

Department Profile

Department Name: Department of Crop Physiology

Established in 1978 with the establishment of College of Agriculture

P.G Program Started from - 1981

Ph.D. Program Started from-1985

This is one of the premier departments of the faculty of Agriculture and has been making significant contribution to knowledge of various aspects of Crop Physiology, both in teaching, research and farmers oriented extension programmes since 1978.

The teaching activity includes courses towards B.Sc. (Ag) and M.Sc. (Ag) degrees and Ph.D. programmes. Most of the students of the department are well placed in either national or international research institutions, state departments of agriculture and in the private sector and have continued to exhibit high standards of performance and excellence.

Objectives-

- To produce, scientifically and technically trained sound Crop Physiology and postgraduate human resource, who could take over the responsibility and challenges of Crop Physiology in future
- To work out the role of abiotic stresses (submergence, salinity, drought and high temperature), plant growth regulators & nutrients, chemical regulation of plant growth and herbicide physiology.
- To update the knowledge of teachers /scientists ofSAUs and ICAR institutes and other organization & across the country in important and innovative areas of Plant Physiology under Center of Advance Faculty Training (CAFT).

GOAL

Our goal is to ensure food and nutritional security of the present and future generations.

MISSION

Our mission is to develop and disseminate eco-friendly production technologies to enhance productivity and profitability of crops.

MANDATE

Conduct basic, applied and adaptive research on crop improvement and resource management for increasing and stabilizing rice productivity in rain fed rice ecosystems with special emphasis on rainfed ecosystem and the related abiotic stresses.

- Generation of appropriate technology through applied research for increasing and sustaining productivity and income from cereals and cropping/farming systems in all the ecosystems in view of decline in per capita availability of land.
- Collection, evaluation, conservation and exchange of rice and wheat germplasm and distribution of improved plant materials to different national and regional, research centers
- Characterization of rice environment in the eastern Uttar Pradesh and evaluation of physical, biological, socio-economic and institutional constraints to rice production under different agro-ecological conditions and in farmers' situations and develop remedial measures for their ameliorate.

Facilities Available for Teaching FACILITIES AVAILABE FOR TEACHING:-

- 1- One classroom with ICT Tool
- 2- One General Classroom
- 3- One Seminar room with ICT Tools
- 4- Two Lab for UG Students, One Lab for PG and one well equipped Molecular Lab for PG/PhD students.
- 5- One Advance Molecular Lab for PG/PhD students
- 6- Well equipped library with more than 300 books/ reading materials

Faculty Strength:

S N	Teaching/ Research	Professor			Associate Professor			Assistant Professor/Upgraded Assoc. Professor			Faculty recommended by the ICAR/UGC/VCI/ Other regulatory bodies
		Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant	
1.	Teaching	1	-	1	1	-	1	1	1	-	
2.	State Non plane	-	-	-	-	-	-	1	1	-	
3.	Associated faculty	-	-	-	-	-	-	-	2	-	
4.	Guest Faculty	-	-	-	-	-	-	-	1	-	
Total		1	-	-	1	-	-	2	5	-	

Faculty Details

1.	Dr. A.K. Singh	Professor, Crop Physiology
2.	Dr. R.K.Yadav	Professor, Crop Physiology/ Shodh Yojna U.P.
3.	Dr. Raj Bahadur	Professor, Crop Physiology/ TA Dean Collage of Agriculture
4.	Dr. Shambhoo Prasad	Professor, Crop Physiology
5.	Dr. Alok Kumar Singh	Assistant Professor, Crop Physiology

Technical and Supporting Staff:

S.N.	Teaching/ Research	Technical / Ministerial			IV Class		
		Sanctioned	Filled	Vacant	Sanctioned	Filled	Vacant
1.	Teaching	5	5	-	1	1	-
2.	State Non plan	1	1	-	1	1	-
Total		6	6	-	2	2	-

LIST OF MAJOR EQUIPMENTS-

List of Major Equipments in Laboratories

SN	Name of Equipments	No. of equipment
1.	Centrifuge Machine	2
2.	Electronic balance	2
3.	Chainometric balance	5
4.	Flame photometer	2
5.	Leaf area meter	1
6.	Chlorophyll meter	1
7.	Microscope	1
8.	Low term cabinet	
9.	Oven	2
10.	pH meter	1
11.	Conductivity meter	1
12.	Spectrophotometer Shimadzu	1
13.	LCD	2
14.	Computer	3
15.	Photocopier Machine	2

b) List of Farm Facilities:

S.N.	Name of implements	No, of Implements
1.	Submergence pond	4
2.	Net House	2
3.	Spade	3
4.	Sickle	3
5.	Submersible pump	1
6.	Earthen pot	500

Details of Faculty, Department of Crop Physiology ANDUAT, Kumarganj, Ayodhya, (UP)

<p>Dr A.K.Singh Professor/Head Department of Crop Physiology Mail Id- assinghkumar3.agri@gmail.com Contact- 09415720338, 07880465691</p>	
<p>Dr Shambhoo Prasad Professor Department of Crop Physiology Mail Id- shambhoonduat@gmail.com Contact- 09450766603, 8858280955</p>	
<p>Dr R.K.Yadav Professor Department of Crop Physiology Mail Id- drkyadavnduat@gmail.com Contact- 09415717080</p>	
<p>Dr. Raj Bahadur Professor Department of Crop Physiology Mail Id- drraj2036@gmail.com Contact- 09450764018</p>	
<p>Dr. Alok Kumar Singh Assistant Professor Department of Crop Physiology Mail Id- aloksingh.agri@gmail.com Contact- 09450045391</p>	

