



ICAR- National Institute of Secondary Agriculture E-NEWSLETTER



Director's Desk

Since our rechristening to the National Institute of Secondary Agriculture in September 2022, we have prioritized the value addition of key commodities, sustainable utilization of by-products, and waste minimization. These initiatives aim to reduce environmental pollution while advancing agricultural technologies for farmers and stakeholders. This quarter, we proudly highlight two impactful events: the *Regional Agriculture Fair* on “Sustainable & Circular Bioeconomy,” which raised awareness among farmers in eastern India about modern agri-technologies, and the *Awareness Programme on Honey and Bamboo Production* in Jharkhand, promoting sustainable, eco-friendly practices. We are also excited to announce the filing of two patents, showcasing our scientific innovation. Our research output continues to thrive with numerous papers, articles, book chapters, and awards. Congratulations to our dedicated team whose efforts drive the institute forward. It is with great pride that I share this newsletter, celebrating our achievements and the bright future ahead.



(Abhijit Kar)

In this issue

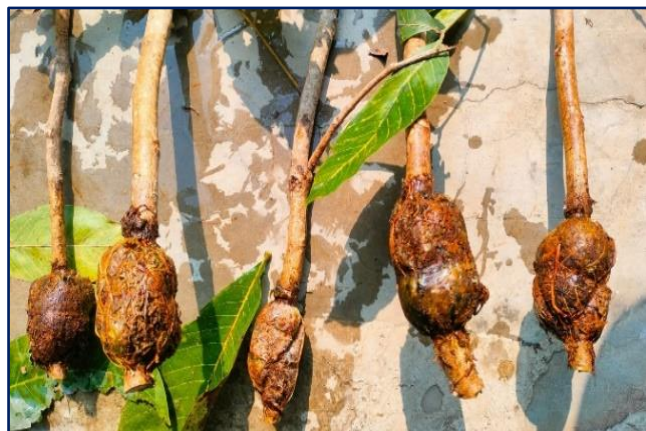
- Research highlights
- Educational and capacity building programme
- Events
 - Hindi Karyasala
 - Brainstorming session
 - Regional Agriculture Fair 2024
 - Int' Women's Day
 - Awareness programme on honey & bamboo production
 - RAC meeting
- Participation
- Patents
- Publication & publicity
- PG cell corner
- Visits
- HRD



RESEARCH HIGHLIGHTS

Identification of host plants (*Flemingia semialata* and *Ziziphus mauritiana*) having potentially higher lac yield and their mass multiplication

The variation in selected *F. semialata* has been assessed for winter kusmi lac production, with 50 g of high-quality broodlac inoculated in 360 plants. Data recorded from 125 selected and 25 control plants has shown higher crawler settlement (65 vs. 53 per cm²), plant height, and fresh biomass in the selected plants. Broodlac yield per plant was 267 g in selected one as compared to 223 g in control, while scrapped lac was also observed higher (72.3 g vs. 53.5 g). Further, multi-location trials were also conducted at Krishi Pathsala (Patamda, East Singhbhum), KVKs in Kisko (Lohardaga), Bano (Saraikela), Bishunpur (Gumla), and Torpa (Khunti), with 3,000 *F. semialata* seedlings transplanted, indicated satisfactory plant growth. An experiment conducted to standardize methodologies for asexual propagation of *Butea monosperma* (palas) and *Schleichera oleosa* (kusum) indicates effective rooting using IBA 1500 ppm + NAA 750 ppm (80% in palas, 90% in kusum), IBA 2000 ppm + NAA 1000 ppm (70% in palas, 80% in kusum), and IBA 3000 ppm (60% in palas, 80% in kusum) under air layering techniques.



