

# Faculty Profile




**DR. AWADHESH KUMAR TRIPATHI**

**Assistant Professor**

**DEPARTMENT OF AGRONOMY**

**C. S. AZAD UNIVERSITY OF AGRICULTURE & TECHNOLOGY,  
KANPUR-208 002**

# Academic Profile of Dr. A.K. Tripathi

1.	<b>Name</b>	:	<b>DR. AWADHESH KUMAR TRIPATHI</b>								
2.	<b>Date of Birth</b>	:	July 10, 1964								
3.	<b>Designation</b>	:	Assistant Professor (Selection Grade)								
4.	<b>College</b> <b>Department</b>	:	Agriculture Agronomy								
5.	<b>Contact info</b>	:	<table border="0"> <tr> <td><u>Office Details</u></td> <td><u>Personal Details</u></td> </tr> <tr> <td>Phone: 0512-</td> <td>Phone: Nil</td> </tr> <tr> <td>Mobile: 09450937647</td> <td>Mobile: 09450937647</td> </tr> <tr> <td>Email: aktripathiak@gmail.com</td> <td>Email: aktripathiak@gmail.com</td> </tr> </table>	<u>Office Details</u>	<u>Personal Details</u>	Phone: 0512-	Phone: Nil	Mobile: 09450937647	Mobile: 09450937647	Email: aktripathiak@gmail.com	Email: aktripathiak@gmail.com
<u>Office Details</u>	<u>Personal Details</u>										
Phone: 0512-	Phone: Nil										
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Email: aktripathiak@gmail.com	Email: aktripathiak@gmail.com										
6.	<b>Year of joining at CSAUA&amp;T</b>	:	25.08.1987								
7.	<b>Date of last promotion</b>	:	<ul style="list-style-type: none"> <li>• 18.08.2008 (From Assistant Professor (Senior Scale) to Assistant Professor (Selection Grade)</li> <li>• Designation of Associate Professor due since 18.08.2008</li> </ul>								
8.	<b>Responsibilities Assigned</b>	:	<p><b><u>TEACHING :</u></b></p> <ul style="list-style-type: none"> <li>• Teaching different courses of Agronomy discipline at graduate, post graduate and doctoral levels.</li> <li>• Formulated <b>new definition of Agronomy</b> during 2003 and further refined it in 2016.</li> <li>• The course entitled “<b>Agricultural Heritage of India</b>” [AGR 105, 2 (2+0)] has been introduced first time at UG level in this University during academic session 2004-05 on the basis of recommendations made during workshop on “<i>Agricultural Heritage of India</i>” organized by ICAR, NAARM and Asian Agri-History Foundation at National Academy of Agricultural Research Management, Hyderabad from December 1-2, 2003. In this workshop, I participated from this University. On the basis of said recommendations, I designed course contents of this course as per desired by Dean (Agriculture) of this University and thereafter, this course has been started from July 2004.</li> <li>• Guiding/supervising students of post graduate and doctoral level.</li> <li>• <b>Members in Advisory Committee</b> of several M.Sc. (Ag.) &amp; Ph.D. scholars’ research work.</li> </ul>								

**RESEARCH** : Do research on various aspects like organic farming, intercropping, baby corn, INM etc.

**EXTENSION** : Performing various extension activities like:

- Master Trainer of Organic Farming, Low-cost input technologies, Intercropping, Nutrient Management, Crop production and Cropping systems.
- Dissemination of agricultural technology/knowledge through E.Tv. and radio, *Krashak Goshthies*, *Kisan Melas* and *Field Divas*.
- Transfer of technology through delivering lectures on different burning topics on agriculture at many forums.
- Adoption of village for improving livelihood security of low resource farmers.
- Published research journal two issues in a year as General Secretary of the Society.

**MANAGEMENT** :

- Discharged duties as ‘**Officer Incharge, Practical Crop Production**’ from April 05, 2003 to October 18, 2005.
- Discharged duty as **Deputy Controller of Examination (Exam.)** in Examination Cell under Registrar of C.S. Azad University of Agriculture & Technology, Kanpur from 01 Dec. 2009 to Oct. 2011.
- Discharged duties as **Hostel Warden** of the University from 22 February 2008 to 22 February 2011.
- Discharging duty as **Coordinator, Organic Farming Programme** of the University with specific objective “*Development of package of organic practices and organic agro-techniques for crops and cropping systems in central Uttar Pradesh*” from 26 June 2009 to date.
- Discharging responsibility of **General Secretary** of ‘The Society of Agricultural Professionals’ from 2008 to date.

**9. Awards Received :**

S.No.	Name of Award	Awarding Organization	Year
<b>AWARDS</b>			
1.	Best Poster Paper Presentation Award	Awarded by “ <i>The Society of Agricultural Professionals</i> ”, Kanpur for outstanding contribution in the field of Agronomy on the occasion of National Symposium on ‘Technological Innovations for Resource Starved Farmers in Global Perspective’ held at CSAUA&T, Kanpur.	April 2008

2.	Major R.S. Yadav SRDA Award 2009	Honoured by “ <i>Society for Recent Development in Agriculture</i> ”, Meerut for understanding and recognition in the field of Agronomy on the occasion of ‘Ist Indian Agricultural Scientist and Farmers Congress’ held at CCS University, Meerut.	October 2009
3.	Best Writer Award	Honoured by “ <i>Society for Scientific Development in Agriculture and Technology</i> ”, Jhansi for outstanding contribution in the field of Agronomy on the occasion of National Symposium on ‘Achieving Millennium Development Goals: Problems & Prospects’ held at Bundelkhand University, Jhansi.	October 2009
4.	Best Poster Paper Presentation Award – Ist	Awarded by “ <i>Society for Scientific Development in Agriculture &amp; Technology</i> ”, Jhansi for outstanding contribution in the field of Agronomical Research on the occasion of National Symposium on ‘Achieving Millennium Development Goals: Problems & Prospects’ held at Bundelkhand University, Jhansi.	October 2009
5.	SAP Young Scientist Award 2010	Conferred by “ <i>The Society of Agricultural Professionals</i> ”, Kanpur for outstanding contribution in the field of Agronomy on the occasion of National Symposium on ‘Food Security in Context of Changing Climate’ held at CSAUA&T, Kanpur.	November 2010
6.	Shiksha Rattan Puraskar 2011	Certificate of Excellence presented by “ <i>India International Friendship Society</i> ”, New Delhi for meritorious services, outstanding performance and remarkable role in Teaching on the occasion of Seminar on ‘Role of Education in Modern India’ held at New Delhi.	October 2011
7.	SAP Excellence Award 2012	Conferred by “ <i>The Society of Agricultural Professionals</i> ”, Kanpur for outstanding contribution in the field of Agronomy on the occasion of National Symposium on ‘Agriculture Production & Protection in Context of Changing Climate’ held at BAU, Ranchi.	November 2012
8.	Best Poster Paper Award	Conferred by “ <i>Range Management Society of India</i> ”, IGRI, Jhansi for Best Poster on the occasion of National Symposium on ‘Climate Resilient Forage Production and its Utilization’ held at BCKV, Kalyani (W.B.).	November 2014
9.	SAP Excellence Award 2012	Conferred by “ <i>The Society of Agricultural Professionals</i> ”, on the occasion of National Symposium on ‘Transforming Indian Agriculture towards Food and Nutritional Security’ held at IGRI, Jhansi.	February 2016
<b>FELLOWSHIP AWARD</b>			
10.	SAP Fellow	Conferred by “ <i>The Society of Agricultural Professionals</i> ”, Kanpur	2014
11.	ISAB Fellow	Conferred by “ <i>Indian Society of Agricultural Biochemists</i> ”, Kanpur	2016

