



# 2023

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Chief Editor  
S.S. Singh  
Director Extension Education

Editorial Board:  
Ashutosh Sharma  
Prabhat Tiwari  
Alka Jain  
Pavan Kumar  
Sanjeev Kumar

## From the Vice-Chancellor Desk



The year 2023 is declared as the International Year of Millets by United Nations. Looking into the nutritional values of millets and its cultural and historical significance, Government of India has named millets as "Shree Anna". Millets are a group of small-seeded, drought-resistant cereal crops that are grown for their edible seeds and have been used as a staple food for thousands of years, especially in arid and semi-arid regions of the world. Most of the world's millets are cultivated in Africa, but the largest production of millets is in India. Africa is the largest exporter of millet grains, while India is at the second place in export of millets.

Millets have been farmed and eaten for thousands of years as a food, according to historical records from China, Africa, and India.

Millets can grow in difficult and harsh environments, making them a dependable source of food in areas with limited resources. Millets were a staple diet for many rural people in India for many years, and had a huge impact on the agricultural and cultural history of the nation. Millets, however, lost favor in recent decades as the output of more desired crops like rice and wheat expanded because of development of more advanced and intense farming techniques for these crops. Government regulations and patterns of international trade that favored the production and export of wheat and rice also had an impact on this change in eating habits. If millets are grown and consumed widely over the world, it would benefit small farmers who are deprived of resources. The millet requires support for processing, marketing and focused research for production and post production management.

**Vice-Chancellor**



## International Day of Forest

The College of Horticulture and Forestry celebrated International Day of Forest on 21<sup>st</sup> March 2023, on the theme, "Forest and Health". Various events like plantation, quiz, posters, nature photography, etc., were held to exhibit the importance of forests for better health. Hon'ble Vice Chancellor A. K. Singh, RLBCAU, started the programme with the plantation of Reetha (*Sapindus mucorossi*) on the campus (Fig. 1). Students participated enthusiastically in the events and were awarded certificates. M. J. Dobriyal welcomed the guests, and the thematic address was delivered by V. P. Singh, Dean of Veterinary and Animal Sciences. K. K. Singh, Chief Conservator of Forests, Bundelkhand region, was the chief guest of the programme and said that forests give us everything for our existence. (MJ Dobriyal, RP Yadav, Prabhat Tiwari).



Fig. 1: Plantation of Neem at Bojla farm

## ELP Product Exhibition

An exhibition of processed products prepared under ELP was executed outside the university's Administration building. The exhibition featured an impressive lineup of eight unique products. Visitors were particularly drawn to the potato fortified with tomato ready-to-eat papad, red guava RTS, quinoa energy bar, and turmeric chilli pickle. The Honorable Vice-Chancellor inaugurated the event, and thereafter, it was open to all attendees. Final year horticulture students took the opportunity to interact with the Vice-Chancellor and also impart valuable information about the nutrition and preparation methods of the products to the visitors. The Dean of the CoH&F, MJ Dobriyal, expressed his admiration for the hard work and dedication of the students, as well as the faculty of the Postharvest Technology Department that supported them (Fig. 2). Overall, the exhibition was a resounding success, showcasing the excellent work of the university's students and faculty in promoting healthy and innovative food products. (Ghan Shyam, Ashwani Kumar, Gaurav Sharma).



Fig. 2: Exhibition stalls during ELP

## RLBCAU as a Training Partner of the FoSTaC Programme of FSSAI

On 17/03/2023, RLBCAU, Jhansi became a training partner of FoSTaC, a leading organization providing professional training and development programs to all the vendors and others directly or indirectly involved in food processing. As a training partner, the university will work closely with FoSTaC to develop and deliver high-quality training programs tailored to meet the needs of today's rapidly changing workplace. This partnership will provide local vendors, students and professional's access to industry-leading training courses and certifications to enhance their knowledge, skills, and abilities. "We are excited to partner with FoSTaC and provide our students and professionals with access to their cutting-edge training programs," said A. K. Singh, Hon'ble Vice-Chancellor. This partnership will help us meet the demands of today's dynamic business environment and equip our learners with the skills and knowledge they need to succeed in their fields." The university is committed to providing its learners with the best possible education and training opportunities and this partnership with FoSTaC is a testament to that commitment. We look forward to a fruitful collaboration and the many benefits it will bring to our learners and the wider community. All the members worked hard to avail this opportunity, and all the necessary documents required to be a partner were provided by Mukesh Srivastava, Registrar, RLBCAU, Jhansi. (Ashwani Kumar, Ghan Shyam, Gaurav Sharma, MJ Dobriyal, SS Singh).

## Experiential learning Programme (ELP) on Raising Quality Planting Material

Experiential learning programme (ELP) II on raising quality forest tree planting material is being undertaken by the 11 students of the VI semester of B.Sc (Forestry) with a weightage of 0+5 credit hours. ELP of forestry is flourishing

with the main motto of learning and earning. During this programme, experiential learning is provided to students in different field activities for raising quality planting material using a nursery management tool. Throughout the whole semester, students are involved in practical activities for planting material like seed collection, nursery bed preparation, container filling, growing media preparation, seed sowing, pricking out seedlings, transplanting etc. Under this student's learning activity, they have raised 3500 forest tree seedlings, including *Acacia senegal*, *Cassia fistula*, *Cabamba*, *Wrightia tinctoria*, *Moringa*, *Poplar*, *Cassia auriculata*, *Accacia Senegal*, *Acacia auriculiformis*, *Mohagony*, *Red sandal*, etc (Fig. 3). Students also get trained in the marketing sector; they learn the marketing skill of raised planting material. ELP forestry courses have tremendous promise to give them practical training and enable them to become self-employed entrepreneurs. Their skills have been improved, they have solid job prospects in the public and private sectors, their confidence has grown, and some are looking forward to starting their own nursery businesses after completing the degree programme. (RP Yadav, Prabhat Tiwari, Swati Shedage, Garima Gupta).



Fig. 3: ELP practical training

### Postharvest Technology Working on the Development of various Value added Products

The Department of Postharvest Technology worked on developing various value-added products from the seasonal fruits and vegetables from 1 January 2023 to 31 March 2023. Strawberries, guavas, cauliflower, and carrots were the main crops processed during this time. The strawberry and guava were provided by the Department of Fruit Science, RLBCAU, Jhansi, while the Department of Vegetable Science, RLBCAU, Jhansi, provided fresh cauliflower and carrots. The ELP students carried out the processing, and the primary goods produced were pickled cauliflower and carrots, strawberry crush, strawberry RTS, and guava RTS. The department also sold these products at the Kisan Fare held on February 26-27, 2023 (Fig. 4).



