Dr. ATUL BHARGAVA

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PRESENT ADDRESS

Dr. Atul Bhargava Associate Professor Department of Botany School of Life Science Mahatma Gandhi Central University Chanakya Parisar, District- East Champaran, Bihar- 845401 (INDIA) Mob: 91-7388325759 Email: atulbhargava@mgcub.ac.in; atul_238@rediffmail.com

EDUCATION

2005. Doctor in Philosophy (Ph.D). National Botanical Research Institute (C.S.I.R.), Lucknow and University of Lucknow

Title: Genetic Divergence and Cytological Studies in Chenopodium spp.

1998. Master of Science (M.Sc.). H.N.B. Garhwal University, Srinagar, Garhwal Subject: Botany (Cytology, Genetics and Molecular Biology) Aggregate percentage: 72.30%.

1996. Bachelor of Science (B.Sc). H.N.B. Garhwal University, Srinagar, Garhwal Subjects: Botany, Zoology (Chemistry) Aggregate percentage: 76.00%.

AWARDS AND HONOURS

Qualified: **National Eligibility Test** for Junior Research Fellowship and Lectureship conducted by the Council of Scientific and Industrial Research (CSIR), New Delhi, India.

JOURNAL EDITORIAL BOARD MEMBER

- 1. Mini Reviews in Medicinal Chemistry-Associate Board Member (JCR- Clarivate IF: 2.84)
- 2. Medicinal Chemistry- Editorial Board Member (JCR IF Clarivate: 2.53)
- 3. Ciencia e Investigación Agraria- Associate Editor (JCR Clarivate IF: 0.307)
- 4. Recent Patents on Biotechnology- Editorial Board Member
- 5. Asian J. Crop Science- Associate Editor
- 6. International J. Plant Breeding & Genetics- Associate Editor
- 7. Asian J. Biotechnology- Associate Editor
- 8. Asian J. Plant Science- Associate Editor

MEMBERSHIP OF PROFESSIONAL BODIES

Uttar Pradesh Association for Science and Technology Advancement [Life Member]

FDP/TRAINING PROGRAMS/WORKSHOPS ATTENDED

- 1. Professional Development Programme on Ethical Issues in Research. Held at Amity University Lucknow Campus. January 16-17, 2019.
- 2. Faculty Development Programme and Workshop on Statistical Methods in Biological Data Analysis. Held at Amity University Lucknow Campus. July 2-6, 2018.
- 3. Faculty Development Programme on GLP and GMP. Held at Amity University Lucknow Campus. March 17, 2017.
- 4. Faculty Development Programme on Biosafety and Bioethics in Life Sciences. Held at Amity University Lucknow Campus. October 15, 2016.
- 5. Interactive Workshop entitled Strengthening Research and Innovation. Held at Amity University Lucknow Campus. April 13, 2016.
- 6. Training Programme on Organic Farming for Agriculture Sustainability. Held at Uttar Pradesh Council of Agricultural Research (UPCAR). August 27-28, 2015.

COMPUTER KNOWLEDGE

- Software: Genstat, M.V.S.P., Windostat, Indostat, NTSYS, SPAR-1, SPSS, KY plot, Harvard Graphics.
- Adobe Photoshop; MS WORD, MS EXCEL, MS PowerPoint

RESEARCH EXPERIENCE

RESEARCH PROJECTS

Completed Projects (As Co-Principal Investigator): Network Programme for Enrichment and Update of Plant Chromosome Database for Spermatophytes and Archegoniate. Department of Biotechnology, New Delhi. (April 2015-2018).

Details: Network project involving 7 Institutions.

Sanctioned amount: Rs. 26,13,200/- for each Institution (Approx.)

