

CURRICULUM VITAE



- 01.** Name: **DR. MOHD. RAFIQ WANI**
- 02.** Father's Name: **MOHD. MAQBOOLWANI**
- 03.** Date of Birth: **12.02.1980**
(Twelfth of February Nineteen Hundred & Eighty)
- 04.** Permanent Residence: **Damhal Hanji Pora**
Tehsil: Damhal Hanji Pora
District: Kulgam, Kashmir
(Jammu & Kashmir)
PIN code: 192 233
- 05. Present Residence:** **House No. 78, Iqbal Colony, Naik Bagh, Budshah Nagar**
Natipora, Srinagar-190015
- 06.** Designation: **Sr. Scale Assistant Professor**
- 07.** Department: **Botany**
- 08.** Name of Posted College: **Govt. Degree College (Boys) Anantnag, Kashmir**
- 09.** Area of Specialization/Interest: **Plant Breeding (Mutation Breeding)**
- 10.** Date of Appointment: **30-10-2009**
- 11.** Mobile Number and E-mail: **+919906517207; botanyrafiq@gmail.com**

12. Educational Qualification:

S.No.	Examination Qualification	Board / University	Year	Subjects	%age of Marks Secured	Division
01.	10 + 2 (12 th)	JKBOSE	1998	Science	60.50 %	I st
02.	B.Sc.	Kashmir University	2001	English , Chemistry , Zoology	63.88%	I st
03.	M.Sc.	A.M.U.	2003	Botany	69.50%	I st
04.	Ph.D.	A.M.U.	2008	Botany	Degree Awarded	
05.	B.Ed.	Kashmir University (Distance Mode)	2010	-	79.70%	Distinction

- 13. Title of Ph.D. Thesis: “Studies on the Induction of Mutations in Mungbean (*Vigna radiata* (L.) Wilczek)”**

Publications

- 14.** Papers Published: **34 (17 National+17 International)**
- 15. International Books Edited: 06 (Six)**
- 16.** Chapters Published in **International Books: 12 (Twelve)**

A. Books Edited (Through International Publishers)

1. Ahmad, P. and **M. R. Wani** (2014). “*Physiological Mechanisms and Adaptation Strategies in Plants Under Changing Environment Vol 1*”.
<http://www.springer.com/life+sciences/plant+sciences/book/978-1-4614-8590-2>
2. Ahmad, P. and **M. R. Wani** (2014). “*Physiological Mechanisms and Adaptation Strategies in Plants Under Changing Environment Vol 2*”.
<http://www.springer.com/life+sciences/plant+sciences/book/978-1-4614-8599-5>
3. Ahmad, P., **M. R. Wani**, M. M. Azooz and Lom San P Tran (2014). “*Improvement of Crops in the Era of Climatic Changes Vol 1*”.
<http://www.springer.com/life+sciences/plant+sciences/book/978-1-4614-8829-3>
4. Ahmad, P., **M. R. Wani**, M. M. Azooz and Lom San P Tran (2014). “*Improvement of Crops in the Era of Climatic Changes Vol 2*”.
<http://www.springer.com/life+sciences/plant+sciences/book/978-1-4614-8823-1>
5. Tomlekova, N., M. I. Kozgar and **M. R. Wani** (2014). “*Mutagenesis: Exploring Novel Genes and Pathways*”. Wageningen Academic Publishers, Netherlands.
<http://www.wageningenacademic.com/doi/book/10.3920/978-90-8686-787-5>
6. Tomlekova, N., M. I. Kozgar and **M. R. Wani** (2014). “*Mutagenesis: Exploring Genetic Diversity of Crops*”. Wageningen Academic Publishers, Netherlands.
<http://www.wageningenacademic.com/doi/book/10.3920/978-90-8686-796-7>

B. List of Publications from 2003-2007

1. Khan, S. and **M. R. Wani** (2003). Isolation of high yielding mutants in mungbean (*Vigna radiata* (L.) Wilczek). *Tropical Agriculturist* 154: 51-55.
2. **M. R. Wani** and S. Khan (2003). Chlorophyll mutations in lentil. *Tropical Agriculturist* 154: 21-26.
3. Khan, S., **M. R. Wani** and K. Parveen (2004). Induced genetic variability for quantitative traits in *Vigna radiata* (L.) Wilczek. *Pakistan Journal of Botany*, 36(4): 845-850. (**Impact Factor = 0.90**).
4. Khan, S., **M. R. Wani**, M.D. Bhat and K. Parveen (2004). Induction of morphological mutants in chickpea. *International Chickpea and Pigeonpea Newsletter*, 11: 6-7.
5. **M. R. Wani** and S. Khan (2004). Effect of chemical mutagens on seedling growth in (*Vigna radiata* (L.) Wilczek.). *Journal of Phytological Research*, 17(1): 113-114.

