

CURRICULUM VITAE



ZUBAIR ASLAM, Ph. D.

zubair.aslam@uaf.edu.pk

zauaf@hotmail.com

PERMANENT ADDRESS

House no. P524, Street no. 6, Hamza block,
Rajaewala (Green view colony),
Faisalabad, Pakistan
Punjab, Pakistan

INSTITUTION ADDRESS

Department of Agronomy,
University of Agriculture,
Faisalabad, Pakistan
Phone: +92-334-7648783

Research Impact Factor: > 160.2

A. ACADEMIC PROFILE:

Tenured Associate Professor, under HEC Tenure Track System (TTS), Department of Agronomy, University of Agriculture, Faisalabad, Punjab, Pakistan (www.uaf.edu.pk). (01-9-2019~Until now).

Post-doc: Endeavour Award, 2014 at University of Queensland, Australia (July 18, 2014~January 20 Jan., 2015). Supervisor: Prof. Steve Adkins (s.adkins@uq.edu.au).

Assistant Professor, under HEC Tenure Track System (TTS), Department of Agronomy, University of Agriculture, Faisalabad, Punjab, Pakistan (www.uaf.edu.pk). (01-3-2011~31-8-2019).

Assistant Professor, under HEC Interim Placement of Fresh PhDs Program (IPFP), Department of Agronomy, University of Agriculture, Faisalabad, Punjab, Pakistan (www.uaf.edu.pk). (12-03-2010~28-2-2011).

Post-doc. Gyeongsang National University, Korea (www.gnu.ac.kr) (01-03-2007~31-08-2009). Supervisor: Prof. Young Ryun Chung (yrchung@gnu.ac.kr)

Ph. D. (Biological Sciences). Korea Advanced Institute of Science and Technology (KAIST), Korea. (01-03-2002~02-02-2007).

M. Sc. (Hons.). (Agronomy). University of Agriculture, Faisalabad, Punjab, Pakistan. (01-12-1999~26-01-2002). CGPA= 3.59

B. Sc. (Hons.). (Agri). University College of Agriculture, Bahauddin Zakariya University, Multan, Punjab, Pakistan. (01-12-95~27-11-1999). CGPA= 3.46

B. DISSERTATION TITLES:

Ph. D. Thesis

Analysis of Microbial Diversity in Shrimp- and Fish-Jeotgal by Cultivation-Independent and -Dependent Methods.

M. Sc. (Hons.) Thesis

Efficacy of Different Weed Management Strategies in Mungbean (*Vigna radiata* L.).

C. Research Interests: Aim is to combine the knowledge of Agronomy and

Microbiology and to fulfill the following interests; weed control by biocontrol methods, vermicomposting, composting and biofertilizer, water and wastewater treatment, application of microbiology in Agriculture, human health and industry,

biodegradation and bioremediation, microbial ecology, microbial taxonomy, use of biologically active compounds produced by microbes.

D. RESEARCH AND TEACHING EXPERIENCE:

a. Current Research Funding

Current Research Funding

Sr. No.	Project Title	Position	Funding agency	Starting date	Total duration	Total amount (Rs. million)	Current situation
1	Multidisciplinary and Sustainable Strategies to Manage Sugar-Industrial By-Products for Developing Valuable Products	PM/PI	SRDB	Jan 2025	3 years	58.701	Accepted
2	DEVELOPING AGRICULTURAL WASTE MANAGEMENT SYSTEM TO PRODUCE DIFFERENT KINDS OF ORGANIC FERTILIZERS FOR SUSTAINABLE AGRICULTURE	Project Manager	PARB	February 2022	3 years	42.388	Continue
3	RAMIE (<i>Boehmeria nivea</i> L.)- A POTENTIAL SUSTAINABLE NATURAL FIBRE CROP: AGRONOMIC EVALUATION OF EXOTIC GERMPLASM AND FIBRE PROCESSING TECHNIQUES FOR ITS LARGE-SCALE COTTONIZATION IN PAKISTAN	Member	HEC NRPU program, Pakistan	June 2023	3 years	6.1644	Continue
4	USE OF BIODEGRADABLE SUPERABSORBENT POLYMERS IN RAIN-FED AGRICULTURE FOR ENHANCING FARMSCALE PROFITABILITY AND CROP WATER USE EFFICIENCY	Member	PARB	January 2022	3 years	28.853	Continue
5	ANAEROBIC DIGESTION OF VARIOUS CROP RESIDUES AND POULTRY MANURE FOR BIOGAS AND	Co- PI	HEC NRPU program, Pakistan	January 2022	3 years	3.385	Continue

	BIO-FERTILIZER PRODUCTION						
6	VERMICOMPOSTING: AN AGRICULTURAL WASTE MANAGEMENT TECHNOLOGY	PI	PakTurk Researchers' Mobility Grant Program 2017	February 2019	3 years	1.860	Completed
7	VERMICOMPOSTING: A RESOURCEFUL ORGANIC FERTILIZER TO IMPROVE AGRICULTURE PRODUCTION AND SOIL HEALTH	PI	HEC NRPU program, Pakistan	July 2018	3 years	7.392	Completed
8	EXPLOITATION OF FUNGAL PATHOGENS AS BIO-CONTROL AGENTS FOR THE MANAGEMENT OF WEEDS IN WHEAT CROP	Co- PI	HEC NRPU program, Pakistan	March 2019	3 years	2.933	Continue
9	NEW PERSPECTIVES ON REDUCING ARSENIC ACCUMULATION IN RICE THROUGH INNOVATIVE INTEGRATED REMEDIATION AND MANAGEMENT STRATEGIES	Co- PI	HEC NRPU program, Pakistan	April 2017	3 years	2.325	Completed
10	STUDYING PLANT DEFENSE RESPONSE IN OIL SEED RAPE (<i>Brassica napus</i>) FOR SUSTAINABLE PEST MANAGEMENT	Co- PI	PAKNORWAY Program	March 2014	3 years	34.057	Completed
11	INFLUENCE OF CROP ALLELOPATHY ON THE MICROBIAL DIVERSITY OF RHIZOSPHERE	PI	HEC NRPU program, Pakistan	June 2013	3 years	10.171	Completed
12	DIRECT SEEDING OF RICE, A NEW OPTION IN RICE-WHEAT CROPPING SYSTEM IN CENTRAL PUNJAB	Co- PI	Endowment Fund, UAF	June 2014	2 years	1.531	Completed
13	STUDY OF POLYSACCHARIDES PRODUCED BY A NEWLY DISCOVERED BACTERIUM ISOLATED FROM KOREAN SOIL	PI	HEC, Pakistan	Sep. 2010	09 months	0.5	Completed

Funding as PI	= 121.012 million Rs
Funding as Co-PI	= 73.084 million Rs
Total funding	= 256.407 million Rs

- **Senior Research Fellow**, Gyeongsang National University, Republic of Korea (3.2007~8.2009).
- **Project Researcher**, “The interaction and resources of the uncultivable microorganisms by using new microorganism isolation technique in the special anaerobic environment”, supported by 21C Frontier R & D Program (01.04.2005~31.03.2006).
- **Project Researcher**, “The resources of the phototrophic bacteria and the autotrophic bacteria like cyanobacteria and microalgae”, supported by 21C Frontier R & D Program (01.10.2002~31.03.2005).
- **Project Researcher**, “Development of the microbial agents for agriculture and environmental cleanup by using the effective microorganisms”, supported by KAIST Brand Support Program, Korea (01.10.2004~31.12.2004).

b. Teaching Courses

Course No	Course Title	Credit Hours
AGR-725	Post harvest Physiology of Field Crops	3(3-0)
AGR-723	Agricultural Biomass Management	3(2-1)
AGR-716	Allelopathy in Crop Production	3(2-1)
AGR-709	Seed Physiology	3(2-1)
AGR-721	Stree Physiology	3(2-1)
C. Phy-706	Plant Stress Physiology	3(2-1)
C. Phy-709	Biological Nitrogen Fixation	3(2-1)
AGRON-202	Principles of Agronomy	2(1-1)
AGRON-201	Field Crop Production	3(2-1)
AGRON-202	Climate Change and Crop Productivity	3(2-1)
AGRON-204	Introduction to Weed Science	3(2-1)
AGRON-502	Introduction to Weed Science	2(1-1)
AGRON-512	Echophysiological Aspects of Weeds	3(2-1)
AGRON-303	Introduction to Agriculture	3(2-1)
AGRON-201	Basic Agriculture	3(2-1)
AGRON-203	Weed Control Methods	3(2-1)
AGRON-204	Weed Control Methods	3(2-1)
AGRON-301	Agro-Ecology	3(2-1)
AGRON-401	Agrotechnology of Minor Field Crops and Medicinal Plants	4(2-1)
AGRON-407	Environmental Physiology and Crop Improvement	4(2-2)
AGRON-305	Field Crop Physiology	3(2-1)
AGRON-402	Seed Science and Technology	3(2-1)
AGRON-317	Water Relations of Crop Plants	2(1-1)
C.Phy-301	General Crop Physiology	2(1-1)

c. Students Supervision

As a Supervisor (Ph.D. candidates)

