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CAREER SUMMARY

I am an agronomist with specialization in sustainable crop production, nutrient management, organic farming, and cropping systems. I have served in various academic and administrative roles, and is actively engaged in teaching, research, community service, and international collaboration. In addition to my research, I am a Postgraduate Coordinator and am passionate about educating the next generation of agricultural scientists.

QUALIFICATIONS

Degree	Institution	Year	Major
B.Sc. (Hons.)	University of Agriculture, Faisalabad	2005	Agriculture
M.Sc. (Hons.)	University of Agriculture, Faisalabad	2007	Agronomy
Visiting Scholar	University of California, Davis, USA (IRSIP)	2010	Water quality & nutrient management
Ph.D.	University of Agriculture, Faisalabad	2011	Agronomy

PROFESSIONAL SUMMARY

- Associate Professor (TTS), Department of Agronomy, BZU Multan, Oct 2019 – Present
- Assistant Professor (TTS), Department of Agronomy, BZU Multan, 2013 – 2019
- Assistant Professor (IPFP), Department of Agronomy, BZU Multan, 2012 – 2013

Peer Reviewed Journal Publications

1. Muhammad Dawood, **Naeem Sarwar**, Tauqeer Ahmad Yasir and Aqeel Ahmad. 2025. Synergistic effect of nitrogen and mulching to enhance water use efficiency, grain quality, and

productivity of maize (*Zea mays* L.), Journal of plant nutrition (accepted): **corresponding author**

2. Muhammad Naveed, **Naeem Sarwar**, Khuram Mubeen, Atique-ur-Rehman, Omer Farooq, Allah Wasaya, Tauqeer Ahmad Yasir. 2024. Elevated auxin levels during the reproductive stage improve rice crop productivity and grain quality *Acta Agrobotanica*, DOI: 10.5586/aa/188711. (**Corresponding author**)
3. **Naeem Sarwar**, Allah Wasaya, Tauqeer Ahmad Yasir, Khuram Mubeen, Mubshar Hussain, Muhammad Mansoor Javaid, Kashan Mehboob & Ayman El Sabagh. 2024. Potassium supplementation mitigates flooding stress by regulating antioxidant enzymes, photosynthetic performance, yield attributes, and lint quality in cotton plants, *JOURNAL OF PLANT NUTRITION*, <https://doi.org/10.1080/01904167.2024.2384565>
4. Allah Wasaya, Sabeela Yaqoob , Allah Ditta, Tauqeer Ahmad Yasir, **Naeem Sarwar**, Muhammad Mansoor Javaid , Ibrahim Al-Ashkar, Ayman EL Sabagh, Muhammad Umar Farooq. 2024. Exogenous Application of β -aminobutyric Acid Improved Water Relations, Membrane Stability Index, and Achene Yield in Sunflower Hybrids Under Terminal Drought Stress. *Polish journal of environmental studies*, 33: 1-13
5. **Naeem Sarwar**, Naseem Abbas, Omer Farooq, Muhammad Akram, Muhammad Waqar Hassan, Khuram Mubeen, Atique-ur Rehman, Muhammad Shehzad, Matlob Ahmad and Abdul Khaliq. Biochar Integrated Nutrient Application Improves Crop Productivity, Sustainability and Profitability of Maize–Wheat Cropping System. *Sustainability* **2023**, 15, 2232.<https://doi.org/10.3390/su15032232>
6. Ahmad Dawood, Abdul Majeed, Sami Ul-Allah, Muhammad Naveed, Shahid Farooq, **Naeem Sarwar** and Mubshar Hussain. **2023**. Combined Application of Organic and Inorganic Nitrogen and Seed Inoculation with Rhizobacteria (*Stenotrophomonas maltophilia* FA-9) Improved Productivity, Nitrogen Use Efficiency, and Economic Returns of Pearl Millet. *Sustainability* **2023**, 15, 8248. <https://doi.org/10.3390/su15108248>
7. Ghulam ABBAS, Atique-ur-Rehman, **Naeem SARWAR**, Zartash FATIMA, Sajjad HUSSAIN, Mukhtar AHMED, Muhammad Ali RAZA, Mustafa KAN, Hülya DOĞAN, Muhammad Azam KHAN, Shakeel AAMAD. **2023**. Deciding sowing-window for maize-based cropping system in arid and semiarid environments in Punjab, Pakistan. *Turk J Agric For* (**2023**) 47: © TÜBİTAK doi:/tar-2204-27
8. Tauqeer Ahmad Yasir, Muhammad Ateeq, Allah Wasaya Mubshar Hussain, **Naeem Sarwar**, Khuram Mubeen, Mudassir Aziz, Muhammad Aamir Iqbal, Chukwuma C. Ogbaga, Ibrahim Al-Ashkar, Md Atikur Rahman and Ayman El Sabagh. **2023**. Seed Priming and Foliar Supplementation with β -aminobutyric Acid Alleviates Drought Stress through Mitigation of Oxidative Stress and Enhancement of Antioxidant Defense in Linseed (*Linum usitatissimum* L.). *Pyhton-International Journal of Botany*. DOI: 10.32604/phyton.**2023**.029502.
9. Muhammad Shakeel, Juan Du, Shang-Wei Li, Yuan-Jin Zhou, **Naeem Sarwar** and Xiaolan Guo. 2022. Glucosamine-6-phosphate N-acetyltransferase gene silencing by parental RNA interference in rice leaf folder, *Cnaphalocrocis medinalis* (Lepidoptera: Pyralidae). *Scientific Reports*, 12:2141.
10. Muhammad Mansoor Javaid,, Singarayer Florentine, Athar Mehmood, Allah Wasaya, Talha Javed, Abdul Sattar, **Naeem Sarwar**, Hazeem M Kalaji, Hafiz Bashir Ahmad, Jacek Worbel, Mohammad a. A. Ahmad, Arkadiusz Telesinski And Jacek Mojski. 2022. Interactive effect of elevated co2 and drought on physiological traits of *Datura stramonium*. *Fronteiers in Plant Sciences*, 13: 929378