RESEARCH EXPERIENCE

June 2000-June 2002. Junior Research Fellow (JRF). National Botanical Research Institute, Lucknow, India [Council of Scientific and Industrial Research (C.S.I.R.), Govt. of India]

June 2002-June 2005. Senior Research Fellowship (SRF). National Botanical Research Institute, Lucknow, India [Council of Scientific and Industrial Research (C.S.I.R.), Govt. of India]

February 2007-August 2019. Lecturer, Senior Lecturer and Assistant Professor. Amity Institute of Biotechnology, Amity University Uttar Pradesh (Lucknow Campus), India

RESEARCH INTERESTS

- Plant Breeding and Cytogenetics
- Medicinal Plants
- Genetic improvement of plants
- Plant molecular markers
- Genetic diversity analysis
- Nanobiotechnology
- Biochemical analysis
- Phytoremediation

PUBLICATIONS

BOOKS= 4 BOOK CHAPTERS= 24 PEER-REVIEWED ARTICLES IN JOURNALS= 48

BOOKS

- 1. Bhargava A. and Srivastava S. 2019. Participatory Plant Breeding: Concepts and Applications. SpringerNature. ISBN: 978-981-13-7118-9.
- 2. Bhargava A. and Srivastava S. 2018. Biotechnology: Recent Trends and Emerging Dimensions. CRC Press, USA. ISBN: 9781138561083.
- 2. Bhargava A. and Srivastava S. 2013. Quinoa: Botany, Production and Uses. CABI, Oxforshire, UK. ISBN: 9781780642260.
- 3. Bhargava A. and Srivastava S. (Eds.) 2012. Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. ISBN: 978-1-62100-539-1. [NLM ID: 101567645].

BOOK CHAPTERS

- 1. Bhargava A. 2018. Biosorption. In: Biotechnology: Recent Trends and Emerging Dimensions (Eds. Bhargava A. and Srivastava S.). CRC Press, USA. pp. 1-18. (ISBN: 9781138561083).
- Bhargava A. and Fuentes F. 2018. Biofuels: a green technology for the future. In: Biotechnology: Recent Trends and Emerging Dimensions (Eds. Bhargava A. and Srivastava S.). CRC Press, USA. pp. 39-56. (ISBN: 9781138561083).
- Bhargava A. and Srivastava S. 2018. Nutrigenomics: the future of human health. In: Biotechnology: Recent Trends and Emerging Dimensions (Eds. Bhargava A. and Srivastava S.). CRC Press, USA. pp. 89-104. (ISBN: 9781138561083).
- Bhargava A. and Srivastava S. 2018. MicroRNAs: Biogenesis and Therapeutic Functions. In: Biotechnology: Recent Trends and Emerging Dimensions (Eds. Bhargava A. and Srivastava S.). CRC Press, USA. pp. 161-176. (ISBN: 9781138561083).
- Bhargava A. and Ohri D. 2016. Origin of genetic variability and improvement of quinoa (*Chenopodium quinoa Willd*.). In: Gene Pool Diversity and Crop Improvement (Eds. Rajpal V.R., Rao S.R. and Raina S.N.). Springer International Publishing, Switzerland. pp. 241-270. (ISBN: 978-3-319-27094-4)
- Bhargava A. and Ohri D. 2015. Quinoa in the Indian subcontinent. In: 'FAO and CIRAD: State of the Art Report of Quinoa in the World in 2013' (Eds. Bazile et al.). FAO, Rome, Italy. pp: 511-523. (ISBN 978-92-5-108558-5)
- Srivastava S. and Bhargava A. 2015. Genetic diversity and heavy metal stress in plants. In: Sustainable Development and Biodiversity. In: (Eds. Ahuja M.R. and Jain S.M.). Springer International Publishing, Switzerland. pp. 241-270 (ISBN: 978-3-319-25635-1)
- 8. Srivastava J. and Bhargava A. 2015. Constructed wetlands: basic design. In: Urban Water Reuse Handbook (Ed. Islamian S). CRC Press, USA. pp. 743-753. (ISBN: 978-1-4822-2914-1)
- Bhargava A. and Srivastava S. 2014. Transgenic approaches for phytoextraction of heavy metals. In: Ahmad P., Wani M.R., Azooz M.M. and Tran L.P. (Eds). Improvement of Crops in the Era of Climatic Changes. Springer, New York. pp. 57-80. (ISBN: 978-1-4614-8829-3)
- Srivastava S., Pathak N., Bhargava A. and Srivastava P. 2014. Nanotechnology: the science of the future. In: Current Trend in Life Science [Eds. Shukla D.S. and Pandey D.K.]. JBC Press, New Delhi. pp. 182-195. (ISBN: 978-93-81558-98-0)