Sr. No.	Name	Reg. No.	Co-Supervisor	Year of Degree	Research Title
1	Qamar uz Zaman	2007-ag-2417	Dr. Muhammad Rashid	2017	Enriching the grain of rice genotypes with zinc through biofortification techniques to combat malnutrition
2	Raza ullah	2006-ag-1838	Prof. Dr. Abdul Khaliq	2018	Influence of crop-mediated modifications on mung bean and the microbial diversity of rhizosphere
3	Ali Ahmad	2011-ag-2643	Prof. Dr. Korkmaz Bellitürk	2022	Microbial biomass, nutrient availability and wheat (<i>Triticum aestivum</i> L.) productivity in vermicompost amended soil under different soil moisture regimes
4	Sabeela Yaqoob	2019-ag-30	Prof. Dr. Abdul Khaliq	2025	Utilization of agricultural waste for enhancing productivity and sustainability in rice-wheat system
5	Ruqia Fatima	2020-ag-1003	PhD	2026	Improving thermotolerance in maize (<i>Zea mays</i>) through organic soil amendments

As a Co-Supervisor (Ph.D. candidates)					
1	Tasawar Abbas	2007-ag-2296	Prof. Dr. Zahir A. Zahir	2017	Effect of allelopathic bacteria on the growth and yield of wheat (<i>Triticum aestivum</i>) and its associated weeds
2	Shazia Afzal	2006-ag-1797	Dr. Farrukh Nawaz	2017	Impact of Eucalyptus based agroforestry system on soil quality and rural socio-economic conditions
3	Shahbaz Nasir Khan	2007-ag-1078	Dr. Abdul Nasir Awan	2021	Development of constructed wetlands to reuse textile industrial effluent for wastewater irrigation by using phytotechnologies
4	Saima Musaddaq	2008-ag-1740	Prof. Dr. Abdul Khaliq	2021	Evaluating the potential of beneficial fungus and antioxidants for improving the resistance against drought stress in maize (<i>Zea mays</i> L.)
5	Fazila Younas	2015-ag-441	Dr. Irshad Bibi	2022	Integrated treatment of chromium-contaminated tannery wastewater using constructed wetlands: Exploring the potential of plants and bedding media
6	Abbas Shoukat				

As a Supervisor {(M.Sc. (Hons.) Agri. candidates)}

Sr. No.	Name	Reg. No.	Year of Degree	Research Title
1	Misbah ul Islam	2006-ag-1411	2012	Efficacy of rice straw extracts on weeds and productivity of wheat (<i>Triticum aestivum</i> L.).
2	Aftab Ahmad	2007-ag-2715	2013	Comparative performance of direct seeded rice (DSR) cultivar planted by different sowing methods
3	Qamar uz Zaman	2007-ag-2417	2013	Evaluation of Different rice cultivars at various seeding depths
4	Asif Ameen	2007-ag-2412	2013	Performance of different cultivars in DSR in response of various seeding densities
5	M. Akbar Ali	2007-ag-1839	2013	Bio Efficacy of Fenoxaprop-p-ethyl along with the use of Bispyribac sodium for control of weeds in DSR
6	Junaid Latif	2008-ag-2147	2014	Influence of molebednum on efficiency of <i>Rhizobium</i> species for nodulation, yield and quality of mung bean
7	Muhammad Shahid	2008-ag-2997	2014	Influence of cobalt on the efficiency of <i>Rhizobium phaseoli</i> for nodulation, yield and quality of mung bean (<i>Vigna radiata</i> L.)
8	M. Firdous khan	2008-ag-2356	2014	Influence of sunflower-mediated modifications on microbial composition of wheat
9	Habib Ahmad	2006-ag-2249	2015	Influence of brassica-mediated modifications on weed dynamics and productivity of transplanted fine rice (<i>Oryza sativa</i> L.) cultivars
10	Muhammad Naveed	2013-ag-515	2015	Influence of different concentrations of cobalt to enhance the efficiency of <i>Rhizobium phaseoli</i> in mung bean under rice-mung bean cropping system
11	Muhammad Naem	2013-ag-1057	2015	Effect of PGPR on aphid susceptible and resistant cultivar of wheat
12	Sami ullan	2009-ag-2188	2015	Comparison of different concentrations of Mo to enhance the efficiency of <i>Rhizobium phaseoli</i> in mung bean under rice-mung bean cropping system
13	Muhammad Zeeshan Safdar	2014-ag-735	2016	Influence of Phosphorous Solubilizing Bacteria on the uptake of phosphorous for yield and quality of chickpea (<i>Cicer arietum</i> L.)
14	Ahsan Khan	2011-ag- 3620	2017	Assessment of the Vermicompost as a resource conservation technique for sustainable wheat production
15	Muhammad Jalal	2011-ag-3536	2017	Allelopathic effect of sunflower on the productivity of wheat cultivars, weed dynamics and culturable bacterial population
16	Muhammad Saeed Ahmed	2012-ag-3466	2018	Influence of Zn nutrition along with bacterial inoculation through seed priming on the productivity of spring maize
17	Tahir Mushtaq	2016-ag-1353	2018	Zinc enrichment through Zinc-Lycine chelate and zinc solubilizing bacteria in spring planted mung bean (<i>Vigna radiata</i> L.)

18	Mujahid Manzoor	2016-ag-649	2018	Characterization of Rhizobacteria (RB) and their interaction with seed germination and seedling growth of targeted weeds associated with different crops.
19	Ubaid Ullah	2017-ag-2773	2019	Impact assessment of different ratios of zinc and iron on wheat by foliar application
20	Sabina Yaseen	2017-ag-2772	2019	Bioremediation of allelopathy in Eucalyptus and Parthenium through vermicomposting and their use in mungbean (<i>Vigna radiata</i> L.) for enhancing its yield
21	Muhammad Shahzad	2013-ag-3839	2019	Integrated zinc biofortification through different sources of zinc by foliar application in mungbean
22	Hafeez Ameer	2012-ag-4069	2019	Zinc management in wheat (<i>Triticum aestivum</i> L.) through foliar spray of zinc- lysine chelate at different growth stages
23	Hafiz Muhammad Asif	2011-ag-2121	2019	Nutrient management through vermicomposting of different desert plant species for higher yields of maize
24	Sami-ur-Rehman	2014-ag-5225	2020	Vermicomposting transforms allelopathic conocarpus erectus into benign fertilizer and its impact assessment on mungbean
25	Muhammad Waqas	2014-ag-4724	2020	An integrated approach to nutrient management for higher productivity of mungbean
26	Mehwish Nadeem	2918-ag-3544	2020	Nutrient enrichment of vermicompost for soil improvement
27	Wajeeh ur Rehman	2015-ag-6953	2021	Optimization of vermicomposting of sugarcane baggase, trash, molasses and FYM and its effect on wheat growth
28	Muhammad Sajjad	2015-ag-6469	2021	Physiochemical, microbial and Agronomical aspects of vermicompost prepared from sunflower and castor bean stem
29	Gulnaz Anwar	2015-ag-7273	2021	Enrichment of vermicompost with cellulose degrading bacteria and chemical fertilizer (urea and sulphate of potash) to improve soil fertility and wheat (<i>Triticum aestivum</i> L.) productivity
30	Yousuf Akram	2015-ag-7301	2021	Assessment of vermiponic nutrient solutions on morphophysiological characteristics of wheat (<i>Triticum aestivum</i> L.)
31	Muhammad Saleem	2015-ah-6456	2021	Evaluating the efficacy of the vermicompost of maize residues on mung bean growth and Soil health
32	Tahreem Majeed	2014-ag-3013	2022	Impact of vermicompost and skip irrigation on the yield of mung bean (<i>Vigna radiata</i> L.)
33	Tanveer Abbas	2020-ag-10	2022	Exploring the priming potential of Moringa oleifera leaf extract (MLE) and Vermi-tea on yield performance of mung bean under various soil amendments
34	M. Ahsan Jameel	2020-ag-17	2022	Effect of integrated phosphorus management on productivity of maize genotypes and their residual impact on soil physico-chemical properties
35	M. Mohsin Aziz	2016-ag-6372	2022	Testing and Integrating of Vermi-fertilizer with Chemical Fertilizer and Simple Compost on Mung Bean (<i>Vigna radiata</i>)
36	Saher Latif	2020-ag-1642	2022	Mitigation of salt stress in Zea mays L. by nutrient management through different sources
37	Rabia Sadique Akbar	2020-ag-1674	2022	Mitigation of heavy metal stress (CdCl ₂) in Zea mays L. by nutrient management through different sources
38	Muhammad Hur	2017-ag-9229	2023	Effect of sugarcane trash vermicompost and sugarcane OFert on productivity of wheat (<i>Triticum aestivum</i> L.) and their residual impact on soil chemical properties.
39	Muhammad Shafqat	2021-ag-15	2023	Sugarcane residues management to enhance productivity of wheat (<i>Triticum aestivum</i> L.) under heat stress
40	Abdul Wahab	2017-ag-9749	2023	Wheat production assessment using organo and chemical fertilizers under semi-arid conditions of Faisalabd

