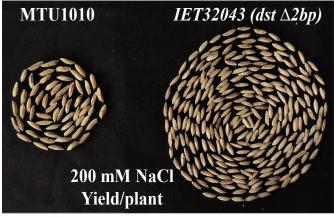
VOL. 41, NO. 2 April-June, 2025



IARI NEWS







Pusa DST Rice 1- India's first genome-edited rice

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Agrisearch with a Buman touch



From Director's Desk

The key highlight of this quarter was the historic announcement of development of Pusa DST Rice 1, India's first genome-edited rice variety, developed to withstand drought and salt stress. IARI also released three improved pigeonpea varieties to boost productivity. To reduce post-harvest losses caused by blue mold in apples,

an eco-friendly method was developed. In pearl millet, scientists have identified key enzymes affecting flour shelf life, offering ways to maintain extended freshness. A novel nanobiohybrid was synthesized using corn silk extract for the fabrication of a nanosensor. Satellite data was used to track real-time stubble burning in northern states, and daily reports were sent to all stakeholders for timely action by the government. Climate mapping of the Indian Himalayan Region showed that the lower and eastern Himalayas are highly vulnerable to rising temperatures.

Through the *Viksit Krishi Sankalp Abhiyan*, IARI identified important research and policy priorities while widely sharing its technologies with farmers and stakeholders. In this quarter, special events were organised to commemorate IARI Foundation Day, World Environment Day, International Seed Day, World IP Day and International Yoga Day. A series of capacity-building programs and high-end workshops were conducted for skill enhancement of scientists, farmers and other stakeholders. The

Institute secured eight externally funded research grants to strengthen its research programs. Twenty-three high-impact publications in reputed peer-reviewed journals have added to the Institute's academic achievement. ICAR-IARI also organized agripreneurship programs to enhance outreach activities. Memoranda of Understanding (MoUs) were signed with public and private partners, facilitating commercial ventures. IARI commercialized 24 technologies to 24 industries during this period.

I am sure that the information included in the IARI NEWS would be useful to the farmers and stakeholders. I wish to congratulate all the scientists and staff of the Publication Unit for bringing out the IARI NEWS in time.

Ch. Srinivasa Rao Director, ICAR-IARI

ICAR Announces India's First-Ever Genome-Edited Rice

In a landmark breakthrough in agricultural science, the nation marked its entry into the global league of genome-editing innovators with the official announcement of India's first genome-edited rice varieties, Pusa DST Rice 1 and DRR Dhan 100 (Kamala), developed by ICAR-IARI and ICAR-IIRR, respectively. Hon'ble Union Minister of Agriculture and Farmers' Welfare, Shivraj Singh Chouhan, announced the development of these varieties. The Pusa DST Rice 1 has a yield advantage of 10-30% under saline and alkaline conditions.

"This marks the beginning of a new era in crop science," said Dr. Mangi Lal Jat, Secretary, DARE and Director General, ICAR. He added that Indian agriculture is entering a new regime where cuttingedge technologies such as genome editing will pave the way forward. The launch of Pusa DST Rice 1 and DRR Dhan 100 (Kamala) reinforces India's commitment to developing climate-smart, high-yielding crop solutions through modern tools in agricultural science. As climate challenges intensify, this innovation positions Indian agriculture to not only adapt but lead.



Hon'ble Union Minister of Agriculture and Farmers' Welfare, Shri Shivraj Singh Chouhan honours Dr. Viswanathan Chinnusamy, Joint Director (Research), developer of Pusa DST Rice 1

IARI Welcomes Dr. M. L. Jat, Secretary (DARE) and Director General (ICAR)

A felicitation ceremony was held on April 24, 2025, at IARI, New Delhi, to welcome Dr. M. L. Jat as the new Director General of ICAR. Dr. Jat emphasized farmercentric research, resilient cropping systems, AI-based solutions, and globallocal innovation synergy. Dr. D. K. Yadava, DDG (Crop Science) outlined key crop science priorities, while

Dr. Ch. Srinivasa Rao, Director, ICAR-IARI, expressed strong support for ICAR's mission under Dr. Jat's leadership.