- Srivastava S. and Bhargava A. 2014. Microbial biofilms: from nature to human body. In: Current Trend in Life Science [Eds. Shukla D.S. and Pandey D.K.]. JBC Press, New Delhi. pp. 1-16. (ISBN: 978-93-81558-98-0)
- Singh A.K., Bhargava A., Kaur G., Sharma A. and Misra K. 2013. Bioinformatics Tools and Resources for Cancer Diagnosis and Drug Development. In: 'Horizons in Cancer Research' (Ed. Watanabe H.S.). Nova Science Publishers Inc., USA. Vol. 51 pp. 165-176. (ISBN: 978-1-62417-329-5)
- Bhargava A., Gupta V.K., Singh A.K. and Gaur R. 2012. Microbes for heavy metal remediation. In: 'Microbial Applications' (Eds. Gaur R., Mehrotra S., Pandey R.R.). I.K. International Publ., New Delhi. pp. 167-177. (ISBN: 978-93-81141-01-4)
- Singh A.K., Bhargava A. and Gaur R. 2012. Role of bioinformatics in microbial study. In: 'Microbial Applications' (Eds. Gaur R., Mehrotra S., Pandey R.R.) I.K. International Publ., New Delhi. pp. 159-166. (ISBN: 978-93-81141-01-4)
- Srivastava S. and Bhargava A. 2012. Nanomedicine: the next generation medicine. In: Bhargava A. and Srivastava S. (Eds.) Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. pp. 115-136.
- Bhargava A., Bhargava M. and Srivastava S. 2012. Proteomics: principles, challenges and applications. In: Bhargava A. and Srivastava S. (Eds.) Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. pp. 69-92.
- Bhargava A. and Srivastava S. 2012. Metabolomics: the technology of the future. In: Bhargava A. and Srivastava S. (Eds.) Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. pp. 45-68.
- Bhargava A. and Srivastava S. 2012. Genetically engineered crops and allergenicity: myth or reality. In: Bhargava A. and Srivastava S. (Eds.) Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. pp. 153-168.
- **19. Bhargava A.** and Srivastava S. 2012. Pharmacogenomics. In: Bhargava A. and Srivastava S. (Eds.) Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. pp. 191-208.
- **20.** Bhargava A. and Srivastava S. 2012. Plant molecular farming. In: Bhargava A. and Srivastava S. (Eds.) Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. pp. 229-254.
- **21. Bhargava A.** and Carmona F.F. 2012. Marker assisted selection. In: Bhargava A. and Srivastava S. (Eds.) Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. pp. 29-44.
- **22.** Bhargava A. and Carmona F.F. 2012. Cisgenesis and intragenesis. In: Bhargava A. and Srivastava S. (Eds.) Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. pp. 137-152.
- 23. Srivastava S. and Bhargava A. 2012. Genetically engineered crops: are we engineering destruction? In: Bhargava A. and Srivastava S. (Eds.) Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. pp. 169-190.
- Srivastava S. and Bhargava A. 2012. Functions foods and nutraceuticals. In: Bhargava A. and Srivastava S. (Eds.) Biotechnology: New Ideas, New Developments. Nova Science Publishers Inc., USA. pp. 209-228.