Air layering in (a) Palas variant swadi (*Butea monosperma*) and (b) Kusum (*Schleichera oleosa* Lour)

Electric Bhatta for button lac production

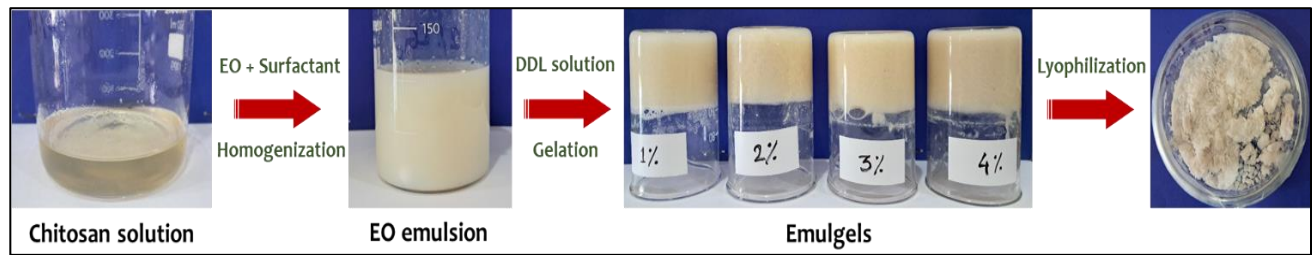
An electric *bhatta* resembling traditional clay *bhatta* in shape and size has been developed to avoid inconvenience to traditional operators. It comprises of three units: oven, operator seat and stone-slab. Reflector-heater assembly is installed in the oven. Reflector is made of aluminium sheet, and radiation heaters are installed inside reflector. Single phase (220 V, 50 Hz) electric power supply operates the heaters. Successful trials have been conducted to operate the developed *bhatta* using PV-based solar power. The developed *bhatta* filters about 3.0 to 3.5 kg seedlac per hour, while it consumes about 2.85–3 kW-h electricity.



Button lac production from ICAR-NISA developed electric bhatta

Lac resin encapsulated essential oil formulation

A process has been developed to encapsulate lemongrass essential oil within a lac resin-based biopolymer composite through emulgel formation. Essential oil from fresh leaves of lemongrass (*Cymbopogon* sp.) has been extracted by hydro-distillation technique with a yield of 0.6±0.05 % on a fresh weight basis. To prepare lac resin-encapsulated essential oil formulation, microemulsification of the essential oil within an aqueous solution of chitosan (2%) has been standardized using a surfactant through a high-speed homogenization technique. This microemulsion mixed with an aqueous seed lac solution and aging, formed an emulgel. Lac resin concentration varied between 1-4%. The prepared emulgel has been freeze-dried to obtain the essential oil-encapsulated solid powder. The particle size analysis indicated the formation of microparticles as low as around 113 nm diameter with a zeta potential of –24 mV, ensuring the stability of the microemulsions.



Process of formation of lac resin encapsulated essential oil formulation

EDUCATIONAL AND CAPACITY BUILDING PROGRAMMES

Sl. No.	Name of programme	No. of batch	No. of beneficiaries
1	Five days Farmers training programme on “Scientific method of lac cultivation, primary processing and utilization”	08	308
2	On Campus one-day Exposure Visits/ Orientation Programme on Natural Resins and Gums	11	572
3	On-farm training for capacity building on lac cultivation	03	125
4	Exhibition cum kisan Ghosti	02	11200
Total		24	12205



Training and exposure visit for school students and farmers at ICAR-NISA

EVENTS

Hindi Karyasala cum Seminar organized at ICAR- NISA

A Hindi Workshop and Seminar was organized by the Nagar Rajbhasha Implementation Committee at ICAR-NISA on January 10, 2024. The event concluded on Wednesday, with the participation of around 125 employees from various central government offices.

The seminar was chaired by Mr. Sanjay Kumar, Chief Commissioner of Income Tax, Ranchi. Dr. Abhijit Kar, Director, ICAR-NISA was also present on this occasion. In his address, the Chief Commissioner of Income Tax emphasized the importance of income tax deductions from various sources and stated that all taxpayers should have necessary knowledge of this subject.

In the first session of the workshop, Manish Jha, an officer from the Indian Revenue Service, discussed in detail about various aspects of income tax deductions. He highlighted the tax provisions applicable in both public and private sectors, along with the compliance process. In the second session, Mrs. Anjuta Rani, Manager (Rajbhasha) at Canara Bank, Ranchi, provided insights on Hindi content tools and their usage. She emphasized the role of digital resources in promoting the effective use of Hindi language in government offices.

Additionally, Mr. Anjesh Kumar, retired Chief Technical Officer ICAR-NISA shared his experiences on journalism and the significance of the Hindi language. Around 125 employees from various central government offices participated in the workshop.