6. Khan, S., **M. R. Wani**, M. D. Bhat and K. Parveen (2005). An induced bushy mutant in mungbean. *Mutation Breeding Newsletter and Review* (Austria), 1:10.
7. Khan, S., **M. R. Wani**, M. D. Bhat and K. Parveen (2005). Induced chlorophyll mutations in chickpea (*Cicer arietinum* L.). *International Journal of Agriculture and Biology*, 7 (5): 764-767. **(Impact factor 0.94)**.
8. Khan, S. and **M. R. Wani** (2005). Genetic variability and correlations studies in chickpea mutants. *Journal of Cytology and Genetics*, 6: 155-160.
9. Khan, S. and **M.R. Wani** (2005). Comparison on the effect of chemical mutagens on mungbean. *Advances in Plant Sciences*, 18(2): 533-535.
10. Khan, S. and **M.R. Wani** (2006). MMS and SA induced genetic variability for quantitative traits in mungbean. *Indian Journal of Pulses Research*, 19(1): 50-52.
11. Khan, S. and **M. R. Wani** (2006). Induced mutations for yield contributing traits in green gram. *International Journal of Agriculture and Biology*, 8(4): 528-530. **(Impact factor 0.94)**.
12. Khan, S., **M. R. Wani** and K. Parveen (2006). Quantitative variability in mungbean induced by chemical mutagens. *Legume Research*, 29(2): 143-145.
13. Khan, S., **M. R. Wani** and K. Parveen (2006). Sodium azide induced high yielding early mutant in lentil. *Agric. Sci. Digest*. 26(1): 65-66.
14. Khan, S. and **M. R. Wani** (2006). Genetic variability studies for seed yield and its components in mungbean (*Vigna radiata* (L.) Wilczek). *Thailand Journal of Agricultural Science*, 39 (1-2) 83-88.
15. Khan, S. and **M.R. Wani** (2006). Estimates of genetic variability in mutated population and the scope of selection for yield attributes in *Vigna radiata* (L.) Wilczek. *Egyptian Journal of Biology*, 8: 1-6.
16. Khan, S. and **M.R. Wani** (2007). Genetic variation and scope of selection for high yielding mutants in mungbean. *Journal of Phytological Research*, 20(2): 309-311.

List of Publications from 2011-2016

1. **Wani, M. R.**, Khan, S., Kozgar, M. I. and S. Goyal (2011). Induction of morphological mutants in mungbean (*Vigna radiata* (L.) Wilczek.) through chemical mutagens. *The Nucleus*, 48(3): 243-247.
2. **Wani, M. R.**, Khan, S. and Kozgar, M. I. (2011). An assessment of high yielding M₃ mutants of green gram (*Vigna radiata* (L.) Wilczek). *Romanian Journal of Biology*, 56(1): 29-36.
3. **Wani, M. R.**, Khan, S. and Kozgar, M. I. (2011). Induced chlorophyll mutations. I. Mutagenic effectiveness and efficiency of EMS, HZ and SA in mungbean. *Frontiers of Agriculture in China*, 5(4): 514-518. **(Impact Factor = 0.57)**.