Felicitation of Dr. M.L. Jat, Secretary, DARE and Director General, ICAR

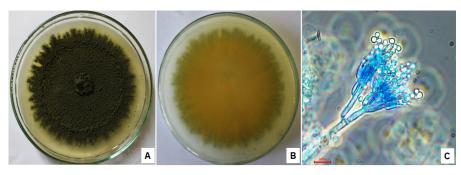


Crop Varieties Released/Notified Across Various Agro-climatic Zones of India

Crop	Variety	Yield Potential	Recommended Zone	
Pigeonpea	Pusa Jawahar Arhar Dwarf 22-01	18.0–22.0 q/ha	Madhya Pradesh (Raje RS, Singh G, RamaPrashat G, Kumar D, Das TS, Division of	
			Genetics) (rsraje@iari.res.in)	
	Pusa Jawahar Arhar 22-02	18.80 q/ha	Madhya Pradesh	
			(Raje RS, Singh G, RamaPrashat G, Kumar D, Das TS, Division of Genetics) (rsraje@iari.res.in)	
	Pusa Jawahar Arhar 21-29	19.50 q/ha	Madhya Pradesh	
			(Raje RS, Singh G, RamaPrashat G, Kumar D, Das TS, Division of Genetics) (rsraje@iari.res.in)	
Wheat	HI 1669 (Pusa Gehun Kranti)	82.1 q/ha. High grain zinc content (40.6 ppm).	Timely sown, irrigated conditions of the Central Zone	
			(Singh JB, Sharma KC, Verma DK, Prakasha TL, Gajghate R, Regional Station Indore) (jangbsing@gmail.com)	
	HI 1674 (Pusa Gehun Atulya)	Zone and 63.4 q/ha in the Peninsular Zone.	Late-sown, irrigated conditions in Central and Peninsular Zones	
		High iron (40.1 ppm) and zinc (up to 42.8 ppm) content	(Singh JB, Sharma KC, Verma DK, Prakasha TL, Gajghate R, Regional Station Indore) (jangbsing@gmail.com)	

Penicillium crustosum-Induced Blue Mold in Indian Apples and Its Eco-Friendly Management

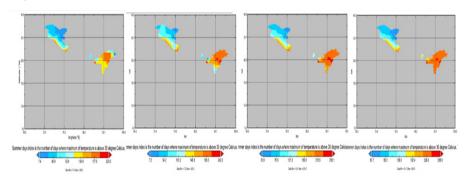
Blue mold, caused by *Penicillium crustosum*, was identified for the first time in India as a post-harvest disease of apples, affecting ~10% of fruits. Identification was confirmed through morphological features, molecular markers (β -tubulin, LSU, ITS), and pathogenicity tests. Eco-friendly management using *Ocimum tenuiflorum* (0.5%) spray and *Ocimum sanctum* (1%) fumigation was recommended for sustainable storage.



A: Pure culture of causative fungus showing bluish-green conidia, B: Reverse side of Petri plate showing yellow to orange colour, C: Circular conidia attached with phialides and metulae

(Watpade S, Regional Station Shimla) (watpade.santosh@icar.org.in) Mapping High-resolution Seasonal Climate Scenarios and Climatic Extremes for the Indian Himalayan Region (IHR)

Bias-corrected GCM ensemble data were analyzed to assess spatio-temporal climate scenarios (SSP-RCP 2.4.5, 3.7.0 and 5.8.5) for agricultural seasons over the Indian Himalayan Region (IHR) from 2015 to 2100. Projected changes in seasonal mean minimum temperatures range from -1 to 4.4°C (*kharif*) and -1.6 to 5.24°C (*rabi*), while maximum temperatures may increase by 0.6–6.6°C (*kharif*) and -1.6 to 5.4°C (*rabi*), relative to 1980–2014. Precipitation is expected to vary between -800 to +2000 mm (*kharif*) and -400 to +800 mm (*rabi*). Heat stress days (>30°C) are projected to increase, especially in the lower and eastern Himalayas, while sub-zero days will decline.



