Curriculum vitae of Dr. Rakesh Tuli

. Personal details

Name	:	RAKESH TULI
Designation	:	Senior Research Advisor & J C Bose National Fellow, UIET, Panjab University, Chandigarh. Former Executive Director, National Agri-Food Biotech Institute, Mohali & Director, National Botanical Res Institute, Lucknow.
Date of Birth	:	21.09.1953
Office Address	:	University Institute of Engineering & Technology (UIET), Panjab University, Sector 25, Chandigarh 160015
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II. Education

Degree	Subjects/Area	Division	Year	University	Additional Particulars
B.Sc. (Hons)	(Agriculture & Animal Husbandry)	Ist	1974	G.B. Pant Univ. of Agriculture & Technology, Pantnagar, U.P.	3rd Position; National Science Talent Search Scholarship Award
M.Sc.	(Major in Genetics, Minor in Biochemistry)	Ist	1976	G.B. Pant Univ. of Agriculture & Technology, Pantnagar, U.P.	2nd Position; NSTS Scholarship Award; Merit Scholarship

Ph.D.	(Research in Mol Biology)	1985	Research at Bhabha Atomic Research Centre, Mumbai, degree Guj Univ.	INSA Young Scientist Medal 1983; NST Scholarship Award

III. ADDITIONAL STUDIES

The University of Chicago, Chicago, USA	Jan 23, 1980 to Dec. 22, 1980	Research study, visit sponsored by Swedish International Development Agency.
AFRC Unit of Nitrogen Fixation,The University of Sussex, Brighton, U.K.	May 19, 1985 to May 30, 1986	Deputation, supported by NBTB Overseas Associateship, Govt. of India.
Management of R&D	July 17-22, 1995	Administrative Staff College of India, Hyderabad.
Seminar, Industrial Property, WIPO, Geneva	Aug. 29-Sept 1, 2000	WIPO Headquarters, Geneva, Switzerland on WIPO Fellowship
Patent Documentation & Information, Austrian Patent office, Vienna	Sept. 4-22, 2000	Austrian Patent office, Vienna, Austria on WIPO Fellowship

IV. POSITIONS HELD

S. No.	Period	Place of Employment	Designation
1.	1976-81	B.A.R.C., Bombay	Scientific Officer (C)
2.	1981-86	B.A.R.C., Bombay	Scientific Officer (D)
3.	1986-91	Bhabha Atomic Res Center, Bombay	Scientific Officer (E)
4.	1991-92	B.A.R.C., Bombay	Scientific Officer (SF)
5.	1992-97	National Botanical Res Institute, Lucknow	Scientist `F'
6.	1997-06	N.B.R.I., Lucknow	Scientist 'G'
7.	01.02.06 – 07.02.10	N.B.R.I., Lucknow	Director

8.	01.09.07 – 19.12.08	Central Drug Res Institute, Lucknow	Director (Addl Charge)
9.	08.02.10 – 30-09-2013	National Agri-Food Biotech Instt., Mohali	Executive Director
10.	05 May to Dec, 2011	Bio-Processing Unit, Mohali	CEO (Addl Charge)
11.	01-09-2014 cont.	Panjab University, Chandigarh	Senior Research Advisor

V. FIELDS OF SPECIALISATION

Genomic & Transgenic Approaches to Improving Plants for Agricultural & Health/ Medicinal Applications : Molecular Details of Promoter Expression, Designing Artificial Promoters, Novel Reversible Male Sterility System for Hybrid Variety Development, Crop Resistance to insects & Drought Stress, Biochemistry and Molecular Genetics of Agriculturally and Medicinally Important Plants, Chemotypes & screening bioactive principles, Genome editing, Plant–based Protein Expression Systems & Edible Vaccines, Genomic Diversity in Plants for Precision Breeding, Biological Nitrogen Fixation, Secondary Metabolism and Regulation of Gene Expression.

