



Pearl Millet News

IIMR-RRS on Pearl Millet, Gudamalani-344031, Rajasthan, India

Website: <http://www.aicpmip.res.in>, www.aicrp.icar.gov.in/pearl

Email: aicpmip@gmail.com



Number : 15

May, 2026

CONTENTS

- From Coordinator's Desk
- 60th Annual Group Meeting
- New Releases and Notification of Hybrids and Varieties
- MoUs
- Trainings/Workshops/Seminars/Conferences Organized
- Field Days /Kisan Melas
- Appointments / Retirements
- Trainings/Workshops/Seminars/Conferences Attended
- Awards and Nominations
- Visits
- Publications



From Coordinator's Desk.....

Pearl millet [*Pennisetum glaucum* (L.) R. Br.] is the most important among all millets and ranks as the fourth most widely cultivated food crop in India after rice, wheat, and maize. The crop is known for its rapid growth, low input requirement, high photosynthetic efficiency, and excellent adaptability to adverse agro-climatic conditions. Pearl

millet possesses remarkable tolerance to drought, high temperature, salinity, poor soil fertility, elevated soil pH, and various biotic stresses, making it one of the most climate-resilient cereal crops. It is predominantly cultivated in arid and semi-arid regions where major cereals such as rice and wheat often fail to survive under moisture stress and harsh environmental conditions. Owing to its resilience and adaptability, pearl millet plays a pivotal role in sustaining food, fodder, nutritional, and livelihood security of resource-poor farmers in fragile ecosystems.

In India, pearl millet was cultivated over an area of 6.24 million hectares during 2025–26 with an estimated production of 8.84 million tonnes and an average productivity of 1,415 kg/ha, as reported in the Second Advance Estimates (2025–26) released by the Department of Agriculture & Farmers Welfare (DA&FW), Ministry of Agriculture & Farmers Welfare, Government of India. The major pearl millet-growing states are Rajasthan, Maharashtra, Uttar Pradesh, Gujarat, and Haryana, which together contribute nearly 90% of the country's total production. Rajasthan alone accounts for about 45% of national production, followed by Uttar Pradesh (19%), Haryana (10%), Gujarat (9%), Madhya Pradesh (7%), Maharashtra (6%), Karnataka (3%), and Tamil Nadu (2%). The crop is primarily cultivated during the rainy (kharif) season extending from June/July to September/October. However, summer cultivation is also practiced in parts of Gujarat, Rajasthan, and Uttar Pradesh during February–May, while limited rabi cultivation is undertaken in certain areas of Maharashtra and Gujarat.

Globally, pearl millet is the sixth most important cereal crop after maize, rice, wheat, barley, and sorghum. It is cultivated on more than 30 million hectares worldwide, with Africa accounting for over 18 million hectares followed by Asia with more than 10 million hectares. Besides serving as an important food and fodder crop, pearl millet also has considerable industrial value and is utilized in alcohol and biofuel production, starch extraction, processed food industries, and value-added nutraceutical products.

Pearl millet is nutritionally superior to several staple cereals such as wheat, rice, maize, and sorghum. The grains are rich in carbohydrates, proteins,

Pearl millet [*Pennisetum glaucum* (L.) R. Br.] is the most important among all millets and ranks as the fourth most widely cultivated food crop in India after rice, wheat, and maize. The crop is known for its rapid growth, low input requirement, high photosynthetic efficiency, and excellent adaptability to adverse agro-climatic conditions. Pearl millet possesses remarkable tolerance to drought, high temperature, salinity, poor soil fertility, elevated soil pH, and various biotic stresses, making it one of the most climate-resilient cereal crops. It is predominantly cultivated in arid and semi-arid regions where major cereals such as rice and wheat often fail to survive under moisture stress and harsh environmental conditions. Owing to its resilience and adaptability, pearl millet plays a pivotal role in sustaining food, fodder, nutritional, and livelihood security of resource-poor farmers in fragile ecosystems.

In India, pearl millet was cultivated over an area of 6.24 million hectares during 2025–26 with an estimated production of 8.84 million tonnes and an average productivity of 1,415 kg/ha, as reported in the Second Advance Estimates (2025–26) released by the Department of Agriculture & Farmers Welfare (DA&FW), Ministry of Agriculture & Farmers Welfare, Government of India. The major pearl millet-growing states are Rajasthan, Maharashtra, Uttar Pradesh, Gujarat, and Haryana, which together contribute nearly 90% of the country's total production. Rajasthan alone accounts for about 45% of national production, followed by Uttar Pradesh (19%), Haryana (10%), Gujarat (9%), Madhya Pradesh (7%), Maharashtra (6%), Karnataka (3%), and Tamil Nadu (2%). The crop is primarily cultivated during the rainy (kharif) season extending from June/July to September/October. However, summer cultivation is also practiced in parts of Gujarat, Rajasthan, and Uttar Pradesh during February–May, while limited rabi cultivation is undertaken in certain areas of Maharashtra and Gujarat.

Globally, pearl millet is the sixth most important cereal crop after maize, rice, wheat, barley, and sorghum. It is cultivated on more than 30 million hectares worldwide, with Africa accounting for over 18 million hectares followed by Asia with more than 10 million hectares. Besides serving as an important food and fodder crop, pearl millet also has considerable industrial value and is utilized in alcohol and biofuel production, starch extraction, processed

food industries, and value-added nutraceutical products.

Pearl millet is nutritionally superior to several staple cereals such as wheat, rice, maize, and sorghum. The grains are rich in carbohydrates, proteins, fats, dietary fibre, resistant starch, vitamins, antioxidants, and essential micronutrients such as iron and zinc. In addition, pearl millet possesses a more balanced amino acid profile than maize and sorghum and contains appreciable amounts of omega-3 and omega-6 polyunsaturated fatty acids, which are beneficial for cardiovascular and neurological health. Nutritionally, 100 g of bajra grain contains approximately 363 kcal energy, 11.8 g protein, 4.8 g fat, 67 g carbohydrates, 2.3 g fibre, 42 mg calcium, 242 mg phosphorus, and 11 mg iron (Kumar et al., 2020). Pearl millet is naturally gluten-free and contains comparatively superior-quality protein, making it highly suitable for individuals suffering from gluten intolerance or celiac disease. It is also the only cereal known to retain its alkaline nature after cooking and possesses a low glycemic index, thereby making it an ideal dietary component for diabetic patients.

Furthermore, pearl millet acts as a probiotic food by supporting beneficial gut microflora and maintaining colon hydration, thereby aiding digestion and preventing constipation. Regular consumption of pearl millet has also been associated with reduced risks of cardiovascular diseases, obesity, and certain cancers. Its high content of slowly digestible starch (SDS) and resistant starch (RS) contributes to its low glycemic index and increasing demand among health-conscious consumers worldwide. Owing to its outstanding nutritional and health benefits, pearl millet has emerged as an important crop for combating malnutrition and ensuring nutritional security.

Recognizing its immense nutritional and climate-resilient value, pearl millet was officially designated as a “Nutri-Cereal” through Gazette Notification No. 133 dated 13 April 2018 for promotion under production, consumption, and trade initiatives, and was also included in the Public Distribution System (PDS). Further elevating its status, the Hon'ble Prime Minister of India conferred pearl millet with the title “Shree Anna” in recognition of its superior nutritional qualities, climate resilience, and role in ensuring sustainable livelihoods for farmers. The Indian Institute of Millets Research

(IIMR) has also been declared as the “Global Centre of Excellence for Millets.”

The ICAR-All India Coordinated Research Project (AICRP) on Pearl Millet has played a pivotal role in the genetic improvement and technological advancement of the crop in India. Apart from conducting coordinated multilocation trials and evaluation of breeding materials across diverse agro-ecological zones, the AICRP system has significantly contributed towards cultivar development, production technologies, disease and pest management, and technology dissemination. Till date, a total of 217 hybrids and 67 varieties of pearl millet have been identified and released for commercial cultivation in different regions of the country through the AICRP network. Several location-specific production and protection technologies have also been developed to enhance productivity, profitability, and sustainability of pearl millet cultivation under varying agro-climatic conditions.

The AICRP on Pearl Millet has further strengthened collaborative research through partnerships with national and international organizations. It has actively contributed as a technology and knowledge partner in major initiatives such as the ICAR–BMGF project on “Application of Next-Generation Breeding, Genotyping, and Digitalization Approaches for Improving the Genetic Gain in Indian Staple Crops.” These collaborative efforts are facilitating the integration of modern breeding tools, genomics, digital phenotyping, and precision agriculture approaches into pearl millet improvement programmes.

The All India Coordinated Research Project (AICRP) on Pearl Millet was shifted from Agriculture University Jodhpur to ICAR-Indian Institute of Millets Research – Regional Research Station on Pearl Millet, Gudamalani with the objective of strengthening pearl millet research activities in the arid and semi-arid regions of western Rajasthan. The relocation aimed to utilize the strategic advantages of Gudamalani and adjoining regions, a major pearl millet growing belt characterized by harsh climatic conditions, sandy soils, recurrent drought and natural prevalence of important diseases and pests, thereby providing ideal conditions for location-specific research and technology development. The establishment of the AICRP centre at Gudamalani has enhanced opportunities for conducting

multidisciplinary research on varietal development, disease screening, climate resilience, agronomic management and farmer-oriented technologies under real field conditions.

60th Annual Group Meeting of ICAR-AICRP on Pearl Millet

As part of the Combined Annual Group Meeting, the centre-wise scientific work plan audit and technical programme formulation meeting for pearl millet was organized on 6 May 2025. The Combined 60th Annual Group Meeting (Diamond Jubilee) of ICAR-AICRP on Pearl Millet was conducted jointly with ICAR-AICRP on Sorghum and ICAR-AICRP on Small Millets during 28–30 May 2025 in online mode by ICAR-Indian Institute of Millets Research in collaboration with the respective AICRPs. More than 200 researchers representing pearl millet, sorghum and small millet centres, volunteer centres, private sector organizations, NGOs, International Crops Research Institute for the Semi-Arid Tropics, and other collaborating institutes participated in the meeting.

