Curriculum Vitae

Name	:	**MUHAMMAD JAVED**
Father's Name	:	QAIM-UD-DIN
Date of Birth	:	January 1, 1985
Marital Status	:	Married
Domicile	:	Muzaffargarh, Punjab, Pakistan
N.I.C. No.	:	32303-7765084-9
Nationality	:	Pakistani
Religion	:	Islam
Cell Phone	:	+92-300-374-83-67
E-mail	:	muhammad.javed@ue.edu.pk; javedbotany@gmail.com

Present Address:

Department of Botany, University of Education, Lahore, Campus Dera Ghazi Khan, Kangan Road, Dera Ghazi Khan

Permanent Address:

Basti Dauna Post office Basira Tehsil Kot Addu District Muzaffargarh

Qualifications:

Academic					
Degree/ Certificate	**Institution**	**Year**	**CGPA/ Marks Obtained**	**%age**	**Division**
Ph.D	B.Z. University Multan	2021	CGPA=3.30/4	82	1st
M.Phil	B.Z. University Multan	2009	CGPA=4.01/5	80	1st
M.Sc	B.Z. University Multan	2006	CGPA=3.88/5	78	1st
B.Sc	B.Z University Multan	2004	461/800	58	2nd
F.Sc	BISE Dera Ghazi Khan	2002	729/1100	66	1st
Matric	BISE Dera Ghazi Khan	2000	670/850	79	1st

Professional Qualification:

Degree/ Certificate	**Institution**	**Year**	**Marks Obtained**	**%age**	**Division**
M.Ed	A.I.O.U, Islamabad	2013	793/1200	66	1st
B.Ed	A.I.O.U, Islamabad	2008	662/900	73	1st

Distinctions/ Honors:

- 4th position in M.Sc Botany from Institute of Pure of Pure and Applied Biology, Bahauddin Zakariya University, Multan
- 1st position in Matric at Govt. High School Douna (Muzaffargarh)

Teaching experience:

- Served as Lecturer in Biology at Punjab Higher Education Department from 27-08-2012 to 21-11-2016.
- Served as Lecturer in Botany at University of Education, Lahore, Campus Dera Ghazi Khan from 22-11-2016 to 22-12-2022.
- Working as Assistant Professor of Botany, University of Education, Lahore, Campus Dera Ghazi Khan since 22-12-2022.

Non-teaching/Admin experience:

- Working as Incharge Internal Examinations, University of Education, Lahore, Campus Dera Ghazi Khan since 01-10-2018.
- Working as Coordinator, Department of Botany, University of Education, Lahore, Campus Dera Ghazi Khan since 14-02-2023.

Publications:

Research articles published

1. Hamna Asif, Muhammad Bilawal Junaid, Habib Ali, Farwa Tariq, **Muhammad Javed**, Seema Batool, Imran Mahmood, Ghulam Abbas, Amal Mohamed AlGarawi, Komolitdin Sultonov, Jobborov Bakhrom, Aleksandra O. Utkina and Mohd Asif Shah (2025). Mitigating cobalt toxicity in linseed (*Linum usitatissimum* L.): the role of ascorbic acid in enhancing pigments formation, antioxidant defense and gene expression. BMC Plant Biology, 25:1653.
2. Iram Batool, Tongjun Qin, Ahsan Ayyaz, Fakhir Hannan, **Muhammad Javed**, Weiqi Chen, Zafar Ullah Zafar, Muhammad Shahbaz Naeem, Muhammad Ahsan Farooq and Weijun Zhou (2025). Overexpression of rapeseed BnaLhcb5.3 mediates cellular metabolism and antioxidant defense under chromium stress. Physiology and Molecular Biology of Plants, 31.
3. Khizir Abbas, **Muhammad Javed**, Sidra Aslam, Fizza Rimal Butt, Mysoon M. Al-Ansari, Mohamed Soliman Elshikh, Muhammad Khubaib Ijaz, Habib Ali, Marjan Aziz, Umer Mahmood and Tabarak Malik (2025). Co-application of Potassium and Thiourea for mitigating salinity stress in wheat seedlings. Scientific Reports, 15:1468.
4. Noreen Kareem, **Muhammad Javed**, Madiha Rashid, Zahra Noreen, Kakaish Raees, Anam Ilyas and Humira Ashraf (2025). Early growth responses of selected cucurbit vegetables to salt stress. International Journal of Applied and Experimental Biology, 4(2): 303-311.

