


Title	Dr.	Name	RAKESH CHANDRA VERMA		Photograph 
Department	School of Studies in Botany				
Designation	Professor & Head				
Address	Dr. R. C. Verma A 9/ 7 MIG Shipra Vihar Nagzhiri UJJAIN 456010				
Phone- Office	0734 2511226				
Residence					
Mobile	09926462693				
E-Mail	rakeshcverma@yahoo.com rakeshcverma55@gmail.com				
Educational Qualifications					
Degree	Institution		Year		
Ph.D.	Jodhpur University		1982		
PG	Allahabad University		1976		
UG	Agra University		1974		
Other					
Career Profile					
Professor	Vikram University , Ujjain (M.P.)		March, 2000 - Till date		
Reader	Vikram University , Ujjain (M.P.)		March, 1992 - March, 2000		
Lecturer	School of Studies in Botany Vikram University , Ujjain (M.P.)		Nov., 1988 - March, 1992		
Senior Research Assistant	Central Sericultural Research & Training Institute, Berhampore(W.B.)		June, 1983 - Nov., 1988		
Research Assistant	Botany Department, University of Jodhpur , Jodhpur		Aug., 1980 - June , 1983		
Research Fellow	" " "		Nov., 1977 - July , 1980		
Research Fellow	Central Arid Zone Research Institute (ICAR), Jodhpur		March, 1977 - Oct., 1977		
Administrative Assignment					

<p>Vice Chancellor : Vikram University , Ujjain Aug. 2013 – Dec. 2013 Head of the Department : Since Oct., 2009 – till date Dean : Faculty of Life Science, Vikram University, Ujjain Director : Internal Quality Assurance Cell, Vikram University, Ujjain Chairman : Board of Studies in Botany, Vikram University, Ujjain Board of Studies in Microbiology, Vikram University, Ujjain Central Board of Studies in Botany, Bhopal Co ordinator : NAAC Steering Committee, Vikram University, Ujjain Organizing Secretary : National Seminar on Climate Change June, 2010 Vikram University Member : Board of Studies in Botany, Vikram University, Ujjain Board of Studies in Microbiology, Vikram University, Ujjain Board of Studies in Botany, Barkatullah University, Bhopal Board of Studies in Botany, Jiwaji University, Gwalior Board of Studies in Biotechnology, M.L. Sukhadia University, Udaipur Selection Committees at PSC / Universities and Colleges. Deputy Registrar (Additional Charge): Vikram University, Ujjain In Charge (Horticulture Division) : Vikram University, Ujjain President and Treasurer : Botanical Association, Vikram University, Ujjain</p>
<p>Area of Interest/ Specialization</p> <p><i>More than 35 years of Research Experience</i></p> <p>Cytogenetics, Genetics, Biotechnology, Molecular Biology</p>
<p>Subjects Taught</p> <p><i>More than 30 years of Teaching experience</i></p> <p>Cytogenetics, Genetics, Breeding, Biotechnology, Molecular Biology, Sericulture, Microbial Genetics, Plant Tissue Culture etc.</p>
<p>Publication Profile</p> <p>Research Papers:</p> <p>(A). Journal Papers: <u>International:</u> <i>Authors name(s), Title of the paper, name of the Journal, year, volume, issue, page numbers</i></p>
<p>SELECTED PUBLICATIONS</p> <ol style="list-style-type: none"> 1. S. N. Raina & R. C. Verma. 1979. Cytogenetics of <i>Crotalaria</i> I. Mitotic complements in twenty species of <i>Crotalaria</i> L. Cytologia (Japan) 44 : 365 – 375 . 2. R. C. Verma & S. N. Raina. 1980. Cytogenetics of <i>Crotalaria</i> II. Male meiosis in 8

species of *Crotalaria*.

Cytologia (Japan) 45 : 297 – 306.