SELECTED RESEARCH/REVIEW ARTICLES

- Bhargava A., Fuentes F., Shukla S., Srivastava S., Dubey S. and Ohri D. 2019. Genetic variability in vegetable *Chenopodium* for morphological and quality traits over different cuttings. *Ciencia e Investigacion Agraria* 46:179-186.
- Bhargava A., Fuentes F., Shukla S., Srivastava S. and Ohri D. 2019. Genetic association between foliage yield and contributing traits in vegetable chenopods: implications for genetic improvement. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca* 47: 24-33.

- Srivastava S., Bhargava A., Pathak N. and Srivastava P. 2019. Production, characterization and antibacterial activity of silver nanoparticles produced by *Fusarium oxysporum* and monitoring of proteinligand interaction through *in-silico* approaches. *Microbial Pathogenesis* 129: 136-145.
- 4. Srivastava S. and Bhargava A. 2016. Biofilms and human health. *Biotechnology Letters* 38: 1-22.
- Siddiqui A., Shukla S., Rastogi A., Bhargava A., Niranjan A. and Lehri A. 2016. Relationship among phenotypic and quality traits in indigenous and exotic accessions of linseed. *Pesquisa Agropecuária Brasileira* 51: 1964-1972.
- 6. Srivastava S. and Bhargava A. 2016. Green nanotechnology. *J. Nanotechnology and Materials Science* 3:1-7.
- 7. Bhargava A., Carmona F.F., Bhargava M. and Srivastava S. 2012. Approaches for enhanced phytoextraction of heavy metals. *Journal of Environmental Management* 105: 103-120.
- Fuentes F.F. Bazile D., Bhargava A. and Martinez E.A. 2012. Implications of farmers seed exchanges for on-farm conservation of quinoa, as revealed by its genetic diversity in Chile. *Journal of Agricultural Sciences* (Cambridge) 150: 702-716.
- Raina S.N., Jain S., Sehgal D., Kumar A., Dar T.H., Bhat V., Pandey V., Vaishnavi S., Bhargava A., Singh V., Rani V., Tandon R., Tewari M. and Mahmoudi A. 2012. Diversity and relationships of multipurpose seabuckthorn (*Hippophae* L.) germplasm from the Indian Himalayas as assessed by AFLP and SAMPL markers. *Genetic Resources and Crop Evolution* 59:1033-1053.
- 10. Fuentes F.F. and **Bhargava A.** 2011. Morphological analysis of quinoa germplasm grown under lowland desert conditions. *Journal of Agronomy and Crop Science* 197: 124-134.
- 11. Srivastava S., Pathak N., **Bhargava A.** and Srivastava P. 2011. Nanotechnology for cancer diagnosis and therapy. *IMTU Medical J.* 2: 19-30.
- 12. Bhargava A. and Fuentes F.F. 2010. Mutational dynamics of microsatellites. *Molecular Biotechnology* 44: 250-266.
- 13. Bhargava A., Shukla S. and Ohri D. 2010. Mineral composition in foliage of some cultivated and wild species of *Chenopodium*. Spanish Journal of Agricultural Research 8: 371-376.
- Shukla S., Bhargava A., Chatterjee A., Pandey A.C. and Mishra B.K. 2010. Diversity in phenotypic and nutritional traits in vegetable amaranth (*Amaranthus tricolor*), a nutritionally underutilized crop. *Journal of the Sciences of Food and Agriculture* 90: 139-144.
- Shukla S., Bhargava A., Chatterjee A., Pandey A.C., Rastogi A. and Kumar A. 2010. Genetic interrelationship among nutritional and quantitative traits in the vegetable amaranth. Crop Breeding and Applied Biotechnology 10: 16-22.
- 16. Bhargava A., Shukla S. and Ohri D. 2009. Metroglyph analysis of morphological variation in *Chenopodium* spp. *World Journal of Agricultural Sciences* 5: 117-120.
- 17. Bhargava A., Shukla S., Srivastava J., Singh N. and Ohri D. 2008. *Chenopodium* a prospective plant for phytoextraction. *Acta Physiologia Plantarum* 30: 111-120.
- 18. Bhargava A., Shukla S., Srivastava J., Singh N. and Ohri D. 2008. Genetic diversity for mineral accumulation in foliage of *Chenopodium* spp. *Scientia Horticulturae* 118: 338-346.
- Bhargava A., Shukla S. and Ohri D. 2008. Implications of direct and indirect selection parameters for improvement of grain yield and quality components in *Chenopodium quinoa* Willd. *International Journal* of *Plant Production* 2: 184-191.
- Bhargava A., Shukla S. and Ohri D. 2008. Genotype x environment interaction studies in *Chenopodium album* L.: an underutilized crop with promising potential. *Communications in Biometry and Crop Science* 3: 3-15.

