

CV

PROF. DR. MUHAMMAD JAMIL KHAN

Higher Education Commission (HEC) Pakistan, University “Best Teacher Award 2011”

Research Fellow on C-Sequestration/GHGs at CEEHWM-Chulalongkorn University, Thailand

Professor/Chairman, Department of Soil & Environmental Sciences
Faculty of Agriculture, Gomal University, DIKhan, 29050, KPK, Pakistan.
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QUALIFICATIONS

I am an enthusiastic and professional Soil & Environmental Scientist with extensive academic, research, publications, projects execution, establishment of new institutions, projects funding and university-industry collaboration experience. I feel excited to lead and enjoy being a part of a successful and productive team. I am quick to grasp new ideas and concepts, and to develop innovative and creative solutions to problems. I am a hard working strong man able to work well on my own initiative and can demonstrate the high levels of motivation required to meet the tightest of targets and deadlines. I can demonstrate a strong ability to manage projects from conception through to successful completion. Even under significant pressure, I possess a strong ability to perform effectively.

PROFESSIONAL EDUCATION

M.Sc (Hons)/M.Phil., Soil Sciences, Gomal University, Pakistan

Ph. D in Soil Sciences, 2007. Gomal University, Pakistan

DAAD & HEC Scholar 2005-06, DID, Berlin & Faculty of Agri-Environmental Sciences, Institute of Land Use, University of Rostock, Germany.

Technical Research Training (3-months), 2008-2009. University of Glasgow, UK.

Research Fellow Working on C- Sequestration at CEEHWM-Chulalongkorn University, Thailand.

PROFESSIONAL CAREER

Lecturer, Department of Soil Sciences, Gomal University	1991-2006
Assistant Professor, Department of Soil Sciences	2006-2009
Associate Professor, Department of Soil & Environmental Sciences	2009-2011
Professor/Chairman, Department of Soil & Environmental Sciences	2011/2009- To Date
F.P/Founding Director, Distance Education Program, Gomal University	2009-2012

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PROFESSIONAL ACHIEVEMENTS

- Upgraded the Department of Soil Science into the **Department of Soil and Environmental Sciences** after taking the charge as Chairman in 2009.
 - Initiated BS in **Environmental Sciences** in Faculty of Agriculture, Gomal University (After being approved by the Department & Faculty Board of Studies, ASRB & Academic Council Gomal University).
 - Established Linkage of the Department with Balance Agri-Nutrients Limited New Zealand (Joint Research Projects in process and Two students are also selected for PhD abroad).
 - Established the **Distance Education Program** (offering degrees in 10 different disciplines) in Gomal University as Focal Person, HEC and Founding Director in 2009.
 - Founding Co-Editor **Gomal J. of Agriculture & Environmental Sciences**.
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PROFESSIONAL EXPERIENCE

- Twenty-one years of teaching/research/administration experience as Lecturer, Assistant & Associate Professor, Professor, Chairman, Director, and Principal Investigator since 1991.
 - Established Distance Education Program in Gomal University as the Founder Director.
 - HEC approved supervisor. Supervising 6 PhD Scholars.
 - Supervised 2 PhD & 15 M. Phil Scholars' research projects and theses writing.
 - Chairman, Department of Soil & Environmental Sciences, Faculty of Agriculture, Gomal University, DIKhan.
 - Co-Editor, Gomal J. of Agriculture & Environmental Sciences.
 - Attended DAAD Summer School in Germany, 2007.
 - Attended several National and International seminars & conferences.
 - 2-months training/experience of working on GC/MS in the University of Rostock, Germany.
 - 6 months post graduate computer training course.
 - Working on Atomic Absorption Spectrophotometer (AAS).
 - Three months technical training/research in University of Glasgow, UK.
 - Post Doc 2012-2013, CEEHWM-Chulalongkorn University, Thailand.
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NO OF M.Phil/Ph.D SUPERVISED

PhD 02

M.Phil 15

COUNTRIES VISITED

Germany, United Kingdom, South Korea, China, Singapore, Thailand and India.