VI. ACADEMIC HONOURS

1. Professor P N Mehra Award - 2009
2. Sunder Lal Hora Medal, Indian National Science Academy, New Delhi; awarded 2008.
3. Professor J.C. Bose National Fellow Award – 2007.
4. Science Councilor Award – 2007 by Indian Society of Health, Environment, Education & Research.
5. Honorary Fellow and Life Member, 2006, International Research Society for Complementary and Alternative Medicine, Toranto, Canada
6. CSIR Technology Prize – 2005 for 'Development of artificial promoters, novel δ-endotoxin coding genes and indigenous transgenic cotton lines for resistance to insect pests'.
7. All India Biotech Association, New Delhi - AIBA Award 2001-2002, for Outstanding Contributions in the field of Agricultural Biotechnology.
8. Elected Fellow (2001), Indian National Science Academy, New Delhi.
9. Elected Fellow (1997), Indian Academy of Sciences, Bangalore.
10. Elected Fellow (1997), National Academy of Sciences, Allahabad.
11. Elected Fellow (1996), National Academy of Agricultural Sciences, New Delhi.
12. UNESCO sponsored Member (1996), International Society for Plant Molecular Biology, Athens, USA.
13. Elected Member (1990), Guha Research Conference.
14. Elected Young Associate (1986), Indian Academy of Sciences, Bangalore.

15. Young Scientist Medal (1983), Award by Indian National Science Academy, New Delhi for establishing the mode of regulation of genes in biological nitrogen fixation in *Klebsiella pneumoniae* and specifically the role of *ntr* genes in the regulation of *nif* and *glnA* operons.

VII. SCHOLARSHIPS / ASSOCIATESHIPS AWARDED

1. National Science Talent Search Scholarship by National Council of Educational Research and Training, New Delhi; 1969-1976.
2. ICAR Junior Fellowship by ICAR; awarded 1976.
3. Merit-cum-Means Scholarship by ICAR; awarded 1974.
4. University Merit Awards and Medals by G.B. Pant University of Agriculture & Technology, Pantnagar; 1970-1973.
5. Swedish International Development Agency Fellowship; June to Dec. 1980.
6. National Biotechnology Board Overseas Associateship; June 1985 to June 1986.
7. World Intellectual Property Organization, Geneva, Fellowship; Aug-Sept, 2000.

VIII. Appointed/Nominated positions on Expert/technical committees

- Member of Governing Bodies, Executive Committees, Research Advisory Committees, Academic Committees of several national institutes including, Central University of Karnataka, Central University Sikkim, Indian Institute of Science Education & Research, Mohali; National Institute of Pharmaceutical Education & research, Mohali; National Institute of Plant Genomic Research, Delhi etc. in recent years/ continuing.
- Expert Member and reporter in Advisory Committee to European Commission for review of global proposals under FP7-2011.
- Sectional President, Biological Sciences Section of the 79th Annual Session (2009) of TheNational Academy of Sciences, India, Allahabad. Member, Sectional Committees of INSA, NAAS, NASI & IA Sc at different times, .
- Member, Apex Committee; Chairman TSC Secondary Agriculture, Member, TSC and Coordinator, Area Review Panel (ARP) for Biotechnology Industrial Partnership Programme (BIPP) etc. in DBT (2009-11).
- Co-chairman, TreeBOL South Asia Group for Barcoding of Life (Trees) in South Asian countries -2008.
- Member, Advisory Committee, Expert Drug Discovery Advisory Committee, World Health Organization – 2008.
- Advisory Consultant to biotechnology companies: Unichem Laboratories Ltd., Mumbai (a pharmaceutical company); Kemwell Laboratories (a diagnostics initiative), Bangalore; Khandelwal Laboratories Ltd. (Industrial proteins), Mumbai and Gene Craft Ltd., Noida, (a Bioinformatics Company).
- Visitor/ Chancellor's nominee on Selection Committees, Executive Committees of Central & State Universities.