- Bhargava A., Shukla S. and Ohri D. 2007. Genetic variability and interrelationship among various morphological and quality traits in quinoa (*Chenopodium quinoa* Willd.). *Field Crops Research* 101: 104-116.
- 22. Bhargava A., Shukla S., and Ohri D. 2007. Evaluation of foliage yield and leaf quality traits in *Chenopodium* spp. in multiyear trials. *Euphytica* 153: 199-213.
- 23. **Bhargava A.**, Shukla S. and Ohri D. 2007. Gynomonoecy in *Chenopodium quinoa* Willd. (Chenopodiaceae): variation in inflorescence and floral types in some accessions. *Biologia* 62: 19-23.
- Bhargava A., Shukla S., Rajan S. and Ohri D. 2007. Genetic diversity for morphological and quality traits in quinoa (*Chenopodium quinoa* Willd.) germplasm. *Genetic Resources and Crop Evolution* 54:167-173.
- 25. Bhargava A., Shukla S. and Ohri D. 2007. Genome size variation in some cultivated and wild species of *Chenopodium* (Chenopodiaceae). *Caryologia* 60: 245-250.
- Bhargava A., Shukla S., and Ohri D. 2007. Effect of sowing dates and row spacings on yield and quality components of quinoa (*Chenopodium quinoa*) leaves. *Indian Journal of Agricultural Sciences* 77: 748-751.
- 27. Bhargava A., Shukla S. and Ohri D. 2006. Karyotypic studies on some cultivated and wild species of *Chenopodium* (Chenopodiaceae). *Genetic Resources and Crop Evolution* 53: 1309-1320.
- 28. Shukla S., **Bhargava A.**, Chatterjee A., Srivastava J., Singh N. and Singh S.P. 2006. Mineral profile and variability in vegetable amaranth (*Amaranthus tricolor*). *Plant Foods for Human Nutrition* 61: 23-28.
- 29. Shukla S., **Bhargava A.**, Chatterjee A. and Singh S.P. 2006. Genotypic variability in vegetable amaranth (*Amaranthus tricolor* L.) for foliage yield and its contributing traits over successive cuttings and years. *Euphytica* 151: 103-110.
- Bhargava A., Shukla S., Dixit B.S., Bannerji R. and Ohri D. 2006. Variability and genotype x cutting interactions for different nutritional components in *Chenopodium album* L. *Horticultural Science* 33: 29-38.
- Kumar A., Bhargava A., Shukla S., Singh H.B. and Ohri D. 2006. Screening of exotic Chenopodium quinoa accessions for downy mildew resistance under mid-Eastern conditions of India. Crop Protection 25: 879-889.
- 32. Bhargava A., Shukla S. and Ohri D. 2006. *Chenopodium quinoa-* an Indian perspective. *Industrial Crops and Products* 23: 73-87.
- 33. Bhargava A., Shukla S. and Ohri D. 2006. Implications of direct and indirect effects of different traits on foliage yield in *Chenopodium album*. Journal of Medicinal and Aromatic Plant Sciences 28: 11-14.
- 34. Bhargava A., Rana T.S., Shukla S. and Ohri D. 2005. Seed protein electrophoresis of some cultivated and wild species of *Chenopodium* (Chenopodiaceae). *Biologia Plantarum* 49: 505-511.
- 35. Bhargava A., Shukla S. and Ohri D. 2005. Analysis of genotype x environment interaction for grain yield in *Chenopodium* spp. *Czech Journal of Genetics and Plant Breeding* 41: 64-72.
- 36. Shukla S., **Bhargava A.**, Chatterjee A., Srivastava A. and Singh S.P. 2005. Estimates of genetic variability in vegetable amaranth (*A. tricolor*) over different cuttings. *Horticultural Science* 32: 60-67.
- 37. Bhargava A., Shukla S. and Ohri D. 2005. Determination of genetic diversity in *Chenopodium* spp. *Indian Journal of Genetics and Plant Breeding* 65: 202-206.
- Bhargava A., Shukla S. and Ohri D. 2005. Medicinal uses of *Chenopodium* a review. Journal of Medicinal and Aromatic Plant Sciences 27: 309-319.
- 39. Bhargava A., Bhargava M., Shukla S. and Ohri D. 2005. *Fagopyrum*: a potential source for nutraceuticals. *Journal of Medicinal and Aromatic Plant Sciences* 27: 505-514.