Number of days above 30°C in IHR with baseline (1980-2014), SSP-RCP 2 4.5 2015-2039, 2040-2069 and 2070-2099 climate scenarios

(Kumar S, N, Division of Environmental Science) (nareshkumar@iari.res.in)

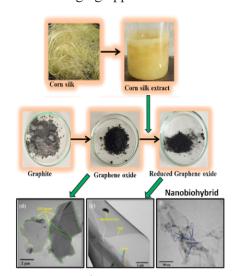
When Genes Turn Traitor: *De Novo* Transcriptomics Uncovers Pearl Millet's Rancidity Machinery

The short shelf-life of pearl millet flour is caused by the enzymatic breakdown of triacylglycerols after milling, leading to rancidity and discoloration. Lipoxygenases (LOX) convert free fatty acids to hydroperoxides, which are further converted by hydroperoxide lyase into off-odour-causing volatiles. Peroxidases (POX) and polyphenol oxidase (PPO) contribute to offflavour with discoloration and browning, respectively, with peak activity within 10 days of milling. Analysis of key enzyme transcripts (2038 lipase, 209 LOX, 26 HPL, 1023 POX, and 17 PPO transcripts) can help in extending flour shelflife.

(Kumar RR, Division of Biochemistry) (ranjeet_biochem@iari.res.in)

Nano-engineered Green Biohybrid Using Corn Silk Extract

Graphene derivatives such as graphene oxide (GO) and reduced graphene oxide (rGO) have emerging applications in food



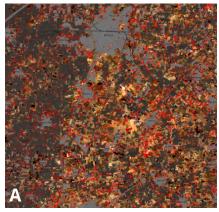
Fabrication of green reduced rGO and nanobiohybrid

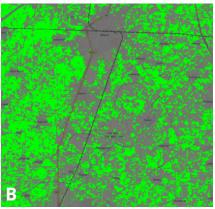
and agriculture. A green synthesis approach using corn silk extract was used to fabricate rGO and a novel nanobiohybrid (G-Fe₃O₄@rGO) for further developing nanosensors. Characterization revealed that GO and rGO had band gaps of 2.07 eV and 3.11 eV, respectively. GO sheets were thicker (37–94 nm) than rGO (up to 75 nm). In the nanobiohybrid, Fe₃O₄ nanoparticles were uniformly distributed over rGO sheets.

(Kundu M, Krishnan P, Vashist A, Pillai S N; Division of Agricultural Physics) (monikak@iari.res.in)

Wheat Residue Burning Monitoring Using Satellite Remote Sensing

Real-time monitoring of wheat residue burning in five North and Central Indian states was conducted using satellite remote sensing, with daily bulletins shared





(A) False color satellite image of fields
(B) Burnt fields (green) classified using Al/ML for a part of Sangrur district of Punjab

with government stakeholders. Satellite data recorded burning events as follows: Punjab (10,207), Haryana (1,832), Uttar Pradesh (14,398), Madhya Pradesh (34,429), and Delhi (49). Using Sentinel-2 MSI images and AI/ ML classification, wheat burnt areas were estimated to be 42.2, 14.2, and 45.3% of the wheat-planted areas in Punjab, Haryana, and Madhya Pradesh, respectively.

(Sehgal V, Rajkumar, Zishan, Jain N; Division Agricultural Physics) (sehgal@iari.res.in)



Lecture under NMSHE-Taskforce

The Division of Environmental Sciences and IQAC, ICAR-IARI, under the aegis of NMSHE-Taskforce (Agriculture), organized an invited lecture on "Emerging Environmental Challenges and Agriculture: Scope and Approaches for Developing Solutions" by Dr. Parth Sarathi Roy, Former Director of IIRS-ISRO, on April 08, 2025. He emphasized the urgent need for sustainable strategies to safeguard our climate, biodiversity and food security.