11. Xiaolan Guo, Shuangshuang Li, Delu Wang, Zongsheng Huang, **Naeem Sarwar**, Khuram Mubeen, Muhammad Shakeel, Mubshar Hussain. 2021. Effects of water and fertilizer coupling on the physiological characteristics and growth of rabbiteye blueberry. **PloS One**, 16(7): e0254013. [https://doi.org/ 10.1371/journal.pone.0254013](https://doi.org/10.1371/journal.pone.0254013).
12. **Naeem Sarwar**, Atique-ur-Rehman, Omer Farooq, Allah Wasaya, Mubshar Hussain, Ahmed M. El-Shehawi, Shakeel Ahmad, Marian Brestic, Samy F. Mahmoud, Marek Zivcak, Shahid Farooq. 2021. Integrated nitrogen management improves productivity and economic returns of wheat-maize cropping system. **Journal of King Saud University – Science** 33 (2021) 101475
13. Ali, H.; **Sarwar**, N.; Muhammad, S.; Farooq, O.; Rehman, A.; Wasaya, A.; Yasir, T.A.; Mubeen, K.; Akhtar, M.N. 2021. Foliar Application of Magnesium at Critical Stages Improved the Productivity of Rice Crop Grown under Different Cultivation Systems. **Sustainability** 2021, 13, 4962. <https://doi.org/10.3390/su13094962> (corresponding)
14. Wasaya, A.; Manzoor, S.; Yasir, T.A.; **Sarwar**, N.; Mubeen, K.; Ismail, I.A.; Raza, A.; Rehman, A.; Hossain, A.; EL Sabagh, A. 2021. Evaluation of Fourteen Bread Wheat (*Triticum aestivum* L.) Genotypes by Observing Gas Exchange Parameters, Relative Water and Chlorophyll Content, and Yield Attributes under Drought Stress. **Sustainability** 2021, 13, 4799. <https://doi.org/10.3390/su13094799>
15. Wasaya, A., Yasir, T.A., **Sarwar**, N. Farooq, O.; Rehman, A. Mubeen, K. Ali, M; Affan, M. and Aziz, A. 2021. Foliage applied potassium improves stay green, photosynthesis and yield of maize (*Zea mays* L.) under rainfed condition. *Plant Physiol. Rep.* 26, 38–48 (2021). <https://doi.org/10.1007/s40502-021-00572-6>
16. Yasir, T.A.; Khan, A.; Skalicky, M.; Wasaya, A.; Rehmani, M.I.A.; **Sarwar**, N.; Mubeen, K.; Aziz, M.; Hassan, M.M.; Hassan, F.A.S. 2021. Exogenous Sodium Nitroprusside Mitigates Salt Stress in Lentil (*Lens culinaris* Medik.) by Affecting the Growth, Yield, and Biochemical Properties. **Molecules** 2021, 26, 2576. <https://doi.org/10.3390/molecules26092576>
17. Wasaya, A., Abbas, T., Yasir, T.A. **Sarwar**, N.; Aziz, A. Javaid, MM and Akram, S. 2021. Mitigating Drought Stress in Sunflower (*Helianthus annuus* L.) Through Exogenous Application of β -Aminobutyric Acid. **J Soil Sci Plant Nutr** (2021). <https://doi.org/10.1007/s42729-021-00412-4>
18. Mubeen, K; Yonas, MW, Khalofah, A; Ikram, RM; **Sarwar**, N; Shehzad, M; Wasaya, A; Rehman, H.; Yasir, TA; Aziz, M.; Alam, M.; Javeed, HMR; Ali, M; Ali, M; Ahmad, M; Khaliq, A; Qayyum, MA; Ahmad, W; Khan, KA. 2021. Interference of horse purslane (*Trianthema portulacastrum* L.) and other weeds affect yield of autumn planted maize (*Zea mays* L.). **Saudi Journal of Biological Sciences**. 28(4):2291-2300
19. Muhammad Shakeel, Juan Du, Shang-Wei Li, Yuan-Jin Zhou, **Naeem Sarwar** and SAH Bukhari. Characterization, Knockdown and Parental Effect of Hexokinase Gene of *Cnaphalocrocis medinalis* (Lepidoptera: Pyralidae) Revealed by RNA Interference. **Saudi Journal of Biological Sciences** 2020, 11, 1258; doi:10.3390/genes11111258
20. Ghulam Abbas, Zartash Fatima, Mubshar Hussain, Sajjad Hussain, Atique-ur-Rehman, Naeem Sarwar, Mukhtar Ahmed and Shakeel Ahmad. 2020. Nitrogen Rate and Hybrid Selection Matters Productivity of Maize–Maize Cropping System under Irrigated Arid Environment of Southern Punjab, Pakistan. *International Journal of Plant Production*. <https://doi.org/10.1007/s42106-020-00086-5>
21. Atique ur Rehman & Rafi Qamar & Abdul Rehman & Allah Wasaya & Omer Farooq & **Naeem Sarwar** & Muhammad Mazhar Iqbal & Shakeel Ahmad. 2020. Silicon Coating on Maize Seed