3. **R. C. Verma & S .N .Raina . 1980.** *Phlox drummondii* in the study of radiation induced chromosomal aberrations .
The Nucleus 23 : 176 – 184 .
4. **R. C. Verma & S. N. Raina . 1981 .** Cytogenetics of *Crotalaria* V. Supernumerary nucleoli in *C. agatiflora* .
Genetica (Netherlands) 56 : 75 – 80 .
5. **R. C. Verma , K. Kesavacharyalu & S. N. Raina . 1982 .** Cytogenetics of *Crotalaria* III . Possible configurations due to paracentric inversions in *Crotalaria sericea* Retz.
Cytologia (Japan) 47 : 499 – 502
6. **K . Kesavacharyalu, S. N. Raina & R. C. Verma . 1982 .** Cytogenetics of *Vicia* I. Male meiosis in twelve species.
Cytologia (Japan) 47 : 511 – 523 .
7. **R. C . Verma & S. N. Raina . 1982 .** NMU induced translocation and inversion in *Phlox drummondii*.
Cytologia (Japan) 47 : 609 – 614 .
8. **R. C. Verma & S. N. Raina. 1982 .** Cytogenetics of *Crotalaria* VI. Chiasma frequency and position , and univalent behaviour in a (Partially) asynaptic mutant of *C. juncea* .
Genetica (Netherlands) 58 : 65 – 70 .
9. **R. C. Verma & S. N. Raina. 1983 .** Cytogenetics of *Crotalaria* VIII. Male meiosis in 26 species .
Cytologia (Japan) 48 : 719 – 733 .
10. **R. C. Verma, K. Kesavacharyulu, & S. N. Raina. 1984 .** Cytogenetics of *Crotalaria* IX. Mitotic complements in 19 species .
Cytologia (Japan) 49 : 157 – 169 .
11. **R. C. Verma, A. Sarkar & B. C. Das. 1984 .** Cytomixis in mulberry .
Current Science 53 : 1258 – 1260.
12. **R. C. Verma, A. Sarkar & S. Sarkar . 1986.** Induced amphiploids in mulberry.
Current Science 55 : 1203 – 1204.
13. **R. C. Verma, A. Sarkar & B. C. Das. 1986.** Cytoplasmic channels and chromatin migration in mulberry .
Cytologia (Japan) 51 : 731-736.

14. **R. C. Verma** & S. N. Raina . **1990** . Cytogenetics of *Crotalaria* IV. Induced translocation lines in *C. juncea* .
The Nucleus **33** : 11 –14
15. **R. C. Verma** & S. N. Raina . **1991** . Differential cytomorphological response of *Crotalaria* species to colchitetraploidy .
Phytomorphology **41** : 21 - 33
16. **R. C. Verma** , P. Vyas & S. N. Raina . **1992** . Effect of colchicine on meiosis in *Rhoeo discolor* stabile complex translocation heterozygote .
Genome (Canada) **35** : 611 – 613 .
17. **R. C. Verma** & A. N. Rao . **1994** . Radiation induced inversions and translocations in *Vicia faba* .
J. Cytol. Genet. **29** : 59 – 63 .
18. **R. C. Verma** & S. Chandel . **1994** . Annual chrysanthemum : a new and novel material for the study of radiation induced chromosomal aberrations at mitosis.
Cytologia (Japan) **59** : 339 – 343 .
19. **R. C. Verma** , S . Khuller & R. Sharma . **1998** . Induced chromosomal aberrations in diploid and colchitetraploid *Phlox drummondii*.
Phytomorphology **48** : 115 – 120 .
20. O. P. Patel & **R. C. Verma** . **1998** . Meiotic behavior of *Cajanus cajan* X *Vigna mungo* hybrid .
Cytologia (Japan) **63** : 279 – 282.
21. O. P. Patel & **R. C. Verma** . **1999** . Cytomorphology of induced tetraploidy in *Cajanus cajan* and *Vigna unguiculata*.
Cytologia (Japan) **64** : 29 – 36 .
22. **R. C. Verma** & Rashmi Sharma . **2000**. Radiation induced cytological changes in *Phlox drummondii* .
J. Cytol. Genet. **1** (NS) : 33 – 39.
23. **R. C. Verma**, Prashant Joshi & Seema Sharma. **2004**. Radiation and EMS induced Translocation and Inversion heterozygotes in *Vicia faba* L.
J. Cytol. Genet. **5** (NS) : 45 – 52.
24. Prashant Joshi & **R. C. Verma**. **2004**. Radiation induced large pod and seed mutant in Faba bean (*Vicia faba*).
Indian J. Genet. **64** : 155 – 156.
25. Prashant Joshi & **R. C. Verma**. **2004**. High frequency production of colchicines induced autotetraploids in Faba bean (*Vicia faba* L.).