4. **Wani, M.R.**, Khan, S. and Kozgar, M. I. (2012). Genetic enhancement of mungbean (*Vigna radiata* (L.) Wilczek) through induced mutagenesis. *Crop Research*, 43(1-3), 189-193. (**NAAS Rating=3.4**).
5. Kozgar, M. I., Khan, S. and **Wani, M.R.** (2012). Impact of research activities of induced mutation breeding: is it on food insecurity and malnutrition. A www search. *Advanced Biotech*, 11(9): 43-46.
6. Kozgar, M. I., Khan, S. and **Wani, M.R.** (2012). Variability and correlations studies for total iron and manganese content of chickpea (*Cicer arietinum* L.) high yielding mutants. *American Journal of Food Technology*, 7(7):437-444. (**Impact Factor = 0.89**).
7. Lone, M. A. and **Wani, M. R.** (2012). Degradation of Dimethoate and Pyrethroid by using fungal strains isolated from the rhizosphere of *Juglans regia* L. in the northern region of Jammu and Kashmir, India. *International Journal of Pharmacology and Bioscience*, 3(4):716-723. (**Impact Factor = 0.47**).
8. Lone, M. A., **Wani, M. R.**, Bhat, N. A., Sheikh, S. A. and Reshi, M. A. (2012). Evaluation of cellulose enzyme secreted by some common and stirring rhizosphere fungi of *Juglans regia* by DNS method. *Journal of Enzyme Research*, 3(1):18-22.
9. **Wani, M. R.**, Lone, M. A., Sheikh, S. A., Dar, M. S., Tak, M. A., Ahmad, P. and Khan, S. (2012). Induction and assessment of genetic variability for yield and yield contributing traits of chickpea (*Cicer arietinum* L.). *Journal of Plant Genomics*, 2(1):28-33.
10. Sheikh, S. A., **Wani, M. R.**, Lone, M. A., Tak, M. A. and Malla, N. A. (2012). Sodium azide induced biological damage and variability for quantitative traits and protein content in wheat (*Triticum aestivum* L.). *Journal of Plant Genomics*, 2(1):34-38.
11. Lone, M. A., **Wani, M. R.**, Sheikh, S. A., Sahay, S. and Dar, M. S. (2012). Antagonistic potentiality of *Trichoderma harzianum* against *Cladosporium sphaerospermum*, *Aspergillus niger* and *Fusarium oxysporum*. *Journal of Biology, Agriculture and Healthcare*, 2(8):72-76.
12. Kozgar, M. I., Khan, S. and **Wani, M.R.** (2013). Role of *ATICS* and *OMICS* for business oriented developmental programmes of micro-propagated plants. *Advanced Biotech*, 12(9):11-16.
13. Sheikh, S.A., M. A. Tak, **M. R. Wani** and P. Ahmad (2013). Response of urdbean (*Vigna mungo* (L.) Hepper) in terms of growth, yield and biochemical parameters to spent engine oil pollution. *Journal of Applied Phytotechnology in Environmental Sanitation*, 2(4): 99-108.
14. **Wani, M. R.**, M. I. Kozgar, S. Khan and N. A. Dar (2013). Induction of genetic variability through artificial mutagenesis in chickpea (*Cicer arietinum* L.). *Thai. J. Agric. Sci.* 46(3): 141-147.

15. Kumar V., Raja T.K., **M. R. Wani** *et al.* (2013). Transgenic plants as Green Factories for vaccine production. *African Journal of Biotechnology*, 12(43): 6147-6158. (**Impact Factor = 0.45**).
16. S. A. Sheikh and **M. R. Wani** (2014). Evaluation of the salinity tolerance of some rice (*Oryza sativa*) genotypes of Kashmir valley. *International Journal for Scientific Research and Development*, 2(5): 284-288.
17. P. Ahmad, Sarwat, M., Bhat, N.A., **Wani, M.R.**, Kazi, A.G., Tran, L.S.P. (2015). Alleviation of cadmium toxicity in *Brassica juncea* L. (CZern & Coss.) by calcium application involves various physiological and biochemical strategies. *Plos One*, 10(1):e0114571.doi:10.1371/journal.pone.0114571, (**Impact Factor:3.54**)
18. **Wani, M. R.** and Kozgar, M. I. (2016). Induction of early flowering and maturing mutants in mungbean. *International Journal on Agricultural Sciences*, 7(1):79-88. (**NAAS Rating 3.9**)