Mitigates Saline Stress in Yermosols of Southern Punjab. Silicon, <https://doi.org/10.1007/s12633-020-00737-2>

22. Atique-ur-Rehman, Muhammad Safeer, Rafi Qamar, Muhammad Mohsin Altaf, **Naeem Sarwar**, Omer Farooq, Muhammad Mazher Iqbal, Shakeel Ahmad. **2019**. EXOGENOUS APPLICATION OF SALICYLIC ACID AMELIORATES GROWTH AND YIELD OF SUNFLOWER (*Helianthus annuus* L.) IN SALINE SOIL. *Agrociencia* 53: 207-217.
23. Khaliq Dad, Abdul Wahid, Alamgir A. Khan, Adeel Anwar, Muqarrab Ali, **Naeem Sarwar**, Sajid Ali, Aqeel Ahmad, Maqsood Ahmad, Khalid Ali Khan, Mohammad Javed Ansari, Allah Bakhsh Gulshan. 2019. Nutritional status of different biosolids and their impact on various growth parameters of wheat (*Triticum aestivum* L.). **Saudi Journal of Biological Sciences**, 26:1423-1428.
24. Allah Wasaya, Touqeer Ahmad Yasir, Omer Farooq and **Naeem Sarwar**. 2018. Soil properties, nitrogen uptake and grain quality of maize (*Zea mays* L.) as effected by tillage systems and nitrogen application. *Italian Journal of Agronomy*, 13:1197.
25. FAROOQ O., ATIQUE-UR-REHMAN, **SARWAR N.**, HUSSAIN M., WASAYA A., NAEEM M., IQBAL M. M, KHALIQ A. 2018. HERBICIDAL POTENTIAL OF SORGHUM AND BRASSICA AGAINST THE WEEDS OF COTTON. *PLANTA DANINHA*, *PLANTA DANINHA*, Doi: 10.1590/S0100-83582018360100144.
26. Shahzad AN, Fatima A, **Sarwar N**, Bashir S, Rizwan M, Qayyum MF, Qureshi MK, Javaid MH, Ahmad S. 2017. Foliar Application of Potassium Sulfate Partially Alleviates Pre-anthesis Drought-induced Kernel Abortion in Maize. *International Journal of Agriculture & Biology*. 30;19(3).
27. Hakoomat Ali, **Naeem Sarwar**, Mamoona Arooj, Ahsan Areeb and Shabir Hussain. 2017. Application of pre and post emergence herbicide under improvd field irrigation system proved a sustainable weed management strategy in cotton crop. *PLANTA DANINHA* Doi: 10.1590/S0100-83582017350100052) (**Corresponding author**)
28. Omer Farooq, Abdul Khaliq, Atique-ur-Rehman, **Naeem Sarwar**, Allah Wasaya, Touqeer Ahmad Yasir, Mubashar Hussain, Muqarrab Ali, Muhammad Naeem, Muhammad Mazhar Iqbal and Nazim Hussain. 2018. Herbicide potential of sorghum and Brassica against the weeds of cotton. *Planta Dhaninha* (accepted)
29. Hakoomat Ali, **Naeem Sarwar**, Zuhair Hasnain, Shakeel Ahmad. 2016. Zinc Fertilization Under Optimum Soil Moisture Condition Improved The Fine Rice Productivity. *The Philpine Journal of Crop Science*, 41: 1-11. (**Corresponding author**)
30. Shehzad, M., Hussain, S., Mubeen, K., Shoaib, M., **Sarwar, N.**, Javeed, H.M.R., Ahmad, A., and Khalid, S. 2016. Allelopathic effect of santa maria (*Parthenium hysterophrous*) mulch on growth and yield of soybean (*Glycine max*). *Planta Daninha Journal*. v. 34, n. , p. , 2016.
31. Shakeel Ahmad, Hakoomat Ali, Umair Farooq, Shahzad Usman Khan, Atique-Ur Rehman, **Naeem Sarwar**, Ahmad Naeem Shahzad, Hülya Doğan, Shabbir Hussain, Muhammad Tauseef Sultan, Abdul Waheed, Muhammad Zia-Ul-Haq, Khadim Hussain, Muhammad Azam Khan. 2016. Improving nitrogen-use and radiation-use efficiencies of C4 summer cereals by split nitrogen applications under an irrigated arid environment. **Turkish journal of Agriculture and Forestry**, doi:10.3906/tar-1506-42.
32. Syed Amir Manzoor, Sarwat Naz Mirza, Muhammad Zubair, Wasif Nourman, Syed Bilal Hussain, Seema Mehmood, Ahsan Irshad, **Naeem Sarwar**, Ali Ammar, Muhammad Faseeh Iqbal, Arslan Asim, Muhammad Umer Chattha, Muhammad Bilal Chattha, Akash Zafar and Rafia Abid. 2015. Estimating Genetic Potential of Biofuel Forest Hardwoods To Withstand