- 40. Ohri D., **Bhargava A.** and Chatterjee A. 2004. Nuclear DNA amounts in 112 species of tropical hardwoods- new estimates. *Plant Biology* 6: 555-561.
- 41. Shukla S., **Bhargava A.**, Chatterjee A. and Singh S.P. 2004. Estimates of genetic parameters to determine variability for foliage yield and its different quantitative and qualitative traits in vegetable amaranth (*A. tricolor*). *Journal of Genetics and Breeding* 58: 169-176.
- 42. Bhargava A., Shukla S., Chatterjee A. and Singh S.P. 2004. Selection response in vegetable amaranth (*A. tricolor*) for different foliage cuttings. *Journal of Applied Horticulture* 6: 43-44.
- 43. Bhargava A., Shukla S. and Ohri D. 2004. Correlated response of various economic traits in *Chenopodium* species. *Journal of Medicinal and Aromatic Plant Sciences* 26: 493-497.
- 44. Shukla S., **Bhargava A.**, Chatterjee A. and Singh S.P. 2004. Interrelationships among foliage yield and its contributing traits in vegetable amaranth (A. tricolor). *Progressive Horticulture* 36: 299-305.
- 45. Bhargava A., Shukla S. and Ohri D. 2003. Genetic variability and heritability of selected traits during different cuttings of vegetable *Chenopodium*. *Indian Journal of Genetics and Plant Breeding* 63: 359-360.
- 46. Bhargava A., Shukla S. and Ohri D. 2003. Genetic association in *Chenopodium*. *Indian Journal of Genetics and Plant Breeding* 63: 283-284.
- 47. Bhargava A., Shukla S. and Ohri D. 2003. Relative selection efficiency for foliage yield & quality characters in vegetable *Chenopodium* over different cuttings. *Journal of Applied Horticulture* 5: 85-86.
- 48. **Bhargava A.**, Shukla S., Katiyar R.S. and Ohri D. 2003. Selection parameters for genetic improvement in *Chenopodium* grain in sodic soil. *Journal of Applied Horticulture* 5: 45-48.