41	Iqra Murtaza	2021-ag-23	2023	Morpho-physiological and biochemical responses of maize hybrids to OFert (maize stalk), vermicompost and chemical fertilizers
42	Maham Nisha Anwar	2021-ag-1285	2023	Comparative efficiency of OFert vermicompost and vermitea to improve growth and grain yield of maize
43	Muhammad Saqlain	2018-ag-7311	2024	Potential exploration of various organic amendments on yield and yield components of soybean (<i>Glycine max</i> L.)
44	Zulqarnain Hameed	2022-ag-15	2024	
45	Muhammad Atif Javeed	2022-ag-35	2024	Investigating the effect of various organic amendments on soil chemical properties, growth and yield of wheat
46	Waleed Ahmad	2016-ag-5261	2024	Effect of compost (OFert) on yield and yield components of rice in response to different irrigation systems
47	Ayesha Asghar	2022-ag-1318	2024	Higher yield sustainability by bio-organo-chemical fertilizers in transplanted rice
48	Zunaira Saif	2022-ag-1320	2024	Exploring growth and yield of transplanted rice (<i>Oryza sativa</i> L.) in response to compost
49	Amna Yasmeen	2023-ag-937	MPhil Botany	
50	Esha Dastgeer	2023-ag-946	MPhil Botany	
51	Muhammad Asim.	2019-ag-7821	MSc(Hons.) Agronomy	
52	M. Usman	2019-ag-7750	MSc(Hons.) Agronomy	
53	Fakhar ul Islam	2020-ag-3914	MSc(Hons.) Agronomy	
54	Muntaha Irfan	2024-ag-3	MSc(Hons.) Agronomy	
55	Usman			
56	Labiba			

E. REVIEWING SERVICE

- Journal of Phycology since 2008
- Microbial Ecology since 2006
- Crop & Environment since 2010
- Arabian Journal of Chemistry since 2012
- African Journal of Biotechnology since 2013
- International Journal of Agriculture and Biology since 2013
- Soil and Environment since 2013
- Journal of Agricultural Research since 2013
- International Journal of Agricultural Policy and Research
- Journal of Microbiology and Biotechnology
- Pakistan Journal of Agricultural Sciences
- Agronomy Journal
- Asian Journal of Agriculture and Biology
- Journal of Botany
- Saudi Journal of Biological Sciences
- Asian Research Journal of Agriculture

F. RESEARCH PUBLICATIONS

1. Ali Ahmad, **Zubair Aslam**, Korkmaz Bellitürk, Saddam Hussain and Irshad Bibi (Apr **2025**). Adaptive responses of two distinct wheat varieties to drought stress through microbial-augmented vermicompost. **Pakistan Journal of Botany**. 57(5): DOI: [http://dx.doi.org/10.30848/PJB2025-5\(28\)](http://dx.doi.org/10.30848/PJB2025-5(28)). (IF= 1.2).
2. Abbas Shoukat, Zulfiqar Ahmad Saqib, Javaid Akhtar, **Zubair Aslam**. (Sep 2024) Optimization and characterization of synthesized ZnO nanoparticles and conventional fertilizers for enhanced maize tolerance to salinity stress. Journal of Xi'an Shiyou University, Natural Sciences Edition. 67, 08 . DOI: 10.5281/zenodo.13621995 (IF= 5.6).
3. Abbas Shoukat, Zulfiqar Ahmad Saqib, Javaid Akhtar, **Zubair Aslam**, Md. Sazzad Hossain and Karl Hermann Mühling. (2024) Zinc and Silicon Nano-Fertilizers Influence Ionomics and Metabolite Profiles in Maize to Overcome Salt Stress. **Plants**. 13, 1224. <https://doi.org/10.3390/plants13091224> (IF= 4. 5).
4. Ali Ahmad, **Zubair Aslam**, Muhammad Ahmad, Usman Zulfiqar, Sabeela Yaqoob, Saddam Hussain, Nabeel Khan Niazi, Kaleem ul din, Manuel Gastelbondo, Ibrahim Al-Ashkar, Mohamed S Elshikh. (Jan. 2024). Vermicompost application upregulates morpho-physiological and antioxidant defense to conferring drought tolerance in wheat. **Plant Stress** 11 (2024) 100360. <https://doi.org/10.1016/j.stress.2024.100360> (IF= 5.0).
5. Ali Ahmad, **Zubair Aslam**, Shoaib Naeem, Muhammad Sarwar, Anser Ali and Muhammad Imdad Ullah. (Jan. 2024). Ascorbic acid ameliorates drought stress in maize (*Zea mays* L.) grown under field conditions. **Journal of Agriculture and Food**, 4 (2). 1-11. (IF= HEC Category Y).
6. **Zubair Aslam**, Ali Ahmad, Zain Mushtaq, Mehwish Liaquat, Tanveer Hussain, Korkmaz Bellitürk, Tahani Awad Alahmadi, Mohammad Javed Ansari, Shafeeq Ur Rahman and Zhenjie Du (Jan 2024): Evaluating the integration of vermicompost with synthetic fertilizer and compost on mung bean (*Vigna radiata* L.). **Archives of Agronomy and Soil Science**, DOI: 10.1080/03650340.2023.2301338 (IF= 2.4).
7. Ali Ahmad, Zubair Aslam, Rana Nadeem Abbas, Korkmaz Bellitürk, Saddam Hussain, Saddam Hussain, Muhammad Ahmad, Usman Zulfiqar, Ihab Mohamed Moussa, and Mohamed S. Elshikh. (Dec. 2023). Enhancing Wheat Crop Resilience to Drought Stress through Cellulolytic Microbe-Enriched Cow Dung Vermicompost. <https://doi.org/10.1021/acsomega.3c04402>. ACS Omega XXXX, XXX, XXX–XXX. (IF= 4.10).
8. Zubair Aslam, Ali Ahmad, Rana Nadeem Abbas, Muhammad Sarwar and Safdar Bashir. (Jun., 2023). Morpho-physiological, biochemical and yield responses of wheat (*Triticum aestivum* L.) to vermicompost, simple compost and NP fertilizer applications. **Pakistan Journal of Botany**. 55(6): 2143-2154, 2023. DOI: [http://dx.doi.org/10.30848/PJB2023-6\(24\)](http://dx.doi.org/10.30848/PJB2023-6(24)) (IF= 1.2).
9. **Zubair Aslam**, Ali Ahmad, Korkmaz Bellitürk , Hira Kanwal, Muhammad Asif and Ehsan Ullah (Jan., 2023). Integrated Use of Simple Compost, Vermicompost, Vermi-Tea and Chemical Fertilizers NP on the Morpho-Physiological, Yield and Yield Related Traits of Tomato (*Solanum lycopersicum* L.) **Journal of Innovative Sciences**. 9(1): 1-12. DOI | <https://dx.doi.org/10.17582/journal.jis/2023/9.1.1.12>