Metal Toxicity In Industrial Effluent Under Dry Tropical Conditions. *Genetics and Molecular Research*, 14: 9543-9554.

33. Shakeel Ahmad, Ilyas Raza, Hakoomat Ali, Ahmad Naeem Shahzad, Atiq-ur-Rehman and **Naeem Sarwar**. 2014. Response of cotton crop to exogenous application of glycinebetaine under sufficient and scarce water conditions. *Brazilian Journal of Botany*, DOI 10.1007/s40415-014-0092-z. (**Impact factor: 1.30**). (**Corresponding author**)
34. Hakoomat Ali, Zuhair Hasnain, Ahmad Naeem Shahzad, **Naeem Sarwar**, Muhammad Kamran Qureshi, Shazia Khaliq, Muhammad Farooq Qayyum. Nitrogen and Zinc Interaction Improves Yield and Quality of Submerged Basmati Rice (*Oryza sativa* L.). *Not Bot Horti Agrobo* , 42(2).
35. Hakoomat Ali, Nadeem Iqbal, Ahmad Naeem Shahzad and Shakeel Ahmad, Zahid Mehmood Khan and **Naeem Sarwar**. 2014. Agro-management practices for sustainable wheat production under scarce water condition of arid climate. *Turkish Journal of Field crop*, 19: 70-78. (**Impact factor: 0.41**). (**Corresponding author**)
36. **Naeem Sarwar**, Hakoomat Ali, Muhammad Maqsood, Ashfaq Ahmad, Ehsan Ullah and James E Hill. 2014. Influence of nursery management and seedling age on growth and economic performance of fine rice. *Journal of Plant Nutrition.*, 37: 1287-1303.
37. Ali, H., S.A. Abid, A.N. Shahzad, M. Arooj, S. Ahmad, **N. Sarwar** (2013) Impact of Integrated Weed Management on Weed Biomass, Seed Cotton Yield and Fiber Quality of Flat-Sown Cotton (*Gossypium hirsutum* L.). *J. Anim. Plant Sci*, 23: 1185-1192.
38. **Naeem Sarwar**, Ashfaq Ahmad, Hakoomat Ali, Shakeel Ahmad, Khuram Mubeen and James E Hill. 2013. Water wise rice cultivation on calcareous soil with the addition of essential micronutrients. *Journal of Animal and plant Sciences*, 23:244-250.
39. **Naeem Sarwar**, Hakoomat Ali, Ehsan Ullah, Ahmad Naeem Shahzad, Khuram Mubeen, Muhammad Asghar Shahid and Shakeel Ahmad. 2013. Phenological response of rice plants to different micronutrients application under water saving paddy fields on calcareous soil. *Turkish Journal of Field Crops*, 18:52-57.
40. Hakoomat Ali, Nadeem Iqbal, Ahmad Naeem Shahzad, Shakeel Ahmad and **Naeem Sarwar**. 2013. Performance of late sown wheat crop under different planting geometries and irrigation regimes in arid climate. ***Soil and Tillage Research***, 130: 109-119. (**Corresponding author**)
41. Hakoomat Ali, Nadeem Iqbal, Ahmad Naeem Shahzad, **Naeem Sarwar**, Shakeel Ahmad, Athar Mehmood. Seed priming improves irrigation water use efficiency, yield and yield components of late-sown wheat under limited water conditions. 2013. ***Turkish Journal of Agriculture and Forestry***. 37: 534-544.
42. Hakoomat Ali, **Naeem Sarwar**, Shakeel Ahmad, Ahmad Waqas Tariq and Ahmad Naeem Shahzad. 2012. Response of wheat crop to phosphorus fertilizers and application methods grown under agro-climatic conditions of southern Punjab. *Pak. J. Agri. Sci.*, Vol. 49: 485-489. (**Corresponding author**)
43. Monika Krupa, Kenneth W. Tate, Chris van Kessel, **Naeem Sarwar** and Bruce A. Linquist. 2011. Water quality in rice-growing watersheds in a Mediterranean climate. ***Agriculture, Ecosystems and Environment***, 144:290-301. (**Impact factor: 3.004**)
44. **Naeem Sarwar**, Muhammad Maqsood, Syed Aftab Wajid and Muhammad Anwar-ul-Haq. 2011. Impact of nursery seeding density, nitrogen and seedling age on yield and yield attributes of fine rice. *Chil. J. of Agri. Res.* 71: 343-349. (**Impact factor: 0.39**)
