

Dr. Muhammad Ashfaq

E-mail:- ashfaq_qs@yahoo.com

Email:- muhammad.ashfaq@mail.mcgill.ca



Current Address: Dr.Muhammad Ashfaq.

Assistant Professor

Institute of Agricultural Sciences

University of the Punjab, Lahore

Permanent Address: Post office Ghakkhar Mandi, Village QilaSangian
Tehsil Wazirabad District Gujranwala.

Ph: 0321-6462690

Professional Information:

- Worked as **Trainee Research Fellow** (Plant Breeding & Genetics) in the Nuclear Institute for Agriculture and Biology (NIAB) since August 19, 2004 to August 18, 2007.
- Worked as **Farm Manager** for the evaluation of new exotic vegetable/cereals varieties/germplasm under the private seed organization at Gujranwala from February 2, 2003 to August 15, 2004 and conducted trials on farmers field.
- Worked in PAEC Agribusiness Project for seed production of Wheat and Cotton at NIAB farm.
- As student researcher conducted research in partial fulfillment of the requirement of the degree of MSc (Hons) Plant Breeding & Genetics entitled: *“Association of grain yield with various morphological traits in Bread Wheat (Triticumaestivum L)*
- Worked as a **Trainee Researcher** in Plant Science Department McGill University, Canada Feburary17, 2010 August 10, 2010.
- Delivered seminars in different forums.
- Worked as a **Visiting Scientist** at USDA (Dale Bumpers National Rice Research Center) USA, Arkansas from 11, August 2010 to 19, November, 2010.
- Worked as **Visiting Scientist** in Rice Research and Extension Center, University of Arkansas USA from 14 August, 2010 to 1 November, 2010 in Hybrid Rice Breeding Programme.
- Ph.D thesis entitled, *“Genetics of Rice (Oryza sativa L.) Under Normal and Water Stress Conditions”*.
- Currently working as **Assistant Professor** since 5-10-2011 to date in the Institute of Agricultural Sciences, University of the Punjab, Lahore, Pakistan

Membership:

- 1) American Society of Plant Biologists (ASPB)
- 2) Pakistan Society of Plant Breeders and Geneticist (UAF)

Academic Background:

Degree	Subject	Institution/ Board	Year	Div.	%age/ CGPA
Ph.D (PBG)	Plant Breeding Genetics	University of Agriculture, Faisalabad	2011	Ist	3.50/4.00
M.Sc (Hons)	Plant Breeding Genetics	University of Agriculture, Faisalabad	2002	1 st	67.30 3.15/4.00
B.Sc (Hons.) 4-Years Degree	Plant Breeding Genetics	University of Agriculture, Faisalabad	2000	1 st	66.92 3.10/4.00
F.Sc	Pre-Medical	Govt.College Gujranwala	1996	1 st	64.90
S.S.C	Science Group	Govt.High School GhakharNo-1 Gujranwala	1992	1 st	75.88

Major Courses Studied in M.Sc(Hons) and Ph.D (P.B.G)

- Breeding of Cereal Crops(rice, wheat and barley)
- Breeding of Oilseed Crops
- Breeding of Fibre Crops
- Breeding of Pulse Crops
- Breeding of Forage Crops
- Breeding of Sugar Crops
- Biotechnology In Crop Improvement
- Evolution of Field Crops
- Stress Breeding of Crop Plants
- Genetics of Cereal
- Plant Molecular Techniques
- Plant Tissue Culture
- Advanced Methods In Plant Breeding
- Cytogenetics of Crop Plants
- Hybrid Seed Production of Field Crops
- Genetic Engineering in Crop Plants
- Advanced Cytogenetics
- Stress Physiology
- Physiology of Drought

Trainings:

1. One-week training course on, “The Safety Measures in the Use of Radiation in Agriculture and Biology” held at NIAB Faisalabad, from 27th Feb to 3rd March 2006.

2. Successfully completed core training in "Poly Tunnel Farming,, at University of Agriculture Faisalabad with the collaboration of Horticultural institute of Agricultural Sciences and Agribusiness Support Fund on 16-21 November 2009.
3. Successfully completed core training in "Workplace Hazardous Materials Information System,, (W.H.M.I.S.) at McGill UniversityCanada on March 17,2010.
4. Successfully completed core training in "Biological Safety Cabinets,, and "Introduction to Biosafety,, at McGill UniversityCanada on March 30,2010.
5. Completed training on "Hazardous Waste Management Disposable Training For Laboratory Personnel,, at McGill UniversityCanada in May 2010.

Participated in International Conferences

- 1) Attended International Conference American Society of Plant Biologist (ASPB) held in Montreal Canada from July 31 to August 4, 2010.
- 2) Attended 5th International Rice Blast Conference held in Little Rock, Arkansas USA from August 10 to August 14, 2010.
- 3) Attended International Symposium on "Modern Approaches and Techniques in Agriculture to Ensure Food Security in Pakistan,, held in University of Agriculture Faisalabad Pakistan and Sponsored by HEC 13-14 October, 2008.

Participated in National Conferences

- 1) Attended national conference on "Agriculture, Trade and Development under the WTO Regime,, jointly organized by University of Agriculture Faisalabad and WTO cell, Planning and Development, Government of the Punjab Lahore held on April 09, 2008.
- 2) Attended one day Workshop on" Supercritical Fluid Extraction Technology for High Value Non- Traditional Crops,, organized by Institute of Horticultural Sciences, University of Agriculture Faisalabad, Pakistan held on October 21, 2008.