10. Sami-ur-Rehman, **Zubair Aslam**, Bandar S. Aljuaid ,Rana Nadeem Abbas, Saqib Bashir, Munawar Hussain Almas, Tahir Hussain Awan, Korkmaz Belliturk, Wafa'a A. Al-Taisan, Samy F. Mahmoud and Safdar Bashir. (Oct., 2022). Reduction in the allelopathic potential of *Conocarpus erectus* L. through vermicomposting. **Sustainability**. 14, 12840. <https://doi.org/10.3390/su141912840>. (IF= 3.9).
11. Ali Ahmad, **Zubair Aslam**, Korkmaz BELLİTÜRK, Saddam Hussain and Irshad Bibi (Sep., 2022). Soil application of cellulolytic microbe-enriched vermicompost modulated the morpho-physiological and biochemical responses of wheat cultivars under different moisture regimes. **Journal of Soil Science and Plant Nutrition**. 22:4153–4167. <https://doi.org/10.1007/s42729-022-01014-4> . (IF= 3.9).
12. Raza Ullah, **Zubair Aslam**, Houneida Attia, Khawar Sultan, Khalid H. Alamer, Muhammad Zeeshan Mansha, Ashwaq T. Althobaiti, Najla Amin T. Al Kashgry, Badreyah Algethami and Qamar uz Zaman. (Aug. 2022). Sorghum allelopathy: alternative weed management strategy and its impact on mung bean productivity and soil rhizosphere properties. **Life**, 12 (9), 1359. <https://doi.org/10.3390/life12091359> (IF= 3.251).
13. Muhammad Adil1, Safdar Bashir, Saqib Bashir, **Zubair Aslam**, Niaz Ahmad, Tasaddaq Younas, Rana Muhammad Ammar Asghar, Jawaher Alkahtani, Yheni Dwiningsih and Mohamed S. Elshikh. (Aug. 2022). Zinc oxide nanoparticles improved chlorophyll contents, physical parameters, and wheat yield under salt stress. **Frontiers in Plant Science**. 13:932861.doi: 10.3389/fpls.2022.932861 (IF= 6.627).
14. Ali Ahmad, **Zubair Aslam**, Saddam Hussain, Amir Bibi, Abdul Khaliq, Talha Javed, Sadam Hussain, Saqer S. Alotaibi, Hazem M. Kalaji, Arkadiusz Telesiński, Chuleemas Boonthai Iwai and Uttam Kumar. (July 2022). Rice straw vermicompost enriched with cellulolytic microbes ameliorate the negative effect of drought in wheat through modulating the morpho-physiological attributes. **Frontiers in Environmental Science**, 10:902999. doi: 10.3389/fenvs.2022.902999 (IF= 4.581).
15. **Zubair Aslam**, Ali Ahmad, Safdar Bashir, Saddam Hussain, Korkmaz Bellitürk, Jam Nazeer Ahmad, Ehsan Ullah, Samina Tanvir and Tanveer Abbas. (May 2022). Effect of integrated nutrient management practices on physiological, morphological and yield parameters of chilli (*Capsicum annum* l.). **Pakistan Journal of Botany**. 54(6): DOI: [http://dx.doi.org/10.30848/PJB2022-6\(40\)](http://dx.doi.org/10.30848/PJB2022-6(40)) (IF= 0.972).
16. Fazila Younas, Irshad Bibi, Muhammad Afzal, Nabeel Khan Niazi and **Zubair Aslam**. (Apr. 2022). Elucidating the Potential of Vertical Flow-Constructed Wetlands Vegetated with Different Wetland Plant Species for the Remediation of Chromium-Contaminated Water. **Sustainability** 2022, 14, 5230. <https://doi.org/10.3390/su14095230> (IF= 3.251).
17. Ali Ahmad, **Zubair Aslam**, Saddam Hussain, Talha Javed, Sadam Hussain, Safdar Bashir, Iqtidar Hussain, Korkmaz Belliturk, Robert Adamski, Dorota Siuta, Eldessoky S. Dessoky and Kamel Hessini. (2022). Soil application of wheat straw vermicompost enhances morpho-physiological attributes and antioxidant defense in wheat under drought stress. **Frontiers in Environmental Science**, 10:894517. doi: 10.3389/fenvs.2022.894517 (IF= 4.581).
18. Ali Ahmad, **Zubair Aslam**, Talha Javed, Sadam Hussain, Ali Raza, Rubab Shabbir, Freddy Mora-Poblete, Tasbiha Saeed, Faisal Zulfiqar, Muhammad Moaaz Ali, Muhammad Nawaz, Muhammad Rafiq, Hany S. Osman, Mohammed Albaqami, Mohamed A. A. Ahmed and Muhammad Tauseef. (Jan. 2022). Screening of wheat (*Triticum aestivum* L.) genotypes for drought tolerance through agronomic and physiological response. **Agronomy**, 12, 287. <https://doi.org/10.3390/agronomy12020287> (IF= 3.417).
19. Abdihakim Osman Heile, Qamar uz Zaman, **Zubair Aslam**, Afzal Hussain, Mustansar Aslam, Muhammad Hamzah Saleem, Muyassar H. Abualreesh, Aishah Alatawi

- and Shafaqat Ali. (Oct. 2021). Alleviation of Cadmium Phytotoxicity Using Silicon Fertilization in Wheat by Altering Antioxidant Metabolism and Osmotic Adjustment. *Sustainability*, 13, 11317. <https://doi.org/10.3390/su132011317> (IF= 3.251).
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G. PRESENTATIONS, SEMINARS AND CONFERENCES

1. Organizing an International Conference (As a Chief Coordinator)

- ❖ Focal person for organizing International Seminar/workshop on “**Vermi-fertilizer: A potential source of organic and sustainable Agriculture in Pakistan**” 18-19 October, 2019 at University of Agriculture, Faisalabad.
- ❖ Focal person/Coordinated Training Session for Advanced Organic Farming Technologies; Phase II. CASE auditorium of UAF and Vermicompost Center of UAF. September 21-23, 2020.
- ❖ Organized 3rd International Cukurova Agriculture and Veterinar Congress, Adana-Turkey on October 9-10, 2021 as a Co-Chairman and also was the part of Scientific Research Board.
- ❖ I acted as a MODERATOR for SESSION-1, HALL-4/OTURUM-1, SALON-4 in 3rd International Cukurova Agriculture and Veterinar Congress, Adana-Turkey on October 9-10, 2021, Abstract book page# 20.
- ❖ I acted as a MODERATOR for SESSION-3, HALL-1/OTURUM-3, SALON-1 in 3rd International Cukurova Agriculture and Veterinar Congress, Adana-Turkey on October 9-10, 2021, Abstract book page# 25.
- ❖ Organized two days, “Hands-on training of rural community for sustainable organic management of soil, water resources and diseases of Date palm” on 1-2 November, 2021 at Khairpur as a focal person and Coordinator.

- ❖ I have organized one day training workshop at Khanewal to train the farmers with the collaboration of WWF about vermicomposting and one Vermicompost bed was prepared on 15 March, 2022.
- ❖ I have coordinated an International Seminar, “Systematic and Evolutionary Microbiology in Modern Era” on 13th February, 2017, 9:00 am, New Senate Hall, UAF. There were 3 speakers (Two from South Korea and one from Pakistan). More than 200 Professors, researchers and students attended this seminar and Vice Chancellor Prof. Dr. Iqar Ahmad Khan appreciated the arrangements and contents of the seminar and research work done by the Korean people.
- ❖ I have held an International Conference, “New Developments in Agricultural Resource Management” on 5-7 April, 2017 at UAF as a coordinator from Department of Agronomy. I got partial funding from PARB, Punjab, Pakistan and Endowment Funding from UAF. This conference was of highly importance as there were introduced new developments being introduced around the world. More than 500 participants and the international speakers attended from South Korea, Turkey, Australia, China and Russia and Pakistan.

2. Attending International Conference (Oral Presentation)

- ❖ Delivered a lecture in the International workshop arranged by the Agribiotech Lab Erdoğan Eşref Hakkı Research Group, Department of Soil Science and Plant Nutrition, Selcuk University, **Turkey** on 23-11-2016 from 9:00 to 17:00 about my research and Pakistani culture. There were around one hundred participants from Turkey, Pakistan, India and Australia. It was very useful workshop in which different presentations were given to teach students and researchers about Potassium, Boron and Zinc and also there was a lecture about writing skill and ethics. These all lectures were very informative and strengthened the collaboration between Turkish and Pakistani researchers.
- ❖ Gyeongsang National University, Republic of Korea (2007.1.18). Korea Research Institute of Bioscience & Biotechnology (KRIBB), Korea (2008.11.21)
- ❖ **Zubair Aslam** (2019). 5th International Eurasian Congress on Natural Nutrition, Healthy Life & Sport held on 02-06 October, 2019, Ankara, Turkey, title of presentation: “**Integrated Zinc Biofortification by Foliar Application in Mung bean (*Vigna radiata* L.)**” (Oral presentation).
- ❖ **Zubair Aslam** (2019). ‘**Vermi-fertilizer: A Potential Source of Organic and Sustainable Agriculture in Pakistan**’ International Seminar/workshop, November 20-21, 2019 at University of Agriculture, Faisalabad.
- ❖ **Zubair Aslam and Ali Ahmad** (2021). ONLINE SUMMIT ON PLANT SCIENCE AND AGRICULTURE (PSA-2021) Belgium Chapter 1 by Science Technology Engineering Mathematics (STEM) International Organization held on 25 March, 2021. Title of presentation: “**VERMICOMPOSTING: AN INTEGRAL PART OF**

ORGANIC FARMING AND IT'S FUTURE ASPECTS IN UNDER DEVELOPED COUNTRIES”

- ❖ **Zubair Aslam** (2021). International Webinar on World Earth Day Celebration, Save Earth, Reuse-Past, Recycle-Present & Save for Future held on 22 April, 2021, Organized by Department of Soil and Environmental Sciences, Ghazi University, Dera Ghazi Khan, Punjab-Pakistan, title of presentation: “**Transferring Waste into Wealth; Sustainable Management of Organic Waste**”
- ❖ **Zubair Aslam**, Muhammad Shahzad, Korkmaz BELLİTÜRK, Safdar Bashir, Zulfiqar Ahmad Saqib, Nabeel Khan Niazi, Irshad Bibi. **2019**. Integrated Zinc Biofortification by Foliar Application in Mung bean (*Vigna radiata* L.). **Oral presentation**. Proceedings Book of 5th International Eurasian Congress on Natural Nutrition, Healthy Life & Sport, 02-06 October 2019, Ankara-Turkey, Pg. 179
- ❖ I have attended the 2016 Annual meeting of the Korean Society of Plant Pathology, held in Pyeongchang, Gangwon, Korea from October 19-22, 2016 and delivered an oral presentation on, “Enhancement of Microbial Abundance, Enzymatic Activity, Soil Health, Productivity of Spring Planted Mung bean and Changing Weed Dynamics through Sunflower Residue”.
- ❖ Attended the 5th international and 12th national conference of weed Science Society of Pakistan on 12– 14 June, 2015 at Shaheed Benazir Bhutto University, Sheringal, Upper Dir.
- ❖ **Aslam, Z.**, S. Bashir, Z. A. Saqib, I. Bibi, N. K. Niazi, W. Hassan, Z. A. Zahir and A. Khan. March 15-17, 2016. “**Vermitechnology**: A Step Towards Sustainable Agriculture”. 16th International Congress of Soil Science on “Healthy Soils for Food Security”, Rawalpindi, Pakistan. Abstract book, pg. 164. **Won 2nd position** in poster presentation.
- ❖ **Aslam, Z.**, Raza Ullah, Samina Jam Nazeer Ahmad, Jam Nazeer Ahmad, Qamar-uz-Zaman, Abdul Khaliq, and Zahir A. Zahir. October 19-21, **2016**. “Enhancement of Microbial Abundance, Enzymatic Activity, Soil Health, Productivity of Spring Planted Mung bean and Changing Weed Dynamics through Sunflower Residue”. Published in abstract book in the 2016 Annual meeting and International Conference of the Korean Society of Plant Pathology, held in Pyeongchang, Gangwon, **Korea**. Abstract book, pg. 26.
- ❖ Zaman, Q., **Z. Aslam**, T. Rasool, S. I. Zamir, M. Rehman and I. ul Haq. April 1, 2016. “Climate change in relation to biotic and abiotic stresses on rice production”. Attended National conference,” Climate change and plant biodiversity” arranged by Muzammal Rehman, Govt College University Faisalabad, Sahiwal Campus. Abstract book, pg. 21.
- ❖ Ullah, R., **Z. Aslam**, A. Khaliq and Z. A. Zahir. April 1, 2016. Sunflower allelopathy: Impact on weeds, soil health and productivity of mung bean. National Conference on “Sustainable crop and animal production systems” December 08-10, 2016, University of Haripur, Pakistan. Abstract book, pg. 162.