Dr. M. L. Jat, Secretary, DARE & DG, ICAR was the Chief Guest while Dr. D. K. Yadava, DDG (CS), ICAR, New Delhi and Dr. S. K. Pradhan, ADG (FFC), ICAR were the Guest of Honour. Dr. (Mrs.) C Tara Satyavathi, Director, ICAR-IIMR and Project Coordinator, AICRP, Pearl millet, presented the overall progress under each AICRPs during 2024-25 along with priority areas. The Chairmen and Co-chairmen of the respective groups reviewed the progress made across various disciplines and emphasized the need for developing more high-yielding hybrids and varieties, profitable cultivation practices, efficient pest management strategies, effective dissemination of research outputs to farmers, and ensuring the availability of quality seed in all millets along with enhancement of the Seed Replacement Rate (SRR). They also stressed the importance of increasing productivity in small millets and sorghum to make millet cultivation more remunerative for farmers. Further, greater emphasis was laid on the use of advanced genomic and phenomic approaches for accelerating genetic gains.

Dr. M L Jat, Secretary, DARE & DG, ICAR, the Chief Guest, in his address congratulated the millet research groups for their notable achievements in varietal

release and technology development. He emphasized the need to identify niche areas for millet cultivation, undertake millet systems mapping, promote intercropping, develop short-duration millet varieties, improve fodder quality, study methane emissions, reduce yield gaps, and strengthen ICARIIMR Regional Research Station Barmer. Highlighting the dual importance of millets as both grain and fodder crops, he stressed that greater emphasis should be

placed on fodder quality assessment in collaboration with animal science institutes. He further noted that nearly 50% of the pearl millet cultivation area falls under the A1 zone, underscoring the need to enhance productivity in these regions. Additionally, he suggested developing robust research programmes on perennality in millets to address challenges related to weather uncertainties, soil loss and erosion, and to improve climate resilience.

New Releases and Notification of Hybrids and Varieties of Pearl Millet During 2025-26

- Five Pearl Millet hybrids were notified and released for cultivation in various agroecologies of the country during 2025-26:

S.No.	Hybrid/ Variety	Notification Number	Notification date	Area of adaptation
1	APHB 126 (MH 2682)	S.O. 6123(E)	31.12.25	Maharashtra, Tamil Nadu, Karnataka, Andhra Pradesh, Telangana and Odisha
2	RHB 273 (MH 2673)	S.O. 6123(E)	31.12.25	A1 dryland zones of Rajasthan, Gujarat and Haryana
3	VNR-3245 (MH 2712) (VNR-106)	S.O. 6123(E)	31.12.25	Rajasthan, Haryana, Gujarat, Uttar Pradesh, Madhya Pradesh, Punjab and Delhi
4	MP 7173 (MH 2709)	S.O. 6123(E)	31.12.25	Rajasthan, Haryana, Gujarat, Uttar Pradesh, Madhya Pradesh, Punjab and Delhi
5	US 7773 (MH 2717)	S.O. 6123(E)	31.12.25	Maharashtra, Karnataka, Andhra Pradesh, Telangana, Tamil Nadu, Odisha, Rajasthan, Gujarat, Haryana, Madhya Pradesh, Uttar Pradesh, Punjab and Delhi

MoUs for Promotions of the Released Pearl Millet Hybrids

- CCSHAU Hisar signed Non-exclusive licensing agreement for production, sale and marketing of pearl millet EDV hybrid HHB 67 Improved 2 with Ms Murlidhar Seeds Corporation, Hyderabad and Mahankaleshwar Agritech Pvt. Ltd., Hyderabad on 21.01.2025.
- CCSHAU Hisar signed Non-exclusive licensing agreement for production, sale and marketing of pearl millet EDV hybrid HHB 299 with Star Agri Seeds Pvt. Ltd, Sangria, Hanumangarh, Rajasthan on 07.08.2025
- CCSHAU Hisar signed Non-exclusive licensing agreement for production, sale and marketing of pearl millet EDV hybrid HHB 67 Improved 2 and hybrid HHB 299 with Sri Lakshmi Venkateswara Seeds, Kurnool, Andhra Pradesh on 02.09.2025.
- CCSHAU Hisar signed Non- exclusive licensing agreement for production, sale and marketing of pearl millet EDV hybrid HHB 299 with Ms Shakti Vardhak Hybrid Seed Private Ltd, Hisar on 31.12.2025.
- VNMKV, Parbhani and HarvestPlus Solutions, IFPRI, 1201 Eye Street NW, Washington signed a MoU at New Delhi during The Nutrition and Biofortification Scaling workshop on 16.12.2025

Trainings / Workshops / Seminars / Conferences Organized

- Farmers Field School (FFS) on “Production Technologies and Value Chain Development in Pearl Millet” under FAO project (TCP/RAS/3909) was organized on 15-16th October 2025 at IIMR-RRS on Pearl Millet, Gudamalani with 20 farmer’s participants.



- IIMR- RRS on Pearl Millet, Gudamalani organized training program under Scheduled Caste Sub Plan at Goliya Jetmal village on 04.02.2026 with participation of 150 farmers from SC community.



- ICAR-AICRP on Pearl Millet, ARS, ANGRAU, Ananthapuramu organized three training programs on “Millets importance and Production technologies” for 50 ST farmers under TSP at Pampanuru Tanda Ananthapuramu district and distributed inputs (Sprayers and Fertilizers) on 23.6.2025; “Millets Value addition” for 50 ST Women farmers under TSP at Pampanuru Tanda Ananthapuramu district and distributed inputs (Hand tool kits) on 24.6.2025; Millets Production technology” for SC farmers of Chennekottapalle village, at ARS, Ananthapuramu under SC sub plan and distributed inputs (Taurpaulins and Seeds) on 5.8.2025.

- ICAR-AICRP on Pearl millet, NARP, Aurangabad conducted 11 training programs during the year 2025-26 on various topics including trainings on “Application of biopesticide and biofertilizers in Pearl millet organized by NARP, Chh. Sambhajinagar and Cotton connect on 28.04.2025 at NARP, Chh. Sambhajinagar”; on Millet production technology at Parsoda Tal-Vaijapur, Dist- Chh. Sambhajinagar in collaboration with AGROWON on date 24.06.2025; on Millet crop production technology in collaboration with HarvestPlus on 07.05.2025; on Millet crop production technology to UP Farmers on 15.05.2025 in collaboration with HarvestPlus; on package of practices and varietal profile of Pearl Millet organized by NARP, Chh. Sambhajinagar at VNMKV, Parbhani on 18.05.2025; on Bajara Production Technology on 23.05.2025 organized by NARP, Chh. Sambhajinagar and HarvestPlus; Nutrient management in Bajara crop organized by NARP, Chh. Sambhajinagar and cotton connect at Khultabad during 24-26, May, 2025; Pearl millet Production technology organized by JDA, Chh. Sambhajinagar and NARP, Chh. Sambhajinagar on 30.05.2025; on mid-season management of kharif crops at KVK, Chh.Sambhajinagar on 02.08.2025 organized by Agril Department, Chh. Sambhajinagar and NARP, Chh. Sambhajinagar; production technology of millet crops organized by NARP, Chh. Sambhajinagar and State Agriculture department on 20.12.25 At KVK, MGM, Gandheli, Chh. Sambhajinagar; on production technology of pearl millet crop (Shree Anna) at Hivrawadi and Nagapur Tal. Kannad, Dist Chh. Sambhajinagar on 26.11.2025.



- Pearl Millet Research Station, JAU, Jamnagar in collaboration with KVK, JAU, Jamnagar has organized state level seminar on “Prakrutik krushi parisnavad” (Seminar on Natural Farming) on 13.09.2025 under the Chairmanship of Hon state cabinet minister for agriculture Shri Raghvajibhai Patel.



- Pearl Millet Research Station, JAU, Jamnagar organized 3 trainings on “Seed Production Technology in Pearl Millet” on 24th September 2025; 5th December 2025 and 15th December 2025, respectively.



- RARI, Durgapura organized 2 farmers training under SCSP and TSP plan of AICRP on pearl millet at Krishi Vigyan Kendra, Dausa on 10 and 11 December, 2025. 100 farmers were benefited from this training.



- ICAR-AICRP on Pearl millet, University of Mysore centre organized 3-Day National Conference on “BioNexus One Health 2035”, under the ANRF-PAIR Programme at Vijnana Bhavan, University of Mysore, Manasagangotri, Mysuru, from 9-11 March 2026 and witnessed enthusiastic participation from over 300 delegates.
- ICAR-AICRP on Pearl millet, University of Mysore centre also organized and conducted TSP/SC-SP outreach programmes across Mysuru, Chamarajanagar, and Kodagu districts, focusing on creating awareness about pearl millet cultivation, nutritional importance, and its use as food and fodder. The programme included farmer interactions, capacity building, and demonstrations under the ICAR-TSP / SC-SP initiative. Agricultural inputs such as quality seeds, accessories, and essential farm materials were distributed to beneficiaries to enhance adoption and improve livelihood security. Also Organized women farmers’ training and awareness programmes under the RKVY initiative across three districts, focusing on seed treatment using biocontrol agents. The programme emphasized the use of Pseudomonas and Trichoderma for improving crop health, disease management, and productivity. Hands-on demonstrations and farmer interactions were conducted, benefiting over 100 women farmers, thereby enhancing their technical knowledge and promoting sustainable agricultural practices.



- Under the SCSP and TSP components of All India Coordinated Research Project on Pearl Millet, two farmers’ training programmes were organized at Agricultural Research Station, Bikaner on 07 March 2026 and at Aanjaroli Khas village in Udaipur on 28 March 2026. A total of 75 and 74

farmers participated at Bikaner and Udaipur, respectively. The programmes were attended by university officials, technical experts, local representatives and officials from the Agriculture and Horticulture Departments, Government of Rajasthan.



Field Days/Kisan Melas

- A Kisan Mela on “Bajra Prodhogyiki Pradarshan evam krishak Sammelan” was organized on 21st September, 2025 at IIMR- RRS on Pearl Millet, Gudamalani under central sector schemes of SCSP involving more than 1000 farmers.



- IIMR- RRS on Pearl Millet, Gudamalani participated and demonstrated Improved Pearl Millet production technologies and Value added products of Pearl Millet to the farmers and students at “Vision Rajasthan 2026” exhibition at Sirohi, Rajasthan from 19-21st January 2026.