- Member, Sectional Committee on Crop Sciences, National Academy of Agricultural Sciences, New Delhi; Judging Committee of the Academy Young Scientists Award (2001-04) etc.
- Member, Sectional Committee on Agricultural Sciences, Indian National Science Academy, New Delhi (2003-2006); INSA Young Scientists Awards Committee.
- Member, Programme Advisory Committee of Molecular Biology, Science and Engineering Research Council of The Department of Science & Technology (1992-1998).
- Member, Task Force on Seribiotechnology Constituted by The Department of Biotechnology (2003-2005, 2006-2008); Member, Expert Committee of DBT to formulate National Biosafety Guidelines for Field Release of Transgenic Plants in India (1997-1998), Expert Group on Transgenic Crops, DBT (2002-2005) etc.
- Director General CSIR Nominee to Research Council, Regional Research Laboratory, Bhubaneswar (2000-2003; 2003-2006); Expert Committees for the development of national projects, like NMITLI etc; Core Member on Committees set up by Recruitment & Assessment Board etc.
- Member, Research Council, Regional Research Laboratory, Jorhat (2000-2003); Member, Research Council of Centre for Cellular and Molecular Biology, Hyderabad (1998-2000); Member, Research Council of Central Institute of Medicinal and Aromatic Plants, Lucknow (1998-2000).
- Member, Research Advisory Committee, Sugarcane Breeding Institute, Coimbatore (2001-2004, 2005-2008), Indian Council of Agricultural Research; Member, Research Advisory Committee, Indian Institute of Sugarcane Research, Lucknow (2004-2007).
- DBT Representative and Expert Member, Institutional Biosafety Committee of Central Tobacco Research Institute, Rajamundary (1995-1999); Expert Nominee, Central Institute of Medicinal and Aromatic Plants, Lucknow (1997-2001); Industrial Toxicological Research Institute, Lucknow (1997-2004); G.B. Pant University, Pantnagar (1998-2001, 2002-2005) and N.D. University of Agriculture and Technology, Faizabad (1999-2002) etc.
- Member, Editorial Board, Proc. (Biological Sciences) of the National Academy of Sciences, India (2007-2008); Journal of Biosciences, Indian Academy of Sciences, Bangalore (1992-1994, 1997-2001); Indian Journal of Experimental Biology, Council of Scientific and Industrial Research, New Delhi (1997 2003); Indian Journal of Agricultural Biochemistry, Indian Society of Agricultural Biochemists, Kanpur (1996-1998); U.P. Biotech News (2001-2003) etc.
- Expert Member for Career Advancement and Paper setter and examiner for examinations in NET-CSIR and Ph.D. and Postgraduate degrees in Botany and Biotechnology in Indian Agricultural Research Institute, Jawahar Lal Nehru University, Banaras Hindu University, Lucknow University, Guwahati University, Punjab University, Meerut University, S.G.P.G.I. Medical Sciences, Indian Institute of Technology (Kharagpur) etc.
- In various capacities (Member to Chairman) on Selection Committees for appointments, Assessment and Screening Committees for academic positions in CSIR, ICAR, ASRB, DBT and DST.
- Member, Management Council, Central Institute of Medicinal and Aromatic Plants, Lucknow (1995-1997); Management Council, Industrial Toxicological Research

Institute, Lucknow (1998-1999, 2003-2005; 2005-2007); Management Council, Central Drug Research Institute, Lucknow (1998-1999).

