

RESUME



Dr. Rashid Mahmood
Assistant Professor (Soil Science)

CONTACT

Permanent Address: Anjum street Muhallah Rasoolpura, Farooqabad,
Tehsil and District Sheikhupura.
Postal Address: Institute of Agricultural Sciences, University of
the Punjab, Lahore, Punjab, Pakistan.
Cell: +923447079236
Email: rashid.iags@pu.edu.pk

EDUCATION

2004 - 2009 (5 years)
UNIVERSITY OF AGRICULTURE FAISALABAD, PAKISTAN
Doctor of philosophy (Soil Science)

Thesis title: Effectiveness of calcium carbide for improving nutrient use
efficiency and yield of wheat crop.

2003 - 2004 (2 years)
UNIVERSITY OF AGRICULTURE FAISALABAD, PAKISTAN
Master of Science (Honours) Agriculture
Result: 73.58 % Marks with 3.48 CGPA

Thesis title: Effect of rate and time of application of encapsulated calcium carbide
on growth and N uptake of wheat

1998 - 2002 (4 years)
UNIVERSITY OF AGRICULTURE FAISALABAD, PAKISTAN
Bachelor of Science (Honours) Agriculture
Result: 74.47 % Marks with 3.56 CGPA

1996 - 1998 (2 years)
BOARD OF INTERMEDIATE AND SECONDARY EDUCATION,
LAHORE
Intermediate in Science (Pre-medical group)
Result: 69.63% Marks Grade "B"

1994 - 1996 (2 years)
BOARD OF INTERMEDIATE AND SECONDARY EDUCATION,
LAHORE
Matriculation
Result: 76.70 % Marks Grade "B"

PROFESIONAL EXPERIENCE

January, 2012 – Present
Assistant Professor (Soil Science) under TTS
Institute of Agricultural Sciences,
University of Punjab, Lahore, Pakistan

2009 – 2012

Agriculture Officer (Laboratory)

Soil and Water Testing Laboratory, Sheikhpura

Government of Punjab, Pakistan

1. Soil and irrigation water sampling.
2. Soil analysis for the determination of fertility status and to diagnose soil problems.
3. Water analysis to classify it as fit or unfit for irrigation purpose.
4. Fertilizer and other soil amendment materials analysis for quality assurance.
5. Advisory service to farmers on the basis of laboratory results.

PUBLICATIONS IN IMPACT FACTOR JOURNALS

(Cumulative Impact Factor: 10.014)

Kanwal, A, A. Javaid, **R. Mahmood** and N. Akhtar. 2017. Correlation between soil nutrients and soil-borne mycoflora in wheat-rice cropping system of Punjab, Pakistan. *The Journal of Animal & Plant Sciences*, 27(4), 1256-1263 (Impact factor: 0.448).

Shakar, M., M. Yaseen, **R. Mahmood** and I. Ahmad. 2017. Effect of soil-applied CaC₂ on gas exchange characters, nitrogen metabolism and fruit yield in cucumber (*Cucumis sativus*). *New Zealand Journal of Crop and Horticultural Science*, 1-12 (Impact factor: 0.605).

Khan, H. A. A., W. Akram, T. Khan, M. Arshad, S. Ali, **R. Mahmood** and F. Hafeez. 2017. Correlation of biochemical leaf traits and gall formation in six cultivars of mango, *Mangifera indica* L. *Pakistan Journal of Agricultural Sciences*, 54(1), 91-96 (Impact factor: 1.049).

Shakar, M., M. Yaseen, A. Niaz, **R. Mahmood**, M. M. Iqbal and T. Naz. 2016. Calcium Carbide-induced changes in germination, morpho-phenological and yield traits in cucumber (*Cucumis sativus*). *International Journal of Agriculture & Biology* 18(4): 703-709. (Impact factor: 0.758).

Shakar, M., M. Yaseen, **R. Mahmood**, I. Ahmad. 2016. Calcium carbide induced ethylene modulates biochemical profile of *Cucumis sativus* at seed germination stage to alleviate salt stress. *Scientia Horticulturae* 213: 179–185. (Impact factor: 1.538).

Mahmood, R. and M. Yaseen. 2016. Influence of calcium carbide formulations on growth, yield and nitrogen uptake of wheat under field conditions. *Journal of Plant Nutrition*. 39(5): 609-619. (Impact factor: 0.510)

Amin. M, R. Ahmad, A. Ali, I. Hussain and **R. Mahmood**, M. Aslam and D.J. Lee. 2016. Influence of Silicon Fertilization on Maize Performance Under Limited Water Supply. *Silicon* (Impact factor: 0.86).