- Pearl Millet Research Station, JAU, Jamnagar participated and demnostred technologies of pearl millet during Rabi Krushi Mohtsav 2025 at six

taluka of Jamnagar and Dev-bhoomi districts of Gujarat organized by Junagadh Agril University and Department of Agriculture and Farmers Welfare, GoG, Gandhinagar during 14-15 October 2025.



- Pearl Millet Research Station, JAU, Jamnagar conducted 4 field visits for farmers of Salumbar, Rajasthan on 9th September, 2025; farmers of Jamnagar on 4th November, 2025; farmers from Bahraich, UP on 16.9.2025 and farmers from Orissa on 8.8.2025.



- ICAR-AICRP on Pearl millet, Vijayapur participated in 2 kisan melas organized at Vijayapur from 4-6th January, 2025 and at University of Agricultural Sciences, Dharwad from 13-16th September, 2025 and demonstrated recent pearl millet varieties and improved agronomic practices in the exhibition.



- ICAR-AICRP on Pearl millet, CCS HAU, Hisar participated in university level farm melas during March 17-18 and 21-22 Sept, 2025. More than 200,000 farmers participated in these events and thousands of farmers were apprised of varietal, production technologies and plant protection aspects of pearl millet crop.
- ICAR-AICRP on Pearl millet, PAU, Ludhiana participated in Kisan Mela at PAU on March 21-22, 2025 and demonstrated different varieties of Pearl millet and various value added products developed by PAU using pearl millet flour and grain to the farmers.



- ICAR-AICRP on Pearl millet, ARS, ANGRAU, Ananthapuramu attended a kisan mela organized by RARS, Nandyal and Department of Agriculture on 18.12.2024 and participated in a ABV04-Field Day, organized by DAATTC, Palnadu on 07.10.2025.



- ICAR-IARI, New Delhi organized visits of farmers from Bahraich, UP on 16.9.2025 and farmers from Orissa on 8.8.2025 and demonstrated them about latest hybrids and technologies of pearl millet. IARI scientist and student's field day was also organized on 15.9.2025.

- ICAR-AICRP on Pearl millet, TNAU, Coimbatore participated in State Level Agricultural Exhibition and demonstrated Improved varieties and technology on millets on 11th -13th June, 2025 at Perundurai, Erode and on 27-28th, December 2025 at Tiruvannamalai, Tamil Nadu.
- ICAR-AICRP on Pearl millet, Bajra Research Scheme, Dhule organized participated on production technology of Pearl millet during 12-13 september, 2025.



NARP, Chh. Sambhajinagar; Rabi Shetkari Melawa organized by VNMKV, Parbhani on 17.09.2025 and guided package of practices of Pearl Millet production technology at KVK, Chh, sambhajinagar and VNMKV, Parbhani.

- ICAR-AICRP on Pearl millet, NARP, Aurangabad organized and participated in 8 field days/kisan melas on Production technology and Value addition in Millet Crops at Village-Jarul, Tq. Vaijapur Dist. Chh. Sambhajinagar on 11.09.2025; Kisan Melawa organized at VNMKV, Parbhani on 18.05.2025; Rabi Kisan Melawa organized by VNMKV, Parbhani on 17.09.2025; Mahila Melawa organized by NARP, VNMKV, Parbhani on 11.12.2025; Kisan Mela organized by NARP, Chh. Sambhanjinagar and Agrowon at Sambhajinagar during 09-12 January, 2026; Kharif Shetkari Melawa organized at VNMKV, Parbhani on 18.05.2025; Shetkari Melawa on 30.05.2025 organized by NARP, Chh. Sambhajinagar and JDA, Chh. Sambhajinagar and



Appointments/Retirements

- Dr. (Mrs.) Punesh Sangwan has joined as Assistant Scientist (Biochemistry) in the AICRP on Pearl Millet scheme at CCS HAU, Hisar w.e.f. 01.10.2025.
- Dr. Ruchika Bhardwaj, Millets Breeder has promoted to Sr. Millets Breeder in the existing sanctioned post of Associate Professor (Level 13A) w.e.f. 29-4-2022

Trainings/Workshops/Seminars/Conferences Attended by Pearl Millet Researchers

- Drs. Dev vart Yadav, Vinod Kumar Malik and HarshDeep attended and presented in International Conference on “Resource Management for Sustainable Agriculture, Food, Environment and Health” at Chaudhary Charan Singh, Haryana Agricultural University, Hisar from 3-4 November, 2025.
- Dr. Harsh Deep from Bajra Section attended 21 days Training on " Advanced Breeding Strategies for Developing Stress Tolerance in Plants Under Changing Climatic Conditions” held at Department of Plant Breeding and Genetics, Punjab Agricultural University, Ludhiana from 4th February 2025 to 24th February 2025.
- Dr. L. Madhavalatha, Principal Scientist (Plant Breeding), AICRP on Pearl Millet, ARS, ANGRAU, Ananthapuramu attended combined Annual Group Meetings of AICRPs on Pearl millet (60th AGM), Sorghum (55th AGM) & Small millets (36th) held Virtually during 28-30 May 2025.
- Dr.L. Madhavalatha, Principal Scientist (Plant Breeding), AICRP on Pearl Millet, ARS, ANGRAU,

Ananthapuramu attended five days training programme on “Abiotic stress management in agriculture for enhancing farmer's income with special reference to millets/fodder crops in arid and semi-arid regions of India” organized by IIMR, Hyderabad and MANAGE virtually from 6.1.2025 to 10.1.2025.

- Dr. Vikas Khandelwal delivered a lecture on “Production technique of nutri-cereal/millet crops: organized by Additional Director Agriculture (Ext.), Jodhpur Division, Jodhpur on 21st March, 2025.
- Dr. Vikas Khandelwal delivered a lecture on “Pearl millet hybrids & varieties development & production technique” at DE, Agriculture University, Jodhpur during 6-7th March, 2025
- Dr. Supriya attended 5 days online training on “Abiotic stress management in agriculture for enhancing the farmer's income with special reference to millets- fodder crops cultivation in arid and semi-arid regions of India” organized by ICAR-IIMR, Hyderabad and National Institute of Agricultural Extension Management (MANAGE), Hyderabad during 6-10th January, 2025 via iECHO platform.
- Dr. Supriya attended 12th International Conference on “Emerging Issues in Agricultural, Food Technology, Biological & Applied Sciences for Global Development (EIAFTBASGD-2025)” held during 15-17th November, 2025 at MPUAT, Udaipur.
- Dr. Supriya attended 2nd International Workshop-cum-Webinar on Advances in CRISPR-Cas Genome Editing in Plants held during 10-12th December, 2025.
- Dr. Supriya Jodhpur attended 21 days ICAR-sponsored CAFT training on “Harnessing modern plant breeding tools for developing climate-resilient and nutritionally enriched crop varieties” organized by Deptt. of PBG, COA, PAU, Ludhiana during 14th January to 3rd February, 2026.
- Dr. Supriya attended 5 days online training on “Ensuring nutritional security through Agri-Food Systems” organized by National Institute of Agricultural Extension Management (MANAGE), Hyderabad in collaboration with Extension Education Institute (EEI), Hyderabad through online mode from 19th -23rd August, 2025 via iECHO platform.
- Dr. Supriya attended 3 days online training on “Biofortification-A frontier novel approach to enrich micronutrients in millets to encounter food and nutritional security in India” organized by ICAR-IIMR, Hyderabad and National Institute of Agricultural Extension Management (MANAGE), Hyderabad during 1st -3rd September, 2025 via iECHO platform.
- Dr. Supriya attended 3 days' faculty development training programme on “Professional Skills for Professional Excellence” organized by Directorate of Human Resource Development, Agriculture University, Jodhpur in collaboration with Extension Education Institute (EEI), Anand, Gujarat from 26 - 28th August, 2025 at Agriculture University, Jodhpur
- Dr. S. B. Pawar, Dr. D. G. Hingole, Dr. C. B. Patil, Dr. D. S. Mutkule and Dr. A. B. Bagade, Attended 60th Annual Group Meeting of Pearl Millet during 28-30, May, 2025 in Online mode.
- Dr. S. B. Pawar, participated in workshop “Redefining agriculture research ecosystem in Maharashtra from output to impact organized by MCAER, Pune & Agriculture Dept., Pune during 29-30, October, 2025
- Dr. S. B. Pawar participated in online 12th International conference (ICAVRI-2025) on Agriculture and Veterinary: Transformative Approach, Research & Innovation Forums organized by ICAVRI, Goa during 16-18, Nov, 2025.
- Dr. S. B. Pawar, participated in International Agronomy Congress on Re-Visioning Agronomy for Smart Agri-food Systems and Environmental Stewardship organized by Indian Society of Agronomy, New Delhi during 24-26, November, 2025.
- Dr. S. B. Pawar participated in National Nutritional & Biofortification Scaling Workshop organized by

Harvest Plus Solution, Washington DC at New Delhi during 16th December, 2025.