Project Submitted:

- 1) Screening of diverse germplasm for drought tolerance in rice (*Oryza sativa* L) through conventional and molecular breeding techniques (To be Submitted to HEC for grant).
- 2) Genetic variability analysis of basmati and exotic rice germplasm lines by using various genotypic and phenotypic traits (To be Submitted to the University of the Punjab).

Techniques

- PCR Techniques
- Gel Electrophoresis
- Southern Blotting
- Crossing Techniques
- Genomic DNA Extraction
- Gel scanning
- Primer Designing

Publications

1. Salam A, **M, Ashfaq** and M A, Asad (2003). A Correlation and Path Coefficient analysis for some yield components in Bread wheat. Asian Journal of Plant Science 2 (8): 582-584.
2. **Ashfaq M**, A, Salam and A, Zulfiqar (2003). Association of Morphological traits with grain yield in wheat (*Triticum aestivum* L.). Int. J. Agri. Biol. 5(3): 262-264.
3. Salam A, M, Imran and **M, Ashfaq** (2009) Estimation of Genetic Variability and Correlation for Grain Yield Components in Rice (*Oryza sativa* L.). American-Eursian J. Agric. Environ. Sci. 6(5): 585-590.
4. Aslam M, **M, Ashfaq**, T, Saeed, S, Allah and Yousaf Zafar (2010). In-vitro Morphogenic Response of Cotton (*Gossypium hirsutum* L). From Apical Meristem Culture. American Eursian J. Agric. Environ. Sci. 7(1): 7-11.
5. Aslam M, **M, Ashfaq**, Tahir Saeed, Sami Ul Allah and Muhammad Sajjad (2009) Development and Evaluation of a New High Yielding and Better Fibre Quality Mutant NIAB-824 of Cotton Through Pollen Irradiation: Am.-Eurasian J. Sustain. Agric. 3(4): 715-720.
6. Aslam M, **M. Ashfaq**, Y. Zafar, Sami ul Allah and Muhammad Sajjad; 2009. Induction of qualitative marker traits(s), via DNAmacroinjections in cotton and its characterization with RAPD markers. American Eurasian J. Sustain. Agric. 3(4): 797-803.
7. **P09058 In- Vitro Activation of Ds Transposons in Barley**. Poster Abstract published in American Society of Plant Biologist (ASPB) 2010.
Qasim, Karim- presenter karim.qasim@mail.mcgill.ca Tan, Han- Qi Singh, Surinder Muhammad, Ashfaq Singh, Manjit Singh, Jaswinder
8. **Ashfaq, M.**, Khan, A.S., Khan, and S.H. Khan (2011) Screening of rice genotypes on the basis of molecular marker and root seedling traits of Rice (*Oryza sativa* L.) under water stress condition (To be submitted to International Journal of Agriculture and Biology).
9. **Ashfaq, M.** and A.S., Khan (2011) Genetic diversity in basmati rice (*Oryza sativa* L.) germplasm as revealed by microsatellite (SSR) markers (Accepted in Russian Journal of Genetics).
10. **Ashfaq, M.**, Khan, A.S., Khan S.H and Rashid A. (2011) Association of various morphological traits with yield and genetic divergence in Rice (*Oryza sativa* L) (Accepted in International Journal of Agriculture and Biology).
11. Muhammad Ashfaq, Muhammad Saleem Haider, Abdus Salam Khan and Sami Ul Allah (2011). Breeding potential of the basmati rice germplasm under water stress condition (To be submitted to African Journal of Biotechnology).
12. Muhammad Ashfaq Muhammad Saleem Haider and Abdus Salam Khan (2011). The Potential of the Basmati Rice Germplasm for Breeding Drought Tolerant Varieties (To be submitted to International Journal of Agriculture and Biology).

References:

1. **Dr. Abdus Salam Khan**
Professor and Chairman
Department of, Plant Breeding & Genetics,
University of Agriculture, Faisalabad, Pakistan.
Contact # 0092-3457938379
Email Address: drabdussalamuaf@yahoo.com
2. **Dr. IhsanKhalique**
Professor,
Department of, Plant Breeding & Genetics,
University of Agriculture, Faisalabad, Pakistan
Phone:0092-41-9200161-170/2923
E-mail:ikhaliq63@uaf.edu.pk
ikhaliq63@yahoo.com
3. **Dr. Rashid Ahmad**
Professor and Chairman
Department ofCrop Physiology,
University of Agriculture, Faisalabad, Pakistan
Phone:0092-334-6602009
E-mail:uaf_rashid@yahoo.com
- 4 **Dr. Wengui Yan**
Research Geneticist-USDA-ARS,
Adjunct Faculty University of Arkansas
Dale Bumpers National Rice Research Center
2890 Hwy 130E, P.O. Box 1090, Stuttgart,
AR 72160 USA
Voice: 870-672-9300 Fax: 870-673-7581
Email: wengui.yan@ars.usda.gov
- 5 **Jaswinder Singh, Ph.D.**
PlantScience Department
McGillUniversity, Macdonald Campus
21111 Lakeshore Road
Ste. Anne de Bellevue
Quebec Canada H9X 3V9
Phone: (514) 398 7906
Fax: (514) 398 7897
E-mail:jaswinder.singh@mcgill.ca
Web Site:<http://www.mcgill.ca/plant/faculty/singh/>
- 6 **Dr. Christopher W. Deren**
Professor at University of Arkansas
Division of Agriculture
Rice Research and Extension Center
2900 Hwy, 130E, Stuttgart, AR 72160
Ph: 870-673-2661 Fax: 870-673-4315
Email: cderen@uark.edu

