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IARI NEWS

ICAR-IARI Tops NIRF Agriculture Ranking

ICAR-IARI secured the 1st position in the Agriculture and Allied Sectors category of NIRF ranking, reaffirming its leadership in agricultural education and research. In its debut in the Sustainable Development Goals (SDG) category, the Institute ranked 2nd, after IIT, Madras. It also climbed to 24th in the overall category and 29th among Research Institutions, marking an 8-position rise from last year and highlighting its growing national and global impact.

Index

Research 2
Education 5
Extension.....7
Capacity Building 9
IARI Assam Highlights..... 10
IARI Jharkhand Highlights..... 10
Miscellaneous 11
Awards, Publications 13-16
and Visits

From Director's Desk

It gives me immense pleasure to share that ICAR–IARI continues to uphold its legacy of excellence in agricultural education and research. The Institute has once again achieved a remarkable milestone by securing 1st position in the Agriculture and Allied Sectors and 2nd position in the Sustainable Development Goals category.

During this quarter, IARI has made notable achievement in research and innovation. Several high-yielding wheat varieties were identified for release across diverse agro-climatic zones, along with improved hybrids of broccoli, cabbage, cauliflower, and carrot. The Institute has promoted biofertilizer use through *Azotobacter chroococcum*-based seed treatments, contributing to sustainable soil health management. Significant breakthroughs include the identification of biomarkers for rancidity resistance in pearl millet, and the ultrasound-assisted extraction of a bioactive cocktail from the *Hericium erinaceus* mushroom, demonstrating its potential nootropic properties. Studies have revealed that organic soil amendments such as rice straw ash and sugarcane trash reduce leaching and enhance recovery of antimicrobial compounds such as triclosan. Two new scarab beetle species were also reported from Northeast India, raising concern about their potential risk on maize and kiwifruit.

The Institute witnessed many academic and outreach activities during this period. Teachers' Day was celebrated with great enthusiasm, complemented by a series of capacity-building programmes, high-end workshops, and field demonstrations. IARI also secured externally funded research grants and organized agripreneurship programmes to strengthen innovation and outreach. Our scientists have continued to publish in high-impact peer-reviewed journals.

IARI organized a series of Kisan Goshthis and demonstrations to disseminate innovative technologies to the farmers. New MoUs were signed for the commercialization of Pusa Decomposer Wettable Powder to tackle the problem of paddy stubble burning.

I am confident that the contents of this newsletter will serve as a valuable resource for farmers, researchers, and stakeholders. I extend my heartfelt appreciation to the publication team for bringing out this issue in time.

Ch. Srinivasa Rao
Director, ICAR-IARI

RESEARCH

New Wheat Variety HI 1669 (Pusa Gehun Kranti) Released to Boost Yield and Stress Resilience

Wheat variety HI 1669 (Pusa Gehun Kranti) developed for timely sown irrigated conditions of Central Zone, by ICAR-IARI, Regional Station, Indore, was released by Shri Shivraj Singh Chouhan, Hon'ble Minister of Agriculture and Farmers' Welfare, at 97th ICAR Foundation Day, held on July 16, 2025.

Release of HI 1669 (Pusa Gehun Kranti) by Shri Shivraj Singh Chouhan, Hon'ble Minister of Agriculture and Farmers' Welfare

Wheat Varieties Identified for Release Across Various Agro-Climatic Zones of India

Crop	Variety	Yield Potential	Recommended Zone
Wheat (Aestivum)	HI 1683	77.5 q/ha	Timely sown, irrigated conditions of the Central Zone
Wheat (Aestivum)	HI 1687	70.9 q/ha	Late sown, irrigated conditions of the Peninsular Zone
Wheat (Durum)	HI 8849	71.8 q/ha	Timely sown, irrigated conditions of the Peninsular Zone
Wheat (Durum)	HI 8850	86.2 q/ha	Timely sown, irrigated conditions of the Central Zone
Wheat (Durum)	HI 8851	61.8 q/ha	Timely sown, restricted irrigated conditions of the Central Zone

(Singh JB, Gajghate R, Verma DK, Prakasha TL, Sharma KC, IARI Regional Station, Indore) (jangbsing@gmail.com)

Varieties/Hybrids of Vegetables Identified for Release

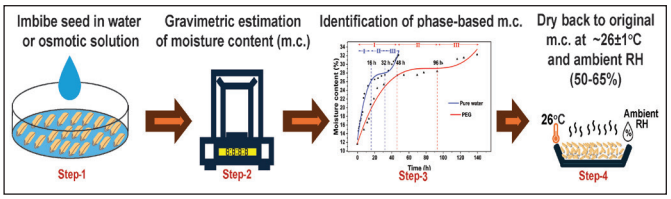
Improved varieties/hybrids of different vegetables *viz.* broccoli (KTHB-3411), cabbage (KTCBH-225), cauliflower (KTCF-36 and KTCFH-534) and carrot (KTTCH-804) with higher yield potential, disease resistance and adaptability were identified for release.