- Dr. S. B. Pawar, Dr. D. G. Hingole, Dr. C. B. Patil, Dr. D. S. Mutkule and Dr. A. B. Bagade, participated in National symposium (west zone) on "Integrating Crop care for sustainable plant health under changing climate scenario" organized by Dept of Plant Pathology, VNMKV, Parbhani & IPS, New Delhi at VNMKV, Parbhani during 16-17 December, 2025.
- Dr. S. B. Pawar participated in International Agronomy Congress on Re-Visioning Agronomy for Smart Agri-food Systems and Environmental Stewardship.
- Dr. S. B. Pawar participated and presented achievement of VNMKV, Parbhani in consultation workshop on millet and other opportunity crops in Maharashtra held at Mumbai during 23.01.2026
- Dr. S. B. Pawar participated in National Nutritional & Biofortification Scaling Workshop organized by Harvest Plus Solution, Washington DC at New Delhi during 16th December, 2025.
- Dr. Ruchika Bhardwaj, Sr. Millets Breeder, PAU, Ludhiana attended one-day National Seminar on "Millets: Nature's Functional Superfood" on 17-4-2025 organized by Sri Guru Granth Sahib World University, Fatehgarh Sahib, Punjab, India.
- Dr. Ruchika Bhardwaj, Sr. Millets Breeder Participated as Millet Expert in E Rasoi Goshthi under The MERA initiative project "Leveraging "MERA" (Millets for Encouraging Soil Restoration and Healthy Food Accessibility) Initiative for Boosting Farmers Livelihood and Consumer Health" organized by PGIMER, Chandigarh on 22-3-2025 and 3-5-2025 through online mode.
- Dr. Bangaremma Wadeyar, Vijaypur attended National conference on "Advances in Molecular Breeding and Tools for Multiple Pest & Disease Resistance Breeding in Crops with Special Reference to Cotton, Rice, Maize & Pulses" at University of Agricultural Sciences, Dharwad during 1st to 3rd February, 2026
- Dr. I. Johnson, Associate Professor (Plant Pathology) undergone Online training on "Digital Agriculture" organized by NIPHM, Hyderabad between 11.08.2025 to 13.08.2025.
- Dr. I. Johnson, presented a research paper entitled "Eco-friendly management strategy for rust disease in pearl millet in the National conference on Transforming Plant Health Management: Integrating Traditional Practices with Modern Innovations for Global Food Security, organized by IPS & PAJANCOA&RI between 18.11.2025 to 19.12.2025 at PAJANCOA & RI, Karaikal.
- Dr. K.D. Mungra, Research scientist (Pearl millet), Dr. H.M. Bhuva, Dr. G.M. Parmar, Dr. R.J. Chaudhary, Prof. J.S. Sorathiya attended a training programme on "Junagadh Agricultural University Online System for Agricultural Research Data Analysis (JOSARDA)" organised by Dept. of Statistics, JAU, Junagadh held at JAU, Junagadh on 05-08-2025.
- Dr. K.D. Mungra, Research scientist (Pearl millet), Dr. H.M. Bhuva, Dr. G.M. Parmar, Dr. R.J. Chaudhary, Prof. J.S. Sorathiya attended a training programme on "Junagadh Agricultural University Online System for Analysis of Design of Experiments Using R SOFTWARE" organised by Dept. of Statics, JAU, Junagadh, held at JAU, Junagadh on 12-09-2025.
- Dr. K.D. Mungra, Research scientist (Pearl millet), Dr. H.M. Bhuva, Dr. G.M. Parmar, Dr. R.J. Chaudhary, Prof. J.S. Sorathiya attended symposium on "Enhancing Functionality of crops & Improving Nutrition Status through Gene Editing-Nutrigene". Organised by ILSI India K-FFIG (knowledge Centre on Functional Foods, Gut Health and Immunity) on October 11, 2025, new Delhi.
- Dr. K.D. Mungra, Research scientist (Pearl millet), Dr. H.M. Bhuva, Dr. G.M. Parmar, Dr. R.J. Chaudhary, Prof. J.S. Sorathiya in National Conference on "Bhumi Suposhan" organised by College of natural farming, Gujarat Natural Farming Science University, Amreli, Gujarat, on 5th December 2025.

- Dr. S.K. Parmar and Dr. R.J. Chaudhari who serves as an Assistant Research Scientist at this station, has been attended the ICAR, New Delhi-sponsored National Seminar on 'Jumpstarting Agricultural Initiatives for Sustainable Agriculture, Rural Development, and Augmenting Regional Collaborations (JAI-SARDAR),' which was organized by the Department of Agricultural Economics at the College of Agriculture, Junagadh Agricultural University, Junagadh, on December 23, 2025.
- Dr. P. R. Patel and Dr. N. N. Chaudhary both Assistant Research Scientists participated in the ICAR sponsored 21 days' winter school on "Nature-based solution for environmental Stewardship in food production system" during 09-29 January, 2026 Organized by Sri Karan Narendra Agriculture University Jobner, Rajasthan
- Dr. S. K. Jain and Dr. Seema Sharma participated in Star National Conference 2025 on "Current Trends in Agriculture Research and Extension Services: Shaping the Future of Sustainable Agriculture and Food Security" during February 23-25, 2025 organized by Science and Technology Application Remodel Society (STARS), Jaipur, Rajasthan, India in collaboration with SKNAU, Jobner.
- Dr. S. K. Jain (Prof. GPB), Dr. Seema Sharma (Prof. Agro.), Dr. Subodh Bishnoi (Assoc. Prof. Plant Physio.), Dr. Bhavya Mishra (Asstt. Prof. P. Path.) and Dr. Birbal Bairwa, Asstt. Prof. (Ento.) attended the 60th Annual Group Meeting of AICRP on Pearl Millet during 28-30 May, 2025 in online mode.
- Dr. S. K. Jain Attended "Annual Group Meeting on Kharif Pulses" Organized by AICRP on Kharif pulses IIPR Kanpur and Rajasthan Agricultural Research Institute, Durgapura on May 07-09, 2025.
- Dr. S. K. Jain Attended "Annual Group Meeting on Integrated Farming System" Organized by AICRP on Integrated Farming System, ICAR-IIFSR, Modipuram and Rajasthan Agricultural Research Institute, Durgapura on November 28-30, 2025.
- Dr SP Singh attended online one-day workshop on Kharif 2024 review of partnership project of ICAR-IARI and ICAR Institutes/SAUs/Universities/VOs partners on 16.5.2025 and presented technologies of Division of Genetics especially in context of kharif crops.
- Dr SP Singh delivered a lecture on the topic, "Production technology of Jowar & Bajra crops" on 8.7.2025 in CATAT in two days training program for extension officers of NCT of Delhi on the subject entitled, "Improved technologies of Kharif crops".
- Dr SP Singh delivered a lecture on the topic "bajre kee unnat utpaadan takneeke" to the group of thirty farmers from Rajasthan on 25.3.2025 in the training entitled, "Sabjiyon evam faslon kee jaivik khetee per prashikshan" organized by ATIC.
- Dr. Ruchika Bhardwaj delivered a lecture as keynote speaker on the topic "Millets for Environmental Sustainability and Nutritional Security" in One Day National Seminar on "Millets: Nature's Functional Superfood" on 17-4-2025 organized by Sri Guru Granth Sahib World University, Fatehgarh Sahib, Punjab, India.
- Dr. Ruchika Bhardwaj delivered a lecture on "Importance of Millets and their cultivation in Punjab" in the training programme Rawe 401 (Rural Awareness Work Experience) on 4-8-2025 organized by Department of Extension Education, PAU, Ludhiana from 29-7-2025 to 6-8-2025.
- Dr. Ruchika Bhardwaj delivered lecture on "Successful cultivation of hybrid seed production in Bajra and visit to farm" in training on "Hybrid Seed Production of Field and Vegetables Crops" for Farmers & Farm Women on 28-29 August, 2025 organized by Skill Development Center, PAU, Ludhiana.
- Dr. Ruchika Bhardwaj delivered Live TV Talk on "Motaeanaaj di sambhsambhal" on October 8, 2025 at Doordarshan Jalnadhra in programme Mera Pind Mere Khaet telecasted at 5.30 pm.

- Dr. Ruchika Bhardwaj delivered lecture on “Cultivation of Millets cultivation” in training cum Exposure visit for farmers from Union Territory of Jammu and Kashmir on 6-11-2025 organized by Skill Development Center, PAU, Ludhiana 5-7-11-2025.
- Dr. Ruchika Bhardwaj delivered lecture on “Cultivation of Millets cultivation” in training on “Integrated crop production” for farmers from TMA, Purnea, Bihar on 17-12-2025 organized by Skill Development Center, PAU, Ludhiana 15-17-12-2025.
- Dr. Ruchika Bhardwaj delivered lecture on “Production Technology of Fodder Crops and Millets” in a session in One Year Diploma in Agricultural Extension Services for Input dealers (DAESI) organized by PAMETI sponsored by MANAGE, Hyderabad on January 4, 2026 (10.00-1.00 pm)
- Dr. Ruchika Bhardwaj delivered lecture on “Production Technology of Fodder Crops and Millets” in a session in One Year Diploma in Agricultural Extension Services for Input dealers (DAESI) organized by PAMETI sponsored by MANAGE, Hyderabad on January 4, 2026 (2.00-4.00 pm)
- Dr. Chandra Nayak attended the IPS National Conference on “Current Perspectives on Crop Health and Sustainable Plant Disease Management”, held during 18–20 February 2026 at Bidhan Chandra Krishi Viswavidyalaya (BCKV), Kalyani, Nadia, West Bengal, India.
- Dr. Gopi Kishan delivered lecture on “Precautionary Measures in procurement, handling and application of chemicals and other agricultural inputs” in a session in One Year Diploma in Agricultural Extension Services for Input dealers (DAESI) organized by KVK, Gudamalani sponsored by MANAGE, Hyderabad on November, 21, 2025 (2.00-4.00 pm).
- Dr. Gopi Kishan delivered lecture on “Harmful effects of indiscriminate use of agricultural inputs” in a session in One Year Diploma in Agricultural Extension Services for Input dealers (DAESI) organized by KVK, Gudamalani sponsored by MANAGE, Hyderabad on February, 20, 2026 (2.00-4.00 pm).
- Dr. Gopi Kishan delivered lecture on “Insect and Disease Symptoms in Pearl Millet” in a session in One Year Diploma in Agricultural Extension Services for Input dealers (DAESI) organized by KVK, Gudamalani sponsored by MANAGE, Hyderabad on March 7, 2026 (11.00 am-1.00 pm).
- Dr. Somanath Nayak delivered lecture on “Improved Package of Practices for Mungbean & Mothbean in arid region of western Rajasthan” in a session in One Year Diploma in Agricultural Extension Services for Input dealers (DAESI) organized by KVK, Gudamalani sponsored by MANAGE, Hyderabad on Aril, 10, 2025 (11.00 am-1.00 pm).
- Dr. Somanath Nayak delivered lecture on “Soil Health Management: Creating Awareness through DAESI” in a session in One Year Diploma in Agricultural Extension Services for Input dealers (DAESI) organized by KVK, Gudamalani sponsored by MANAGE, Hyderabad on April, 11, 2025 (11.00 am-1.00 pm).
- Dr. Somanath Nayak delivered lecture on “Integrated Weed Management” in a session in One Year Diploma in Agricultural Extension Services for Input dealers (DAESI) organized by KVK, Gudamalani sponsored by MANAGE, Hyderabad on May, 1, 21, 2025 (11.00 am-1.00 pm).
- Dr. Danakumara T. delivered lecture on “Hybrid seed production in India” in a session in One Year Diploma in Agricultural Extension Services for Input dealers (DAESI) organized by KVK, Gudamalani sponsored by MANAGE, Hyderabad on April, 17, 2025 (11.00 am-1.00 pm).
- Dr. Danakumara T. delivered lecture on “The Seed Certification System in India” in a session in One Year Diploma in Agricultural Extension Services for Input dealers (DAESI) organized by KVK, Gudamalani sponsored by MANAGE, Hyderabad on April, 18, 2025 (11.00 am-1.00 pm).