<b>APPRECIATIONS</b>			
12.	Vice Chancellor's Certificate of Appreciation	Vice Chancellor of CSAUAT, Kanpur for successfully completion of Hindi translation of book " <i>Sasya Vigyan Ke Sindhant</i> (Principles of Agronomy)" and outstanding contributions in teaching, research and extension field.	May 2007
13.	Letter of Appreciation	By CSAUAT (Kanpur), for remarkable efforts, incomparable contribution and cooperation in organizing 10 <sup>th</sup> Convocation successfully held on 24 October 2008 at CSAUAT, Kanpur.	November 2008
14.	Vice Chancellor's Appreciation Letter	By CSAUAT (Kanpur), for remarkable contribution in organizing 11 <sup>th</sup> Convocation successfully held on 06 February 2010 at CSAUAT, Kanpur.	February 2010
15.	Certificate of Appreciation for Excellence in Teaching	By CSAUAT (Kanpur), for outstanding contributions in teaching UG and PG classes, research and extension in the University.	March 2010
<b>RECOGNITIONS</b>			
16.	Executive Council Member	Indian Society of Agronomy (Kanpur Chapter)	2002-2003 to date
17.	General Secretary	The Society of Agricultural Professionals, CSAUAT, Kanpur	Feb. 2008 to date
18.	Organizing Secretary	National Symposium on "Food Security in Context of Changing Climate" held at CSAUA&T, Kanpur	30 Oct.-01 Nov. 2010.
19.	'Executive Editor' in Editorial Board	'Current Advances in Agricultural Sciences' published by The Society of Agricultural Professionals, C.S. Azad University of Agriculture and Technology, Kanpur	June 2009 to 2014
20.	'Sub Editor' in Editorial Board	'Farm Science Journal' published from C.S. Azad University of Agriculture and Technology, Kanpur	2007 to date
21.	Executive Council Member	Alumni Association, C.S Azad University of Agriculture and Technology, Kanpur	Oct. 2009 to 2016
22.	'Editor' in Editorial Board	Journal of Food Legumes published by Indian Society of Pulses Research and Development, IIPR, Kanpur	October 2011-2013
23.	Expert in Selection Committee	Indian Institute of Pulse Research, Kanpur	2011
24.	Organizing Secretary	National Symp. on "Transforming Indian Agric. towards Food and Nutritional Security" held at IGFRI, Jhansi	20-21 Feb. 2016
25.	Session Convener	4 <sup>th</sup> Uttar Pradesh Agricultural Science Congress-2016 held at CSAUA&T, Kanpur	2-4 March 2016

<b>10. Publications since joining CSAUA&amp;T (give nos. only)</b>	Books	:	06
	Technical Bulletins	:	03
	Review Articles	:	02
	Research Papers	:	61
	<i>National</i>	:	56
	<i>International</i>	:	05
	Popular Articles	:	22
	<b>Others</b>		
	Book Chapters	:	09
	Edited Books	:	03
	Abstract/Souvenir books	:	05
	Extended Summaries	:	08
	Articles in Proceedings	:	04
	Abstracts	:	60

**11. Books Published** :

<u>S.No.</u>	<u>Title</u>	<u>Authors</u>	<u>Publishers</u>	<u>Year of Publication</u>
1.	A Handbook of PAT	<b>Tripathi AK</b> and Khan SA	<i>Shanti Krishi Prakashan, Kanpur, pp. 171.</i>	1997
2.	Handbook of Agri-Tests : Volume I	<b>Tripathi AK</b>	<i>Shanti Publishers and Distributors, Kanpur, p. 500. ISBN No.: 81-904067-1-X</i>	1999
3.	Krishi Sasya Utpadan (Agricultural Crop Production) : Volume I	<b>Tripathi AK</b>	<i>Kalyani Publishers, B1-1292, Rajendra Nagar, Ludhiana, pp. 523. ISBN No.: 81-272-0837-X</i>	2003
4.	Sasya Vigyan Ke Sindhant (Principles of Agronomy)	<b>Tripathi AK, Reddy TY and Reddi GHS</b>	<i>Kalyani Publishers, B1-1292, Rajendra Nagar, Ludhiana, pp. 530. ISBN No.: 81-272-3211-4</i>	2006
5.	Combined Agriculture and Technology Entrance Test – At a glance (In Hindi)	<b>Tripathi AK</b> and Tewari Jitendra	<i>Shanti Publishers and Distributors, Kanpur, pp. 680. ISBN No.: 81-904067-3-6</i>	2007
6.	Handbook of Agri-Tests: Volume II (In Hindi)	<b>Tripathi AK</b>	<i>Shanti Publishers and Distributors, Kanpur, p. 400. ISBN No.: 81-904067-4-4</i>	2009
	<b><u>Edited Books</u></b>			
7.	A Profile of 25 years' Achievements of	Tewari AN, Rathi KS, Tripathi HN,	<i>Department of Agronomy, C.S. Azad University of</i>	2002

	Department of Agronomy	Prasad Kedar, Yadav DD and <b>Tripathi AK</b>	Agriculture & Technology, Kanpur, pp. 210.	
8.	Climate Change and Food Security in India	<b>Tripathi AK</b> and Pathak H	<i>The Society of Agricultural Professionals</i> , CSAUAT, Kanpur, pp. 344. ISBN No.: 978-81-922166-0-7	2011
9.	Proceedings of Lead Papers and Abstracts	<b>Tripathi AK</b>	<i>The Society of Agricultural Professionals</i> , CSAUAT, Kanpur, pp. 216. ISBN No.: 978-81-922166-1-4	2016

## 12. Technical Bulletins published :

<u>S.No.</u>	<u>Title</u>	<u>Authors</u>	<u>Publishers</u>	<u>Year of Publication</u>
1.	<i>Adhunik Kharpatwar Pravandhan</i> (Modern Weed Management)	Tewari AN, <b>Tripathi AK</b> and Mishra JS	Department of Agronomy, CSAUAT, Kanpur, pp. 48.	2008
2.	Role of Allelopathy in Crop Production	Rathi KS, <b>Tripathi AK</b> , Tewari AN, Tripathi HN and Prasad KP	Department of Agronomy, CSAUAT, Kanpur, pp. 20.	2008
3.	Border Method – A Novel Agro-technique in Crop Production	Rathi KS, <b>Tripathi AK</b> , Tewari AN, Tripathi HN and Prasad KP	Department of Agronomy, CSAUAT, Kanpur, pp. 20.	2008

## 13. List of ten best papers published in National journals (> 5 NAAS rating journals) during last 10 years :

<u>S.No.</u>	<u>Title/ Volume/ Year</u>	<u>Authors</u>	<u>Name of Journal</u>	<u>NAAS rating</u>
1.	Phosphorus requirement of gram ( <i>Cicer arietinum</i> ) + Indian mustard ( <i>Brassica juncea</i> ) intercropping system under irrigated conditions. 74(4) : 207-209, 2004	Chand Subash, Tripathi HN and <b>Tripathi AK</b>	<i>Indian Journal of Agricultural Sciences</i>	6.17
2.	Soil fertility and crop productivity as influenced by different cropping systems and levels of nitrogen in central plain zone of Uttar Pradesh. 3(3&4): 180-184, 2004	<b>Tripathi AK</b> , Tripathi HN and Kumar Munish	<i>Journal of Soil and Water Conservation</i>	5.08

3.	Effect of herbicidal weed management on wheat ( <i>Triticum aestivum</i> ) productivity and weed growth. <b>75</b> (9): 569-571, 2005	Tiwari SN, Tewari AN and <b>Tripathi AK</b>	<i>Indian Journal of Agricultural Sciences</i>	6.17
4.	Herbicidal control of weeds in coriander ( <i>Coriandrum sativum</i> ) with special reference to <i>Coronopus didymus</i> . <b>37</b> (3&4): 234-236, 2005	Tewari AN, Tiwari SN, <b>Tripathi AK</b> and Singh SK	<i>Indian Journal of Weed Science</i>	5.17
5.	Integrated weed management in rainy season maize ( <i>Zea mays</i> L.) in Central Uttar Pradesh. <b>37</b> (3&4): 269-270, 2005	<b>Tripathi AK</b> , Tewari AN and Prasad A	<i>Indian Journal of Weed Science</i>	5.17
6.	Biological and economical feasibility of chickpea ( <i>Cicer arietinum</i> ) + Indian mustard ( <i>Brassica juncea</i> ) cropping systems under varying levels of phosphorus. <b>50</b> (1): 31-34, 2005	Tripathi HN, Chand S and <b>Tripathi AK</b>	<i>Indian Journal of Agronomy</i>	5.46
7.	Effect of herbicides on weed dynamics and yield of direct seeded puddled rice ( <i>Oryza sativa</i> ) under varying water regimes. <b>77</b> (7): 415-419, 2007	Singh DK, Tewari AN and <b>Tripathi AK</b>	<i>Indian Journal of Agricultural Science</i>	6.17
8.	Production potential and monetary advantage of winter maize ( <i>Zea mays</i> )-based intercropping systems under irrigated conditions in central Uttar Pradesh. <b>80</b> (2): 125-128, 2010	<b>Tripathi AK</b> , Kumar Anand and Nath Somendra	<i>Indian Journal of Agricultural Sciences</i>	6.17
9.	Weed management in field pea with special reference to wild safflower. <b>40</b> (3&4): 140-143, 2010	Tewari AN, <b>Tripathi AK</b> , Singh Sanjay and Batham AK	<i>Indian Journal of Weed Science</i>	5.17
10.	Growth and Yield of greengram ( <i>Vigna radiata</i> ) under foliar application of <i>panchgavya</i> and leaf extracts of endemic plants. <b>58</b> (4): 618-620, 2013	Yadav Prakash and <b>Tripathi AK</b>	<i>Indian Journal of Agronomy</i>	5.46



**14. List of ten best papers published in National journals (> 3 NAAS : rating journals) during last 10 years**

<u>S.No.</u>	<u>Title/ Volume/ Year</u>	<u>Authors</u>	<u>Name of Journal</u>	<u>NAAS rating</u>
1.	Effect of micronutrients in combination with organic manures on production and net returns of ( <i>Sesamum indicum</i> ) in Bundelkhand tract of Uttar Pradesh. <b>30(1&amp;2): 53-58, 2009</b>	Yadav RA, <b>Tripathi AK</b> and Yadav AK	<i>Annals of Agricultural Research</i>	4.01
2.	Bio-economic evaluation of maize + urdbean/moongbean intercropping systems under rainfed conditions of central Uttar Pradesh. <b>22 (3): 176-178, 2009</b>	<b>Tripathi AK</b> , Shukla NS and Kumar Kaushal	<i>Journal of Food Legumes</i>	4.97
3.	Production potential, weed dynamics and energetic of maize + greengram/blackgram intercropping system. <b>23 (1): 30-34, 2010</b>	<b>Tripathi AK</b> , Shukla NS, Kumar Kaushal and Pandey SN	<i>Journal of Food Legumes</i>	4.97
4.	Weed suppression and production potential of direct-seeded puddled rice ( <i>Oryza sativa</i> ) as affected by herbicides under varying water management practices <b>10 (Spl. issue) : 107-111, 2010</b>	Singh DK and <b>Tripathi AK</b>	<i>Progressive Agriculture</i>	4.29
5.	Weed competitive ability of field pea ( <i>Pisum sativum</i> ) cultivars with varying row spacing. <b>3(2): 112-114, 2011</b>	<b>Tripathi AK</b> and Meena HN	<i>Current Advances in Agricultural Science</i>	4.69
6.	Growth and dry-matter partitioning of winter maize ( <i>Zea mays</i> ) as influenced by intercropping. <b>4(1): 20-24, 2012</b>	<b>Tripathi AK</b> , Dubey AP, Awasthi UD, Tripathi BN, Nath Somendra and Tripathi Anand Kumar	<i>Current Advances in Agricultural Science</i>	4.69
7.	Yield, income and energy budge of tomato ( <i>Lycopersicon esculentum</i> ) in organic farming <b>5(1): 41-44, 2013</b>	<b>Tripathi AK</b> , Dwivedi AK and Shukla IN	<i>Current Advances in Agricultural Sciences</i>	4.69

8.	Productivity, economic viability and energy efficiency of intercropping winter maize ( <i>Zea mays</i> ) and rajmash bean ( <i>Phaseolus vulgaris</i> ) in potato ( <i>Solanum tuberosum</i> ) with border ridge technique <b>6(1): 10-15, 2014</b>	<b>Tripathi AK</b> and Singh Anil Kumar	<i>Current Advances in Agricultural Sciences</i>	4.69
9.	Response of organically grown cauliflower ( <i>Brassica oleracea</i> L. var. <i>botrytis</i> ) to different sources and rates of organic manures in Indo-Gangetic plains of Uttar Pradesh <b>8(1): 32-35, 2016</b>	<b>Tripathi AK</b> , Shukla IN and Dwivedi AK	<i>Current Advances in Agricultural Sciences</i>	4.69
10	Growth dynamics and nutrient content of winter maize ( <i>Zea mays</i> L.)-based intercropping systems in relation to integrated nitrogen management under Indo-Gangetic plains of Uttar Pradesh <b>8(1): 62-68, 2016</b>	Kumar Puspendra, <b>Tripathi AK</b> and Dubey AP	<i>Current Advances in Agricultural Sciences</i>	4.69

**15. List of ten best publications in International journals during last 10 years (ISI impact factor)**

<u>S.No.</u>	<u>Title/ Volume/ Year</u>	<u>Authors</u>	<u>Name of Journal</u>	<u>Impact factor</u>
1.	Production potential and economic viability of Indian mustard ( <i>Brassica juncea</i> )-based cropping sequences. <b>72(3) : 158-160, 2002</b>	<b>Tripathi, A.K.</b> and Rathi, K.S. 2002	<i>Indian Journal of Agricultural Sciences</i>	0.28
2.	Phosphorus requirement of gram ( <i>Cicer arietinum</i> ) + Indian mustard ( <i>Brassica juncea</i> ) intercropping system under irrigated conditions. <b>74(4) : 207-209, 2004</b>	Chand Subash, Tripathi HN and <b>Tripathi AK</b>	<i>Indian Journal of Agricultural Sciences</i>	0.28
3.	Effect of herbicidal weed management on wheat ( <i>Triticum aestivum</i> ) productivity and weed growth. <b>75 (9): 569-571, 2005</b>	Tiwari SN, Tewari AN and <b>Tripathi AK</b>	<i>Indian Journal of Agricultural Sciences</i>	0.28

4.	Effect of herbicides on weed dynamics and yield of direct seeded puddled rice ( <i>Oryza sativa</i> ) under varying water regimes. 77(7): 415-419, 2007	Singh DK, Tewari AN and <b>Tripathi AK</b>	<i>Indian Journal of Agricultural Science</i>	0.28
5.	Production potential and monetary advantage of winter maize ( <i>Zea mays</i> )-based intercropping systems under irrigated conditions in central Uttar Pradesh. 80(2): 125-128, 2010	<b>Tripathi AK</b> , Kumar Anand and Nath Somendra	<i>Indian Journal of Agricultural Sciences</i>	0.28

#### 16. Membership of the Professional Societies :

<u>Nature of membership</u>	<u>Name of Society</u>	<u>Year of membership</u>
1. Life member	Indian Society of Agronomy, New Delhi	1999
2. Life Member	Indian Society of Weed Science, DWSR, Jabalpur.	2003
3. Life Member	Society of Recent Development in Agriculture, SVPUAT, Meerut	2004
4. Life Member	Indian Society of Agricultural Biochemists, CSAUA&T, Kanpur	2006
5. Life Member	The Society of Agricultural Professionals, CSAUA&T, Kanpur.	2008
6. Life Member	Indian Society of Pulses Research and Development, IIPR, Kanpur	2009
7. Life Member	Alumni Association, CSAUA&T, Kanpur.	2008
8. Annual Member	The Indian Journal of Agricultural Sciences	-

#### 17. Conferences / Seminars/ Symposia attended in last ten years :

S.No.	Name	Place	Year
<b><i>National</i></b>			
1.	National Biennial Conference of Indian Society of Weed Science on “ <i>Recent Advances in Weed Management Research and Development</i> ”	Punjab Agricultural University, Ludhiana, Punjab	April 6-9, 2005
2.	National Seminar on “ <i>Organic Agriculture: Hope for posterity</i> ”	UP Council of Agricultural Research, Lucknow (U.P.)	July 13-14, 2007
3.	Biennial Conference of Indian Society	Bihar Veterinary College,	February

	of Weed Science on “ <i>Weed Management in Modern Agriculture : Emerging Challenges and Opportunities</i> ”	Patna Campus R.A.U., Pusa (Bihar)	27-28, 2008
4.	National Symposium on “ <i>Technological Innovations for Resource Starved Farmers in Global Perspective</i> ”	C.S. Azad University of Agric. & Tech., Kanpur (Uttar Pradesh)	April 28-30, 2008
5.	Conference on “ <i>Food and environmental Security through Resource Conservation in Central India : Challenges and Opportunities</i> ”	CSWCRTI, Research Centre, Agra (Uttar Pradesh)	September 16-18, 2009
6.	Ist Indian Agricultural Scientists and Farmers Congress on “ <i>Technological Innovations for Enhancing Agriculture Production</i> ”	C.C.S. University, Meerut (Uttar Pradesh)	October 03-04, 2009
7.	National Symposium on “ <i>Achieving Millenium Development Goals : Problems and Prospects</i> ”	Bundelkhand University, Jhansi (Uttar Pradesh)	October 25-26, 2009
8.	National Symposium on “ <i>Organic Farming for Safe Food and Healthy Environment</i> ”	Madhav Ashram, Bairagarh, Bhopal (Madhya Pradesh)	April 26-27, 2010
9.	National Symposium on “ <i>Sustainable Agriculture for Rural Development</i> ”	C. S. Azad University of Agriculture & Technology, Kanpur	December 11, 2010
10.	National Seminar on “ <i>Horticulture and Agriculture Research for Prosperity of India</i> ”	Janta P.G. College, Bakewar (Etawah), Uttar Pradesh	March 28-29, 2011
11.	National Seminar on “ <i>Organic and Biological Inputs - New Innovations and Quality Control</i> ”	National Centre of Organic Farming, Ghaziabad (UP)	July 18-19, 2012
12.	National Symposium on ‘ <i>Agriculture Production and Protection in Context of Climate Change</i> ’	Birsa Agricultural University, Ranchi (Jharkhand)	November 3-5, 2012
13.	37 <sup>th</sup> ISSC-Satellite Meet on ‘ <i>Management of Natural Resources in relation to Sustainable Agro-ecosystem under Climate Change</i> ’	C. S. Azad University of Agriculture & Technology, Kanpur	December 24, 2013
14.	National Symposium on ‘ <i>Climate Resilient Forage Production and its Utilization</i> ’	BCKV, Kalyani (W.B.)	November 13-14, 2014
15.	National Seminar on ‘ <i>Bio-diversity and</i>	Baba Sahab Dr. Bhim Rao	February

	<i>Renewable Energy (BARE-2016)</i>	Ambedkar College of Agricultural Engineering & Technology, Etawah (U.P.)	13-14, 2016
16.	National Symposium on ' <i>Transforming Indian Agriculture towards Food and Nutritional Security</i> '	IGFRI, Jhansi (U.P.)	February 20-21, 2016
17.	4 <sup>th</sup> Uttar Pradesh Agricultural Science Congress on ' <i>Strategic Governance and Technological Advancement for Sustainable Agriculture</i> '	C. S. Azad University of Agriculture & Technology, Kanpur	March 2-4, 2016
<b><i>International</i></b>			
1.	International Conference on ' <i>Parthenium Management</i> '	University of Agricultural Sciences, GKVK, Bangalore (Karnataka)	December 5-7, 2005
2.	International Conference on ' <i>Post-Harvest Technology and Value addition in Cereals, Pulses and Oilseeds</i> '	C. S. Azad University of Agriculture & Technology, Kanpur (Uttar Pradesh)	November 27-30, 2006
3.	International Conference on ' <i>Sustainable Agriculture for Food, Bio-energy and Livelihood Security</i> '	Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur (Madhya Pradesh)	February 14-16, 2007
4.	International Conference on ' <i>Grain Legumes : Quality Improvement, Value Addition and Trade</i> '	Indian Institute of Pulse Research, Kanpur (Uttar Pradesh)	February 14-16, 2009
5.	5 <sup>th</sup> International Nitrogen Conference on ' <i>Reactive nitrogen management for sustainable development – Science, Technology &amp; Policy</i> '	The Ashoka Hotel, New Delhi	December 03-07, 2010
6.	International Conference on ' <i>Organic Bihar</i> '	Hotel Maurya, Patna (Bihar)	June 22-24, 2011
7.	Third International Agronomy Congress on ' <i>Agriculture Diversification, Climate Change Management and Livelihoods</i> '	IARI, New Delhi	November 26-30, 2012
8.	International Conference on ' <i>Role of Plant Bio-chemistry and Bio-technology in Food and Nutrition Security</i> '	Tirupati (Andra Pradesh)	December 11-14, 2013
9.	Fourth International Agronomy Congress on ' <i>Agronomy for Sustainable Management of Natural Resources, Environment, Energy and Livelihood Security to Achieve Zero Hunger Challenge</i> '	IARI, New Delhi	November 22-26, 2016

**18. Conferences / Seminars/ Symposia organized as Secretary/ Organizing Secretary :**

S.No.	Name	Place	Year
1.	The 1 <sup>st</sup> National Symposium on <i>“Technological Innovations for Resource Starved Farmers in Global Perspective”</i>	C.S. Azad University of Agriculture & Technology, Kanpur	April 28-30, 2008
2.	The 2 <sup>nd</sup> National Symposium on <i>“Food Security in Context of Changing Climate”</i>	C.S. Azad University of Agriculture & Technology, Kanpur	30 Oct. - 01 Nov. 2010
3.	The 3 <sup>rd</sup> National Symposium on <i>“Agriculture Production and Protection in Context of Climate Change”</i>	Birsa Agricultural University, Ranchi at BAU, Ranchi (Jharkhand)	3-5 Nov, 2012
4.	The 4 <sup>th</sup> National Symposium on <i>“Transforming Indian Agriculture towards Food and Nutritional Security”</i>	Indian Grassland and Fodder Research Institute (IGFRI), Jhansi	20-21 February 2016

**19. Foreign countries visited :** NIL

**20. Training organized in last 5 years :** None

**21. Training attended in last 5 years :**

S.No.	Title of the course	Duration	Name of Organizing Institution
1.	Good Agricultural Practices for Safe, Secured and Sustainable Crop Production	21 days (March 28- April 17, 2006)	G.B. Pant University of Agriculture & Technology, Pantnagar (Uttarakhand)
2.	Crop Diversification through Pulses for Sustainable Crop Production	21 days (August 10-30, 2006)	Indian Institute of Pulse Research, Kanpur (U.P.)
3.	Advances in Video and Multimedia Production	21 days (November 1- 21, 2007)	National Academy of Agricultural Research Management, Hyderabad (Andra Pradesh)
4.	Training on <i>“Internet and its Uses”</i>	15 days (February 1-15, 2007)	C.S.A. University of Agriculture & Technology, Kanpur
5.	Workshop on <i>“Role and</i>	3 days	NAARM, Hyderabad

	<i>Establishment of Education Technology Cells in SAUs</i>	(October 18-20, 2007)	
6.	Training on “ <i>Certification and Inspection in Organic Farming</i> ”	10 days (Sept. 03-12, 2007)	National Centre of Organic Farming, Ghaziabad (U.P.)
7.	Trainers Training Programme on “ <i>Production Technology, Post Harvesting, Processing, Value Addition and Marketing of Medicinal &amp; Aromatic Plants</i> ”	2 days (March 28-29, 2008)	Department of Forestry, C.S. Azad University of Agric. & Tech., Kanpur (U.P.)
8.	Short Course on “ <i>Site Specific Integrated Nutrient Management in Rice and Rice-based Cropping Systems</i> ”	10 days (Feb. 04-13, 2009)	Directorate of Rice Research, Rajendranagar, Hyderabad (A.P.)
9.	National Training on “ <i>Fundamentals of IPRs</i> ”	2 days (March 05-06, 2010)	UP Council of Agricultural Research (UPCAR), Lucknow
10.	Trainers Training on “ <i>Production Technology, post harvesting, processing, value addition and marketing of medicinal and aromatic plants</i> ”	2 days (January 27-28, 2010)	Department of Forestry, CS Azad University of Agriculture & Technology, Kanpur
11.	National Capacity Building on “ <i>Essential Teaching Skills for Effective Teaching</i> ”	7 days (26 Dec. 2016 to 01 Jan. 2017)	G.B. Pant University of Agriculture & Technology, Pantnagar (Uttarakhand)

**22. Externally funded projects handled :** None

**23. List of current research projects :** None

**24. Patents held :** None

**25. Varieties/ Technologies developed in the last 10 years :**

### **IMPLEMENTED TECHNOLOGY GENERATED**

The significant contribution in respect of generating significant recommendations in various crops and cropping systems are stated below:

#### ❖ **Developed Sustainable Weed Control Technology**

- **Control of *Carthamus oxyacantha* and other associated weeds in pea:**

In order to tackle the problem of *Carthamus oxyacantha* in field pea, a field investigation were carried out for three *rabi* seasons (2001-04) on farmers field at Bariapur village of Jalaun district

in UP. Metribuzin (175 g/ha) as pre-emergence followed by metribuzin (87.5 g/ha) as post-emergence (after first irrigation) demonstrated satisfactory mortality of *C. oxycantha* and other associated weeds with an overall weed control efficiency of 72% resulting in increased grain yield by 56.8% which recorded greater net monetary returns with higher B : C ratio over unweeded. Use of five tined hoe caused weed mortality to the extent of 18-24% resulting in increased grain yield to the extent of 16-17%.

- **Control of *Phalaris minor* and other associated weeds in wheat:**

Isoproturon (0.75 kg/ha) + 2, 4-D (0.5 kg/ha) eliminated weed competition resulting in greater yield closely, followed by isoproturon (0.75 kg/ha) + metsulfuron methyl (3 g/ha). Metsulfuron methyl (3 g/ha) has been proved good alternative of 2,4-D (0.5 kg/ha) with regard to broad leaved weed control in wheat. Metribuzin showed effective control of grassy as well as broad leaved weeds but gave lower grain yield of wheat.

- **Control of *Coronopus didymus* and other associated weeds in coriander:**

In coriander, pretilachlor (1.5 kg/ha) and pendimethalin (1 kg/ha) were found very effective against associated weeds especially *C. didymus* and increased seed yield of coriander over untreated. However, pendimethalin (1.0 kg/ha) fetched highest monetary return, followed by pretilachlor and metolachlor.

- Initial 60 days period appeared to be critical period of weed competition in rainfed chickpea dominated with *Asphodelus tenuifolius*.
- It has been reported that higher dose of oxadiazon caused little phytotoxicity on seedling growth of onion nursery. It was thus inferred that oxadiazon (0.5 kg/ha) and pendimethalin (0.75 kg/ha) could be applied for effective control of weeds in onion nursery.
- A significant reduction in weed population and their dry-biomass was recorded in maize + potato combination, closely followed by maize + pea system. Weed-control efficiency of these intercropping systems was also higher in order than other intercropping combinations.
- Field pea cultivar 'JP 885' - a fast growing tall cultivar significantly suppressed weed population as well as weeds dry weight resulted higher productivity which ultimately reflected in terms of more net returns and benefit: cost ratio as compared to dwarf cultivar Sapna.
- Regular row planted maize was found most productive and profitable cropping system which resulted significant reduction in weed population and weed dry-matter accumulation and recorded the highest weed control efficiency than paired row planted maize.
- The soil solarization (0.5 TPE) for 3 weeks inhibited emergence of *Trianthema monogyna* upto 20-25 days after sowing and thereafter weeds start emerging. Supplementing removal of weed through manual labours along with solarization appeared to be advantageous with respect to weed management (63.59%WCE) and greater baby corn yield (64.64%) over unweeded.
- With an objective to assess the relating efficacy of herbicides under varying water management practices in dissect seeded puddled rice, a field experiment was conducted for two consecutive *kharif* seasons of 2003 and 2004 at Kanpur. Results revealed that butachlor (1.5 Kg/ha) controlled grasses significantly but was less effective against broad leaved weeds and sedges at 30 and 90 days after sowing. Anilofos (0.45 kg/ha) applied at 7 days after sowing significantly reduced the population of broad-leaved weeds and sedges (52-55% weed control efficiency), resulting in increased all the yield attributing characters and finally grain yield over that of untreated. Spraying of herbicides in shallow film of water proved to be optimum condition for intended weed control.



## ❖ **Developed Sustainable and Profitable Crops and Cropping Systems**

- The yield of Indian mustard could be maximized in green-manured plot with *Sesbania cannabina* (32.73 q/ha) and minimized under pearl millet-Indian mustard sequences (25.86 q/ha) in irrigated conditions of central Uttar Pradesh.
- In a study under sequential cropping, Indian mustard grown after fallow, *Sesbania*, maize, blackgram and cowpea responded only up to 160 Kg N/ha, while after sorghum and pearl millet the response was up to 200 kg N/ha. Among the cropping systems tested, maize – Indian mustard registered the highest total productivity, net returns with highest land use efficiency (61.92%), followed by blackgram-Indian mustard cropping sequence at 160 kg N/ha.
- Mustard grown after sorghum and pearl millet responded up to 200 kg N/ha, while after fallow, *Sesbania*, maize, blackgram and cowpea the response was only up to 160 kg N/ha. The highest seed and oil yield of mustard realized in *Sesbania*-mustard cropping sequences at 160 kg N/ha.
- A study indicated that rice-wheat cropping sequences recorded the maximum productivity and monetary returns when rice nursery was fertilized with 25 kg ZnSO<sub>4</sub>/ha along with 30 kg ZnSO<sub>4</sub>/ha to rice crop directly.
- Application of 90 kg nitrogen/ha produced significantly higher seed and stalk yield as well as net returns of sunflower as compared to 30, 60 and 120 kg N/ha. Use of 20 kg sulphur and 4 kg boron/ha increased seed yield and economics of sunflower over control. Thus, sustainable productivity of sunflower could be harvested with the application of 90 kg N, 20 kg S and 4 kg B/ha in central U.P.
- Border method of sowing (3:0) in mustard proved to be the best resulting in higher seed yield and net returns and also improved seed quality of mustard than other methods, followed by skip row technique method.

## ❖ **Developed Sustainable and Profitable Intercropping Systems**

### • **Compatibility of rabi crops with winter maize in association:**

- Field investigations carried out for two years (2003–05) revealed that intercropping of winter maize with potato in 1:1 row pattern under additive series was more advantageous than other intercrops viz., Indian mustard, toria, pea, linseed and wheat particularly in central UP. Maize + potato appeared to be biologically the most efficient and economically viable system given the highest maize grain yield (6091 kg/ha which increased by 22% compared with sole cropping of maize), maize-equivalent yield (13792 kg/ha), production efficiency (276.1%), productivity (98.51 kg/ha/day), land equivalent ratio (2.14), area-time equivalent ratio (1.91), monetary advantage (39017), net realization (Rs 32369/ha), monetary-equivalent ratio (1.66) and monetary efficiency (Rs 536.2/ha/day). Winter maize + pea intercropping system was found next in order. Indian mustard, toria and wheat were found non-compatible with winter maize.
- Partitioning of dry-matter in winter maize-based intercropping systems revealed that winter maize planted with potato produced significantly higher total dry-matter as well as cobs and grain weight at maturity, followed by maize planted with pea system. A significantly positive association of grain weight with total dry-matter, stem weight, root weight, leaf weight, cobs weight and flower weight under these intercropping systems indicated that higher biomass yield and its maximum partitioning into cobs improved the grain yield of maize. Intercropping of toria and wheat with maize caused maximum reduction in total dry-matter production.

- Intercropping of chickpea and mustard in 8:2 row ratio was found more profitable and viable system than sole stand of both the crops and 6:2 row ratio. Phosphorus application @ 60 kg/ha was found most effective in increasing the yield and net returns of the system.
- **Effect of component crops in intercropping:**  
In a trial, the effect of winter maize was found adverse on component crop rajmash grown in association. Rajmash yield reduced by 22.23% in additive series and 27.37% in replacement series due to adverse effect of maize on rajmash. In potato intercropping, both maize and potato were benefited by each other. Winter maize was also benefited by rajmash in intercropping system where the effect of rajmash intercrop on winter maize was synergetic. The intercropping of maize + potato in additive series (1:1 row ratio) gave significantly maximum net profit of Rs. 73963/ha, thus proved most profitable.
- Intercropping of winter maize for cob purposes with potato planted at 45 x 20 cm apart through border ridge technique recorded significantly higher potato equivalent yield (339.99 q/ha), net returns (Rs 60947/ha) and benefit: cost ratio (2.48), followed by potato at 60 x 15 cm + maize (cob purposes). Intercropping of rajmash with potato was found next alternative system.
- Intercropping of mungbean with *kharif* maize in uniform rows under 1:2 row ratio proved advantageous with higher land equivalent ratio (LER), land equivalent coefficient (LEC) and area-time equivalent ratio (ATER) which produced the highest productivity of the system and economics than association of urdbean as intercrop and other row ratios.
- Intercropping of maize under uniform planting with urdbean/mungbean produced higher total output energy (203.63-209.69 x 10<sup>3</sup> MJ/ha) and energy productivity (342-361 g/MJ).
- Chickpea + fennel (1:1) intercropping system were established its superiority over sole chickpea and other intercropping combinations in terms of higher chickpea-equivalent yield (1699 kg/ha), more net returns (Rs. 20275/ha), Benefit: Cost ratio (2.12) and monetary efficiency (Rs 250.4/ha/day). Results further revealed that these parameters were maximized significantly at 100% recommended dose of fertilizer-RDF (20:60:20 kg NPK/ha) over 50% RDF but at par with 150% RDF.

#### ❖ **Developed Nitrogen Management Schedule in Baby Corn**

- Baby corn fertilized with 150 kg N/ha in 3 equal splits at basal, knee high and at pre-tasseling stages recorded higher marketable corn yield and net return from baby corn in winter season in central plain zone of Uttar Pradesh.

#### ❖ **Developed INM Protocols For Crops and Cropping Systems**

- Maize + potato in 3:1 and maize + linseed in 3:3 row ratios (replacement series) were established more productive intercropping systems as they increased total productivity of the system by 15.86 and 3.75% over sole cropping of winter maize, respectively. These maize based intercropping systems also recorded higher productivity when fertilized with INM practice of 75% RDN through inorganic + 25% RDN through organic fertilizers over application of 50% RDN through inorganic + 50% RDN through organic and 100% RDN through inorganic.
- Greengram grown after maize + potato (3:1) intercropping system was out yielded over grown after other intercropping systems and sole cropping of maize as this system produced 4.14% higher grain yield and earned 8.81 and 4.21% more net return and benefit: cost ratio of greengram, respectively, compared to greengram cultivated after sole maize. Similarly, greengram grown on previously fertilized plots with increasing proportion of organic inputs along with inorganic fertilizer was established more productive and remunerative, consequently

INM practice of 50% RDN through inorganic + 50% RDN through organic fertilizers was produced 8.23 and 16.11% more grain yield, 16.81 and 35.59% higher net return and 8.16 and 15.85% more benefit: cost ratio of greengram crop than previously fertilized plots with application of 75% RDN through inorganic + 25% RDN through organic fertilizers and 100% RDN through inorganic fertilizer, respectively.

