

PERSONAL INFORMATION

Name: Muhammad Rizwan Shafiq
Father's name: Muhammad Islam
Date of Birth: October 10, 1982
Nationality: Pakistani
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ACADEMIC QUALIFICATION

2016 PhD
Institute of Molecular Physiology and Biotechnology of Plants (IMBIO)
Rheinische Friedrich-Wilhelms-Universität Bonn. Germany
German grading system 1.3 grades, (A grade, $\geq 90\%$)
US

2006 M.Sc. (Hons.) Plant Breeding & Genetics
Department of Plant Breeding & Genetics
University of Agriculture, Faisalabad. Pakistan
CGPA: 3.87/4.00 (A grade, 82.82%)

2004 Bachelor of Honors in Agricultural Sciences
Specialization in Plant Breeding & Genetics
University of Agriculture, Faisalabad. Pakistan
CGPA: 3.88/4.00 (A grade, 81.55%)

1999 Higher Secondary School Certificate
Pre-Medical Group
723/1100 (B grade, 65.72%)

1997 Secondary School Certificate
Science
676/850 (A grade, 79.53%)

PROFESSIONAL EXPERIENCE

- Currently working as lecturer in the department of Plant Breeding and Genetics, University of Agriculture Faisalabad (UAF), Depalpur Campus, Okara, Pakistan.
- PhD thesis with the title “A forward genetic approach to isolate *Arabidopsis* mutants altered in the regulation of the *ALDH7B4* gene.”
- Lecturer, University of Agriculture, Faisalabad, Pakistan from 15th September 2006 to March 2010.
- M.Sc. thesis on “Genetic variability and correlation response in mungbean (*Vigna radiata* L. Wilczek) following gamma irradiation”.
- Three-month internship program on hybrid seed production at National Agricultural Research Centre (NARC), Islamabad, Pakistan.
- Completed Basic Wheat Improvement Course - 2022 organized by CIMMYT from 31st January 2022 to – 27th May 2022.

PARTICIPATION IN SEMINARS AND WORKSHOPS

- Attended the seminar on “Floriculture Industry” at Agriculture House Auditorium, Lahore on 30-05-2007.
- Participate in the COST one-week training School on “Halophyte Biochemistry and Physiology at Leibniz Universitaet Hannover, Germany from 3rd July to 10th July, 2011.
- Participate in one-day training on “Handling and transport of radioactive materials used in laboratory” at Rheinischen Friedrich-Wilhelms-Universität Bonn (University of Bonn), Germany on 08.05.2014.
- Participate in “2nd Pakistan Seed Congress” at University of Agriculture, Faisalabad on November 21-22, 2016.
- National Conference on “Sustainable Management & Control of Fruit Fly Infestation” at University of Agriculture, Faisalabad on November 21-22, 2016.

- Participate in Capacity Building Workshop on “Biosafety Measures in Agriculture” at University of Agriculture, Faisalabad on February 20-21, 2017.
- Participate in national conference on “Challenges and Opportunities to Boost Agriculture in Changing Climate” at College of Agriculture, BZU, Bahadur Sub-Campus Layyah on March 29-30, 2017.
- Participate in Training Program on “Introduction to LaTeX UAF Synopsis and Thesis” at University of Agriculture, Faisalabad on July 26-28, 2017.
- Participate in one-week “Orientation of Newly Inducted Faculty” at UAF from 31st July to 4th August 2017.
- Member of organizing committee for “National seminar on sustainable potato production: Challenges and strategies 2018” held on 25-09-2018 at UAF Depalpur campus, Okara.
- Member of Hall management Committee to organize “the one-day seminar for Awareness of Fertilizer Prediction Model” on 19th December 2018.
- Member of purchase committee for arrangement of one-day seminar and training workshop entitled “promoting agriculture entrepreneurship among small farmers through collective action” held on 30-01-2019.
- Member of different committees to organize the “One-day national seminar on potato and maize’ held on 24th September 2019 at UAF Depalpur campus, Okara.
- Participated in “One Day Workshop on Laboratory Biosafety” as Resource Person at UAF Depalpur campus on 21-02-2019.
- **International Webinar on Nutritious Maize:** Technologies, Development and Availability in South Asia from July 21 to July 23, 2020, conducted by CIMMYT.
- Increasing maize varietal turnover in Sub-Saharan Africa arranged by CIMMYT on 27-07-2020.
- Role of Agricultural & Environmental Biotechnology for a Sustainable Future organized by Bioingene.com on 11-08-2020.