COURSES UNDER UG PROGRAMME:-

UG PROGRAM-

Ist Semester

S.N.	Course Code	Course Title	Credit Hours	Instructor Name
1	CP 111 (H)	Introductory Crop Physiology	2 (1+1)	Dr R K Yadav Dr Alok Kumar Singh
II nd Semester				
1	CP-121	Fundamental of Crop Physiology	2 (1+1)	Dr Alok Kumar Singh
2	CP 121 (H)	Growth and Development of Horticultural Crops	2 (1+1)	Dr Alok Kumar Singh Dr R K Yadav
PG PROGRAM				
I st Semester				
1	PP 501*	Principles of Plant Physiology-I: Plant Water Relations and Mineral Nutrition	3 (2+1)	
2	PP 502*	Principles of Plant Physiology-II: Metabolic Processes and Growth Regulation	3 (2+1)	
3	PP 599	Master's Research	Variable	Major Advisor
II nd Semester				
1	PP 504	Physiological and Molecular Responses of Plants to Abiotic Stresses	3 (2+1)	Dr A K Singh Dr Alok Kumar Singh
2	PP 505	Hormonal Regulation of Plant Growth and Development	3 (2+1)	Dr R K Yadav Dr Alok Kumar Singh
3	PP 506	Physiological and Molecular Mechanisms of Mineral Nutrient Acquisition and their Functions	3 (2+1)	Dr Alok Kumar Singh Dr R K Yadav
4	PP 599	Master's Research	Variable	Major Advisor
III rd Semester				
1	PP 503*	Plant Developmental Biology: Physiological and Molecular Basis	3 (2+1)	
2	PP 510*	Seed Physiology	3 (2+1)	
4	PP 599	Master's Research	Variable	Major Advisor
IV th Semester				
1	PP 599	Master's Research	Variable	Major Advisor

2	PP 591	Master's Seminar	1 (1+0)	Dr A K Singh
Ph.D. Programme				
I st Semester				
	PP 601	Functional Genomics and Genes Associated with a Few Physiological Processes		Dr A K Singh Dr S Prasad
	PP602	Signal Perceptions and Transduction and Regulation of Physiological Processes	2 (2+0)	Dr Alok Kumar Singh Dr A K Singh
	PP 692	Doctoral Seminar II	1(1+0)	Dr A K Singh
	PP 699	Doctoral Research	Variable	Variable
Ph.D. Programme				
II nd Semester				
1	PP 607	Physiological and Molecular Aspects of Source sink Capacity for Enhancing Yield	3(3+0)	Dr A K Singh Dr R K Yadav
2	PP 608	Seed and Fruit Growth and their Quality Improvement	2(2+0)	Dr Alok Kumar Singh Dr A K Singh
3	PP 692	Doctoral Seminar II	1(1+0)	Dr A K Singh
4	PP 699	Doctoral Research	Variable	Variable

RESEARCH PROJECT ONGOING

INTERNATIONAL PROJECTS:

➤ **Stress Tolerant Rice for Poor Farmers in Africa & South Asia (STRASA)**

❖ Submergence

❖ Salinity

❖ **Aims and Objective:**

- Develop and evaluate the crop and natural resource management practices for stress tolerant rice varieties in rainfed lowland environment of eastern Uttar Pradesh.

➤ **European Commission of International Fund for Agriculture Development (Ec-IFAD)**

❖ **Aims and Objective:**

- Development of crop and nutrient management practices for recently released stress tolerant varieties.

➤ **AGGRi- Alliance (IRRI Funded Project)**

❖ **Aims and Objective:**

- Develop and evaluate the crop and natural resource management practices for stress tolerant rice varieties in rainfed lowland environment of eastern Uttar Pradesh.

NATIONAL PROJECTS:

➤ **Centre of Excellence for Rice (COEFR)**

❖ **Aims and Objective:**

1. Establishment of laboratory and field lab facilities
2. Development of Climate change resilient rice varieties highly stable in yield across existing rice ecosystem of eastern Uttar Pradesh.
3. To improve and conserve indigenous rice cultivar and technologies.
4. To generate scientific information regarding existing rice ecosystem of Uttar Pradesh, to improve the productivity of rainfed ecosystem through multi-disciplinary approaches.

Achievements of Department:-

- Published more than 200 research papers in different reputed scientific journals.
- Published more than 10 Books/Edited books for researcher and students.
- Published more than 20 laboratory manuals for Students/Researcher
- Published more than 100 popular articles in different magazine.



Seminar Deliver by Student



Students Trails Visited by Advisory Committee



Team Syngenta India Ltd.at MES Farm Visited Team IRRI, Varamasi Team at COE- Rice



Field Visit with US Delegates at Centre of Excellence for Rice



Field Visit with Hon'ble Vice Chancellor and ACIRP-Rice Team at Centre of Excellence for Rice



Practical Examination



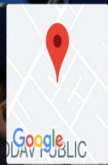
Practical Classes of PG/Ph.D. students



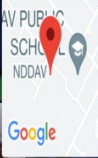
Participation in Akashwani Talk in Krishi Darshan Programme



Kumarganj, Uttar Pradesh, India
 GRVQ+QGH, Market, opposite to N D University, Kumarganj,
 Uttar Pradesh 224229, India
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 Long 81.837976°
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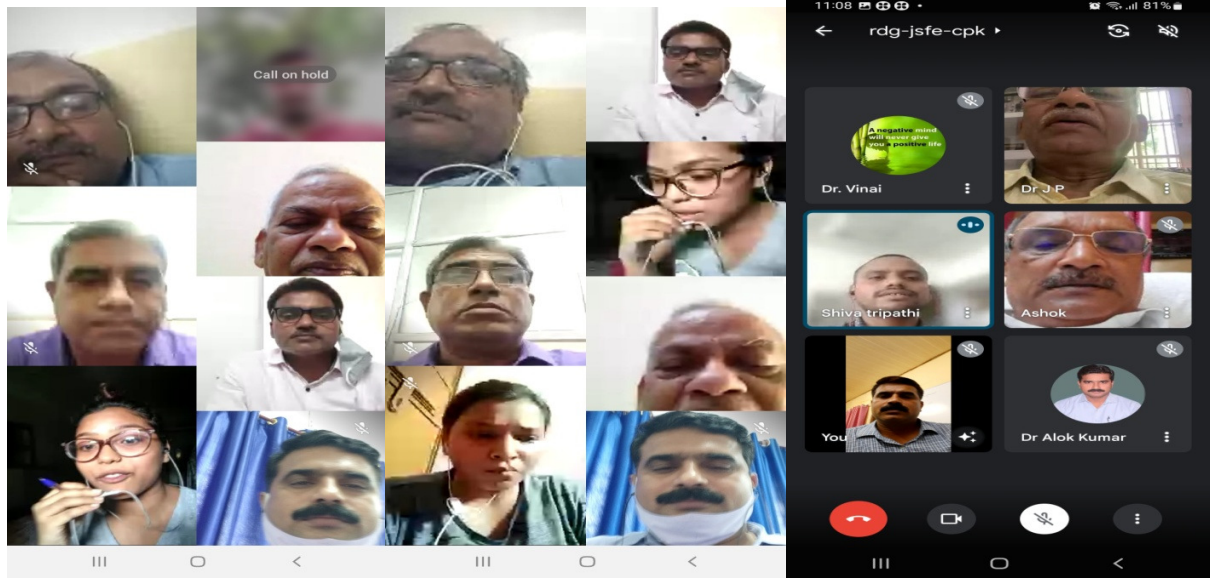