45. **Naeem Sarwar**, M. Maqsood, K. Mubeen, M. Shehzad, M.S. Bhullar, R. Qamar and N. Akbar. 2010. Effect of different levels of irrigation on yield and yield components of wheat cultivars. *Pak. J. Agri. Sci.* 47: 371-374. (**Impact factor; 1.24**)

46. **Naeem Sarwar**, Abbas, N. (2024). Improving soil moisture condition with biochar application for sustainable management of wheat-maize cropping system. In: Adaptive agronomy for a resilient future. Ed. Lawes, R, Flower, K, Michael, P, Mwenda, G and Singh, B. Proceedings of the 21st Australian Society of Agronomy Conference, 21-24 October, 2024, Albany, Western Australia, Australia © 2024. (<http://www.agronomyaustraliaproceedings.org/>).
47. Farooq, Omer, **Naeem Sarwar**, Atique ur Rehman, Muqarrab Ali, Khuram Mubeen, Fahid Ehsan, Muhammad Mazhar Iqbal, and Muhammad Nasir. "FAT HEN INCORPORATED AND RHIZOSPHERE SOIL AFFECTS THE GERMINATION AND SEEDLING GROWTH OF MUNGBEAN AND MAIZE." J. Agric. Res 61, no. 2 (2023): 117-121.
48. **Naeem Sarwar**, Khuram Mubeen, Allah Wasaya, Atique ur Rehman, Omer Farooq, Muhammad Shehzad. 2020. Response of hybrid maize to multiple soil organic amendments under sufficient or deficient soil zinc situation. Asian Journal of Agriculture and Biology, 8: 38-43.
49. **Naeem Sarwar**, Muhammad Haseeb Javaid, Asifa Neelam, Atique ur Rehman, Omar Farooq, Allah Wasaya, Khuram Mubeen, Aamir Ghani and Muhammad Zaighum Mushtaq. 2020. Application of spermidine to manage water stress for improved fine rice yield and quality. Pure and Applied Biology. Vol. 9, Issue 3, pp 1813-1819.
50. Allah Wasaya, Tauqeer Ahmad Yasir, **Naeem Sarwar**, Omer Farooq, Ghulam Rasool Sheikh and Abdul Wahid Baloach. Improving growth and yield of mungbean (*Vigna radiate* L.) through foliar application of silver and zinc nanoparticles Pure and Applied Biology. Vol 9, Issue 1, pp 790-797
51. **Naeem Sarwar**, Atique-ur-Rehman, Omer Farooq, Allah Wasaya, Suhail Saliq and Khuram Mubeen. 2019. Improved auxin level at panicle initiation stage enhance the heat stress tolerance in rice plants. Proceedings of the 2019 Agronomy Australia Conference, 25 – 29 August 2019, Wagga Wagga, Australia © 2019. www.agronomyaustralia.org/conference-proceedings.
52. **N.SARWAR**, A. WASAYA, S. SALIQ, A. REHAM, O. FAROOQ, K. MUBEEN, M. SHEHZAD, M. USMAN ZAHOR, A. GHANI. 2019. USE OF NATURAL NITROGEN STABILIZERS TO IMPROVE NITROGEN USE EFFICIENCY AND WHEAT CROP YIELD. Cercetări Agronomice în Moldova, 178: 107-115.
53. M Asad, K Mubeen, N Sarwar, M Shehzad, M Aziz, M Tariq, M Ahmad, M Mudassar and M Rasheed. 2019. Congress grass possess herbicidal potential against weeds in wheat field. AJAB, 7:501-511.
54. Naeem Sarwar, Hakoomat Ali and Atique-ur-Rehman. 2017. Zinc fertilization improves the aerobic rice productivity. Proceedings of the 18th Australian Society of Agronomy Conference, 24-28 September 2017, Ballarat, Australia.
55. Muhammad Naeem Akhtara, Ashfaq Ahmed Rahia, Khuram Mubeenb, Shahid Munira, **Naeem Sarwar**, Hafiz Muhammad Rafiquea and Muhammad Waseem Akhtard. 2018. Impact of Pesticide Quality Control Programme in Southern Punjab, Pakistan. Pak. j. sci. ind. res. Ser. B: biol. sci. 61: 52-55.
56. Mamoon Arooj, Hakoomat Ali, **Naeem Sarwar***, Atique-ur-Rehman, Omer Farooq, Shakeel Ahmad and Wasif Nouman. 2017. Sustainable weed management strategies in cotton crop and their economical performance in semi-arid environment. Pakistan Journal of life and social sciences. 15: 136-143. (**Corresponding author**)
57. **Naeem Sarwar**, Atique-ur-Rehman, Omer Farooq, Khuram Mubeen, Allah Wasaya, Wasif Nouman, Muhammad Zafar Ali and Muhammad shehzad. Exogenous application of gibberellic