PRESENTATIONS IN CONFERENCE/SYMPOSIUM

- 1. Srivastava S. and Bhargava A. 2019. *In-silico* mining of simple sequence repeats in mitochondrial genome of *Trichoderma gamsii*. In: National Symposium on Biotech breakthrough in clinical research and diagnostics (BBCRD-2019) held at AUUP Lucknow Campus, Lucknow. February 26-27, 2019.
- 2. Bhargava A. and Srivastava S. 2019. SSR mining in the chloroplast genome of *Fagopyrum tataricum*. In: National Symposium on Biotech breakthrough in clinical research and diagnostics (BBCRD-2019) held at AUUP Lucknow Campus, Lucknow. February 26-27, 2019.
- **3.** Srivastava S. and **Bhargava A. 2018.** *In-silico* mining of simple sequence repeats in mitochondrial genome of *Trichoderma asperellum*. In: Symposium on Medical and Health Sciences held at AUUP Lucknow Campus, Lucknow. October 10, 2018.
- Bhargava A. and Srivastava S. 2018. SSR mining in the chloroplast genome of *Hippophae rhamnoides* L. In: Symposium on Medical and Health Sciences held at AUUP Lucknow Campus, Lucknow. October 10, 2018.
- 5. Srivastava S. and Bhargava A. 2018. Antimicrobial property of titanium and copper nanoparticles. In: National Conference on Biological Applications of Nanomaterials (NANOCON 2018) held at AUUP Lucknow Campus, Lucknow. January 9, 2018.
- 6. Bhargava A., Dubey S. and Srivastava S. 2017. Nano-agriculture: prospects for an environmentally sustainable second green revolution. In: International Conference on Impact of Environment on Women's Health held at Amity University Lucknow Campus, Lucknow. Nov 29-Dec 1, 2017.

- Bhargava A. and Srivastava S. 2015. Effect of salt stress on the germination and early growth of *Chenopodium album* seeds. In: 3rd Lucknow Science Congress (LUSCON 2015) held at BBAU, Lucknow. October 31-November, 2015.
- 8. Srivastava S., Singh A.K. and Bhargava A. 2015. Genetic diversity and multivariate analysis. In: Fifth International Conference on Plants and Environmental Pollution (ICPEP-5), held at National Botanical Research Institute, Lucknow. February 24-27, 2015.
- **9.** Srivastava S., Sharma P.K. and **Bhargava A. 2015.** Role of Mathematics in Environmental Biology: an expanding field. In: Fifth International Conference on Plants and Environmental Pollution (ICPEP-5), held at National Botanical Research Institute, Lucknow. February 24-27, 2015.
- **10.** Srivastava S., Singh A.K. and **Bhargava A. 2015.** Biosensors in cancer diagnosis. In: National Symposium on Interfacing Chemical Biology and Drug Design, held at AUUP Lucknow Campus, Lucknow. February 24-25, 2015.
- **11.** Srivastava S., Sharma P.K. and **Bhargava A. 2015.** Nanobiotechnology and Drug Delivery: new avenues. In: National Symposium on Interfacing Chemical Biology and Drug Design, held at AUUP Lucknow Campus, Lucknow. February 24-25, 2015.
- **12.** Srivastava S. and **Bhargava A. 2014.** Nanomedicine: the next generation medicine. In: National Conference on Bioengineering and Biotechnology: an Industrial Perspective, held at AUUP Lucknow Campus, Lucknow. October 16-17, 2014.
- **13.** Srivastava S. and **Bhargava A. 2014.** Nanotoxicity: assessment before commercialization. In: National Conference on Bioengineering and Biotechnology: an Industrial Perspective, held at AUUP Lucknow Campus, Lucknow. October 16-17, 2014.
- 14. Bhardwaj V., Srivastava S. and **Bhargava A. 2014.** The nutraceutical potential of *Fagopyrum*. In: National Conference on Bioengineering and Biotechnology: an Industrial Perspective, held at AUUP Lucknow Campus, Lucknow. October 16-17, 2014.
- **15.** Anand S., Srivastava S., Hasan S., Shivam and **Bhargava A. 2014.** Production, characterization and antibacterial activity of zinc nanoparticles. In: National Conference on Bioengineering and Biotechnology: an Industrial Perspective, held at AUUP Lucknow Campus, Lucknow. October 16-17, 2014.
- **16.** Bhargava A., Srivastava S., Shukla S. and Ohri D. **2014.** 'Chenopods: the answer to future food security' In: IInd International Conference on Agricultural and Horticultural Sciences, 3-5 Feb 2014 held at Hyderabad.
- 17. Rehman Y., Bhargava A., Chaturvedi R. and Srivastava S. 2014. The amalgamation of nanobiotechnology and agriculture. In: International Conference on Future Prospects of Advancement in Biological Sciences, Health Issues and Environmental Protection organized at Indira Gandhi Pratisthan, Lucknow. February 7-8, 2014.
- Fuentes F.F., Bazile D., Bhargava A. and Martinez E.A. 2011. Relationship between genetic diversity of Chenopodium quinoa and the dynamics of its seed exchanges in Chile. In: ASA, CSSA and SSSA International Annual Meetings held at San Antonio, TX, USA. October 16-19, 2011.
- Bhargava A., Shukla S. and Ohri D. 2009. Quinoa in India- a potential nutraceutical. In: 'National Symposium on Plant Propagation, Conservation, Modification and Characterization' organized at Institute of Himalayan Bioresource Technology (CSIR), Palampur, H.P., India. April 3-4, 2009.
- 20. Bhargava A., Shukla S. and Ohri D. 2003. Genetic diversity in *Chenopodium* spp. In proceed. IInd World Congress on Biotechnological Development of Herbal Medicine held at National Botanical Research Institute, Lucknow (India) from February 20-22, 2003, pp. 128

