

Proceedings of the Visit to RLBCAU by UPCAR Delegation



Uttar Pradesh Council of Agricultural Research (UPCAR), Lucknow, Uttar Pradesh



Rani Lakshmi Bai Central Agricultural University, Jhansi



Date of Visit: 16th September, 2025



Delegation Members(UPCAR):

- Dr. Sanjay Singh, Director General
- Dr. Permendra Singh, Deputy Director General
- Dr. Rinni Singh, Scientific Officer

Background

UPCAR sanctioned the project to Rani Luxmi Bai Central Agricultural University, Jhansi for “Identification of nutritionally superior climate resilient varieties of millets through evaluation of land races/available varieties/germplasm and development of good agronomic practices for their promotion”, in December 2023 under the Principal Investigator Dr Rumana Khan, Assistant Professor, Genetics and Plant Breeding, RLBCAU.

In continuation of this on-going project, a three-member delegation from UPCAR undertook the visit to RLBCAU.

The visit was co-ordinated by Dr Rumana Khan, Assistant Professor, Genetics and Plant Breeding, RLBCAU, and the team.

Team -RLBCAU

1. Dr. S.K. Chaturvedi, Director Research, RLBCAU, Jhansi
2. Dr. Jitendra Kumar Tiwari, Associate Professor & Head, Genetics & Plant Breeding
3. Dr. Akhilesh Kumar Singh, Associate Professor & Head, Entomology
4. Dr. Rakesh Choudhary, Scientist, Genetics & Plant Breeding
5. Dr. Rumana Khan, Assistant Professor, Genetics & Plant Breeding
6. Dr. Ashutosh Singh, Assistant Professor, Molecular Biology & Biotechnology

INAUGURATION OF THE EIGHT DAY SUMMER SCHOOL TRAINING ON “TECHNIQUES IN MASS PRODUCTION, QUALITY CONTROL OF MICROBIAL BIO-PESTICIDES”

Hon'ble Director General, Uttar Pradesh Council of Agricultural Research (UPCAR), Lucknow, Dr. Sanjay Singh along with Team-UPCAR visited the Rani Lakshmi Bai Central Agricultural University, Jhansi on 16th September 2025 for the inauguration of UPCAR sponsored summer school on “Techniques in Mass production, quality control of microbial bio-pesticides being carried out the RLBCAU. A total of 17 participants attended the programme from different states of the country.



INSIGHT ON SITE: DEMONSTRATION / FIELD VISITS FOR EXPERIMENT ON RESILIENT CROPS

Key Discussions and Outcomes:

1. Field Inspection of Breeding Material, On-Field Trials, and Advanced Millet Lines

A total 294 germplasm lines have been planted along with 7 checks for detailed characterization and to assess their potential in Bundelkhand region. Due to continuous rains, the crop could be sown on 14/08/2025. Dr. Sanjay Singh suggested adding more germplasm lines and elite breeding material so that high yielding varieties of barnyard millet can be

released soon for Uttar Pradesh. He assured for his guidance and support in getting more breeding material. The crop growth was found satisfactory.

Four entries of barnyard millet (RLBB1, RLBB 2, RLBB 4 are RLBB 5) were promoted for second year testing at RATDS centres in Uttar Pradesh and these are being evaluated during *Kharif* 2025. These entries are also grown for their seed multiplication. The pearl millet hybrids testing experiment has also been grown and found satisfactory with respect to plant population and growth under late sown conditions.



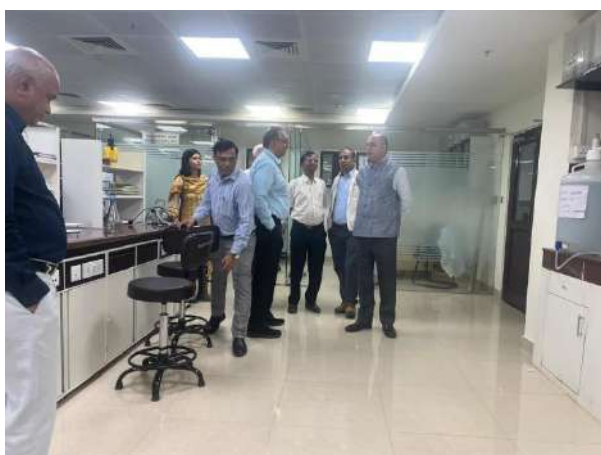
2. Field Inspection of experiments being conducted on groundnut, sesame, urdbean and spine gourd

The Director General-UPCAR and team also visited other field experiments being conducted on groundnut. Dr. Jitendra K Tiwari, Head (GPB) shared detailed information of breeding lines, genetic resources and evaluation of groundnut varieties during current season at RLBCAU. Visit to other experiments being carried out on sesame, urdbean and spine gourd was also facilitated.



VISIT TO THE HIGH END FACILITIES DEVELOPED AT RLBCAU

Visit to the facilities recently developed at RLBCAU viz., Central Instrumentation Lab., Speed Breeding Facility, Plant Genetic Resources Centre, Wide Hybridization Garden and CC Pots where sesame and groundnut have been grown for generation advancement and maintenance of groundnut, urdbean, sesame etc. Dr. Rakesh Choudhary explained details about the speed breeding and wide hybridization garden.





VISIT TO THE HONEY BEE KEEPING LAB INCUBATION CENTRE AND MUSHROOM LAB ENTREPRENEURSHIP CENTRE

RLBCAU supports beekeeping through its Directorate of Extension Education, which runs capacity-building programs to foster entrepreneurship. Capacity-building programs offer training for farmers and other interested individuals to promote scientific beekeeping.

Entrepreneurship development programs focus on creating skilled human resources capable of establishing beekeeping enterprises.

Mushroom lab and entrepreneurship centre: The University encourages mushroom cultivation as a profitable venture for farmers. Training and incubation support are provided through the Directorate of Extension Education and the local business incubator. Mushroom production training programs to teach modern techniques for mushroom cultivation. Incubation support: The Rani Laxmi Bai Incubator for Sustainable Entrepreneurship (RISE), located in Jhansi, supports agricultural entrepreneurs, including those in mushroom production. It offers mentorship, technical assistance, and financial facilitation to help new businesses get started. Value-added products: Some central agricultural universities also extend support for value-added products derived from mushrooms, such as mushroom biscuits and snacks, further promoting entrepreneurship.





VISIT TO THE “PLANT GENETIC RESOURCE CENTRE”

The facility preserves the seeds of Chick pea, Barnyard, Linseed, Mustard, Wheat and Rice seeds at 4⁰C. A cold storage facility is maintained to keep the different varieties of seeds.



CONCLUSION

This official visit provided a holistic understanding of the ongoing research, fieldwork, infrastructure development, and innovation ecosystem at RLBCAU, particularly in the context of the Millet Revival Programme. The observations and insights gained will inform future strategies for project monitoring, policy alignment, and resource allocation. The visit and interactions brought to light RLBCAU's robust research ecosystem, cutting-edge facilities, and its pivotal role in promoting sustainable agricultural practices in Uttar Pradesh.

Dr. S.K. Chaturvedi, Director Research, RLKCAU, briefed about the research being carried out at RLBCAU during current Kharif season. He mentioned about that barnyard millet, groundnut, urdbean and spine gourd have tremendous potential in Bundelkhand and adjoining areas. He acknowledged and appreciated the support and guidance being received from Dr. Sanjay Singh, Director General (UPCAR).