Felicitation of Dr. Parth Sarathi Roy, Former Director, IIRS-ISRO by Joint Director (Research)

Education Conclave on National Education Policy (NEP)

Dr. Ch. Srinivasa Rao, Director, ICAR-IARI, was an esteemed panelist in the Zee News Education Conclave "Ideas on Education" where he highlighted the role of the IARI in NEP on April 28, 2025. The conclave discussed the



Dr. Ch. Srinivasa Rao, Director, ICAR-IARI sharing his views on NEP

integration of agricultural curriculum in schools and the need for a more responsive and innovative agricultural education system aligned with the NEP.

Pusa Krishi Bootcamp 2025

Pusa *Krishi* and The Graduate School, ICAR-IARI, jointly organized a boot camp on May 02, 2025, to familiarize students with its flagship incubation programs, UPJA and ARISE. Chaired by Dr. Anupama Singh, Joint Director (Education) and Dean, ICAR-IARI, the session introduced grant-in-aid support of ₹25 lakh, ₹5 lakh and a newly launched ₹4 lakh grant specially for student-led innovations.



Participants at Pusa Krishi Bootcamp

Also, to enhance the agripreneurship skills, IARI introduced four new courses: Diploma in Freshwater Aquaculture and Fisheries Management (IARI Assam), Diploma in Soil Testing and Nutrient Management (Division of Soil Science and Agricultural Chemistry), Certificate in Rapid Composting and Quality Assessment (Division of Microbiology) and Certificate in Greenhouse Hydroponics and Aeroponics Farming (CPCT).

Inauguration of Experiential Learning Unit (ELU)

The ELU on 'Multimedia and Advanced Graphic Lab' was inaugurated by Dr. Ch. Srinivasa Rao, Director and Vice Chancellor, ICAR-IARI on May 05, 2025,



Inauguration of ELU at the Division of Agricultural Extension by the Director, ICAR-IARI

under an ICAR Education Division-funded project at the Division of Agricultural Extension. The lab features four workstations with an audio-video editing facility. It aims to support students and extension professionals in creating multimedia content for agriculture and allied sectors.

SpectraNova' 25 - A Celebration of Culture and Creativity

SpectraNova'25, the annual cultural festival of The Graduate School, ICAR-IARI, was celebrated under the aegis of the Post Graduate School Students' Union (PGSSU) on May 06, 2025. The two-day event served as a vibrant platform for students to showcase their diverse talents through an array of performances and competitions, celebrating creativity, camaraderie, and cultural expression across the IARI community. The UG Second Year batch (2023-2027) emerged as overall champions, while the UG First Year batch (2024-2028) was declared runners-up.



Annual cultural festival SpectraNova' 25

'Transforming Indian Agriculture for *Viksit Bharat* @2047'- Thirty-second Dr. B.P. Pal Memorial Lecture

The 32nd Dr. B.P. Pal Memorial Lecture was jointly organized by The Graduate School and Genetics Club of ICAR-IARI, New Delhi on May 28, 2025. Dr. M.L. Jat, Secretary, DARE and Director General, ICAR delivered the lecture on the theme "Transitioning from Commodity-centric Agriculture to Agri-Food System is a Must for *Viksit Bharat@*2047". He called for a paradigm shift in agricultural research through transdisciplinary approaches, AI/ML integration, and demand-driven

innovations. He emphasized capacity building, techenabled extension, and agri-business models in line with *Viksit Bharat*.