- Cytologia (Japan) 69** : 141 – 147.
26. Prashant Joshi & **R. C. Verma. 2005.** Ethyl Methane Sulphonate (EMS) induced (Partial) Asynaptic mutant in Faba bean (*Vicia faba* L.)
Cytologia (Japan) 70 : 143 – 147.
27. Vineeta Dubey & **R. C. Verma 2009.** Shelf life and colonization of soil by clay based Cyanobacterial inocula.
Indian J. of Experimental Biology 47 : 222 – 224.
28. **R. C. Verma** & Ramesh Ahirwar **2012.** Chromosomal behaviour in *Rhoeo discolor* against colchicine treatment.
Cytologia (Japan) 77 : 17-21.
29. **R. C. Verma** & Sapna Goyal **2012.** Induced Reciprocal Translocation in *Pisum sativum* L.
Cytologia (Japan) 77 : 485-489.
30. Ramesh Ahirwar & **R. C. Verma 2013.** Spontaneous Inversion Heterozygote in *Aloe barbadensis* Mill.
Cytologia (Japan) 78 : 51-54.

Nationals:

Authors name(s), Title of the paper, name of the Journal, year, volume, issue, page numbers

1. M. B.L. Saxena, G.V. Subba Rao, G. K. Gupta & **R. C. Verma . 1978.** Bajra germplasm of arid areas of Rajasthan .
Indian J. Genet. 38 : 390 – 395 .
2. M. B. L. Saxena, G.V. Subba Rao & **R. C. Verma. 1979.** Path analysis in *Panicum millaceum* .
Ind. J. Genet. 39 : 237 – 239.
3. B. C. Das, **R. C. Verma** & A. Sarkar. **1984.** Chromosome associations in natural and induced triploids of mulberry (*Morus*) .
Cell & Chromosome Research 7 : 60 – 61 .

4. **R. C. Verma**, A. Sarkar & B. C. Das. **1986**. Translocation heterozygosity in mulberry **Science and Culture** **52** : 60 - 61.
5. H. Sau, **R. C. Verma**, & A. Sarkar . **1987** . Further studies on induced amphiploids of mulberry (*Morus*) .
Cell & Chromosome Research **10** : 15 – 17 .
6. **R.C. Verma** , S. Chakraborty & G. Subba Rao . **1988**. Possible causes of sterility in some improved varieties and its exploitation in mulberry breeding.
Ind. J. Sericulture **27** : 66 –68.
7. **R. C. Verma** & S. N. Raina. **1991**. Characteristics of colchiploid *Phlox drummondii*
Indian J. Genet. **51** : 246 – 251 .
8. **R .C. Verma** & S. N. Raina. **1991**. Cytogenetics of *Crotalaria* VII. Induced cytochimeral and asynaptic mutants of *C. juncea* (Sunnhemp).
Indian J. Genet. **51** : 315 – 319 .
9. O. P. Patel , K.B. Nigam & **R. C. Verma** .**1992** . Cytological studies in two exotic *Papaver* species .
J. Cyto. Genet. **27** : 31 – 36 .
10. P. R. Unnikrishna Pillai & **R. C. Verma** . **1992** . A comparison of induced chromosomal aberrations in *Vicia faba* and *Phlox drummondii* .
Proc. Conf. on Cytol. & Genet. **3** : 17 – 23 .
11. P.Vyas & **R. C. Verma** . **1992**. Meiotic behaviour of B chromosomes in *Commelina*
Proc. Conf. on Cytol. & Genet. **3** : 123 –126.
12. **R. C. Verma** , P. Vyas & A.N. Rao . **1993** . Colchicine induced chromosomal interchange and colchitetraploidy in *Phlox drummondii* .
Indian J. Genet. **53** : 187 –192 .
13. H. Patidar, **R. C. Verma** , V. S. Kandalkar & K. B. Nigam . **1993**. Combining ability for seed yield and its components in *Papaver somniferum* L.
Indian J. Genet. **53** : 318 – 323 .
14. S. N. Raina , **R. C. Verma** & K. P. Singh . **1994** . Comparison of pre-irradiated and non-irradiated colchitetraploids , and radiation induced tetraploidy in sunnhemp (*C. juncea*) .
In : Plant Cytogenetics in India (Ed. S. Ghosh) Calcutta . pp . 115 – 124 .

