DEPARTMENT OF AGRONOMY

At a glance

College of Agriculture

ACHARYANARENDRADEVAUNIVERSITYOFAGRICULTURE&TECHNOLOGYKUMARGANJ,AYODHYA-224229,

UTTARPRADESH

OVERVIEWOFTHEDEPARTMENT

Department of Agronomy is one of the oldest Departments in the College of Agriculture and it came into existence in the year 1978. M.Sc. (Ag.) programme in discipline of Agronomy was started during the year 1981 while Ph.D. programme in Agronomy discipline was started during 1984. Total No. of students awarded M.Sc. (Ag.) degree in Agronomy since inception till 2022-23 is 49,While the Total No. of students awarded Ph.D. degree in Agronomy since inception till 2022-23 is 124.Thedepartment offers courses in Agronomy for UG, PG and Ph.D. in College of Agriculture and UG in College of Horticulture &Forestry. Major achievements of the department have been in the placement of its alumni in reputed institutions of the country as Directors of ICAR institutes; Scientists of ICAR institutesfaculty members and on other higher scientific and administrative posts. The technologies adopted and developed by the department are being transferred to the farmers by the university. The department is well-equippedwithlaboratoriesfor both U.G. and P.G. students.

Vision:

To create the conducive environment for quality education and innovative research as to increase the skills of students in the field of Agronomy.

Mission:

- ❑ To provide conceptual knowledge of Agronomy among the students,
- ❑ To inculcate scientific and innovative thinking among the students and
- ❑ To provide best recognition to the P.G. and Ph.D. students through innovative Research in the field of Agronomy.

Objectives:

- To provide practical knowledge related with Agronomy to PG and Ph. D students as well as to guide the farmers for their problems through various research and extension activities.
- To maintain the quality Teaching and Research, inculcate the smart work & high efficiency among the students.
- To provide the experimental knowledge to the students and farmers as to enhance the input use efficiency for better crop production and sustainable agriculture.

EMPLOYEESPROFILE

FACULTIES

Name	**Dr.Anil Kumar Singh** 
Qualification	Ph.D (Agronomy)
Designation	Professor &Head
Research Specialization	Agriculture Meteorology and Irrigation Water Management
Contact No.	9450766594
E-mailaddress	aksmausam@gmail.com
Name	**Dr.Neeraj Kumar** 
Qualification	Ph.D (Soil science and Agriculture Chemistry)
Designation	Professor
Research Specialization	Soil fertility and nutrient management
ContactNo.	9415515216
E-mailaddress	nksoilchem@gmail.com
Name	**Dr. Raj Bahadur** 
Qualification	Ph.D(Crop Physiology)
Designation	Professor
ContactNo.	7235824235
Research Specialization	Stress Physiology
E-mail address	drraj2036@gmail.com
Name	**Dr. Abhinandan Singh** 
Qualification	Ph.D (Agronomy), NET
Designation	Assistant Professor
Contact No.	8303725258
Research Specialization	Conservation Agriculture and Irrigation Water Management
E-mail address	agabhi92@gmail.com

ASSOCIATED FACULTIES

S. No.	Name	Designation	Contact No.	E-mail address
1.	Dr. Rajesh Kumar	Associate Professor	9452520242	rajeshnduat@gmail.com
2.	Dr. Abhinav Kumar	Assistant Professor	9415348240	Abhinavsingh709@gmail.com
3.	Dr. Sanjeev Singh	Assistant Professor	9452375581	dr.sanjeevagron@nduat.org
4.	Dr. Girish Goyal	Assistant Professor	8299426434	girishgoyalagron@nduat.org
5.	Dr. Sanjay Kumar	Assistant Professor	9454839057	Sanjay.psbvb@nduat.org

LIST OF MINISTERIAL STAFF

S. No.	Name	Designation	Contact No.
1.	Shri. Arun Pratap Singh	Research Assistant	9453237796
2.	Shri. Ajay Kumar Srivastava	Stenographer	7458014423
3.	Shri. O. P. Singh	Lab Assistant	7706998843
4.	Shri. Anil Dubey	Jr. Clerk	6307494848
5.	Shri. Vishal Singh	Field Assistant	9140286181
6.	Shri. Ashutosh Singh	Field Assistant	9918324828
7.	Shri. Umadutt	Attendant	9621133459
8.	Shri. Ram Sankar Shukla	Driver	9451571340

DEGREEPROGRAMMES

(A) DegreeProgrammersofferedintheDepartment

- **M.Sc.(Ag.)Agronomy**
- **Ph.D.Agronomy**

(B) StudentsEnrolledintheDepartmentduringlast 6years

- **M.Sc.(Ag.)Agronomy**

Academic Year	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Students	22	23	28	25	20	25

- **Ph.D. Agronomy**

Academic Year	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Students	06	04	05	07	06	11

Courses offers from Department

- **Courses for B.Sc. (Ag.)**
- **Courses for M.Sc. (Ag.) Agronomy**
- **Courses for Ph.D. Agronomy**

(A) Courses for B.Sc. (Ag.)