Inauguration of 32nd Dr. B.P. Pal Memorial Lecture

IARI-IAA Eminent Expert Lecture

A special lecture, jointly organized by ICAR-IARI and IARI Alumni Association, was held on June 24, 2025. Dr. Bram Govaerts, Director General, CIMMYT, spoke on "Science and Innovation for Food Security and Peace," emphasizing the role of innovation and partnerships in supporting smallholder farmers. He addressed climate change challenges and the need for sustainable intensification and conservation agriculture. Dr. R.S. Paroda, Ex. Secretary, DARE and DG, ICAR presided over the event.



Director, ICAR-IARI felicitates Dr. Bram Govaerts, Director General, CIMMYT

Pusa Summer Camp

A vibrant summer camp was organized by the Nehru Experimental Centre (NEC) from June 04-24, 2025, for the wards of the staff of ICAR-IARI. Activities included yoga, music, dance, painting, pottery, origami, and seed planting, along with interactive sessions on microgreens, pollution, and biodiversity. The Director's participation in both the inaugural and valedictory sessions provided

valuable motivation and support to the children and organizers. The event saw enthusiastic participation from NEC teachers, students, and community members.



Children of IARI Staff at the Summer Camp

IARI Students Dominate Central Silk Board Scientist Recruitment

Students at ICAR-IARI demonstrated their academic acumen with 36 students successfully qualifying for 122 Scientist-B positions in the Central Silk Board's national selection.



IARI students who cracked the Central Silk Board Examination



Cucumber Field Day

The Zonal Technology Management & Business Planning and Development (ZTM & BPD) Unit, in collaboration with the Division of Vegetable Science, organized a Cucumber Field Day on April 21, 2025, at the IARI Campus, New Delhi. Participants observed live demonstrations of IARI-developed elite cucumber

lines and hybrids, highlighting their performance in both open field and protected cultivation systems.



Display of elite cucumber lines



Seed distribution at the Training program organised at IARI Regional Station, Pusa

Training Programs

Divisions/KVK/ Regional Station	No. of	Title of Training Program
	Trainings	
Soil Science and Agricultural Chemistry	01	Instrumentation Techniques for Analysis of Soil, Plant and Water
Microbiology	01	Skill Development and Entrepreneurship in Biofertilizers and
		Composting
KVK, Gurugram	03	Sustainable Dairy Farming
		• Bee Keeping
		Goat Farming for Livelihood
IARI Regional Station, Pusa	01	Scientific Rice Farming

Viksit Krishi Sankalp Abhiyan

ICAR-IARI conducted the *Viksit Krishi Sankalp Abhiyan* (VKSA) from May 29 to June 12, 2025, across the Delhi-NCR region in collaboration with ICAR Institutes, KVKs and State Departments. The *Abhiyan* aimed to promote climate-resilient *Kharif* technologies, soil health management, natural farming, balanced fertilization and farm mechanization through farmer-scientist interaction meets.

The campaign was launched at Dariyapur village, Delhi, with over 750 farmers and concluded with a Chaupal at Tigipur village, attended by Hon'ble Union Minister of Agriculture and Farmers' Welfare, Shri Shivraj Singh Chouhan and over 900 farmers. Key technologies disseminated included Direct Seeded Rice (DSR), Zero Tillage, PUSA Decomposer, Biocontrol-based IPNM and Drip Irrigation. Innovative farmer practices such as cow urine-based biopesticides, community seed banks, solar-powered sprayers, and WhatsApp-based crop marketing were documented. Policy gaps in seed traceability, input quality, and access to soil testing labs were highlighted. Skill gaps were observed in pest ID, use of bioinputs, and post-harvest handling.



Hon'ble Union Minister of Agriculture and Farmers' Welfare, Shri Shivraj Singh Chouhan attends Chaupal at village Tigipur, Delhi



IARI Team led by Director, ICAR-IARI at village Dariyapur

Poshan Pakhwada

KVK Shikohpur, observed *Poshan Pakhwada* from April 08-22, 2025 by organizing three awareness programs on establishing kitchen gardens. A total of 117 Anganwadi workers and school students participated in the program.