- Member of *ad-hoc* committees set up by different agencies (DST, DBT, DAE, CSIR, ICAR Indo-French Centre, European Communities, Rajiv Gandhi Institute for Contemporary Studies, etc.) to scrutinize research proposals and other related matters.
- Chairman to Member of several national committees set up by U.G.C., other scientific bodies, institutes and academic societies for departmental evaluations, and organizational bodies for symposia, workshops, seminars etc.
- Elected Member, Executive Committee, Environmental Mutagens Society of India, 2003-2004; Nominated Member, Governing Body, Toxicology Research Promotion Foundation Board, 2003-2006.
- Chairman, Advisory Committee / Peer Group of Experts, Central Research Institute of Unani Medicine, Lucknow.
- Member, Joint Working Group reg. designation of Referral Centres for detection of Genetically Modified foods under PFA Act, Department of Biotechnology, New Delhi.
- Member, Task Force in the area of 'Agricultural Biotechnology', Task Force on 'Biopesticide and Crop Management', Task Force on 'Improvement of Fibre Crops' Department of Biotechnology, New Delhi.
- Member, Task Force for 'Reinvigorating Indian Agriculture through S&T', Department of Science & Technology.
- Member (CSIR's nominee), Inter-Departmental Plant Variety Registration Implementation, Protection of Plant Varieties and Farmers' Rights Authority, New Delhi.
- Chairman, Local Advisory Committee (LAC) of Regional Science Centre, Lucknow.
- Member, Executive Council, The National Academy of Sciences, Allahabad.
- Vice President, Executive Committee, Uttar Pradesh Association for Science and Technology Advancement (UPASTA).
- Member, Uttar Pradesh State Biodiversity Board.
- Member, Genetic Engineering Advisory Committee (GEAC), Ministry of Environment & Forests.
- Member, Review Committee on Genetic Manipulation (RCGM), Department of Biotechnology.
- Member, Bureau of Indian Standards (GMOs), Govt. of India.
- Member, Advisory Committee / Management Board of Lucknow Zoological Garden.
- Member, Editorial Board, Medicinal & Aromatic Plants Abstracts (MAPA), National Institute of Science Communication And Information Resources (NISCAIR).
- Member, Editorial Board, Indian Journal of Biotechnology, National Institute of Science Communication And Information Resources (NISCAIR).
- Member,Editorial Board, Indian Journal of Experimental Biology of National Institute of Science Communication And Information Resources (NISCAIR).
- Member, Executive Committee, Environmental Mutagen Society of India

- Member, Research Council, National Institute of Science Communication And Information Resources (NISCAIR), New Delhi.
- Member, Research Council, Central Drug Research Institute, Lucknow.
- President, Institute of Ethnobiology, Gwalior.
- President, International Society of Environmental Botanists, Lucknow.
- Member, National Scientific Advisory Committee, Ministry of Food Processing Industries, Govt. of India.
- Member, Scientific Advisory Committee (SAC), Environmental Information System (ENVIS), Ministry of Environment & Forests.
- Vice President, U P Association for Advancement of Science & Technology.
- Executive Committee Member, National Academy of Sciences, Allahabad.
- Member, Editorial Board, International Journal of Plant Genomics.

IX Visits abroad

Travelled globally during the past 30 years as Advisor/leader/member of official scientific delegations/committees in international scientific advisory bodies, negotiations, meetings such as research collaborations with international organizations to foreign universities and research centres to participate in international seminars/congress as convenor/chairperson/moderator/keynote speaker/present scientific papers, etc. or member of international project proposal reviews and progress monitoring etc..

X. Publications & patents

Published research papers : 152 in various international and national reviewed journals of high impact factor (h-index as per Google Scholar 39; citations 4859). Contributed 9 chapters or books & scientific literature.

Monographs/ Books / Chapters : 8

Patents awarded/ in process : 29

PhD thesis supervised : 33

XI. VISITS TO FOREIGN COUNTRIES

S.No	From	To	Institute and the country of visit	Purpose of visit	Source of Funds
1.	June 23,1980	Dec. 22, '80	The University of Chicago, Chicago, USA	Swedish International Development Agency Fellow	SIDA, Sweden
2.	May 19,1985	May 30, '86	The University of Sussex, Brighton,	NBTB Overseas Associateship	DBT