5. Shakil Ahmad, Abdur Razzaq, Binish Khaliq, **Muhammad Javed**, Muhammad Iqbal (2025). Influence of CuO nanoparticles on photosystem II structural stability and functional activity of corn (*Zea mays* L.) under drought stress. International Journal of Applied and Experimental Biology.
6. Zaryab Ali Abbass, Maryam Zahra, Habib Ali, **Muhammad Javed**, Imran Mahmood, Mavadat Hussain Alvi, Alishba Waheed, Sadam Hussain, Sachin Kumar (2024). Zinc-Lysine and Iron-Lysine mitigate chromium toxicity in Pearl millet (*Pennisetum glaucum*) through modulating photosynthetic and antioxidant system and inhibiting chromium uptake and translocation. Environmental Science and Pollution Research.
7. **Muhammad Javed**, Muhammad Iqbal, Habib ur Rehman Athar, Zafar Ullah Zafar, Fahim Arshad, Muhammad Ashraf (2024). Role of photosystem II activity in salt tolerance of *Panicum antidotale* and *Panicum turgidum*: Insights from chlorophyll *a* fluorescence analysis on excised leaf. Journal of Animal and Plant Sciences. 34(2)387-399.
8. Ehsan Ali, Muhammad Farooq Azhar, Edris Alam, Zainab Rehman, Sami Ullah., Aqeel Ahmad, Abu Reza Md. Towfiqul Islam, Wajid Zaman, **Muhammad Javed**, Praveen Mittal (2023). Deforestation perspectives of dry temperate forests: main drivers and possible strategies. Frontiers in Environmental Science, 11(1).
9. Abdul Ghaffar, Nadeem Hussain, Rahaf Ajaj, Suzan Marwan Shahin, Hussan Bano, **Muhammad Javed**, Ayesha Khalid, Memona Yasmin, Kausar Hussain Shah, Muhammad Zaheer, Muhammad Iqbal, Zafar Ullah Zafar and Habib ur Rehman Athar (2023). Photosynthetic activity and metabolic profiling of bread wheat cultivars contrasting in drought tolerance. Frontiers in Plant Science,14.
10. Ghulam Mustafa, Asia Iqbal, Arshad Javid, Waqas Ali, Nisar Ahmad, Muhammad Saleem, Muhammad Farooq, Muhammad Farooq, Sadam Hussain, Ahmad Ali, Muhammad Khalid, Vijay Lal, Sheikh Muhammad Azam, **Muhammad Javed** and Fatima Sughra (2022). Morphological and genetic characterization of various *Apis* species captured from selected sites of Punjab. Fresenius Environmental Bulletin, 31(12): 11259-11269.
11. Muhmmad Zaheer, Zafar Ullah Zafar, Habib-ur-Rehman Athar, Hussan Bano, Misbah Amir, Ayesha Khalid, Hamid Manzoor, **Muhammad Javed**, Muhammad Iqbal, Chukwuma C. Ogbaga and Muhammad Kamran Qureshi (2022). Mixing tannery effluent had fertilizing effect on growth, nutrient accumulation and photosynthetic capacity of some cucurbitaceous vegetables: A little help from foe. Environmental Science and Pollution Research, 29(59).
12. Ahsan Ayyaz, Rouyi Fang, Junyi Ma, Fakhir Hannan, Qian Huang, Habib-ur-Rehman Athar, Yongqi Sun, **Muhammad Javed**, Shafaqat Ali, Weijun Zhou and Muhammad Ahsan Farooq (2022). Calcium nanoparticles improve drought stress tolerance in *Brassica napus* by modulating the photosystem II, nutrient acquisition and antioxidant performance. NanoImpact, 28(1): 100423.
13. Nadeem Hussain, Younas Sohail, Nasir Shakeel, **Muhammad Javed**, Hussan Bano, Hafiza Saima Gul, Zafar Ullah Zafar, Islam Frahat Zaky Hassan, Abdul Ghaffar, Habib-ur-Rehman Athar and Rahaf Ajaj (2022). Role of mineral nutrients, antioxidants, osmotic adjustment and PSII stability in salt tolerance of contrasting wheat genotypes. Scientific Reports, 12(1): 12677.

