

RAZA ULLAH KHAN

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E 206, Soil & Plant Nutrition Program, LRRI, NARC, Park Rd,
Islamabad

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Islamabad

CURRENT POSITION

National Agricultural Research Centre

Principal Scientific Officer

Park Rd, Islamabad, PK

2001-Present

EDUCATION

Massey University

PhD, Plant Nutrition

Palmerston North, NZ

Thesis: Availability and Dynamics of Boron in *Pinus radiata*
Plantation in New Zealand

2013

Agricultural University

MSc (Hons.)

Peshawar, PK

Dissertation: The Role of Inoculation in Lentil Production in
Northern NWFP

Scholarship

Higher Education Commission (HEC) –Govt. of Pakistan granted
Scholarship under overseas PhD Program for life sciences

2007-2012

RESEARCH EXPERIENCE

Currently working in project entitled "Production of Humic
Substances Based Plant Nutrients Products"

PROFESSIONAL ASSOCIATIONS

Member Soil Science Society of Pakistan

Member Royal Society of NZ

TEACHING EXPERIENCE

Allama Iqbal Open University

H-8, Islamabad, PK

CONFERENCE PRESENTATION

R. Khan., M.Z.Kham., A. Khan and F. Hussain Characterization of Coal and Plant Derived humic substances using FTIR and HPLC. 16th Int'l Congress of Soil Sci. organized by Soil Sci. Society of Pakistan. March 15-17, 2016 Arid university Rawalpindi, Pakistan.

R. Khan, C.W.N. Anderson, P. Loganathan, J. Xue and P. Clinton. *Pinus radiata* growth and B uptake response to B applied fertiliser in glasshouse study. Int'l soil science Congress on Management of Natural Resources to sustain soil health and quality. May 26-28 2010 Samsun Turkey.

Raza. U. Khan, C.W.N. Anderson, P. Loganathan, J. Xue and P. Clinton Effect of slow-release boron fertiliser on *Pinus radiata* growth and photosynthesis under greenhouse conditions. 309-314. Farming's future: Minimising footprints and maximising margins, 10-11 February 2010, Massey University, Palmerston North, New Zealand.

Khan. R. U, Loganathan. P, Xue. J, Clinton. P and Anderson. C.W.N. Anderson. Effect of boron fertilizer on soil boron fractionation and availability in a soil under *Pinus radiata* plantation. Poster paper presented in Soil-The living skin of Planet Earth. Joint conference of Australian and New Zealand soil Societies held Dec 1-5, 2008.

A. Rashid., M. Yasin., M.A. Ali, and **R.U. Khan**. Boron deficiency in Rice in Pakistan: A serious constraints productivity and grain yield In: Proceedings international Symposium on Strategies for crop improvement against Abiotic Stresses, 18-20 Sep. 2006, Agri. Uni. Faisalabad Pakistan.

A. Rahid, M. Yasin, A. Zahoor, I.A. Khan, and **R.U. Khan**: Alarming Boron deficiency. Pp 103-116, In: Advances in Plant and Animals B Nutrition. Proceeding of 3rd International Symposium on All aspects of Boron, Wuhan, China, 9-13 Sep. 2005. Springer, Dordrecht.

PEER-REVIEWED PUBLICATIONS

Khan. A., **Khan. R.U.**, Khan. M.Z., Hussain. F and Akhtar. M. E (2013). Characterization and Effect of Plant Derived Humic acid on the Growth and Yield of Pepper under Glasshouse Conditions. *Pak. J Chem. Soc.* 3 (3): 1-6.

Khan. M.Z., Akhtar. M. E., Ahmad. S., Khan. A and **Khan. R.U** (2013). Chemical Composition of Lignitic Derived Humic acid and Evaluation of its Positive Impacts on Nutrients Uptake, Growth and Yield of Maize. *Pak. J Chem. Soc.*

Khan, A., M.E. Akhtar., **R.U Khan**, M. Z. Khan and Jalal-Ud-Din (2015) Response of Onion Yield under Field Conditions to Humic acid derived from Different Sources. Under review in *Pak. J. Agri. Res.*, PARC, Islamabad.