C. Book Chapters Published in International Books

1. Mohammad Abass Ahanger, Shiv Ram Tyagi, **Mohd. Rafiq Wani**, Parvaiz Ahmad (2014). Drought Tolerance: Roles of Organic Osmolytes, Growth Regulators and Mineral Nutrients. *In: Ahmad, P. and M. R. Wani* (Eds.), ***“Physiological Mechanisms and Adaptation Strategies in Plants Under Changing Environment Vol 1”***. <http://www.springer.com/life+sciences/plant+sciences/book/978-1-4614-8590-2>
2. Parvaiz Ahmad, Asiya Hameed, Elsayed Fathi Abd-Allah, Subzar Ahmad Sheikh, **Mohd. Rafiq Wani**, Saiema Rasool, Sumiya Jamsheed and Ashwani Kumar (2014). Biochemical and Molecular Approaches for Drought Tolerance in Plants. *In: Ahmad, P. and M. R. Wani* (Eds.), ***“Physiological Mechanisms and Adaptation Strategies in Plants Under Changing Environment Vol 2”***. <http://www.springer.com/life+sciences/plant+sciences/book/978-1-4614-8599-5>
3. Mohammad Imran Kozgar, **Mohd. Rafiq Wani**, Samiullah Khan and Parvaiz Ahmad (2014). Mineral Bioavailability through Mutation Breeding In Pulse Crops: A Review. *In: Ahmad, P., M. R. Wani, M. M. Azooz and Lom San P Tran* (Eds.), ***“Improvement of Crops in the Era of Climatic Changes Vol 1”***. <http://www.springer.com/life+sciences/plant+sciences/book/978-1-4614-8829-3>
4. **Mohd. Rafiq Wani**, M. Imran Kozgar, Samiullah Khan, M. Abbas Ahangar and Parvaiz Ahmad (2014). Induced Mutagenesis for the Improvement of Pulse Crops with Special Reference to Mungbean-A Review Update. *In: Ahmad, P., M. R. Wani, M. M. Azooz and Lom San P Tran* (Eds.), ***“Improvement of Crops in the Era of Climatic Changes Vol 1”***. <http://www.springer.com/life+sciences/plant+sciences/book/978-1-4614-8829-3>

5. Shaista Qadir, Asiya Hameed, Nahida Tun Nisa, MM Azooz, **Mohd. Rafiq Wani**, Mirza Hasannuzaman, Alvina Gul Kazi and Parvaiz Ahmad (2014). Brassicas: Responses and Tolerance to Heavy Metal Stress. In: Ahmad, P., **M. R. Wani**, M. M. Azooz and Lom San P Tran (Eds.), "*Improvement of Crops in the Era of Climatic Changes, Volume 2*", DOI 10.1007/978-1-4614-8824-8_1, © Springer Science+Business Media New York 2014, pp. 1-36.
6. **Mohd. Rafiq Wani**, Mohd Imran Kozgar, Nasya Tomlekova, Samiullah Khan, Alvina Gul Kazi, Subzar Ahmad Sheikh and Parvaiz Ahmad (2014). Mutation Breeding: A Novel Technique for Genetic Improvement of Pulse Crops Particularly Chickpea (*Cicer arietinum* L.). In: Ahmad, P., **M. R. Wani**, M. M. Azooz and Lom San P Tran (Eds.), "*Improvement of Crops in the Era of Climatic Changes, Volume 2*", DOI 10.1007/978-1-4614-8824-8_9, © Springer Science+Business Media New York 2014, pp. 217-248.
7. Mohammad Imran Kozgar, Shaheen Hussain, **Mohd. Rafiq Wani** and Samiullah Khan (2014). The Role of Cytological Aberrations in Crop Improvement through Induced Mutagenesis. In: Ahmad, P., **M. R. Wani**, M.M. Azooz and Lom San P Tran (Eds.), "*Improvement of Crops in the Era of Climatic Changes, Volume 2*", DOI 10.1007/978-1-4614-8824-8_11, © Springer Science+Business Media New York 2014, pp. 283-296.
8. Subzar Ahmad Sheikh, **Mohd. Rafiq Wani**, Mohd Imran Kozgar and Parvaiz Ahmad (2014). Wheat Improvement: Historical Perspective and Mutational Approach—A Review. In: Ahmad, P., **M. R. Wani**, M. M. Azooz and Lom San P Tran (Eds.), "*Improvement of Crops in the Era of Climatic Changes, Volume 2*", DOI 10.1007/978-1-4614-8824-8_12, © Springer Science+Business Media New York 2014, pp. 297-322.
9. M. I. Kozgar, **Mohd. Rafiq Wani**, N. B. Tomlekova and S. Khan (2014). Induced mutagenesis in edible crop plants and its impact on human beings. In: N. B. Tomlekova, M. I. Kozgar and **M. R. Wani** (Eds.), "*Mutagenesis: Exploring Novel Genes and Pathways*", Wageningen Publishers, Netherland, pp. 167-182.
<http://www.wageningenacademic.com/doi/book/10.3920/978-90-8686-787-5>
10. M. I. Kozgar, **Mohd. Rafiq Wani**, N. B. Tomlekova and S. Khan (2014). Surface graph and densitometric SDS-PAGE studies in chickpea mutants. In: N. B. Tomlekova, M. I. Kozgar and **M. R. Wani** (Eds.), "*Mutagenesis: Exploring Novel Genes and Pathways*", Wageningen Publishers, Netherland, pp. 279-290.
<http://www.wageningenacademic.com/doi/book/10.3920/978-90-8686-787-5>
11. N. B. Tomlekova, O. Timin, Y. Arnaoudova, O. Timina, **Mohd. Rafiq Wani**, M. I. Kozgar (2014). Trends and achievements in F₁ hybrids of sweet pepper utilizing induced male sterility. In: N. B. Tomlekova, M. I. Kozgar and **Mohd. Rafiq Wani** (Eds.), "*Mutagenesis:*

Exploring Genetic Diversity of Crops”, Wageningen Publishers, Netherland, pp. 15-40.

<http://www.wageningenacademic.com/doi/book/10.3920/978-90-8686-796-7>

12. **Mohd. Rafiq Wani**, M. I. Kozgar, N. B. Tomlekova and S. Khan (2014). Selection for polygenic variability in early mutant generations of mungbean (*Vigna radiata* (L.) Wilczek). In: N. B. Tomlekova, M. I. Kozgar and **M. R. Wani** (Eds.), “*Mutagenesis: Exploring Genetic Diversity of Crops*”, Wageningen Publishers, Netherland, pp. 213-232.

<http://www.wageningenacademic.com/doi/book/10.3920/978-90-8686-796-7>

D. Orientation/ Refresher Courses Attended

- 1 Attended orientation course at UGC-Academic Staff College, University of Kashmir, Srinagar w.e.f. **22.02.2010-26.03.2010**.
- 2 Attended Refresher course in Botany (Multidisplinary) at UGC-Academic Staff College, Aligarh Muslim University, Aligarh w.e.f. **31.01.2012-21.02.2012**.
- 3 Attended Refresher course in Environmental Studies (Multidisplinary) at UGC-Academic Staff College, University of Calicut, Kerela w.e.f. **08.01.2015-29.01.2015**.

E. Workshops/Symposia/Seminars/Conferences Attended

1. Participated in “**26th Annual conference of Indian Botanical Society**” and “**National Symposium on Plant Biology and Biodiversity in Changing Environment**” organized by Jamia Hamdard University, New Delhi on **December 29-31, 2003**.
2. Attended two day’s workshop for “**College Principals and Senior Academicians**” in Educational Administration organized by UGC Academic Staff College, University of Kashmir, Srinagar from **22nd -23rd March, 2010**.
3. Participated in National Seminar on “**Recent Advances in Plant Biotechnology: Prospectus and Potentials**” organized by the Department of Botany, Aligarh Muslim University, Aligarh on **February 19-20, 2011**.
4. Participated in “**National Symposium on current trends in Biochemical, Biomedical and Environmental Science**” organized by the Department of Biochemistry, Faculty of Life Sciences, Aligarh Muslim University, Aligarh on **22nd February, 2011**.
5. Participated in a “**Two day Awareness Programme for the Functionaries of Higher Education including Physically Challenged Students**” organized by Govt. Degree College (Boys) Anantnag from **18th to 19th March, 2011**.
6. Participated in one day “**National Seminar on Advances in Biosciences**” organized by Govt. Amar Singh College, Srinagar on **12th June, 2012**.

7. Participated and presented a paper in “**8th Science Congress**” Organized by University of Kashmir, Srinagar from **17th -19th September, 2012.**
8. Participated in Two day “**National conference on Tourism and Socio-Economic Complexion of North- Western India with Special Emphasis on Jammu and Kashmir**” organized by Govt. Degree College (Boys) Anantnag **from 5-6 March, 2013.**
9. Participated in one day “**NME-ICT awareness workshop**” organized by NIT Srinagar and sponsored by MHRD, Govt. of India on **June 18th 2013.**
10. Participated and presented a paper in the “**9th JK Science Congress**” held at University of Kashmir, Srinagar from **October 1-3, 2013.**
11. Attended a training workshop on “**Disaster Preparedness for Risk Reduction**” organized by Jammu and Kashmir students welfare society, Anantnag in collaboration with NSS, Govt. Degree College (Boys) Anantnag from **22nd November to 24th November, 2014.**
12. Participated and presented a paper in “**Two days national inter-disciplinary Conference Science for Sustainable Development**” held at S. P. College, Srinagar from **February 25-26, 2017.**

F. Membership of Scientific Societies

1. Life Member of “**Indian Society of Pulses Research and Development, Kanpur**”, India.
2. Life Member of “**Indian Society of Genetics and Plant Breeding**”, Indian Agricultural Research Institute (IARI), New Delhi.



(Dr. Mohd. Rafiq Wani)