu.

Resource Person in Training Programme/Workshops

Name	Name of the Institute/ Organization, where served as resource person	Name of the Event	Title of the Talk	Date
Dr. Bornalee Handique	Seujbhumi Agro Producer Company Limited, North Lakhimpur, Assam	Training Program on Maize Silage processing	Silage making: An approach to conserving green fodder	23.06.2025
Dr. Chethan C R	ICAR-DWR, Jabalpur	IRC-2025	Research Achievements for the year 2024-25	18.06.2025
Dr. Arpan Bhowmik	The Neotia University, West Bengal	Faculty Development Program on Emerging Agricultural Practices-Focused on Sustainability	Product-Process Optimization in Agricultural Experiments	11.04.2025
Dr. Sunny Arya	ICAR-IARI, New Delhi	National brainstorming workshop on Next-Gen Agricultural	Invited as Panel member for Panel Discussion on “Use of Next-Gen Technology for Remote Sensing Research”	29.06.2025
Mr. Saroj Kumar Singh	ICAR - NAARM Hyderabad	Foundation Training Programme for Newly Recruited Administrative Officers and Finance and Accounts Officers of ICAR	Hands-on Training on ICT Tools (CPGRAMS and RTI MIS)	04.04.2025
			Hands-on Training on ICT Tools (GeM & CPPP)	04.04.2025
	ICAR - RC NEH Barapani	Module- II Training Program for Newy Recruited Assistants of ICAR	Joining Time, Deputation / Foreign Service, Technical Resignation, Lien etc.	07.04.2025
	RTI & Grievance Redressal Mechanism in Govt. of India and ICAR and Handling of Court Cases		07.04.2025	

Mr. Saroj Kumar Singh	ICAR - RC NEH Barapani	Module- II Training Program for Newy Recruited Assistants of ICAR	Service matters of Administrative Cadre viz Appointment, Promotion, Probation/Confirmation, RRs	08.04.2025
			Seniority & MACP	08.04.2025
	ICAR - CIFE Mumbai	Module- II Training Program for Newy Recruited Assistants of ICAR	Introduction of ICT Tools viz e-Office, SPARROW, e-HRMS etc.	02.05.2025
			Hands on Training on GeM	02.05.2025
	ICAR - IARI New Delhi	Module- II Training Program for Newy Recruited Assistants of ICAR	Hands on Training on GeM	16.06.2025
			Procurement of Goods and Services	17.06.2025
Manual of Office Procedure			17.06.2025	

PUBLICATIONS

Research Papers

Sl. No	Detail of the Paper	NAAS Rating 2025 *	National/ International
1	Chaudhary, M. B., Rao, K. J., & Bihola, A. (2025). Correlation Studies on Sensorial and Textural Characteristics of Mohanthal During Optimization of Sugar Syrup Concentration. <i>Journal of Culinary Science & Technology</i> , 1-22.	7.39	International
2	Chaudhary, M. B., Rao, K. J., Bihola, A., & Adil, S. (2025). Standardization and characterization of Mohanthal using response surface methodology. <i>Scientific Reports</i> , 15(1), 1-14.	10.8	International
3	Chattopadhyay, K., Xavier, K. M., Porayil, L., Balange, A. K., & Nayak, B. B. (2025). Effects of chitosan molecular weight on proteins and lipids interactions in fish mince emulsion sausages. <i>International Journal of Biological Macromolecules</i> , 145562.	14.5	International
4	Singh, T., Goswami, S., Ali, A., Munibyrapa, S., Dutta, M., Thimmegowda, V., ... & Satyavathi, C. T. (2025). Characterization of Phenolics and Influence of Phytic Acid Content on Iron and Zinc Bioaccessibility in Chapati Prepared From Diverse Pearl Millet Genotypes. <i>Molecular Nutrition & Food Research</i> , e70130.	10.2	International
5	Dalal, A., Jaggi, S., Varghese, E., Bhowmik, A., Varghese, C., & Datta, A. (2025). Rotatable Response Surface Designs for $S1^{n1} \times S2^{n2}$ Incorporating Neighbour Effects. <i>REVSTAT-Statistical Journal</i> , 23(2), 235-251.	7.2	International
6	Nayak, S. L., Sethi, S., Asrey, R., Singh, B., Bhowmik, A., & Dubey, A. K. (2025). Retention of 'Dancy' Tangerine Quality Attributes with Chitosan Coating and Phytosanitary Irradiation Dose. <i>Applied Fruit Science</i> , 67(4), 1-6.	-	International