KTHB-3411 KTCBH-225 KTCF-36 KTCFH-534 KTTCH-804

(Parkash C, Kumar S, IARI Regional Station, Katrain) (chanderp@iari.res.in)

Uniprime Technology: An Imbibition Phase-based Seed Priming Technique

Uniprime technology of seed priming overcomes the inconsistencies of conventional seed priming methods that vary across crop varieties and water potentials. It identifies varietal specific moisture content at phase II of seed imbibition for priming followed by low temperature drying across priming types.



Pipeline of Uniprime Technology

(Vijay D, Archana HR, Prasad M, Ahmad D, Division of Seed Science and Technology)
(vijaydunna@iari.res.in)

PCR Based Rapid Detection of *Fusarium solani* Species Complex Infecting Tomato

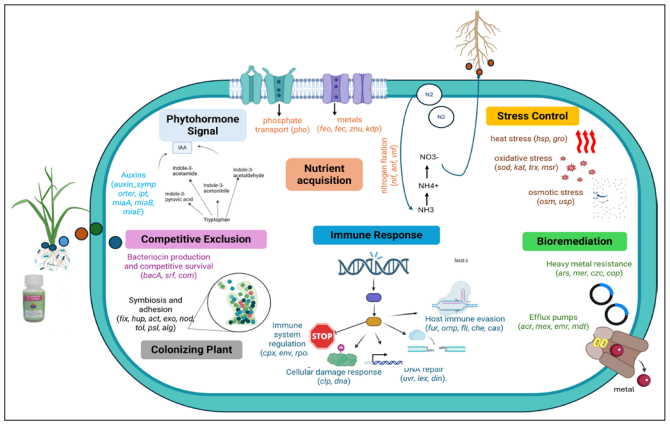
For rapid detection of *Fusarium etavorans, Fusarium falciforme* and *Fusarium striatum* infecting tomato species specific primers were developed and PCR technique was standardized. This technique was certified by ICAR.

(Kamil D, Division of Plant Pathology)
(deebakamil@iari.res.in)

Azotobacter W5: A Smart Biofertilizer Boosting Yields and Nitrogen Efficiency

The diazotrophic rhizobacterium *Azotobacter chroococcum* strain W5 enhances soil nitrogen by 15-20 kg/ha and increases crop yields by 10-35%. Whole-genome and metabolomics analyses revealed its multifaceted plant growth-promoting traits, including hormone production (auxin and gibberellic acid), phosphate solubilisation, nitrogen fixation and stress tolerance. Field studies confirmed that seed treatment with *A. chroococcum* strain W5 improves nitrogen use efficiency, making it a sustainable biofertilizer for reduced nitrogen input systems.

(Paul S, Division of Microbiology)
(sangeetapaul@iari.res.in)

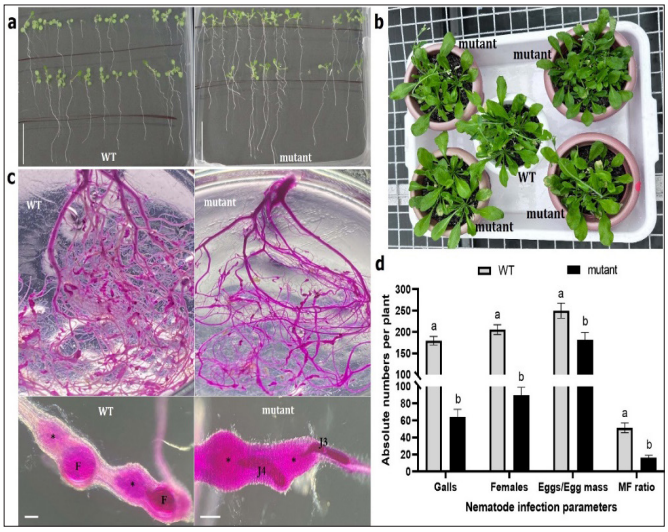


Schematic overview of the principal plant growth promoting genes of *A. chroococcum* strain W5