acid improves the maize crop productivity under scarce and sufficient soil moisture condition. Cercetari Agronomice in Moldova, 4: 65-73

58. **N. SARWAR**, H. ALI, M. IRFAN, M.T. AKHTER, M.T. ALI. 2016. Boron Nutrition Under Intermittent Flooding And Drying Condition Seems Sustainable Nutrient Management Technique In Rice. Cercetări Agronomice în Moldova. 1: 17-27.
59. M.Z. Iqbal., T. Naz, A. Rehman, **N. Sarwar**, G. Murtaza, R. Ahmad, Z. Rehman, M. Shakar, M.W. Khan, O. Farooq, M. Ali and G. Sarwar. 2016. Assessment of P-Zn interactive effect on growth, P and Zn uptake by wheat in salt affected soil. Pak. J. Life. Soc. Sci. 14:1-7.
60. Hakoomat Ali, Raheel Atif Hameed, Shakeel Ahmad, Ahmad Naeem Shahzad and **Naeem Sarwar**. 2014. Efficacy of different techniques of nitrogen application on American cotton under semiarid conditions. Journal of Food, Agriculture & Environment, 12: 157-160.
61. Atique ur Rehman, Muhammad Farooq, Hakoomat Ali, **Naeem Sarwar**, Rafi Qamar. 2014. Thermal hardening improves germination and early seedling growth of chickpea. Asian J. Agri. Biol., 2: 51-58.
62. Ali, H., S. A. Abid, S. Ahmad, **N. Sarwar** and A. N. Shahzad (2013) Integrated Weed Management in Cotton Cultivated in the Alternate-Furrow Planting System. J. Food Agri. Environ, 11: 1664-1669.
63. MSI Zamir, HMR Javeed, W Ahmed, AUH Ahmed, **N Sarwar**, M Shehzad, MA Sarwar, S Iqbal. 2013. Effect of tillage and organic mulches on growth, yield and quality of autumn planted maize (Zea mays L.) And soil physical properties. Cercetari agronomice in Moldova. 46: 17-26.

Book/Book Chapters (Books: 2, Book Chapters: 13)

Edited/Authorred Books:

- 1- **Naeem Sarwar**. Sustainable Agronomy: Principles and Practices. Cambridge Scholar, 2025
- 2- **Naeem Sarwar**, Atique-ur-Rehman, Shakeel Ahmad and Mirza Hassanuzzaman. Modern techniques in Rice Crop production. Springer Nature, 2022.