Fig. 4: Postharvest technology

### Programme under Experiential Learning Programme of B.Sc Horticulture

Under the ELP programme of B.Sc Horticulture, final year students prepared gulal from flowers and other plant part pigments. Different flowers that were utilized for making the gulal are Marigold, Nasturtium, Bougainvillea, and Larkspur, along with beetroot, pink cabbage, palak leaves, marigold leaves etc. Arrowroot powder was used for making the gulal from flowers and other plant parts. Flower petals, leaves and other plant parts were crushed in the grinder and flower pigment was extracted. This flower pigment was then mixed with Arrowroot powder thoroughly with hands. The pigmented powder was then dried in a mechanical dryer. After drying, the pigmented powder was again ground in the grinder to make it fine and sieved. After sieving, the powder was packed in packets and sealed (Fig. 5).



Fig. 5: Gulal prepared from Nasturtium flower pigment

### Agri Unifest-2023 at UAS-Bengaluru

RLBCAU student team has participated in "All India 21<sup>st</sup> Inter-Agricultural University Youth Festival (Agri Unifest-2023)" from 13-17<sup>th</sup> March at the University of Agricultural Science (UAS); Bengaluru under the supervision of team manager Pavithra B.S. and Umesh Pankaj. The team has participated in different literary events, such as the Procession. Students performed the group songs (Folk), light vocals, Mimes, on-spot painting, Extempore, Poster making, Clay modelling, Rangoli, Debate and Quiz. The Agri Unifest-2023 inauguration program was held in the presence of honorable minister Narendra Singh Tomar, Agriculture

and Farmer Welfare; Sushri Shobha Karandlaje, Minister of State, Agriculture and Farmers Welfare and other dignitaries (Fig. 6).



Fig. 6: Agri Unifest-2023 at UAS-Bengaluru

### Established Orchard for Citrus

An orchard for different citrus species was established near VC residence on 22.02.2023. The orchard is established in about 0.5-acre area covering other species of Citrus (Sweet Orange, Mandarin, and Lime). The planting material came from the Centre of Excellence for Fruits (Citrus), Khanaura, Punjab. The purpose of this orchard is to provide fruits around the year (Fig. 7).



Fig. 7: Citrus species s established near VC residence

### Celebration of 10<sup>th</sup> Foundation Day

RLBCAU celebrated its 10<sup>th</sup> Foundation Day on March 05, 2023. The celebration witnessed the august presence of Ex-Secretary, DARE and Director General, ICAR Trilochan Mohapatra as Chief Guest. Several programmes were organised between the 4<sup>th</sup> to 5<sup>th</sup> of March 2023. The foundation day celebration started on March 04 with the Debate and Extempore competition at 3:00 P.M. chaired by Mangala Rai Ex-Secretary, DARE and DG, ICAR and A. K. Singh, Vice Chancellor RLBCAU, Jhansi with all Statuary officers, faculty members and students of the University. The topic for the debate competition was "The unstoppable

rise of modern food habits among youth replacing traditional food- Will it nurture the youth forward?" and for Elocution was "Necessity of youth participation in community service and volunteering" Students participated with full enthusiasm and expressed their views on the topic (Fig. 8). The winners of the debate completion were Shruti Lata (First) and Purnima Upadhyay (Second). The winners of the elocution competition were Shruti Lata (First position) and Pradyumn Deshmukh (Second). On March 05 2023, the programme began at 3:00 PM in IGFR Auditorium, Jhansi, with debate and elocution winners' presentations. The chief guest felicitated the winners. Foundation Day Lecture on "Indian Agriculture- Challenges & Opportunities" was delivered by the chief guest Mangal Rai. Hon'ble Vice Chancellor of the University venerated him with citation and memento. The cultural programme "Goonj" started at 6:00 PM with Ganesh Vandana and a welcome song. The event was graced with regional dances, skits, songs, solo performances and many other programmes by the students.



Fig. 8: Celebration of 10<sup>th</sup> foundation day

### Learning Tour on Poultry Farm

On January 21, 2023, B. Sc. (Hons.) Agriculture second-year students toured the Mehta poultry farm as part of the practical syllabus accompanied by Pramod Kumar Soni (Fig. 9). The location is 25 kilometres from Jhansi and close to the Dengri Dam. Students had fruitful discussion on several aspects of poultry farming with Raveen Mehta, poultry farm owner, including management, productivity, diseases, biosecurity, vaccination and government subsidies to establish a poultry farm. Poultry waste is helpful for organic farming and has market demand. He emphasised to the students the enormous employment potential in chicken farming. Students learned about the egg-laying capabilities of the white leg horns layer breed of chicken, feed ingredients for poultry, feed processing, and concentrate feed manufacturing. Learning how farm resources were used to grow roses was the last activity of the visit. It was a very productive visit. (Pramod Kumar Soni).



**Fig. 9:** Mehta poultry farm

### State Tour of B. Sc. (Agriculture) Students

The 33 (14 girls and 19 boys) students of the VI semester, College of Agriculture, of RLBCAU, had visited various ICAR institutes and universities as per the course curriculum (Fig. 10). The tour started from Jhansi on March 30, 2023, and visits were made to well-established laboratories and processing units at ICAR-IIPR and CSAUA&T, Kanpur. The students also visited the farm area and processing laboratories of ICAR-CISH, the Engineering division and other departments of ICAR-IISR and the fish aquarium, Museum of ICAR-NBFGR, Lucknow. The students have learned much about entrepreneurship development through business models created at these esteemed institutes. The tour was completed on April 01, 2023 (Saurabh Singh, Ashutosh Sharma)



**Fig. 10:** Agricultural students during state tour

### National Science Day Program

**National Science Day Program** was organised on **28<sup>th</sup> February 2023** by RLBCAU to remember Nobel Laureate C.V. Raman (7 November 1888-21 November 1970) on the theme of "Global Science for Global Wellbeing". B K Behera gave a lecture on "Recent Developments in Genomics". A R Shrama, threw light on the achievements of C V Raman (Fig. 11). A poster making competition was also organized among students. (AR Sharma, M Arya, DC Bhaskar, S Singh, AK Gupta, S Kumar)



**Fig. 11:** National science day celebration

### Participation in the Exhibition and Kisan Mela

The University participated in the Technology and Machinery Demonstration Meet (TMDM)-cum-Farmers Fair on 1st March 2023, organized by ICAR-IGFRI, Jhansi at Central Research Farm near Farm Machinery Operation Unit (FMOU). The University displayed advanced technology and machinery (Fig. 12). (Sanjeev Kumar, Govind Vishwakarma, Saurabh Singh, Vaibhav Singh).



**Fig. 12:** University participated in the TMD meet

### School Visits

1285 students from 7 different schools were given tours by the Directorate of Education from 17th March to 31st March 2023 (Fig. 12). These schools are Rajkiya High School (Rewan, Jhansi), Jawahar Navodaya Vidyalaya (Pichhore, Dabra), Govt Girls Inter College (Gursarai), rajkiya High School (Bhojla, Jhansi), Govt Inter College (Sakrar, Jhansi), Rajkiya High School (Khadora, Jhansi) and Rajkiya High School (Bijora, Jhansi).