* JCR Impact Factor if NAAS Rating is not available

Review Papers

Sl. No	Detail of the Paper	NAAS Rating 2025 *	National/ International
1	Pde, D., Baruah, A., Balange, A. K., Baruah, D., Handique, B., Chaudhary, M. B., Pandey, M., & Manoharan, A. (2025). Fisheries and aquaculture in Northeast India: A comprehensive review of status, issues, and sustainable development opportunities. <i>International Journal of Agriculture Sciences</i> , 17(3), 13546–13552.	4.18	National
2	Bihola, A., Chaudhary, M. B., Bumbadiya, M. R., & Borad, S. (2025). Milk procurement system in India. <i>International Journal of Dairy Technology</i> , 78(2), e70019.	9.05	International
3	Sreekanth, D., Pawar, D. V., Sahadeo, I. K., Kumar, R., Basavaraj, P. S., Mahesh, S., ... & Mishra, J. S. (2025). Advancements in CRISPR/Cas technology for generating herbicide tolerant crops: a comprehensive review. <i>Journal of Plant Biochemistry and Biotechnology</i> , 1-16.	13.6	International
4	Gaibimei, P., Devi, N. M., Raleng, A., Pongener, A., & Mate, C. J. (2025). Sustainable Processing and Commercialization of Underutilized Fruits in North East India. <i>International Journal of Environment, Agriculture and Biotechnology</i> , 10(3), 617821.	4.74	International
5	Singh, R. and Debnath, B. (2025). Demonstration of Feed-based Aquaculture in adivasi Villages of Tripura, North-East India. <i>Journal of Community Mobilization and Sustainable Development</i> , 20 (Special issue), 1-7	5.02	National
6	Min, K. Wason, M., Padaria, R. Satyapriya, Bishnoi, S., Singh, Biswas, A., Prasad, S. and Lama, A. (2025). Gender Based Perception on Climate Change Awareness in Myanmar's Upland, Shan Region. <i>Journal of Community Mobilization and Sustainable Development</i> , 20 (Special issue), 114-120	5.02	National
7	Pandey, M., Shah, S. V., Patel, D. C., Pandya, P. R., Wadhvani, K. N., & Sarvaiya, N. P. (2025). Influence of rice DDGS and straw mixture on growth, intake, serum enzymes and thyroid hormones of dairy heifers. <i>Annals of Phytomedicine</i> , 14(1), 1082–1089.	7.7	International

* JCR Impact Factor if NAAS Rating is not available

Book Chapter

- Mahra, G.S., Burman, R.R., Satyapriya, Joshi, P., Bishnoi, S., Sahu, S., Kushwaha A, Satyaprakash and Singh, R. (2025). Digital Skills for Smart Agriculture: Opportunities, Challenges and Way Ahead for Indian Youth Published in Redrafting the national Youth Policy in light of India 2047 (Editors: Nisha Joshi, Prerna Tiwari and Ritika Singh), GBPUAT Pantnagar.

