

## Dr. Anjana Rustagi

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### Professional Preparation

Dr. B.R.Ambedkar University, Agra, India	Botany	Bachelor of Science	2000
Dr.B.R.Ambedkar University, Agra, India	Botany	Master of Science	2002
University of Delhi, Delhi, India	Botany	Ph.D.	2011

### Appointments

2015 onwards-Assistant Professor, Department of Botany, Gargi College, University of Delhi, Delhi

2009-2015- Assistant Professor, Ramjas College, University of Delhi, Delhi

2002-2004- Junior Research Fellow, School of Life Sciences, Jawaharlal Nehru University, New Delhi

### Publications

1. Suman Sharma, Apekshita Singh, Stuti Singh, James Bond and **Anjana Rustagi** (2015) 'Evaluation of Antimicrobial properties of Essential oils from Clove and Eucalyptus' Asian Journal of Pharmaceutical and Clinical Research: Volume 7, Issue 5, page 291-294
2. **Anjana Rustagi**, Shalu Jain, Deepak Kumar, Mukesh Jain, Shashi Shekhar, Vishnu Bhat, Neera Bhalla Sarin (2015) 'High Efficiency Transformation of Banana [*Musa acuminata* L cv. Matti (AA)] for Enhanced Tolerance to Salt and Drought Stress through Overexpression of a Peanut Salinity-induced Pathogenesis-Related class 10 Protein' Molecular Biotechnology: Volume 57, Issue 1, page 27-35
3. **Anjana Rustagi**, Deepak Kumar, Shashi Shekhar, Mohd Aslam Yusuf, Santosh Misra, Neera Bhalla Sarin (2014) 'Transgenic *Brassica juncea* plants expressing *MsrA1*, a Synthetic Cationic Antimicrobial Peptide, Exhibit Resistance to Fungal Phytopathogens' (2014) Molecular Biotechnology Volume 56, page 535-545
4. Pooja Jha, Shashi, **Anjana Rustagi**, Pankaj Kumar Agnihotri, Vishvas M. Kulkarni, Vishnu Bhat (2011) Efficient *Agrobacterium*-mediated transformation of *Pennisetum glaucum* (L.) R. Br. using shoot apices as explant source. Plant Cell Tissue and Organ Culture 107:501-512
5. Nasser JY Sholi, **Anjana Chaurasia**, Anuradha Agrawal and Neera Bhalla Sarin (2009) ABA enhances plant regeneration of somatic embryos derived from cell suspension cultures of plantain cv. Spambia (*Musa* sp.) Plant Cell Tissue and Organ Culture 99:133-140
6. **Anjana Chaurasia**, Vishnu Bhat and Neera Bhalla Sarin Vacuum Infiltration of Multiple Shoot Meristems of Indian *Musa* spp. cv *Matti* (AA) for Rapid and Highly

7. Neera Bhalla Sarin, Nasser Sholi and **Anjana Chaurasia** (2008) Towards improvement of *Musa* species through *in vitro* manipulations. In: Book of Abstract Banana 2008 International Conference, October 5-9, 2008, Mombasa, Kenya published by International Institute of Tropical Agriculture.

### **Book Chapters**

1. **Rustagi A.**, Shekhar S., Jain S., Kumar D. and Sarin N.B. 'Enhancing abiotic stress tolerance in banana through genetic engineering' In: Mohandas S. and Ravishankar K.V. eds. *Banana: Genomics and Transgenic approaches for genetic improvement* Springer-verlag Ltd. London (accepted and under revision; to be published in 2016)
2. **Rustagi A.**, Sarin NB, Bhat V and Khaling MK "Transgenic Banana: Biotic and Abiotic Stress Challenges." In: Suresh K and Vandana eds. *Environment and Chemistry*. New Delhi. New Campus publishers 2015 page 127-137 (ISBN 978-81-8030-432-3)

### **Research papers presented in conferences/ seminars**

1. **Anjana Rustagi nee Chaurasia**, Shashi Shekhar, Vishnu Bhat and Neera Bhalla Sarin (2010). Vacuum assisted transformation of Indian *Musa* spp. *cv.* Matti (AA). XXXI Annual Meeting of Plant Tissue Culture Association of India and National Symposium on Plant Cell Tissue and Organ Culture, March 3-10, 2010, University of Calcutta, Kolkata.
2. Nasser J Sholi, **Anjana Chaurasia** and Neera Bhalla Sarin (2008). Towards improvement of *Musa* species through *in vitro* manipulations. Banana 2008 International Conference, October 5-9, 2008, Mombasa, Kenya organized by International Institute of Tropical Agriculture.
3. Nasser JY Sholi, **Anjana Chaurasia** and Neera Bhalla Sarin (2004). ABA assisted enhanced regeneration of banana somatic embryos. IV Annual Biosparks Research Festival at School of Life Sciences, JNU, New Delhi.
4. Nasser JY Sholi, **Anjana Chaurasia** and Neera Bhalla Sarin (2005). Regeneration and transformation of Plantain var. *Spambia* with *barnase* (phosphinothricin resistance) gene. National Symposium on Plant Biotechnology, CIMAP, Lucknow organized by Plant Tissue Culture Association of India.