Kumarganj, Uttar Pradesh, India
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 Uttar Pradesh 224229, India
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 Long 81.838659°
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Two Days Farmers Training Program



Online Thesis Vive-voce



Student Reading in Departmental Library



Students Orientation Program

News Coverage by Different Print Media

शोध परियोजनाओं से गुणवत्तायुक्त फसल की होगी पैदावार

अयोध्या। आचार्य नरेंद्र देव कृषि एवं प्रौद्योगिकी विश्वविद्यालय में अंतरराष्ट्रीय धान अनुसंधान केंद्र द्वारा पोषित परियोजनाओं के शोध कार्यों का अवलोकन किया गया। विश्वविद्यालय पहुंचे अंतरराष्ट्रीय धान अनुसंधान केंद्र वाराणसी के वरिष्ठ वैज्ञानिक डॉ. आशीष कुमार श्रीवास्तव एवं फसल कार्यकी विभाग के वैज्ञानिकों द्वारा अनुसंधान फॉर्म पर अवलोकन किया गया। अंतरराष्ट्रीय अनुसंधान केंद्र के वैज्ञानिक डॉ. आशीष श्रीवास्तव ने कहा कि कहीं कम व अधिक वर्षा से जलभराव के कारण किसान परेशान रहते हैं, इस समस्या को विश्वविद्यालय के साथ मिलकर जल्द दूर किया जाएगा। उन्होंने कहा कि किसानों को गुणवत्तायुक्त प्रजातियों के खाद्यान व तकनीक हेतु प्रयास किया जा रहा है। विश्वविद्यालय के साथ मिलकर कई शोध परियोजनाओं पर कार्य किया जा रहा है जो उच्च गुणवत्तायुक्त फसलों के उत्पादन में मदद करेगा। डॉ. आशीष ने विभाग में चल रही परियोजना सेंटर फॉर एक्सिलेंस के शोध कार्यों का भी अवलोकन किया और कार्यों की प्रशंसा की। उन्होंने कुलपति डॉ. बिजेन्द्र सिंह व मुख्य अन्वेषक के मार्गदर्शन में हो रहे कार्यों की प्रशंसा करते हुए कहा कि आने वाले समय में इस सेंटर से पूर्वांचल के किसानों को धान की उच्च कोटि की प्रजातियां मिलेंगी। इस दौरान फसल कार्यकी विभाग के वैज्ञानिक डॉ. आलोक सिंह द्वारा परियोजनाओं के प्रगति एवं उनके विभिन्न कार्यों के साथ साथ परियोजना द्वारा किसानों के बीच किए जाने वाले कार्यों से अवगत कराया गया। इस इस मौके पर फसल कार्यकी विभाग के वैज्ञानिक डॉक्टर रामकल्प यादव, डॉ. आनंद कुमार पांडेय, डॉ. सुमंत कुमार सिंह व अंकित सिंह सहित आदि लोग मौजूद थे।



हिंदुस्तान, 11.09.2022

शोध से गुणवत्तायुक्त फसल की होगी पैदावार

अवलोकन

मिल्कीपुर, संवाददाता। आचार्य नरेंद्र देव कृषि एवं प्रौद्योगिकी विश्वविद्यालय कुमार्गंज में अंतरराष्ट्रीय धान अनुसंधान केंद्र से पोषित परियोजनाओं के शोध कार्यों का अवलोकन किया गया। विश्वविद्यालय पहुंचे अंतरराष्ट्रीय धान अनुसंधान केंद्र वाराणसी के वरिष्ठ वैज्ञानिक डॉ. आशीष कुमार श्रीवास्तव एवं फसल कार्यकी विभाग के वैज्ञानिकों ने अनुसंधान फॉर्म का अवलोकन किया। अंतरराष्ट्रीय अनुसंधान केंद्र के वैज्ञानिक डॉ. आशीष श्रीवास्तव ने कहा कि कहीं कम व अधिक वर्षा से जलभराव के कारण किसान परेशान रहते हैं। इस समस्या को विश्वविद्यालय के साथ मिलकर जल्द दूर किया



अनुसंधान कार्यों का निरीक्षण करते अतिथि वैज्ञानिक।

जाएगा। उन्होंने कहा कि किसानों को गुणवत्तायुक्त प्रजातियों के खाद्यान व तकनीक के लिए प्रयास किया जा रहा है। विश्वविद्यालय के साथ मिलकर कई शोध परियोजनाओं पर कार्य किया जा रहा है, जो उच्च गुणवत्तायुक्त फसलों के उत्पादन में मदद करेगा। डॉ. आशीष ने विभाग में चल रही परियोजना

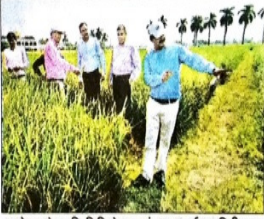
सेंटर फॉर एक्सिलेंस के शोध कार्यों का भी अवलोकन किया और कार्यों की प्रशंसा की। इस मौके पर फसल कार्यकी विभाग के वैज्ञानिक डॉ. रामकल्प यादव, डॉ. आनंद कुमार पांडेय, डॉ. सुमंत कुमार सिंह व अंकित सिंह सहित अन्य मौजूद रहे।