Semester	Coursecode	Coursetitle	Credithours
I	AGRON-111	FundamentalsofAgronomy	4(3+1)
	AGRON-112	AgricultureHeritage*	1(1+0)
	AGRON-113	Natural Farming	1(1+0)
III	AGRON-211	CropProductionTechnology-I(*Kharif crops*)	2(1+1)
IV	AGRON-221	Crop Production Technology - II(*Rabicrops*)	2(1+1)
	AGRON-222	FarmingSystem&SustainableAgriculture	1(1+0)
	AGRON-223	IntroductoryAgro-meteorology&Climate Change	2(1+1)
V	AGRON-312	Practical Crop Production-I(*KharifCrops*)	2(0+2)
	AGRON-311	Geo-informatics and Nano-technologyandPrecision Farming	2(1+1)
VI	AGRON-323	Practical Crop Production-II(*RabiCrops*)	2(0+2)
	AGRON-321	Rainfed Agriculture and WatershedManagement	2(1+1)
	AGRON-322	PrinciplesofOrganic Farming	2(1+1)

(B) Courses for M.Sc. (Ag.) Agronomy

Semester	Coursecode	Coursetitle	Credithours
I	AGRON-501*	ModernconceptofcropProduction	4(4+0)
	AGRON-502	PrinciplesandPracticesofsoilfertilityand nutrientmanagement	3(2+1)
	STAT-511	Statisticalmethodsforappliedsciences	3(2+1)
	SST-501	Elective(Seedphysiology)	3(2+1)
	PGS-501	LibraryandInformationServices	1(0+1)
	PGS-503	Intellectualpropertyanditsinformationin Agriculture	1(0+1)
II	AGRON-503	PrinciplesandPracticesofweedmanagement	3(2+1)
	AGRON-504*	PrinciplesandPracticesofwatermanagement	3(2+1)
	AGRON-506	AgronomyofMajorcerealsandPulses	3(2+1)
	SOILS-502	Soilfertility&fertilizeruse	3(2+1)
	STAT-512	ExperimentalDesign	3(2+1)
	AGRON-550	Masterseminar	1(1+0)
	AGRON-560	Masterresearch	4(0+4)
	PGS-504	Basicconceptinlaboratorytechniques	1(0+1)
III	AGRON-507	Agronomyofoilseeds,fiberandSugar crops	3(2+1)
	AGRON-511	Croppingsystemandsustainableagriculture	2(2+0)
	AGRON-512	Drylandfarmingandwatershed management	3(2+1)
	SOILS-509	RemotesensingandGIS techniqueforsoiland crop studies	3(2+1)
	PGS-502	Technicalwritingandcommunicationskills	1(0+1)
	PGS-505 (e-course)	Agricultureresearch,researchethicsandrural Developmentprogramme	1(0+1)
	AGRON-560	Masterresearch	10(0+10)
IV	AGRON-560	Masterresearch	16(0+16)

*IndicatecorecoursesforM.Sc.(Agronomy)Program

(C) CoursesforPh.D.Agronomy

Course No.	Course Title	Credit Hours
AGRON-601*	Current trends in Agronomy	3(3+0)
AGRON-602	Recent trends in crop growth and productivity	3(2+1)
AGRON-603	Irrigation management	3(2+1)
AGRON-604	Recent trends in weed management	2(2+0)
AGRON-605	Integrated farming systems for sustainable agriculture	2(2+0)
AGRON-606	Soil Conservation and Watershed Management	3(2+1)
AGRON-607	Stress Crop Production	3(2+1)
AGRON-608*	Research and Publication ethics	2(2+0)
AGRON-691	Doctoral Seminar	1(1+0)
AGRON-692	Doctoral Seminar	1(1+0)
AGRON-699	Doctoral Research	75

*Indicates core course for Ph.D.

Facilities and infrastructure

Classrooms and Laboratories

Lecture Room	:	02
Seminar Room	:	01
Departmental Book Library	:	01
PG Lab	:	01
UG Lab	:	02

Farm facility

A well planned and equipped 11 ha. Agronomy farm is situated in the university main campus where the masters and Ph. D students' research trialsare conducted.

Achievements of Department

- Published 107 research papers in reputed scientific journals.
- Published 5 books
- Published 21 popular articles in reputed magazines
- Published 20 book chapters
- Faculties received 5 awards by different scientific society.
- 25 students qualified ASRB NETduring last 5 years.
- 2 students qualified ICAR SRF examination.
- 10 students placed in Government organizationsduring last 5 years.