15. **R. C. Verma** , B. M. Reddy & A. Shevade . **1996** . Meiotic studies in a radiation induced mutant in *Phlox drummondii*.
J. Cytol. Genet. 31 : 23 – 25.
16. A. Shevade , R . Sharma & **R. C. Verma** . **1997**. In vitro flowering in colchitetraploid *Phlox drummondii* .
Phytomorphology 47 : 173 – 175.
17. O. P. Patel , **R. C. Verma** , S . N . Upadhyaya , G .S. Kulmi & C . B. Singh .
1998 . Morphological studies on intergeneric and interspecific hybrids of some grain legumes .
Indian J. Genet. 58 : 327 –336 .
18. **R. C. Verma**, Prashant Joshi & Seema Sharma. **2004**. Radiation and EMS induced Translocation and Inversion heterozygotes in *Vicia faba* L.
J. Cytol. Genet. 5 (NS) : 45 – 52.
19. Prashant Joshi & **R. C. Verma**. **2004**. Radiation induced large pod and seed mutant in Faba bean (*Vicia faba*).
Indian J. Genet. 64 : 155 – 156.
20. O. P. Patel, M.S. Kakran, H.S. Yadav & **R.C. Verma** **2005**. Induced morphological variations in grain legumes.
National J. of Life Sciences 2: 625 – 630.
21. O.P. Patel, M.S. Kakran **R.C.Verma** & H.S. Yadav **2007**. Meiotic behaviour of induced mutation in some grain legumes.
Indian J. of Applied and Pure Biology 22 : 83 – 92
22. **R. C. Verma**, Ramesh Ahirwar & Preeti Das **2011**. Induction of polyploidy in *Phlox drummondii* by colchicine.
J. Cytol. & Genet. 12 : 1-5.

(B). Conference Papers:

International:

Authors name(s), Title of the paper, name of the conference, place, dates & year, page numbers

1. S. Rama Rao , **R.C. Verma** & S.N. Raina . **1988**. Utility of *Phlox drummondii* in the study of induced chromosomal aberrations . International Conference of Genetics
Genome (Canada) (Abst.) 30. Suppl. 1 : 158.
2. **R. C. Verma** . **1994** . Induction of genetic diversity in *Rhoeo discolor* (Commelinaceae). Presented at the Regional Conference on Environment and Biodiversity held at **Kathmandu , Nepal** (Abst.) pp. 71.

3. Rashmi Sharma & **R. C. Verma . 2002.** Assessment of extent of naturally occurring diversity and cytogenetic studies in *Phlox drummondii*. Presented in the Botany 2002 Conference held at University of **Wisconsin, Madison (USA)**. pp.48.
4. Rashmi Sharma & **R. C. Verma . 2002.** In vitro flowering in induced colchitetraploid *Phlox drummondii* : a differential genotype dependent response.(Abst.) Botany 2002 Conference held at University of **Wisconsin, Madison (USA)**. pp.52.