During Poshan Pakhwada

state-specific policies, market reforms, demand-driven production, and the integration of biotechnology to usher in a "BioRevolution". The event also saw the release of publications and the felicitation of outstanding students and meritorious staff of the institute.



Release of Publications by Prof. Ramesh Chand, Union Minister of State & Member, NITI Ayog

120th Foundation Day

ICAR-IARI, New Delhi, celebrated its 120th Foundation Day on April 01, 2025, marking over a century of contributions to Indian agriculture since its inception in 1905. Prof. Ramesh Chand, Member, NITI Aayog, graced the occasion and delivered the Foundation Day lecture, highlighting the role of IARI in the Green Revolution and emphasizing the need for



Felicitation of Meritorious Staff on the Foundation Day

Day Celebration

Divisions/Units	Days
International Seed Day	Division of Seed Science and Technology celebrated International Seed Day on April 26, 2025, to emphasize the vital role of seeds in agriculture, food security, and biodiversity.
World IP Day	World IP Day was celebrated by ZTM & BPD, IARI and IPTM, ICAR, with an online session titled "Innovative Concepts: Transforming Ideas into Intellectual Property", conducted by Dr. Shweta Sharma on May 02, 2025.
World Environment Day	Division of Environmental Science and IARI-Regional Station in Pusa, Bihar, celebrated World Environment Day on June 05, 2025 and planted saplings of trees on the campus.
World Yoga Day	International Yoga Day was celebrated on June 21, 2025, at the NASC Complex, Pusa, New Delhi. Hon'ble Union Minister of Agriculture and Farmers' Welfare, Shri Shivraj Singh Chouhan graced the occasion and highlighted the role of yoga's role in holistic well-being. The Division of Plant Physiology also marked the day with enthusiastic participation from faculty and students.







On the Occasion of World Environment Day planting of saplings by

Hon'ble Union Minister of Agriculture and Farmers' Welfare, Shri Shivraj Singh Chouhan and DG (ICAR) Dr. M.L. Jat Director, ICAR-IARI



Hon'ble Union Minister of Agriculture and Farmers' Welfare, Shri Shivraj Singh Chouhan, celebrates International Yoga Day with ICAR and IARI

IARI Mango Varieties at 4th Mango Festival

ICAR-IARI displayed exotic mango varieties and selections from different parts of India during the 34th Mango Festival 2025, organized by Delhi Tourism and Transportation Development Corporation Ltd., Govt. of Delhi, at Thyagraj Stadium, New Delhi, from June 27-29, 2025.



Mrs. Rekha Gupta, Chief Minister, Delhi, visited IARI stall at the Mango Festival

Swachh Bharat Abhiyan at Different Divisions

A cleanliness drive was conducted at different Divisions of IARI main campus, regional station and off campuses with active participation from students and staff. Dr. Ch. Srinivasa Rao, Director, ICAR-IARI, joined the events, motivating members from various Divisions and Campuses. He emphasized the significance of the *Swachh Bharat* and Clean India missions, encouraging everyone to adopt cleanliness as a regular practice for a cleaner and greener future.