अमर उजाला, 11.09.2022

बेहतर व उपयोगी फसल के लिए शोध जरूरी

संवाद न्यूज एजेंसी

कुमारांज, अयोध्या। आचार्य नरेंद्र देव कृषि एवं प्रौद्योगिकी विश्वविद्यालय में शनिवार को अंतरराष्ट्रीय धान अनुसंधान केंद्र वाराणसी द्वारा पोषित परियोजनाओं के शोध कार्यों पर गहन चर्चा हुई। इस दौरान विश्वविद्यालय पहुंचे केंद्र के वरिष्ठ वैज्ञानिक डॉ. आशीष कुमार श्रीवास्तव एवं फसल कार्यकी विभाग के वैज्ञानिकों द्वारा अनुसंधान फॉर्म का निरीक्षण भी किया गया। कृषि विज्ञानियों ने कहा कि शोध परियोजनाओं के माध्यम से ही गुणवत्तायुक्त फसलों की पैदावार संभव है। डॉ. आशीष श्रीवास्तव ने बताया कि



अयोध्या के कृषि विधि के अनुसंधान फार्म का निरीक्षण करते वैज्ञानिक। - संवाद

किसानों को गुणवत्तायुक्त प्रजातियों के बारे में जानकारी देने के लिए नियमित तौर पर जागरूकता कार्यक्रमों का आयोजन भी किया जाना चाहिए। इस दौरान फसल कार्य की विभाग के वैज्ञानिक डॉ. आलोक सिंह ने संचालित परियोजनाओं की प्रगति के साथ किसानों को मुहैया कराया जा रही सुविधाओं के बारे में भी बताया।

शोध परियोजनाओं से गुणवत्तायुक्त फसल की होगी पैदावार

अमर भारती ब्यूरो

मिल्कीपुर। आचार्य नरेंद्र देव कृषि एवं प्रौद्योगिकी विश्वविद्यालय में अंतरराष्ट्रीय धान अनुसंधान केंद्र द्वारा पोषित परियोजनाओं के शोध कार्यों का अवलोकन किया गया। विश्वविद्यालय पहुंचे अंतरराष्ट्रीय धान अनुसंधान केंद्र वाराणसी के वरिष्ठ वैज्ञानिक डॉ. आशीष कुमार श्रीवास्तव एवं फसल कार्यकी विभाग के वैज्ञानिकों द्वारा अनुसंधान फॉर्म पर अवलोकन किया गया।

अंतरराष्ट्रीय अनुसंधान केंद्र के वैज्ञानिक डॉ. आशीष श्रीवास्तव ने कहा कि कहीं कम व अधिक वर्षा से जलभराव के कारण किसान परेशान रहते हैं, इस समस्या को विश्वविद्यालय के साथ मिलकर जल्द दूर किया जाएगा।

उन्होंने कहा कि किसानों को गुणवत्तायुक्त प्रजातियों के खाद्यान व तकनीक हेतु प्रयास किया जा रहा है। विश्वविद्यालय के साथ मिलकर कई शोध परियोजनाओं पर कार्य किया जा रहा है जो उच्च गुणवत्तायुक्त फसलों के उत्पादन

• वैज्ञानिकों द्वारा अनुसंधान फार्म का किया गया अवलोकन

में मदद करेगा। डॉ. आशीष ने विभाग में चल रही परियोजना सेंटर फॉर एक्ससीलेस के शोध कार्यों का भी अवलोकन किया और कार्यों की प्रशंसा की।

उन्होंने कुलपति डा. बिजेन्द्र सिंह व मुख्य अन्वेषक के मार्गदर्शन में हो रहे कार्यों की प्रशंसा करते हुए कहा कि आने वाले समय में इस सेंटर से पूर्वांचल के किसानों को धान की उच्च कोटि की प्रजातियां मिलेंगी। इस दौरान फसल कार्यकी विभाग के वैज्ञानिक डॉ. आलोक सिंह द्वारा परियोजनाओं के प्रगति एवं उनके विभिन्न कार्यों के साथ साथ परियोजना द्वारा किसानों के बीच किए जाने वाले कार्यों से अवगत कराया गया। इस इस मौके पर फसल कार्यकी विभाग के वैज्ञानिक डॉक्टर रामकल्प यादव, डॉ. आनंद कुमार पांडेय, डॉ. सुमंत कुमार सिंह व अंकित सिंह सहित आदि लोग मौजूद थे।

शोध परियोजनाओं से गुणवत्तायुक्त फसल की होगी पैदावार

अयोध्या। आचार्य नरेंद्र देव कृषि एवं प्रौद्योगिकी विश्वविद्यालय में अंतरराष्ट्रीय धान अनुसंधान केंद्र द्वारा पोषित परियोजनाओं के शोध कार्यों का अवलोकन किया गया। विश्वविद्यालय पहुंचे अंतरराष्ट्रीय धान अनुसंधान केंद्र वाराणसी के वरिष्ठ वैज्ञानिक डॉ. आशीष कुमार श्रीवास्तव एवं फसल कार्यकी विभाग के वैज्ञानिकों द्वारा अनुसंधान फॉर्म पर अवलोकन किया गया। अंतरराष्ट्रीय अनुसंधान केंद्र के वैज्ञानिक डॉ. आशीष श्रीवास्तव ने कहा कि कहीं कम व अधिक वर्षा से जलभराव के कारण किसान परेशान रहते हैं, इस समस्या को विश्वविद्यालय के साथ मिलकर जल्द दूर किया जाएगा। उन्होंने कहा कि किसानों को गुणवत्तायुक्त प्रजातियों के खाद्यान व तकनीक हेतु प्रयास किया जा रहा है। विश्वविद्यालय के साथ मिलकर कई शोध परियोजनाओं पर कार्य किया जा रहा है जो उच्च गुणवत्तायुक्त फसलों के उत्पादन में मदद करेगा। डॉ. आशीष ने विभाग में चल रही परियोजना सेंटर फॉर एक्ससीलेस के शोध कार्यों का भी अवलोकन किया और कार्यों की प्रशंसा की। उन्होंने कुलपति डा. बिजेन्द्र सिंह व मुख्य अन्वेषक के मार्गदर्शन में हो रहे कार्यों की प्रशंसा करते हुए कहा कि आने वाले समय में इस सेंटर से पूर्वांचल के किसानों को धान की उच्च कोटि की प्रजातियां मिलेंगी। इस दौरान फसल कार्यकी विभाग के वैज्ञानिक डॉ. आलोक सिंह द्वारा परियोजनाओं के प्रगति एवं उनके विभिन्न कार्यों के साथ साथ परियोजना द्वारा किसानों के बीच किए जाने वाले कार्यों से अवगत कराया गया। इस इस मौके पर फसल कार्यकी विभाग के वैज्ञानिक डॉक्टर रामकल्प यादव, डॉ. आनंद कुमार पांडेय, डॉ. सुमंत कुमार सिंह व अंकित सिंह सहित आदि लोग मौजूद थे।