- ❖ Aziz, N., S. Bashir, **Z. Aslam**, Z. A. Saqib, I. Bibi, N. K. Niazi and W. Hassan. March 15-17, 2016. "Amelioration of drought stress in maize by exopolysaccharide producing bacteria isolated from rhizosphere of plants from Thal desert". 16th International Congress of Soil Science on "Healthy Soils for Food Security" Rawalpindi, Pakistan. Abstract book, pg.193.
- ❖ **Aslam, Z.**, S. Syed and A. Khaliq. September 17-19, 2015. "Mountain Agriculture in Pakistan: Water Problems and their possible Solutions". Presented a paper and gave oral presentation in International Conference on Mountains and Climate Change held in KIU Gilgit, Pakistan., Abstract book, pg. 112.
- ❖ **Aslam, Z.**, Q. Zaman, A. Khaliq, M. A. Ali and A. Ameen. June 12– 14, 2015. "Bio-Efficacy of Fenoxaprop-P-Ethyl Along with Bispyribac Sodium to Control Weed Flora in Direct Seeded Rice". Presented a paper and gave oral presentation on 5th International/12th National Weed Science Conference. Abstract book, pg. 52. Co-chaired the above session.
- ❖ Ullah, R. and **Z. Aslam**. March 24-27, 2014. "Biochar: Impacts on soil microbes and the nitrogen cycle" Published an abstract on International workshop on, "Biochar in Pakistan: Opportunities and Potential" held in UAF. Abstract book, pg. 30.
- ❖ **Aslam, Z.**, J. Latif and I. Ali. March 24-27, 2014. "The role of Biochar to mitigate the climate change". Published an abstract on international workshop on, "Biochar in Pakistan: Opportunities and Potential" held in UAF. Abstract book, pg. 64.
- ❖ Ahmad, A., **Z. Aslam** and R. Ahmad. June 4-6, 2013. "Performance of rice (*Oryza sativa* L.) extract on germination, root-shoot length, fresh and dry weight of wheat (*Triticum aestivum* L.)". Published an abstract in the abstract book of AgMIP-Pakistan Kickoff workshop & International Seminar on Climate change, University of Agriculture, Faisalabad. Abstract book, pg. 98.
- ❖ **Aslam, Z.**, Q. uzaman, E. Ullah, M. Rehman and A. Ameen. April 11-12, 2013. "Evaluation of different cultivars in Direct seeded rice sown at various seeding depths" Published an abstract 3rd International Conference of Pakistan Society of Agronomy, "Sustainable Crop Productivity Threats and Options", Ayub Agricultural Research Institute, Faisalabad, Pakistan. Abstract book, pg. 46.
- ❖ **Aslam, Z.**, A. Ameen, E. Ullah, Q. Zaman and M. Rehman. April 11-12, 2013. "Performance of different rice cultivars in Direct seeding at various seeding densities" published by 3rd International Conference of Pakistan Society of Agronomy, "Sustainable Crop Productivity Threats and Options" at Ayub Agricultural Research Institute, Faisalabad, Pakistan. Abstract book, pg. 45.
- ❖ **Zubair Aslam**, Qamar Uz Zaman, Abdul Khaliq, Muhammad Akbar Ali and Asif Ameen. Bio-Efficacy of Fenoxaprop-P-Ethyl Along with Bispyribac Sodium to Control Weed Flora in Direct Seeded Rice. 5th international and 12th national

- conference of weed Science Society of Pakistan on 12– 14 June, 2015 at Shaheed Benazir Bhutto University, Sheringal, Upper Dir, KPK, Pakistan. Abstract book, Presented the paper and also co-chaired the session and received the certificate and shield.
- ❖ Raza Ullah and Zubair Aslam. Biochar: Impacts on soil microbes and the nitrogen cycle. International workshop on , “Biochar in Pakistan: Opportunities and Potential” on March 24-27, 2014 held in UAF, page 30 on abstract book.
 - ❖ Zubair Aslam and Junaid Latif and I. Ali. The role of Biochar to mitigate the climate change. International workshop on, “Biochar in Pakistan: Opportunities and Potential” on March 24-27, 2014 held in UAF, page 64 on abstract book.
 - ❖ **Zubair Aslam** and Young Ryun Chung. **Oral Presentation**, International Seminar on “CROP MANAGEMENT: ISSUES AND OPTIONS” New Senate Hall, on 02-06-2011. “Bacterial community of rice-rhizosphere managed under tillage and no-tillage practices”.
 - ❖ **Zubair Aslam**, Muhammad Zahid Ihsan, Misbah ul Islam and Abdul Khaliq. **Poster presentation: Won 1st position**: “Isolation and characterization of rice root associated novel bacterium”. Pakistan Agricultural Scientist's Forum have arranged a 3-Day National Conference on "Sustainable Agriculture in Changing Climate" at hill station Bara Gali, Abbottabad from 7-9 July, 2011.
 - ❖ **Zubair Aslam**, Aftab Ahmad, Riaz Ahmad and I. Hussain. Comparative performance of direct seeded rice (*Oryza sativa* L.) cultivars planted by different sowing methods. International conference on “CROP MANAGEMENT IN CHANGING CLIMATE”, University of Agriculture, Faisalabad, February 11-13, 2013. pg-43
 - ❖ Riaz Ahmad, Shahid Mehmood, **Zubair Aslam** and Attiq ur Rehman. Effect of Boric acid seed coating on growth and yield of fine and coarse rice. International conference on “CROP MANAGEMENT IN CHANGING CLIMATE”, University of Agriculture, Faisalabad, February 11-13, 2013. pg-11.
 - ❖ Zubair Aslam, Qamar uzaman, EhsanUllah, M. Rehman and Asif Ameen. "Evaluation of different cultivars in Direct seeded rice sown at various seeding depths". Published an abstract on 3rd international conference of Pakistan society of Agronomy, "Sustainable Crop Productivity Threats and Options" April 11-12, 2013, Ayub Agricultural Research Institute, Faisalabad, Pakistan pg. 46 in abstract Book.
 - ❖ Zubair Aslam, Asif Ameen, EhsanUllah, Qamar uzaman and M. Rehman. "Performance of different rice cultivars in Direct seedling at various seeding densities" published on 3rd international conference of Pakistan society of Agronomy, "Sustainable crop productivity Threats and Options" April 11-12, 2013, Ayub Agricultural Research Institute, Faisalabad, Pakistan pg. 45 in abstract Book.
 - ❖ Muhammad Irshad, Ghulam Abbas, Asmat Ullah Malik, Zafar Abbas, Muhammad Aslam, Muhammad Bakhsh Khokhar, **Zubair Aslam** and Marghub Amer. "Efficacy

of insecticides for the control of *Heliothus* (*H. armigera*) on cotton (*Gossypium spp.*) crop”. Published an abstract in the abstract book of Agriculture in arid environment 25-26 March 2013, Food security in Arid Environment, pg. 38.