Staff and students at Swachh Bharat Abhiyan at IARI Assam

CAPACITY BUILDING

Workshops and Brainstroming Sessions

Divisions/Units	Date	Title of Workshop				
Entomology	April 21-23, 2025	ANRF sponsored workshop on "Taxonomy of Agriculturally Importa Insects"				
Environmental Science	April 28, 2025	Brainstorming workshop on "Carbon Credits for Small-holder Farms Approaches and Framework"				
Microbiology	May 16, 2025	Workshop on "Uses of Biofertilizers and composting"				
CATAT	May 16, 2025	34th review workshop of NEP/VO partnership				
Genetics	May 16, 2025 June 25, 2025	 National Workshop on "Stake Holders Consultation on Basmati Rice – Way Forward" National Workshop on "Strengthening Research and Seed System for Enhancing Livelihood and Nutritional Security" at Nepal House, Ranchi in collaboration with ICAR-IARI, Jharkhand 				
ICAR-IARI	June 16-20, 2025	Training program for newly recruited Assistants, ICAR-IARI				
Agronomy	June 24-25, 2025	International online workshop on "Advanced Hydrogel-Biochar Nanocomposites for Controlled Release of Macro and Micro Nutrient Nanoparticles for Sustainable Agriculture"				
ICAR-IARI, New Delhi	June 25, 2025	Seed expansion workshop at Ranchi, Jharkhand				
Agricultural Physics	June 28-30, 2025	Workshop on "Next-Gen Agricultural Physics: Innovations for Sustainable Growth"				



Brainstorming workshop on "Carbon Credits for Small-holder Farms: Approaches and Framework"



National workshop organized at Nepal House, Ranchi by ICAR-IARI, New Delhi, in collaboration with IARI, Jharkhand and the Department of Agriculture

ICAR-IARI ASSAM HIGHLIGHTS

IARI-Assam Celebrates 9th Foundation Day

ICAR–IARI, Assam, celebrated its 9th Foundation Day on May 26, 2025, in the presence of Dr. Ranoj Pegu, Minister of Education, Government of Assam, as the Chief Guest, Shri Rahul Suresh Javir, District Commissioner, Dhemaji, and Shri Tapan Kr. Gohain, Registrar, Assam Agricultural University, was the Guest of Honour. 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 and ensure environmental sustainability.



Dignitaries, Staff and Students of IARI Assam at the Foundation Day Celebration

ICAR-IARI JHARKHAND HIGHLIGHTS

ICAR-IARI, Jharkhand Celebrates 11th Foundation Day

ICAR-IARI, Jharkhand, celebrated its 11th Foundation Day on June 28, 2025, chaired by Director & Vice-Chancellor Dr. Ch. Srinivasa Rao, with Padma Bhushan Dr. R.S. Paroda, Ex. Secretary, DARE & DG, ICAR as the Chief Guest. Dr. Paroda emphasized the need for a second Green Revolution led by Eastern India and acknowledged IARI Jharkhand's role in advancing research, education and farmer empowerment.





Felicitation of Dr. R.S. Paroda, Chief Guest and awardees at the Foundation Day Celebration of IARI, Jharkhand

MISCELLANEOUS

Research Grants

Externally Funded Projects Sanctioned and Implemented (> ₹ 10 lakhs)

Externally funded projects sanctioned during the period from April-June, 2025						
Project Title	Amount (₹	Duration	Funding	Principal Investigator		
	in Lakhs)		Agency			
Biodiversity surveys on Indian native plant	40.44	April 2025-	CABI,	Dr. Deeba Kamil,		
species to identify candidate biological control		April 2028	United	SS, Division of Plant		
agents for use in other countries where those			Kingdom	Pathology		
species have become invasive alien weeds						
following their accidental introduction						

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Greenhouse gas emission under different rice crop establishment methods	33.40	May 2025- December 2027	IRRI	Dr. Arti Bhatia, PS, Division of Environmental Science
Targeted editing of host susceptibility factors to engineer multiple disease resistance in tomato	81.46	May 2025- May 2028	DBT	Dr. Anirban Roy, PS, Division of Plant Pathology
Discovery of indigenous genome editing tools and developing high yielding rice varieties	29.28	June 2025- June 2028	DBT	Dr. Prolay K. Bhowmik, SS, Division by Genetics
Development of embryo rescue protocol for harnessing wide crosses and rapid generation advancement in soyabean (<i>Glycine max</i> L.)	22.23	June 2025- June 2028	DST	Dr. Ambika Rajendran, SS, Division of Genetics
Indigenized low cost coconut milk based low protein diet - A panacea for metabolic management of IEM in organic acidemias and urea cycle disorder	127.24	June 2025- June 2028	ICMR	Dr. Neelam Upadhyay, SS, Division of Food Science & Post harvest Technology
Bridging technology and agriculture: Understanding the spread of precision farming in India	24.98	June 2025- June 2027	Corteva Agriscience India Private Limited	Dr. Alka Singh, Head, Division of Agricultural Economics
Biofortification for nutrition security: Bridging the micronutrient gap in India	24.99	June 2025- June 2027	Corteva Agriscience India Private Limited	Dr. Alka Singh, Head, Division of Agricultural Economics