Popular Articles

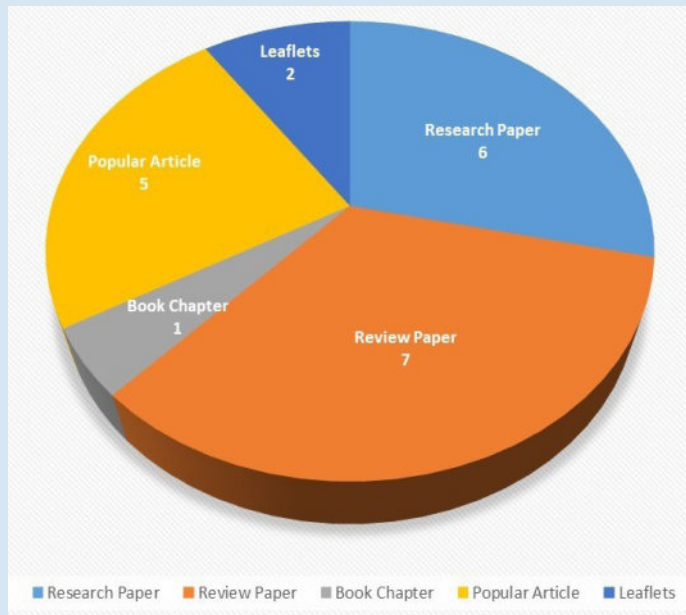
- Ch. Jamkhokai Mate, Sunil Mandi, Arpan Bhowmik, Gaibimei Palmei. (2025) Some Common Plant-Based Polysaccharides and their Applications. *Agriculture & Food e-newsletter*, 7(4), 95-96.
- Kajal Sharma, LK Baishya, Sunil Mandi, Ch. Jamkhokai Mate, Arpan Bhowmik. (2025) Utilization of Rice Fallows for Horizontal Diversification in Eastern India for Ensuring Food Security. *Agriculture & Food e-newsletter*, 7(4), 121-123.

- Pallavi Kalita, Prabhat Pramanik, Ch. Jamkhokai Mate. (2025) Acidic Soil and Northeast Region of India: Its Status and Management. Agriculture & Food e-newsletter, 7 (4), 219-221.
- Pde, D., Baruah, A., Handique, B., Chaudhary, M. B., Pandey, M., & Manoharan, A. (2025). Probiotics roles in plant-based fish feed. Just Agriculture, 5(10), [e-ISSN: 2582-8223].
- M.B. Chaudhary, Bornalee Handique, Amjad K. Balange, Azhaguraja M., Da U Ruhi Pde and Arunjyoti Baruah. (2025) Joha Rice: A Promising Future Nutraceutical Food. Krishi Science – eMagazine for Agricultural Sciences. 06(05): 31-34. (ISSN: 2583-4150).

Leaflets

- Deepjyoti Baruah, A.K. Balange, Da U R Pde, R. Kumar, L. Mog, A. Paria, Rejani C. (2025). Commercially important fishes in fish farming systems of northeast India. ICAR-Indian Agricultural Research Institute, Assam. PME No. IARI-A/B/2025/20
- Pramanik, P., Dash, U., Baishya, L.K. and Panda, D. (2025). Leaflet on Biowaste to Biochar. ICAR-IARI, Assam. PME Ref. No. IARI-A/B/2025/24.

Summary of Publications



Statistical Advisory

- Dr. Arpan Bhowmik advised Dr. Shruti Sethi, Principal Scientist, IARI, New Delhi on the use of PCA, heat map and ANOVA for data pertaining to their research.
- Dr. Dibyendu Deb provided expertise to:
 1. Dr. Sunayan Saha (ICAR-Central Potato Research Station, Jalandhar) - Data analysis and regression modeling
 2. Dr. Jaydeep Halder (IIVR, Varanasi) - Data exploration, regression, machine learning, and GIS mapping
 3. Dr. Shovik Deb (Uttar Banga Krishi Viswavidyalaya) - Data analysis for soil quality indexing
 4. Dr. Gunjan (RLBCAU, Jhansi) - Experimental design and analysis

New Joinings

Scientific Staff

- Dr. Rahul Singh as Senior Scientist (Agricultural Extension) w.e.f. 22.04.2025
- Dr. Chethan C. R. as Senior Scientist (Farm Machinery and Power) w.e.f. 23.04.2025
- Dr. Prabhash Kumar Mishra as Senior Scientist (Land and Water Management Engineering) w.e.f. 13.05.2025
- Dr. Amit Kumar Srivastava as Senior Scientist (Live Stock Production Management) w.e.f. 04.06.2025

- Dr. Subhra Shil as Senior Scientist (Vegetable Science) w.e.f. 17.06.2025

Administrative and Finance Staff

- Mr. Dev Plasiya as Administrative Officer (AO) w.e.f. 21.04.2025
- Mr. Subham Kumar as Finance and Accounts Officer (F&AO) w.e.f. 21.04.2025