Faculty Details

Profile Summary of Dr Ashok Kumar Singh
Head Department of Crop Physiology
Acharya Narendra Deva University of Agriculture and Technology, Kumarganj Ayodhya
(UP0 India)

D.O.B : 15th February, 1963
Nationality : Indian
Contact : +91-9415720338
Mail Id : assinghkumar3@gmail.com

Area of Specialization: Stress Physiology, Nutrition Physiology & Production Physiology

Profile summary:

- Have good ability to interact and collaborate with public and private sector institutions.
- Seeking a challenging position in developing and disseminating Agro-techniques that would entail building multi-skilled work force which enable the institution to develop its compatibilities to compete in today's global challenges.
- Served various post of Administration..
- Identified/ evaluated and developed many rice genotypes with multidisciplinary approaches for multi ecological conditions.
- Possessing strong technical experience as technical Associate in Rainfed lowland research rice consortium since 1991-2001 (IRRI Philippines, Collaborative Projects), and actively co-ordinated other international projects funded by ACICAR-Australia, European Commission Brussels Netherland and Rockefeller foundation for Genetic improvement of rice through physiological & molecular approaches.
- “Physiological Approaches for Genetic Improvement for waterlogging tolerance in wheat crop under sodic condition (ACIAR- Australia), coordinate research activity, GxE interaction, IRRI sponsored and
- Coordinated 06 Advance training program for SAU's and ICAR Scientist, sponsored by ICAR – UNDAP, New Delhi, India.
- **Principal Investigator for “Development of Nursery Nutrient Management option to enhance survival, recovery and yield of SUB1 rice” varieties.** RKVY funded project from 2009-2013.
- Conscientious, quality oriented, self motivated and team spirited.

Personal objectives:

To utilize my skill and Knowledge in our reputed institute to gain research experiences.

- M.Sc. (Ag.) Bot., Ph.D (Crop Physiology)
- The work done during (1987-91) Ph.D. programme on ‘**Physiological Studies on Sodic tolerance in *Linum usitatissimum* L.**’

- **Stress Physiology** (Drought tolerance, Flooding and Submergence tolerance, Sodicity)

Special Contribution

- NDR 8002 Rice varieties have been released for rainfed lowland rice ecosystem by Varietal Identification Committee during (CVRC) 2004-05. This variety was based on physiological traits.
- Team Member of Swarna Sub1 (Unnat Swarna) rice variety released by U.P. State Government Release committee, 2009
- Team member of Sambha Sub1 rice variety released by U.P. State release committee, 2012

Professional Experience:

1. Director Administration & Monitoring
2. Administrative Office
3. Assistant Administrative Officer 09 May 2016 to 19 Feb 2018
4. Nodal Officer Legal Cell
5. Nodal Coordinator ANDUAT, Kumarganj Ayodhya and International Rice Research Institute, Manila, Philippines.
6. Nodal Officer Legislative Assembly Election UO 2017
7. Nodal Officer IGRS Portal 27 October 2016
8. Member of Guest Faculty Selection First Semester College of Agriculture 2019-20 Session
9. Member of Guest Faculty Selection First Semester College of Agriculture 2022-23 Session
10. Member of Guest Faculty Selection First Semester College of Veterinary Science and Animal Husbandry 2022-23 Session
11. Vice President Co-Operative Society, ANDUAT, Ayodhya
12. Nodal Officer ZEM Portal
13. In charge- Department of Crop Physiology, ANDUAT Kumarganj, Ayodhya (UP)
14. Head- Department of Crop Physiology, ANDUAT Kumarganj, Ayodhya (UP)
15. Director Centre of Advance Faculty Training Funded by ICAR

Book Published:

1. Physiological Basis of Crop Production & Improvement

Edited by: *G.S.Chaturvedi, P.C.Ram, A.K.Singh*

Avishkar Publisher, Distributors; Jaipur, ISBN 978-81-7910-286-2

2. Drought and Rice under Rainfed Ecosystem

Edited by: *Dr. Arvind Kumar, Prof. Padmakar Tripathi, Dr A.K.Singh*

LAMBER, Academic Publisher; ISBN 978-3-659-49923-4

3. Assessment of Rice under Rainfed Ecosystem

Edited by: *Alok Kumar Singh, Ashok Kumar Singh, G.S.Chaturvedi*

Scholar Press, Germany, ISBN; 978-3-369-70741-0

4. Effect of Organic and Inorganic Fertilizers on “Klanamak” Rice

Edited by: *Pradeep Kumar, A.K.Singh, Sweta Verma*
Scholar Press, Germany, ISBN:978-3-639-71591-0

Project Handled as PI & Part of Team

1. Active member of Rockefeller Foundation Project “**Improving Drought Tolerance in Rice Through Marker Assisted Selection**” 2002-2005.
2. Active team member (Physiology group) of the **RLRRC, IRRI** collaborative project, since 1991-2001.
3. Co-PI of the G x E interaction studies in rainfed lowland rice ecosystem. Site of project included India (Faizabad), Indonesia, Bangladesh, Thailand and Philippines.
4. Team member of Physiological Approaches for Genetic Improvement for Waterlogging Tolerance in Wheat under sodic condition (ACIAR-Australia collaborative project) during 1999-2001.
5. Team member of participatory Breeding project sponsored by IRRI, Manila Philippines, during 1999-2001.
6. Co-PI of Submergence Group of BMGF and IFAD under STRASSA phase IIInd (2008-20013) NDUAT and IRRI Collaborative project
7. PI for project entitled “Development of nursery nutrient management option to enhance survival, recovery and yield of SUB1 rice varieties. IRRI collaborated funded by RKVY,India
8. Project Investigator of “STRASSA PHASE III”, IRRI Funded Project (2014-2019).
9. Project Investigator of Future Rained lowland rice system in Eastern Uttar Pradesh(2014)