			UK		
3.	Oct. 4, 1989	Oct. 9, '89	Indo-French Seminar, Strasbourg, France	Invited by Indo-French Centre for Promotion of Advanced Research	Indo-French Center Promotion of Advanced Research
4.	Nov. 19,1989	Nov. 26,` 89	Indo-GDR Symposium, Berlin, Germany	Member of Indian Delegation for Cooperation in Biotechnology, Govt. of India	DBT
5.	May 18,1990	May 28,`90	VIII Int. Congress of Nitrogen Fixation, Knoxville, USA	Invited by Organisers, USA	Organizers, USA
6.	Sept. 21,1997	Sept. 27, '97	5th International Congress of Plant Molecular Biology, Singapore	Invited by Organisers, Singapore	ICPMB, Singapore
7.	Aug. 29,2000	Sept. 1, '00	WIPO Headquarters, Geneva, Switzerland	WIPO Fellowship	WIPO, Vienna
8.	Sept. 4, 2000	Sept. 22, '00	Austrian Patent Office, Vienna, Austria	WIPO Fellowship	WIPO, Vienna
9.	Nov. 15, 2006	Nov. 17, '06	National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Japan	Participate as a panelist in a panel discussion held in the Third Biomass – Asia Workshop 2006	AIST, Japan
10.	Mar. 31,2008	April 03, '08	World Health Organization, Geneva, Switzerland	Participated in the Special Programme for Research and Training in Tropical Diseases (TDR) on behalf of UNICEF/UNDP/World Bank/WHO as a WHO Temporary Adviser.	WHO, Geneva
11.	May 1,2008	May 2, '08	The New York	Participated in the	New York

			Botanical Garden, USA	treeBOL 2008 meeting at the New York Botanical Garden (NYBG), USA as a Regional Co-chairman.	Botanic Garden
12.	Nov. 6, 2008	Nov. 7, '08	The New York Botanical Garden, USA	Participated in the treeBOL 2008 meeting at the New York Botanical Garden (NYBG), USA as a Regional Co-chairman.	New York Botanic Garden
13.	Nov. 12, 2008	Nov. 14, '08	European Commission, Joint Research Centre (JRC) Institute for Prospective Technological Studies (IPTS), Sevilla, Spain	Participate as an expert in the Workshop on the 'Global commercial pipeline of new GM crops'.	European Commission
14.	Jan. 21, 2010	Jan. 27, '10	National Research Council's Plant Biotechnology Institute, University of Saskatchewan & agri-biotech cluster, Saskatoon, Canada	Participated in B2B Partnership Summit on Life Sciences and Biopartnering North America event at Vancouver, Canada & visit to Saskatoon cluster.	DBT
15	Feb. 13, 2011	Feb. 15, 2011	National Research Council's Plant Biotechnology Institute, University of Saskatchewan & agri-biotech cluster, Saskatoon, Canada	Indo-Canadian Partnership Development Activity meeting at Saskatoon	DBT& ISTP, Canada
16	Apr 11, 2011	Apr 15, 2011	European Commission, Brussels, Belgium	Expert to Review global research proposals submitted to	European Commission

				European Commission under call FP7	
17	Aug 22,2011	Aug 24, 2011	Institutes in Scotland, e,g., St. Andrews, James Hutton Instt, Univ. Edinburgh etc.	Indo-Scotland Co-operation S&T	DST & The Royal Society, London
18	Sep 25, 2011	Sep 26, 2011	University of Sussex	Bt- diversity & technology update	JCBose Fellowship, DST
19	Sep 27, 2011	Sep 29, 2011	University of Wageningen, WUR, RIKILT etc.	Visit to Food Valley for update & exploring collaboration	JCBose Fellowship, DST
20	Oct 30, 2011	Nov 07, 2011	University of Utrecht, The Netherlands	Seminar on 'Food and Nutrition: Health Improvement' and visit to Millennium Seed Bank at Wakehurst and Royal Botanic Garden, Kew	The Netherland Ministry of Economic Affairs, Agriculture &Innovation
21	Sep 11, 2017	Sep 15, 2017	Nottingham Trent University, UK	Research & Academic Collaboration	NTU, UK

Research Publications:

1. Mohan Lal, Rakesh Tuli and Ved Pal Singh (2017) Isolation, Characterization and Detection of Antimicrobial Genes in Antagonistic Bacterium *Bacillus* sp. JES1. **Phytomorphology**, 67, 1-11.
2. Behera SK, Sahu N, Mishra AK, Bargali SS, Behera MD, Tuli R, 2017. Aboveground biomass, and carbon stock in three Indian tropical deciduous forests and its relationship with stand structural attributes. **Ecological Engineering**. 99, 513-524.