- Genomic-assisted maize breeding: Status and Opportunities conducted on 12-08-2020 by CIMMYT.
- Improving phenotyping accuracy and throughput in Maize organized by CIMMYT on Friday, August 14, 2020.
- MicroProteins: Novel tool to bioengineer future ready plants on 17-08-2020 arranged by Bioingene.com
- CRISPR in Agriculture- Context of Improving WUE, held on 12 September 2020 arranged by Bioingene.com
- Enterprise Resource Planning meetings and discussions on administrative components (Vehicle Management System) and Academic activities especially for admissions, examinations and hostel management.
- WORLD ENVIRONMENT DAY-2021 WEBINAR: Sustainable Nitrogen Management for Ecosystem Restoration held on 4th June 2021.
- Attended a workshop on “Capacity building & Professional Development for faculty and Officers” at UAF between 15.11.2021 to 19.11.2021.
- Attended a workshop on “Capacity building & Professional Development for faculty and Officers (SWOT Analysis and Succession Plan)” at UAF on 31. 12. 2021.
- Member of organizing committee, International Webinar on “**Modern Crop Breeding for Food Security**” 22 December 2022, Sub-Campus Depalpur, Okara.
- Participated in the National Seminar on **World Fisheries Day** organized by the Department of Zoology, Wildlife and Fisheries at UAF Depalpur Campus, Okara on 21-11-2022.
- Participated in the National Seminar on **Role of Tilapia Fish to Control Dingue** organized by Department of Zoology, Wildlife and Fisheries at UAF Depalpur Campus, Okara on 28-09-2022.
- Participated in Refresher Webinar on **Fall Armyworm Management in South Asia** organized by The International Maize and Wheat Improvement Centre (CIMMYT) held on 21st July 2022.

- Participated in the **3rd International Colloquium on Challenges and Opportunities of Maize Production** organized by UAF Department of Plant Breeding & Genetics held on May 18-20, 2022.
- Completed **Basic Wheat Improvement Course - 2022** organized by **CIMMYT** from 24th January 2022 to – 31st May 2022.

PUBLICATIONS

- Missihoun, Tagnon D., Eva Willée, Jean-Paul Guegan, Solenne Berardocco, **Muhammad R. Shafiq**, Alain Bouchereau, and Dorothea Bartels. "Overexpression of ALDH10A8 and ALDH10A9 Genes Provides Insight into Their Role in Glycine Betaine Synthesis and Affects Primary Metabolism in *Arabidopsis thaliana*." *Plant and Cell Physiology* 56, no. 9 (2015): 1798-1807.
- Shahzadi Mahpara, Zulfiqar Ali, Muhammad Ishaq Asif Rehmani, Javaid Iqbal & **Muhammad Rizwan Shafiq**. "Studies of Genetic and Combining Ability Analysis for Some Physio-Morphological Traits in Spring Wheat Using 7×7 Diallel Crosses". *Int. J. Agric. Appl. Sci.* Vol.9, No.1, 2017.
- Mahmoud M. Gaballah, Sajid Fiaz, Xiukang Wang, Afifa Younas, Sher Aslam Khan, Fahad Masoud Wattoo & **Muhammad Rizwan Shafiq** (2021) Identification of genetic diversity among some promising lines of rice under drought stress using SSR markers, *Journal of Taibah, University for Science*, 15:1, 468-478, DOI: 10.1080/16583655.2021.1989738.
- Parwsha Zaib a, Hafiz Muhammad Ahmad a, Safira Attacha b, Mahmood Ur Rahman a, **Muhammad Rizwan Shafiq** c, Kousar Parveen d, Sajid Fiaz e, Kotb. Attia f, Saira Ishaq g, Shazia Arif h, Asmaa M. Abushady i j, Muhammad Jawad Umer k (2023). Comparative genomics of light harvesting chlorophyll (*LHC*) gene family and impact of chlorophyll-A contents under drought stress in *Helianthus annuus*. *Journal of Plant Physiology*, 291(154136), DOI: 10.1016/j.jplph.2023.154136
- Khalid Naveed, Muhammad R. Shafiq, Ahmed Raza (2023). CITRUS TRISTEZA VIRUS: ITS RESEARCH STATUS AND FUTURE PROSPECTS IN PAKISTAN. *Int. J. Agric. Appl. Sci.*, 35 (02) 465-472, DOI:10.33866/phytopathol.035.02.0873.

- Y Gong, Z Qiu, W Hou, IU Haq, MR Shafiq, B Alharthi (2024). Characteristics of rapeseed (*Brassica rapa* L.) genome DREB family demonstrate their roles in stress. *Plant Stress* 13, 100536. doi.org/10.1016/j.stress.2024.100536

RESEARCH INTERESTS

- Breeding for biotic and abiotic stresses
- Molecular Plant Stress Physiology
- Conventional and Molecular Plant Breeding & Genetics

REFERENCES

Dr. Dorothea Bartels

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