Nationals:

Authors name(s), Title of the paper, name of the conference, place, dates & year, page numbers

1. R. C. Verma & S. N. Raina . 1978 . Cytogenetics of *Crotalaria*. International Seminar on Chromosomes at Calcutta University Cell and Chromosomes Newsletter (Abst.) 1 : 32 – 33
2. **R. C. Verma** & S. N. Raina. **1982** . Differential response of nine *Crotalaria* species to colchitetraploidy . Proc. Nat. Symp. Developmental & Comparative aspects of Plant Structure & Function, Allahabad (Abst.). pp. 26.
3. I. D. Arya, **R. C. Verma** & S. N. Raina. **1983** . Colchicine induced polyploidy in sunnhemp (*Crotalaria juncea*) . Proc. Natl. Symp. Adv. Front. Pl. Sc., Jodhpur (Abst.) pp. 174 –175.
4. S .Rama Rao ,S.N. Raina & **R.C. Verma . 1988** . Genetic improvement of *Phlox drummondii* . Proc. International Conf. on Research in Pl. Sci. and its Relevance to Future. Delhi (Abst.) pp. 399.
5. **R.C. Verma** & G. Subba Rao. **1988**. Cytomixis and chromatin transfer during microsporogenesis in triploid mulberry (*Morus*) . Proc. International Conf. on Research in Pl. Sci. and its Relevance to Future. Delhi (Abst.) pp. 411.
6. P. R. Unnikrishna Pillai & **R.C. Verma. 1990** . A comparison of induced chromosomal aberrations in *Vicia faba* and *Phlox drummondii* . 3rd All India Conference on Cytology & Genetics , Nagpur . (Abst.) pp. 76-77.
7. P. Vyas & **R. C. Verma . 1990** . Behavior of B chromosomes during meiosis in *Commelina benghalensis*. 3rd All India Conference on Cytology & Genetics , Nagpur . (Abst.) pp. 49.
8. **R. C. Verma . 1991** . Translocation heterozygosity and prospects of genetic improvement in *Rhoeo discolor* .

Golden Jubilee Symposium on Genetic Research and Education : Current Trend and the next fifty years . New Delhi . (Abst.) pp. 780 .

9. S. Chandel & **R. C. Verma** . **1992** . Induced polyploidy and yield increase in sunflower (*Helianthus annuus*) .
Proc. Fourth All India Conf. on Cytology & Genetics, Bangalore . (Abst.) pp. 48.
10. B. M. S. Reddy & **R. C. Verma**. **1994** . Radiation induced flower mutant in *Phlox drummondii* . Proc. Fifth All India Conference on Cytology & Genetics . Kurukshetra . (Abst.) pp. 90 .
11. **R. C. Verma 2011**. Climate change, Evolution and Biodiversity (Invited Lecture)
Proc. National Symposium held at NEHU, Shillong. (Abst.) pp. 11
12. **R. C. Verma 2011** Recent Advances in Molecular Cytogenetics. (Invited Lecture)
Proc. National Symposium held at Gujrat University, Ahmedabad. (Abst.) pp. 84
13. **R. C. Verma** & Ramesh Ahirwar **2012**. Meiotic studies of Complex Translocation Heterozygosity in *Rhoeo discolor*. Proc. XI All India Conference on Cytology & Genetics held at Bangalore University (Abst.) pp 10.
14. **R. C. Verma 2012** Genetics and Evolution Theories. (Plenary Lecture). Proc. National Symposium on Plant Cytogenetics held at Panjabi University, Patiala (Abst.) pp. 44.
15. **R.C. Verma** & Preeti Das **2013**. Genetics and Origin of Species. XXXVI Annual Conference of the Indian Botanical Society Oct. 18-20, 2013 Organized by the DDU University, Gorakhpur (Abst.)

Books Published:

Authors name(s), Title of the book, name of the publisher, year

Co Authored IGNOU ‘Genetics & Biotechnology’ course.

Research Guidance

Supervision of awarded Doctoral Thesis:

Scholar’s name, year, Title of dissertation

1. Hari Patidar 1993 : Studies of *Papaver somniferum* Linn. hybrids and their adaptation.

2. O.P. Patel 1996 : Cytogenetics and interspecific hybrids of 22 chromosome grain legumes.
3. Rashmi Sharma 2002 : Cytogenetics and genetic improvement of *Phlox drummondii*.
4. Prashant Joshi 2004 : Cytogenetic and mutagenic studies in some *Vicia* species.
5. Vineeta Dubey 2007 : Studies on Physiology and Ecology of Cyanobacteria from grass lands of Ujjain and to evaluate their potentiality as Biofertilizer.
6. Vijendra Sharma 2009 : Isolation and characterization of heavy metal resistant bacteria from heavy metal contaminated sites as potential agents for bioremediation of heavy metal contamination.