- ❖ Aftab Ahmad, **Zubair Aslam** and Riaz Ahmad. "Performance of rice (*Oryza sativa* L.) extract on germination, root-shoot length, fresh and dry weight of wheat (*Triticum aestivum* L.). Published an abstract in the abstract book of AgMIP-Pakistan Kickoff workshop & International Seminar on Climate change 4-6 June 2013, University of Agriculture, Faisalabad. pg. 98.
- ❖ **Zubair Aslam**, Muhammad Yasir, Tae Soon Park, Che Ok Jeon, Young Ryun Chung. *Terracolaceae* fam. nov., to include *Jinjuella oryziterrae* gen. nov., sp. nov., isolated from the rhizosphere of rice (*Oryza sativa* L.) belonging to the order *Acidimicrobiales*. MSK's 50th Anniversary International Symposium on Microbiology 2009 (The 50th Anniversary of MSK), Jeju Island, **Korea**. (28~30-5-2009).
- ❖ Muhammad Yasir, Geun Cheol Song, **Zubair Aslam**, Che Ok Jeon, Young Ryun Chung. Functional analysis of bacterial community in vermicompost and isolation of novel cellulase genes from metagenomic libraries. MSK's 50th Anniversary International Symposium on Microbiology 2009 (The 50th Anniversary of MSK), Jeju Island, **Korea**. (28~30-5-2009).
- ❖ **Zubair Aslam**, Muhammad Yasir, Kim Son Won, Che Ok Jeon, Young Ryun Chung. “Analysis of bacterial community and isolation of novel bacteria from two rice fields, managed under conventional tillage and no-tillage practices with modified culture method”. The 12th International Symposium on Microbial Ecology, Cairns, **Australia** (17~22. 8.2008).
- ❖ International meeting of the Microbiological Society of Korea, in PyeongChang, **Korea** (2007-5-10~11)
- ❖ **Zubair Aslam**, Sung-Taik Lee. “Analysis of microbial diversity in shrimp- and fish-jeotgal, traditional Korean fermented seafood, by cultivation-independent and -dependent methods”. (2006) International Meeting of the Federation of Korean Microbiological Societies (www.fkms.or.kr). Poster no. B076, Seoul, **Korea**. (2006.10. 19-20).
- ❖ **Zubair Aslam**, Sung-Taik Lee. “Analysis of microbial diversity in shrimp- and fish-jeotgal, traditional Korean fermented seafood, by cultivation method”. International Meeting of the Microbiological Society of Korea. Poster no. H019, Daegu EXCO, Daegu, **Korea**. (2006.5. 3~4).
- ❖ Leonid N. Ten, Wan-Taek Im, **Zubair Aslam**, Sung-Taik Lee. “Novel insoluble chromogenic substrate for the assay of Endoinulinase”. International Meeting of the

- Federation of Korean Microbiological Societies, **Korea**. Poster presentation. (2005.10.13~14).
- ❖ **Zubair Aslam**, Kyoung-Ho Kim, Ju Hyoung Lim, Wan-Taek Im, Sung-Taik Lee. “*Lactobacillus koreensis* sp. nov., isolated from wheat-flour in South Korea”. (2005). International Meeting of the Federation of Korean Microbiological Societies, **Korea**. Poster presentation. (2005.10. 13~14).
 - ❖ Dong Shan An, Wan-Taek Im, Kwang Kyu Kim, **Zubair Aslam**, Sung-Taik Lee. “*Cellulomonas terrae* sp. nov., β -glucosidase producing bacterium”. (2004) International Meeting of the Federation of Korean Microbiological Societies, Seoul, **Korea**. Poster presentation.
 - ❖ **Zubair Aslam**, Wan-Taek Im, Myung Kyum Kim, Ah-Young Kwon, Seon-Kyung Kim, Hee-Jin Hong, Sung-Taik Lee. “*Flavobacterium granulensis* sp. nov., isolated from granule”. 2004 International Meeting of the Federation of Korean Microbiological Societies, Seoul, **Korea** (www.msk.or.kr). Poster no. A03, (2004-10-21~22).
 - ❖ Osaka University KAIST Graduate Students Symposium, KAIST, **Korea**. 2004-7-19~22.
 - ❖ Korea-France Joint Symposium on Microbiology and Biotechnology. “New Challenges in Functional Microbiology and Biotechnology”. Under the Korean Society for Microbiology and Biotechnology. Daegu, **Korea**. (www.kormb.or.kr). (2004-6-21~23).
 - ❖ Foreign Research Students Industrial Visit, Daedeok Science Town, Hyundai Motor Company, SK Corp, Ulsan complex, Pohang Iron and Steel Co., Ltd (POSCO), Gyeongju City, arranged by KOSEF, **Korea** (www.kosef.or.kr). (2003-11-18~20).
 - ❖ **Zubair Aslam**, Myung Kyum Kim, Wan-Taek Im, Sung-Taik Lee. “Isolation and classification of some strains of genus *Chlorella* on the basis of morphology and 18S rRNA gene sequences form marine water in South Korea”. International Meeting of the Microbiological Society of Korea, **Korea**. (www.msk.or.kr). Poster no. A014, (2004-5-13~14).
 - ❖ Hye-Yoon Park, **Zubair Aslam**, Wan-Taek Im, Myung Kyum Kim, Ju Hyoung Lim, Seong-Hye Kim, Myung Suk Kang, Sung-Taik Lee. “Polyphasic taxonomic approach of phototrophic bacterial strain Uni-1 isolated from south seawater”. 2003 International Meeting of the Federation of Korean Microbiological Societies, Yonsei University, Seoul, **Korea**. (www.msk.or.kr/msk). Poster presentation, (2003-10-24~25).
 - ❖ **Zubair Aslam**, Myung Kyum Kim, Wan-Taek Im, Sung-Taik Lee. “Isolation and classification of fresh and marine algae”. International Meeting of the Microbiological Society of Korea, **Korea**. (www.msk.or.kr). Poster no.A18, (2003-5-2~3).

- ❖ Myung Kyum Kim, Wan-Taek Im, Ju Hyoung Lim, **Zubair Aslam**, Sung-Hye Kim, Sung-Taik Lee. (2003). “Taxonomic study of photosynthetic bacteria, Cyanobacteria and microalgae. The Spring Meeting of Korean Society for Microbiology and Biotechnology, Muju, **Korea**, Poster presentation.

H. BOOKS/BOOK CHAPTERS PUBLISHED

a) BOOKS

1. Book Name: “Latest Studies and Developments in Agriculture and Environment” published by IKSAD Publisher, Turkey. Editors: Ahmet Celik, **Zubair Aslam**, Korkmaz BELLİTÜRK, Ali Ahmad and Zain Mushtaq.
Name of book chapter: “Use of Organic Amendments for Sustainable Crop Production in Marginal Lands” by Muhammad Asif JAMAL, Abdul REHMAN, Saddam HUSSAIN, Miraç KILIÇ, Ahmet ÇELİK, Ali AHMAD, Korkmaz BELLİTÜRK and Zubair ASLAM. DOI: <https://dx.doi.org/10.5281/zenodo.8415397>. Chapter 4, pg. 4-31. October 2023
2. Korkmaz Bellitürk and **Zubair Aslam**. 2021. “Fertilizers and their efficient use in sustainable agriculture” edited by and book chapter, “Innovative waste management technologies for sustainable agriculture: the case of vermicomposting”, by Zubair Aslam, Korkmaz Bellitürk and Ali Ahmad. Iksad Publications – 2021© ISBN: 978-625-7562-11-9 June / 2021 Ankara / Turkey
3. Muhammad Ashiq and **Zubair Aslam**. 2014. “Weeds and Weedicides”. Punblisher: University of Agriculture Faisalabad and Ayub Agriculture Research Institute, Faisalabad. ISBN 978-969-7590-17-9.
4. **Zubair Aslam**, Qamar uz Zaman, Shahid Ibn Zameer and Ihtisham ul Haq. 2016. “**Comprehensive Agronomy Glossary**”. For students, researchers and teachers who are going to appear in interviews and exams related to Agriculture. **Agrihunt Publishers**. ISBN 978-969-82-37-75-2

b) BOOK CHAPTERS

- 1- **Book Title:** Waste Problems and Management in Developing Countries
Book Chapter Name: Vermicomposting: A Sustainable and Environment-Friendly Approach for Organic Waste Management
Authors Zubair Aslam, Safdar Bashir, Korkmaz Bellitürk, Sami-Ur-Rehman, Lixin Zhang, Qamar Uz Zaman and Ali Ahmad
Year of Publication: 2023.
Volume: Chapter 1, pg. 365-401, Published by CRC Press Taylor and Francis Group, Apple Academic Press.
- 2- **Book Title:** Climate Change and Soil-Plant-Environment Interactions
Book Chapter Name: Plant and Soil Data Management Via Intelligent Agricultural Machinery and Field Robots
Authors: FARZAND, Hafiz Muhammad Bilawal AKRAM, Ali AHMAD, Zubair ASLAM, Korkmaz BELLİTÜRK, Fatih BÜYÜKFİLİZ, and Bahar SÖZÜBEK.
Year of Publication: 2023.