**Fig. 12:** School visit of students

**Farm Advisory**

दिनांक	सलाह	लेखक
04.01.23	चने की फसल को इल्ली से बचाने के उपाय	योगेन्द्र मिश्रा, सुंदरपाल
05.01.23	देशभर में बर्ड फ्लू के मामलों में सजग रहें किसान	प्रमोद सोनी
06.01.23	सरसों की फसल को पाले से बचाएं	राकेश चौधरी, अर्तिका सिंह
07.01.23	सरसों की फसल को तना गलन रोग से बचाएं	शुभा त्रिवेदी, पी.पी. जाम्बुलकर
08.01.23	गेहूँ में नाइट्रोजन की दूसरी खुराक का प्रयोग करें	अनिल कुमार राय, योगेश्वर सिंह
08.01.23	बुंदेलखण्ड में ड्रोन से होगा कीटनाशक एवं खाद का छिड़काव	आशुतोष शर्मा
09.01.23	बुंदेलखण्ड क्षेत्र में चितकबरा कीट से सरसों की फसल का बचाव करें	विजय कुमार मिश्रा, अर्तिका सिंह
11.01.23	मटर की फसल को काला माहू कीट से बचाएं	अंशुमान सिंह, सोनिया देवी
12.01.23	तापमान में बदलाव से कमजोर हो सकता है गेहूँ का दाना	योगेश्वर सिंह
18.01.23	गोभी वर्गीय सब्जियों को कीटों से बचाने के उपाय	सुंदर पाल, अर्जुनलाल ओला
19.01.23	माहू कीट से सरसों की फसल का करें बचाव	अर्तिका सिंह, विजय कुमार मिश्रा
04.01.23	चने की फसल को इल्ली से बचाने के उपाय	योगेन्द्र मिश्रा, सुंदर पाल
05.01.23	देशभर में बर्ड फ्लू के मामलों में सजग रहें किसान	प्रमोद सोनी
06.01.23	सरसों की फसल को पाले से बचाएं	राकेश चौधरी, अर्तिका सिंह
07.01.23	सरसों की फसल को तना गलन रोग से बचाएं	शुभा त्रिवेदी, पी.पी. जाम्बुलकर
08.01.23	गेहूँ में नाइट्रोजन की दूसरी खुराक का प्रयोग करें	अनिल कुमार राय, योगेश्वर सिंह
08.01.23	बुंदेलखण्ड में ड्रोन से होगा कीटनाशक एवं खाद का छिड़काव	आशुतोष शर्मा
09.01.23	बुंदेलखण्ड क्षेत्र में चितकबरा कीट से सरसों की फसल का बचाव करें	विजय कुमार मिश्रा, अर्तिका सिंह
11.01.23	मटर की फसल को काला माहू कीट से बचाएं	अंशुमान सिंह, सोनिया देवी
12.01.23	तापमान में बदलाव से कमजोर हो सकता है गेहूँ का दाना	योगेश्वर सिंह
18.02.23	गेहूँ में दाना बनते समय करें सिंचाई	अनिल कुमार राय, योगेश्वर सिंह
21.02.23	किसान गुणवत्ता युक्त बीज का करें उत्पादन	मनोज कुमार सिंह
02.03.23	पछेती गेहूँ की फसल में करें हल्की सिंचाई एवं रतुआ रोग से करें बचाव	अनिल कुमार राय, योगेश्वर सिंह
04.03.23	जायद रकबा बढ़ाने के लिए ग्रीष्मकाली नमूंग हो सकती है उपयुक्त	निशांत भानु, अंशुमान सिंह
20.03.23	सावधान रहें हो सकता है फसल रखने पर नुकसान	अनिल कुमार राय, योगेश्वर सिंह
31.03.23	आज हो सकती हैं बारिश, किसानों को सावधान रहने की सलाह	अनिल कुमार राय, योगेश्वर सिंह
02.03.23	पछेती गेहूँ की फसल में करें हल्की सिंचाई एवं रतुआ रोग से करें बचाव	अनिल कुमार राय, योगेश्वर सिंह
20.03.23	सावधान रहें हो सकता है फसल रखने पर नुकसान	अनिल कुमार राय, योगेश्वर सिंह

**तकनीकी प्रसार साहित्य (हिंदी-फोल्डर)**

पशुओं में खुरपका मुंहपका (एफएमडी) रोग	प्रमोद सोनी, वीपी सिंह	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/59
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पशुओं में लम्पीत्वचा रोग (एलएसडी)	प्रमोद सोनी, वीपी सिंह	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/60
बकरियों में पीपीआर (बकरीप्लेग) बीमारी	प्रमोद सोनी, वीपी सिंह	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/61
बकरियों में प्लुरोन्मोमोनिया रोग	प्रमोद सोनी, वीपी सिंह	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/62
बुंदेली कृषि विपणन मोवाइल एपकी जानकारी	संजीव कुमार, तनुज मिश्रा, शैलेन्द्र कुमार, अर्पित सूर्यवंशी	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/63
चना की वैज्ञानिक खेती	अंशुमान सिंह, मीनाक्षी आर्य, अनिल कुमार राय, अर्पित सूर्यवंशी, भरत लाल	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/64
मटर की वैज्ञानिक खेती	निशांत भानु, अंशुमान सिंह, मीनाक्षी आर्य, अनिल कुमार राय, भरत लाल, सुंदर पाल, माइमोम सोनिया, अर्पित सूर्यवंशी, सुशील कुमार चतुर्वेदी	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/65
मसूर की वैज्ञानिक खेती	अर्पित सूर्यवंशी, अंशुमान सिंह, अंशुमान सिंह, निशांत भानु, अनिल कुमार राय, भरत लाल, माइमोम सोनिया, राजीव नंदन, सुशील कुमार चतुर्वेदी	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/66
उरद की वैज्ञानिक खेती	मीनाक्षी आर्य, अंशुमान सिंह, अर्पित सूर्यवंशी, निशांत भानु, संजीव कुमार, सुंदरपाल, एस के चतुर्वेदी	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/67
मूंग की वैज्ञानिक खेती	अर्तिका सिंह, राकेश चौधरी, संजीव कुमार योगेश्वर सिंह, एस के चतुर्वेदी	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/68
बुंदेलखण्ड में अलसी की वैज्ञानिक खेती	अर्तिका सिंह, राकेश चौधरी, संजीव कुमार, शुभा त्रिवेदी, योगेश्वर सिंह, एस के चतुर्वेदी	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/69
बुंदेलखण्ड में सरसों की वैज्ञानिक खेती	अर्तिका सिंह, राकेश चौधरी, शुभा त्रिवेदी, योगेश्वर सिंह, एस के चतुर्वेदी	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/70
बुंदेलखण्ड में मूंगफली की वैज्ञानिक खेती	अर्तिका सिंह, संजीव कुमार, राकेश चौधरी, अर्पित सूर्यवंशी, योगेश्वर सिंह, एस के चतुर्वेदी	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/71
बुंदेलखण्ड में तिल की वैज्ञानिक खेती	अर्तिका सिंह, राकेश चौधरी, अनिल कुमार राय, मीनाक्षी आर्य, योगेश्वर सिंह, एस के चतुर्वेदी	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/72
मधुवाटिका का प्रबंधन	विजय मिश्रा, ऊषा, माइमोम सोनिया, सुंदरपाल, योगेन्द्र मिश्रा, हरिचन्द्र, एस के चतुर्वेदी, एस एस सिंह	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/73
सरसों के प्रमुख कीट एवं उनका नियंत्रण	ऊषा, विजय कुमार मिश्रा, माइमोम सोनिया, हरिचन्द्र, एस के चतुर्वेदी, एस एस सिंह	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/74
कृषि ड्रोन भारत में कृषि तकनीक का लाभ	आशुतोष शर्मा, प्रशांत जाम्बुलकर, विजय कुमार मिश्रा, तनुज मिश्रा	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/75
बुंदेलखण्ड क्षेत्र में अंजीर की खेती की संभावनाएं	गोबिंद विश्वकर्मा, रंजीत पाल, सुकन्या मिश्रा, गौरव शर्मा	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/76
बुंदेलखण्ड क्षेत्र में ड्रैगन फ्रूट की उन्नत खेती की संभावनाएं	गोबिंद विश्वकर्मा, रंजीत पाल, सुकन्या मिश्रा, गौरव शर्मा	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/77
बागीचे के लिए मौसमी फूल एवं उनकी देखभाल	गौरव शर्मा, प्रियंका शर्मा	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/78
गेंदाकीव्यवसायिकखेती	प्रियंका शर्मा, गौरव शर्मा	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/79
कृषिवानिकी में प्राकृतिक संसाधनों का प्रबंधन	युमनाम विजिलक्ष्मी, आर पी यादव, एम जे डोवरियाल	प्र.शि.नि./त.प्र.सा./फोल्डर/2023/80