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RESEARCH PROJECTS COMPLETED

- ◆ Heavy metals contamination in soil due to industrial and municipal wastes and their phytoremediation by Castor. **Pakistan Science Foundation for funding (worth 0.631 millions).**
 - ◆ Impact of sewage wastes (effluent and sludge) on soil properties and quality of vegetables. **Funded by the PARC, Islamabad, Pakistan, under the “Agriculture Linkage Program (Worth Rs. 4.153 million) (Acting P.I.).**
 - ◆ Carbon-sequestration as influenced by land use management using natural abundance (^{13}C and isotopic technique). **(IAEA).**
 - ◆ Effect of doses of agrotain treated urea (Urease Inhibitor) on the yield and quality of wheat in calcareous soil **(Ballance Agri-Nutrients Limited New Zealand)**
 - ◆ Impact of press mud as organic fertilizer on the soil properties and yield of legume crops. **Funded by Higher Education Commission, Islamabad, Pakistan (Worth Rs. 1.6 million).**
 - ◆ Modification of soil pH by organic fertilizers for better micronutrients availability in calcareous soil under legume crop. **Funded by Gomal University (P.I).**
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RESEARCH PROJECTS IN PROCESS

- ◆ Economically optimal Nitrogen and Water application combined with cultural practices for enhancement of winter wheat (*Triticum aestivum* L.) yield and protein content. **Funding Agency (HEC-Islamabad).**
 - ◆ “Improving nitrogen and phosphorus use efficiency of chemical fertilizers by 30% and 20% in arable farming” **(In Process with PARC, Islamabad)**
 - ◆ Effect of crop residues retention on soil C sequestration natural abundance of ^{15}N and ^{13}C and its effect on N_2O emission **((In Process IAEA).**
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REVIEW REPORT

- ◆ Written a review report on “Reviewing the analytes extraction and quantification of persistent organochlorine pesticide (POPs) residues in water and sediments of river Elbe (Germany)”.
 - ◆ Written three yearly reports on research project “Utilization of pressmud as organic fertilizer to improve physico-chemical characteristics of soil and yields of legumes”.
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POST DOC REPORT

Problems in Chromium (IV) determination by FAAS and the use of organic materials as a filter bed to control Chromium contamination in soil and water.

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MEMBERSHIPS:

1. Member Soil Science Society of Pakistan.
2. Member “MYCOPS” Myco-Phytopathological Society of Pakistan.
3. Member Khwarzimid Science Society, Punjab University, Lahore.
4. HEC approved supervisor.
5. Member Higher Education Commission (H.E.C) of Pakistan Curriculum Committee on “Land Water Management”.
6. Member HEC Curriculum Committee on “Agricultural Chemistry”.
7. Member HEC Curriculum Committee on “Soil Science”.
8. Member Board of Studies in the Department of Soil & Environmental Sciences, Faculty of Agriculture, Gomal University.
9. Member Ph.D supervisory committee in the Department of Soil & Environmental Sciences, Faculty of Agriculture, Gomal University.
10. Member Selection & Purchase Committee of the Project “International linkage program, University of Glasgow, UK & Gomal University, DIKhan”.
11. Member Advanced Board of Studies & Research, Gomal University, DIKhan.