- Volume:** pg. 18-45. published by IKSAD Publisher, Turkey
- 3- **Book Title:** Agricultural Practices and Sustainable Management in Turkey” **Book Chapter Name:** New Generation Fertilizers in Agricultural Inputs: The Case of Vermicompost
Authors: Korkmaz Bellitürk, Zubair Aslam and Ali Ahmad
Year of Publication: 2022
Volume: Chapter 1, pg. 10-37, published by IKSAD Publisher, Turkey
- 4- **Book Title:** Fertilizers and Their Efficient Use in Sustainable Agriculture edited by Korkmaz BELLİTÜRK / TURKEY and Zubair ASLAM / PAKISTAN
Book Chapter Name: Innovative Waste Management Technologies for Sustainable Agriculture: The Case of Vermicomposting
Authors: Zubair ASLAM, Korkmaz BELLİTÜRK and Ali AHMA
Year of Publication: 2021
Volume: Iksad Publications © ISBN: 978-625-7562-11-9 June / 2021 Ankara / Turkey
- 5- **Book Title:** **Water Resources of Pakistan** edited by Muhammad Arif Watto, Michael Mitchell, Safdar Bashir/ PAKISTAN,
Book Chapter Name: Impacts of Water Quality on Human Health in Pakistan
Authors: Safdar Bashir, **Zubair Aslam**, Nabeel Khan Niazi, Muhammad Imran Khan & Zhongbing Chen
Year of Publication: 2021
Volume: DOI:<https://doi.org/10.1007/978-3-030-65679-9> Springer Nature Switzerland AG
- 6- **Book Title:** Agronomic Crops
Book Chapter Name: Herbicide Resistance in Crops and Weeds
Authors: Zubair Aslam, Muhammad Saeed Ahmed, Safdar Bashir, Nabeel Khan, and Zulfiqar Ahmad Saqib
Year of Publication: 2020.
Volume: Volume 3, Springer published, Singapore, Singapore, pp. 381-396
- 7- **Book Title:** Phytoremediation: Management of Environmental Contaminants
Book Chapter Name: Phytoremediation of Arsenic-Contaminated Soils Using Arsenic Hyperaccumulating Ferns
Authors: Nabeel Khan Niazi , Safdar Bashir , Irshad Bibi , Behzad Murtaza , Muhammad Shahid , Muhammad Tariq Javed , Muhammad Bilal Shakoor , Zulfi qar Ahmad Saqib , Muhammad Farrakh Nawaz , **Zubair Aslam** , Hailong Wang, and Ghulam Murtaza
Year of Publication: 2016
Volume: Chapter 19, Vol. 3, pg. 521-545. ISBN: 978-3-31952-381-1
- 8- **Book Title:** New Developments in Allelopathy Research
Book Chapter Name: The Invasive Potential of Parthenium Weed: A Role for Allelopathy
Authors: Boyang Shi, **Zubair Aslam** and Steve Adkins
Year of Publication: 2015
Volume: Published by Nova publishers. Editors: Julia E. Price. ISBN: 978-1-63483-415-5

I. PROFESSIONAL TRAININGS

1. **I have attended,”** Training Course on Agricultural Pest and Diseases control

technology For Pakistan” from 6th, September to 17th, September, 2021, National Agricultural Technology Extension and Service Center (NATESC), Beijing, P. R. China. It was an extensive and comprehensive course and lot of participants from different countries joined. (Certificate is attached as proof).

Proof 120

2. I have attended an International Hands-on-training ,”Role of **DSSAT** and WaNuLCAS Model to Develop Site Specific Climate Resilience in Crops” from 30 May 2022 to 02 June 2022. (Certificate is attached)

Proof 121

3. I have attended as committee member 7 days training course as a committee member notified by University on October 1-2, November 2-3, 9-10, 23-24 and 30, 2021
4. I have attended as committee member International Hand’s on training from 30 May 2022 to 2nd June 2022 entitled, “Capacity building of stakeholders in order to develop site specific climate adaptations in agriculture.
5. I have attended as committee member farmer training activity at Jang entitled with Capacity building of stakeholders in order to develop site specific climate adaptation in agriculture on June 16, 2022
6. I attended, 4 **day** Training Course on Research Capacity Building Program for Grant Reviewers in 2023 organized by Pak-UK education gateway.
7. Successfully completed a **Professional Training on**, “Professional Competency Enhancement Program for Teachers (PCEPT) by HEC, at National Textile University, Faisalabad, from Sept 05 to Oct 12, 2011.
8. Got training on Tunnel Farming on 19-3-2012~24-3-2012
9. Completed a training on 18th post graduate annual training course on, “Safety measures and application of radiation and isotope in Agriculture, health and industry” from NIAB on 21-25 May 2012.
10. Completed a training of the GlobalG.A.P. from 10-15 December, 2012
11. Completed a training of IFS (International Featured Standard) on 7-11 January, 2013.
12. **International course on New Technologies of Agricultural Products Processing for Developing Countries** from **China** for 20 days from 5 April to 24 April, 2013. This training was sponsored by Ministry of Science and Technology (MOST), China and organized by Chinese Academy of Agricultural Mechanization Sciences (CAAMS), **China**. Mainly this course was completed in two big cities, Beijing and Shanghai of China. We visited not only research institutes, food and mechanical factories but many entertainment and historical places, including Shanghai museum, Wax museum, Shanghai Tower etc.
13. Attended training and workshop of two days "**Project formulation workshop**" held

J. POPULAR ARTICLES PUBLISHED

a) Urdu

1- درپیش مسائل published in Zari-digest, UAF. Jan-March, 2020.

2- Muhammad Mohsin Aziz, Sabeela Yaqoob, Maham Nisha Anwar, Ali Ahmad, Dr. Zubair Aslam (Department of Agronomy, Department of Botany)

Title: “What is Azolla?” Published in Zari Digest, October to December 2022

3- Authors: Muhammad Ahsan Jameel, Sabeela Yaqoob, Ali Ahmad, Dr. Zubair Aslam (Department of Agronomy)

Title: “Vermi-Tea: A Liquid Organic Fertilizer” Published in Zari Digest, January to March 2023

4- “مونگ کی پیداواری ٹیکنالوجی اور زنک لائی سین چیلیٹ کا اصلاحاتی کردار” The Production technology of Mungbean and developing role of zinc lysine” Muhammad Saeed Ahmad, Zubair Aslam, Muhammad Zohaib Ilyas, Tahir Mushtaq and Muhammad Shehzad. August, 2018. Pakistan Agriculture Research.

3. “کھادوں کے درست طریقہ استعمال کے حوالے سے کسانوں کی رہنمائی” Guidance for the farmers to use the fertilizers in a proper way. Muhammad Zohaib Ilyas, Ahmad Ali, Zubair Aslam (Published in January-March, 2018, Zari-digest vol 53, Issue 1, pg. 47).

4. “فصلوں میں ادویات کا استعمال اور ذخیرہ کرنے کا جدید نقطہ نظر” Modern prospects to use pesticides in crops and their storage. Ahmad Ali, **Zubair Aslam**, Muhammad Zohaib Ilyas (Published in January-March, **2018**, Zari-digest vol 53, Issue 1, pg. 46).

5. “مکئی کی پیداوار میں زنک لائسین کا کردار” Role of Zinc lysine in the production of maize. Zubair Aslam, Muhammad Saeed Ahmad (Published in January-March, **2018**, Zari-digest vol 53, Issue 1, pg. 1)

6. “ورمی ٹیکنالوجی: کوڑا کرکٹ کو سونا بنانا” (Vermitechnology: Conversion of Waste into Gold). Zubair Aslam (Published in April-June, **2016**, Zari-digest vol 51, Issue 2, pg. 44).

7. “پودے کے دفاعی نظام میں سیلیکان کا کردار” (The role of Silicon in the Defense System of Plants)” Zubair Aslam, Qamar uz Zaman, Imran Khan, Raza Ullah and Muhammad Naeem. (Published in Jan-March, **2016**, Zari-digest vol 50-51, Issue 1, 4, pg. 37)

8. “وقتِ آبپاشی۔ ایک سنگین مسئلہ” “Timely Irrigation- a Serious Problem” published in Kissan risala on February **2014**, page.09 With Dr. Zubair Aslam, Qamar uz Zaman, and Dr. Imran Khan.

9. “اجزائے صغیرہ کا فصلوں میں کردار” “Role of Micronutrients in Crops” (Published in Jul-Sep., **2014**, Zari-digest vol 49, Issue 3, pg. 17-18)

10. “معیاری بیج-اچھی پیداوار کا ضامن” “Quality Seed is the Guaranty of High Yield Production” published in Kissan risala on September **2013**, page 23.
11. “پرائم بیج ایک منافع بخش ٹیکنالوجی” “See Priming is a Profitable Technology” published in Kissan Rissala, page 12, February **2012** issue.
12. “پاکستان میں پانی کی کمی اور جدید زراعت کے تقاضے” “Water Scarcity in Pakistan and Demands of Modern Agriculture” published in Kissan Rissala, page 14-16, February **2012** issue.
13. “الیلوپیتھی کی حقیقت اور اسکا مستقبل” “The Reality of Allelopathy and its Future Status” published in Zari Digest, October **2012**, Page 17 and 19.
14. “پاکستان میں ایگریکلچر سنٹرز کا قیام---ترقی کی طرف ایک قدم” “Establishment of Agricultural Centers in Pakistan-a Step towards Development” published in Zari Digest, October **2012**, Page 54. پاکستان

b) English:

1. “Current Issues of Agriculture in Pakistan-2020” by Muhammad Sajjad, Zubair Aslam, Hira Kanwal, Ali Ahmad, Muhammad Waqas, Sami-Ur-Rehman, Wajeesh Ur Rehman, Yousuf Akram and Gulnaz Anwar. Pakistan Technology Times. 14-02-2020.
2. “Camelina: A Potential Oil Seeds Crop in Pakistan” by Wajeesh Ur Rehman, Dr. Zubair Aslam, Mamoonah Jamil, Ali Ahmad, Muhammad Sajjad, Sami Ur Rehman, Waqas Sajjad, Mehwish Nadeem. (10-02-2020). Pakistan Technology Times.
3. “Role of plant nutrients in improving growth, yield and quality of edible plant parts” by Mehwish Nadeem, Zubair Aslam, Sami-ur-Rehman, Ali Ahmad, Muhammad Waqas. (31-01-2020). Pakistan Technology Times.
4. “Oil Seed Crops Production and Future Prospects in Pakistan” by Muhammad Shahzad, Zubair Aslam, Muhammad Waqas, Sami ur Rehman, Mehwish Nadeem. Pakistan Agriculture Research. (December, 2019).
5. Wajeesh Ur Rehman, Muhammad Sajjad, Sami Ur Rehman, **Zubair Aslam**, Mehwish Nadeem. Waste Decomposer & Its Uses In Agriculture” October 9, 2020. Technology Times
6. “Vermicomposting: Future of Organic Agriculture In Pakistan” by Wajeesh Ur Rehman, Zubair Aslam, Ali Ahmad, Muhammad Sajjad, Mamoonah Jamil, Mehwish Nadeem. Technology Times. September 16, 2021.
7. “Waste Decomposer & Its Uses In Agriculture” by Wajeesh Ur Rehman, Muhammad Sajjad, Sami Ur Rehman, Zubair Aslam, Mehwish Nadeem. Technology Times. October 9, 2020.

