# Curriculum Vitae

# **Mushood Ali**

University of Agriculture, Faisalabad, Pakistan.

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Date of Birth: 03-05-1998 Nationality: Pakistani

Gender: Male

#### **Current Employment:**

**Research Associate** in Soybean Lab, Center for Advanced Studies in Agriculture and Food Security (CAS-AFS)/NCGE, University of Agriculture, Faisalabad, Pakistan. (2<sup>nd</sup> May, 2024 to )

#### **Previous Employment:**

**Research Assistant** in Soybean Lab, Center for Advanced Studies in Agriculture and Food Security (CAS-AFS), University of Agriculture, Faisalabad, Pakistan. (2<sup>nd</sup> April, 2024 to 1<sup>st</sup> May, 2024)

#### **EDUCATION**

University of Agriculture, Faisalabad, Pakistan. M.Sc. (Hons) Agriculture Plant Breeding and Genetics [CGPA 3.86/4.00]	[2021-23]
University of Agriculture, Faisalabad, Pakistan.	
B.Sc. (Hons) Agriculture with Major Plant Breeding and Genetics	[2017-21]
[CGPA 3.77/4.00]	
Board of Intermediated and Secondary Education, Multan	
Intermediate (Pre-Medical)	[2013-16]
[Marks 61.54%]	
Board of Intermediated and Secondary Education, Multan	
Matriculation	
[Marks 83.71%]	[2011-13]

#### **RESEARCH SKILLS & ABILITIES**

Techniques and tools related to Plant Breeding and Biotechnology

- Experimental designs like CRD, RCBD, LSD, split plot design and augmented design
- ➤ Biometrical/Statistical analysis
- Emasculation & crossing of plants in field (Tomato, Chili, Onion and Okra)
- ➤ Polymerase Chain Reaction & Gel-Electrophoresis
- Tissue culturing expertise (Soybean, Potato and Tomato)
- ➤ Molecular Biological techniques (competent cell preparation, plasmid isolation, molecular cloning)
- ➤ Agrobacterium mediated transformation

#### **COMPUTATIONAL & BIOINFORMATICS SKILLS**

- ➤ Computational Tools: Microsoft Office packages, Statistical Analysis tools (Statistix10, Minitab and Genstat).
- ➤ **Bioinformatics Tools:** Databases (NCBI, Phytozome, Ensemble plant, Sol genomics), Sequences alignment tool (Mega v.11 and Clustal omega), Primer designing tools, gRNA designing for CRISPR/Cas9.

#### **EXPERIENCE**

	Soybean field trials demonstration throughout Pakistan.	[2021-23]
$\triangleright$	Potato tissue culture protocol optimization (Organogenesis &	[2021-23]
	Embryogenesis).	****
	CRISPR/Cas mediated gene editing of potato for late blight	[2021-23]
	resistance.	
	Field screening and sampling of potato plants infected with	[2021-23]
	viruses and late blight disease.	[2021-23]
	Internship at Vegetable Research Institute, AARI, Faisalabad.	[Mar-May, 2021]
	Emasculation, and crossing of vegetable crops at Vegetable	[Mar-May, 2021]
	Research Institute, AARI.	, , ,

#### **HONORS & AWARDS**

	Higher Education Commission merit & need scholarship (8 times)	[2017-21]
>	English Proficiency Certificate awarded by UAF, Pakistan	[2021]
	Award of Laptop on merit by "Prime Minister Laptop Scheme Youth Initiative"	[2014]

#### **ABSTRACT**

- ➤ Waheed A, Moaz H, Latif M.M, Ali M, Atif M, Irfan U, Khan A.I, Rehman R, Ahmed Z. Genetic Potential of Soybean (Glycine max L.) Cultivars For Use in Intercropping-Based Production Technology. International Conference on Emerging Technologies For Crop Improvement in Pakistan. February 19-20, 2024.
- Latif M.M, Afzal A, Ali F, Atif M, Irfan U, Waheed A, Ali M, Moaz H, Rehman R, Ahmed Z. Development of Reproducible Genotype- Specific Plant Regeneration Method To Establish A Highly Efficient Agro-bacterium Mediated Transformation System For CRISPR-Cas9 Mediated Genome Editing in Soybean (Glycine max L.). International Conference on Emerging Technologies for Crop Improvement in Pakistan. February 19-20, 2024.
- Moaz H, Ali M, Latif M.M, Ali F, Atif M, Irfan U, Waheed A, Afzal Z, Rehman R, Ahmed Z. Establishing The Genotype-Specific Tissue Culture Protocol For CRISPR-Cas9- Mediated Genome Editing in Potato (Solanum tuberosum). International Conference on Emerging Technologies For Crop Improvement in Pakistan. February 19-20, 2024.
- ➤ Irfan U, Ali M, Atif M, Latif M.M, Moaz H, Waheed A, Ahmed Z, Rehman R, Maqbool R. Genetic Analysis of Wheat F2 Population For Yield Contributing Traits. International Conference on Emerging Technologies For Crop Improvement in Pakistan. February 19-20, 2024.

### PROFESSIONAL TRAINING (Workshop, Seminars & Trainings)

- ➤ CRISPR/Cas mediated genome editing, May 06-10, 2024 "Resource person in International handson training", organized by National Center for Genome Editing (NCGE), Center for Advanced Studies in Agriculture & Food Security (CAS-AFS), University of Agriculture Faisalabad (UAF).
- ➤ Jan 23, 2023, "Awareness Seminar on GM Soybean & potential of its cultivation" Organized by Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore Directorate of Oilseeds, AARI, Faisalabad & Punjab Poultry Traders Association.
- ➤ CRISPR/Cas mediated genome editing, Feb 21-25, 2022 "Participant in 1st National hands-on training" & May 23-37, 2022 "Resource person in 2nd National hands-on training", organized by National Center for Genome Editing (NCGE), Center for Advanced Studies in Agriculture & Food Security (CAS-AFS), University of Agriculture Faisalabad (UAF).
- ➤ June 29-July 2nd, 2022, attend as a participant "Workshop on scientific writing and publishing", organized by Deptt. of PBG, UAF, in collaboration with University of Kassel, Germany.
- ➤ Sept 28, 2022, "Participated in workshop on Biosafety, "Biological waste management & Responsible science", Organized by Center for Advanced Studies in Agriculture & Food Security, UAF.
- ➤ Oct 19-20, 2022, Member of Organizing Committee "International Wheat Conference-2022", organized by: Deptt. of PBG, UAF.

- ➤ Oct 25, 2022, participated in "Seminar on Crop diversification Through soybean cultivation to ensure food security", organized by Government of Punjab Directorate of Oilseeds, AARI, Faisalabad.
- ➤ Oct 27-29, 2022, "Workshop on Data science with python in agriculture". Organized by Young peace & development corps, Office of the Senior Tutor, UAF.

## **LANGUAGES**

- > Urdu
- > English