Ali. A, T. Haq, **R. Mahmood**, M. Jaan and M.N. Abbas. 2016. Stimulating the Anti-Oxidative Role and Wheat Growth Improvement Through Silicon Under Salt Stress. *Silicon* (Impact factor: 0.86).

Ali. A, W. Ahmad, **R. Mahmood**, T. Haq and M.N. Abbas. 2016. Salinity tolerance in rice as affected by application of abscisic acid and salicylic acid. *Bangladesh Journal of Botany* 45(1): 93-98. (Impact factor: 0.301).

Akhtar, S., A. Shoaib, N. Akhtar and **R. Mahmood**. 2016. Separate and combined effects of *macrophomina phaseolina* and copper on growth, physiology and antioxidative enzymes in *vigna mungo* L. *The Journal of Animal & Plant Sciences* 26(5): 1339-1345. (Impact factor: 0.422).

Siddiq, S, M. Yaseen and **R. Mahmood**. 2015. Impact of calcium carbide induced nitrogen uptake and ethylene related response on fruit quality of three Tomato (*Lycopersicon esculentum* Mill.) Cultivars. *Philippine Agricultural Sciences* 98(4): 368-373 (Impact factor: 0.260).

Mahmood, R. and M. Yaseen. 2014. Effectiveness of calcium carbide formulations in emergence stimulation and growth of wheat seedlings. *Pakistan Journal of Agricultural Sciences* 51(3): 579-584 (Impact factor 1.05).

Mahmood, R., A. A. Shahid, A. Usmani, M. S. Haider and S. Ali. 2014. Nitrification inhibition potential of various leaf extracts. *Philippine Agricultural Scientist* 97(3): 287-293 (Impact factor 0.260).

Mahmood, R. and M. Yaseen. 2014. Calcium carbide based formulations cause a slow release of acetylene and ethylene in the soil and inhibits nitrification. *Communications in Soil Science and Plant Analysis* 45: 2277-2288 (Impact factor 0.42).

Mahmood, R., A. Ali and M. Ahmad. 2014. Role of encapsulated calcium carbide in nitrogen economy, growth and yield of crops- a review. *The Journal of Animal and Plant Sciences* 24(2): 354-361 (Impact factor 0.45).

Mahmood, R., M. Yaseen, A. Ali, J. Iqbal, M. Sarwar and S. Hussain. 2011. Effect of rate and application depth of matrix-I calcium carbide based formulation on growth, yield and nitrogen uptake of wheat. *African Journal of Agricultural Research* 6(30): 6363-6368 (Impact factor; 0.263).

Mahmood, R., M. Yaseen and M. Arshad. 2007. Effect of rate and time of calcium carbide application on nitrogen use efficiency of applied urea and growth of wheat. *Pakistan Journal of Botany* 39(2): 497-502 (Impact factor; 0.82).

PUBLICATIONS IN HEC RECOGNISED NON-IMPACT FACTOR JOURNALS

Ali, A., N. Abas, M. M. Maqbool, T. Haq, M. Ahmad, **R. Mahmood**. 2015. Influence of soil applied moringa leaf extract on vegetative growth of *Cyperus Rotundus*. *Asian Journal of Agricultural Biology* 3(2):79-82.

Mahmood, A., A. J. Wahla, **R. Mahmood**, L. Ali and M. Nawaz. 2014. Impact of sowing time on yield parameters of selected wheat cultivars under rice-wheat cropping system of district Sheikhupura, Punjab, Pakistan. *Biologia (Pakistan)* (Y-category).

Sarwar, M, A. Ali, M. M. Maqbool, M. Ahmad, **R. Mahmood**, T. U. Haq. 2013. Suppressing impact of *Avena fatua* and *Phlaris minor* on the growth and yield in wheat. *Pakistan Journal of Nutrition* 12 (10): 912-916 (Y-category).

Maqbool M. M., M. Ahmad, A. Ali, **R. Mahmood**, M. Ahmad and M. Sarwar. 2012. Optimizing the Method and Source of Phosphatic Nutrition for Wheat (*Triticum astivum* L.) Under Agro-Climate of Dera Ghazi Khan. *Pakistan Journal of Nutrition* 11 (9): 787-792 (Y-category).