14. Misbah Amir, Nahidah Bashir, Shehrooz Afzal, Habib-ur-Rehman Athar, Zafar ullah Zafar, Seema Mahmood, Ali Sher Kashif, Talou e Islam Inqalabi, Ahsan Ayyaz, Iqra Rasheed, Zahida Asghar, Khadija Zafar, **Muhammad Javed**, Muhammad Iqbal and Maleeha Kashif (2022). Chlorophyll "*a*" fluorescence of *Zea mays* L. (maize) cultivars that differ in degree of their drought tolerance. Journal of Cereal Research, 14(1). 106-119.

15. Shehrooz Afzal, Misbah Amir, Sanobar Shadab Qamar, Ayesha Tariq, **Muhammad Javed**, Zafar Ullah Zafar and Habib ur Rehman Athar (2021). Correlation and heritability studies of yield and yield related traits in F5 *Triticum aestivum* lines from a cross Cv Fsd-08 × Cv S-24. Journal of Cereal Research, 13(3): 287-294.

16. **Muhammad Javed**, Muhammad Iqbal, Hussan Bano, Nadeem Hussain, Abdul Ghaffar, Zafar Ullah Zafar, Altaf Hussain, Muhammad Abdullah, Ahsan Ayyaz, Muhammad Ahsan Farooq, Muhammad Ashraf and Habib-ur-Rehman Athar (2024). Photosynthetic acclamatory response of *Panicum antidotale* Retz. populations to root zone desiccation stress. Brazilian Journal of Biology, 84(4): e 252735.

17. Ahsan Ayyaz, Muhammad Ahsan Farooq, Muhammad Dawood, Abdul Majid, **Muhammad Javed**, Habib-ur-Rehman Athar, Hussan Bano and Zafar Ullah Zafar. (2021). Exogenous melatonin regulates chromium stress‐induced feedback inhibition of photosynthesis and antioxidative protection in *Brassica napus* cultivars. Plant Cell Reports, 40(11): 2063-2080.

18. **Muhammad Javed**, Muhammad Ashraf, Muhammad Iqbal, Muhammad Ahsan Farooq, Zafar Ullah Zafar and Habib-ur-Rehman Athar (2021). Chlorophyll fluorescence, ion uptake, and osmoregulation are potential indicators for detecting ecotypic variation in salt tolerance of *Panicum antidotale* Retz. Arid Land Research and Management, 35(3).

19. Ahsan Ayyaz, Yamna Noor, Hussan Bano, Muhammad Awais Ghani, **Muhammad Javed**, Muhammad Iqbal, Zafar Ullah Zafar and Muhammad Ahsan Farooq (2021). Effects of exogenously applied melatonin on growth, photosynthesis, ion accumulation and antioxidant capacity of canola (*Brassica napus* L.) under chromium stress. Pakistan Journal of Botany, 53(5): 1561-1570.

20. Nadeem Hussain, Abdul Ghaffar, Zafar Ullah Zafar, **Muhammad Javed**, Kausar Hussain Shah, Sibgha Noreen, Hamid Manzoor, Muhammad Iqbal, Islam Frahat Zaky Hassan, Hussan Bano, Hafiza Saima Gul, Misbah Aamir, Ayesha Khalid, Younas Sohail, Muhammad Ashraf and Habib-ur-Rehman Athar (2021). Identification of novel source of salt tolerance in local bread wheat germplasm using morpho‐physiological and biochemical attributes. Scientific Reports, 11(1): 10854.