NATIONAL LEVEL WORKSHOPS/WALKS/SEMINARS ORGANIZED

- ▶ One day national workshop on “Water/Energy conservation in Agriculture”, 2008 funded by HEC.
http://www.gu.edu.pk/N/home_data/NewEvents/WorkShopHEC.asp
- ▶ A Walk and a Seminar on the “World Environment Day”, June 5, 2008.
http://www.gu.edu.pk/N/home_data/NewEvents/WorldDay.asp
- ▶ Organized one day national workshop on “Integrated soil and water resource management in CRB Canal command area, in DIKhan, 2008 funded by HEC.
http://www.gu.edu.pk/N/home_data/NewEvents/OneDayWork11Oct08.asp
- ▶ Seminar on “Mitigation of green house gases/Nitrogen losses & use efficiency. 2009.
http://www.gu.edu.pk/N/home_data/NewEvents/SeminarSoilSciences.asp
- ▶ 2-Days Training Workshop on “BioSand Water Filter/Drinking water quality”, 09-10th February, 2010.
http://www.gu.edu.pk/N/home_data/NewEvents/BioSand.asp
- ▶ Conference/Workshop: Water for Cities: Responding to the Urban Challenge, 22nd March, 2011.
http://www.gu.edu.pk/N/home_data/NewEvents/ConfSoilSciences.asp
- ▶ Organized two days Joint Training workshop on “Enabling Technologies in Distance Education” in Gomal University with HEC & Allama Iqbal Open University.
http://www.gu.edu.pk/N/home_data/DDE.pdf
- ▶ Conference on “Use of GIS for Natural Resources Conservation....” On 4th September, 2012.
http://www.gu.edu.pk/N/home_data/Events.asp

LIST OF PUBLICATIONS**Book Chapter Published**

M. Zaman^{*}, M.L. Nguyen, M. Šimek, S. Nawaz, **M. J. Khan**, M.N. Babar and S. Zaman. ^{*} Ballance Agri-Nutrients Limited, Tauranga, New Zealand & Gomal University, Dera Ismail Khan, Pakistan. Greenhouse Gases - Emission, Measurement and Management (ISBN 979-953-307-224-0): Emissions of Nitrous Oxide (N₂O) and Di-Nitrogen (N₂) from the Agricultural Landscapes, Sources, Sinks, and Factors Affecting N₂O and N₂ Ratios. InTech - Open Access Publisher, Croatia, 2012.

Manuscripts Published = 46

1. M. Qasim, **M. Jamil** and H. Khan. Effect of trace elements on the yield of wheat crop. **Gomal Uni. J. Res.** (A) 13 (2); 99-105, 1993
2. M. Qasim, **M. Jamil** and M. Subhan. Effect of kind, quantity and time of fertilizers application on Mashbean. **Gomal Uni. J. Res.** (A) 15 (1): 141-148, 1995.
3. M. Qasim, A. Rehman, M. Subhan and **M. Jamil**. To study the effect of kind, quantity and time of fertilizers application on Soybean. **Gomal Uni. J. Res.** (A) 15 (2): 7-14, 1995.
4. M. Qasim & **M. Jamil**. Effect of Trace Elements on their concentration in Soil and Wheat leaves. **Sarhad J. Agric.**, 14 (2), 121-125, 1998.
5. Umar Khan, M. Qasim and **M. Jamil**. Effect of different levels of Zn on the extractable Zn content of soil and chemical composition of rice. **Asian. J. Plant Sciences.** 1(1), 20-21, 2002.
6. Umar Khan, M. Qasim and **M. Jamil**. Response of rice to Zinc fertilizer in calcareous soils of D. I. Khan. **Asian J. Plant Sciences.** 1(1), 1-2, 2002.
7. Umar Khan, M. Qasim, M. Subhan, **M. Jamil** and Riazud Din Ahmad. Response of rice to different methods of Zn application in calcareous soils. **Pak. J. Applied Sciences**, Faisalabad. 3(7): 524-529, 2003.
8. Umar Khan, M. Qasim, M. Subhan, **M. Jamil**, Riazud Din Ahmad and Liaqat Ali. Effect of Zn application by different methods on the chemical composition and grain quality of rice. **Pak. J. Applied Sciences**, Faisalabad. 3(7): 530-536, 2003.
9. M. Qasim, **M. Jamil**, M. Umar Khan and M. Subhan. Yield and quality of sunflower in response to nitrogen fertilizer nutrition. **J. Pure and Applied Sciences.** Uni. Bahawalpur. 22 (1): 89-94, 2003.
10. Munir Muhammad, **Jamil Muhammad**, Baloch Jalal-ud-Din and Khattak Khalid Rehman. Impact of light intensity on flowering time and plant quality of *Antirrhinum majus* L. cultivar Chimes White. J. of Zhejiang University, **SCIENCE, China.** 5(4): 400-405. 2004.
11. Muhammad Munir, **Muhammad Jamil**, Jalal-ud-Din Baloch and Khalid Rehman Khattak. Growth and flowering of *Antirrhinum majus* L. under varying temperatures. **Int. J. of Agri; and Bio.** 6(1): 173-178. 2004.