Awards and Nominations

- CCS HAU, Hisar was awarded Best performing ICAR-AICRP on Pearl millet Centre (2024-25) during 60th Annual Group Meeting of ICAR-AICRP on Pearl millet held online during 28-30th May, 2025.
- Pearl Millet Research Station, Junagadh Agricultural University, Jamnagar, has been awarded with “Best Performing AICRP Centre (2025)” during the Annual Group Meeting of AICRP on Pearl Millet, Sorghum, and Small Millets held at the ICAR-Indian Institute of Millets Research, Rajendranagr, Hyderabad during 28–30 May 2025.
- Dr. Chandra Nayak awarded the prestigious Fellowship of the Indian Phytopathological Society (IPS), New Delhi, in 2025, in recognition of outstanding contributions to plant pathology research, particularly in the areas of host–pathogen interactions, molecular diagnostics, and disease management in pearl millet.
- Dr. S.B. Pawar received “ISDABest Oral Presentation Award” at 2nd International Conference on RAINBURS 2025 rainfed agriculture: building pathways for resilience and sustainable livelihood organized by Indian Society of Dryland Agriculture, CRIDA, Hyderabad with auspicious hands of Dr. J.C. Samra, Former DDG, NRM, Dr. B. Venkateswarlu Former Vice Chancellor, VNMKV, Parbhani and Dr. V.K. Singh, Director, CRIDA, Hyderabad on dated 29-31 January, 2025 at ICAR-CRIDA, Hyderabad.
- Dr. S.B. Pawar received Maharashtra Bhushan Prerna Purashkar 2025 by Krishi Bhushan, Maharashtra FPO Start up Federation, Nashik during July-2025.
- Dr. S.B. Pawar was awarded Best Extension Scientist Award ISASTR Society and Conference Award Screening Committee on 12th online conference (ICAVRI) 2025 on Agriculture and Veterinary Transformative Approach, Research and Innovation Forum held during 16-18 November, 2025.
- Dr. K.K. Barhate, Dr. C.S. Thakare and Shri. R.T. Suryawanshi scientist of Pearl millet team Dhule center awarded with the hands of Shri. Aamir Khan, Kiran Rao and State Agriculture minister Shri. Kokate on 29 Feb 2025 as work in Pani Foundation to take the digital Sheti Shala dring 2024-25 for Maharashtra farmers.
- Dr. L. Madhavalatha, Principal Scientist (Plant Breeding), AICRP on Pearl Millet, ARS, ANGRAU, Ananthapuramu received Sri Mandava Venkatramaiah Best Researcher Award for the year 2024; Sri Neelakantapuram Kaverappa Gold Medal" for the Best Research worker/scientist for the year 2024 and Smt. Edara Subbayamma and Sri Edara Venkata Rao Memorial Gold Medal" for the year 2024 in ANGRAU Foundation Day on 12.06.2025 at ANGRAU, Lam, Guntur and Best Scientist Award from Jai kisan foundation, NGO Ananthapuram on 23.12.2025.
- Dr. I. Johnson, Associate Professor (Plant Pathology) received best oral presentation awards during International Conference on "Advances in Plant Health Improvement for Sustainable Agriculture (APHISA-2025)", organized by TNAU at VOCAC&R Killikulam during 14- 16th, February, 2025 and International Conference on "One Health Perspectives in Global Plant Protection Research" (OHPGPR 2025) organized by DCPPS, TNAU Coimbatore during 19th to 21st February 2025.
- Dr. Sanjay K. Parmar, ssistant Research Scientist, Plant Breeding, PMRS, JAU, Jamnagar was honored with the Best Oral Presentation Award (1st Position) for his presentation titled "Biofortified Pearl Millet Hybrid GHB 1305 (Sorath Maru Shakti): Empowering Farmers for Better Climate Resilience." during ICAR, New Delhi-sponsored National Seminar on 'Jumpstarting Agricultural Initiatives for Sustainable Agriculture, Rural Development, and Augmenting Regional Collaborations (JAI-SARDAR),' which was organized by the Department of Agricultural Economics at the College of Agriculture, Junagadh Agricultural University,



Junagadh, on December 23, 2025.

- Dr. S. K. Jain was awarded STAR Excellence Award for significant contribution in research and development in chickpea and millet crops by Science and Technology Applications Remodel (STAR) Society Jaipur (Rajasthan) and Best oral presentation award (Silver Medal) for paper entitled “Combining ability and heterosis studies for yield, grain iron and zinc content in pearl millet” during National Conference organized by STAR s
- Dr. SP Singh received appreciation certificate from TAAS working as a rapporteur in Technical session IV: Current status and future prospects in hybrid crop breeding I (Food and Fiber crops) in National 'Symposium on Hybrid Technology for Enhancing Crop Productivity (NSHT),' held at AP Shinde Symposium Hall, NASC, New Delhi-110012 during January 8-10, 2025 organized by TAAS, ICAR, ICRISAT, CIMMYT, IRRI and ISPGRSociety and SKNAU Jobner during, Feb. 23-25, 2025.



Visits

- Honorable Director ICAR-IARI, Dr Ch. Srinivasa Rao and Joint Director Research Dr. C. Viswanathan visited IARI pearl millet field on 15.9.2025.
- Dr. Gajendra Singh, Former DDG, Agril. Engineering, ICAR, New Delhi visited Biopesticide Laboratory, National Agricultural Research Project, Chh. Sambhajinagar on 18.09.2025



- Dr. Indra Mani, Hon'ble Vice Chancellor, Vasant Rao Naik Marathwada Krishi Vidhyapeeth, Parbhani and Smt. Varsha Ladda, DG, MCAER, Pune visited National Agricultural Research Project, Chh.Sambhajinagar on January 2, 2026.
- Dr. V. L. Amolik , Head, Department of Botany visited the Pearl Millet Research Station, Dhule on 5th October 2025.



- Hon. Vice Chancellor, Dr. S.R.Gadakh and Dr. B.M.Ilhe , Associate Dean, College of Agriculture,

Dhule Visited the Pearl Millet Research Station, Dhule during 8th October 2025.



- National level ICAR-AICRP on Pearl millet monitoring team visited at Dhule on October 2025.



- National level ICAR-AICRP on Pearl millet monitoring team from Dhule center monitored the ICAR-AICRP on Pearl millet, Junagadh center in September 2025.
- ICAR monitoring team from Dhule visited AICRP Pearl millet field trials at Vijayapur on 13.10.2025.



- Sh. Raghavjibhai Patel, Hon'ble Cabinet Minister of Agriculture, Animal Husbandry, Government of Gujarat visited Pearl Millet Research Station, Junagadh Agricultural University, Jamnagar during the events on "*Prakrutik Krushi Parisamvad*" held on 13 September 2025 at Krushi Vignyan Kendra, JAU, Jamnagar.



- Dr. V.P. Chovatiya, Hon'ble Vice Chancellor, Dr. N. B. Jadav, Director of Extension Education, Dr. Y. H. Ghelani, Registrar, Junagadh Agricultural University, Junagadh visited Pearl Millet Research Station, JAU, Jamnagar on 28th January, 2025.
- ICAR-AICRP on Pearl millet monitoring team from PAU, Ludhiana, Punjab visited and monitored the AICRP on Pearl millet trials viz., Breeding, Agronomy and Pathology trails at TNAU, Coimbatore under AICRP Pearl millet programme on 29.09.2025.



- ICAR-Pearl Millet monitoring team visited field trials of pearl millet at ARS, Ananthapuramu on 16.10.25.



- ICAR-AICRP on Pearl millet monitoring team visited the coordinated trials of Maharashtra state from 05.10.25 - 10.10.25.

Research Papers

Ambawat, S., C. T. Satyavathi, Meena, R.C., Meena, R., Khandelwal, V., Singh, S., Kumar, M. and Bishnoi, J.P. (2025). Molecular analysis of pearl millet genotypes suitable for drought tolerance in A1 zone using SSR markers. *International Journal of Advanced Biochemistry Research*, 9(2), 593–597. <https://doi.org/10.33545/26174693.2025.v9.i2Sh.3847> (NAAS Rating: 5.29).

Ambawat, S., Satyavathi, C.T., Khandelwal, V., Meena, R., Singh, S., Kumar, M. and Bishnoi, J.P. (2025). Genetic diversity analysis and molecular characterization of pearl millet [*Pennisetum glaucum* (L.) R. Br.] hybrids/varieties. *Journal of Advances in Biology and Biotechnology*, 28(2), 824–840. <https://doi.org/10.9734/jabb/2025/v28i22043> (NAAS

Rating: 5.30). Ambure, A.B., Pawar, S.B., Bhosale, N.U. and Kadam, S.B. (2025). Enhancing productivity and quality of kharif pearl millet (*Pennisetum glaucum* L.) hybrid through micronutrient application. *International Journal of Agriculture and Food Science*, 7(8), 423–427.

Bajal, N., Sangwan, V., Yadav, R., Priyanka and Rani, R. (2024). The impact of continuous calorie restriction and fasting on cognition in adults. *International Journal of Agriculture Extension and Social Development*, 7(7), 211–216. <https://doi.org/10.33545/26180723.2024.v7.i7c.793> (NAAS Rating: 5.04).

Bhardwaj, R. and Sohu, R.S. (2025). Notification and germplasm registration of pearl millet variety Punjab Composite Bajra 167 (PCB 167). *Indian Journal of Genetics and Plant Breeding*, 85(1), 168–169. (NAAS Rating: 7.34).

Bhardwaj, R. and Sohu, R.S. (2025). Notification and germplasm registration of Punjab Composite Bajra PCB 168 (PHBF 5). *Indian Journal of Genetics and Plant Breeding*, 85(1), 175. (NAAS Rating: 7.34).

