

MUHAMMAD ADNAN MUSHTAQ

Gender: Male **Native Place:** Punjab, Pakistan **D.O.B:** 3rd Jan 1988

Religion: Islam **Marital Status:** Single **Phone:** +92-303-5681237

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Career Objective and Self-Assessment

Career Objective: To obtain a respectable position in the well-established research based agricultural institution and apply my theoretical, professional and practical knowledge to meet goals and explore my abilities to serve my nation.

Personal Evaluation: Industrious, work carefully, coherent, well-disciplined, have a strong sense of responsibility, have a bright and cheerful disposition, optimistic, soft and prudent, modest kind, sincere, honest, good at communication and has the team cooperation spirit.

Academic Qualification

Degree, Major	Institute	Session (CGPA)
Ph.D. Scholar Crop Genetics and Breeding	Huazhong Agricultural University, Wuhan, China.	2012-2016
M.Sc. (Hons.) Agriculture Plant Breeding and Genetics	University of Agriculture, Faisalabad, Pakistan.	2009-2011 (3.63/4.00)
B.Sc. (Hons.) Agriculture Plant Breeding and Genetics	University of Agriculture, Faisalabad, Pakistan.	2005-2009 (3.75/4.00)
F.Sc. (Pre-Medical)	Bahawalpur Board	2003-2005 (760/1100)
Matriculation	Bahawalpur Board	2003 (701/850)

Scholarships and Awards

- ◆ June 2016: Won **“The Individual Award of Excellence”** from Huazhong Agricultural University, Wuhan, China because of excellent academic and co-curricular record.
- ◆ September 2012-December 2016: Won **“Chinese Government (CSC) Scholarship”** for Ph.D. Degree in Huazhong Agricultural University, Wuhan, China.
- ◆ **Chinese:** Won Certificate for **“HSK Level 4”** from Confucius Institute Headquarters (Hanban)
- ◆ April 2010: Become Champion of Intervarsity Mountaineering Championship organized by Higher Education Commission, Islamabad, Pakistan.
- ◆ May 2007: Honorary Award for Scout Leader Course (Basic) from Punjab Boy Scout Association, Pakistan.
- ◆ 2006-2010: Fours year won several Excellence Awards (Cricket, Basketball, Long Jump) from The Agrarian Society, Faculty of Agriculture, University of Agriculture, Faisalabad, Pakistan.

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- ◆ 2006-2009: Three consecutive years won University Merit Scholarship from University of Agriculture, Faisalabad, Pakistan.

Symposium, Conference, Workshop, Seminar

- ◆ March 21-22, 2016: The 3rd International Conference on Global Environmental Changes and Green Expo at Government College University, Faisalabad, Pakistan.
- ◆ September 21-24, 2015: The 13th International Symposium on Rice Functional Genomics at Huazhong Agricultural University, Wuhan, China.
- ◆ April 22-25, 2014: The 1st Maize Biology Conference of China at Huazhong Agricultural University, Wuhan, China.
- ◆ March 30 – April 2, 2014: The 19th Crucifer Genetics Workshop and Brassica at Wuhan, China.

Experience/Internship

- ◆ March 2017-Present: **Hybrid Rice Production Manager** in CKD Seeds & Fertilizers Pakistan.
- ◆ September 2012-December 2016: **Ph.D. Researcher** for Rapeseed Germplasm Enrichment and Utilization in Huazhong Agricultural University, Wuhan, China.
- ◆ August 2011- August 2012: **Assistant Farm Manager** and **Assistant Research Officer, Maize** in Four Brothers Seed Corporation (Pvt.) Ltd Pakistan.
- ◆ March 2009- June 2009: Four months Internship at Oilseed Research Institute of Ayub Agriculture Research Institute (AARI), Faisalabad, Pakistan.
- ◆ October 2008- December 2008: Two months Internship for Wheat Sowing Campaign at District Officer (Extension) Bahawalnagar, Punjab, Pakistan.

Specialty & Hobbies

- ◆ **Languages:** Fluent in four languages including English, Chinese, Urdu and Punjabi. I have a strong interest for learning Chinese. I am good at listening, speaking, reading and writing Chinese, and can communicate well with Chinese fellows.
- ◆ **Hobbies:** Playing Sports (Cricket, Football, Badminton, Athletics), Reading Books, Tourism, Learning Foreign Languages (English and Chinese), Making Friends.
- ◆ **Computer Skills:** Familiar to Word, Excel, Power Point, well versed with Internet and E-mail.