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12. **M. Jamil**, M. Qasim and M. Umar. Agronomic potential of organic wastes (sewage sludge) in respect of Wheat (*Triticum aestivum* L.). **Int. J. of Agri; and Bio.** 6(3), 465-467, 2004.
13. **M. Jamil**, M. Qasim and M. Umar. Agronomic potential of organic wastes (bagasse ash) in respect of Wheat (*Triticum aestivum* L.). **Int. J. of Agri; and Bio.** 6(3), 468-470, 2004.
14. M. Umar Khan, M. Qasim and **M. Jamil**. Effect of Zn on Starch Content of Paddy and Zinc Content of soil, leaf and root of Rice grown in calcareous soils. **Int. J. Agri. Bio.** Vol. 6. No. 6. 1132-1135, 2004.
15. Ghulam Zarina, Muhammad Munir, M. Qasim, **M. Jamil** and Jalal-Ud-Din Baloch. Effect of extent of pruning on growth and flowering characteristics of six exotic rose cultivars. **Sarhad. J. Agri.**, 20 No. 4, 502-505, 2004.
16. M. Umar Khan, M. Qasim and **M. Jamil**. Effect of different levels of Zn on the yield and yield components of Rice in different soils of D. I. Khan, Pakistan. **Sarhad J. Agri.** Vol. 21, No. 1, 64-69, 2005.
17. **M. Jamil**, M. Munir, M. Qasim, Jalal-ud-Din Baloch and K. Rehman. Effect of different types of mulches and their duration on the growth and yield of Garlic (*Allium sativum* L.). **Int. J. Agri. Bio.** Vol. 7, No. 4, 588-591, 2005.
18. **M. Jamil**, M. Qaim and M. Umar. Utilization of sewage sludge as organic fertilizer in sustainable agriculture. **J. Appl. Sc.** Vol. 6(3) 531-535, 2006.
19. Salma Shaheen, M. Qasim, **M. Jamil** and Javed Iqbal. Effect of bagasse ash on physico-chemical characteristics of soil. **Indus Journal of Biological Sciences**, 3 (2): 842-846, April 2006.
20. **M. Jamil**, Sabir Ali, M. Qasim, M. Munir and Jalal-Ud-Din. Effects of extent and time of pruning on the growth and yield of phalsa (*grewia asiatica* l.): reappraisal of analysis using polynomial model. **Sarhad J. Agri.** Vol. 22, No. 1, 32-35, 2006.
21. M. Sharif Zia, M. Qasim and **M. Jamil**. Waste water use in agriculture and heavy metal pollution in soil plant system. **Journal of Chemical Society**, Pakistan, 30 (3), 424-430, 2008.
22. **M. Jamil** and M. Qasim. Integrated use of boiler ash as organic fertilizer and soil conditioner in calcareous soil. **Songklanakar J. Sci. Technol.** 30(3), 281-289, 2008.
23. **M. Jamil**, M. Qasim and M. Sharif Zia. Utilization of pressmud as organic amendment to improve physico-chemical characteristics of calcareous soil under two legume crops. **Journal of Chemical Society, Pakistan**, 30 (4), 577-584, 2008.
24. **M. Jamil**, M. Qasim and M. Sharif Zia. Sugar industry press mud as alternate organic fertilizer source. **International Journal of Environment and Waste Management (IJEWM)**, Inderscience Publishers, Ltd. **Switzerland**, 2008 (Accepted).
25. **M. Jamil**, M. Sharif Zia, M. Qasim and A. Rahman. Pesticide residue in the food chain and human body inside Pakistan. **Journal of Chemical Society, Pakistan**, 31 (2) 284-291. 2009.