21. Sadia Bashir, Misbah Amir, Faiza Bashir, **Muhammad Javed**, Adnan Hussain, Saba Fatima, Rabia Parveen, Aneela Kanwal Shahzadi, Shehrooz Afzal, Shumaila Raza, Tooba Horain, Ayesha Iqbal, Ayesha Pervaiz, Atiq-ur-Rehman, Ahsan Ayyaz, Zafar Ullah Zafar and Habib-ur-Rehman Athar (2021). Structural and functional stability of photosystem-II in *Moringa oleifera* under salt stress. Australian Journal of Crop Science, 15(5): 676-682.

22. Ahsan Ayyaz, Misbah Amir, Sarah Umer, Muhammad Iqbal, Hussan Bano, Hafiza Saima Gul, Yamna Noor, Aneela kanwal, Ayesha khalid, **Muhammad Javed**, Habib Rehman Athar, Zafar Ullah Zafar and Muhammad Ahsan Farooq (2020). Melatonin induced changes in photosynthetic efficiency as probed by OJIP associated with

improved chromium stress tolerance in canola (*Brassica napus* L.). Heliyon, 6(7): e04364.

23. Muhammad Iqbal, Habib-ur-Rehman Athar, Muhammad Ibrahim, **Muhammad Javed**, Zafar Ullah Zafar and Muhammad Ashraf (2019). Leaf proteome analysis signified that photosynthesis and antioxidants are key indicators of salinity tolerance in canola (*Brassica napus L*.). Pakistan Journal of Botany, 51(6): 1955-1968.

24. Habib-ur-Rehman Athar, Sarah Ambreen, **Muhammad Javed**, Mehwish Hina, Sumaira Rasul, Zafar Ullah Zafar, Hamid Manzoor, Chukwuma C. Ogbaga, Muhammad Afzal, Fahad Al-Qurainy and Muhammad Ashraf (2016). Influence of sub-lethal crude oil concentration on growth, water relations and photosynthetic capacity of maize (*Zea mays* L.) plants. Environmental Science and Pollution Research, 23:18320–18331.

25. Amir Ijaz, Zahid Anwar, Muhammad Irshad, Zafar Iqbal, Muhammad Arshad, **Muhammad Javed**, Muhammad Zulfiqar Ahmad, Abdul Rehman, and Aftab Ahmad (2014). Purification and kinetic characterization of statistically optimized cellulase produced from *Aspergillus niger*. Romanian Biotechnological Letters, 19(6): 9835-9845.

Book Chapter

1. Zafar Ullah Zafar, Hamid Manzoor, Sumaira Rasul, Sibgha Noreen, Qasim Ali, Muhammad Iqbal, **Muhammad Javed**, Hafiza Saima Gul, Zara Ahmad, Faisal Shahzad, Chukwuma C. Ogbaga, Habib-ur-Rehman Athar and Muhammad Ashraf (2017). Strategies to improve crop salt and drought tolerance: Success and limitations. Quality and quantum improvement in field crops, pp. 265-298. Agribios, New Dehli, India.

Thesis Supervision:

- HEC approved supervisor
- Supervised research students at BS and MS level

Sr. No.	Name	Student ID	Program	Session	Thesis title
1	Shaista Allah Bakhsh	msf24001912	MS Botany	2024-26	Unveiling Morphological, Anatomical and Physiological Adaptations in *Solanum virginianum* L. along Different Elevational Gradient of Koh-e-Sulaiman
2	Tania Bibi	msf24001916	MS Botany	2024-26	Study of Morphological, Anatomical and Physiological Changes in *Indigofera oblongifolia* Forssk. along the Elevational Gradient of Koh-e-Sulaiman
3	Akifa Afzal Chughtai	msf24001917	MS Botany	2024-26	Assessment of Variations in Structural and Functional Traits of *Dodonaea viscosa* Jacq. along Elevational Gradient of the Koh-