Mahmood, R., M. Yaseen, A. Ali, J. Iqbal, S. Hussain and M. A. A. H. A. Bukhsh. 2012. Nutritional and Physiological Response of Wheat to Soil Applied Matrix-I Formulated Calcium Carbide with and Without Nitrogen Fertilizer. *Pakistan Journal of Nutrition* 11 (2): 154-159 (Y-category).

Mahmood, R., M. Yaseen, M. Arshad and A. Tanvir. 2010. Comparative effect of different calcium carbide based formulations on growth and yield of wheat. *Soil and Environment* 29(1): 33-37 (Y-category).

Mahmood, R., M. Yaseen, S. Kashif and M. Arshad. 2005. Effect of rate and time of application of encapsulated calcium carbide on growth and N uptake of wheat. *Pakistan Journal of Agricultural Sciences* 42(1-2):48-55 (Y-category).

Yaseen, M., M. Sohail, **R. Mahmood**, S.A. Hussain, A. Rahim, W. Ahmad and S. R. Kashif. 2004. Phosphorus use efficiency in wheat genotypes: II. Chemical composition. *Pakistan Journal of Life and Social Sciences* 2(2): 159-162 (Y-category).

PUBLICATIONS IN OTHER LOCAL JOURNALS

Mahmood, A., A. J. Wahla, **R. Mahmood** and L. Ali. 2013. Influence of flat and bed sowing methods on growth and yield parameters of wheat in rice-wheat cropping system. *Mycopath* 11(1): 33-37.

Mahmood, A., G. S. Azhar, J. Iqbal, A. J. Wahla and **R. Mahmood**. 2013. Effects of herbicides on weed density and wheat yield. *Mycopath* 11(2): 103-108.

Kanwal, A., F. Anjum, H. Qudsia, A. Javaid and **R. Mahmood**. 2012. Evaluation of tebuconazole and thiophanate-methyl against some problematic soil-borne plant pathogens. *Mycopath* 10(1): 17-20.

Mahmood, R. and U. Bashir. 2011. Relationship between soil physicochemical characteristics and soil-borne diseases. *Mycopath* 9(2): 87-93.

PUBLICATIONS IN OTHER FOREIGN JOURNALS

Mahmood, R., M. Naseer, A. A. Shahid and A. Usmani. 2014. Screening of indigenous weed extracts against *Fusarium solani* with an emphasis to soil fertility related microbial activities. *Journal of Food, Agriculture & Environment* 12(2): 958-962.

PUBLICATIONS IN CONFERENCE PROCEEDINGS

Kashif, S. U. R., M. Yaseen, **R. Mahmood** and M. Arshad. 2007. Response of okra (*Abelmoschus esculentus* L. Moench) to soil applied calcium carbide – an innovative approach. Proceedings: International Symposium on Prospects of Horticultural Industry in Pakistan. 28th to 30th March. Institute of Horticultural Sciences, University of Agriculture, Faisalabad.

CONFERENCES

Mahmood, R., M. Hashmi and M. Shafiq. Growth and yield responses of chili pepper (*Capsicum annum*) to soil acidification. **Oral presentation:** 6th International Conference of Pakistan Phytopathological Society “Plant Health for Sustainable Agriculture” A focused approach for food security under changing climate, November 20-22, 2017, Department of Plant Pathology, Bahauddin Zakriya University and Central Cotton Research Institute, Multan.

Mahmood, R., M. Ali and M. Shafiq. influence of nitrogen to phosphorus supply ratio on growth yield and medicinally important characteristics of linseed (*Linum usitatissimum* L.). **Oral presentation:** International Conference on “Conventional and Modern Approaches in Plant Sciences” November 27-29, 2017, Department of Botany, University of the Punjab, Lahore-54590 Pakistan.

Rashid M., R. Hussain, S. N. Khan and S. Ramzan. Amount and form of nitrogen affect burnt leaf length of onion seedlings. **Poster presentation:** Conference on ‘Sustainable Crop and Animal Production Systems, December 08-10, 2016 at the University of Haripur, Haripur.

Sumreen S., Muhammad Y. and **R. Mahmood**. Impact of calcium carbide-influenced nitrogen uptake and ethylene related response on fruit quality of three tomato (*Lycopersicon esculentum* Mill.) cultivars. **Oral presentation:** 5th International Conference on Crop Protection for Sustainable Agriculture 23rd – 25th November 2015, Institute of Agricultural Sciences, university of the Punjab, Lahore.