Two days brainstorming session/workshop on ‘Secondary Agriculture for Lac and Tasar production systems’

ICAR-NISA, Ranchi organized a 2-days brainstorming session on ‘Secondary Agriculture for Lac and Tasar production systems’ on January 21-22, 2024. Central Tribal Affairs Minister Sri Arjun Munda participated in the session through online platform and shared important insights. The session focused on promoting lac and tasar production, empowering the artisans and farmers associated with these industries, and exploring the commercial potential of these sectors. The minister emphasized the need to prioritize research and innovation in these fields to drive growth and sustainability. Officials from various state government departments, scientists, entrepreneurs, and experts from the relevant sectors were present at the meeting. All participants shared their views on the current scenario, challenges, and future opportunities for the lac and tasar industries.

The primary objective of the brainstorming session was to discuss ways to incorporate modern technologies in the lac and tasar industries, enhance the income of artisans, and ensure the global competitiveness of these products.

Regional Agriculture Fair (Eastern Region) 2024

The Regional Agriculture Fair (Eastern Region) 2024 was organized by the Ministry of Agriculture and Farmers Welfare, Govt. of India and convened by ICAR- NISA at Krishi Vigyan Kendra, Torpa, Khunti, Jharkhand during February 03-05, 2024. The theme of the fair was “Sustainable & Circular Bioeconomy – A Catalyst for Atmanirbhar evam Viksit Bharat”. The fair was inaugurated by chief guest Hon’ble Union Minister of Agriculture and Farmers’ Welfare & Minister of Tribal Affairs, Shri Arjun Munda on February 03, 2024 with the august presence of Padma Bhushan Shri Kariya Munda, former Deputy Speaker of Lok Sabha as guest of honor, Dr. Himanshu Pathak, Secretary, DARE and DG, ICAR, Shri Koche Munda, Hon’ble MLA, Torpa and Shri Ravindra Rai, former MP, Koderma. Public representatives, officials of central and state government, ICAR dignitaries were also present during the inaugural session. The minister also inaugurated the newly established Administrative Building of the KVK.

The Regional Agriculture Fair aimed to raise awareness among farmers in eastern India about modern agri-technologies and practices. It focused on enhancing income through technological interventions, highlighting government policies, and fostering connections between farmers and both public and private sectors, with a focus on uplifting tribal farmers. In his speech, the Hon’ble Minister emphasized the fair’s importance and the government's efforts to double farmers' income and promote self-sufficiency. He stressed on integrating science and technology into traditional farming to boost productivity, organic farming, nutrition, and agro-processing, while addressing concerns about population growth, climate change, and pollution.



Regional Agriculture Fair (Eastern Region) 2024: (a) Inaugural Function, (b) Address by Chief Guest Hon'ble Union Minister, Shri Arjun Munda, (c) Inauguration of Administrative Building of KVK, Torpa, and (d) Presentation of Award to Progressive Farmer by His Excellency, the Governor of Jharkhand, Shri C.P. Radhakrishnan, During Closing Ceremony.

The fair featured a total of 139 stalls by exhibited by ICAR institutes (28), KVKs (25), FPOs (5), other government organizations (21), SHGs (11), and NGOs (41)- each offering insights into various farming aspects. A total of 13 *Kishan Gosthi* were organized on different topics like natural farming, cropping systems, farm mechanization, nutrient management, Nutri-garden, crop production, animal husbandry, poultry science, minor forest produce, mushroom production, fishery, tasar and lac production. Over 600 farmers received various inputs, including agricultural tools, machinery, animal feed, mineral mixtures, and fishing nets, valued at over ₹ 40 Lakhs. These items were distributed by various ICAR institutes, along with central and state government agencies. Around 10,000 farmers from various parts of Jharkhand, Bihar, Odisha, and West Bengal attended and participated in the fair. Majority of the farmers belonged to tribal communities. Farm equipment, seed bins, animal feeds, fish nets, cattle feed and medicine kits were distributed among many farmers by the honorable minister during the inaugural session of the fair. The farmers interacted with scientists, entrepreneurs, company representatives, NGOs, FPOs and gained knowledge about the latest agricultural technologies related to seeds, varieties, production processes, farm machinery, fertilizers, crop and soil management, use of drones in agriculture, etc.