Bhardwaj, R., Sohu, R.S. and Dhatt, A.S. (2025). Punjab's forgotten grains: Revitalizing millets for sustainability and health. *Agricultural Research Journal*, 62(2), 235–245.

Bhargavi, H.A., Singh, S.P., Goswami, S., Aavula, N., Yadav, S., Hemanth, S., Singhal, T., Danakumara, T., Shashikumara, P., Kapoor, C. and Singh, N., (2026). Comprehensive assessment of low-rancid, high-performing pearl millet genotypes in a global germplasm collection using multi-trait stability indices. *Journal of Cereal Science*, p.104415.

Bhuva, H.M., Detroja, A.C., Chaudhari, N.N., Patel, P.R., Galani, S.N. and Mungra, K.D. (2026). Response of pearl millet cultivars to agronomic biofortification with zinc fertilizers under rainfed situation. *International Journal of Research in Agronomy*, 9(1), 724–728. (NAAS Rating: 5.20).

Chaudhari, N.N., Hirpara, D.S., Patel, P.R., Chaudhari, R.J., Vasava, J.B. and Parmar, G.M. (2025). Impact of nano urea on quality, plant and soil nutrient status of pearl millet [*Pennisetum glaucum* (L.) R. Br.] under precision nitrogen management. *International Journal of Plant & Soil Science*, 37(11), 150–161. (NAAS Rating: 5.07).

Chaudhari, N.N., Hirpara, D.S., Rajani, A.V., Patel, P.R., Vasava, M.S., Chaudhari, R.J. and Chhodvadiya, S.K. (2025). Effect of nano urea on growth, yield attributes and yield of summer pearl millet [*Pennisetum glaucum* (L.) R. Br.] under real-time nitrogen management. *International Journal of Research in Agronomy*, SP-8(3), 15–25. (NAAS Rating: 5.20).

Chhodvadiya, R.J., Mehta, D.R., Gadhiya, H.D., Butani, H.G., Raval, L.J., Mungra, K.D. and Patel, J.B. (2025). Trait association and path analysis for grain yield and yield-related traits in pearl millet [*Pennisetum glaucum* (L.) R. Br.]. *International Journal of Agriculture and Food Science*, 7(9), 715–779. (NAAS Rating: 4.97). Daduwal, H.S., Bhardwaj, R., Lamba, J.S., Yogesh, V. and Srivastava, R.K. (2025). QTL mapping and candidate gene identification for fodder quality traits in pearl millet. *BMC Plant Biology*, 25(1), 404. (NAAS Rating: 10.30).

Damor, A.S., Patel, J.N., Patil, K. and Mungra, K.D. (2025). Combining ability analysis for grain yield and its component traits in pearl millet [*Pennisetum glaucum* (L.) R. Br.]. *Plant Archives*, 24(2), 621–627. (NAAS Rating: 5.59).

Deep, H., Verma, S.K., Gaur, A.K., Bisht, C., Yadav, H., Chauhan, C. and Roy, D. (2025). Generation of biparental progenies and dissection of gene action for yield and related traits in lentil (*Lens culinaris* L. Medikus). *Indian Journal of Genetics and Plant Breeding*, 85(1), 132–140. (NAAS Rating: 6.00).

Devi, M., Sangwan, V., Rani, V. and Yadav, R. (2025). Breastfeeding and its impact on infant growth and health. *European Journal of Nutrition & Food Safety*, 17(5), 252–261. <https://doi.org/10.9734/ejnfs/2025/v17i51722> (NAAS Rating: 5.14).

Dianambika Palaniswamy, D., Iruthayasamy, J., Kalimuthu, R., Chinnathambi, S., Xavier, A. and Muthusamy, K. (2025). Empowering early detection of plant diseases in agriculture using artificial intelligence. *Plant Science Today*, 12(3), 1–14. (NAAS Rating: 6.70).

Dobariya, M.P., Bhuva, H.M., Goplani, S.N. and Khunt, A.K. (2025). Impact of nano DAP on growth, yield and economics of summer pearl millet. *International Journal of Research in Agronomy*, 8(6), 118–121. (NAAS Rating: 5.20).

Ghume, O.G., Barhate, K.K. and Pawar, V.Y. (2026). Genetic mean analysis using six-parameter genetic model for yield and yield-attributing traits in pearl millet. *Journal of Agriculture Research and Technology*, 24(1). (NAAS Rating: 3.34).

Hemanth, S., Singh, S.P., Singhal, T., Yadav, S., Kapoor, C., Naveen, A., Bhargavi, H.A., Satyam, A., Singh, N., Meena, M.C., Kumar, A. and Satyavathi, C.T. (2025). Nutrient dynamics in pearl millet: Impact of seed soaking on minerals and anti-nutrient contents. *Journal of Cereal Science*. <https://doi.org/10.1016/j.jcs.2025.104252> (NAAS Rating: 9.70).

Jain, S.K., Sharma, S.K., Gupta, D.K., Khandelwal, V., Sharma, R.K., Anuradha Sharma, V., Dhaka, B.L. and Gupta, S.K. (2025). Combining ability and heterosis studies for yield, grain iron and zinc content in pearl millet [*Pennisetum glaucum* (L.) R. Br.] under varied environmental conditions. *Indian Journal of Agricultural Sciences*, 95(6), 611–616. (NAAS Rating: 6.00).

Khandelwal, V., Reddy, P.S., Satyavathi, C.T., Gupta, P.C., Jain, S.K., Mungra, K.D., Tripathi, M.K., Yadav, D., Solanki, R.K. and Patroti, P. (2025). Identification of stable cultivars of pearl millet [*Pennisetum glaucum* (L.) R. Br.] based on GGE biplot and MTSI index. *Indian Journal of Genetics and Plant Breeding*, 84(4), 668–678. (NAAS Rating: 6.00). Kumar, R.R., Kumar, A., Vinutha, T., Goswami, S., Kumar, S., Singh, S., Manjunath Prasad, C.T., Mishra, G.P., Padaria, J.C., Jha, G.K., Chellapilla, T.S. and Chinnusamy, V. (2025).

Characterising the enzyme-driven metabolic shifts in rancid pearl millet flour using metabolomics approaches: A step towards improving quality and shelf-life. *Frontiers in Nutrition*, 12, 1691522. <https://doi.org/10.3389/fnut.2025.1691522> (NAAS Rating: 11.10).

Kumar, R.R., Prashanth Babu, H., Pandit, K., Kumar, A., Ranjan, A., Vinutha, T., Goswami, S., Singh, S.P., Mishra, G.P., Rai, G.K., Jha, G.K., Satyavathi, C.T., Praveen, S. and Viswanathan, C. (2025). Characterizing the mono- and triacylglycerol lipase (MAGL and TAGL) genes from pearl millet (*Pennisetum glaucum* L.) and elucidating their dynamics with biochemical traits linked with rancidity. *Planta*, 261, 57. <https://doi.org/10.1007/s00425-025-04621-4> (NAAS Rating: 9.80).

Meena, R.C., Garg, N.K., Ambawat, S., Gupta, S. and Satyavathi, C.T. (2025). Temperature stress-induced biochemical changes in pearl millet [*Pennisetum glaucum* (L.) R. Br.] genotypes at the seedling stage. *Madras Agricultural Journal*, 112(4–6), 51–55. <https://doi.org/10.29321/MAJ.10.70JE23> (NAAS Rating: 4.36).

Mittal, G.K., Singh, S., Yadav, D., Beckmann, M., Mur, L.A.J. and Yadav, R.S. (2025). Genome-wide association study for dissecting lipid and fatty acid variation in a global collection of pearl millet germplasm. *Journal of Food Composition and Analysis*, 144, 107679. <https://doi.org/10.1016/j.jfca.2025.107679> (NAAS Rating: 10.60).

Mungra, K.D., Parmar, S.K., Srivastava, R., Sorathiya, J.S., Chaudhari, R.J. and Galani, S.N. (2025). From millet's 'pearl' to desert's 'gold': GHB 538 Improved (Maru Sona) emerges through genomics-assisted breeding. *Asian Research Journal of Agriculture*, 18(2), 22–29. (NAAS Rating: 4.86).

Parmar, G.M., Patel, P.R., Chaudhri, R.J. and Mungra, K.D. (2025). Post-harvest susceptibility of pearl millet hybrids to the red flour beetle, *Tribolium castaneum* (Herbst, 1797). *Insect Environment*, 27(3), 286–289. (NAAS Rating: 3.52).

Patel, P.R., Parmar, G.M., Chaudhari, N.N., Mungra, K.D. and Kandoriya, D.V. (2025). Studies on effect of photosynthate partitioning and remobilization on growth and yield of pearl millet [*Pennisetum glaucum* (L.)] under rainfed conditions. *International Journal of Plant and Soil Science*, 37(12), 47–52. (NAAS Rating: 5.07).

Puttamadanayaka, S., Sannagoudar, M.S., Siddaiah, C.N., Kumar, V., Mehta, B.K., Kumar, A and Gupta, S.K. (2026). Multi-environment evaluation and stability analysis for the selection of elite pearl millet genotypes with better fodder yield and quality component traits. *Plants*, 15(7), 1034.

Rahman, M.A., Karthikeyan, M., Johnson, I., Raja, K., Sekar, C., Mary, X.A. and Basha, J.S. (2025). Ensuring food security through rapid and in-field detection of diseases in food crops 30using real-time and portable sensors. *Analytical Biochemistry*, 705, 115925. (NAAS Rating: 8.60).

Rasitha, R., Iyanar, K. and Ravikesavan, R. (2025). Unraveling the genetics of fertility restoration in diversified cytoplasmic genetic male sterile lines (CGMS): Insights from hybrid studies in pearl millet [*Pennisetum glaucum* (L.) R. Br.]. *Journal of Animal and Plant Sciences*, 35(3). <https://doi.org/10.36899/JAPS.2025.3.0064> (NAAS Rating: 6.60).

Roy, S., Soumen, S., Arp, J.T., Kaur, J., Bhowmick, R., Pettit, T., Choudhury, S., Das, T.K., Nayaka, S.C., Mandal, S.N. and Mallikarjuna, M.G. (2026). From soil to sequences: Mechanisms and tools unravelling plant-rhizomicrobiome interactions. *World Journal of Microbiology and Biotechnology*, 42(3), 127.

