



**10 days Short Course
On**



**Pulses as the Climate Smart Crops
for Resource Conservation and Economic
Intensification/Diversification of Cropping Systems**

March 2-11, 2022

**Sponsored by
Indian Council of Agricultural Research (ICAR)
New Delhi**

**Course Director
Dr. Narendra Kumar
Principal Scientist & Head
Crop Production Division**

Course Coordinators

**Dr. Chaitanya Prasad Nath
Scientist (Agronomy)**

**Mr. Kali Krishna Hazra
Scientist (SS) (Agronomy)**



**Organized by
Division of Crop Production
ICAR– Indian Institute of Pulses Research
Kanpur 208 024 (U.P.)**



About the Institute

ICAR-Indian Institute of Pulses Research (IIPR) was established as national Institute by the Indian Council of Agricultural Research (ICAR) for basic, strategic and applied research on major pulse crops. The Institute is involved in generation of basic information, development of high yielding varieties and appropriate production and protection technologies, production of breeder seeds, demonstration and transfer of technologies, and strategic coordination of pulses research through wide network of testing centres across the country.

The Institute has its origin from the All India Coordinated Pulses Improvement Project (AICPIP) which was established at the Indian Agricultural Research Institute (IARI), New Delhi in 1966. Later in 1978, AICPIP was shifted to the Regional Station of IARI at Kanpur under the name of Project Directorate (Pulses). It was further elevated as Directorate of Pulses Research (DPR) in 1984 and became an independent entity under the umbrella of ICAR. In 1993, it was restructured as the Indian Institute of Pulses Research and the AICPIP was trifurcated into three coordinated projects one each on chickpea, pigeonpea and MULLaRP (mungbean, urdbean, lentil, lathyrus, rajmash and fieldpea). Since 1993, the Institute is playing a key role in strengthening nutritional security, soil health and sustainable production.

Vision:

Ensure self-sufficiency in pulse production and improve competitiveness through knowledge based technological interventions for improving nutritional security and sustainability of the production base.

Mandate:

To act as national centre for basic and applied research on pulse crops; To monitor, guide and coordinate research on pulses in the country; To impart training to scientists and extension workers engaged in pulses research and development. To foster national and international collaborations for exchange of views and material; To disseminate information on latest pulses production technology; To serve as an information bank on different aspects of pulses for strategic planning; To extend consultancy services and expertise.

About the Division

This Division comprises of major disciplines of Crop Production. Division of Crop Production is engaged in research and extension activities related to the cropping system, integrated nutrient, water and weed management and Resource Conservation.

Thrust Areas :

1. Resource use efficiency 2. Integrated crop management module for pulses in different cropping systems 3. Long-term effect of pulses in cropping systems on soil health and crop productivity 4. Resource Conservation Technology on Pulses in Rice Fallows 5. Farm mechanization suitable for pulses 6. Post-harvest technology and value addition in pulses.

Research achievements

- Intensification of efficient pulses based cropping systems (rice/bajra/maize/pigeonpea-wheat/chickpea-mungbean).
- Developed efficient pulse based intercropping systems.
- Standardized agro-technologies for early pigeonpea-wheat cropping system.
- Developed agro-technology for late chickpea, rabi rajmash, dwarf pea and late sown *kharif* mungbean.
- Established the need of sulphur, zinc, boron & molybdenum for balanced nutrition of pulse crops.
- Developed integrated weed management technology for pulses and its systems. New post-emergence herbicides were identified for pulses.
- The extra-early mungbean variety recommended for intensification of rice-wheat system in IGP.
- Standardized foliar spray of urea in pulses.
- Developed and marketed IIPR mini-dal mill for processing of pulses.
- Value added products were developed from pulse by-products.