अश्वगंधा की वैज्ञानिक खेती एवं शस्य क्रियाएं	अभिषेक कुमार, एम जे डोवरियाल, अनिल कुमार	प्र.शि.नि./त.प्र.सा./फो ल्डर/2023/81
खरीफ प्याज की उन्नत खेती	अर्जुनलाल ओला, सौरभ सिंह, देवेश तिवारी, गौरव शर्मा	प्र.शि.नि./त.प्र.सा./फो ल्डर/2023/82
नियंत्रित व्यवस्था में सब्जियों की खेती	देवेश तिवारी, अर्जुनलाल ओला, सौरभ सिंह, गौरव शर्मा	प्र.शि.नि./त.प्र.सा./फो ल्डर/2023/83
अदरक की वैज्ञानिक खेती	अर्जुनलाल ओला, प्रशांत जाम्भुलकर, सौरभ सिंह, देवेश तिवारी, गौरव शर्मा	प्र.शि.नि./त.प्र.सा./फो ल्डर/2023/84
बुंदेलखण्ड में गम्हार की वैज्ञानिक खेती	प्रभात तिवारी, गरिमा गुप्ता, राम प्रकाश यादव, मनमोहन डोवरियाल	प्र.शि.नि./त.प्र.सा./फो ल्डर/2023/85
बुंदेलखण्ड में कदमम का वैज्ञानिक विधि से रोपण	प्रभात तिवारी, गरिमा गुप्ता, राम प्रकाश यादव, मनमोहन डोवरियाल	प्र.शि.नि./त.प्र.सा./फो ल्डर/2023/86
बुंदेलखण्ड में शीशम रोपण की वैज्ञानिक तकनीक	प्रभात तिवारी, गरिमा गुप्ता, राम प्रकाश यादव, मनमोहन डोवरियाल	प्र.शि.नि./त.प्र.सा./फो ल्डर/2023/87
वन चारागाह कृषि वानिकी तकनीक	प्रभात तिवारी, गरिमा गुप्ता, राम प्रकाश यादव, मनमोहन डोवरियाल	प्र.शि.नि./त.प्र.सा./फो ल्डर/2023/88
मधुमक्खी पालन: एक बहु आयामी व्यवसाय	हरिचन्द्र, ऊषा, एस एस सिंह, एस. के चतुर्वेदी	प्र.शि.नि./त.प्र.सा./फो ल्डर/2023/06
बुंदेलखण्ड में दलहन की वैज्ञानिक खेती	अखौरी निशांत भानु, अंशुमान सिंह, मीनाक्षी आर्य, सुशील कुमार चतुर्वेदी	प्र.शि.नि./त.प्र.सा./बुले टिन/2023/07

## Publications

- ❖ A. Nishant Bhanu, Editor-in-chief (2023). GRAIN (Global Research and Agri Innovation) a bimonthly e-magazine. 1:2, Publisher AgriVision4U.
- ❖ A. Nishant Bhanu, Editor-in-chief (2023). GRAIN (Global Research and Agri Innovation) a bimonthly e-magazine. 2:2, Publisher AgriVision4U.
- ❖ Sharma Priyanka, Sharma Gaurav and Abrol Ghanshyam (2023). Evaluation of Gladiolus cultivars for growth, flowering and corm multiplication under Jhansi conditions of Bundelkhand Region. International Journal of Bioresource and Stress Management. 14(1): 39-4. (NAAS-5.11).
- ❖ Kumar A, Nirmal P, Kumar M, Jose A, Tomer V, Oz E, Proestos C, Zeng M, Elobeid T, K S, Oz F (2023). Major Phytochemicals: Recent Advances in Health Benefits and Extraction Method. Molecules. 16; 28(2):887. (NAAS-10.90).
- ❖ Vijay Kumar Mishra, M. Soniya Devi, SS. Singh, S.K. Chaturvedi, Usha, Nitish Ratan Bhardwaj, Deepika Chauhan, Sandeep Upadhyay (2023). First Report Of Flower Chafer Beetle, Oxycetonia versicolor (Fabricius) on maize cob in bundelkhand region (INDIA). AMA, Agriculture Mechanization in Asia, Africa, Latin, America. 54(1):11755-11766. (NAAS-6.30).

- ❖ Sharma Priyanka, Sharma Gaurav and Abrol Ghanshyam. 2023. Evaluation of Gladiolus cultivars for growth, flowering and corm multiplication under Jhansi conditions of Bundelkhand Region. International Journal of Bioresource and Stress Management. 14(1): 39-43. (NAAS-5.11).