Book Chapters

1. **Naeem Sarwar**, Khuram Mubeen, Omer Farooq, Allah Wasaya, Tauqeer Ahmad Yasir, Muhammad Shahzad, Mansoor Javed, Abrar Hussain, Masood Iqbal Awan, Muhammad Dawood, Shakeel Ahmad. Impact of Heat Stress on Cereal Crops and Its Mitigation Strategies. Disaster Risk Reduction in Agriculture. Disaster Risk Reduction in Agriculture. Springer Nature Singapore, Page, 191-210.
2. Omer Farooq, Muhammad Imran, Masood Iqbal Awan, **Naeem Sarwar**, Khuram Mubeen, Mukhtar Ahmed, Shakeel Ahmad. 2023. Causes of Soil Erosion, Its Measurements, and Management. Disaster Risk Reduction in Agriculture. Springer Nature Singapore, Page, 211-232.
3. Omer Farooq, **Naeem Sarwar**, Sohaib Afzal, Khuram Mubeen, Atique ur Rehman, Mukhtar Ahmed, Shakeel Ahmad. 2023. Disaster Risk Reduction in Agriculture. Disaster Risk Reduction in Agriculture. Springer Nature Singapore, Page, 21-42.
4. 2. Atique-ur-Rehman, **Naeem Sarwar**, Shakeel Ahmad, Muhammad Azam Khan, and Mirza Hasanuzzaman. World Rice Production: An Overview, Modern techniques in Rice Crop production. Springer, 2022. Page, 3-12

5. 3. **Naeem Sarwar**, Hakoomat Ali, Atique-ur-Rehman, Allah Wasaya, Omer Farooq, Khuram Mubeen, Muhammad Dawood, Muhammad Shehzad, and Shakeel Ahmad. 2022. Nursery Management of Transplanted Rice, Modern techniques in Rice Crop production. Springer, 2022. Page, 59-70.
6. 4. **Naeem Sarwar**, Atique-ur-Rehman, Hakoomat Ali, Allah Wasaya, Omer Farooq, Khuram Mubeen, Muhammad Dawood, Muhammad Shehzad, and Shakeel Ahmad. 2022. Smart Nutrient Management in Rice Crop, Modern techniques in Rice Crop production. Springer, 2022. Page, 85-103.
7. 5. Khuram Mubeen, **Naeem Sarwar**, Muhammad Shehzad, Abdul Ghaffar, and Mudassir Aziz. Irrigation Management in Rice, Modern techniques in Rice Crop production. Springer, 2022. Page, 105-114.
8. 6. **Naeem Sarwar**, Atique-ur-Rehman, Allah Wasaya, Omer Farooq, Khuram Mubeen, Muhammad Dawood, Muhammad Shehzad and Shakeel Ahmad. 2022. Rice-Based Cropping Systems: Modern techniques in Rice Crop production. Springer, 2022. Page, 115-133.
9. 7. Omer Farooq, **Naeem Sarwar**, Hafiz Muhammad Aatif, Muqarrab Ali, Atique-ur-Rehman, Azhar Abbas Khan, Muhammad Mazhar Iqbal, Muhammad Zeeshan Manshaa, and Shakeel Ahmad. Plant Protection Strategies in Rice Crop, Modern techniques in Rice Crop production. Springer, 2022. Page, 305-326.
10. 8. Muhammad Shakeel, **Naeem Sarwar**, Omer Farooq, Juan Du, Shang-Wei Li, Yuan-Jin Zhou, Xiaolan Guo, and Shakeel Ahmad. Insect Chitin Biosynthesis and Regulation in *Cnaphalocrocis Medinalis* Using RNAi Technology, Modern techniques in Rice Crop production. Springer, 2022. Page, 377
11. 9. Omer Farooq, **Naeem Sarwar**, Tauqeer Ahmad Yasir, Muhammad Mazhar Iqbal, Tayyaba Naz, Muqarrab Ali, Sohaib Afzal, and Shakeel Ahmad. 2019. Advanced Production Technology of Sugar Crops. In: Agronomic crops: Production technologies. 1st edition. Editor: Mirza Hasanuzzaman. Springer Nature Singapore. 1: 335-361.
12. 10. Rana Nauman Shabbir, Hakoomat Ali, Fahim Nawaz, Shabir Hussain, Ahsan Areeb, **Naeem Sarwar**, and Shakeel Ahmad. Use of Biofertilizers for Sustainable Crop Production. In: Agronomic crops; Management practices. Editor: Mirza Hasanuzzaman. Springer Nature Singapore, Volume: 2, P: 149-162.
13. 11. Atique-ur-Reham, Hakoomat Ali, **Naeem Sarwar**, shakeel Ahmad, Omer Farooq, Kamaran Nehar, Mirza Hasanuzzaman. Cotton-based inter cropping system. Cotton Production and Uses Agronomy, Crop Protection, and Postharvest Technologies Editors: Ahmad, Shakeel, Hasanuzzaman, Mirza, P: 321-340