His Excellency, the Governor of Jharkhand, Shri C. P. Radhakrishnan was the Chief Guest at the closing ceremony of the fair on February 5, 2024. The Vice-Chancellor of Birsa Agricultural University, Dr. S. C. Dubey also graced the occasion. In his speech, the Governor praised the fair's organization at Bhagwan Birsa Munda's soil and encouraged farmers to diversify income sources like animal husbandry, poultry, and horticulture. He highlighted the impact of central schemes such as PM Kisan Samman Nidhi and PM Fasal Bima Yojna in supporting farmers. He also commended farmers for their contribution to the country's economy and presented awards to progressive farmers and stalls during the event.

Celebration of International Women's Day

ICAR-NISA marked International Women's Day 2024 with an enriching celebration that highlighted the theme "Invest in Women: Accelerate Progress." The event aimed to honor women's contributions to society and raise awareness about pressing health issues.

The occasion was graced by Dr. Rajanigandha Tudu, Medical Oncologist, Ranchi Cancer Hospital and Research Center, Ranchi as chief guest and Dr. Sujay Rakshit, Director, ICAR- Indian Institute of Agricultural Biotechnology, Garkhatanga as guest of honour. The event started with a warm welcome address by Dr. Abhijit Kar, Director, ICAR-NISA, who extended heartfelt greetings to all attendees and expressed gratitude to Dr. Tudu for her time and expertise. He also acknowledged the tremendous contributions of women in various fields and emphasized the institute's commitment to promoting women's health and empowerment. Dr. Rakshit highlighted about the importance of empowering women through education, health, and equal opportunities to drive progress in society.

Dr. Tudu, chief guest delivered an insightful guest lecture on "Cancer Awareness", highlighting the importance of early detection and preventive measures in combating cancer. She emphasized the need for regular health check-ups and shared valuable insights on how lifestyle choices impact cancer risks, stressing the significance of investing in women's health for societal progress.

The event concluded with a vote of thanks delivered by Dr. Debabandya Mohapatra, Head, APE Division and Convener of the program expressing gratitude to all those who participated and contributed to making the event a success.

Further, a health check-up camp was set up for the employees of the institute and their family. Cultural program was organized for the female staff members and the female family members of ICAR- NISA staff.



Women’s day Celebration at ICAR-NISA

Awareness programme on honey and bamboo production for the farmers of Jharkhand

ICAR-NISA organized an awareness programme on honey and bamboo production for the farmers of Jharkhand on March 14, 2024. Hon’ble Union Minister of Agriculture and Farmers’ Welfare & Minister of Tribal Affairs, Shri Arjun Munda was the chief guest of the programme. Padma shri Shri Ashok Bhagat, Secretary, Vikash Bharti; Shri Sanjay Seth, Member of Parliament, Ranchi; Dr. S.C. Dubey, Vice Chancellor, Birsa Agricultural University, Ranchi; Dr. Sujay Rakshit, Director, ICAR-Indian Institute of Agricultural Biotechnology, Ranchi; Dr. Abhijit Kar, Director National Institute of Secondary Agriculture, Ranchi and other dignitaries graced the occasion. Around 1200 farmers from Khunti, Ranchi, Gumla, Simdega, Seraikela and West Singhbhum districts attended the programme. During the event, the Hon’ble Union Minister laid the foundation stone of the Regional Honey Testing Laboratory and Integrated Bee Development Centre at ICAR-NISA. He also launched the Bamboo Development in Jharkhand and National Bee Keeping & Honey Mission projects. In his speech, he emphasized the potential of beekeeping and bamboo production, highlighting the region’s future as a honey hub and the first step towards a 'Sweet revolution' in the eastern region. He also noted that these projects would help promote the unique honey varieties of Jharkhand, Bihar, Chhattisgarh, West Bengal, and Odisha in the international stage. Shri Sanjay Seth pointed out that beekeeping offers an excellent opportunity for additional income, as Jharkhand is highly suitable for this industry. He urged farmers to focus on utilizing local environmental resources to diversify their income streams. Scientists from various ICAR institutes in Jharkhand attended the program, and several institutions displayed their technologies through exhibition in stalls for the benefit of the farmers.