CRISPR/Cas9 Knockout of a Host Susceptibility Gene Improved Nematode Resistance

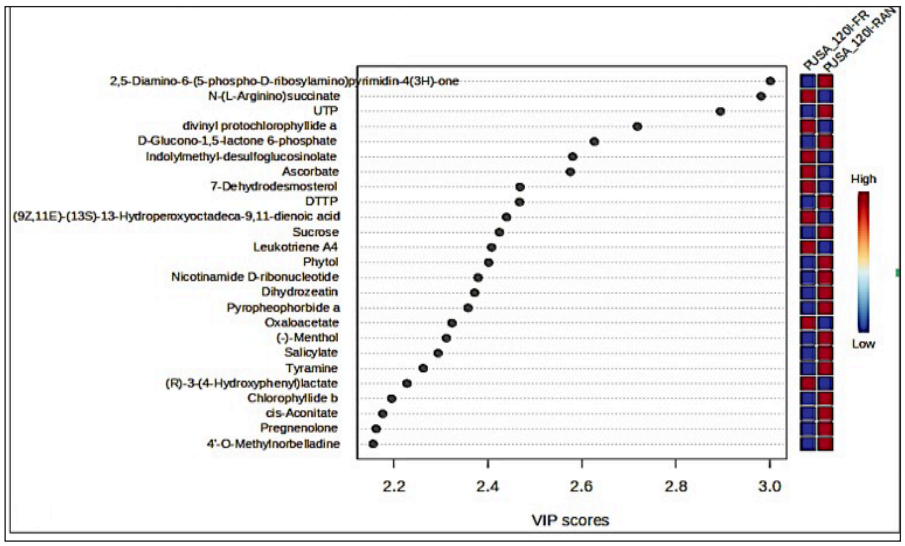
Using CRISPR/Cas9, a nematode-responsive susceptibility (*S*) gene, amino acid permease (*AtAAP6*) was selectively knocked out without incurring any growth penalty in the host plant *Arabidopsis thaliana*. The 'Cas9-free' homozygous T_3 lines were challenge inoculated with *Meloidogyne incognita* and CRISPR edited *A. thaliana* plants exhibited considerably reduced susceptibility to nematode infection compared to the non-edited plants.

(Dutta T K, Division of Nematology)
(tkdutta@iari.res.in)



Targeted mutagenesis of *AtAAP6* conferred improved resistance in *A. thaliana* against *M. incognita* infection. (a) Growth phenotypes of wild-type (WT) and mutant plants in MS agar (b) Shoot morphology of WT and mutant plants after 30 dpi (c) Lower galling intensity in mutant root system compared to the WT (d) Differential nematode infection parameters in WT and mutant line

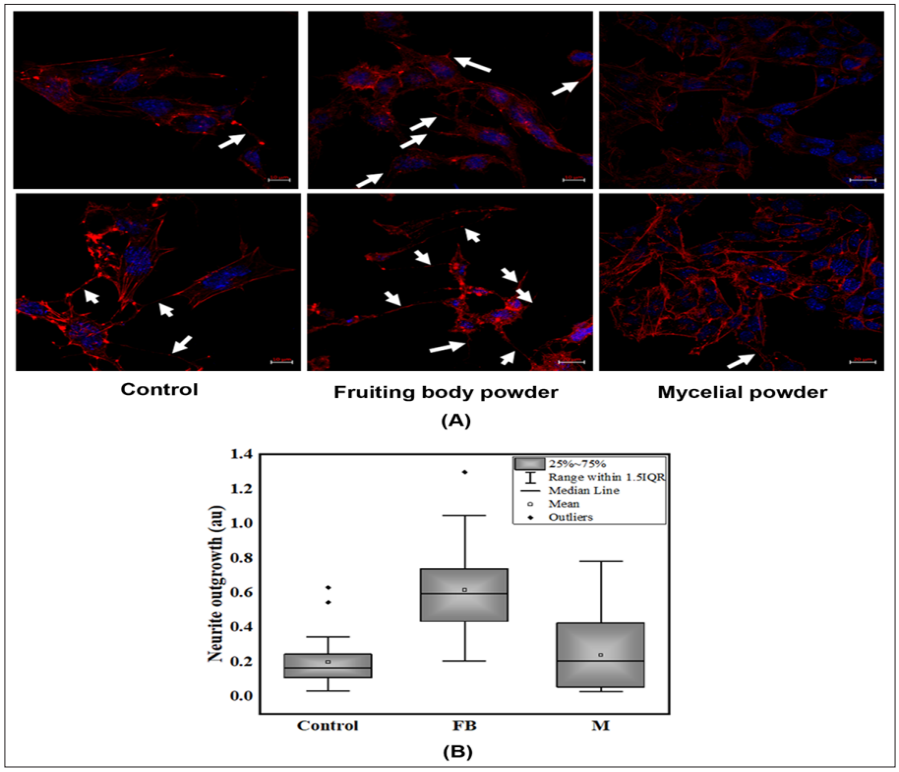
Characterizing the Enzyme-Driven Metabolic Shifts in Rancid Pearl Millet Flour using Metabolomics Approach



Variable Importance in Projection (VIP) score plot highlighting the top 25 metabolites contributing to the group discrimination in fresh and rancid flour of Pusa-1201

Rancidity limits the shelf-life and marketability of pearl millet flour despite its nutritional advantages. Metabolomics and biochemical approaches to unravel the mechanisms underlying rancidity in pearl millet cultivars, Pusa-1201 (hybrid) and Chadhi Bajri (landrace), revealed higher lipid degradation metabolites (3-oxotetradecanoyl-CoA), pigments (chlorophyllide b) and free fatty acids (FFA) in stored flour of Pusa-1201, while Chadhi Bajri exhibited unique antioxidant and stress-protective metabolites (quercetin 3-sulfate, rosmarinate), conferring resistance to oxidative degradation. Storage dependent increase in lipase, lipoxygenase, and peroxidase activities correlated with rancidity indices including acid value (AV), peroxide value (PV), and FFA. Twenty-five key metabolites, including phytol and chlorophyllide b, were identified as biomarkers for breeding rancidity-resistant cultivars.

