



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 6765

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze e Politiche Ambientali**

Scientist- in - charge: **Prof.ssa Tedesco**

[Muhammad Zubair Akram]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Akram
Name	Muhammad Zubair

PRESENT OCCUPATION

Appointment	Structure
Doctorate student	Department Agricultural, Forest, Food and Environmental Sciences (DAFE), University of Basilicata, Potenza 85100, Italy

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Agriculture-Agronomy	PMAS Arid Agriculture University, Rawalpindi, Pakistan	2017
PhD	Agriculture, Forest and Food Sciences SSD (AGRI-02/A)	University of Basilicata, Potenza, Italy	37th cycle doctorate student and thesis has been submitted for final evaluation. Soon I will be graduated.
Master	Agriculture-Agronomy	University of Agriculture, Faisalabad, Pakistan	2019

REGISTRATION IN PROFESSIONAL ASSOCIATIONS



FOREIGN LANGUAGES

Languages	level of knowledge
English	B2

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2015	Awarded by a laptop by Government of Pakistan
2021	Scholarship winner for doctorate at University of Basilicata, Italy
2022-23	Winner of Erasmus Traineeship Program (2022-23) by University of Basilicata, Potenza, Italy.
2023-2024	Overseas period at Department of Plant and Environmental Sciences, University of Copenhagen, Copenhagen, Denmark under Erasmus+ program.

TRAINING OR RESEARCH ACTIVITY

description of activity
Work as a Senior Science teacher at Tameer-E-Seerat High School, Raiwind, Lahore, Pakistan from Dec 2021-Oct 2013.
Internship at Office of Agronomist Directorate of Soil Conservation, Rawalpindi from Jul 2016-Sep 2016.
Field Management and Crop Production at Agronomic Research Area, University of Agriculture, Faisalabad, Pakistan from Oct 2017-Aug 2019.

PROJECT ACTIVITY

Year	Project
Feb 2018- Aug 2019	Exploring the Potential of Chenopodium quinoa Willd. as low Input High Nutrition and Climatic Resilient Crop (Feb 2018- Aug 2019). Funding agency: Higher Education Commission, Islamabad, Pakistan. Project number: 4652
Sep 2017- Aug 2019	Exploring the Potential of Moringa as a Crop Growth Enhancer and Forage Crop (Sep 2017- Aug 2019). Funding agency: Higher Education Commission, Islamabad, Pakistan. Project number: 20-1042/R&D/11
FEB 2020- Sep 2021	Investigation of the Role of GATA12 in Regulation of Iron Deficiency Signalling in Arabidopsis thaliana (Feb 2020- Sep 2021). Funding agency: TUBITAK, Ankara, Turkey. Project number: 119Z149

CONGRESSES AND SEMINARS

Date	Title	Place
09-10 April	National Symposium on <i>Moringa Oleifera</i>	Lahore, Pakistan



2018	“Recent Trends and Challenges in Processing and Product Developments”	
26-28 March 2019	International Conference on Water Saving and Plant Production Strategies: Constraints and Implications for Sustainable Agriculture	Faisalabad, Pakistan
3-5 April 2019	1st International conference on Sustainable Agriculture: Food Security under Changing Climate Scenarios	Dera Ghazi Khan, Pakistan
27-28 May 2021	Bitki Islahi ve Genetigi Ogrenci Kongresi	Nigde, Turkey
12 July, 19 July, 26 July and 2 August 2024	Sustainable Agronomy Conference	Online conducted by American Society of Agronomy
1-15 November 2023	2nd International Online Conference on Agriculture	Online conducted by MDPI, Switzerland
11-13 September 2024	La gestione delle risorse nell’innovazione delle filiere agro-alimentari	Matera, Italy
10, 17, 24 and 31 July 2024	2024 Sustainable Agronomy Conference	Online conducted by American Society of Agronomy