Glipmses of honey and bamboo production awareness programme

Research Advisory Committee (RAC) Meeting

The XXXI meeting of the Research Advisory Committee (RAC) of ICAR-NISA was held on March 18-19, 2024 under the Chairmanship of Dr. K. Alagusundaram, former DDG (Engg.), ICAR, New Delhi. Members of the RAC Dr. K.P. Singh, ADG (FE), ICAR, New Delhi, Dr. H.N. Mishra, Professor (Food Technology), IIT, Kharagpur, Dr. D. Usharani, Principal Scientist, CSIR-CFTRI, Mysuru, Dr. D. Behera, Professor & Head, OUAT, Bhubaneshwar, Dr. Nachiket Kotwaliwale, Director, ICAR-CIPHET, Ludhiana, Dr. Abhijit Kar, Director, ICAR-NISA, Ranchi and Dr. N.K. Sinha, Principal Scientist and Member Secretary RAC, ICAR-NISA, Ranchi were also present in the meeting. The RAC recommended to explore new areas of secondary agriculture, fostering collaborations with food industries, and improving productivity in sectors like bioactive compounds. Key actions include exploring waste-to-wealth opportunities, developing pilot-scale facilities, enhancing HRD plans for scientists, import substitution, alternate food sources, and impact assessments.



XXXI RAC meeting & Hon’ble Chairman and Members, RAC

PARTICIPATION IN EVENTS

ICAR-National Institute for Secondary Agriculture (ICAR-NISA) has been actively participating in various exhibitions organized by institutes across the country. These exhibitions offer a dynamic platform for the institute to showcase its innovative technologies in lac, natural resins, gums, and secondary agriculture. The exhibitions serve as an important medium for promoting sustainable agricultural practices and technological advancements. ICAR-NISA’s demonstrations focus on improving lac cultivation, resin extraction methods, and secondary agriculture processes, providing valuable insights to visitors from different sectors. By presenting cutting-edge research and development, ICAR-NISA not only increases its visibility but also fosters opportunities for technology transfer to farmers, entrepreneurs, and researchers.



(a) Director, ICAR-NISA briefing Hon’ble Agriculture Minister about institute’s technologies and
(b) Demonstration of ICAR-NISA technologies

The exposure garnered during these exhibitions helps facilitate collaboration, knowledge-sharing, and the potential adoption of innovative solutions, benefiting both the agricultural community and industries reliant on natural resources. During this period, ICAR-NISA participated in the following exhibitions.

Sl. No.	Events	Period	Venue
1	Krishi Unnati Mela	January 01, 2024	Kharsowan, Jharkhand
2	Regional Agriculture Fair (RAF) Eastern Zone-2024	February 03-05, 2024	Krishi Vigyan Kendra, Torpa, Khunti, Jharkhand
3	Annual Kisan Mela 2024	February 08-09, 2024	R. K. Mission, Morabadi, Ranchi, Jharkhand
4	Annual Kisan Mela-2024	March 01, 2024	IARI, Hazaribag, Jharkhand
5	Agrotech Kisan Mela-2024	March 02 - 04, 2024	Birsa Agriculture University, Ranchi, Jharkhand
6	National Dairy Mela-2024	March 09-11, 2024	Adivasi Khuntkatti Maidan, Chaibasa, West Singhbhum, Jharkhand
7	Pusa Krishi Vigyan Mela 2024	March 10-12, 2024	Simdega, Jharkhand

PATENT

- Thombare N, Srivastava S, Mohanasundaram A, and Sharma KK. Natural resin based novel nondrying adhesive: Preparation and application in insect trap. Patent No. 497208 granted on 10.01.2024.
- Thombare N, Sharma KK, Kar A, Kumar S, Bhondekar AP, Sharma A and Cherwoo L, Das S. A rapid process for the preparation of multipurpose conducting ink using natural rosin as a conductivity enhancer. Indian Patent Office Patent No. 202331016762, date 13.03.2024.