Mahmood, R., S. Siddique and S. N. Khan. Correlation of curd-associated fungi with NPK and Na concentrations in cauliflower. **Poster presentation:** International Conference on Soil Sustainability for Food Security 15th -17th November, 2015, Institute of Soil & Environmental Sciences, University of Agriculture, Faisalabad, Pakistan

Mahmood, R., M. Yaseen. Influence of acetylene and ethylene release from calcium carbide formulations on soil nitrification; growth, yield and nitrogen economy of wheat. **Oral presentation:** International Conference on Advances in Agricultural, Biological & Environmental Sciences, October 15-16, 2014. IICBE conference Holiday Inn Dubai.

Mahmood, R., S. Siddique and S. N. Khan. Correlation of nitrogen, phosphorus, potassium and sodium concentrations with fungi causing postharvest discoloration in cauliflower. **Oral presentation:** 5th International Conference on Agriculture, Food Security and Climate Change, September 9-11, 2014. The University of Poonch, Rawalakot, Azad Kashmir, Pakistan.

Mahmood, R. and M. Yaseen. Calcium carbide formulations as soil amendments stimulate emergence and growth of wheat seedlings. **Oral presentation:** International Conference on Stress Biology & Management, May 21-23, 2014. Institute of Agricultural Sciences, University of the Punjab, Lahore, Pakistan.

Mahmood, R., M. Naseer, A. A. Shahid and A. Usmani. Influence of soil drenching with antifungal weed extracts on microbial indices of soil fertility. **Oral presentation:** International Conference of Environmental Horizon; Greening the Blue, January 01-03, 2014. Department of Chemistry, University of Karachi, Karachi, Pakistan.

Mahmood, R. and M. Yaseen. Influence of calcium carbide formulations on germination and biomass production of wheat. **Poster presentation:** International Conference on Sustainable Crop Productivity: Threats and Options, April 11-12, 2013. AARI, Faisalabad, Punjab, Pakistan.

International conference “Crop Management in Changing Climate”. February 11-13, 2013 Department of Agronomy University of Agriculture, Faisalabad, Pakistan (Participation)

RESEARCH PROJECTS

Principal Investigator of project entitled “Influence of various fertilizer-coating materials on hydrolysis of urea in soil” Funded by University of the Punjab for fiscal year 2015-16, amount PKR 0.15 million (Completed).

Principal Investigator of project entitled “Urease activity of soil for humic acid and sulfur coated urea” Funded by University of the Punjab for fiscal year 2014-15, amount PKR 0.15 million (Completed).

Principal investigator of project “Effect of type and combination of phosphorus and potassium fertilizers on soil urease activity. Funded by University of the Punjab for fiscal year 2013-14, amount PKR 0.15 million (completed).

Principal Investigator of project entitled “Evaluation of weed extracts in nitrification inhibition and uptake of synthetic nitrogen for yield enhancement of maize” funded by HEC, amount PKR 0.5 million, year 2012-13 (completed).

Submitted for Funding

Probing soil urease inhibitors from plant extracts and their use for the improvement of nitrogen use efficiency of wheat, rice and cotton crops. Submitted to HEC under National Research Program for Universities (NRPU) (Under Review).

Development and Optimization of Mobile-based Imaging System for Nitrogen Management in Field Crops. Submitted to HEC under National Research Program for Universities (NRPU) (Under Review).

TRAINING COURSES AND WORKSHOPS

Two weeks training course on “The use of nuclear and other techniques in food and agricultural research” held at “Nuclear Institute of Food and Agriculture (NIFA), Peshawar, Pakistan” dated 16-27, 2013.

Two days workshop on “Faculty professional training for core modules: Teaching as a profession and communication skills” held at “Institute of Agricultural Sciences, University of the Punjab, Lahore, Pakistan” dated 19-20, 2013.

One day national UIP seminar on “Developing local food additives/preservatives” held at “University of the Punjab, Lahore, Pakistan” dated November 22, 2012.

Two days training course on “Research Ethics, Endnote and Turnitin” held at “Department of Library and Information Sciences, University of the Punjab, Lahore, Pakistan” dated October 2-3, 2012.

One week 1st National Training Course on “Bacterial Identification and Metagenomics” held at “National Institute of Biotechnology and Genetic Engineering (NIBGE), Faisalabad, Pakistan” dated March 5-9, 2012.