### **Conferences/Seminars/Workshop Participation:**

1. Workshop on "e-resources" organized by Gargi College Library, Gargi College, New Delhi on 26<sup>th</sup> November 2016.
2. 'National Seminar on Relevance of Medicinal Plants in 21<sup>st</sup> Century' organized by Ramjas College, University of Delhi from February 10-11, 2015
3. National Seminar on 'Current Environmental Challenges and Possible Solutions' organized by Ramjas College, University of Delhi from 15<sup>th</sup> to 16<sup>th</sup> February 2013.
4. Workshop on 'Genomics' organized by Department of Botany, Ramjas College from 1<sup>st</sup> to 3<sup>rd</sup> March 2012 and sponsored by Department of Biotechnology, Government of India.

5. Workshop on 'Microbial Biotechnology' organized by Department of Botany, Ramjas College from 10<sup>th</sup> to 13<sup>th</sup> December 2012 and sponsored by Department of Biotechnology, Government of India
6. Workshop on 'Fundamentals of Bioinformatics' organized by Ramjas College at Institute of Lifelong Learning, University of Delhi from 26<sup>th</sup> to 30<sup>th</sup> September 2011.
7. 'International Conference on Cellular and Molecular Biology' organised by Jawaharlal Nehru University, New Delhi, January 2008.
8. 'Annual Meet of Society of Biological Chemists' organised by Jawaharlal Nehru University, New Delhi, December 2006
9. 'National Symposium on Plant Biotechnology' organised by Plant Tissue Culture Association of India at CIMAP, Lucknow, November 2005
10. National Seminar on Genetically Modified and Transgenic Food Crops, 26<sup>th</sup> November to 27<sup>th</sup> November, 2003, organized by Delhi University Botanical Society, Delhi University, New Delhi.

### **Synergistic Activities**

1. Prepared e-lesson entitled 'Anther' for undergraduate course in Botany for Institute of Life long Learning, University of Delhi (chapter accepted for publication) ISBN 978-93-85611-91-9
2. Prepared e-lesson entitled 'Pollen Development and Maturation' for undergraduate course in Botany for Institute of Life long Learning, University of Delhi (chapter accepted for publication) ISBN 978-93-85611-91-9
3. Convener and member, Health and Hygiene Committee, Gargi College, University of Delhi.
4. Member, Equal Opportunity Cell, Gargi College, University of Delhi.
5. Member, Physical Sciences committee, Gargi College, University of Delhi.
6. Professional member of 'Plantae' and American Society of Plant Biologists, USA.
7. Conducted summer workshop on 'Plant Tissue Culture: Technique and Applications' for graduate students at Gargi College in June 2015.
8. Member of organizing committee for 'National Seminar on Current Environmental Challenges and Possible Solutions' and 'National Seminar on Relevance of Medicinal Plants' in 21<sup>st</sup> Century' organized by Ramjas College, University of Delhi from 15<sup>th</sup> to 16<sup>th</sup> February 2013 and February 10-11, 2015 respectively
9. Staff advisor of 'Genomics Workshop' and workshop on 'Microbial Biotechnology' organized by Department of Botany, Ramjas College, University of Delhi, from 1<sup>st</sup> to 3<sup>rd</sup> March 2012 and from 10<sup>th</sup> to 13<sup>th</sup> December 2012 respectively which was sponsored by Department of Biotechnology, Government of India.
10. Member of organizing committee for the workshop 'Fundamentals of Bioinformatics' for faculty of University of Delhi, at Institute of Lifelong Learning, University of Delhi from 26<sup>th</sup> to 30<sup>th</sup> September 2011.
11. Advising six graduate students for completion of research project funded by DBT, Government of India.

### **Scholarships and Awards:**

1. Qualified for joint **CSIR-UGC NET** and **UGC-JRF** examination in June 2004.
2. Qualified for **UGC SRF** in January 2007
3. Received **International Travel Grant** from **CSIR** to present research paper at Society for *In vitro* Biology 2009 meeting in Charleston, United states of America.
4. Topper of M.Sc. (Botany) entrance exam of Agra University, batch 2000-2002.

5. Topper of college in B.Sc. exam.
6. Received National Mathematics Olympiad merit certificate.
7. Represented Agra region for UP state level Badminton open women championship.
8. Elected for the post of sports secretary, University Hostel for Women, University of Delhi, Delhi.

## **Collaborators & Other Affiliations**

### **(i) Collaborators**

Dr. Apekshita Singh (Amity University, NOIDA, India), Dr. Anuradha Agrawal (National Bureau of Plant Genetic Resources, New Delhi) Dr. Bharti Chaudhary, Khaling, Dr. Suman Sharma, Dr. Suresh Kumar (Department of Botany, Ramjas College, University of Delhi), Dr. D. Kumar (Department of Biosciences, Bansthali Vidyapeeth, India), Dr. M. Jain, (University of Florida, Gainesville, USA), Prof. Neera Bhalla Sarin (School of Life Sciences, Jawaharlal Nehru University), Dr. N.J.Y. Sholi (National Research Centre on Agriculture, Palestine, Israel), Dr. Pooja Jha Maity, (Stockholm University, Sweden), Prof. Santosh Misra (University of Victoria, Canada), Dr. Shalu Jain (North Dakota State University, Fargo, USA), Shashi Shekhar (Senior Research Fellow, School of Life Sciences, Jawaharlal Nehru University), Prof. Vishnu Bhat (Department of Botany, University of Delhi),

### **(ii) Graduate and Postdoctoral Advisors**

Prof. Neera Bhalla Sarin, School of Life Sciences, Jawaharlal Nehru University, New Delhi  
Prof. Vishnu Bhat, Department of Botany, University of Delhi, Delhi

### **(iii) Thesis Advisor and Postgraduate-Scholar Sponsor**

Currently advising six graduate students for completion of research project funded by Department of Biotechnology, Government of India.