## Book Chapters

- ❖ Rana, M. Priyadarshini P., Guleria G., Kaldate R., Kumar N., Gajghate R., Dwivedi KK and Ahmed S (2023). Biofortification of Oats (Avena sativa). In: Deshmukh, R., Nadaf, A., Ansari, W.A., Singh, K., Sonah, H. (eds) Biofortification in Cereals. Springer, Singapore.
- ❖ Guleria, G., M. Rana, Priyadarshini P., Kaldate R., Kumar N., Rana R., Chauhan R., Gajghate R., Ahmed S (2023). Biofortification of Sorghum (Sorghum bicolor). In: Deshmukh, R., Nadaf, A., Ansari, W.A., Singh, K., Sonah, H. (eds) Biofortification in Cereals. Springer, Singapore.
- ❖ Shubha Trivedi, S. Pandey and M. Srivastava (2023). Bio-inoculants the potential microbes for restoration of degraded land. In a book entitled "Microbes in restoration of degraded land" published by CRC press, Taylor & Francis Group, London (pp-273-288).
- ❖ Misra S, Gurung S, Ghosh A (2023). Proper planting systems improve yield, growth, and quality of strawberry by regulating soil moisture in humid tropical Terai region. The Pharma innovation, 12(2)2284-2287.
- ❖ Misra S, Gurung S, Ghosh A (2023). Mulching improves strawberry fruit growth and yield by regulating soil temperature and soil moisture in humid tropical India, Annals of plant and soil Research, 25(1) 45-46.
- ❖ Baidya B. Misra S, Sur B (2023). Effect of Preharvest Spray on Shelf life and Quality of Strawberry (Fragaria ananassa), Biological Forum, 15(2)29-34.
- ❖ Sanjeev Kumar and S K Jha (2023). Nutri-cereals: Health to Entrepreneurship, Global Research and Agri Innovation-Grain, Volume 2, Issue 1. Page no 33-40, January 2023.
- ❖ संजीव कुमार, एस एस सिंह, अखौरी निशांत भानु एवं अर्पित सूर्यवंशी (मार्च 2023) बुंदेलखंड में स्वस्थ मृदा के लिए प्रसार की गतिविधियाँ, पेज 18, कृषक बंदना, ISSN-0972-7930.

## Training/Lecture Delivered

- ❖ सुंदरपाल, राष्ट्रीय मधुमक्खी मंडल द्वारा वित्तपोषित परियोजना के तहत रानी लक्ष्मी बाई केंद्रीय कृषि विश्वविद्यालय, झाँसी द्वारा "बुन्देलखण्ड में मधुमक्खी पालन एक बहुआयामी व्यवसाय" पर आवासीय पांच दिवसीय कर्षक प्रशिक्षण कार्यक्रम में "मधुमक्खी की विभिन्न प्रजातियाँ एवं उनका आर्थिक महत्व" शीर्षक पर किसानों को दिनांक 17 जनवरी 2023 पर व्याख्यान एवं प्रशिक्षण दिया।

- ❖ सुंदरपाल, राष्ट्रीय मधुमक्खी मंडल द्वारा वित्तपोषित परियोजना के तहत रानी लक्ष्मी बाई केंद्रीय कृषि विश्वविद्यालय, झाँसी द्वारा "बुन्देलखण्ड में मधुमक्खी पालन एक बहुआयामी व्यवसाय " पर आवासीय पांच दिवसीय कर्षक प्रशिक्षण कार्यक्रम में "मधुमक्खी परिवार का मिलाव, बंटवारा एवं आधार छत्ता बनाने की विधि " शीर्षक पर किसानों को दिनांक 19 जनवरी 2023 पर व्याख्यान एवं प्रशिक्षण दिया।
- ❖ सुंदरपाल, औधानिक प्रयोग एवं प्रशिक्षण केंद्र, बरुआसागर, झाँसी, उत्तर प्रदेश पर चल रहे माली प्रशिक्षण कार्यक्रम (200 घंटे), के अंतर्गत दिनांक 1 मार्च 2023 को प्रशिक्षणार्थियों को शीर्षक "जापानी गार्डन (बागवानी), मधु मक्खी पालन" विषय पर व्याख्यान एवं प्रशिक्षण दिया।
- ❖ सुंदरपाल, औधानिक प्रयोग एवं प्रशिक्षण केंद्र, बरुआसागर, झाँसी, उत्तर प्रदेश पर चल रहे माली प्रशिक्षण कार्यक्रम (200 घंटे), के अंतर्गत दिनांक 2 मार्च 2023 को प्रशिक्षणार्थियों को शीर्षक "बागवानी में कीट एवं रोग प्रबन्धन" विषय पर व्याख्यान एवं प्रशिक्षण दिया।
- ❖ सुंदरपाल, रानी लक्ष्मीबाई केन्द्रीय कृषि विश्वविद्यालय, झाँसी, भा.कृ.अनु.प. भारतीय कृषि सांख्यिकी अनुसन्धान संस्थान, नई दिल्ली एवं भा.कृ.अनु.प. केंद्रीय कृषिवानिकी अनुसन्धान संस्थान, झाँसी द्वारा अनुसूचित जाति उपयोजना के अन्तर्गत "बुंदेलखंड क्षेत्र में दलहन उत्पादन पर एक दिवसीय कृषक प्रशिक्षण कार्यक्रम" के अंतर्गत शीर्षक " दलहन में कीट प्रबन्धन" विषय पर किसानों को व्याख्यान एवं प्रशिक्षण दिया गया।
- ❖ अखौरी निशांत भानु "बुन्देलखण्ड में गेहू की उन्नत प्रजातियाँ व गुणवत्तायुक्त बीज उत्पादन ". दो दिवसीय कृषक प्रशिक्षण- गेहू की उन्नतशील उत्पादन तकनीक. अनुसूचित जाति उपयोजना के अंतर्गत. रानी लक्ष्मी बाई केंद्रीय कृषि विश्वविद्यालय, झाँसी. मार्च21, 2023।
- ❖ अखौरी निशांत भानु "बुन्देलखण्ड में दलहन की उन्नत प्रजातियाँ व गुणवत्तायुक्त बीज उत्पादन ". बुंदेलखंड क्षेत्र में दलहन उत्पादन पर एक दिवसीय कृषक प्रशिक्षण कार्यक्रम. अनुसूचित जाति उपयोजना के अंतर्गत. रानी लक्ष्मी बाई केंद्रीय कृषि विश्वविद्यालय, झाँसी. मार्च23, 2023 ।
- ❖ एस एस सिंह एवं संजीव कुमार (फरवरी 2023). बुंदेलखंड में श्री अन्न पोषक आनाज हेतु कृषि विस्तार की भावी कार्य योजना, स्मारिका-बुंदेलखंड किसान मेला एवं कृषि प्रदर्शनी, रानी लक्ष्मी बाई केंद्रीय कृषि विश्वविद्यालय, झाँसी ।
- ❖ सुंदरपाल, भा कृ अनु प्र- केन्द्रीय कृषि वानिकी अनुसंधान संस्थान, झाँसी एस सी एस पी एफ एल. डी चना, के अंतर्गत गाँव खाई खेडा, ललितपुर में दिनांक 24 जनवरी 2023 को एक दिवसीय प्रक्षेत्र दिवस मनाया।
- ❖ सुंदरपाल, 2. भा कृ अनु प्र- केन्द्रीय कृषि वानिकी अनुसंधान संस्थान, झाँसी एस सी एस पी एफ एल. डी चना, के अंतर्गत गाँव सिमरधा, ललितपुर में दिनांक 24 जनवरी 2023 को एक दिवसीय प्रक्षेत्र दिवस मनाया।
- ❖ सुंदरपाल, आई ए एस आर आई, नई दिल्ली, एस सी एस पी एफ एल. डी गेहूँ, के अंतर्गत गाँव इमलिया, ललितपुर में दिनांक 28 मार्च 2023 को एक दिवसीय प्रक्षेत्र दिवस मनाया।
- ❖ सुंदरपाल, आई ए एस आर आई, नई दिल्ली, एस सी एस पी एफ एल. डी गेहूँ, के अंतर्गत गाँव करेगा, ललितपुर में दिनांक 28 मार्च 2023 को एक दिवसीय प्रक्षेत्र दिवस मनाया।
- ❖ Gaurav Sharma invited talk on "Commercial use of flowers for their aromatic values" in the National Seminar on "Spices and Aromatic Crops Prospects and Potential in Chhattisgarh" from 14-15 March, 2023 at IGKV, Raipur, Chhattisgarh.
- ❖ Ghan Shyam served as Convenor in the Bundelkhand Agri Export Promotion Summit "Strengthening Value-chain and Export Potential of Bundelkhand Agri-produce through Synergy of NABARD, FPOs and APEDA" on 27 February, 2023.
- ❖ Ghanshyam Abrol, served as rapporteur of the Session III (Entitled: Opportunities and Challenges for Processing and Export of Pulses, Cereals & Oil seeds) in the Bundelkhand Agri Export Promotion Summit "Strengthening Value-chain and Export Potential of Bundelkhand Agri-produce through Synergy of NABARD, FPOs and APEDA" on 27 February, 2023.
- ❖ Sunder Pal, organised a national seminar on "Market led Agriculture towards One nation One Market" at Rani Lakshi Bai Central Agricultural University on 25 March 2023.
- ❖ Nishant Bhanu, ICAR sponsored short course on Agri-preneurship Development in Seed Sector for Sustainability of Agricultural & Rural Economy organized by ICAR-Indian Institute of Wheat and barley Research, Karnal. 1-10<sup>th</sup> February 2023.
- ❖ Shailendra Kumar delivered a lecture on 19/01/2023 as Resource Person in the 10 days Workshop entitled "Research Methodology Training Course in Social Science" during 10-19 January 2023 at the Institute of Education, Bundelkhand University, Jhansi. This Research Methodology Course will be a joint effort of Bundelkhand University Jhansi and the Indian Council of Social Science Research, New Delhi.
- ❖ Nishant Bhanu completed ICAR sponsored short course on Agri-preneurship Development in Seed Sector for Sustainability of Agricultural & Rural Economy organized by ICAR-Indian Institute of Wheat and barley Research, Karnal. 1-10 February 2023.
- ❖ Shubha Trivedi delivered a lecture on "Conventional Diagnostic Techniques for Detection of Plant Pathogens" in DST-SERB sponsored one day workshop organised by Department of Plant Pathology, RLBCAU, Jhansi (March 15, 2023).