Course Background

Food legumes/pulse crops have an important role in system productivity enhancement, carbon sequestration and improving the sustainability of major cereal based cropping systems through crop diversification and system intensification. Given the unique characteristics of deep root system, higher leaf fall, biological nitrogen fixation, and release of root exudates, grain legumes offer the potential option for improving soil health and ecosystem restoration. Presently, grain legumes are increasingly being advocated for diversifying cereal-cereal rotation with the objectives like minimizing the use of declining natural resources, improving soil quality, and maintaining the sustainability for long-term. To accomplish the target of sustainable agriculture, a proper planning and execution is utmost important. Research and development on understanding on climate resilient agriculture will pave the way of ecological sustainability. Over the past few years, a range of institutions have endorsed that pulse crops are integral component of climate resilient agriculture and sustainable intensification. To apply theoretical knowledge to the practical application requires skill development. This training will cover basic and applied techniques and instrument handling to develop the candidates with effective practical skills to improve the vision of applying the learned skills. This training will provide the participants not only with theoretical information but also practical experience in pulses systems and improved agro-techniques.

Objectives

- To keep the trainees abreast about the latest developments in the field of pulses research and development and advances in knowledge in pulses technologies.
- To provide hands-on exposure to the trainees on various aspects of pulse agronomy, pulse based systems and techniques used for technology development.

Eligibility

Master's Degree in any branch of Agricultural Sciences. The applicant should not be below the rank of Assistant Professor/Scientist and equivalent and should be working in Colleges/Universities/Agricultural Universities/KVKs/ICAR Institutes.

Travel

Travel Allowance to the participants will be paid for the journey, to and fro, as per their entitlement for the class of travel, restricted to the maximum of AC II tier rail fare by the shortest route. Participants are required to produce money receipt/ tickets in support of their claim. The reimbursement will be made as per ICAR guidelines. The candidates are advised to make their reservation in advance.

Boarding and lodging

Accommodation will be available on sharing basis in Institute Guest House at free of cost for trainees.

Duration of course: 10 days (March 2-11, 2022)

Last date to apply: 20 February, 2022

Number of participants: 25 (Twenty-five)

Address for Correspondence

Course Director

Dr. Narendra Kumar

Principal Scientist (Agronomy) & Head (Acting)

Division of Crop Production

ICAR- Indian Institute of Pulses Research

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Course Coordinators

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How to apply

- Visit the website <https://cbp.icar.gov.in>. or Click on 'Capacity Building Program' link at <http://www.icar.org.in>.
- Login using your User Id and Password. To create User Id use "Create New Account" link and fill required information to register.
- After login, click on "Participate in Training" link
- Select the particular training programme and fill the proforma online.
- Take a printout of filled application proforma and sign it.
- Get it signed by competent authority.
- Upload approved scanned copy of the application on the above CBP Portal.
- Send approved application duly forwarded by the competent authority by post to Dr. Narendra Kumar; Course Director, ICAR-Short Course, Head, Division of Crop Production ICAR- Indian Institute of Pulses Research, Kalyanpur, Kanpur 208 024 (U.P.) along with Postal Order/Bank Demand Draft of Rs. 50/- as registration fee (nonrefundable) in favor of [ICAR Unit, IIPR Kanpur](#).

About the city

Kanpur is a metropolitan city in the state of Uttar Pradesh in India. Founded in 1803, Kanpur became one of the most important commercial and military stations of British India, Nestled on the banks of Ganges River. ICAR-Indian Institute of Pulses Research (IIPR, Hindi: भा. कृ. अनु. प.- भारतीय दलहन अनुसन्धान संस्थान) is situated on Grand Trunk Road and is about twelve kilometer from Kanpur Central Railway Station towards New Delhi. The overall climate varies from semi-arid to sub-humid and mean annual rainfall ranges from 800 to 1000 mm.

REGISTRATION FORM

ICAR Short Course

On

Pulses as the Climate Smart Crops for Resource Conservation and Economic Intensification/Diversification of Cropping Systems

1. Name:
2. Designation:
3. Present employer and address:
4. Address for correspondence :
5. Telephone:.....Mob:.....
6. Email:
7. Date of birth:
8. Sex:
9. Educational Qualification (Graduation onwards):

Degree	Year	University	OGPA/Division

10. Teaching/Research/Professional Experience (Post held during last five 5 years and number of publications):

Post Held	Institution	Period	Publications

11. Mention if you have participated in any research seminar/summer/winter school/short course etc. during the previous years under ICAR/other organizations

Training/Short Course	Year	Duration	Organizing Institute

It is certified that all the information furnished by me is true to the best of my knowledge.

Date:

Signature of applicant

Recommendation of forwarding authority with seal: