

Name	Dr. V.P. Singh	
Designation	Professor & UGC-BSR Faculty Fellow	
Department	<b>Department of Plant Science</b>	
Address	M.J.P. Rohilkhand University, Bareilly -	le sill
(Campus)	243006 (U.P.).	100
	&	
	President,	
	Indian Botanical Society (2018)	
(Residence)	S-3/13 Greater Green Park, Bareilly -	
	243006 (U.P.).	1 N N
Date of Birth	25.11.1954	2 0 8 0 8
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Edwardian		

# **Education**

Subject	Institution	Year	Details	
M.Sc.	Agra University	1973	Subjects: Botany	
Ph.D	Agra University	1978	Thesis topic: Improvement of	
			Mung Bean	
			Mutagenesis.	

# **Career Profile**

Organisation / Institution	Designation	Duration	Role	
Hindu college Moradabad	Lecturer	Aug.1973-Feb.1985	Teaching & Research	
MJP Rohilkhand University,	Reader	Feb.1985-Aug.1995	Teaching & Research	
Bareilly				
MJP Rohilkhand University,	Professor	Aug.1995-June 2017	Teaching & Research	
Bareilly				
MJP Rohilkhand University,	UGC-BSR	1 <sup>st</sup> July, 2017 –	Research	
Bareilly	Faculty Fellow	30 <sup>th</sup> June, 2020		

# **Research Interests / Specialization**

Cytogenetics, Plant Breeding, Environment Management.

# **Teaching Experience ( Subjects/Courses Taught)**

11Yrs. & 6 Months (U.G. & P.G.) Cytogenetics, Taxonomy, Plant Breeding (1973-1985).
32 Yrs (P.G.) Environmental Biology, Genetics, Plant Breeding & Biostatistics (1985-continuing).

#### **Honors & Awards**

- A. Elected President, Indian Botanical Society (2018).
- B. President (Plant Science Section), Indian Science Congress (2017).
- C. Awarded U.G.C. Basic Science Research Faculty Fellowship Award (01.07.2017-30.06.2020) (Awarded to Professors to continue their research after retirement for three years by UGC/MHRD, New Delhi).
- D. Elected Fellow of the Society of Plant Reproductive Biology (2013).
- E. Awarded Distinguished Service Award (2013) by Bareilly College, Bareilly.
- F. Elected Secretary, Indian Botanical Society (2011-13) and re-elected up to 31<sup>st</sup> March, 2017.
- G. Awarded Best Teacher Award in 2006 (by Society for Plant Research, Meerut), 2007 (by Agrasen Society, Bareilly) and 2008 (by Bareilly Scholar Education Society).
- H. Elected Vice President, Indian Botanical Society (2003).
- I. Elected Fellow of Mendelian Society of India (1986).
- J. Elected Fellow of Indian Botanical Society (1984).

### **Research Experience**

- A. Specialization: Genetics & Plant Breeding & Environmental Biotechnology.
- B. Published 89 research papers with some in **Thomposon Reuters Science Citation Indexed Journals i.e. Scientific Reports (Nature Publishing Group) (IF 5.078)**, J. of Hazardous Materials (Elevier) (IF 5.52), Microbial Cell Factories (IF 4.116), Environ. Sci. Poll Res (IF 2.757), Peer J Preprints (IF 2.2), Virus Genes (IF 1.76), J. of Chemistry (IF 1.30), J. Plant Pathology (IF 0.97), Australian Plant Disease Notes (IF 0.96), J. Environ. Biology (IF 0.55), Current Science (IF 0.833), Indian J. of Agri. Scieces (IF 0.18), J. Bioremediation & Biodegrad.etc.
- C. 27 Students have been awarded Ph.D. degree under my supervision.
- D. Completed 07 major Research Projects sanctioned by UP, CST, Lucknow and U.G.C., New Delhi.
- E. Chaired papers reading sessions in 25 conferences and delivered key note address in 15 conferences.
- F. Foreign Collaborations:

Selected in INSA-DFG Scientist Exchange Programme in 1994 and worked at Institute of Crop Plant Research Gaterseleben Germany and

Visited Martin Luther University Hale and Kaiserleutern University, Germany for scientific discussions.

#### **Project (Major Grants / Collaborations)**

Completed 07 major Research Projects (04 Awarded by U.G.C. New Delhi and 01 U.P.C.S.T. Lucknow) and 01 minor Research Project awarded by U.P.C.S.T. Lucknow.

Year	Title	Source	Completed
2010-2013	Studies on the effects of EDTA and Citric acid on the	UGC, New Delhi	Completed
	Phytoremediation efficiency of Brassica juncea (L.).		
2008-2011	"Decontamination of Heavy metals from Soil and	University	
	Water trough Phytoremediator Plants (The Vetiver	Sponsored Project	Completed
	System for Environmental Protection and Natural		
	Disaster Management)"		
2005-2007	Studies on the effects of Heavy metals (Pb++, Zn++,	UGC, New Delhi	Completed
	Hg <sup>++</sup> ) on Black gram & Pigeon Pea with its		
	Phytoremediation through Vetiveria zizanioides (L)		
	Nash and Brassica juncea (L)		
1999-2002	Regulation of growth & Nitrogen Assimilation in	UP,CST, Lucknow	Completed
	Popular by growth regulators.		Completed
1996-99	Studies on the Effect of Industrial Waste Water	UGC, New Delhi	Completed

	Irrigation on Cytogenetical and Agronomical		
	characteristics in some Pulse Crops.		
1986-90	Improvement of Some Pulse Crops Trough Induced	UGC, New Delhi	Completed
	Mutagenesis.		
1982-84	Reconstruction of Plant types through Induced	UP,CST, Lucknow	Completed
	Mutagenesis		_

# **Administrative Experience:**

- 1) Pro-Vice Chancellor (Dec 2014 Nov 2016).
- 2) Coordinator & Vice Chairman, IQAC (Dec 2014 Nov 2016).
- 3) Dean, Faculty of Applied Sciences (1999 2003, 2010 2015).
- 4) Head, Department of Plant Science (1985-1987, 2001-2008, 2011-2014).
- 5) Coordinator, NAAC Steering Committee (2011-2014).
- 6) Chief Coordinator, Entrance Test Cell (2001 2016).
- 7) Chief Proctor (1999 2014).
- 8) Coordinator, Central Evaluation (2007 2010).
- 9) Dean Students Welfare (1989 1993).
- 10) Secretary, University Sports Council (1987-1990)

#### **Consulting Activity:-**

- 1- Appointed Chairperson/Member of NAAC Peer Team in various Universities of the country.
- 2- Appointed Expert in UGC Committee for evaluation of proposals under the scheme of Research Project Grant dated 01.10.2013
- 3- Nominated, Member Academic Council in AMT University, Gwalior by M.P. Private Regulatory Commission on 29.11.2013.
- 4- University Coordinator, U.P. B.Ed. combined Entrance Test 2007 conducted by C.S.M. University, Kanpur & 2008 conducted by Dr. B.R. Ambedkar University, Agra, 2010 Lucknow University, Lucknow, and 2011 M.J.P.Rohilkhand University, Bareilly, 2012 RML University Faizabad, 2013, DDU Gorakhpur University, Gorakhpur, 2014 Bundelkhand University, Jhansi and 2015 Lucknow University, Lucknow.
- 5- Member, Core-Committee, U.P. C.P.M.T. 2004 organized by C.C.S. University, Meerut (U.P.).
- 6- Member, Coordination Committee, U.P. SLET.- 2004 Organized by C.S.M. University, Kanpur (U.P.).
- 7- Expert, U.G.C. Visiting Team for allocation of XI Five Year Plan Grant 2008.
- 8- Nominated member, Education advising committee Govt. Of U.P. 1997.
- 9- Referee in National / International Journals.

### **Other Details**

- 1. Elected as Councillor (1996 1999 and 2008 2011) and member editorial Board (1999 2002 and 2017-2020) in Indian Botanical Society.
- 2. Organized UGC Refresher Course  $7^{th}$  Sept.  $27^{th}$  Sept., 2001; from 3rd Oct. 29th Oct., 2002.  $28^{th}$  Oct.  $20^{th}$  Nov. 2003 as Coordinator.
- Organized National Symposium on Biosciences: Advances, Impact and Relevance and Silver Jubilee Conference of Indian Botanical Society from 27th Oct.-29th Oct., 2002. as Organizing Secretary.

- 4. Organized Patent Awareness Workshop in collaboration with UP CST, Lucknow & DST, New Delhi on 27th Nov.2002. as organizing Secretary.
- 5. Councillor in Society of Plant Reproductive Biologist (2008-continuing).
- 6. Convener, BOS, Plant Science, RU. Bareilly.
- 7. Member, RDC, Plant Science and Academic Counsel, R.U. Bareilly.
- 8. Member, BOS & RDC other State/ Deemed Universities.
- 9. Delivered lectures in U.G.C. Refresher Course organized by Jiwaji University, Gwalior, R.D. University, Jabalpur, Ch.Ch. Singh University, Meerut and Department of Animal Science & Plant Science, Rohilkhand University, Bareilly.
- 10. Organized visit of U.G.C. Team (17-19 Sept. 2008 at MJPRU, Bareilly. As Coordinator for allocation of XI five year Plant Grant.
- 11. Organized workshop on "Role of IQAC in Assesment & Acereditation" on 22-23<sup>rd</sup> Dec.2012 & 27-29<sup>th</sup> Jan 2012" and 31<sup>st</sup> Jan. 2<sup>nd</sup> Feb., 2014 and 22<sup>nd</sup> 24<sup>th</sup> March, 2014, 13<sup>th</sup> 15<sup>th</sup> Feb, 2015 as coordinator, NAAC Streering Committee/IQAC.
- 12. Organized Seminar on "Alcohol/Smoking/Drugs: Their deleterious effects on Human Body" on 23<sup>rd</sup> Jan., 2010, 5<sup>th</sup> March, 2011, 24<sup>th</sup> Jan., 2012 and 16<sup>th</sup> Jan., 2014 as Chief Proctor & Organizing Secretary.
- 13. Organized Conference of the Indian Botanical Society on Oct. 10-12, 2011 at Lucknow University, Lucknow (U.P.), Dec 8-10, 2012 at M.S. University, Vadodara (Gujrat), Oct. 18-20, 2013 at DDU Gorakhpur University, Gorakhpur (U.P.), Nov. 7-9, 2014 at V.G. Vaze College, Mumbai (Maharashtra), October 26<sup>th</sup> 28<sup>th</sup>, 2015 at University of Rajasthan, Jaipur as Secretary, Indian Botanical Society.
- 14. Organized Prof. J.N. Rai Memorial Lecture in 2011, 2012, 2013 which was delivered by Prof. S.P. Khuller, Chandigarh, Prof. M. Anis, Aligarh, Dr. U.C. Lavania, Lucknow as Head of the Department.
- 15. Organized Prof. H.S. Srivastava Memorial Lecture in 2011, 2012, 2013 which was delivered by Prof. Arun Arya, Vadodara, Prof. A.K. Jain, Gwalior and Prof. D.K. Maheshwari, Haridwar as Head of the Department.

# **EXPERIENCE OF NAAC PEER TEAM VISITS:**

- 1- Appointed member of NAAC Peer Team at Vikram University, Ujjain (M.P.) 21<sup>st</sup> -24<sup>th</sup> Sept., 2015.
- 2- Visited as Chairperson of NAAC Peer Team at Shri Shivaji Education Society, Amravati's Science College, Nagpur (Maharashtra), 18<sup>th</sup> to 20<sup>th</sup> Jan., 2016.
- 3- Visited as Chairperson of NAAC Peer Team at Shri P.N. Pandya Arts, M.P. Pandya Science & Smt. D.P. Pandya Commerce College, Lunawada (Gujrat) 22<sup>nd</sup> to 24<sup>th</sup> Jan., 2016.

- 4- Visited following institutions as Chairperson in NAAC Peer Team and accredited institutions-
  - A. Govt. Madhav Sadashiva Golvalkar College, Rewa (M.P.)  $10^{th} 12^{th}$  Nov., 2016.
  - B. Mongasaji Maharaj Mahavidyalaya, Yavatmal (Maharashtra) 5<sup>th</sup> 7<sup>th</sup> Dec., 2016.

# (I) NAAC ACTIVITIES AT UNIVERSITY LEVEL:

- Organized NAAC Peer Team Visit at M.J.P. Rohilkhand University, Bareilly (U.P.) from 4<sup>th</sup> 7<sup>th</sup> April, 2016 for 2<sup>nd</sup> Cycle of NAAC Accreditation as Pro-Vice Chancellor & Chairman, IOAC Cell.
- Organized workshop on "Role of IQAC in Assessment & Accreditation" on 22<sup>nd</sup> -23<sup>rd</sup> Dec., 2012 & 27<sup>th</sup> 29<sup>th</sup> Jan., 2012, 31<sup>st</sup> Jan. 2<sup>nd</sup> Feb., 2014 & 22<sup>nd</sup> -24<sup>th</sup> March, 2014, 13<sup>th</sup> -15<sup>th</sup> Feb., 2015 and 28<sup>th</sup> Feb.- 1<sup>st</sup> March, 2016 & 27<sup>th</sup> 29<sup>th</sup> March, 2016 as Coordinator, NAAC Steering Committee/IQAC.

# **Total Publication Profile:**

#### Books

- 1. 2003 Edited Book on "Bio Science: Advances, Impact & Relevance".
- 2. 2009 Chapter-19 "Use of Plant Genetic Resources for sustainable food and nutritional security: Today's World need." In Book Stable food production & Sustainable Agriculture, Published by Studium Press (India) Pvt. Ltd. New Delhi, pp.352-372.

# In Indexed/ Peer Reviewed Journals;

# Papers Published.

The state of the s				
Year of Publication	<u>Title</u>	<u>Journal</u>	Authors	
1. 1977	DMSO as a carrier agent for morphactin and dalapon in moong bean ( <i>Phaseolus aureus</i> Roxb.)	Comp. Physiol. Ecol.2(2):83-84.	V.P. Singh	
2. 1978	Increased muagenic effects of EMS in Moong bean ( <i>Phaseolus aureus</i> Roxb) DMSO	J.Cytol. Genet. 13:116-119	V.P. singh and S.N. Chaturvedi.	
3. 1978	Enhancement of frequency and spectrum of NMU induced mutations in moong bean ( <i>Phaseolus aureus</i> Roxb) by DMSO.	Science and culture 44(12):537-539.	V.P. singh and S.N. Chaturvedi,	
4. 1979	Mutability of moong bean ( <i>Phaseolus aureus</i> Roxb) induced by Gamma-rays & EMS during combined treatments.	Agra Univ. J.Res. XXVII (Part I):129-134.	•	
5. 1980	Note on the induction of synchronous maturing mutants in green gram by alky lating agents	Indian J.Agri. Sci 50(8):631-633	V.P. singh and S.N. Chaturvedi,	
6. 1980	Gamma-rays induced quantitative variation in moong bean ( <i>Vigna radiata</i> (L) Wilczek)	J.Cytol.Genet.15(1):6 4-67.	V.P. singh and S.N. Chaturvedi,	
7. 1980	The productivity of some mutants of the moong bean ( <i>Vigna radiata</i> (L) Wilczek.I. Bigger grain size and high yielding mutants	J. Cytol. Genet.15 (2):152-155.	V.P. singh and S.N. Chaturvedi	
8. 1980	Effects of recurrent gamma irradiation in seeds of <i>Vigna radiata</i> (L) Wilczek.	<i>Indian J. Heredity</i> 12(3):65-67.	V.P. singh and S.N. Chaturvedi	
9. 1980	Mutagenic efficiency of EMS, NMU, Gamma-rays and their combined treatments	Genetica Agraria 34:331-343.	V.P. singh and S.N. Chaturvedi	

	in Vigna radiata (L) Wilczek		
10. 1980	The productivity of some mutants of moong bean ( <i>Vigna radiata</i> (L) Wilczek)	Genetica Agraria 35:295-300.	V.P. singh and S.N. Chaturvedi
11.1980	Combined effects of Gamma-rays with EMS, NMU, on the growth of moong bean ( <i>Vigna radiata</i> (L) Wilczek)	Comp. Physiol. Ecol 5(1):17-18.	V.P. singh and S.N. Chaturvedi
12. 1981	Gamma-rays induced male sterile mutants in moong bean ( <i>Vigna radiata</i> (L) Wilczek).	PulseCrop Newsletter 1(1):41.	V.P. singh and S.N. Chaturvedi
13. 1981	The productivity in induced mutants in moong bean	Current Science 50(13):603-60	V.P. singh and S.N. Chaturvedi
14. 1981	Effects of EMS, NMU, Gamma-rays in Vigna radiata (L) Wilczek.	Acta Botanica India 9(10):82-87.	V.P. singh and S.N. Chaturvedi
15. 1982	Variability, heritability and correlation studies on yield and its components in moong bean after mutagenic treatment.	Acta Botanica India 10:156.	V.P. singh and S.N. Chaturvedi
16. 1982	Comparative mutagenic effects of EMS, NMU, in <i>Vigna radiata</i> (L) Wilczek by DMSO.	Indian J. BOt. 5(1):54-57.	V.P. singh and S.N. Chaturvedi
17. 1982	Quantitative variation in moong bean induced by EMS, NMU, Gamma-rays and their combined treatments.	J.Cytol. Genet. 17:47-52.	V.P. singh and S.N. Chaturvedi
18. 1983	A contribution to angiospermic flora of Moradabad District, Uttar Pradesh	J.Economic & Botany 3:651-861.	N.K. Paliwal and V.P. singh.
19. 1983	Effects of morphactin and Gamma-rays on growth and yield of Okra.	Indian J.Bot. 6(1): 5-9.	N.K Paliwal and V.P. Singh.
20. 1983	Effects of EMS, NMU, Gamma-rays and their combined treatments in <i>Cyamopsis tetragonoloba</i> (L) Taub.	J.Agric. Sci. Res. 25:56-66.	S. Agarwal and V.P. Singh.
21.1986	Quantitative variation and heritability estimate induced by EMS, NMU, Gammarays and their combined treatments in <i>Cyamopsis tetragonoloba</i> (L) Taub	Mendel 3 (2) :114- 121.	Suman Agarwal and V.P. Singh.
22. 1986	Induced high yielding mutants in cluster bean.	Indian J.Agric. Sci. 56 (10): 695-700.	Suman Agarwal and V.P. Singh.
23. 1989	A comparison in the mutagenic effects of EMS and Gamma-rays in sugarcane.		B.D. Singh and V.P. Singh.
24. 1989	Gamma-rays induced polygenic variation and their Heritability estimates in sugarcane	Bhartiya Sugar Feb., 37-41.	B.D. Singh, and V.P. Singh
25. 1990	Induced high yielding mutants in pulse crops: Moong bean and Cluster bean	Perspectives in Cytology & Genetics 6:889-893.	V.P. Singh
26. 1991	The effect of different moisture contents in pre-gamma irradiated seeds of <i>Cajanus cajan</i> (L) Millsp	J. Indian Bot. Soc. 70:313-316.	A . Srivastava, and V.P. Singh.
27. 1991	Enhancement of EMS induced mutagenic effects in moong bean (Vigna radiata (L) Wilczek) by DMSO	Indian J. Heredity 23 (1-2):19-24.	R. Sharma, and V.P. Singh.
28. 1991	Effects of post-irradiation heat treatment on the induction of mutations in moong bean	Indian J. Heredity 37 (1&2) 25-31.	R. Sharma, and V.P. Singh.
29.1992	The influence of altered moisture levels in	J. Indian Bot. Soc. 71	R. Sharma, and V.P.

	gh Srivastava, Alka
30. 1992 Male sterile mutants induced by Gamma-rays J. Indian Bot. Soc. A. and EMS in pigeon pea 71(I-IV):227-278. Dub	Srivastava. Alka
31. 1992 Gamma-rays induced male sterile mutants in <i>Mendel</i> 9:159-160. R.SI	bey, and V.P. Singh.
mung bean. Sing	harma, and V.P. gh.
32. 1992 Mutagenic efficiency of EMS, NMU and J. Agric. Sci. Res. 31 A. 3 Gamma-rays in Cajanus cajan (L) Millips (1&2): 76-83. Sing	Srivastava, and V.P. gh.
33. 1993 The yield of synchronous maturing pigeon Mendel 10:53-54. A. Sing	Srivastava, and V.P.
	Sharma, and V.P.
35. 1993 Induced polygenic variability in pigeon pea <i>J. Indian Bot. Soc.</i> 72 R. (III &IV):281-284. Sing	Sharma, and V.P. gh.
36. 1993 Note on radioprotective effects of Gibberllic J. Indian Bot. Soc. 72 Alka acid in Black Gram. (3-4): 285-287. Sriv Sing	vastava, and V.P.
	Srivastava, and V.P.
•	Sharma., A. vastava, S. Sharma, V.P. Singh
	O. Singh, and V.P.
(1&2):55. Sing	
41.1997 Effect of city waste water on the growth of Int. J. Mendel 14 S.K Urd bean (1&2). Sriv Sing	vastava, and V.P.
42. 1997 Effect of rubber factory effluents on the J.Environ. Pollution S.K.	Sharma, Alok vastava, and V.P.
	mber Singh, and V.P.
Phytotoxic effect of city waste on growth J. Envi. Pollu. Pital parameters and chlorophyll content in 4(4):265-269. Sing Pigeon Pea.	amber Singh, and V.P. gh.
	Sharma, and V.P.
	tap Singh, and V.P. gh.
47.2000 Induction of resistance to rubber factory <i>Physiology</i> and K.P.	vastava, and V.P.
	kash, Anant, Alok vastava, and V.P. gh.

49. 2002	Genetic divergence in Sugarcane	Indian. J. of Ag. Sci.	Pratap Singh, and V.P.
50. 2006	germplasm.  The effect of Zn <sup>2+</sup> & Pb <sup>2+</sup> on nitrogen metabolism of <i>Vigna mungo</i> (L) Hepper.	<b>74</b> (4): 251-252. <i>J. Indian Bot. Soc.</i> 85: 56-60	Singh. Vijay Kr. Sinhal, Alok Srivastava, and V.P. Singh.
51.2007	Optimization of Rooting in Micropropagated Shoots of Sugarcane.	Sugar Tech 9 (1): 95-97.	M. Lal Ramanand, S.B. Singh, and V.P. Singh.
52. 2007	Effect of Zinc on growth and NR Activity in Blackgram antagonized by Magnesium and Sucrose	Indian J. Plant Physiology 12 (1): 95-99.	V. K Sinhal, S. K. Gupta, A. Srivastava, U.P. Singh, and V.P. Singh.
53.2007	Effects of Pb <sup>2+</sup> on growth & NR activity in <i>Vigna mungo</i> (L.) Hepper and its alleviation by sucrose treatment	J. Indian Bot. Soc. <b>86</b> (3-4): 113-117.	Vijay Kumar Sinhal, Alok Srivastava, and V.P. Singh.
54.2008	EDTA enhances lead uptake and facilitates phytoremediation by <i>Vetiver</i> grass	<ul><li>J. Environ. Biology.</li><li>29 (6): 903-906.</li></ul>	D.K Gupta, Alok Srivastava, and V.P. Singh.
55.2008	Evaluation of the effects of Zn <sup>2+</sup> on the growth of <i>Cajanus cajan</i> and its phytoremediation through <i>Helianthus annuus</i> .	Ecology Eenvironment and Conservation 14 (2-3): 1-4.	Satish Kumar Gupta, Vijay Kumar Sinhal, Alok Srivastava, and V.P. Singh.
56.2008	First report of a Subgroup 1A Cucumber mosaic Virus isolate from gladiolus in India.	Australian Plant Disease Notes 3: 35-37.	V.K. Dubey, Aminuddin and V.P. Singh.
57. 2009	First report of Bean Yellow mosaic Virus (BYMV) in Gladiolus in India.	J. Plant Pathology 91(4Sup.) S4 110.	V.K. Dubey, Aminuddin, and V.P. Singh.
58. 2010	EDTA and Citric acid mediated Phytoextraction of Zn, Cu, Pb and Cd through Marigold.	J. Environ. Biol. 31:225-259.	V. K. Sinhal, Alok Srivastava, and V.P. Singh.
59. 2010	Molecular Characterization of Cucumber Mosaic Virus infecting Gladiolus revealing its phylogeny distinct from Indian isolate and alike the Fny strain of CMV.	Virus Genes 41:126- 134.	V. K. Dubey, Aminuddin, and V.P. Singh.
60. 2010	Seasonal variation in nitrate reductase activity, Nitrate content, Amino-acid, Protein and total nitrogen contents in roots and leaves of <i>Populus deltoids</i> .	Plant Archives 10(1): 153-158.	Anant Prakash, and V.P. Singh.
61.2010	In vitro morphogenesis in leaf sheath explants of sugarcane hybrid var: CoS 99259.	Sugar Tech. 12(2): 172-175.	Y. Goel, M. Lal, M. L. Sharma, and V.P. Singh.
62.2011	Chelate assisted phytoremediation potentiality of <i>Vetiveria zizanioides</i> (L.) Nash against Pb and Cd by EDTA.	Int.J.Env.Sci. 1:77-82.	Shabana, Alok Srivastava, and V.P. Singh.
63. 2011	Antagonestic effect of Magnesium and Sucrose on the zinc induced toxicity in <i>Zea mays</i> .	Int.J.Env.Sci. 2:119- 124.	Amit Shukla, Alok Srivastava, and V.P. Singh.
64. 2011	Zinc alleviates cadmium induced toxicity in <i>Vigna radiate</i> (L.) Wilczek.	J. Phytology 3(8): 43-46.	Manoj Kumari, V. K. Sinhal, Alok Srivastava, and V.P. Singh.
65. 2011	Cytogenetic effects of individual and combined treatment of Cd <sup>+2</sup> , Cu <sup>+2</sup> and Zn <sup>+2</sup> in <i>Vigna radiate</i> (L.) Wilczek.	J. Phytology 3(8): 38-42.	Manoj Kumari, V. K. Sinhal, Alok Srivastava, and V.P. Singh.
66. 2011	EDTA enhanced phytoextraction of Pb by Indian mustard ( <i>Brassica juncea</i> L.).	Plant Sciences Feed 1(9): 160-166.	Jitendra Kumar , Alok Srivastava, and V.P. Singh.
67. 2012	Metabolism of 4-chloro-2-nitrophenol in a	Microbial Cell	Pankaj Kumar Arora, R.

	Gram-positive bacterium, Exiguobacterium sp.PMA	Factories, 11:150, 2-10.	Mehta, B.D. Shenoy, A Srivastava, and V.P Singh.
58. 2012	Potentiality of marigold for lead phytoremediation from artificially contaminated soil.	Ecol. Env. And Cons. 18(3): 677-681.	Shikha Saxena, Alok Srivastava, V.P. Singh and U.P. Singh.
69. 2013	Novel degradation pathway of 4-chloro-2-aminophenol via 4-chlorocatechol in Burkholderia sp. PKJ800	Environ. Sci. Poll. Res. DOI:10.1007/s11356 -013-2167-y.	
70. 2014	Novel degradation pathway of 2-chloro- 4amino-phenol in Arthrobacter sp SPG	Peer J Preprints DOI 01/2014 2e194v	Arora PK, Srivastava Alok & Singh VP
71. 2014	Degradation of 4-chloro-3-nitrophenol via a novel intermediate, 4-chlororesorcinol by	Scientific Reports 4:4475 DOI:	
72. 2014	Psedudomonas sp.JHN. Metabolic pathway for degradation of 2-chloro-4-aminophenol by Arthrobacter sp.SPG	10.1038/srep04475 Microbial Cell Factories DOI 10.1186/s12934-014- 0164-6	
73. 2015	Expression of coat protein gene of Cucumber mosaic virus (CMV-subgroup IA) Gladiolus isotate in Nicotiana tabacum.	J. of Plant Interactions, DOI: 10.1080/17428145.2 015.1101496	Vimal Kumar Dubey Kottakota Chandrasekhar, Alok Srivastava, Aminuddin Vijai Pal Singh, Kartic Dhar & Pankaj Kuman Arora
74. 2016	Diversity of 4-chloro-2-nitrophenol-degrading bacteria in a waste water sample	Journal of Chemistry DOI.org/10.1155/201 6/7589068	Pankaj Kumar Arora Alok Srivastava & Vijay Pal Singh
75. 2017	Citric acid and sucrose mediated phytoextraction of lead through marigold	Ecology, Env.and Conservation refer no. EEC- 23 (3)1472- 1476 (NAAS impact rating 5.02, SCOPUSH index 9.0)	Shikha Saxena, Jitendra Kumar, Shabana, Alok Srivastava & V.P. Singh
76. 2018	Effect of EDTA & NTA on solubility of lead and cadmium and their uptake by vetiver grass.	Ecology, Env. and Conservation EEC- 2919 (In press)	Shabana, Jitendra Kumar, Sikha Saxena Alok Srivastava & V.P Singh.
Articles Review Article	es Published in Books/Journals		
		Louwel /Deal-	A neth area
Year of Publication	<u>Title</u>	<u>Journal</u> /Book	Authors
77. 1990	Mutation breeding in pigeon pea	Genetic Improv of Pulse Crops. 1:179-188, Edite Jafar Nizam.	Vol. S.N. Chaturvedi.
78. 1995	chemical muagens,	the <i>J. Indian Bot.</i> and (Plantinum Ju Volume) 503-512	blilee Srivastava, and . S.N. Chaturvedi,
70 1007	The genetic improvement of pulse arong three	10h plant Pro	adina UD Singh A

plant

Culture,

Breeding

CBS

Advances and in Vitro

Publication, 27-42.

V.P. Singh, A.

S.N. Chaturvedi.

and

Srivastava,

The genetic improvement of pulse crops through

mutation breeding.

79. 1997

80. 2001	Induced polygenic variability in pulse crops.	In Some aspects of research in Botany Respa Pub. :226-236.	V.P. Singh, and Alok Srivastava
81. 2002	Improvement of Poplar through biotechnological approaches.	J. Indian. Bot. Soc. 81:1-10.	Prakash, Anant, Alok Srivastava, and V.P. Singh.
82. 2005	Biochemical & Genetic effects of heavy metals in plants.	Plant Diversity, microbial Interaction and Environmental Biology Edited: Drs. S.N. Chatruvedi &K.P. Singh: 215-225.	Alok Srivastava, Udai Pal Singh, and V.P. Singh.
83. 2005	Demand Characteristics and Utilities of Poplar	.Aqrobios Newsletter IV (2): 39-40.	Anant Prakash and V.P. Singh.
84. 2008	GIS and Remote Sensing in Agriculture.	Vegetos 21 (1): 11-27	Preeti Singh, Satish Kr, Sameer Srivastava, Sanjay Garg, S.K. Bhatnagar, R.K. Singh and V.P. Singh.
85. 2010	Use of Plant Genetic Resources for sustainable food and nutritional security: Today's World need.	Stable food production & Sustainable Agriculture, Published by Studium Press (India) Pvt. Ltd. New Delhi, pp.352-372.	Kalpna Sengar, Christain follmer, Sanjay Kumar Garg, Ankush Innani, R.S. Sengar, H.B. Singh and V.P. Singh.
86. 2010	Application of Monooxygenases in Dehalogenation, Denitrification and hydroxylation of Aromatic compounds.	J. Bioremed. Biodegrad. 1(3): 110.	Pankaj Kumar Arora, Alok Srivastava, and V.P. Singh.
87. 2014	Bacterial degradation of nitrophenols and their derivatives.	J. of Hazardous materials 266(2014)42-59.	Arora PK, Srivastava Alok & Singh VP
88. 2018	Recent advances in degradation of chloronitrophenols.	Bioresource Technology BITE 19262 (In press)	P.K. Arora, Alok Srivastava, S.K. Garg & Vijai Pal Singh.
Articles P	Published in Proceedings of the Confer		
<u>Year</u> 89. 2003	<u>Title</u> Productivity of heavy metal induced mutants in Moong bean.	Proceeding Bioscience: Advances, Impact & Relevance. 77-81.	Authors Asha Singh, Alok Srivastava, and V.P. Singh.
90. 2003	Effect of Nitrate and putrecine on Nitrate Reductase Activity and Glutamine Synthetase activity in popular leaves.	Bioscience: Advances, Impact & Relevance. 43-47.	Anant Prakash, and V.P. Singh.
91. 2008	Phytoremediation of lead induced toxicity in <i>Vigna mungo</i> (L) Hepper by Vetiver Grass.	The Vetiver System for Environmental Protection and Natural Disaster management. Pp126-135. Cochin, India.	D. K. Gupta, Alok Srivastava, and V.P. Singh.

#### 1. ABSTRACTS PUBLISHED IN SEMINAR/CONFERENCES:

#### No. Name of Conference-

- 92. Botanical conference at Meerut University, Meerut (1978). "Increased mutagenic effects of EMS in moong bean by DMSO" J.I.B.S.:70-71.
- 93. Annual Conference (30-31st March, 1979) of Society for advances of Botany at Punjab Agricultural University, Ludhiana "Comparative mutagenic effects of EMS, NMU and Gamma-rays in moong bean" Acta Botanica India 129.
- 94. XV International Congress of Genetics, New Delhi (Dec. 12-21, 1983) "Reconstruction of Plant types through induced mutagenesis in pulse crops. Moong bean and guar part 1:333.
- 95. VI all India Congress of Cytology and Genetics (Oct. 12-17, 1987) University of Jammu, Jammu & Kashmir, Induced high yielding mutants in pulse crops. Moong bean and cluster bean" J Cytol. Genetic. 279.
- 96. XI Botanical Conference (Jan, 2-4, 1989) Bhartidarshan University Tiruchirapalli (Tamilnadu) "A Comparison in the mutagenic effectiveness and efficiency of Gamm-rays, EMS and NMU in sugarcane". J.I.B.S. XIII, 40.
- 97. XII Botanical Conference (Dec.26-28, 1990), Banaras Hindu University, Varanasi. "the influence of alteration in moisture contens in pre gamma-irradiated seeds on frequency and spectrum of mutations in pigeon pea". J.I.B.S.
- 98. XIV Botanical Conference (Dec. 28-30, 1991), Lucknow University, Lucknow. "The Productivity of synchronous early maturity mutants in pigeon pea". J.I.B.S. XIII 27.
- 99. XV Botanical conference (Dec. 28-30, 1992) Marathwada University, Aurangabad, "Gamma-rays & EMS induced leaf mutants in moong bean". J.I.B.S.
- 100. XV International Botanical Congress (28th Aug.-3rd Sept., 1993). The performance of high yielding pigeon pea mutants. Congress Centre of Pacifico, Yokohme, Japan. (Abstract Published, Congerence not attended).
- 101. XIX Botanical Conference (Dec. 28th-30th, 1996) held at Gurkul Kangri University, Haridwar (U.P.) Chaired session on Cytogenetics & Plant Breeding.
- 102. Symposium on Advances in Plant Science Technology 30th Nov. 1997. Dr. B.R. Ambedkar University, Agra (UP).
- 103. XX Botanical conference (Oct. 29-31st, 1997) held at Deptt. of Applied Botany University of Mysore, Mysore (Karnataka).
- 104. XX Botanical conference (Oct 23-26th, 1998) held at Department of Botany, Vikram University, Uiiain.
- 105. XXII Botanical conference (Oct.23-25, 1999) held at Mithibai college (Bombay University) Mumbai:
- 106. National Symposium on Plant Science unfinished task (2001) held at Dr. B.R. Ambedkar University, Agra 13 May, 2001.
- 107. XXIII Botanical Conference (Nov. 19-21, 2001) held at Osmania University, Hyderabad, Chaired session on cytology, Genetics & Plant Breeding.
- 108. National Symposium on "Sugarcane and sugar productivity-present scenario and future strategies with conventional & Biotechnological approaches, held at U.P. Council of sugarcane research, Shahjahanpur (21-22 March, 2002). Plant let regeneration from leaf explants of sugarcane var. CoS 96258 & CoS 91269. Abst. No.P-9.
- 109. National Symposium on "Biosciences Advances, Impact and Relevance" held at MJP Rohilkhand University Bareilly (27th -29th Oct, 2002).
- 110. National Symposium on "In Retrospect and Prospect with special reference to opening of Indian Market to worked: held at Dr. B.R. Ambedkar university, Agra (Dec. 19-20,2004).
- 111. Twenty Eighth Botanical conference (24-26th Oct., 2005) held at Botanical Survey of India, Dehradun. Chaired Session on Cytogenetics & Plant Breeding.
- 112. XXIX Botanical Conference (9-11Oct.2006) held at Department of Botany, M.L.S. University, Udaipur chaired session on cytogentics & Plant Breeding.
- 113. Delivered Special Lecture on Remediation of lead toxicity through chemical mutagencis and Vetiver grass in Black gram in National Seminar held from 3-4th Feb. 2007 at Doon Paramedical College &

- Hospital, Dehradun.
- 114. XXX Botanical Conference (28-30th Nov. 2007) held at Jiwaji University.
- Presided over the National Seminar on Global Warming organized on 17<sup>th</sup> Dec. 2007 at Bareilly College, Bareilly.
- Delivered Special Lecture on "Phytoremediation of lead induced toxicity in *Vigna mungo* (L) Hepper by Vetiver grass in National Workshop on the Vetiver System for Environmental Protection and Natural Disaster Management organized the International Vetiver Network from 21-23rd Feb. 2008 at Cochin, India.
- 117. XXXI National Botanical Conference held at Allahabad University Allahabad (Dec. 17-19, 2008).
- 118. XXXII All India Botanical Conference and International Symposium on Diversity of Plants and Microbes: Present Scenario held at Kuvempu University, Shankaraghatta Karnataka on 28-30<sup>th</sup> Dec. 2009.
- Delivered special lecture on EDTA mediated Phytoremidaton of lead by Vetiver grass and Merigold in National Conference on "Plant Science in Human Welfare" held at Botany, Kakatiya University, Warangal on 3-4<sup>th</sup> March, 2010.
- 120. Delivered Invited Lecture on "Phytoremediation: A technique for cleaning up Metals contaminated Land." In National Seminar on Management of Environmental Pollution for Sustainable Energy Production held at Department of Plant Science, MJP Rohilkhand University on 10-11<sup>th</sup> April, 2010.
- 121. XXXIII All India Botanical Conference and International Symposium on New Horizones of Botany: held at Dept. of Botany, Shivaji University, Kolapur on 10-14<sup>th</sup> Nov.. 2010.
- 122. XXXIV All India Botanical Conference held at Department of Botany, Lucknow University, Lucknow on 10-12<sup>th</sup> Oct. 2011.
- 123. XXXV All India Botanical Conference held at Department of Botany, MS University, Baroda, Vadodara (Gujrat) on 08-10<sup>th</sup>Dec. 2012.
- 124. Invited to deliver lecture in 1<sup>st</sup> U.P. Science Congress scheduled to be held at DDU Gorakhpur University, Gorakhpur 2-4<sup>th</sup> March 2013.
- 125. XXXVI All India Botanical Conference held at Department of Botany, D.D.U. Gorakhpur University, Gorakhpur (U.P.) on 18<sup>th</sup> -20<sup>th</sup> Oct., 2013.
- 126. Delivered Lecture in National Seminar on "Environment Pollutions, Consequences and Management" as Guest of Honour at Krishna College of Science and Technology, Bijnor on 30<sup>th</sup> Nov., 2013.
- 127. Invited to deliver lecture in Brainstorming Conference on STI Policy implementation sponsored by DST, New Delhi held at Bareilly College, Bareilly on 8<sup>th</sup> Jan., 2014.
- 128. XXXVII All India Botanical Conference held at Department of Botany, V.G. Vaze College, Mumbai (Maharashtra) on 6<sup>th</sup> 8<sup>th</sup> Nov., 2014.
- 129. XXXVIII All India Botanical Conference held at Department of Botany, University of Rajasthan, Jaipur on 26<sup>th</sup> -28<sup>th</sup> Oct., 2015.
- 130. XXXIX All India Botanical Conference held at Department of Botany, Ranchi University, Ranchi (Jharkhand) on 21<sup>st</sup> 23<sup>rd</sup> Oct., 2016.
- 131. XXXX All India Botanical Conference held at Department of Botany, Punjabi University, Patiala (Punjab) on 15<sup>th</sup> 17<sup>th</sup> Sep., 2017.

#### 2. CHAIRED SESSION IN CONFERENCES:

#### No. Name of Conference-

- 1. XX Botanical conference (Oct. 29-31st, 1997) held at Deptt. of Applied Botany University of Mysore, Mysore (Karnataka). Chaired session on Cytology, Genetics & Plant Breeding.
- 2. XX Botanical conference (Oct 23-26th, 1998) held at Department of Botany, Vikram University, Ujjain. Chaired session on cytology, Genetics & Plant Breeding.
- 3. XXII Botanical conference (Oct.23-25, 1999) held at Mithibai college (Bombay University) Mumbai: Chaired Session on Cytology, Genetics and Plant Breeding.
- 4. Chaired Paper Reading Session and acted as judge for selecting Best Paper presented in XXXI National Botanical Conference held at Allahabad University Allahabad (Dec. 17-19, 2008).

- 5. Chaired Paper Reading Session in National Conference on "Impact of Climate Change on Plant Reproductive Biology" held at Dr. M.P. Memorial group of Colleges, Sikandra, Agra (7& 8<sup>th</sup> Nov. 2009).
- 6. Chaired Paper Reading Session in XXXII All India Botanical Conference and International Symposium on Diversity of Plants and Microbes: Present Scenario held at Kuvempu University, Shankaraghatta Karnataka on 28-30<sup>th</sup> Dec. 2009.
- 7. Chaired Paper Reading Session in XXXIII All India Botanical Conference and International Symposium on New Horizones of Botany: held at Dept. of Botany, Shivaji University, Kolapur on 10-14<sup>th</sup> Nov.. 2010.
- 8. Chaired Medal Awardee Lecture in XXXIV All India Botanical Conference held at Department of Botany, Lucknow University, Lucknow on 10-12<sup>th</sup> Oct. 2011.
- 9. Chaired Medal Awardee Lecture in XXXV All India Botanical Conference held at Department of Botany, MS University, Baroda, Vadodara (Gujrat) on 08-10<sup>th</sup>Dec. 2012.
- 10. Chaired Medal Awardee Lecture in XXXVI All India Botanical Conference held at Department of Botany, D.D.U. Gorakhpur University, Gorakhpur (U.P.) on 18<sup>th</sup> -20<sup>th</sup> Oct., 2013.
- 11. Chaired inaugural session of National Seminar on "Organic Farming for Sustainable Agriculture" organized by Department of Animal Science, MJP Rohilkhand University, Bareilly, 10<sup>th</sup> 12<sup>th</sup> March, 2014.
- 12. Chaired Medal Awardee Lecture in XXXVII All India Botanical Conference held at Department of Botany, V.G. Vaze College, Mumbai (Maharashtra) on 6<sup>th</sup> 8<sup>th</sup> Nov., 2014.
- 13. Chaired Medal Awardee Lecture in XXXVIII All India Botanical Conference held at Department of Botany, University of Rajasthan, Jaipur on 26<sup>th</sup> -28<sup>th</sup> Oct., 2015.
- 14. Chaired Medal Awardee Lecture in XXXIX All India Botanical Conference held at Department of Plant Science, Ranchi University, Ranchi (Jharkhand) on 21<sup>st</sup> 23<sup>rd</sup> Oct., 2016.
- 15. Chaired Medal Awardee Lecture in XXXX All India Botanical Conference held at Department of Botany, Punjabi University, Patiala (Punjab) on 15<sup>th</sup> 17<sup>th</sup> Sep., 2017.
- 16. Chaired Inaugural Session of 3rd National Conference on "Environmental Protection through Innovative Approaches for sustainable Development" held on 19<sup>th</sup> to 20<sup>th</sup> January, 2018 at Khandelwal College of Management Science & Technology, Bareilly.

3. NUMBER OF STUDENTS AWARDED Ph.D.					
Name of Student	Thesis Title	<u>Year</u>			
Suman Gupta	Studies on the induction of mutations in Guar	1984			
	(Cyamposis tetragonoloba (L) Taub).				
B.D.Singh	Studies on the induction of mutations in Sugarcane.	1986			
Swarnlata Kaul	Height gene system and its influence on heterosis and	1992			
	•				
Alok Srivastava	,	1992			
111011 211 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
Alka Dubey		1992			
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Kasiiiii Siiaiiiia	• •	1774			
D': 1 C' 1	<u> </u>	1000			
Pitamber Singh		1998			
	•				
	type.				
S.K. Sharma	Phytotoxic effects of industrial effluents in black gram	1998			
	with Special Reference to the induction of effluent				
	resistant plant type.				
K.P.Singh	Induction of industrial effluents resistance in Urd bean	1998			
•	Through induced mutagenesis.				
Pratap Singh		1998			
1 0					
Asha Singh		2001			
	Name of Student Suman Gupta B.D.Singh Swarnlata Kaul  Alok Srivastava Alka Dubey Rashmi Sharma Pitamber Singh  S.K. Sharma	Suman Gupta Studies on the induction of mutations in Guar (Cyamposis tetragonoloba (L) Taub).  B.D.Singh Studies on the induction of mutations in Sugarcane.  Height gene system and its influence on heterosis and recombination variability in sorghum (S.bicolar Mouch).  Alok Srivastava Improvement in pigeon pea through induced mutagenesis.  Alka Dubey Studies on the induction of mutations in black gram.  Studies on the influence of modifying factors on the induction of mutations in mung bean.  Pitamber Singh Mutation breeding in Cajanus cajan (L) Millsp. With special Reference to induction of effluent resistant plant type.  S.K. Sharma Phytotoxic effects of industrial effluents in black gram with Special Reference to the induction of effluent resistant plant type.  K.P.Singh Induction of industrial effluents resistance in Urd bean Through induced mutagenesis.  Pratap Singh Studies on evaluation, Characterization and classification in Sugarcane germplasm.			

		Metals and city waste water in moong bean.	
12.	Anant Prakash	Effect of cytokinins and polyamines on Nitrogen	2002
		assimilation and growth in Poplar (Populus deltoids)	
13.	Anil Kr. Singh	Physiological and Biochemical Basis for in vitro	2005
		morphogenesis in sugarcane hybrids.	
14.	Vijay Kr. Sinhal	Phytotoxic, Cytogenetic & Biochemical effects of Zn <sup>++</sup> &	2005
		Pb <sup>++</sup> in Vigna mungo (L) Hepper.	
15.	Richa Agrawal	Phytotoxic, Cytogenetic and Biochemical effects of	2005
	· ·	Heavy metals (Cu, & Cd <sup>++</sup> ) in Vigna mungo (L) Hepper	
16.	Rama Nand	In Vitro morphogenetic studies on crop improvement	2007
		and multiplication in Sugarcane (Saccharum spp.	
		Complex).	
17.	Deepak Kr. Gupta	Studies on the effects of lead on Vigna mungo (L)	2007
	1 1	Hepper with its Phytoremediation through Vetiveria	
		zizanioides (L) Nash.	
18.	Satish Kr. Gupta	Studies on the effects of Zinc on Cajanus cajan (L)	2007
		Millsp with its Phytoremediation through <i>Helianthus</i>	
		annuus (L)	
19.	Neetu Gupta	Studies on the effects of mercury on <i>Cajanus cajan</i> (L)	2008
	Troots Supra	Millsp. with its Phytoremediation through Brassica	
		juncea (L).	
20.	Manoj Kumari	Combined effect of Cu <sup>2+</sup> , Zn <sup>2+</sup> and Cd <sup>2+</sup> induced toxicity	2008
	Wanoj Raman	in Vigna radiata (L) wikzek.	
21.	Archana	Studies on Flowering Behaviour and Genetic Variability	2008
	' ii ciidiid	in Floral organs of <i>Saccharum</i> spp. Complex and	2000
		Saccharum Spontaneous clones	
22.	Vimal Kumar Dubey	Expression of Cucumber Mosaic Virus (CMV) Coat	2009
	vimai Ramai Daocy	Protein gene in Gladiolus/Tobacco: Regeneration of	2007
		CMV-CP mediated resistant transgenic Gladiolus	
		Tobacco plants.	
23.	Yukti Goel	Molecular studies on <i>in vitro</i> morphogenesis and	2010
23.	1 uku Ooci	Somaclonal Variations in Sugarcane.	2010
24.	Shabana	Studies on the effects of some chelating agents (NTA	2012
21.	Silaballa	and EDTA) on the phytoremediation potential of	2012
		Vetiveria zizanioides (L.) Nash.	
25.	Amit Shukla	The study of Phytoremediation Potentiality of <i>Zea mays</i>	2012
25.	i mini Shukla	(L) in Contaminated Soil.	2012
26.	Jitendra Kumar	Studies on the effects of EDTA & Citric Acid on	2013
20.	manura Kulliai	Phytoextraction ability of heavy metals in <i>Brassica</i>	2013
27.	Shikha Saxena	<i>juncea</i> (L).  Studies on the Potentiality of Marigold as heavy metal	2013
27.	Silikila Saxella	, , ,	2013
		(Arsenic & Lead) Phytoremediator Plant.	