Technology Commercialization

Under the Lab to Land Initiative from April-June, 2025, 24 technologies developed by ICAR-IARI were commercialized to 24 industry partners, resulting in a total revenue generation of ₹ 73.33 lakh.

IP Management

During April-June 2025 the ZTM & BPD unit filed one patent, one trademark and two copyrights.

Incubation Activities

Launch of UPJA & ARISE 2025-26

On April 01, 2025, Pusa Krishi, ICAR-IARI launched its flagship startup incubation programs, UPJA and ARISE, to support aspiring entrepreneurs with mentorship, funding and guidance.

Masterclass Series for RABI Startups

Pusa Krishi Masterclass Series for RABI Startups, organized under the RKVY-RAFTAAR scheme of the Ministry of Agriculture & Farmers' Welfare, was held online from April 03-16, 2025. This intensive 10-day virtual workshop was tailored for CIC-recommended pre-seed and seed-stage startups incubated under the RAFTAAR Agri Business Incubators (RABIs).

Memorandum of Understanding (MoU)

On June 16, 2025, Pusa Krishi, ICAR-IARI signed two MoUs with

- ACCESS Development Services to support agri-startups under the GAP Fund, an IFAD-supported initiative through the India Agri-Business and Value Chain Platform.
- Somani Kanak Seedz Pvt. Ltd. for licensing Pusa TOLCV Tomato Hybrid 8, a virus-resistant variety developed by Dr. Zakir Hussain (ICAR-IARI) and Dr. P.K. Singh (ICAR-NBPGR).



MoUs with Somani Kanak Seedz Pvt. Ltd. and ACCESS Development Services

AWARDS, RESEARCH GRANTS, PUBLICATIONS AND VISITS

Awards and Honours

- Dr. Veda Krishnan, Senior Scientist, Division of Biochemistry, ICAR-IARI, was elected to the "Executive Committee" of the Global Young Academy (GYA) for 2025-2026.
- Dr. Arpan Bhowmik, IARI-Assam, received the National Academy of Agricultural Sciences (NAAS) Associateship Award.
- Team of B. Tech 3rd year (Division of Agricultural Engineering) received the 3rd award in National Agri Hackathon 2025 organized by the Centre for Agribusiness Incubation and Entrepreneurship with a joint initiative of Rajmata Vijaya Raje Scindia Krishi Vishwa Vidyalaya (RVSKVV), Gwalior and NABARD, aimed at promoting impactful Agri tech innovations from students, startups and rural entrepreneurs.

Publications with NAAS rating >10.0

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National & International Visits at IARI



Visit of a delegation from 10 African countries, under a National Institute of Labour Economics Research and Development (NITI Aayog) training program, on April 04, 2025



Visit of a delegation from Michigan University on April 14, 2025



Visit of Bhutanese delegation led by Dasho Thimley Namgyel, Secretary, Ministry of Agriculture & Forests on April 21, 2025



Visit of Mr. Kamal Bahadur Shah, Chief Minister of Sudurpashchim Province, Nepal, on May 01, 2025



Visit of Newly Recruited Agriculture Officers from Bihar Institute of Public Administration and Development (BIPARD) on May 06, 2025



Visit of members of the Malaysian Agricultural Research and Development Institute, Malaysia, facilitated by Dr. Khushnood Ali of African-Asian Rural Development Organization, on June 24, 2025

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