3. Shukla Anoop Kumar, Upadhyay Santosh Kumar, Mishra Manisha, Sharad Saurabh, Singh Rahul, Singh Harpal, Thakur Nidhi, Rai Preeti, Pandey Paras, Hans Aradhana L, Srivastava Subhi, Vikram Rajapure, Sunil Kumar Yadav, Mithlesh Kumar Singh, Jitendra K Singh, K. Chandrashekar, Praveen C Verma, Ajit Pratap Singh, K N Nair, Smrati Bhadauria, Muhammad Wahajuddin, Sarika Singh, Sharad Sharma, Omkar, Ram Sanmukh Upadhyay, Shirish A Ranade, Rakesh Tuli, Pradhyumna Kumar Singh (2016) Expression of an insecticidal fern protein in cotton protects against whitefly. **Nature Biotechnology**, DOI:10.1038/nbt.3665.

4. Pathak Ashish K., Sudhir P., Gupta Yogesh, Gurjar Anoop K.S., Mantri Shrikant S., Tuli Rakesh (2016) Transcriptional changes during ovule development in two genotypes of litchi (*Litchi chinensis* Sonn.) with contrast in seed size. **Scientific Reports**, 6, DOI :10.1038/srep36304.

5. Kumar Jitesh, Anshu Alok, Singh Jitendra Kumar and Rakesh Tuli (2016) Senna leaf curl virus: a novel begomovirus identified in *Senna occidentalis***. Archives Virology,** 161, 2609-12. DOI: 10.1007/s00705-016-2931-7.

6. Singh Anuradha, Kumar Pankaj, Sharma Monica, Tuli Rakesh , Dhaliwal Harcharan S, Chaudhury Ashok, Pal Dharam and Roy Joy K (2015) Expression patterns of genes involved in starch biosynthesis during seed development in bread wheat (*Triticum aestivum*). **Molecular Breeding**,35: 184.

7. Behera Soumit K, Behera M D and Tuli Rakesh (2015) An indirect method of estimating leaf area index in a tropical deciduous forest in India. **Ecological Indicators**, 58, 356-364.

8. Gupta Yogesh, Pathak K Ashish, Singh Kashmir, Mantri S Shrikant, Singh P Sudhir, Tuli Rakesh (2015) *De novo* assembly and characterization of transcriptomes of early-stage fruit from two genotypes of *Annona squamosa* L. with contrast in seed number. **BMC Genomics**, 16:86-98.

9. Jitendra Kumar, Shashank Singh, Jitesh Kumar, Vishnu Shukla, Sudhir P Singh and Rakesh Tuli (2015) Prevalence of *Wheat dwarf India virus* in wheat in India. **Current Science**, 108, 260-265.

10. Raju Madanala, Vijayta Gupta, Ashutosh Kumar Pandey, Subhi Srivastava, Vivek Pandey, Pradhyumna Kumar Singh and Rakesh Tuli (2015) Tobacco chloroplasts as bioreactors for the production of recombinant superoxide dismutase in plants, an industrially useful enzyme. **Plant Molecular Biology Reporter**, 33, 1107-1110.

11. Ankit Singh, Subhi Srivastava, Ankita Chouksey, Bhupendra Singh Pawar, Praveen C Verma, Sribash Roy, Pradhyumna K Singh, Gauri Saxena and Rakesh Tuli (2014) Expression of rabies glycoprotein and ricin toxinB chain (RGP-RTB)

fusion protein in tomato hairy roots : A step Towards Oral Vaccination for Rabies. **Mol. Biotechnol**. DOI 10.1007/s12033-014-9829-y.

12. Jitendra Kumar, Jitesh Kumar, Sudhir P. Singh and Rakesh Tuli (2014) βC1 is a pathogenicity determinant: not only for begomovirus but also for mastrevirus. **Archives Virology**, 159, 3071-3076.

13. Ashish K Pathak, Sudhir P Singh and Rakesh Tuli (2014) AFLP fingerprinting to identify genetic relatedness among Lychee (*Litchi chinensis* Sonn) cultivars and markers associated with small- seeded cultivars. **Journal of American Society of Horticultural Science**, 139, 657-668.