8. “Water Scarcity, A Potential Threat to Agriculture of Pakistan” by Yousuf Akram, Zubair Aslam, Muhammad Waqas, Mehwish Nadeem. Pakistan Agriculture Research. Feb 12, 2020.
9. “Current Issues of Agriculture in Pakistan-2020” by Muhammad Sajjad, Zubair Aslam, Hira Kanwal, Ali Ahmad, Muhammad Waqas, Sami-Ur-Rehman, Wajeeh Ur Rehman, Yousuf Akram and Gulnaz Anwar. Pakistan Technology Times. 14-02-2020.
10. “Camelina: A Potential Oil seeds Crop in Pakistan” by Wajeeh Ur Rehman, Dr. Zubair Aslam, Mamoonah Jamil, Ali Ahmad, Muhammad Sajjad, Sami Ur Rehman, Waqas Sajjad, Mehwish Nadeem. (10-02-2020). Pakistan Technology Times.
11. “Role of plant nutrients in improving growth, yield and quality of edible plant parts” by Mehwish Nadeem, Zubair Aslam, Sami-ur-Rehman, Ali Ahmad, Muhammad Waqas. (31-01-2020). Pakistan Technology Times.
12. “Oil Seed Crops Production and Future Prospects in Pakistan” by Muhammad Shahzad, Zubair Aslam, Muhammad Waqas, Sami ur Rehman, Mehwish Nadeem. Pakistan Agriculture Research. (December, 2019).
13. “Strenuous and Luxurious Stages in the Life of *Cuscuta* spp.” by Muhammad Zahaib Ilyas, Dr. Zubair Aslam, Muhammad Saeed Ahmad, Hafeez Ameer, Tahir Mushtaq, Ahmad Ali. Sep., 2018. AgriHunt.
14. “Role of Zinc Solubilizing Bacteria in Plant Growth and Human Health” by Muhammad Zohaib Ilyas, **Zubair Aslam**, Tahir Mushtaq, M. Saeed Ahmad and Ahmad Ali. **Jul 2018. Pakistan Agriculture Research.**
15. “Zinc supplementation to combat with human’s hidden hunger” by Muhammad Zahaib Ilyas, Tahir Mushtaq, Muhammad Ahtisham Tahir and **Zubair Aslam. 2018. Technology Times.** Volume 09 Issue 28.
16. “**Vermitechnology**: Easy to convert trash into cash. How to do?” by **Zubair Aslam**, Ahsan Khan and Muhammad Jalal. **2016. Technology Times.** Volume 07 Issue 1.
17. “Importance of inoculants application in agriculture sector” by **Zubair Aslam**, Qamar uz Zaman, Tariq Javed, Ihtisham ul Haq and Raza Ullah. **2015.** published in **Technology Times.** Volume 06, Issue 29.
18. Published an article on "Direct seeded rice (DSR) technology, weeds a challenge. Zubair Aslam and Muhammad Akbar Ali, pg 11-14 in Farming outlook in March 2013.
19. Jojoba, an industrial crop” published in Farming Outlook, March **2012:** Pg 21-23.

J. MEMBERSHIP OF SCIENTIFIC AND PROFESSIONAL SOCIETIES

- 1) Member of Australian Society of Agronomy (since 2017)
- 2) Member of Weed Science Society of Pakistan (**Life Time Member**).

- 3) Member of Pakistan Society of Agronomy (**Life Time Member**)
- 4) Member of Pakistan Botanical Society (since 2011).
- 5) Member of Soil Science Society of Pakistan (since December 2012)
- 6) Member of Jeeded Zaraat Society of Pakistan (1996~1999).
- 7) Member of Microbiological Society of Korea, Korea (2003~2007).
- 8) Member of the Federation of Korean Microbiological Societies, Korea (2003~2007).
- 9) Member of International Society of Microbial Ecology and volunteer reviewer of the Journal “Microbial Ecology” (2006~2007).
- 10) Member of KAIST International Student Association, Korea (KISA).

K. AWARDS/HONOURS/SCHOLARSHIPS

- Worked as a member of **Program Evaluator/Subject Expert for B.Sc. (Hons) Degree Program in Agronomy at BZU Sub-Campus Bahadur Layyah on March 22, 2021**
- Won 2nd prize in poster competition on **Vermitechnology**, during 16th International Congress of Soil Science on “Healthy Soils for Food Security”, Rawalpindi, Pakistan.
- Won the Endeavour Award 2014 of Australia for postdoc (July 18, 2014 to January 16, 2015).
- Won first prize in poster presentation in National conference, “Sustainable Agriculture in Changing Climate” Abbottabad (7~9 July, 2011).
- Selected as HEC Approved Supervisor for PhD level students (20-9-2010).
- Merit scholarship holder in Ph. D. (Biological Sciences) sponsored by KRF, Korea (Sep. 2003~Feb. 2006).
- Merit scholarship holder in Ph. D. (Biological Sciences) sponsored by KAIST, Korea (Mar. 2002~Aug. 2003).
- Merit scholarship holder in M. Sc. (Hons.) Agri. sponsored by the University of Agriculture, Faisalabad, Pakistan.
- Merit scholarship holder in Matriculation sponsored by the Board of Intermediate and Secondary Education, Sargodha, Pakistan.

L. TECHNIQUES AND SKILLS:-

a) Microbiological Techniques

- Isolation and maintenance of microorganisms with pure culture techniques.
- Staining of microorganisms, estimation of microbial growth, and enumeration of microbes in soil and food.
- Microscopic studies using Light Microscope, Phase Contrast Microscope, Fluorescence Microscope, Transmission Electron Microscope, and Scanning Electron Microscope.

- Basic biochemical and physiological tests to identify bacteria.
- Phylogenetic analysis of different gene sequences with the help of BLAST in NCBI, BioEdit, Clustal X and MEGA 4 programs.

b) Molecular Biological Techniques

- Isolation of DNA/RNA from plant, animal and microbial source.
- Construction of partial genomic DNA libraries..
- Genomic fingerprint techniques like, REP, ERIC, BOX etc.
- Cloning in *E. coli*.
- Agarose gel electrophoresis (AGE), and Poly acryl amide gel Electrophoresis (PAGE).
- PCR techniques.
- Transformation.
- Diversity analysis with DGGE, T-RFLP and Random cloning.

c) Biochemical Techniques

- Cellular fatty acids analysis.
- Polar lipids analysis.
- Quinones analysis.
- Polyamines analysis.
- Cell wall component analysis.

d) Instrument Handling

- High performance liquid chromatography (HPLC).
- Gas chromatography (GC).
- UV-Vis spectrophotometer.
- High Speed refrigerated and ultra centrifuge.
- Column chromatography.
- Gel documentation system.
- PCR machine.
- Rotary vacuum evaporator.
- Atomic absorption spectroscopy.
- Sprayers used in pest control management.

M.RESEARCH EXCHANGE VISITED COUNTRIES

Australia: 1) To present a poster in 12th international symposium on Microbial Ecology ISME 12, held at Cairns, Australia (August 17-22, 2008).

2) Endeavour Award, 2014. (18th July, 2014~20th Jan., 2015)

China: To visit the Fudan University, Shanghai 200433 China (Feb. 25, 2006 ~ March 3, 2006).

Japan: To visit the IAM Culture Collection, Japan and Tokyo University Japan and discuss the systematics of bacteria and biotechnology with Prof. Akira Yokota (2003-02- 4~18).

South Korea: 1- For Ph. D. studies (2002.3~2007.2), Senior research fellow (2007.3~2009.8).
2- For research for one month, (2010.7.15~2010.8.5).

Saudi Arabia: For Hajj purpose during 2011.

Turkey: As a lecturer in the Department of Soil and Nutrition Department, Faculty of Agriculture, Selcuk University, Koneya, Turkey, for one month, Nov. 1, 2017 to Nov. 30, 2017.