### Award/Recognitions

- ❖ Gaurav Sharma conferred with Fellow, Environment and Social Welfare (FESW), during the 10th Annual Research Conference on "Strategies for promotion and conservation of environment and native species to protect and restore the Nature" held during 29 & 31 January, 2023 at Khajuraho, Madhya Pradesh, India.

## Bundelkhand Kisan Mela evam Krishi Pradarshani

RLBCAU, Jhansi organised a "Kisan Mela" from 26-27 February 2023 on the theme, "Bundelkhand me Krishi Niryaatevam Poshak Anaajo Shree Ann (millets) ki Sambhabnayan." Vijender Singh, VC, ANDUAT, Ayodhya; P. N. Singh, VC, BUAT, Banda; Mukesh Pandey, Vice-Chancellor, BU, Jhansi, graced this occasion. Shri Surya Pratap Shahi, Hon'ble Agriculture Minister, Government of Uttar Pradesh, and Adarsh Singh, Divisional Commissioner, Jhansi, inaugurated the mela as the chief guest (Fig. 15). The 98<sup>th</sup> Mann Ki Baat by the Hon'ble PM Narendra Modi was also live broadcast. Ashok Kumar Singh, in his address, said that this fair is being organised for the first time and there is a need to move forward in the direction of agriculture through water conservation, nutritious cereals, Kharif, onion, maize, groundnut, linseed cultivation through which the multidimensional goal can be achieved. Hon'ble MP Anurag Sharma emphasised the PM vision and said there is a need to promote healthy, nutritious grains, herbs, amla, napier grass, solar pump technology and ragi and its processed products like laddus. Surya Pratap Shahi advocated increasing awareness of modern farming practices, training, demonstrations, organic farming, soil health, green manure use, and Jayad cultivation promotion in UP and MP regions Bundelkhand so that farmers can increase their income. A total of eleven progressive farmers of UP and MP were honoured with certificates of appreciation for their excellent performance in agriculture and the allied sector. Krishi Mela Souvenir, Bulletin on the Possibilities of Beekeeping, Krishi Jeevan magazine and two books written and edited by the scientists of the University, i.e. Soil Improvement by Microbes, Concept & Methods of Agricultural Economics, was also released. The Department of F&H, Jhansi, UP, organised an attractive flower and fruit exhibition. Educational, research institutions and non-governmental agencies set up more than 80 stalls. During this mela, a cultural program was organised by the Bundelkhand Cultural Society.

## The Summit on Bundelkhand Agricultural Exports

The summit on Promoting Bundelkhand Agricultural Exports themed on "Strengthening of Value Addition Chain of Agricultural Products and Export Potential in Bundelkhand" was organized NABARD, APEDA, BCoC, played important roles. Vice-Chancellor Ashok Kumar Singh, Adarsh Singh, Junaid Ahmed, and Pulkit Garg were the prominent guests at the event. Four technical sessions were organised i.e. Potential of Agri-processing and Export, Scope for FPOs & Start-ups: technicality for Processing and Export, Scope for FPOs & Start-ups: Technicality for Processing and Export, Opportunities for Export of forest products, fruits, vegetables & medicinal Crops

Bundelkhand." During the mela, an Android-based mobile app-"Bundeli Krishi Vipnan", developed by the University, was also released. An MoU was signed between RLBCAU, Jhansi and Tarablooms Pvt. Ltd on this occasion. Shri Anna stall, RLBCAU and DWR Jabalpur stall secured first place in the educational institution category. The National Horticultural Research and Development Foundation (NHRDF), New Delhi, stood second, and Bundelkhand University got third place. In the category of KVKs, Shivpuri, M.P. KVK-Bharari, Jhansi, and KVK-Jalaun secured first, second and third place, respectively. Balini, Jhansi got first prize in the farmer group category, Manpura Mushroom Jhansi and Basant Mahila FPO stood second, and Bekar ko Aakar, Jhansi, got the third prize. In the private and NGO category, IFFCO got first, BAIF, UP second and Corteva Agri Science got third prize (Fig. 13).



Fig 13: Summit on promoting Bundelkhand agricultural exports

## Workshop on Indian Agriculture-Challenges and Opportunities

Under the joint auspices of Bhartiya Agro-Economic Research Center, New Delhi and RLBCAU, a two-day workshop was organized from 14-15 January, chaired by Adv. Pramod Chaudhary, President of BAERC. Makarand Karkare, Dinesh Kulkarni, Ss Manohar, Ashutosh Murkate, SK Dubey, SK Chaturvedi, and SS Singh. Hon'ble Vice-Chancellor, Ashok Kumar Singh shared his ideas over participatory research and extension activities (Fig. 14).



Fig. 14: Participants of the workshop Indian Agriculture-Challenges and Opportunities



Fig 15: Bundelkhand kisan mela

## Virtual Participation of Farmers in "Global Shri Anna Sammelan

Hon'ble Prime Minister, Shri Narendra Modi inaugurated the "Global Shree Anna Sammelan" on the theme, "One Earth, One Family and One Future" in New Delhi on 18<sup>th</sup> March, at Subramanian Hall, NAAC Complex, Pusa Campus. About 60 progressive farmers, members of FPOs and self-help groups of Jhansi districts associated with the production of Shree Anna cereals participated by connecting through the virtual classroom facility located at RLBCAU (**Yogeshwar Singh, AK Rai, Ashutosh Sharma.**)

## Training

- ❖ A 5-Day residential beekeeping training was organised by the Department of Entomology, CoA, sponsored by the National Bee Board (NBB), New Delhi, from 17<sup>th</sup> to 21<sup>st</sup> Jan. 2023, on the theme of "Bundelkhand mein madhumakhipalan ek bahuayamivyavassay". 25 farmers from different districts of the Bundelkhand region participated. A Hands-on training for the handling of bee colonies was also conducted. (**Usha, H Chand, DB Ahuja, S Pal, M Soniya, VK Mishra, Y Mishra, U Pankaj.**)
- ❖ A 4-Day training was provided to 30 farmers to boost onion production in the Bundelkhand region by RLBCAU in collaboration with the National Horticultural Research and Development Foundation (NHRDF), New Delhi, from 7 to 10 Feb. 2023. Farmers were trained in nursery and nutrient management, advanced cultivation technology, and techniques for maintaining soil health and soil fertility status. Onion and other vegetable seed kits were also distributed. (**Arjun Lal Ola, Gaurav Sharma, Sourabh Singh, Devesh Tiwari.**)
- ❖ A 6-Day Training program on "Nursery and Plantation Management in Agroforestry" was conducted between March 13-18, for farmers by the Department of Silviculture and Agroforestry, sponsored by RKVY. Farmers were imparted Hi-tech nursery techniques, plantation and management skill, dairy and livestock management, and land utilization. More than 50 farmers participated. (**Prabhat Tiwari, RP Yadav, Garima Gupta, MJ Dobriyal.**)
- ❖ A 4-Day Training on "Scientific Goat Farming" from 20-23<sup>rd</sup> Mar. 2023 was organised under the aegis of SCSP-ICAR-CAFRI. This was the first training on goats and more than 30 farmers, including 15 women, participated from Jhansi, Datia, and Jalaun districts. Experts of IGFR, CAFRI, ANDUAT and RLBCAU delivered lecture on scope of goat farming, suitable breeds, concentrate feed preparation, health care management, etc. Certificates were provided. (**Pramod**

**Kumar Soni, Ashutosh Sharma, Sanjeev Kumar, Ashish Kumar Gupta.**)

- ❖ A 2-Day training was organised for 50 Farmers of Karenga and Imliya villages of Lalitpur on campus from Mar. 21-22, 2023, under FLS SCSP wheat (IASRI, New Delhi). Hon'ble Vice Chancellor Dr A.K. Singh advised farmers to use chemical sprayers with precaution. Sprayers were distributed to 50 farmers. (**Gunjan Guleria, SK Singh, AK Rai.**)
- ❖ A 3-Day training on "Agro-Forestry Methods for Income Augmentation" was organised under SCSP-ICAR-CAFRI FLD on Agro-Forestry from Mar. 23-25, 2023 at the campus and 35 farmers were trained. Various aspects of agroforestry, including IFS, advanced techniques of selecting and managing multipurpose agroforestry trees, scientific techniques involved in fisheries, fish species of Bundelkhand, etc. were elaborated upon. (**Prabhat Tiwari, Garima Gupta, Prince Kumar.**)
- ❖ A farmers training on "Bundelkhand Kshetrame Dalhani Faslon ki Vaigyanik Kheti" was conducted at RLBCAU on March 23<sup>rd</sup> 2023, under SCSP-FLD funded by ICAR- IASRI-New Delhi and ICAR-CAFRI- Jhansi. 36 farmers participated, and the different aspects of pulses production were discussed, followed by distribution of mung bean variety virat, to farmers of 15 districts of Lalitpur and Jhansi. A technical bulletin on "Bundelkhand me Dalhanki Vaigyanik Kheti" was released by the Hon'ble Vice-Chancellor (**Ansuman Singh, Meenakshi Arya, Nishant Bhanu, Sunder Pal, Arpit Suryawanshi.**)
- ❖ 1-Day training entitled "Bundelkhand mein phoolon ki vyavsayikheti" under SCSP-CAFRI was organised at Village Imliya, Lalitpur, on 28<sup>th</sup> March 2023. 50 farmers participated, and Desi rose plants were distributed. Cultivation practices of marigold and important flowers, knowledge about nursery raising through seeds, planting and maintenance of marigold plants for better yield were emphasized. The training concluded with an overall focus on sustainable farming by incorporating horticultural crops, fisheries, and crops. (**Priyanka Sharma, Gaurav Sharma, BK Behera, Prince Kumar.**)
- ❖ Field day cum Training programme on "Production Technology of fruit crops in Bundelkhand region" 25<sup>th</sup> March 2023 was organised under the SCSP-ICAR-CAFRI plan for FLD on fruit crops at Imliya Village of Lalitpur district on 25 March 2023. During this program, about 50 farmers benefited from different fruit plants. Experts from University delivered a series of lectures. (**MJ Dobriyal, Gaurav Sharma, Ranjit Pal, Govind Vishwakarma.**)
- ❖ Under the SCSP programme of ICAR-IIPR Kanpur, a farm implements (sprayer) distribution and farmer-

scientist interface program was organized on 29<sup>th</sup> March 2023, where 60 SC beneficiaries from the Palinda village of Bavina block, district Jhansi participated. Vice-Chancellor Ashok Kumar Singh emphasised upon frequent farmer scientist interface and millet crop as an option for the health and climate resilience. **(Yogeshwar Singh, AK Rai, Ashutosh Sharma).**