Khan, R. U., M. Z. Khan., A. Khan., M. E. Akhtar and F. Hussain (2015) Characterization of Coal and Plant derived humic substances using Fourier Transform Infrared Spectroscopy and High Pressure Liquid Chromatography. Under review in *J. Soil and Envir. Pak.*

R.U. Khan., M. Z. Khan., A. Khan., S. Saba., I. U. Jan and M. Khan (2015) Effect of Humic Acid on Wheat Growth and Crop Nutrients Status Grown on Two Different Soil. Under review in *J. Plant Nutr.*

Khan. R., Anderson. C.W.N., Loganathan. L., Jianming. X and Clinton. P. (2012). The response of *P. radiata* D. Don to boron fertilization in a glasshouse study. *Commu. Soil Sci. Plant Anal.* 43: 1412-1426.

Salimullah Khan, Muhammad Nisar, Wajid Hussain, **Raza Ullah Khan** and Fazli Nisar (2010). Anti-inflammatory study on crude methanol extract and different fractions of *Eremostachys laciniata* (L). *Pharma. Biol.* 48(10): 1115-1118.

Attaullah Shah, Salimullah K. M. Shah, **Raza Ullah Khan** and Irfanullah Jan (2010). Environmental impact assessment (EIA) of infrastructure development projects in developing countries. *OIDA int'l J. sustainable develop.* 10 (4):47-54.

Salimullah Khan, M. Nisar, Simjee S.U, W. Rehman, **Razaullah Khan**, Irfan Ulah J, and Momin (2010). Evaluation of micronutrients level and antinocipptive property of *Eremostachys laciniata* (L) Bunge. *African J. Biotec.* 9(5):775-777.

Salimullah Khan, F. Khan, M. Nisar, B. Ahmed and **R. U. Khan.** (2007). The Effect of Suspended solids on disinfecting process for the Drinking water supply in Peshawar Valley. *J. Chem. Soc. Pak.* 29(2):121-124.

Raza Ullah Khan, Shafiullah and S. Ahmad. (2003). Seabuckthorn (*Hippophae rhamnoides* L.) a magic plant found in Northern Areas. *Hamdard Medicus*, XLVI(3):20-22.

Fayyaz. A and **Raza Ullah Khan.** (2002). Effect of Different Soil Media and Irrigation Intervals on the growth of Aerial plant parts of *Sophora secundiflora*. L. *Asian J. Plant Sci.* 1(2):91-92.

Raza Ullah Khan, S. Ahmad, S. Khan, F. Ahmad, M. Zaman and B. A. Khan. (2002). Effect of different levels of Nitrogen, Phosphorous and Potassium on the growth and yield of cabbage *Asian J. Plant Sci.* 1 (5): 548-549.

Nadar Khan, Muhammad Qasim, Fayaz Ahmad, Falak Naz, **Raza Ullah Khan** and Bashir Ahmad Khan. (2002). Effect of different sowing dates on the yield of maize under the agroclimatic conditions of Kahgan valley. *Asian J. Plant Sci.* 1 (2): 146-1479.

Zahir Shah, **Raza Ullah Khan**, S.H. Shah, D.F. Herridge and M.B. Peoples. (2000). Does Lentil need inoculation in Northern NWFP? *Sarhad J. Agri.* 16(2): 179-186.

“Humic acid ki ahmiat aur afadiat” (Urdu language) (translation: Humic acid its importance and benefits) brusher about the importance and benefits of humic acid

BOOK CHAPTER

A. Rashid, M. Yasin, M.A. Ali, Z. Ahmad, and **R. Ullah** (2009). Boron Deficiency in Rice in Pakistan: A serious Constraint to productivity and Grain Quality. In: Salinity and Water Stress Improving Crop Efficiency, Eds. M. Ashraf, M. Ozturk and H.R. Athar. Pp 213-220. Springer Publishers.

CURRENT RESEARCH ACTIVITIES

Humic acid

Various proportions of humic acid derived from coal and plant materials are being tested on cereals (wheat, maize), vegetables (tomato, onion) by mixing in various proportion with inorganic fertilizer to see its efficacy and economics.

ICARDA-Pakistan

Conducting field experimentation under Soil health and soil fertility project financed by USDA and ICARDA-Pak on micronutrients management in wheat and peanuts in rainfed Chakwal district.

Lab. work

How does humic acid affect soil organic matter- lab. Studies conducted and presented in biannual soil science congress.

Future Research Focus

Organo-metallic research to address problems of soil deterioration and rationalize the use of fertilizer in high tilled soils

Software/Modellings

R Studio, SAS, Sigmaplot 12

Apsim

REFEREES

Dr. Chris Anderson
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Associate Professor soil & Earth Group, Institute of Natural Resources, Massey University, Palmerston North

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