- Among the maize-based intercropping – greengram cropping systems, maize + potato (3:1) – greengram was most economically viable cropping system, which fetched 21.44% higher system net return and 7.06% more system benefit: cost ratio over winter maize – greengram cropping system. Maize + linseed (3:3) – greengram was next highly economically practicable cropping system, which augmented by 10.64 and 5.29% system net return and system benefit: cost ratio over winter maize – greengram cropping system, respectively. On the basis of whole cropping system, INM practice of 75% RDN through inorganic + 25% RDN through organic fertilizers was established as profitable INM protocol, which increased by 0.26 and 36.61% system net return than application of 100% RDN through inorganic and 50% RDN through inorganic + 50% RDN through organic fertilizers, respectively.

#### ❖ **Developing Organic Package of Practices/Organic Agro-Techniques for Central Uttar Pradesh**

- Chickpea cultivar ‘KPG-59’ (Udai) was out yielded significantly at wider row spacing of 60 cm, however ‘KGG-1168’ (Alok) recorded higher grain yield at row spacing of 45 cm in organic farming.
- Nipping as low-cost agro-technique in chickpea established its superiority over no nipping and registered maximum grain yield in organic farming.
- Chickpea cultivar ‘KGG-1168’ (Alok) was performed well as compared to ‘KPG-59’ (Udai) in organic farming.
- In mustard, 45 cm row spacing along with thinning + topping agro-techniques produced the highest grain yield and earned maximum net return over lower (30 cm) and higher row spacing (60 cm) irrespective of low-cost agro-techniques, viz. thinning and topping alone. Low cost input agro-techniques viz., thinning and topping alone or in combination established their superiority over none.
- Out of 12 mustard cultivars (Varuna, Rohini, Vaibhav, Vardan, Urwashi, Basanti, Maya, Kanti, Ashirbad, Pitambari, Kranti, Pusa Bold) tested in organic farming eco-system, ‘Rohini’ performed the best which gave significantly higher grain yield of over all other varieties, followed by Kranti and Ashirbad which out yielded on par.
- Integration of FYM (10 t/ha) + Vermicompost (2.5 t/ha) + Neem seed cake (0.1t/ha) produced the highest fruit and curd yield of tomato and cauliflower, respectively in organic farming.
- Foliar spray of *Panchgavya* thrice along with neem leaf extract recorded higher grain yield of greengram and baby corn over the water sprayed control and application of *panchgavya* alone.
- Combined use of fermented liquid organics (Beejamruta + Jeevanmruta + Panchgavya) and FYM + vermicompost established its superiority over individual use of either of these organics sources when assessed in terms of growth, yield attributes, yield and economics of greengram and blackgram.
- Application of FYM 2.5 t/ha + vermicompost 1.0 t/ha + Beejamruta + Jeevanmruta + Panchgavya blended with neem leaf extract + biofertilizer (PSB + *Rhizobium*) recorded 86.8%

and 47.1% higher grain yield in case of greengram and 68.6% and 43.7% higher grain yield in case of blackgram over the control and treatment applied with Beejamruta + Jeevanmruta + Panchagaya blended with neem leaf extract alone, respectively. This treatment could also be considered economically more remunerative in both the crops.

#### 26. Significant contributions in the area of specialization (not more than 5) :

- Involved in developing a rainy season maize variety ‘Azad Kranti’ (R-9303) and winter maize variety ‘Sharadmani’ (R-49).
- Involved in developing sustainable weed management technologies for controlling weeds in various crops and cropping systems.
- Developed, perfected and demonstrated intercropping technology of *rabi* season vegetables and other crops with winter maize and pulses with rainy season maize at farmers’ field.
- Standardized dose of nitrogen and its scheduling of application for *rabi* grown baby corn and developing INM protocols for crops and cropping systems in central plain zone of UP.
- Developed and standardized organic package of practices for crops and cropping systems.

#### 27. Participation in the college/ university building activities :

- Discharged duties as ‘Officer Incharge, Practical Crop Production’ from April 05, 2003 to October 18, 2005.
- Discharged duty as Deputy Controller of Examination under the University Examination Cell as confidential assignment regarding setting question papers from external examiners, printing and supply of papers for organizing semester examinations of the University with great zeal from 01 December 2009 to 10 October 2011.
- Discharging duty as Coordinator, Organic Farming Programme of the University with specific objective “Development of package of organic practices and organic agro-techniques for crops and cropping systems in central Uttar Pradesh” from 26 June 2009 to date.
- Discharged duties as Hostel Warden of the University from 22 February 2008 to 22 February 2011.

#### 28. Resource generated during last 5 years : None

#### 29. Any other significant academic / research achievement :

- Initiated in establishment of an academic Society ‘The Society of Agricultural Professionals’ in 2008 in the University. I am entrusting the responsibilities of **GENERAL SECRETARY** of the Society since 2008 to date.
- Initiated in establishment of an International Journal ‘Current Advances in Agricultural Sciences’ in 2009 and it has the current NAAS Rating of 4.69. I had been assigned the responsibilities of **EXECUTIVE EDITOR** of the Journal from 2009 to 2014. I am also

publishing two issue of this journal every year on behalf of the Society since its inception.

- Taken as lead for **“Development of package of organic practices and organic agro-techniques for crops and cropping systems in central Uttar Pradesh”**.
- I had been Chair as well act as member of the prestigious committees of International / National Conferences/ Symposia.
- Delivered many lectures on different topics at various forums.
- Attended many advanced trainings/workshops/winter schools/summer courses for developing skill in teaching as well research.
- Adoption of Village for improving livelihood security of low resource farmers:

**Virchi** village in Unnao district of Uttar Pradesh about 25 km away from head quarter was selected by **‘The Society of Agricultural Professionals’** under my technical supervision for transmission of sustainable agricultural technologies. The objectives for adoption of said village are:

- i) to improve socio-economic status of farming community particularly marginal and small farmers, and
  - ii) to provide technical how-know of various fields of agriculture for raising the farm productivity of the area under selected village.
- Evaluated M.Sc. (Ag) & Ph.D. theses in Agronomy; Theses viva-voci of post graduate students; Paper setter and practical examiner of under graduate and graduate levels of several Universities, Paper setter and practical examiner of Intermediate in Agriculture in UP Board, Allahabad since last many years.
  - I did one year diploma on ‘Computer’ and 45 days Course on “Computer Application”, 4 refresher courses of 21 days, and 14 training of 2 to 15 days duration in my carrier.

Date: 15.01.2017



(A. K. Tripathi)