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



Nootropic effect of *Hericium erinaceus* extract from fruiting body (FB) and mycelium (M) (A) Phalloidin and fluorescent dye (DAPI) staining of cells after 120 hours (B) Quantification of neurite outgrowth

Nutribooster: Ultrasound-Assisted Sequential Extraction of a Bioactive Cocktail from *Hericium erinaceus* Mushroom

An optimized ultrasound-assisted sequential extraction method was developed to recover bioactive compounds from *Hericium erinaceus* (Lion's Mane mushroom) with validated nootropic and cognitive effects. A dual-phase extraction using aqueous ethanol and hot water efficiently extracted polyphenols, terpenoids and β-glucans. Parameters optimized through Response Surface Methodology enhanced yields while reducing time and solvent use. The extracts showed superior bioactivity and sustainability over conventional methods. Neurotropic validation

in SH-SY5Y cells revealed that fruit body extracts induced greater neuronal differentiation and neurite outgrowth than mycelium extracts.

(Krishnan V, Division of Biochemistry)
(vedakrishnan@iari.res.in)

Persistence of Antimicrobial Substance-Triclosan (TCS) in Agricultural Soils and the Effect of Organic Amendments on its Mobility in Soils

Persistence and leaching behavior of TCS at 5 µg g^{-1} fortification level were studied in inceptisol (pH 7.67, OC 0.67%) and entisol (pH 4.97, OC 1.98%). TCS persisted beyond 120 days, showing higher persistence in inceptisol ($T_{1/2}$ = 73.3–40.1 days) than entisol (68.3–36.2 days), with lowest persistence under UV light. Leaching studies under simulated monsoon conditions showed TCS movement only up to 10 cm, with 96–97% recovery from soil and 2–3% from leachates. Leaching was greater in inceptisol under continuous flow. Organic amendments reduced leaching, with higher TCS recovery in soils amended with rice straw ash and sugarcane trash ash.

(Gupta S, Division of Agricultural Chemicals)
(sumangupta@iari.res.in)

Two New Scarab Beetles Discovered in Northeast India: A Boost to Biodiversity Research

In a collaborative study, researchers from ICAR-IARI, Assam; ICAR–NBAIR, Bengaluru; College of Horticulture and Forestry, CAU, Pasighat, Arunachal Pradesh; ICAR–IIOR, Hyderabad and the Muséum d'Histoire Naturelle, Geneva, discovered two new scarab beetle species-*Cyphochilus kukriana* from Arunachal Pradesh and *C. pentaphysia* from Mizoram, Nagaland, and Tripura. The study records India's first occurrence of *C. tenzingyatsoi* and resolves a taxonomic puzzle by merging multiple species under *C. niveosquamosus*. It also highlights Northeast India's rich biodiversity and raises concerns about the potential effects of the beetles on maize and kiwi fruit.

(Sreedevi K, Sahoo K C, Ajykumara K M, Boopathi T, Sushil S N and Sabatinelli G, ICAR-IARI Assam)
(kishore.sahoo@icar.org.in)

EDUCATION

Dr. R.C. Gautam Memorial Award Ceremony

The Division of Agronomy, ICAR-IARI, organized the Dr. R.C. Gautam Award Ceremony on July 05, 2025, to commemorate the 82nd birth anniversary of Late Dr. R.C. Gautam, honoring his exemplary contributions to agronomy and agricultural education. Dr. Ch. Srinivasa Rao, Director, ICAR-IARI, graced the event as Chief Guest. Recalling Dr. Gautam's visionary leadership, Dr. Anupama Singh and Dr. P.S. Bramhanand highlighted the importance of sustaining his legacy. The Dr. R.C. Gautam Memorial Award for Young Agronomists was conferred on Dr. Rakesh Kumar, Senior Scientist, ICAR RCER, Patna.

Dr. Ch. Srinivasa Rao, Director, ICAR-IARI, felicitates
Dr. Rakesh Kumar, recipient of Dr. R.C. Gautam Memorial Award

Peer Review Team Visits ICAR-IARI for Accreditation Assessment

The Peer Review Team, chaired by Dr. Tej Partap, Former VC, GBPAUT, Pantnagar, visited ICAR-

IARI from August 25-27, 2025, to assess its accreditation by the National Agricultural Education Accreditation Board (NAEAB), ICAR, for the fourth cycle, covering a period of five years (2025-2030).

Director ICAR-IARI welcomes Dr. Tej Partap, Chairman, Peer Review Team

Teachers' Day Lecture

The ICAR-IARI and the Genetics Club organized the Teachers' Day celebration on September 04, 2025, on the eve of Teachers' Day. The program was presided over by Dr. Ramesh Chand, Member, NITI Aayog, who introduced the keynote speaker, Dr. Sanjay Kumar, Chairman, Agricultural Scientists Recruitment Board (ASRB), New Delhi. In his address titled "Live Where the Sparks Fly", Dr. Kumar emphasized the timeless role of teachers and praised IARI as the "Epitome of Agricultural Wisdom". He urged young scientists to document their work, engage with communities and value patience in their pursuit of success.