ANNEXTURE 04 (National Training Organized/Attended)

Training Organized:

1. **Course Director-** training on “Physiological & molecular basis of flood tolerance” 07-27 November, 2005.
2. **Course Director-** training on “Harnessing productivity potential of salt affected areas: physiological and molecular approaches” 04-24 December, 2007.
3. **Course Director-** training on “sustainable improvement in productivity under stress environments” 20 Nov.- 11 Dec. 2008.
4. **Course Director-** training on “Crop improvement under submergence and salt stress environment: physiological and molecular approaches” 04-23 January, 2011.

5. **Course Director-** training on “Physio-Molecular Approaches for Improving Abiotic Stress Tolerance and Sustaining Crop Productivity” 17 Sept.-07 Oct., 2012.
6. **Course Director-** training on “Climate Change and Abiotic Stresses” 11 Sept.-01 Oct. 2013.

Award and Honor:

1. Dr.A.K. Singh, Assoc. Professor, received **Eminent scientist** of the year award – 2015 from National Environmental Science Academy, New Delhi- 110019
2. Dr.A.K. Singh, Assoc. Professor, received **Eastern India Rainfed Lowland Shuttle Breeding Network** celebrating 25 years of research accomplishments awarded to Narendra Deva University of Agriculture & Technology (NDUAT) Faizabad, U.P. for remarkable contribution in germplasm development & exchange.

Special Contribution

- Rice varieties released through multi disciplinary approaches for improving productivity of flash flood rice ecosystem.
- Rice varieties developed which have strong physiological background are NDR 8002, Swarna Sub1(Unnat Swarna), NDR-9436 Sub1. These varieties are boon for poor farmers of eastern UP.

Research Publication:

❖ Edited Book Published with ISBN No.	: 04
❖ Book Chapters Published with ISBN No.	:10
❖ Research Published in International Training/Visit	:08
❖ Projects in Hand as PI	: 03
❖ Projects in Handled as PI& Part of Team	: 09
❖ Training Organized/Attended	: 10
❖ Ph.D. Students Guided	:12
❖ M.Sc. Students Guided	:35
❖ Research (2012 onward) Publication in International Journals	:32
❖ Research Publication in National Journals	:17
❖ Research Publication in Proceeding/Extended Summery	:34
❖ Popular articles published in reputed magazine	:02
❖ Contribution in Variety Development	:03
❖ Gotten Award/Honor	:02

Teaching

- ⇒ Working as ‘**Associate Professor**’ at Department of Crop Physiology, Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya (UP) INDIA.
- ⇒ Sound knowledge of Teaching and Research in Crop Physiology.
- ⇒ Effective communication skills to conduct classroom teaching.

- ⇒ Create positive environment in classroom teaching, inspiring students to be curious, to attain their objectives.
- ⇒ High level of flexibility to teach students up to their way of acceptance.
- ⇒ Have very good patience and empathy during classes to provide support, encouragement and guidance which helps the students to overcome difficulties and maximum utilization of their potentials.
- ⇒ Under skill development program I participated in more than 24 trainings for enhancement of professional and personal expertise.
- ⇒ **Scientifically Contribution-**
 - **Project Coordinator** Centre of Excellence for Rice funded by Government of Uttar Pradesh
 - **Project Coordinator** AGGRI-Alliance Project funded by IRRI
 - **Project Coordinator** EC-IFAD Project funded by IRRI
- Guided 11 Ph.D. and 35 Post Graduates students successfully and two students enrolled in Ph.D. and four in M.Sc. under my supervision.
- Worked/working as member of research advisory committee of PG/PhD students of the college of Agriculture and College of Horticulture.
- Worked as member of core team for newly developed rice variety NDR 9930111, IET NO. 19117 notified for Uttar Pradesh, by CVRC New Delhi.
- I have sound knowledge/ expertise of physiological/ molecular behavior analysis of rice and wheat crops.
- Good commend for designing and conducting scientific experiments.



Dr. R.K. YADAV

ASSOCIATE PROFESSOR

*NARENDRA DEVA UNIVERSITY OF AGRICULTURE
AND TECHNOLOGY, KUMARGANJ, FAIZABAD.*

I. PERSONAL

NAME : DR. R.K. YADAV
FATHER NAME : LATE-SRI R. S. YADAV
DISIGNATION : ASSISTANT PROFESSOR
DATE OF BIRTH : 18. NOV. 1965.
PLACE OF BIRTH : VILL. AHIRAN KA PURWA, POST. DILI SARAIYA
DIST. FAIZABAD,UTTAR PRADESH,INDIA.
LOCAL ADDRESS : DEPARTMENT OF CROP PHYSIOLOGY,
NARENDRA DEVA UNIVERSITY OF AGRICULTURE &
TECHNOLOGY, KUMARGANR, FAIZABAD. UTTAR
PRADESH, INDIA.
E Mail ID : drrkyadavnduat@gmail.com
MOBILE NO. : +91-9415717080
BASIC PHONE : 05270-262038 (Off.),
NATIONALITY : INDIAN

II. ACADEMIC QUALIFICATION

B.Sc. (Ag.) & A.H. : 1988 C.S.A.Univ. of Agri. & Tech. Kanpur
M. Sc.(Ag.) Plant Physiology : 1990 C.S.A.Univ. of Agri. & Tech. Kanpur
Ph.D. (Plant Physiology) : 1997 C.S.A.Univ. of Agri. & Tech. Kanpur

III. TEACHING & RESEARCH EXPERIENCE

- ❖ Joined as a Assistant Professor (Crop Physiology) on 28-08-2004 in the N.D. Univ. of Agriculture & Technology Kumarganj, Faizabad.
- ❖ Taught Various UG/PG & Ph-D Courses Regularly Since 2004.
- ❖ Guided Nine (9) M.Sc. (Ag.) & One(1) PhD Students in different physiological research aspects.
- ❖ Presently Guiding Four (4) M.Sc. (Ag.) Students on different aspects.