Supervision of Doctoral Thesis, under progress:

Scholar's name, Title of dissertation

1. Ramesh Ahirwar : Cytogenetic studies in some members of the family Liliaceae
2. Sapna Goyal : Chromosomal studies in some members of the family Fabaceae
3. Pratibha Shrivastava : Chromosomal studies in some members of the family Asteraceae
4. Vijay Pandey : Use of nuclear DNA Polymorphism assay as genetic markers for India Hybrid Tea accessions and clones including identified core set
5. R.P. Tiwari : Studies on Ethnoveterinary Medicinal Plants of Western Madhya Pradesh
6. Mushtaq Ahmed Khah : Cytogenetic and Molecular studies of certain members of the family Poaceae

Supervision of M.Phil. dissertations:

Scholar's name, year, Title of dissertation

1. P. Vyas 1990 : Male meiosis in sixteen ornamental plants.
2. P.R.U. Pillai 1990 : A comparison of radiation induced chromosomal aberrations in *Vicia faba* and *Phlox drummondii* .
3. A.N. Rao 1991 : Radiation induced inversions and translocations in *Vicia faba* L.
4. S. Chourey 1991 : Studies on induced chromosomal aberrations at mitosis.

5. S. Chandel 1992 : Cytogenetics of sunflower (*Helianthus annuus* L.).
6. S. Khullar 1993 : Cytomorphological studies in diploid and colchiploids of *Phlox drummondii* .
7. B.M.S.Reddy 1994 : Cytogenetic and tissue culture studies in diploid and colchitetraploids of *Phlox drummondii* .
8. A.B. Chawda 1995 : Meiotic studies in some ornamentals.
9. R. Sharma 1996 : Genetical and tissue culture studies in *Phlox drummondii* .
10. M. Jaiswal 2002 : Effect of radiation and chemical mutagens on *Vicia faba*.
11. Pankaj Jamwal 2003 : Effect of some chemicals and physical mutagens on the chromosomes of *Vicia faba*.
12. Seema Singh 2009 : Cytomorphogenetic studies in *Phlox* and *Vicia*
13. Sunil Kumar Sharma 2010 : Cytogenetics and mutagenic studies in *Pisum sativum*
14. Ramesh Ahirwar 2010 : Cytogenetics studies in *Phlox drummondii* (Hook)
15. Sapna Goyal 2010 : Effects of radiation on chromosomes of *Vicia faba*
16. Pratibha Shrivastava 2010 : Effects of radiation on the chromosomes of *Chrysanthemum carinatum*
17. Sartaj Gani 2011 : Ethano- Botanical Survey of Kashmir- A case study
18. Kisar Ahmad Dar 2011 : Status of foliar diseases on different cultivars of apple in Kashmir
19. Irfan Ahmad Mir 2011 : Assessment of herbaceous vegetation in Gulmarg range, Kashmir valley
20. Manzoor Ahmad Mir 2011: Maize – A major livelihood security in tribal areas of Kashmir
21. Jaya Joshi 2011 : Cytogenetic studies in some medicinal plants of the Liliaceae family
22. Mona Maheshwari 2011: Study of cytogenetics and radiation effects on few members of the family Fabaceae
23. Mukesh Bhuriya 2011 : Cytogenetics studies in few members of the family Solanaceae
24. Sonam Tejra 2011: Cytogenetics studies in few members of the family Brassicaceae

25. Ruchi Sharma 2012 : Effects of gamma radiation on chromosome *Phlox drummondii*
26. Rakesh Purbiya 2012 : Effects of gamma rays on *Alium cepa* chromosomes
27. Reena Modi 2012 : Effects of gamma radiation on the chromosome of *Chrysanthemum carinatum*