PUBLICATIONS

Book Chapters
Muhammad Zubair Akram, Samreen Nazeer, Anila Sadia and Muhammad Abdullah Saleem. 2020. Phytoremediation and Environmental Factors. In: Bioremediation and Phytoremediation for Sustainable Soil Management. Apple Academic Press, Taylor and Francis. ISBN: 9781774637180.
Muhammad Bilal Hafeez, Ali Raza, Noreen Zahra, Kanval Shaukat, Muhammad Zubair Akram, Shahid Iqbal and Shahzad Maqsood Ahmed Basra. 2021. Gene regulation in halophytes in conferring salt tolerance. In Handbook of Bioremediation (pp. 341-370). Academic Press.
Noreen Zahra, Kanval Shaukat, Muhammad Bilal Hafeez, Ali Raza, Sadam Hussain, Muhammad Tanees Chaudhary, Muhammad Zubair Akram, Shiva Najafi Kakavand, Muhammad Sohail Saddiq and Abdul Wahid. 2021. Physiological and Molecular Responses to High, Chilling, and Freezing Temperature in Plant Growth and Production: Consequences and Mitigation Possibilities. In: Husen A. (eds) Harsh Environment and Plant Resilience. Springer, Cham.
Samreen Nazeer, Muhammad Zubair Akram and Madad Ali. 2021. Rhizosphere Engineering and Soil Sustainability: An Introduction. In Junaid Ahmad Malik (Ed.), Handbook of Research on Microbial Remediation and Microbial Biotechnology for Sustainable Soil (pp. 583-601). IGI Global.
Muhammad Zubair Akram and Madad Ali. 2022. Rhizosphere Engineering and Soil Sustainability: An Introduction. In Research Anthology on Strategies for Achieving Agricultural Sustainability (pp. 23-41). IGI Global. (Selected by IGI Global’s executive editorial board for inclusion as a reprinted chapter with 100% unchanged)
Articles in Journal