26. Ghulam Abbas, M. Qasim Khan, **M. Jamil**, M. Tahir and Fida Hussain. Nutrient Uptake, Growth and Yield of Wheat (*Triticum aestivum*) as Affected by Zinc Application Rates. **Int. J. Agric. Biol.** 11(4), 389-396, 2009.
27. G. Abbas, M. Q. Khan, **M. J. Khan**, F. Hussain and I. Hussain. Effect of iron on the growth and yield contributing parameters of wheat (*Triticum aestivum*). **J. Animal and Plant Sciences**, 19 (3) 135-139, 2009.
28. **M. Jamil**, M. Qasim and M. Sharif Zia. Contamination of agro ecosystem and human health hazards from wastewater used for irrigation. **J. of Chemical Society of Pakistan**. 32(1), 2010.
29. P. Leinweber, G. Jandl, K.-U. Eckhardt, J. Kruse, F.L. Walley, **M.J. Khan**, R.I.R. Blyth, and T. Regier. Nitrogen speciation in fine and coarse clay fractions of a Cryoboroll - new evidence from pyrolysis-mass spectrometry and nitrogen *K*-edge XANES. **Canadian Journal of Soil Science**. 2(90) 309-318, 2010.
30. Z. Bibi, N. U. Khan, M. Aram, Q. U. Khan, **M. J. Khan**, S. Batool and K. Makhdoom. Maize response to integrated use of NP-Fertilizers and compost. **Pak. J. Bot.**, 42(4), 2010.
31. Q. U. Khan, M. J. Khan, S. Rehman and Sanaullah. Dhanchia, an effective amendment in improving salt affected soils and enhancing P efficiency in Rice-Wheat cropping system. **Sarhad J. Agric.** 26 (1): 37-42, 2010.
32. Q. U. Khan, M. J. Khan, S. Rehman and Sanaullah. Comparison of different models for phosphate adsorption in salt inherent soil series of Dera Ismail Khan. **Soil & Environ.** 29(1): 11-14, 2010.
33. Qudratullah Khan, **M. Jamil Khan**, Saifur Rehman & Sanaullah Khan. Impact of Equilibrating Time on Phosphate Adsorption & Desorption Behaviour in Some Selected Saline Sodic Soils. **J. Chem. Soc. Pak.** 34(1): 33-38, 2012.
34. Imdad Ullah Khan, **Muhammad Jamil Khan**, Naqib Ullah Khan, Mohammad Jamal Khan, Habib Ur Rahman, Zarina Bibi and Kalim Ullah. Wastewater Impact on Physiology, Biomass and Yield of Canola (*Brassica Napus L.*). **Pak. J. Bot.**, 44(2): 781-785, 2012.
35. Mr. Azizullah Azizullah Peter Richter, Ph.D; **Muhammad Jamil, PhD**; Donat-Peter Häder, Prof. Dr. Dr. h.c. Chronic Toxicity of a Laundry Detergent to the Freshwater Flagellate *Euglena gracilis*. **Ecotoxicology**. 2012 (Accepted).

MANUSCRIPTS PRESENTED IN INTERNATIONAL CONFERENCES/ PROCEEDINGS

36. M. Sharif Zia, **M. Jamil**, M. Qasim Khan, Adam Khan, and Mehvish Kiran. Remediation Strategies for Safe use of Wastewater in Agriculture. Abstracts of Papers, South Asian Conference on "Water in Agriculture", Indira Gandhi Agricultural University, Raipur, **India**, 15-17/11/2007, pp 309.
37. M. Sharif Zia, **M. Jamil**, M. Qasim, A. Rahman and K Usman. Natural Resources Pollution and Degradation due to Pesticide use in Pakistan. Abstracts of Papers, 12th International