- ❖ A Workshop on Personal Hygiene, Menstrual Health and Nutrition, supported by NAHEP was organised on 28 March, 2023, for female students and staff of RLBCAU. The Chief Guest and resource person, Sunita Rathore (Bahdoriya) enlightened the students on issues concerning sanitation and hygiene during menstruation and the need to evolve by overcoming stigmas and prejudices. She further elaborated upon PCOD and hormonal issues in women and the need for regular check-ups and self-care. Puneet Choudhari, Medical Officer, RLBCAU, delivered a talk on the significance of the workshop **(Alka Jain).**
- ❖ A workshop “Development of Soft Skills for Entrepreneurship among Agri-graduates” under National Agricultural Higher Education Project Component 2A. Funded by ICAR-National Academy of Agricultural Research Management, Hyderabad as Programme Co-Director, on 04/03/2023 at RLBCAU, Jhansi **(Ghan Shyam).**
- ❖ One day workshop on “Development of Soft Skills for Entrepreneurship Among Agri-Graduates (National Agricultural Higher Education Project Component 2a)” at Rani Lakshmi Bai Central Agricultural University, Jhansi in collaboration with ICAR-National Academy of Agricultural Research Management, Hyderabad on 4<sup>th</sup> March, 2023 **(Sunder Pal).**

### Field Days/Visit

- ❖ A field day was conducted on 19th January 2023 at Imliya village, District Lalitpur. Under FLD-SCSP Field pea. ICAR-IASRI where overall 47 farmers attended the field day comprising farmers across different economic strata. Insecticide Emamectin Benzoate, 5% SG, was distributed among the beneficiaries. **(A Singh, M Arya, AK Rai, V Singh, A Suryawanshi).**
- ❖ Under the SCSP FLD on Agroforestry (ICAR-CAFRI), a field day was organised on Jan. 28, 2023, at Karenga village, Lalitpur, to create awareness about the advantages of agro-forestry and selection of suitable tree types to encourage farmers to adopt agroforestry as an additional source of income. 50 male and female farmers participated. **(P Tiwari, G Gupta, P Kumar).**
- ❖ Field Day under AICRP Rapeseed-Mustard was organized on 2nd February 2023 in Rundkarari, Hastinapur and Simra villages. The farmers appreciated

the mustard variety Giriraj and RH-749 variety concerning the production despite the unfavourable rains. Under improved practices, a yield increase of 19.08 per cent was observed over local types with farmers' practices. Demonstration of Mobile Plant Health Clinic Van, drone technology, spot diagnosis of plant diseases, and soil testing was also done. **(S Trivedi, R Choudhary, VK Singh, A Sharma, A Shukla).**

- ❖ Field Day was organised under AICRP Chickpea and AICRP MULLaRP FLD at village SunauraKhiriya of district Tikamgarh (M.P.) on 25th Mar. 2023. Around 25 farmers attended the field day, and enquired about the disease and insect pests **(A Singh, M Arya, A Suryawanshi, N Bhanu, B Lal, AK Rai).**
- ❖ FLD SCSP (Wheat): Nano urea and herbicide were distributed among farmers of different villages under the FLD SCSP-CAFRI (Wheat) and FLD SCSP-IASRI (Wheat). Fertiliser and herbicide were distributed to 50 farmers of Imliya, Karenga, and 25 farmers of Larayta, Banwas, and Katili villages of MP under these programs. Two sprays of Nano urea and single spray of herbicide were distributed to farmers to increase farm productivity by adopting new practices of growing wheat **(G Guleria, SK Singh, A Rai, S Upadhyay).**
- ❖ Under the AICRP on Rapeseed and Mustard, 200 FLDs are conducted in Jhansi, Lalitpur and Niwari. A field day was organised at University Farm, Harshmau, Niwadi (M.P.) on 03 February 2023, and nearly 200 farmers participated. Hon'ble Vice Chancellor A. K. Singh emphasized on achieving higher mustard productivity and self-sufficiency in Oilseed production. Ashutosh Sharma demonstrated the use of drones in agriculture. **(R Choudhary, S Trivedi, S Shukla, Y Mishra, B Lal, A Gupta, A Suryavanshi, MK Singh).**
- ❖ Field Day under FLD SCSP wheat (CAFRI) was organised at Banwas village of Datia, MP and two field days under the programme FLD SCSP wheat (IASRI, New Delhi) were organised in Karenga and Imliya village of Lalitpur, on 28<sup>th</sup> March 2023. Keynote addresses on improved wheat production, government schemes for farmers, integrated pest management, integrated nutrient management, and soil management were delivered. **(G Guleria, SK Singh, AK Rai, S Upadhyay, V Mishra, S Pal, A Panda).**

### Cafeteria Visit

Date	Host Organisation/ Place	Number
19.01.23	Manjari Foundation	35 Women Farmers
25.01.23	Chitrakoot and Jhansi	40 Farmers
25.01.23	ICAR-IGFRI	50 farmers

06.02.23	Gramonnati Sansthan, Mahoba District, UP	40 Girls
08.02.23	Rajkiya High School, Ambabai, Jhansi (U.P.)	80 Students
09.02.23	Pandit DeenDayal Upadhyay Rajkiya Model Inter College	65 Students
04.03.23	ATMA, Chhatarpur (M.P.) under the DAESI	40 Trainees
16.03.23	Navsari, Gujrat,	100 Farmers
20.03.23	ATMA officials from Niwadi	7 Officials
27.03.23	Rajkiya Balika Inter College Ranipur, Baruasagar, Ranipur	60, 50, 200 Students
28.03.23	Rajkiya High School, Bhojla, Jhansi, U.P.	94 Students
30.03.23	Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur (JNKVV), Tikamgarh	35 Students
30.03.23	Rajkiya High School Bajoura, Village Bijnour Jhansi,	81 Students

	Hastinapur and Simra, Jhansi, UP	Sharma, Vaibhav Singh, Yogendra Mishra and Abhishek Shukla.
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### Farmer Outreach Project

Under the Outreach project, *i.e.* "Dissemination of quality seed for sustainable livelihood security of farmers of Scheduled Caste community of Bundelkhand region", funded by Education Planning and Home Science, ICAR, New Delhi, 4 field day trainings were organized in Simardha, Lalitpur (24<sup>th</sup> Jan, 2023) and Taricharkalan, Niwari (30<sup>th</sup> Jan, 2023) for creating awareness and training SC farmers and youth on quality seed production (Fig. 16). (SK Chaturvedi, R Choudhary, A Singh, Ru Khan, M Arya, AS Kushwaha)



Fig. 16: Dissemination of quality seed

### PHC van activities

Date	Place	Team
17 Jan	Choti Badoni and Sanora, Datia, MP	P. P. Jambhulkar, Vaibhav Singh, Anil Rai and Abhishek Shukla.
24 Jan	Simardha and Khaikhera, Lalitpur, UP	Meenakshi Arya, Anshuman Singh, Vaibhav Singh, Sundar Pal, Ashish Kumar Gupta and Abhishek Shukla
2 Feb	Rundkarari,	Shubha Trivedi, Ashutosh