Singh, T., Goswami, S., Ali, A., Munibyrapa, S., Dutta, M., Vinutha, T., Kumar, R.R., Bansal, N., Kundu, A., Meena, M.C., Mishra, G.P., Singh, S.P., Singh, N. and 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. *Molecular Nutrition & Food Research*, e70130. <https://doi.org/10.1002/mnfr.70130> (NAAS Rating: 10.20).

Suraksha, Kumari, Divyavani Gowda, Chandra Nayaka Siddaiah, Tara Satyavathi Chellapilla, Hui, S.P. and Gowda, S.B.G. (2026). Comprehensive lipidomic profiling of dietary Indian millets and identification of fatty acid esters of hydroxy fatty acids by untargeted LC/MS. *Food Chemistry*, 148792. (NAAS Rating: 15.80).

Thorat, S.D., Patil, J.M., Barhate, K.K., Pawar, V.Y. and Shirsath, S.D. (2025). Heterosis studies in pearl millet. *Journal of Advances in Biology and Biotechnology*, 28(9), 673–681. (NAAS Rating: 5.29).

Thorat, S.D., Patil, J.M., Barhate, K.K., Pawar, V.Y. and Shirsath, S.D. (2025). Genetic analysis of combining ability in pearl millet (*Pennisetum glaucum*) for enhanced yield and agronomic traits. *Journal of Advances in Biology & Biotechnology*, 28(9), 1042–1049. <https://doi.org/10.9734/jabb/2025/v28i92953> (NAAS Rating: 5.29).

Tomar, M., Bhardwaj, R., Singh, P., Kaur, S., Singh, S.P., Dahuja, A., Krishnan, V., Kansal, R., Yadav, V.K., John, R., Singh, A.K., Kaushal, P., Gowda, V.T., Hasan, M., Choyal, P., Gupta, O.P., Praveen, S. and Sachdev, A. (2025). From grain to gain: Bridging conventional methods with chemometric innovations in cereal quality analysis through near-infrared spectroscopy (NIRS). *Food Control*. <https://doi.org/10.1016/j.foodcont.2025.111482> (NAAS Rating: 12.30).

Venkatesan Kishanth Kanna, K., Djanaguiraman, M., Jincy, M., Ananthi, K., Senthil, A., SathyaMoorthy, P., Iyanar, K., Shafi, S. and Sofi, P.A. (2025). High-temperature stress during reproductive stages: Impacts and traits associated with seed set. *Annual Plant Reviews*, 7, 131–158. <https://doi.org/10.1002/9781119312994.apr0815>. Yadav, S., Singh, S., Singhal, T., Bhardwaj, R., Shekhawat, S., Naveen, A. and Hemanth, S. (2025). Decoding biochemical trait inheritance through generation mean analysis in pearl millet [*Pennisetum glaucum* (L.) R. Br.]. *Journal of Agricultural Science*, 163(5), 561–575. <https://doi.org/10.1017/S0021859625100269> (NAAS Rating: 8.20).

Yadav, S., Tomar, M., Singhal, T., Joshi, N., Bhargavi, H.A., Naveen, A., Langyan, S., Joshi, T., Satyavathi, C.T., Rana, J.C., Singh, S.P., Bhardwaj, R. and Riar, A. (2025). Near-infrared reflectance spectroscopy (NIRS): An innovative, rapid, economical, easy and non-destructive whole grain analysis method for nutritional profiling of pearl millet genotypes. *Journal of Food Composition and Analysis*, 142, 107373. <https://doi.org/10.1016/j.jfca.2025.107373> (NAAS Rating: 10.60).

Yadav, S., Malik, K., Moore, J.M., Kamboj, B.R., Malik, S., Malik, V.K., Arya, S., Singh, K., Mahanta, S. and Bishnoi, D.K. (2024). Valorisation of agri-food waste for bioactive compounds: Recent trends and future sustainable challenges. *Molecules*, 29(9), 2055. (NAAS Rating: 10.60).

Books/Book Chapters

Bhardwaj R and Sohu, R.S. (2025) Punjab Wich Millets Da Utpadan. In 'Basics of Agriculture and DAESI Course' (eds). Rupinder Kaur, Kanwar Barjinder Singh, Damanjit Kaur and Rajinder Kaur Kalra, Punjab Agricultural Management and Extension Training Institute (PAMETI), p: 113-116.

Sohu, R.S., Bhardwaj Ruchika, Cheema, Harpreet Kaur, Kaur Maninder and Ashlesha. (2025). Pashu Charre Lai Phaslaan. Punjab Agricultural University, Ludhiana, pp: 96.

Lavanya, S. N., Yogitha, N., Mahesha, M., & Nayaka, S. C. (2025). Recent advancement in multiomics techniques for the exploration of microbial diversity. In C. Manoharachary, H. A. Singh, S. K. Singh, & Y. P. Sharma (Eds.), Biodiversity, bioengineering, and biotechnology of fungi (pp. 227–253). Academic Press. <https://doi.org/10.1016/B978-0-443-13856-0.00012-9>.

Technical Bulletins

Muskan Beura, Rahna Fathima A, Archana Singh, Malathi V M, Sumer Pal Singh, Anil Dahuja, Veda Krishnan (2025) “Millet Magic: Timeless millet recipes from Indian heritage”. Published under DST-SHRI project “Heritage millet recipes of Southern India and their scientific validation for low glycemic and satiety inducing effects” under the project code 24-855.

Naseeruddin R., M. Jhanavi, L. Madhavilatha, G. Narayana Swamy, K. Lakshman, Dr. K.C Nataraj, D. Lakshmi Kalyani, I. Bhaskar Rao and M. VijayaSankarBabu (2025). Booklet on “Varshadarapantalasagulomelynayajamanyapaddatulu”

Sadhana R Babar, Bangaremma Wadeyar and BK Athoni, 2026, A folder on pearl millet - recently released hybrids and improved technologies (Kannada). Published by Associate Director of Research, RARS, VijayapurSingh, S.P. and Singhal, T. 2025. Breeding strategies for enhancing micronutrients and resilience to drought and heat stress in pearl millet. In: Viswanathan Chinnusamy, Sudhir Kumar, Mahesh Kumar, Lekshmy S. and Madhurima Das (2025). Manual of ICAR Sponsored Short Course On “Non-invasive sensors based High Throughput phenotyping approaches for developing climate resilience crops”, Nanaji Deshmukh Plant Phenomics Center, Division of Plant Physiology, ICAR-Indian Agricultural Research Institute, New Delhi-110012. 174-183pp.

Singh, SP. 2025. Breeding for micronutrient-dense climate smart pearl millet varieties. In: Ellur RK, Muthusamy V, Jha SK and Gopala Krishnan S (2025). Genetic and genomic approaches for improvement of stress resilience and nutritional quality in crops-A training manual. ICAR-Indian Agricultural Research Institute, New Delhi-110012 (TB/ICN: 367/2025), pp: 251-257.

Popular Articles

Ambawat S and Singh S (2025) Accelerating crop improvement using marker-assisted selection. AgriTech-Today e-Magazine 3 (1) (April, 2025): 25-29. Article ID: ATT20250301009

Ambawat S and Singh S (2025) Western blotting: principle and application for detection of proteins. AgriTech-Today e-Magazine 2 (10) (January, 2025): 42-44. Article ID: ATT20250210013

Chaudhari N. N., Patel P. R., Chaudhari R. J. and Mungra, K. D. (2025). “Ardh Shiyalu bajarani vaigyanik kheti padhdhti” published in daily magazine Krushi prabhat. 20th October 2025

Chaudhari NN, Patel PR, Chaudhari RJ and Mungra KD (2025). Popular article published on “ArdhShiyalubajaranivaigyanikkhetipadhdhti” published in daily magazine, Krushi Prabhat, 20th October 2025.

Singh D P, R S Sohu and Ruchika Bhardwaj (2025) GarmianvichPaushtik Chara leinlayee Unnat takneekanapnao. *Changi Kheti* 61(3): 23-24.

Deep, H., Yadav, D. V., Pankaj, R., Singla, P., & Kumar, P. (2025). Pearl millet: A climate-smart and sustainable alternative to traditional poultry feed. *AgriTech Today e-Magazine*, 2(11), 73–74.

Devi, S., Kumar, A., Deep, H., & Abhishek. (2025). Ensuring genetic integrity: The role of DUS testing in pearl millet variety development and protection. *Agri Articles*, 5(6), 221–223.

Devi, S., Kumar, A., Deep, H., & Yadav, G. (2025). The science behind freshness: Measuring rancidity in pearl millet with comprehensive acid value (CAV). *The Agriculture Magazine*, 5(4), 300–302

Harsh Deep, Yadav D.V., Rao P., Singla P. and Kumar P. (2025): Pearl Millet, A Climate-Smart and Sustainable Alternative to Traditional Poultry Feed. *AgriTech Today e-Magazine: Volume 2, Issue 11, 73-74.*

Kumar, A., Deep, H., Chaurasia, H., & Gill, V. (2025). Decoding genes: Forward and reverse genetics. *Agriculture & Food e-Newsletter*, 7(8).

Bhardwaj R and RS Sohu (July 2025). Baumukhipakhan wale millets ugaotekheti nu lahewandbnao. *Krishi Jagran* 27(7): 28-29.

Bhardwaj and RS Sohu (July 2025). Millets for health and enterprise: traditional foods with better nutrition. *Kheti Sandesh* 27(7): 28-29.