14. Singh Sudhir P, Jeet R, Kumar J, Shukla V, Srivastava R, Mantri S S and Tuli R (2014) Comparative transcriptional profiling of two wheat genotypes with contrasting levels of minerals in grains shows expression differences during grain filling. PLOS ONE, 9, e111718

15. Bhatti KK, Aggarwal S, Sharma S, Mantri S, Singh SP, Bhalla S, Kaur J,Tewari S, Roy JK, Tuli Rakesh and Pandey AK (2014) Differential expression of structural genes for the late phase of phytic acid biosynthesis in developing seeds of wheat (*Triticum aestivum* L.). **Plant Science**, 224, 74-85; DOI: 10.1016/j.plantsci.2014.04.009

16. Sudhir P. Singh, Katarina Vogel-Mikuš, Primož Vavpetič, Luka Jeromel, Primož Pelicon, Jitendra Kumar and Rakesh Tuli (2014) Spatial X-Ray fluorescence micro-imaging of minerals in grain tissues of wheat and related genotypes. **Planta,** DOI: 10.1007/s00425-014-2084-4.

17. Jitendra Kumar, Jitesh Kumar, Sudhir P. Singh and Rakesh Tuli (2014) Association of satellites with a mastrevirus in natural infection:complexity of *Wheat dwarf India virus* disease. **Journal of Virology**, 88, 7093-7104.

18. Rakesh Srivastava, Krishan Mohan Rai, Meenal Srivastava, Verandra Kumar, Bindu Pandey, Sudhir P. Singh, Sumit K. Bag, Brahma Deo Singh, Rakesh Tuli, and Samir V. Sawant (2014) Distinct Role of Core Promoter Architecture in Regulation of Light Mediated Responses in Plant Genes. **Molecular Plant**, 7, 626-641; DOI: 10.1093/mp/sst 146.

19. Nidhi Thakur, Santosh Kumar Upadhyay, Praveen Chandra Verma, Krishnappa Chandrashekar, Rakesh Tuli, Pradhyumna Kumar Singh (2014) Enhanced whitefly resistance in transgenic tobacco plants expressing double stranded RNA of v-ATPase A gene. **PLOS ONE**, 9, e87235; DOI: 10.1371/Journal pone. 0087235.

20. Kumar Jitendra, Gunapati S, Kumari A, Kumar A, Tuli Rakesh and Singh Sudhir P (2014) Virus induced gene silencing using a modified betasatellite: a potential

candidate for functional genomics of crops. **Archives Virology**, 159, 2109-2113. DOI 10.1007/s 00705-014-2039-x.

21. Anuradha Singh Shrikant Mantri Monica Sharma Ashok Chaudhury, Rakesh Tuli, and Joy Roy (2014) Genome-wide Transcriptome Study in Wheat Identified Candidate Genes Related to Processing Quality, Majority of Them Showing Interaction (Quality x Development) and Having Temporal and Spatial Distributions, ***BMC Genomics***, 15, 29; DOI:10.1186/1471-2164-15-29.

22. Kumar Jitendra, Gunapati S, Gadre R, Sharma NC, Singh Sudhir P and Rakesh Tuli (2013) Molecular characterization and pathogenicity of a carrot (*Daucus carota*) infecting begomovirus and associated betasatellite from India. **Virus Research**, 178, 478-485.

23. Singh Kripal, Singh Bajrang and Rakesh Tuli (2013) Sodic soil reclaimation potential of *Jatropha carcas*: A long term study. **Ecological Engineering**, 58, 434-440.

24. Santosh Kumar Upadhyay, Jitesh Kumar, Anshu Alok, and Rakesh Tuli (2013) RNA Guided Genome Editing for Target Gene Mutations in Wheat. **Genes Genomes Genetics,** 3, 2233-2238**;** DOI :10.1534/g3.113. 008847

25. Kumar Jitendra, Gunapati S, Gadre R, Sharma NC, Singh SP and Rakesh Tuli (2013) Molecular characterization and pathogenicity of a carrot (*Daucus carota*) infecting begomovirus and associated betasatellite from India. **Virus Research**, 178, 478-485.