One week training course on “Office Management” held at “Punjab Institute of Management and Professional Development Department (MPDD), Lahore, Pakistan” dated January 2-6, 2012.

RESEARCH SUPERVISION

- i. Muhammad Muneeb Hashmi, M.Sc. (Hons.) Agriculture, 2017. Nutrient use efficiency of chillies plants cultivated with acidified irrigation water (completed).

- ii. Nosheen Tabassum, M.Sc. (Hons.) Agriculture, 2017. Influence of nitrogen to phosphorus supply ratio on medicinally important characteristics of kalonji (*Nigelia sativa* L.) seeds (completed).
- iii. Mobeen Ali, M.Sc. (Hons.) Agriculture, 2017. “Importance of nitrogen to phosphorous proportionality of nutrient solution in regulating the growth yield and biochemical characteristics of linseed (*Linum usitatissimum* L. (completed).
- iv. Muhammad Rashid Khan, M.Sc. (Hons.) Agriculture, 2017. “Leaf color based nitrogen assessment of bell pepper (*Capsicum annum* L.) and deficit recovery through foliar application” (completed).
- v. Sundus, Ph.D., 2016. “Copper distribution variation in soil fractions and relationship with charcoal rot of *Vigna mungo* under organic amendments” (completed).
- vi. Riaz Hussain, M.Sc. (Hons.) Agriculture, 2016. Impact of nitrogen nutrition on tip burn disease of onion in hydroponics” (completed).
- vii. Samra Ramzan, M.Sc. (Hons.) Agriculture 2016. “Comparison of ammonium and nitrate nutrition on growth, yield and tip burning disease of onion” (completed).
- viii. Gohar Ayub, M.Sc. (Hons.) Agriculture, 2016. “Role of phosphorus nutrition on growth, yield and tip burn disease severity of onion” (completed).
- ix. Umar Khalid, 2016. Influence of potassium nutrition on tip burn disease of onion and related growth and yield parameters (completed).
- x. Atif Riaz, 2016. “Influence of form of nitrogen on bioactive compound profile of hydroponically grown onion” (completed).
- xi. Anam Usmani, M.Sc. (Hons.) Agriculture, 2013. Thesis research title “Evaluation of different weed extracts in nitrification inhibition, suppression of stem rot and yield enhancement of maize” (completed).
- xii. Memmona Naseer, M.Sc. (Hons) Agriculture, 2013, Thesis research title “Influence of weed extracts on charcoal rot of sunflower and soil beneficial microflora” (completed).
- xiii. Sidra Haneef, M.Sc. (Hons.) Agriculture, 2013. Thesis research title “Effect of farm yard manure on copper partitioning in soil and Fusarium wilt of tomato” (completed).
- xiv. Halima Qudsia, B.Sc. (Hons.) Agriculture, 2013. Internship report title “Isolation of soil mycoflora of cucumber tunnels and its chemical control” (completed).
- xv. Freeha Anjum, B.Sc. (Hons.) Agriculture, 2013. Internship report title “Isolation of soil-borne mycoflora of tomato tunnels and its chemical control” (completed).
- xvi. Amara Kanwal, B.Sc. (Hons.) Agriculture, 2013. Internship report title “Isolation of soil mycoflora of wheat fields and its chemical control” (completed).

- xvii. Ayesha Nisar, B.Sc. (Hons.) Agriculture, 2013. Internship report title “Soil locational and probability mapping of selected districts of Punjab through geographical information system” (completed).
- xviii. Mariya Khan, B.Sc. (Hons.) Agriculture, 2013. Internship report title “Soil locational and probability mapping of selected districts of Punjab through geographical information system” (completed).
- xix. Faiza Mahmood B.Sc. (Hons.) Agriculture, 2013. Internship report title “Soil locational and probability mapping of selected districts of Punjab through geographical information system” (completed).

MEMBERSHIP

- i. Member “Soil Science Society of Pakistan”.
- ii. Member “Zonal Technical Committee of Adaptive Reseach Farm Sheikhpura, Punjab, Pakistan..

PERSONNAL PROFILE

Father’s Name:	Muhammad Younas
Date of Birth:	08-03-1979
Nationality:	Pakistani
Gender:	Male
Marital Status:	Married
C.N.I.C #:	35404-1624512-9

REFERENCES Will be furnished if required.