PUBLICATION AND PUBLICITY

Research papers

Chowdhury, A. R., Kumar, R., Mahanty, A., Mukherjee, K., Kumar, S., Tribhuvan, K. U., Sheel R., Lenka, S., Singh, B.K., Chattopadhyay, C., Sharma, T.R., Bhadana, V.P., & Sarkar, B. (2024). Inhibitory role of copper and silver nanocomposite on important bacterial and fungal pathogens in rice (*Oryza sativa*). *Scientific Reports*, 14(1), 1779. (NAAS: 10.60)

Saha, A., Das, B. K., Sarkar, D. J., Samanta, S., Vijaykumar, M. E., Khan, M. F., Kayal, T., Jana, C., Kumar, V., Gogoi, P., & Chowdhury, A. R. (2024). Trace metals and pesticides in water-sediment and associated pollution load indicators of Netravathi-Gurupur estuary, India: Implications on coastal pollution. *Marine Pollution Bulletin*, 199, 115950. (NAAS: 11.80)

Mukhopadhyay, A., Antil, J., Khatkar, A., Pandey, D., Somvanshi, V. S., Nebapure, S. M., Dutta, A., & Singh, A. (2024). A laboratory study on survival and infectivity of entomopathogenic nematodes formulated in gum katira-based biogel compositions. *Journal of Plant Diseases and Protection*, 131, 927-936. DOI: <https://doi.org/10.1007/s41348-024-00890-5>. (NAAS: 8.10)

Lyngdoh, M. E., Chettri, J., Kharchandy, V. F., Sheel, R., Choudhury, A. R., Sarkar, B., Pattanayak, A., Deori, S., Abedin, S.N. & Kadirvel, G. (2024). Synthesis of green zinc-oxide nanoparticles and its dose-dependent beneficial effect on spermatozoa during preservation: sperm functional integrity, fertility and antimicrobial activity. *Frontiers in Bioengineering and Biotechnology*, 12, 1326143. (NAAS: 11.70)

Kumar, S., Sharma, A., Cherwoo, L., Thombare, N., & Bhondekar, A. P. (2024). DFT study on the polymerization mechanism of aleuritic acid and jalaric acid in shellac molecule. *Kuwait Journal of Science*, 51(1), 100138

Ali, M., Hazra, D.K., Naiya, H., Sharma, K.K. & Mohanasundaram, A., (2024). Microwave-assisted extraction and purification of aleuritic acid from seedlac: A fast, eco-friendly and cost-effective single process for enhanced yield and purity. *Chemical Engineering and Processing-Process Intensification*, 197, 109716.

Swami, S., Mohanasundaram, A., & Lohot, V.D. (2024). Characterization of the Fragrant Resin from *Shorea roxburghii*, a Lac Insect Host Tree of Tropical Deciduous Forest in South India. *Indian Forester*, 150(1), 46-53.

Bhat, S. S., Lohot, V. D., Ghosal, S., Singhal, V., Ghosh, J., Sinha, N. K., Ahmad, S., MIR, N.H., & Regu, A. (2025). Vegetative Propagation of Kusum [*Schleichera oleosa* (Lour.) Oken] through Air Layering for the Mass Multiplication of Quality Planting Material. *Archives of Current Research International*, 25(1), 260-266.

Sharma, S.C., Prasad, N., & Pandey, S.K. (2024). Seedlac Manufacturing through Integrated Lac Processing Unit: An Industrial Product. *Indian Forester*, 150(3), 267-274.

Sharma, S.C., Pandey, S.K., Prasad, N., & Raj, H. (2024). Revolutionizing gum tapping: A manual blazer for *Moringa oleifera* gum tapping. *Journal of AgriSearch*, 11(01), 58-63.

Singh, R., Priya, H., Kumar, S. R., Trivedi, D., Prasad, N., Ahmad, F., Chengaiyan, J.G., Haque, S. & Rana, S.S. (2024). Gum Ghatti: A Comprehensive Review on Production, Processing, Remarkable Properties, and Diverse Applications. *ACS omega*, 9(9), 9974-9990.

Popular articles

Udaykumar M S, Ramu M S, Ajayakumar, Gaddi G M and Ramappa K B (2024). The lac cultivation: A way to achieve prosperity. *Krishi Science – eMagazine for Agricultural Sciences*, 05 (02), 1-5.