Singh S and Ambawat S (2025) Genetic engineering: a biotechnological tool for crop improvement. *AgriTech-Today e-Magazine 2 Special Issue (January, 2025):16-18. Article ID: ATT20250210-S-06*

Singh S and Ambawat S (2025) Next-generation sequencing: a boon to plant science. *AgriTech-Today e-Magazine 3 (1) (April, 2025): 29-33. Article ID: ATT20250301010*

सूखाग्रस्त इलाकों के लिए बाजरे की विश्व की पहली तीन-स्तरीय संकर किस्म विकसित, 21% तक अधिक पैदावार

विजयन नई दिल्ली। जनवरी 2026 भारतीय कृषि अनुसंधान परिषद (आईसीएआर) ने

में 13 से 27 प्रतिशत तक अधिक है। इसके साथ ही इससे चारे की भी अच्छी पैदावार मिलती है, जिससे यह किसानों

इस किस्म के विकास में आईसीएआर दुर्गापुर (जयपुर) के

बदलती जलवायु की चुनौतियों से निपटने में मदद कर रहा है। क्या कहते हैं आईसीएआर



भारत सरकार
GOVERNMENT OF INDIA



सूखा प्रभावित और बारिश पर निर्भर इलाकों के लिए बाजरे की एक नई और खास किस्म विकसित की है। इस किस्म का नाम आरएचबी 273 है। यह दुनिया की पहली तीन-स्तरीय संकर (थ्री-वे हाइब्रिड) बाजरा किस्म है। यह किस्म विशेष रूप से उन क्षेत्रों के लिए तैयार की गई है, जहाँ पानी की कमी रहती है और खेती मुख्य रूप से ब्रांश पर निर्भर होती है। आरएचबी 273 को देश के विभिन्न हिस्सों में वर्ष 2022 से 2024 के बीच 30 स्थानों पर परखा गया। परीक्षण के दौरान यह किस्म सभी जगह बेहतर साबित हुई। इसकी औसत पैदावार लगभग 2239 किलोग्राम प्रति हेक्टेयर दर्ज की गई, जो मौजूदा किस्मों की तुलना

के लिए दोहरा लाभ देने वाली किस्म बन जाती है। इस बाजरा किस्म में प्रमुख बीमारियों/कृजी से मिल्ड्यू, व्हाइट और रमट आदि के खिलाफ अच्छी प्रतिरोधक क्षमता पाई गई है। पोषण के लिहाज से भी यह किस्म काफी समृद्ध है। इसमें आयरन, जिंक, प्रोटीन और फैट की अच्छी मात्रा पाई गई है, जो पोषण सुरक्षा को मजबूती प्रदान करती है। आईसीएआर की बाजरा परियोजना की 60वीं वार्षिक बैठक (मई 2025) में इस किस्म को जारी करने की सिफारिश की गई थी। इसके बाद 31 दिसंबर 2025 को केंद्र सरकार ने इसे आधिकारिक रूप से अंतिम स्वीकृति दे दिया। फिलहाल इसे राजस्थान, गुजरात और हरियाणा में खेती के लिए मंजूरी दी गई है। वैज्ञानिकों का साझा प्रयास

आईसीएआरआई सं ट, हैदराबाद और जोधपुर स्थित परियोजना इकाई के वैज्ञानिकों ने मिलकर काम किया। कई वरिष्ठ और युवा वैज्ञानिकों के निरंतर शोध और परीक्षण के बाद यह किस्म विकसित की जा सकी। किसानों के लिए फायदेमंद कम समय में तैयार होने वाली, सूखा सहने वाली, अधिक पैदावार देने वाली और पोषण से भरपूर यह किस्म सूखे और अर्ध-शुष्क क्षेत्रों के किसानों के लिए बड़ी राहत साबित हो सकती है। यह दर्शाता है कि किस तरह देश में किया जा रहा कृषि अनुसंधान सीधे किसानों तक लाभ पहुँचा रहा है और

के प्रमुख आईसीएआर के महानिदेशक डॉ मांगी लाल जाट कहते हैं कि पोषण सुरक्षा और जलवायु परिवर्तन की चुनौतियों से निपटने के लिहाज से बाजरा भारत की एक अत्यंत महत्वपूर्ण फसल है। वर्ष 2023 में इंटरनेशनल ईयर ऑफ मिलेट्स और 2024 के दौरान माननीय प्रधानमंत्री के नेतृत्व में देश और दुनिया में बाजरे को लेकर विशेष फोकस बढ़ाया गया। इसी दिशा में आगे बढ़ते हुए भारत ने दुनिया की पहली थ्री-वे क्रॉस बाजरा किस्म जारी की है। यह नई किस्म सूखा-प्रभावित और वर्षा पर निर्भर क्षेत्रों के किसानों के लिए विशेष रूप से उपयुक्त होगी और बाजरे को बढ़ावा देने के राष्ट्रीय अभियान को आगे बढ़ा देगी।

सूखाग्रस्त इलाकों के लिए बाजरे की विश्व की पहली तीन-स्तरीय संकर किस्म विकसित

नई दिल्ली, (पंजाब केसरी): भारतीय कृषि अनुसंधान परिषद (आईसीएआर) ने सूखा प्रभावित और बारिश पर निर्भर इलाकों के लिए बाजरे की एक नई और खास किस्म विकसित की है। इस किस्म का नाम आरएचबी 273 है। यह दुनिया की पहली तीन-स्तरीय संकर (थ्री-वे हाइब्रिड) बाजरा किस्म है। यह किस्म विशेष रूप से उन क्षेत्रों के लिए तैयार की गई है, जहाँ पानी की कमी रहती है और खेती मुख्य रूप से ब्रांश पर निर्भर होती है। आरएचबी 273 को देश के विभिन्न हिस्सों में वर्ष 2022 से 2024 के बीच 30 स्थानों पर परखा गया। परीक्षण के दौरान यह किस्म सभी जगह बेहतर साबित हुई। इसकी औसत पैदावार लगभग 2239 किलोग्राम प्रति हेक्टेयर दर्ज की गई, जो मौजूदा किस्मों की तुलना में 13 से 27 प्रतिशत तक अधिक है। इसके साथ ही इससे चारे की भी अच्छी पैदावार मिलती है, जिससे यह किसानों के लिए दोहरा लाभ देने वाली किस्म बन जाती है। इस बाजरा



किस्म में प्रमुख बीमारियों जैसे मिल्ड्यू, व्हाइट और रमट आदि के खिलाफ अच्छी प्रतिरोधक क्षमता पाई गई है। पोषण के लिहाज से भी यह किस्म काफी समृद्ध है। इसमें आयरन, जिंक, प्रोटीन और फैट की अच्छी मात्रा पाई गई है, जो पोषण सुरक्षा को मजबूती प्रदान करती है। आईसीएआर की बाजरा परियोजना की 60वीं वार्षिक बैठक (मई 2025) में इस किस्म को जारी करने की सिफारिश की गई थी। इसके बाद 31 दिसंबर 2025 को केंद्र सरकार ने इसे आधिकारिक रूप से अंतिम स्वीकृति दे दिया। फिलहाल इसे

राजस्थान, गुजरात और हरियाणा में खेती के लिए मंजूरी दी गई है। इस किस्म के विकास में आईसीएआर, आरएआरआई दुर्गापुर (जयपुर), आईसीएआरआई सं ट, हैदराबाद और जोधपुर स्थित परियोजना इकाई के वैज्ञानिकों ने मिलकर काम किया। कई वरिष्ठ और युवा वैज्ञानिकों के निरंतर शोध और परीक्षण के बाद यह किस्म विकसित की जा सकी। आईसीएआर के महानिदेशक डॉ. मांगी लाल जाट ने बताया कि पोषण सुरक्षा और जलवायु परिवर्तन की चुनौतियों से निपटने के लिहाज से बाजरा भारत की एक अत्यंत महत्वपूर्ण फसल है।

ICAR unveils world's first three-way Hybrid Pearl Millet, boosting drought-resilient farming

TSN/News Delhi: The Indian Council of Agricultural Research (ICAR) announced a landmark achievement on Saturday with the development of RHB 273, the world's first three-way hybrid pearl millet. The hybrid represents a significant breakthrough in millet breeding and aims to strengthen agriculture in India's drought-prone and rain-fed regions. Developed under the All-India Coordinated Research Project (ICRPP) on Pearl Millet, RHB 273 combines genetic material from three distinct parent lines, offering superior yield and adaptability. Between 2022 and 2024, the hybrid underwent extensive trials across 30 regional locations, consistently demonstrating its ability to perform well in drought and low-nitrogen conditions. The variety produced an average grain yield of 2,239 kilograms per hectare, surpassing national standards by 13 to 27 percent, and also delivered a high stover yield, benefiting farmers with



Developed under the All-India Coordinated Research Project (ICRPP) on Pearl Millet, RHB 273 combines genetic material from three distinct parent lines, offering superior yield and adaptability. Dr. Mangilal Jat, ICAR's Director General, highlighted the strategic importance of millets in ensuring nutritional security and climate-resilient agriculture. He said, "RHB 273, with its early maturity, drought tolerance, high yield, disease resistance, and nutritional benefits, is set to transform farming in arid and semi-arid regions, offering farmers a more profitable and resilient crop. With this breakthrough, farmers in challenging agro-climatic zones are expected to benefit from higher productivity, resilient crops, and improved nutritional outcomes." The development was a collaborative effort between research teams at ICAR-MCRP Durgam Cheruvu, ICARSAT Hyderabad, and other prominent scientists, including Dr. S.K. Jain. The hybrid was officially released during the 60th Annual General Meeting of ICAR-MCRP on Pearl Millet in May 2025, and received provisional approval on December 31, 2025, for cultivation in Rajasthan, Gujarat, and Haryana.

अमरउजाला amarujala.com

जलवायु परिवर्तन और पोषण सुरक्षा के दौर में बाजरा भारत की अत्यंत महत्वपूर्ण फसल है। इंटरनेशनल ईयर ऑफ मिलेट्स 2023 और G20 के दौरान प्रधानमंत्री के नेतृत्व में बाजरे को वैश्विक पहचान मिली। इसी दिशा में आगे बढ़ते हुए भारत ने दुनिया की पहली थ्री-वे हाइब्रिड बाजरा किस्म विकसित की है। डॉ. मांगी लाल जाट आईसीएआर महानिदेशक



Published by

Project Coordinator

ICAR - All India Coordinated Research Project on Pearl Millet

IIMR-RRS on Pearl Millet, Gudamalani-344031, Rajasthan, India

Website: <http://www.aicpmip.res.in>, www.aicrp.icar.gov.in/pearl

Email: aicpmip@gmail.com



Editorial board: S. N. Saxena, Vikas Khandelwal, Supriya Ambawat, Gopi Kishan, Somanath Nayak and Danakumara T.

Assistance: AS Nathawat, Subhash, Mahesh Chanad Kumawat and Shankar Lal Yadav