					e-Sulaiman
4	Afiya Afzal Chughtai	msf24007689	MS Botany	2024-26	Appraisal of Morpho-anatomical and Physiological Modifications in *Withania somnifera* (L.) Dunal at Various Elevations in the Koh-e-Sulaiman Range
5	Saira Malik	mss24000182	MS Botany	2024-26	Impact of Exogenously Applied Copper Oxide Nanoparticles on Some Morphological, Physiological and Biochemical Characters of Wheat (*Triticum aestivum* L.) under Drought Stress
6	Nayab Fatima	mss2400186	MS Botany	2024-26	Assessment of Growth, Pigments and Mineral Uptake in Wheat (*Triticum aestivum* L.) by Foliar Application of Moringa Leaf Extract under Water Stress
7	Sana Safdar	msf23007581	MS Botany	2023-25	Effect of Exogenously Applied Alpha Tocopherol on Growth, Water Status and Photosynthetic Capacity of Maize (*Zea mays* L.) under Drought Stress
8	Najam Ul Hassan	msf23007583	MS Botany	2023-25	Enhancing Moisture Stress Tolerance in Maize (*Zea mays* L.) by Exogenous Application of Salicylic Acid
9	Farman Ali	msf23007587	MS Botany	2023-25	Morpho-physiological Responses of Sorghum (*Sorghum bicolor* L.) and Pearl Millet (*Pennisetum glaucum* L.) to Root Zone Desiccation
10	Muhammad Mahtab	msf23007588	MS Botany	2023-25	Appraisal of Drought Tolerance in Maize (*Zea mays* L.) and Pearl Millet (*Pennisetum glaucum* L.) Using Morpho-physiological Characters
11	Muhammad Mustafa	msf23007589	MS Botany	2023-25	Assessment of Ascorbic Acid Mediated Drought Stress Tolerance in Maize (*Zea mays* L.)
Sr. No.	**Name**	**Student ID**	**Program**	**Session**	**Thesis title**
1	Muhammad Amjad	bsf2001918	BS Zoology	2020-24	Ungulates Farming and Business in Layyah, Punjab, Pakistan
2	Shahmeer Imam	bsf2001979	BS Zoology	2020-24	Trapping Methods of Falcons in Kot Chutta, District Dera Ghazi

					Khan, Punjab, Pakistan
3	Nazeer Ahmad	bsf2002163	BS Zoology	2020-24	Fish Meat Preference in Dera Ghazi khan, Punjab, Pakistan
4	Ammar Yasir	bsf2002204	BS Zoology	2020-24	Analysis of water from University of Education DG Khan Campus and Post Office Paigah, Dera Ghazi Khan, Punjab, Pakistan
5	Muhammad Imran	bsf2002493	BS Zoology	2020-24	Prevalence of Typhoid Fever in District Dera Ghazi Khan, Punjab, Pakistan
6	Aqsa Mahnoor	bsf2002100	BS Botany	2020-24	Study of morpho-anatomical characters in *Datura stramonium* L. collected from different habitats
7	Muhammad Uzair	bsf1905540	BS Botany	2019-23	Exploring the Hidden Anatomy: A Morpho-anatomical Investigation of *Aerva javanica* (Burm.f.) from Taunsa Sharif, Dera Ghazi Khan
8	Muhammad Kashif	bsf1905888	BS Botany	2019-23	Exploring Soil Composition and Anatomy of *Abutilon indicum* L. through a Comparative Survey Study
9	Abid Hussain	bsf1905491	BS Botany	2019-23	Understanding of Morpho-anatomical Characteristics of *Mentha spicata* L. in Connection with Soil Characteristics
10	Ateeq ur Rehman	bsf1905528	BS Botany	2019-23	Study of Morpho-Anatomical Features of *Solanum nigrum* L. from Natural Habitats of Kot Chutta, Dera Ghazi Khan
11	Muhammad Irfan	bsf1905810	BS Botany	2019-23	Comparison in Soil Composition and Anatomical Characteristic of *Amaranthus viridis* L. under Natural Condition: A Survey Study
12	Kakaish Raees	bsf1803504	BS Botany	2018-22	Seed Germination and Seedling Growth of *Cucumis sativus L.*, *Citrullus lantus* (Thunb)., *Cucumis melo* L. and *Luffa acutangula* L. are Reduced by Different NaCl Levels
13	Noreen Kareem	bsf1803995	BS Botany	2018-22	Effect of Salinity on Seed Germination and Seedling Growth of *Luffa aegyptica* L.,