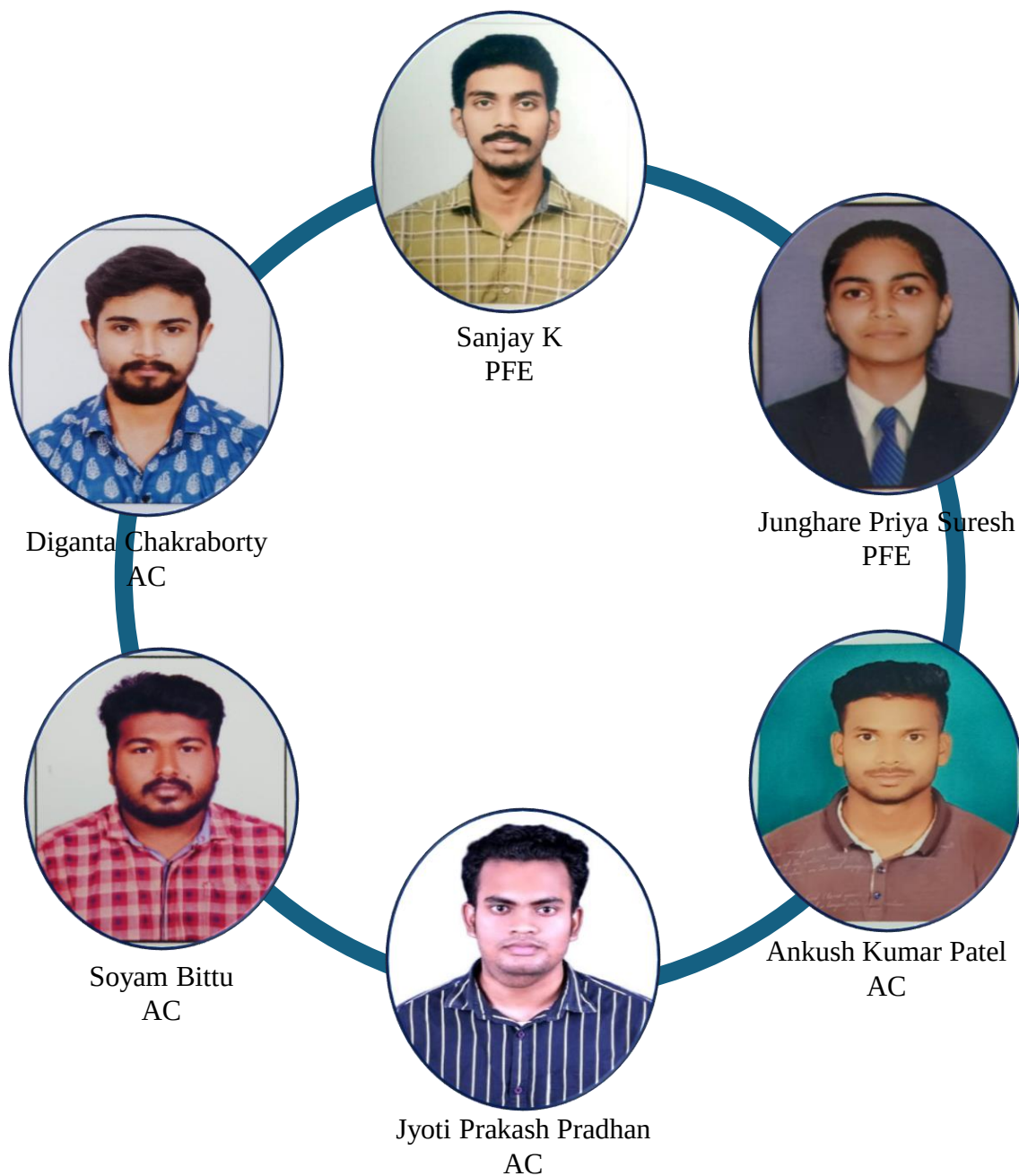
Book Chapters

Mahapatra A., Patil S, Dhakane-Lad J. 2024. Spray Chilling/Cooling of Nutraceutical Ingredients. In: Rajakumari R., Thomas S. (eds) Handbook of Nutraceuticals. Springer, Cham. https://doi.org/10.1007/978-3-030-69677-1_33-1.