- ❖ Member of advisory Committee in deferent disciplines of M. Sc. (Ag) Students in University – One Hundred Ten (110).
- ❖ Member of advisory Committee in deferent disciplines of Ph.D. Students in University- Twenty (20).
- ❖ Setting question papers of Course No.- BBP-102- Introductory crop Physiology, Rajendra Agriculture Univ. Bihar in 2009 and B.Sc. (Forestry) Course No.-BSH-106- Tree Physiology, C.S. Azad Univ. & Tech Kanpur -2012.
- ❖ Membership in Society & journals at the National & International levels.
- ❖ Original Research papers published - Seventeen (List Attached).
- ❖ Abstracts published – Twenty Five (List Attached).
- ❖ Research article published in Hindi five (05) (List Enclosed).
- ❖ Participated in national seminar/symposium in the year of 2005 in Gujarat, 2008 in New Delhi, 2009 in Jorhat, Assam, 2012 New Delhi & Lucknow 2014, respectively.
- ❖ Participated and completed three, twenty one days training programme in the N.D.U.A.T. Kumagganj, & TNAU Tamilnadu, Collabarotion with I.C.A.R., New Delhi.
- ❖ Taking practical examination in different degree colleges affiliated with Dr. Ram Manohar Lohiya University in B.Sc. (Ag) as KNI Sultanpur, Nandani Nagar Degree College Gonda, Chaudhari Charan Singh Degree College Bardari, Barabanki, Malviya Degree College Kalakankar Pratapgarh UP.
- ❖ Attended Two days annual meeting and planning workshop in N.A.S.C. Complex, New Delhi from 10-12 April 2013, organized by IRRI Philippines.

IV- ASSOCIATED PROJECTS

- COPI : Project entitled “Establishment of leaf tissue analysis laboratory”(UPCAR)
- Presently working as a Scientist , BMGF Salinity, IRRI Funded Project.

V- ADMINISTRATIVE RESPONSIVILITIES

- a. Appointed as verifying Officer in the department of Crop Physiology.
- b. Worked as a Assistant Superintendent of examination Mandi Sachiv- 2 in the year of 2011
- c. Assistant Superintendent in entrance examination test (CATET) in the year of 2006 & 2011.
- d. Appointed as Assistant Superintendent in final examination of University 2011.

- e. Participated in varietal selection committee as fixed by IRRI Philippine in the year of 2008.

Publication-

➤ Original Research Paper	- 75
➤ Reviewed Paper	- 09
➤ Paper Presented	-08
➤ Popular Articles	
○ Hindi	- 23
○ English	- 02
➤ Books Published	- 04
➤ Edited Book	- 01
➤ Book Chapter	- 09
➤ Seminar Symposia Attended	- 17
➤ Training Courses Attended	- 04
➤ Life Membership	- 07
➤ Award/ Recognition	-10
➤ M.Sc. Student Guided	-33
➤ Ph.D. Student Guided	-01
➤ Project in hand as Physiologist	-02

**Profile Summary of Dr Raj Bahadur,
Associate Professor**

Department of Crop Physiology
A. N. D. University of Agriculture and Technology,
Kumarganj, Ayodhya-224 229, Uttar Pradesh, India



Dr. Raj Bahadur, Associate Professor obtained his Master Degree on Plant Physiology from Chandra Shekhar Azad University of Agriculture and Technology, Kanpur and Ph. D. in Crop Physiology from Narendra Deva University of Agriculture and Technology, Kumarganj-224229, Ayodhya (U.P.). He worked as Research Associate, approximate three years at IIPR (Indian Institute of Pulses research, Kalyanpur, Kanpur) in Indo-Australian collaborative research project “Traits for yield improvement of chickpea in drought prone environments of India & Australia” and thereafter in year 2004 he joined as Scientist, Plant Physiology at Acharya Narendra Deva University of Agriculture and Technology, Kumarganj-224229, Ayodhya (U.P.). He has guided more than Eighteen M. Sc. and one Ph. D. (Crop Physiology) students and actively involved in teaching and research work. He has published more than forty research papers in national and International Journals, ten books, more than thirteen book chapters, more than forty abstracts, two English articles and more than forty Hindi articles in national magazines. He has awarded more than eight awards like best teaching award, young scientist awards etc. He is life member of Indian Society of Pulses Research and Development, IIPR, Kalyanpur, Kanpur, Forum for Plant Physiologists, 01 Kamla Nagar, Saint Tukaram Hospital Chowk, Akola-144004 (M.S.) India and Alumni Association, of Narendra Deva University of Agriculture and Technology, Kumarganj-224229, Faiazabad (U.P.).

Profile summary of Dr Alok Kumar Singh,

Assistant Professor, Crop Physiology



D.O.B : 01-01-1979

Nationality : Indian

Contact : +91-9450045391

Mail Id : aloksingh.agri@gmail.com

GoogleScholar : <https://scholar.google.com/citations?user=gypVIB0AAAAJ&hl=en>

Research gate:- <https://www.researchgate.net/profile/Alok-Singh-43>

ORCID Link :- <https://orcid.org/my-orcid?orcid=0000-0002-9889-4537>

Qualification:

- ✚ Ph.D. in Crop Physiology, ANDUA&T, Kumarganj, Ayodhya (UP) India in 2008
- ✚ M.Sc. (Ag) in Crop Physiology, ANDUA&T, Kumarganj, Ayodhya (UP) India in 2004
- ✚ B.Sc. (Ag) in Agriculture, V.B.S. Purvanchal University, Jaunpur (UP) India in 2001

Professional Experience:

- ✚ Project Officer-2008-2009 at Bayer Crop Science Ltd. Faizabad (UP)
- ✚ Jr. Agronomist-2009-2011 at Bayer Crop Science Ltd. Faizabad (UP)
- ✚ Agronomist- 2011-2013 at Bayer Crop Science Ltd. Faizabad (UP)
- ✚ Senior Agronomist- 2013-2016 at Bayer Crop Science Ltd. Faizabad (UP)
- ✚ Associate Agronomist- 2016-2019 at Bayer Crop Science Ltd. Faizabad, (UP)
- ✚ Assistant Professor- 2019 to till date at ANDUAT, Kumarganj, Ayodhya (UP)

Teaching

- ⇒ Working as ‘Assistant Professor’ at Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya (UP) INDIA.
- ⇒ Sound knowledge of Teaching and Research in Crop Physiology.
- ⇒ Effective communication skills to conduct classroom teaching.
- ⇒ Create positive environment in classroom teaching, inspiring students to be curious, to attain their objectives.
- ⇒ High level of flexibility to teach students up to their way of acceptance.