					Cucurbita pepo L., *Praecitrullus fistulosus* (Stocks) and *Cucurbita maxima* (Duchesne)

Conference/ Symposium/Webinar Participation:

- 1st International conference & exhibition on plant science innovations for sustainable agriculture & climate resilience, December 22-23, 2025, Department of Botany, Ghazi University, Dera Ghazi Khan, Pakistan
- 3rd International conference on recent approaches in plant sciences, November 12-13, 2025, Department of Botany, Division of Science and Technology, University of Education, Lahore, Pakistan
- 3rd International Ege congress on scientific research, December 20-22, 2024, Faculty of Economics and Administrative Sciences & IKSAD Institute, Ege University, Izmir, Turkey.
- 9th International & 18 national conference of plant scientists "Capitalizing plant diversity for ensuring food security", October 28-30, 2024, Institute of Botany, Bahauddin Zakariya University, Multan, Pakistan.
- 2nd International conference on recent approaches in plant sciences, May 04-05, 2023, Department of Botany, Division of Science and Technology, University of Education, Lahore, Pakistan.
- International conference on agriculture, animal sciences and rural development, March 3-5, 2023.
- International conference on Recent Innovations in Plants Sciences and Natural products and Natural product exhibition, February 16-17, 2023, Department of Botany, University of Okara, Pakistan.
- International webinar on the invaluable value of plant genetics resources, November 11, 2022, Agriculture, MDPI.
- 1st International conference on recent approaches in plant sciences, March 30-31, 2022, Department of Botany, Division of Science and Technology, University of Education, Lahore, Pakistan.
- International webinar on ecosystem restoration, June 5, 2021, Department of Botany, Division of Science and Technology, University of Education, Lahore, Pakistan
- International conference on sustainable agriculture: food security under changing climate scenarios, April 3-5, 2019, Ghazi University, Dera Ghazi Khan, Pakistan.
- International conference on major environmental constraints: Assessment and their reclamation, April 28-30, 2016 GC, University, Faisalabad, Pakistan.
- National symposium on plant stress and Human life, February 16, 2015 GC, University, Faisalabad, Campus Layyah, Pakistan.

Workshop Participation:

- Capacity building program for teaching faculty of PHEC institutions, Qasim Ali Shah foundation Lahore.

- Modern techniques in research on abiotic stress tolerance in plants, March 10-14, 2014, Pakistan Atomic Energy Commission (PAEC), Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad.

Member Association:

Life member of Botanical Society of Pakistan.
Life member of Zakariyan Association of Botanists, Bahauddin Zakariya University, Multan, Pakistan.

Apparatus Handling:

Chlorophyll meter (SPAD)
Multi speq (Photosyn Q)
Pocket PEA Chlorophyll Fluorimeter
FluorPen
Dual PAM
Spectrophotometer
Centrifuge
Flame Photometer
Infrared Gas Analyzer (IRGA)
Water potential apparatus (Pressure Bomb chamber)
Osmometer
Polymerase Chain Reaction (PCR)
Gel Electrophoresis system (Agarose & SDS PAGE)

Research Interest:

Plant Stress Physiology
Plant Molecular Biology

Computer Skills:

Microsoft Office (MS word, MS EXCEL, MS Power Point), Internet Surfing

Statistical Tools:

COSTAT, MINITAB, MS EXCEL, Origin Pro, Graph Pad Prism

Sports:

Actively participate in various sports, particularly in Cricket.

References:

- **Prof. Dr. Habib-ur-Rehman Athar**
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