Muhammad Farhan Aslam, Shahzad Maqsood Ahmed Basra, Muhammad Bilal Hafeez, Shahbaz Khan, Muhammad Sohail Irshad, Shahid Iqbal and Muhammad Zubair Akram. 2019. Inorganic fertilization improves quality and biomass of <i>Moringa oleifera</i> L. <i>Agroforestry Systems</i> , 94: 975-983.
Samreen Nazeer, Shahzad Maqsood Ahmed Basra, Shahid Iqbal, Muhammad Bilal Hafeez, Ahmad Mateen, Muhammad Zubair Akram, Noreen Zahra, Shahbaz Khan, Muhammad Sohail Saddiq and Jahanzaib. 2020. Adaptability and yield potential of different species of amaranth under semiarid conditions. <i>International Journal of Agriculture and Biology</i> , 24:1558–1564.
Samreen Nazeer, Muhammad Zubair Akram and Madad Ali. 2022. Amaranth as Nutrition-Rich and Climatic Resilient Crop: A Review. <i>Agriculturae Conspectus Scientificus</i> , 87(4): 281-293.
Muhammad Zubair Akram, Shahzad Maqsood Ahmed Basra, Muhammad Bilal Hafeez, Shahbaz Khan, Samreen Nazeer, Shahid Iqbal, Muhammad Sohail Saddiq and Noreen Zahra. 2021. Adaptability and yield potential of new quinoa lines under agro-ecological conditions of Faisalabad-Pakistan. <i>Asian Journal of Agriculture and Biology</i> , 2021(2):202005301.
Madad Ali, Muhammad Ahsan, Muhammad Zubair Akram and Samreen Nazeer. 2022. Study of physio genetic parameters of double haploid single cross Maize hybrid. <i>Sarhad Journal of Agriculture</i> , 38(5): 1-11.
Mehwish Mujahid, Muhammad Zubair Akram and Samreen Nazeer. 2021. Evaluation of mungbean (<i>Vigna radiata</i>) under drought stress by foliar application of salicylic acid. <i>Journal of Agriculture, Food, Environment and Animal Sciences</i> , 2(1): 1-14.
Muhammad Bilal Hafeez, Shahid Iqbal, Yuanyuan Li, Muhammad Sohail Saddiq, Shahzad M.A. Basra, Hui Zhang, Noreen Zahra, Muhammad Zubair Akram, Daniel Bertero, and Ramiro N. Curti. 2022. Assessment of Phenotypic Diversity in the USDA Collection of Quinoa Links Genotypic Adaptation to Germplasm Origin. <i>Plants</i> , 11: 738.
Muhammad Zubair Akram, Angela Libutti and Anna Rita Rivelli. 2023. Evaluation of Vegetative Development of Quinoa under Water Stress by Applying Different Organic Amendments. <i>Agronomy</i> , 13(5): 1412.
Abdul Ghaffar Khan, Abid Niaz, Shahzadi Mahpara, Rehmat Ullah, Muhammad Tahir, Muhammad Akram Qazi, Affan Ahmed, Nihayet Koçyiğit, Syed Asghar Hussain Shah, Abdul Rauf, Muhammad Muneer, Muhammad Zubair Akram, Abdel-Rhman Z. Gaafar, Mohamed S. Elshikh, Mai Sayed Fouad. 2023. Impact of various irrigation levels and nitrogen rates on wheat (<i>Triticum aestivum</i> L.) yield and nitrate leaching. <i>Journal of King Saud University-Science</i> 35(10): p. 102940.
Anna Rita Rivelli, Muhammad Zubair Akram and Angela Libutti. 2024. Woody biochar rate and water shortage impact on early growth stages of <i>Chenopodium quinoa</i> willd. <i>Agronomy</i> 14(1): 53.
Ahmad Khan, Muhammad Amjad Ali, Muhammad Tahir, Samreen Nazeer, Muhammad Zubair Akram, Muhammad Arslan Azmat and Sabina Asghar. 2023. Response of various wheat varieties against root-knot nematodes (<i>Meloidogyne graminicola</i>) based on their morphological characters and grain yield. <i>Sarhad Journal of Agriculture</i> , 39(4): 944-951.
Muhammad Tahir, Muhammad Amjad Ali, Ahmad Khan, Muhammad Zubair Akram, Sana Ullah, Imran Faraz, Muhammad Shahroz Khan, Muhammad Abrar, Fahad Ali and Qaisar Abbas. 2023. Impact of various soil amendments on root knot nematodes and plant growth attributes of tomato (<i>Solanum lycopersicum</i> L.). <i>Journal of Pure and Applied Agriculture</i> 8(4): 30-37.
Mehwish Zafar, Muhammad Shahzad, Muhammad Zubair Akram, Quratulain, Mehak Shehzad and Samreen Nazeer. 2024. Assessment of growth and physiological traits of <i>Chenopodium quinoa</i> lines under different salt levels. <i>Sarhad Journal of Agriculture</i> , 40: 315-324.
Bushra Irfan, Muhammad Shahbaz, Asif Mukhtar, Muhammad Zubair Akram, Muhammad Atif Bashir, Sabina Asghar, Abdul Ghaffar and Samreen Nazeer. 2024. Seed Priming with Thiourea enhances the performance of Sesame (<i>Sesamum indicum</i> L.) varieties under salinity stress. <i>Sarhad Journal of Agriculture</i> , 38: 1007-1016.
Muhammad Zubair Akram, Anna Rita Rivelli, Angela Libutti, Fulai Liu and Christian Andreasen. 2024. Mitigation of drought stress for quinoa (<i>Chenopodium quinoa</i> Willd.) varieties using woodchip biochar-



amended soil. *Plants*, 13: 2279.

Muhammad Zubair Akram, Angela Libutti and Anna Rita Rivelli. 2024. Drought stress in quinoa: effects, responsive mechanisms, and management through biochar amended soil: A review. *Agriculture*, 14: 1418.

Articles in reviews

Shahid Ali Khan, Farooq Ahmad, Muhammad Zubair Akram, Yan Tongyu, Fatima Urooj, Kamran Ahmad, Saeed Ullah, Sharmeen Zulfiqar, Tahira Batool, Aqsa Sarwar, Yaqoob Sultan and Samreen Nazeer. 2024. Morpho-anatomical Alterations in *Euphorbia hirta* L. in Various Regions of Faisalabad, Pakistan (Accepted by *Sarhad Journal of Agriculture*).

Congress proceedings

Muhammad Zubair Akram, Angela Libutti and Anna Rita Rivelli. 2024. Enhancing vegetative growth of quinoa and soil properties under water shortage through targeted organic amendments. *Biology and Life Sciences Forum*, 30(1): 4.

OTHER INFORMATION

References

Anna Rita Rivelli (Ph.D. Advisor)

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Angela Libutti (Ph.D. Co-Advisor)

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Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.



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