PG CELL CORNER

As IARI PG school has grown into IARI mega University, with several hubs at different places in India, ICAR-NISA also joined the IARI Ranchi hub as one of the participating institutes. Thus, apart from research activity, the faculty is engaged in teaching activities, making a holistic approach of amalgamating basic and applied research. ICAR-NISA is offering post graduate courses in two disciplines, namely Process and Food Engineering (PFE) and Agricultural Chemicals (AC). In this academic year, the first batch of 6 Master's students have joined our institute.

We encourage the young minds to improve their vision, and quality of research through practical learning which was accomplished through visits to industries and sending the students on specialized training to have better learning exposure.



Newly joined Master's students of ICAR-NISA

MISCELLANEOUS

Awards/Honors

The institute's official language magazine "**Lākṣā-2022**" was awarded second prize at the TOLIC Ranchi meeting on March 6, 2024.

Participation in Seminar/Symposia/Workshop/Conference

All HoDs, in-charge ABD Unit and scientists Dr. S. C. Sharma, Dr. S. Ghosal, Dr. Achintya Pramanik, Dr. Sandeep Kumar, Dr. N. Thombare, Dr. Arnab Roy Choudhary, Dr Sakharam Kale and Dr Priyanka Sakare attended two days brainstorming session/workshop on 'Secondary Agriculture for Lac and Tasar production systems' organized by ICAR-NISA, Ranchi during 21-22 Jan 2024.

Visit of Foreign Delegates to ICAR-NISA

Three Japanese delegates Mr. Hitoshi Mizutani, Ms.Yoko and Mr. Daisuk from Higashiuzura, Gifu, Japan visited ICAR-NISA, Namkum, Ranchi, Jharkhand on March 15, 2024. Dr. Udaykumar, M. S., Scientist and Mr. P. Patmajhi briefed regarding the cultivation of lac, processing and value addition aspects and its industrial applications. They also visited Insect gene bank, institute farm and the museum.



Delegates visiting museum of the institute

HRD

- Dr. Sandeep Kumar, scientist completed seven days training entitled "Decoding Genomics & Proteomics Data using Machine Learning Approach" during February 21-27, 2024.
- Dr. Sandeep Kumar, scientist participated in a five-day pedagogy training program at NASC complex organized by the National Academy of Agricultural Sciences (NAAS) in New Delhi from March 03-08, 2024
- Dr. Mohd Ali, Sc. participated in a five-day pedagogy training program at the NASC Complex, organized by the National Academy of Agricultural Sciences (NAAS) in New Delhi from March 03-08, 2024

Joining

Shri Kartik Mahto, LDC 20.02.2024
Shri Suraj Singh, Technician 21.02.2024
Shri Ashish Kumar, LDC 22.02.2024

Promotions

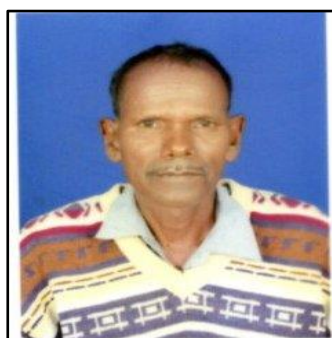
Shri Ajay Kumar, STO w.e.f. 01.01.2024

Retirements

Shri Raghunath Mahto
Asst. Administrative Officer
31.01.2024



Shri Kunwar Tirkey
Technical Officer
28.02.202



Shri Sukra Lakra
Multi Tasking Staff
31.01.2024



Shri Baiju Oraon
Multi Tasking Staff
28.02.2024

Editor-in-chief

Dr. Debabandya Mohapatra

Editor

Dr. Archana Mahapatra

Administrative Assistance

Mr. Indrajeet Kumar

Published by

Dr. Abhijit Kar, Director

ICAR-National Institute of Secondary Agriculture, Namkum, Ranchi - 834 010, Jharkhand

Phone : 0651-2260117, 0651-2261156 (Director)

Fax : 0651-2260202

E-mail: director.nisa@icar.gov.in, director.icar.nisa@gmail.com

URL : <https://nisa.icar.gov.in>