- 21. Bhargava A., Chatterjee A., Shukla S. and Singh S.P. 2003. Genetic components for improvement of foliage yield in vegetable amaranth. In proceed. National Conference on Biodiversity and Applied Biology of Plants held at Deptt. of Botany, University of Lucknow, Lucknow (India) from Oct. 8-10, 2003. Abstr. No. PIV-7. pp. 93.
- **22.** Bhargava A., Chatterjee A., Shukla S. and Singh S.P. **2003**. Genetic variability and selection parameters in vegetable amaranth. In proceed. National Seminar on Advances in Genetics and Plant Breeding- Impact of DNA Revolution, held at University of Agricultural Sciences, Dharwad (Karnataka), India from October 30-31, 2003. Abstr. No.1-232. pp.118.
- **23.** Bhargava A., Shukla S., Katiyar R.S. and Ohri D. **2002**. Varietal performance of *Chenopodium* in sodic soil. In Proceed. IInd International Conference on Plants and Environmental Pollution, held from Feb. 4-9, 2002 at National Botanical Research Institute, Lucknow (India). Abstr. No. SVII/P-21, pp 113.

CONFERENCE/SYMPOSIUM ATTENDED ABROAD [WITH FULL SPONSORPHIP]

- 1. International Conference on Quinoa for Future Food and Nutrition Security in Marginal Environments'. 6-8th December 2016 held at Zayed University, Dubai, UAE.
- 2. 'Congresso Internacional de la Quinua'. 23-26th October 2007 held at University of Arturo Prat, IQUIQUE, CHILE.
- 2. 'IIIrd Encuentro Nacional de Estudiantes de Biotecnologia'. 30 October-1 November 2007 held at University of Arturo Prat, IQUIQUE, CHILE.

LECTURES PRESENTED IN CONFERENCES ABROAD

- 1. Bhargava A. 2016. Experimenting with quinoa: the Indian experience. In: 'International Conference on Quinoa for Future Food and Nutrition security in Marginal Environments'. 6-8th December 2016 held at Zayed University, Dubai, UAE.
- 2. Bhargava A. 2007. Future prospects of quinoa diversification in developing countries- some strategies. In: 'Congresso Internacional de la Quinua'. 23-26th October 2007 held at University Of Arturo Prat, IQUIQUE, CHILE.
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