Professional and Technical Skills

- ◆ Familiar with the techniques of molecular biology: primer designing, phylogenetic analysis, sequence alignment, DNA recovery and transformation, Gene cloning, Construct expression vector, cDNA library construction, extraction and purification of RNA, DNA and protein, RNA reverse transcription for double-stranded cDNA synthesis and plasmid DNA purification by alkaline lysis method, agarose gel electrophoresis, SDS-PAGE, transgenic technology, RT-PCR and qRT-PCR, fluorescence quantitative PCR, RNA interference technique, in situ hybridization (GISH & FISH), cell culture, gene overexpression, gene knockout, etc.
- ◆ Well versed with biologically relevant softwares includes primer5, enhancer3.0, endnote, etc.
- ◆ Familiar with the operation and maintenance of American-LI-6400 photosynthesis measuring

instrument.

- ◆ Have a familiar understanding about physiological reactions like crop photosynthetic rate, photosynthetic response, fluorescence, activities of antioxidant enzymes (SOD, CAT and POD) under heavy metal stress, and also participated in the research work related these topics.

Ph.D. Thesis Title

- ◆ Mushtaq, M.A. (2016). Accumulation of Anthocyanins and Related Gene Expression in Leaves of Brassica (芸薹属叶片花青素累积及相关基因表达研究). Huazhong Agricultural University, Wuhan, China.

M.Sc.(Hons) Agriculture Thesis Title

- ◆ Mushtaq, M.A. (2011). Estimation of Genetic Variability and Path Analysis of Grain Yield and Its Components in Chickpea (*Cicer arietinum* L.). University of Agriculture, Faisalabad, Pakistan

Publications

1. **Mushtaq MA**, Pan Q, Chen D, Zhang Q, Ge X and Li Z (2016) Comparative Leaves Transcriptome Analysis Emphasizing on Accumulation of Anthocyanins in Brassica: Molecular Regulation and Potential Interaction with Photosynthesis. *Frontiers in Plant Science*. 7:311. doi: 10.3389/fpls.2016.00311 (**SCI Published**) (**4.495** Impact Factor)
2. **Mushtaq MA**, Bajwa MM and Saleem M. (Jan 2013) Estimation of genetic variability and path analysis of grain yield and its components in chickpea (*Cicer arietinum* L.). *International Journal of Scientific & Engineering Research*, 4(1):2. (**ISI Published**) (**3.8** Impact Factor)
3. Imtiaz M, **Mushtaq MA**, Rizwan MS, Xiong S, Tu S. (2016) Comparison of antioxidant enzymes activities and DNA damage in chickpea (*Cicer arietinum* L.) genotypes exposed to vanadium. *Environmental Science and pollution Research*. 19:19787-96. doi: 10.1007/s11356-016-7192-1 (**SCI Published**) (**2.76** Impact Factor)
4. Imtiaz M, Rizwan MS, **Mushtaq MA**, Ashraf M, Shahzad SM, Rizwan M, Tu S (2016). Silicon occurrence in plants: uptake, transport and its influence on heavy metals, essential and beneficial elements stress with future prospects: A review. *Journal of Environmental Management*. 183 (Pt 3):521-529. doi: 10.1016/j.jenvman.2016.09.009. (**SCI Published**) (**3.131** Impact Factor)
5. Imtiaz M, **Mushtaq MA**, Rizwan MS, Muhammad Ashraf, Sher Muhammad Shahzad, Muhammad Rizwan, Tu S (2016). Interactive effects of V and P on growth, their uptake and biochemical changes in chickpea genotypes under hydroponic conditions. *Environmental and Experimental Botany*. 134, 72-81. (**SCI Published**) (**3.712** Impact Factor)
6. Imtiaz M, Rizwan MS, **Mushtaq MA**, Rizwan M, Aziz O, Yousaf B, Shakeel Q, Ijaz U, Tu S. (2016). Responses of antioxidant enzymes and accumulation of vanadium in chickpea (*Cicer arietinum* L.) plants grown in red soil. *Journal of Environmental Sciences*. (**SCI 3.73 IF**)

7. Imtiaz M, **Mushtaq MA**, Rizwan MS, Tu S (2017). Photosynthetic activity, antioxidative response and molecular regulation of anthocyanin of two mustard (*Brassica juncea*) cultivars differing in photosynthetic capacity subjected to vanadium stress. *Scientific Reports*.

(Under review)

8. Imtiaz M, Ashraf M, Rizwan MS, Yousaf B, Rizwan M, Mehmood S, Ditta A, **Mushtaq MA**, Aziz O, Ijaz R, Dai Z, Yuan Y, Cai D, Tu S (2017). Global vanadium distribution and future outlooks-focusing on china: a review. *Environmental Science and Pollution Research*.

(Under review)

Book Published

◆ Muhammad Adnan Mushtaq (2012). “Genetic Variability in Chickpea” ISBN 978-3-659-13377-0 Published by LAP LAMBERT Academic Publishing GmbH & Co. KG, Germany.

References

Dr. LI ZAIYUN

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