Transfers

- Dr. Ramanath Ramesh Babu transferred to CHES (Central Horticultural experiment station), IIHR, Chettalli, Kodagu, Karnataka (relieved from IARI Assam w.e.f. 27.6.25)

Press / Media Coverage

গোগামুখত ভাৰতীয় কৃষি গৱেষণা প্ৰতিষ্ঠানৰ বৰ্ষপূৰ্ত পালন

আই চি এ আৰৰ গৱেষণা-পৰিচালন কাৰ্য

IARI Assam held the 3rd research council meeting at Gogamukh

PM Modi urges NDA states to tackle child marriage

Managing high blood pressure may lower dementia risk by 15%

ICAR-IARI Assam held the 3rd research council meeting at Gogamukh

PM Modi urges NDA states to tackle child marriage

Managing high blood pressure may lower dementia risk by 15%

Celebration of the 9th Foundation Day, IARI Assam

ENN, May 27: The 9th foundation day was celebrated on Monday with great enthusiasm & solemnity marking nearly a decade of the Institute's dedicated contribution to agricultural research and development in the Northeast region. Dr. L. K. Baishya, Scientist In-Charge, welcomed the dignitaries and participants, set-



day's events. Distinguished guests including Shri Tapan Kr. Gohain, Registrar, AAU, Jorhat; Dr. Viswanathan Chinnusamy, Joint Director (Research), IARI; and Shri Rahul Suresh Javir, IAS, DC, Dhemajji, graced the occasion with

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INDIAN COUNCIL OF AGRICULTURAL RESEARCH
Ministry of Agriculture and Farmers Welfare

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Ministry of Agriculture and Farmers Welfare

Glimpses of Vikshit Krishi Sankalp Abhiyan



Campus Life at IARI-Assam





Staff Position of IARI-Assam



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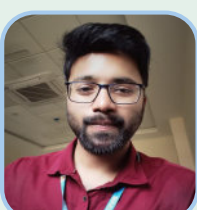
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(10.12.1955 - 10.05.2025)

With deep sorrow, the ICAR family mourns the sad demise of

Padma Shri Dr S Ayyappan,

former Secretary (DARE) and Director General,
ICAR (2010-2016).

A true visionary and an unwavering champion of Indian agricultural science, his contributions will continue to inspire us all.

May his soul rest in eternal peace!

With profound sorrow and deep reverence, the ICAR family honor the memory of Dr. S. Ayyappan, Former Secretary (DARE) & Director General (ICAR), who departed for his heavenly abode on May 10, 2025. A visionary leader and a luminary in agricultural research, Dr. Ayyappan made pioneering contributions to fisheries, aquaculture, and agricultural sciences, leaving an indelible legacy on India's scientific community. His unwavering dedication, wisdom, and transformative leadership will continue to inspire generations of researchers and scientists. We extend our deepest condolences to his bereaved family and loved ones. May his noble soul find eternal peace, and may his legacy continue to guide and inspire us all.

From the Editors

It is our pleasure to present the April–June 2025 issue of our newsletter, showcasing a vibrant and productive quarter for our institute. This period was marked by major achievements, meaningful collaborations, and renewed momentum in our mission to advance agriculture in the Northeast. A highlight of the quarter was our 9th Foundation Day, which brought together eminent guests, scientists, students, and farmers to celebrate our journey and reaffirm our shared commitment to agricultural transformation. We also hosted impactful workshops, research council meetings, and signed new MoUs that will strengthen research, training, and outreach. From expanding infrastructure and research capacity to launching innovative projects and capacity-building programs, our scientists and students have excelled across fieldwork, extension, and academics, demonstrating dedication and resilience. Special emphasis was placed on outreach, directly engaging farming communities to share knowledge and translate research into practical benefits. We express our sincere gratitude to our visionary Director for continuous guidance, and to all faculty, staff, students, collaborators, and partners whose efforts drive our success. Moving forward, let us continue to embrace innovation, collaboration, and community spirit to fulfil our vision for the region.

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Photo Credit: Dr. Abhijith K P



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