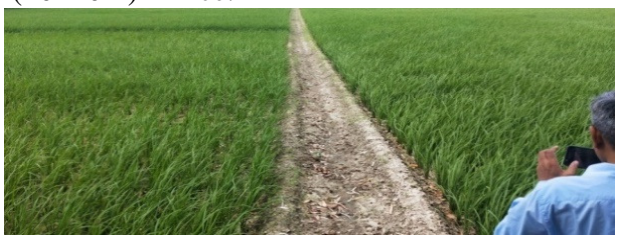
Ongoing Research projects

S. No.	Project Title	Funding agency	Fund sharing (%)
1	AICRP on Integrated Farming System	ICAR	ICAR (75) + State Gov. (25)
2	AICRP on Water Management	ICAR	ICAR (75) + State Gov. (25)

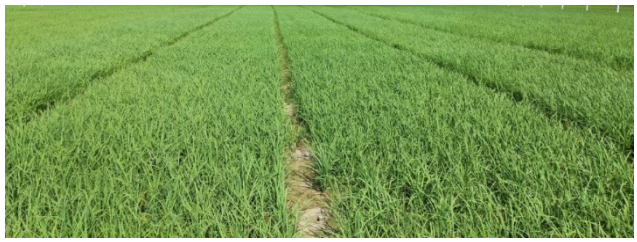
Technology Developed during Last Five Years

Technologies Developed under AICRP on Irrigation Water Management

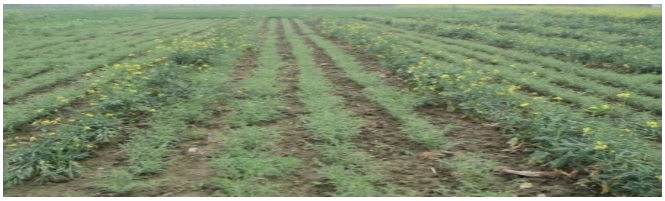
Developed improved Water Management practice; 7cm water in each irrigation at 1-4 days after disappearance of ponded water through check basin (10x10m) in rice.



Developed improved Water Management practice; 6cm water per irrigation at critical stages (CRI, Late jointing and milking) of wheat in check basin (5x10m).



Diversification of crops during rabi crop season under poor availability of canal water has been found more productive and remunerative and intercropping of gram with mustard (4:1) has been found to be best.



Rainwater harvesting and its multiple use through rice based diversified integrated farming system with and pisciculture accrued highest net return per hectare per year in comparison to conventional farmer's practice rice-wheat+rai

The turmeric crop grown in the alleys of Aonla as alternate land use system under drip irrigation and fertigation systems (100% and 75% of RDF). Drip irrigation @ 80% PE with 100% RDF recorded the highest yield of turmeric 158.00 q/ha with WUE 20.68 kg/ha.mm.

Technologies Developed under the AICRP-Integrated Farming System.

1. One ha Integrated Farming system model for small and marginal farmers more remunerative energy efficient, eco-friendly and nutritional security of livelihood comprising of Crop+ Dairy + Horticulture + Fisheries + Vermicompost + Duckery.
2. Among the Rice Based cropping Systems, Rice –Frenchbean - Greengram recorded highly economically, remunerative for soil health and energy efficient.
3. Stale seed bed + reduced spacing (up to 25%) + mulching with previous crop residue + one H.W (50 DAT/DAS) treatment controlling the weeds in Rice-Potato-Okra crop sequence.

Distinguished Alumni of the Department

Name of Alumni	Position
Dr. Sudhanshu Singh	Director, IRRI, Varanasi
Dr. Ravi Gopal Singh	Director, CIMMYT, Mexico
Dr. Sudhir Shukla	Director, U.P. Council of Sugarcane Research, Shahjahanpur
Dr. J. S. Mishra	Director. ICAR-Directorate of Weed Research, Jabalpur
Dr. Sunil Kumar	Director, ICAR-IIFSR, Meerut
Dr. J.P. Mishra	Director, ICAR-ATARI, Jodhpur
Dr. Ved Prakash Singh	Head, Division of Crop Production ICAR-IISR, Lucknow
Dr. U. P. Singh	Prof. & Head, Agronomy, BHU, Varanasi

Dr. S. P. Singh	Professor, Agronomy, BHU, Varanasi
Dr. M. K. Tripathi	Principal Scientist, ICAR-IISR, Lucknow
Dr. Aditya Dwivedi	Principal Scientist, ICAR-IISR, Lucknow
Dr. V. K. Singh	Professor, Agronomy, GBPUAT, Uttrakhand
Dr. Sanjeev Yadav	Professor, Agronomy, CSAUA&T, Kanpur
Dr. Varun Kumar Singh	Professor, Agronomy, Rath College, Hamirpur

Future Plans of the Department:

- To develop advance teaching techniques and laboratory in the department,
- To develop new agronomic management practices under changing climatic conditions,
- To develop value added courses and
- To revise the Course syllabus up to 20- 25 percent as per local need.