Conferences Organized

Organization of a Conference

Organizing Secretary : National Seminar on Climate Change June, 2010 Vikram University

Conferences / Seminars etc. Attended

More than 50 National and International

Research Projects

Name of Project:

Position in Project:

Period:

Grant:

1. "Cytogenetics of some important oil seeds cultivated in M. P.", funded by the CSIR, New Delhi. P.I., 1990 - 1993. 2 Lacs
2. "Genetic improvement of *Rhoeo* through chromosomal manipulations", funded by the U.G.C. , New Delhi. P.I., 1991 – 1993. 0.11 Lacs
3. "Genetic improvement of some garden ornamentals", funded by the M. P.C. S. & T., Bhopal (M. P.) P.I., 1995 - 1998 . 2 Lacs
4. "Genetic improvement of broad bean (*Vicia faba*), a vegetable crop of Malwa region", funded by the M.P.C. S. & T., Bhopal (M.P.) P.I., 2001 – 2004. 2.5 Lacs
5. "Genetic improvement of *Vicia faba* and *Phlox drummondii* for cultivation adaptability in the diverse ecoclimate of the area" as a component of the SAP-DRS funded by the U.G.C., New Delhi. Co- P.I., 2002 – 2007. 42 Lacs (Total)
6. "Cytogenetic and Molecular characterization of some Medicinal plants of the family Liliaceae", funded by the M.P.C. S. & T., Bhopal (M.P.) P.I., 2010 – 2013. 5 Lacs

Awards and Distinctions

1. **“Best Paper Presented”** Award at the 3rd All India Conference on Cytology & Genetics held at Nagpur in 1990.
2. Awarded , **Department Of Biotechnology National Associateship** 1999 – 2000, availed at Lab. of Cell & Mol. Cytogenetics, Deptt. of Botany, University of Delhi
3. **“Best Scientific Research Publication Award”** 2012-2013 by the M.P.C.S.& T. (Bhopal), University Cell, Vikram University, Ujjain

Association with Professional Bodies

Committees and Boards

Memberships

1. Member - Society of Cytologists & Geneticists, Bangalore .
2. Fellow - Indian Society of Genetics & Plant Breeding , New Delhi
3. President – Botanical Association, Vikram University, Ujjain
4. Councilor & Life Member – Indian Botanical Society, Bareilly

Other Activities

Research Interests

More than 35 years in Cytogenetics, Genetics, Breeding and Biotechnology of economically important plants like, *Crotalaria*, *Phlox*, *Morus*, *Vicia*, etc. (70 Publications), and some aspects of molecular biology of *Arachis* sp.

At the Central Arid Zone Research Institute, Jodhpur, worked in the All India Coordinated Millet Improvement Programme as Research Fellow (Plant Breeding) (March 1977 – Oct. 1977).

At the Botany Deptt., Jodhpur University, worked as JRF (UGC) in the Project on ‘Cytogenetics of some Medicinal plants of Rajasthan’ ; as SRF (CSIR) in the Project ‘Cytogenetics of *Crotalaria*’; and as Research Assistant in the faculty (Oct. 1977 – June 1983).

At the Central Sericultural Research & Training Institute, Berhampore (W.B.) worked as Senior Research Assistant (Mulberry Breeding & Genetics Programme, Training Division, Technical Cell) (June 1983 – Nov. 1988).

At the National Centre for Plant Genomic Research, Jawaharlal University, New Delhi in ‘Molecular Marker Techniques in Plant Genomics’ (March,1999)

At the Lab. Of Cellular & Molecular Cytogenetics, Deptt. Of Botany, University of Delhi as Department of Biotechnology (DBT) National Associate on the Project 'Genetic variation detectable with genetic markers among gene pool resources of cultivated peanut and related wild species' (May 2000 - May 2001).