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- Conference on Integrated Diffuse Pollution Management (IWA DIPCON 2008). Research Center for Environmental and Hazardous Substance Management (EHSM), Khon Kaen University, **Thailand**; 2008. Abstract 02-071.
38. **M. Jamil**, M. Sharif Zia and M. Qasim. Heavy metal and pathogenic contamination of agro-ecosystem due to waste water use in agriculture. 13th International Conference on Integrated Diffuse Pollution Management (IWA DIPCON 2009). Seoul, **South Korea**; 2009. Abstract 030.
39. M. Jamil*, M. Sharif Zia and M. Qasim Khan. Sewage sludge: An important resource for sustainable agriculture and its environmental implications. ICEST 2010 Conference, on "Environmental Science and Technology" in Bangkok, Thailand, 23-25 April, 2010. Proceedings.
40. M. Jamil. Use of Pesticides and Their Role in Environmental Pollution. ICEST 2010: International Conference on Environmental Science and Technology, Singapore, December 18-20, 2010. Proceedings.
41. **M. Jamil**. Impact of Selected Doses of Organic Wastes on Physico-Chemical Characteristics of the Soil and Yield of Wheat. ICEAE 2011: "International Conference on Environmental and Agriculture Engineering", Chengdu, China, 29-31 July, 2011. Proceedings: *2011 2nd International Conference on Environmental Engineering and Applications. IPCBEE vol.17 (2011)*
42. **M. Jamil Khan**. Analytes Extraction and Quantification for Organochlorine Pollutant Residues in Water and Sediments of River Elbe. Proceedings CBEES, International Conference on Climate Change and Humanity -ICCCCH 2012, 26-28, February 2012, Singapore, Abstract H2012.

MANUSCRIPTS PRESENTED IN NATIONAL CONFERENCES

43. Abdus Subhan, Matiullah Khan, M. Qasim and **M. Jamil**. Participation and guidance of Rodkohi Farmers in irrigating their fields through canal water from CRBC and other canals of NWFP. National Drainage Seminar, June 7-8, 2004, NWFP Agricultural University, Peshawar.
44. **M. Jamil** and M. Qasim. Integrated Use of Boiler Ash as Organic Fertilizer and Soil Conditioner in Calcareous Soil. National Research Conference. 29th - 30th June, 2007, Holiday Inn, Lahore. University of South Asia and University of Management Sciences, Lahore, Pakistan. 2007.
45. **M. Jamil Khan**. Impact of pressmud application on physico-chemical characteristics of the soil and yield of Lentil (*lens culinaris*). Proceedings 2nd International Conference, "Environmentally Sustainable Development", 26-28 August, 2007, COMSATS, Abbottabad, Pakistan.
46. **M. Jamil**, M. Qasim and M. Sharif Zia. Impact of pressmud on physico-chemical characteristics of calcareous soil under legume crops. Proc. 7th Int. and 17th Nat. Chem. Conf. 101-106, 26-28th February, 2007.

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MANUSCRIPTS SUBMITTED FOR PUBLICATION

1. **M. Jamil**, Adam Khan and M. Qasim. Morrisville-Gomal Buffer test: a new buffer test to determine lime recommendations for soil. Journal of Chemical Society of Pakistan.
 2. **M. Jamil** and T. H. Flowers. Problems in Chromium (VI) detection by FAAS and use of organic material as filter bed to control the Chromium contamination in soil and water. Journal of Chemical Society of Pakistan.
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MANUSCRIPTS IN PROCESS

1. **M. Jamil**. Comparative studies on different wheat cultivars for salt resistance.
2. **M. Jamil**. Impact of selected doses of sewage sludge, press mud and bagasse ash on the physico-chemical characteristics of calcareous soil.
3. **M. Jamil**, M. Qasim & S. Ahmed. Effect of sewage effluents and sludge application on the heavy metal content of soil and yield of peas (*pisum sativum* L).
4. **M. Jamil**. Bioavailability and phytoextraction of heavy metals in soil contaminated by the application of municipal and industrial wastes (sewage sludge, press mud and bagasse).