- ⇒ Have very good patience and empathy during classes to provide support, encouragement and guidance which helps the students to overcome difficulties and maximum utilization of their potentials.
- ⇒ Under skill development program I participated in more than 24 trainings for enhancement of professional and personal expertise.

Published Books

- Plant Physiology at a Glance (2018), published by Weser Books Publications, ISBN No.- 978-3-96492-083-6.
- Climate Change and Agriculture (2020) published by Rubicon Publication, ISBN No. 978-1913482-88-6
- A comprehensive Note on Soil Science Vol.-I (2021), published by New Aastha Prakashan, ISBN No.- 978-81-922-944-1-7
- Instant Notes on Soil Science (2023), published by Biotech Books, ISBN No. 978-81-7622-542-7

Contribution in Books as Book Chapters-

I contributed 09 book chapters on different books-

- Vermi composting: A potential Technology for cost Effective Waste Management and Nutrient recycling in Agro-Ecosystem.
- Modulation of Water Stress by Paclobutrazol.
- Necessary Nutrients of Plant: Nutrient Functions and Deficiency Symptoms
- Impact of Temperature Stress (Heat Stress) on Plants
- Effect of Climate Change on Crop Growth, Production and Productivity
- Global Warming and Climate Change
- Phyllochron: Acclimatize to low temperature in cereals
- Physiology of Plant Seed Development
- Plastic Waste: Its Impact of Agricultural and on Environment

Scientific Contribution-

- Guided 02 Post Graduates students successfully and two students enrolled under my supervision.
- Worked/working as member of research advisory committee of PG/PhD students of the college of Agriculture and College of Horticulture.
- Worked as member of core team for newly developed rice variety NDR 9930111, IET NO. 19117 notified for Uttar Pradesh, by CVRC New Delhi.
- I have sound knowledge/expertise of physiological/ molecular behavior analysis of rice and wheat crops.
- Good commend for designing and conducting scientific experiments.

- ⇒ **Scientifically Associated with projects as Plant Physiologist-**
 - Centre of Excellence for Rice funded by Government of Uttar Pradesh
 - AGGRI-Alliance Project funded by IRRI
 - EC-IFAD Project funded by IRRI
 - Strengthening of Crop Physiology funded by Government of Uttar Pradesh
- ⇒ Worked as Principal Investigator of Hybrid Rice/Wheat testing program of PRIDE Seeds, Nuzvedu Seeds & Syngenta India Ltd..
- ⇒ Published 50 research papers in UGC/ NAAS rated journals and presented more than 30 research papers in different National/International level.
- ⇒ Life member of 11 different National/ International Societies.

Administrative Skills & Contribution-

- Acting as **Secretary**, Board of Faculty Association, Collage of Agriculture, ANDUA&T, Kumarganj, Ayodhya (UP) India.
- Acting as **General Secretary**, ALUMNI Association, Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya (UP) -224229.
- Worked as Assistant Examination Superintendent in the UPCATET 2019 & 2023 and Member of Flying Squad during semester examination of university.
- Worked/Working as external examiner for practical examination, paper setter and moderator in various universities.
- Acting as Chairman, co-chairman, Coordinator, Co-coordinator, members of different committees as assigned by competent authority.
- Worked as member of selection committee of field staff in Bayer Crop Science Limited.
- Under administrative/management skill to prioritizing task, time management, and human resource management etc. during my professional tenure.
- Well expertise to use of ICT tools for up-gradation of students as well as modernization of organization.

Contribution in Extension Activities:

- Published more than 50 popular articles in different magazines to disseminate latest technological knowledge to serve the farming community.
- Delivers more than 200 technical lectures in the farmers meeting/gathering and educated to them about Hybrids Rice.
- Member of committee to solve Birds problem at Chaudhary Charan Singh Airport Lucknow on 24 September 2019.
- Delivered expert lecture at All India Radio Ayodhya and Doordarshan E Lucknow on different topic related to farmers.
- Acting as Co-coordinator of adopted Village as directed by Hon'ble Governor.

Awards/ Recognition

- Special recognition Award (2012) Bayer Crop Science Ltd
- Award of Recognition (2014) Bayer Crop Science Ltd
- Best Stall in Farmer fair (2015), KVK, Sitapur
- Appreciation & Recognition (2015) KVK, Masodha, Faizabad
- Distinguished Service Award (2016), Society of Biological Sciences and Rural Development, Allahabad
- Young Scientist Award (2017), Society for Agriculture Innovation and Development (SAID) Ranchi (JHARKHAND) India
- Excellence in Research Award (2017), Science & Technology for Integrated Rural Improvement (S&T SIRI), Thorrur, Warangal, Telangana
- Excellence in Extension Award (2018), Endling Conferences, Pune Maharashtra
- Excellence in Extension Award (2018), Science & Technology for Integrated Rural Improvement (S&T SIRI), Thorrur, Warangal, Telangana
- Outstanding Agronomist Award (2018), Madhumita Foundation, Suryapet, Telangana
- Excellence in Teaching Award (2019), Society for Agriculture Innovation and Development (SAID) Ranchi (JHARKHAND) India
- Best Teacher Award (2019), Agricultural & Environmental Technology Development Society (AETDS), U. S. Nagar, Uttarakhand, India
- Outstanding Plant Physiology Award (2020), Green Agri Professional Society, Dhanbad, Jharkhand
- Co-Chairman for a Technical Session (2020), 3rd International Conference on Promoting & Reinvigorating Agri-Horti Technological Innovation organised by Green Agri Professional Society, Dhanbad, Jharkhand