Survey Articles

Popular Article

1. Silkworm used in Genetic Engineering 1986
Indian Silk XXV (5) : 20
2. Mutation to the help of Sericulture 1987
Indian Silk XXVI (6) : 32-33

Delivered Lectures (More than 50)

December 2013 : Delivered Lecture at the Central Zone Vice Chancellor's Meet at Raipur

October 2013 : Delivered Lecture at the National Seminar of The Indian Botanical Conference at DDU University, Gorakhpur.

February 2013 : Delivered invited lectures on 'Environmental Issues' on the 'Science Day' at D.A.V.V. (University), Indore

January 2013 : Delivered invited lectures in Refresher Course at Academic Staff College D.A.V.V. (University), Indore

January 2013 : Delivered invited lecture in the National Seminar at the Economics Deptt., Vikram University, Ujjain

February 2012 : Delivered invited lecture in the National Symposium on 'Recent Trends in Life Sciences' at the DAVV (University), Indore

February 2012 : Delivered invited lecture in the National Symposium on Cytogenetics at the Panjab University, Patiala

January 2012 : Presented paper in the National Conference on Cytology & Genetics, at Bangalore

January 2012 : Delivered invited lectures as Chief Guest at DBSAM University, Aurangabad

October 2011 : Delivered invited lecture in the National Symposium at Gujarat University, Ahmedabad

March 2011 : Delivered invited lecture in the National Symposium at NEHU, Shillong

Jan., 2011 : Delivered invited lecture at D.A.V.V. (University), Indore
Delivered invited lecture at Barkatullah University, Bhopal

Feb., 2010 : Delivered invited lecture at D.A.V.V. (University), Indore

Nov., 2009 : Delivered lecture at PGBT College , Ujjain

Dec., 2008 : Presented paper at the International Seminar organized by the Indian Botanical Society at Allahabad.

Feb., 2008 : Delivered invited lecture at Maharaja College, Ujjain

Feb., 2007 : Delivered invited lectures at Maharaja College, Ujjain

Dec., 2006 : Delivered invited lecture at L.T. College, Ujjain

Nov., 2006 : Delivered invited lecture at the Govt. Girls. P.G. College, Ujjain

March, 2006 : Delivered invited UGC lectures at the Botany Deptt., Pune University.

Jan., 2006 : Delivered invited lecture at the National Seminar on Biodiversity at the Panjabi University, Patiala

Oct., 2005 : Delivered Lectures in the Refresher Course at the Botany Deptt., Jodhpur University, Jodhpur

Feb., 2004 : Delivered an invited lecture on ' 50 Golden years of DNA' at the P.M.B. Gujarati Science College, Indore

Jan., 2004 : Delivered an Expert Lecture on '50 years of DNA Research' at the M.L.B. College, Bhopal (Organized by the M.P.Bhoj (Open) University)

Dec., 2003 : Delivered an invited Lecture on ' 50 years of DNA' at the S.N.P.G.G. College, Bhopal.

Nov., 2003 : Delivered an invited Lecture on ' 50 years of DNA' at the K.P. P.G. College, Dewas.

May 2003 : Presented a Concept Paper at the ' Interactive Biotech. meet for the development of Madhya Pradesh' held at Pachmarhi.

January 2003 : Presented an invited lecture on ' Cytology and cytogenetic tools for deliniating interrelationship ' as a resource person at the N.B.P.G.R., New Delhi.

August 2002 : Presented a research paper and a poster at the Conference "Botany 2002" organized by the Botanical Society of America at The University of Wisconsin at **Madison** (

USA).

March 2002 : National Seminar on ' Recent Advances in Botany ' held at Birganj (**Nepal**).
Delivered an invited special lecture on Recent Advances in Cytogenetics.

October 1998 : National Conference of 'Indian Botanical Society' held at Ujjain.

May 1997 : Seminar on 'Medicinal plants of Malwa' held at Ujjain.

December 1996 : M.P. State Seminar on 'Floriculture' held at Ujjain.

September 1995 : National Conference on Biotechnology held at Bhopal.

March 1994 : Regional Conference on 'Environment and Biodiversity ' held at Kathmandu, **Nepal**.

Forthcoming Research

Cytogenetic and Molecular characterization of some economically important plants.