Dignitaries at Teachers' Day celebration

ICAR-IARI Sets Benchmark in Agricultural Education and Sustainability

ICAR-IARI was ranked 1st in the Agriculture and Allied Sectors category of the NIRF 2025 rankings, reaffirming its leadership in agricultural education, research and innovation. The institute also secured 2nd position in the Sustainable Development Goals (SDG) category and achieved 24th in overall and 29th in Research Institutions categories. The award was presented by Shri Dharmendra Pradhan, Hon'ble Education Minister, to Dr. Ch. Srinivasa Rao, Director and Vice Chancellor, ICAR-IARI on September 04, 2025. Dr. Rao appreciated the collective efforts of the Institute's faculty, staff and students, stating that the recognition stands as a testament to its scientific excellence and commitment to sustainable agriculture and national food security.

Dr. Ch. Srinivasa Rao, Director, ICAR-IARI, New Delhi and Dr. Anupama Singh, Joint Director (Education) & Dean, receiving the Award

National Seminar on "IARI Towards a World-Class Higher Education Institution"

The IARI Alumni Association (IAA) and ICAR-IARI, New Delhi, jointly organized a two-day National Seminar on September 29-30, 2025, at the NASC Complex, New Delhi, bringing together around 100 leading scientists, policymakers, academicians, industry experts, and young researchers. The deliberations focused on transforming IARI into a globally recognized hub for higher education, research, and innovation, and evolving into a Multidisciplinary Education and Research University (MERU).

Dignitaries and participants at National Seminar on "IARI Towards a World-class Higher Education Institution", NASC Complex, New Delhi

IARI Pre-Placement and Career Seminar

ICAR-IARI organized a pre-placement career seminar on September 29, 2025, featuring Fast Retailing India Material Corporation Pvt. Ltd. (Uniqlo) from Bengaluru. Company representatives presented their global operations and career opportunities in cotton crop management, followed by an interactive Q&A session with around 60 students. Subsequently, campus interviews were conducted for shortlisted candidates, providing them direct engagement with the recruiters. The company representatives expressed satisfaction with the event and appreciated the professionalism of IARI's students and placement team.

Participation of students in ICAR-IARI Pre-Placement and Career Seminar

EXTENSION

Mango Field Day

The Division of Fruits and Horticultural Technology, ICAR-IARI, organized a Mango Field Day on July 14, 2025, attended by farmers from various states, faculty and students. Dr. Ch. Srinivasa Rao discussed new mango cultivation techniques and market integration, while Dr. Viswanathan Chinnusamy highlighted the outreach program to increase quality planting materials. The event demonstrated popular varieties like Amrapali, Mallika, Pusa Arunima and others, with proposals for collaboration with National Horticulture Board and APEDA to boost exports.

Director and Joint Director (Research), ICAR-IARI with Staff and Students at the Mango Field Day

Parthenium Awareness Field Day

The Division of Agronomy, ICAR–IARI, observed '*Parthenium* Awareness Week' from August 16-22, 2025, with a Field Day held on August 20, 2025. Dr. Viswanathan Chinnusamy, Joint Director (Research) and Dr. R. N. Padaria, Joint Director (Extension) emphasized on collective action and eco-friendly management of the invasive weed. A lecture-cum-awareness campaign was also conducted at the Government Senior Secondary School, Pusa Campus, on August 22, 2024.

Eradication of *Parthenium* during *Parthenium* Awareness Week

Kisan Goshthi-cum-Awareness Program

KVK Gurugram organized three *Kisan Goshthis i.e. Kisan Samman Nidhi Yojana* (1) and *Kisan Chaupal Charcha* (2) during July 12-August 09, 2025, discussing various state and central agricultural schemes. The events included a live telecast of Prime Minister Shri Narendra Modi's address to farmers. Participants also engaged with sessions on modern farming technologies such as drip irrigation, bio-fortified varieties, drone applications and natural farming, enhancing awareness of innovative agricultural practices.

Participation of farmers at *Kisan Goshthi*-cum-Awareness Program at KVK Gurugram

Kisan Goshthi on *Sarson se Samriddhi*

The Indian National Young Academy of Science (INYAS)-NCR Zone, in collaboration with the Division of Agronomy, ICAR-IARI, New Delhi, organized an outreach program on "*Sarson se Samriddhi*" on September 28, 2025 at Miaun Block, Badaun District, Uttar Pradesh. The program promoted sustainable mustard cultivation and higher farm income through

Training Programs

Divisions/Unit/ KVK/ Regional Station	No. of Training	Title of Training Programs
KVK, Gurugram	05	• IPM in Pigeon pea • ICM in Pearl millet • IPM in Cotton • Integrated Dairy Management for Enhanced Productivity • IPM in Pearl millet
IARI-RS Katrain	01	• TSP Training Program
Seed Science and Technology	08	• Farmers' Training Program-cum-exposure Visit • Improved Rabi Crop Production and Input Distribution • Farmers' Training Program-cum-exposure Visit • Improved Crop Management in Paddy & Input Distribution • Orientation-cum-Training Program of Gram Pradhan/Contact Farmers on Rabi Crop Production Technology • Planting Material Distribution Program of IARI-Kalimpong Under SC-SP Scheme • Popularization of High-Yielding and Nutrient-rich Variety of Wheat HS-562 • Scientific Farming of Wheat Variety HS-562 for Higher Yield
IARI-RS Shimla	02	• Training-cum-input Distribution Program Under the SCSP at the Krishi Vigyan Kendra, Bara (Hamirpur) and Sunder Nagar (Mandi), Himachal Pradesh

improved practices. About 200 farmers participated, and 'Pusa Mustard-30' seeds were distributed among the participating farmers.

Participant farmers at *Kisan Goshthi* on *"Sarson se Samriddhi"*

Swachh Bharat Abhiyan (Swachhotsav)

A cleanliness drive was conducted at different Divisions of IARI main campus, regional stations, KVK Gurugram and off campuses from September 17-October 02, 2025, with active participation from students and staff. At ICAR–IARI Assam, as part of *Swachhotsav*, a human chain was formed with active participation of 100 farmers, under the leadership of Dr. Ch. Srinivasa Rao, Director, ICAR–IARI, on September 25, 2025, to spread the message of cleaner and greener future.

Farmers Unite for *Swachhotsav* 2025: Human Chain Formation at ICAR–IARI Assam

CAPACITY BUILDING

Workshops/ Brainstroming Sessions

Divisions/Units	Date	Title of Workshop
Agricultural Economics	July 01, 2025	Developing India's Food Processing Sector: Farm Politics, Federalism and State-Directed Development
Agricultural Economics	July 7-18, 2025	Tools and Techniques for Advanced Analytics in Social Sciences Research
Agricultural Economics	July 25, 2025	Methodological Frameworks for Assessing the Impact of Agricultural Technologies
Agricultural Engineering	September 8-14, 2025	Innovations in Post-Harvest Machinery: Design, Development and Digital Advancements
Soil Science and Agricultural Chemistry	July 02-09, 2025	Soil Testing and Water Quality Assessment
Soil Science and Agricultural Chemistry	July 23-25, 2025	Best Management Practices for Profitable Agriculture
Soil Science and Agricultural Chemistry	September 08-28, 2025	22nd Advanced Level Training in Soil Testing, Plant Analysis and Water Quality Assessment
AKMU	September 23, 2025	Creation of Agricultural Advisories using *Kisan Sarathi Kosh*

ICAR-IARI ASSAM HIGHLIGHTS

Regional Rainfed Lowland Rice Research Station (RRLRRS), Gerua Handed over to IARI Assam

On August 31, 2025, the ICAR-IARI, Assam formally took over the Regional Rainfed Lowland Rice Research Station (RRLRRS), Gerua, Kamrup from ICAR–NRRI, Cuttack, marking a new chapter in agricultural research for the Northeast.

Handing over Ceremony of RRLRRS, Gerua

IARI Director Meets Chief Minister of Assam to Strengthen Institutional Collaboration

On September 02, 2025, Dr. Ch. Srinivasa Rao, Director, ICAR–IARI, met Hon'ble Chief Minister Dr. Himanta Biswa Sarma and senior state officials to discuss land matters and enhance research, education, and extension activities of IARI Assam, with the Chief Minister assuring full government support.

Director-IARI with Chief Minister of Assam

ICAR-IARI JHARKHAND HIGHLIGHTS

Farmers' Empowerment in Jharkhand through Training on Millet Production, Value Addition

ICAR-IARI, Jharkhand organized a five-day farmer training program on "Millets Production, Promotion and Value Addition in Jharkhand" under the SCSP scheme from August 02-06, 2025. The event coincided with the online release of the 20th PM-KISAN instalment, addressed by the Hon'ble Prime Minister. A practical exposure visit on millet processing was arranged at Herodih FPC, Koderma, and participants received seed kits, small tools, and certificates.

Participation of farmers at the training program

Foundation Day of ICAR-IARI Regional Station, Wellington

The ICAR-IARI Regional Station, Wellington, celebrated its 72nd Foundation Day on September 13, 2025, under the chairmanship of Dr. Ch. Srinivasa Rao, Director, ICAR-IARI. Established in 1954, under the "Coordinated Wheat Rust Control Scheme" of ICAR, the station has played a vital role in national crop improvement programs for wheat rust screening and resistance breeding. Dr. Rao highlighted the visionary contributions of Dr. Norman Borlaug and Prof. M.S. Swaminathan to India's Green Revolution, while Dr. C. Viswanathan and Dr. M. Sivasamy lauded the station's continued excellence and scientific contributions to wheat research.

Field visit of Dignitaries, Staff and Students at ICAR-IARI RS, Wellington

MISCELLANEOUS

Senior Officers Council Meeting

During this quarter, ICAR–IARI held four meetings of Senior Officers Council to review research, education and administration related activities, to improve inter-departmental coordination and plan for future initiatives and programs.

Senior Officers Council Meeting

Research Grants

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

Project Title	Amount (in ₹ Lakhs)	Duration	Funding Agency	Principal Investigator
Genome-edited nitrogen use-efficient lines with improved nutritional quality for sustainable agriculture (GENUEIN-lines)	63.41	July 2025 - July 2028	DBT	Dr. Lekshmy Sathee, SS, Division of Plant Physiology
Deciphering the seed transmission of turnip mosaic virus in mustard: From prevalence to mechanism	61.22	July 2025 - July 2028	DST	Dr. Pankhuri Singhal, S, Division of Plant Pathology
Info chemicals mediated multifarious behavioral tactics for Uzi fly management in muga culture	27.99	July 2025 - July 2028	Central Silk Board	Dr. Mukesh Kumar Dhillon, Head, Division of Entomology
AICRP on Vegetables	36.00	July 2025 - July 2031	ICAR	Dr. R Selvakumar, S, CPCT
Centre of Excellence (CoE): A Centre for technology D4 - Design, Develop, Demonstrate and Deploy in the Area of F5 - Food, Feed, Fodder, Fertilizer and Fuel	60.14	July 2025 - July 2030	DST	Dr. Manoj Srivastava, PS, Division of Environmental Science
Development of novel film coated seeds using beneficial microbial as organic inputs for enhanced seedling vigour and nutrient uptake in wheat and maize	11.80	August 2025 - August 2028	CSIR-ASPIRE	Dr. Sudipta Basu, PS, Division of Seed Science and Technology
Application of advanced technologies for improved productivity and resource-use efficiency for regenerative agriculture production systems	228.00	August 2025 - August 2030	SM Sehgal Foundation, Gurugram	Dr. Anchal Dass, PS, Division of Agronomy
Collaborative research and capacity building training for agricultural policy analysis	25.70	September - December 2025	Bioversity International, Italy	Dr. Alka Singh, Head, Division of Agricultural Economics
Science Technology and Innovation Hub for development of Scheduled Caste community in Baghpat and Indri blocks and Nuh district respectively in Uttar Pradesh and Haryana States	105.02	September 2025 - September 2028	DST	Dr. Zakir Hussain, PS, CPCT

Integrating weather and remote sensing data for developing Geo-spatial forewarning models for crop pests and disease	27.05	September 2025 - September 2028	ISRO – Space Application Centre	Dr. Amrender Kumar, PS, AKMU
Contract Research Project				
Assessment of the impact of Nano zinc (1%), and Nano boron (0.1%) on growth, yield, and quality of brinjal and bottle gourd	15.43	August 2025 - August 2026	M/s Combe Project Private Limited	Dr. Jogendra Singh, S, Division of Vegetable Science
Assessment of the bio efficacy of Etoxazole 10% SC (New Source) against European red mite Panonychus ulmi & two-spotted spider mite Tetranychus urticae Koch in Apple	12.43	September 2025 - September 2027	M/s Sumitomo Chemicals, India Ltd.	Dr. K. K. Pramanick, PS, Regional Station, Shimla

Technology Commercialization

Under the Lab to Land Initiative, 33 technologies developed by ICAR-IARI were commercialized to 26 industry partners, resulting in a total revenue generation of ₹45,91,150.

IP Management

During July-September 2025, the ZTM & BPD Unit filed three patents and seven copyrights.

Incubation Activities

Launch of SHITIJ 2025-26

SHITIJ 2025-26, a year-long incubation program by PUSA Krishi, was launched on August 29, 2025, to drive innovation and boost startup participation in agriculture.

Agri-preneurship Development Programs (ADPs)

- ADP on "Soil Testing and Water Quality Assessment" was organized by ZTM & BPD and the Division of Soil Science and Agricultural Chemistry, during July 02-09, 2025. The week-long program enhanced skills in modern soil and water testing and promoted agri-preneurship for sustainable resource management.

Release of publication by Dr. Ch. Srinivasa Rao, Director, ICAR-IARI, New Delhi at ADP on 'Mushroom Cultivation for Sustainable Agribusiness'

- ADP on "Mushroom Cultivation for Sustainable Agribusiness" was organized by ZTM & BPD in collaboration with the Division of Plant Pathology, ICAR- IARI, from August 25-29, 2025. The training imparted comprehensive knowledge of mushroom cultivation and promote sustainable agribusiness by equipping participants with skills to establish successful mushroom enterprises.
- ADP on "Recent Avenues in Food Processing for Agritech Startups" was hosted by ZTM & BPD along with the Division of FS & PHT, ICAR-IARI from September 08-13, 2025. The program introduced aspiring agri-preneurs and agritech startups to advanced food processing technologies, enhancing skills to meet market demands and foster innovation.
- ADP on "From Seed to Storage: Ensuring Quality in Field and Vegetable Crops" was organized by ZTM & BPD in collaboration with the Division of Seed Science and Technology, ICAR- IARI, from September 22-27, 2025.