26. Singh SP, Vogel-Mikuš K, Arčon I, Vavpetič P, Jeromel L, Pelicon P, Kumar J, Tuli R. (2013) Pattern of iron distribution in maternal and filial tissues in wheat grains with contrasting levels of iron. **Journal of Experimental Botany,** *DOI:10.1093/jxb/ert160*.

27. Kumar J, Gunapati S, Singh SP, Kumar A, Lalit A, Sharma NC, Puranik R, Tuli Rakesh (2013) A new betasatellite associated with Cotton leaf curl Burewala virus infecting tomato in India: influence on symptoms and viral accumulation. **Archives of Virology**, DOI: 10.1007/s00705-013-1613-y.

28. Kumar J, Singh SP, Kumar A, Khan JA, Tuli R (2013) Detection and characterization of a new betasatellite: variation in disease symptom of Tomato leaf curl Pakistan virus-India due to associated betasatellite. **Archives of Virology**, 158: 257-261.

29. Singh Bajrang, Singh Kripal, Rao GR, Chikara J, Kumar Dinesh, Mishra DK, Saikia SP, Pathre UV, Raghuvanshi N, Rahi TS , Tuli Rakesh (2013) Agro-technology of Jatropha curcas for diverse environmental conditions in India. **Biomass & Bioenergy**, 48, 191-202.

30. Singh Sudhir P, Vogel-Mikus K, Pelicon P, Vavpetic P, Jeromel L, Feng R, Chibbar R, Roy JK, Mantri SS, Kumar J and Tuli Rakesh (2012). New insights into iron transport from maternal tissues to endosperm in mature wheat seed using synchrotron radiation. **Quality assurance & Safety of Crops & Foods**. DOI: 10.1111/j.1757-837X.2012.00146.x

31. Kumar J, Singh SP, Kumar A and Tuli R (2012) A novel mastrevirus infecting wheat in India. **Archives of Virology**. 157, 2031-2034.

32. Upadhyay SK, Singh S, Chandrashekar K, Tuli R and Singh PK (2012) Compatibility of garlic (*Allium sativum L*.) leaf agglutinin and CryAc ∂-endotoxin for gene pyramiding. **Applied Microbiol & Biotechnol**, 93, 2365-2375.

33. Kumar J, Gunapati S, Singh SP, Lalit A, Sharma NC and Tuli R (2012) First report of 'Candidatus Phytoplasma asteresis' (16SrI group) associated with little leaf disease of brinjol in India. **New Disease Reports** (earlier BSPP Plant Pathology), 26, 21.

34. Kumar J, Kumar A, Singh SP, Roy JK, Lalit A, Parmar D, Sharma NC and Tuli R (2012) First report of leaf curl virus infecting Okra in India. **New Disease Report** (earlier BSPP Plant Pathology), 25, 9.

35. Ranjan A, Nigam D, Asif Mehr H, Singh R, Ranjan S, Mantri S, Pandey N, Trivedi I, Jena SN, Tuli R, Pathre U and Sawant S (2012) Genome wide expression profiling of two accessions of *Gossypium herbaceum* L. in response to drought, **BMC Genomics**, 13, 94-99.

36. Gupta P, Idris A, Mantri S, Asif MH, Yadav HK, Roy JK, Tuli R, Mohanty CS, Sawant SV (2012) Discovery and use of single nucleotide polymorphic (SNP) markers in *Jatropha curcas* L. **Molecular Breeding** 30: 1325-1335. [doi:10.1007/s11032-012-9719-6]

37. Behera , Soumit K, Mishra AK , Sahu N, Kumar A, Singh N, Kumar A, Bajpai O, Chaudhary LB, Khare PB and Tuli R (2012) The study of microclimate in response to different plant community association in tropical moist deciduous forest from northern India. **Biodiversity and Conservation**, 21, 1159-1176.

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