Training on Quality seed by ZTM & BPD and Division of Seed Science and Technology

Memorandum of Understanding (MoU)

On August 04, 2025, MoU was signed with seven collaborating partners for the commercialization of the Pusa Decomposer Wettable Powder formulation developed under the CRP project for enhanced *in situ* and *ex situ* management of crop residues.

AWARDS, PUBLICATIONS AND VISITS

Awards and Honours

- *Pusa Krishi*, ICAR-IARI, received the Best Incubator Award in the Incubators/R&D category at the SICA'25 - Social Impact Conference & Awards, the India International Centre in New Delhi on September 09, 2025.
- *Pusa Krishi*, ICAR-IARI, was honoured with the prestigious Bharat Incubator Award 2025 by the Entrepreneurs Association of India during the 4th Bharat Entrepreneurship Summit at the NDMC Convention Centre in New Delhi on September 13, 2025.
- ICAR– IARI received Third Prize for excellence in the implementation of Hindi at the 12th Half-Yearly meeting of the Nagar *Rajbhasha Karyanvayan Samiti* (NRAKAS), North Delhi, organized under the Ministry of Home Affairs, Government of India, on September 25, 2025.
- Water Technology Centre (WTC), ICAR-IARI was globally recognized as a winner in the innovate for impact use case 'IoT-based Solar Powered Automatic Smart Irrigation System' under the smart agriculture category at International Telecommunication Union (ITU), held at Geneva, Switzerland from July 08-11, 2025.
- Dr. Viswanthan Chinnusamy, Joint Director (Research), was elected as Fellow National Academy of Sciences, India, (NASI) 2025.
- Dr. Anupama Singh, Dean and Joint Director (Education) was awarded Indian National Science Academy Women Associateship (IWA).
- Dr. Veda Krishnan, Senior Scientist, Division of Biochemistry, was awarded Indian National Science Academy Women Associateship (IWA).
- Dr. Veda Krishnan was recognised as Adjunct Professor at the Department of Food Science and Human Nutrition, University of Manitoba, Canada, for 2025-2028.
- Dr. Vinutha T, Senior Scientist, Division of Biochemistry, was selected for the prestigious NASI-Membership 2025.
- Dr. R. Pandiselvam, Senior Scientist, Division of Agricultural Engineering, ICAR-IARI, received the prestigious Rashtriya Krishi Vigyan Puraskar 2025-Outstanding Young Scientist Award in Agriculture and Allied Sciences (Natural Resource Management and Agricultural Engineering) at ICAR Foundation Day on July 16, 2025.
- Dr. R. Pandiselvam received Shri Nilesh Patel Innovation Award for Cottonseed & Cottonseed Oil Supply Chain 2025, instituted by the Solvent Extractors' Association of India in collaboration with FoodTech, Pathshala at the 6th SEA–AICOSCA Cottonseed Oil Conclave 2025, on August 02, 2025 at Vijayawada, Andhra Pradesh.
- Dr. J B Singh, Dr. TL Prakasha and Dr. R Gajghate received recognition from Shri Shivraj Singh Chouhan, Hon'ble Minister of Agriculture and Farmers' Welfare, for developing wheat varieties, *viz.*, HI 1665 (Pusa Gehun Sharbati), HI 8840 (Pusa Gourav), HI 1669 (Pusa Gehun Kranti) & HI 1674 (Pusa Gehun Atulya) at 64th All India Wheat and Barley Research Workers' Meet held at RVSKVV, Gwalior from August 25-27, 2025.

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Visits of National & International Dignitaries to IARI

Dr. Indra Mani, Vice Chancellor, VNMKV Parbhani, along with high-level officials of the University visited on July 22, 2025

Participants of the 82nd edition of the Know India Program of the Ministry of External Affairs, representing 12 countries visited on August 01, 2025

Ethiopian delegation led by Mr. Solomon Euyda Alemn, DG, Legal Affairs visited on August 22, 2025

Visit of a delegation of 15 FPOs from Sikkim led by Shri Tshering Tendup Bhutia, Principal Director, Agriculture Department, Govt. of Sikkim and Mrs Raihan Gurung, Additional Director, Agriculture Department on September 01, 2025

Ms. Julie Borlaug, President of Borlaug Foundation and Council of Advisor for World Food Prize visited on September 09, 2025

Thirty civil servants from Madagascar visited as part of their comprehensive capacity development program organized by National Centre for Good Governance, on September 11, 2025

A Nepalese delegation led by Dr. Govinda Prasad Sharma, Secretary, Ministry of Agriculture and Livestock Development (MoALD), Government of Nepal (GoN) visited on September 10, 2025

A European Union delegation on Agriculture and Food led by Mr Christophe Hansen, EU Commissioner for Agriculture and Food visited on September 12, 2025

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