Organized/Participation in Conferences/workshops/seminars

- Organized seminar on impact of climate change on water resources on world water day 22nd March 2025.
- Organized seminar with collaboration of Fatima fertilizer company on international women day 8th March 2025
- Organized seminar and field on importance of pulses in food and sustainable crop production, world pulses day 10th February 2025.
- Organized international seminar on smart and sustainable agriculture, 20th February 2025
- Organized tree plantation drive on world forest day, 21st March 2025
- Organized seminar and walk on importance of soil for crop production, world soil day 5th December, Institute of Agronomy

- Organized awareness seminar with collaboration of APO, dated 15th December, Institute of Agronomy
- Participated in Webinar: Sustainable Agronomy Conference-Managing soil health and other conservation challenges. (17 July 2024), Organized by American society of Agronomy
- participated international Training seminar on Agriculture Efficiency Improvement, organized by FACE, dated 14 November, Ramadha Multan
- Participated in Webinar: Sustainable Agronomy Conference - Extending sustainability in agriculture to benefits beyond the field. (24 July 2024), Organized by American society of Agronomy
- Participated in Webinar: Sustainable Agronomy Conference - Accelerating the adoption of innovative ag practices. (31 July 2024), Organized by American society of Agronomy
- Organized an International Conference on “ALLELOPATHY RESEARCH IN ASIA, Bahauddine Zakariya University Multan, January 16-17, 2024. <https://conferences.science.org.pk/5AAS.pdf>
- Participated in Webinar Mixed Species Annual fodder. (16 Jun 2023), Department of primary Industry, NSW Australia
- Participated in Webinar: Halving Nitrogen Waste - Green Ammo (18 July 2023), International Nitrogen Initiative
- Oral presentation on Zinc fertilization improves the aerobic rice productivity in 18th Australian Agronomy Conference, 24-28 September, 2017.
- Organized national seminar on “Wheat production Challenges in Pakistan under Changing Climate, Bahauddine Zakariya University Multan, March 07 2017
- Training workshop on Understanding Endnote and NVIVO- Research made easy, 2017. OREC BZU Multan
- National Conference on Challenges and opportunities to boost Agriculture in Changing Climate, 29-30, 2017
- Participation in International conference on “Climate Change threats to Agriculture and food Security” Think –Adapt, University of Agriculture Faisalabad, November 22-24, 2017.
- Participation in 3rd International Conference on Safe Food for All and Food Expo, March 2-3, 2017
- Participated in Hands on Training on “Soil, Water and Plant Analysis at NIAB Faisalabad ,September 6-9, 2016
- Ist international salinity conference, Department of Soil Science, Islamia University Bahawalpur , December 19-21, 2016
- Participation in Role of Agronomy for sustainable Agriculture under climate change scenario, Department of Agronomy, University of Sargodha, 18th October 2016
- Participation in International conference on “Significance of potash use in Pakistan Agriculture” University of Punjab Lahore, 24-25 November
- Participation in National Workshop on “Alternate Crops for the Future of Pakistan” on 16th May 2016 at Institute of Agricultural Sciences, University of the Punjab Lahore.
- Participation in Training workshop on “Discovering Yourself and Others” on 6th May, 2016 by BZU Multan and Bayer Crop Sciences.
- Participation in Training Workshop on “The Art of facilitation” on 19th May 2016 at BZU Multan by Australian Centre for International Agricultural research.

- Participation in National Workshop on “ Sustainable production of Pulses: Situation analysis” on 11th August 2015 at Bahadur Sub campus Leyyah, BZU Multan
- Participated in irrigation management training workshop on 09-04-2014 at BZU Multan
- Participation in Workshop on “Simulating Modeling: A decision support system for agro-technology transfer for improving the standard of research” By HEC BZU Multan, 04-05 March, 2013.
- Participation in three days cascading of Asian institute of technology (AIT), Thailand based training program “Ensuring training effectiveness”. 9th to 11th April, 2013. Bahauddin Zakariya University Multan.
- Participation in International Workshop on “Biofortification of Staple Crops: a solution to combat malnutrition” held on March 29-31, 2015 at UAF.
- Certificate of Participation in the training workshop on Sustainable Management of Insect Pest of Fruits with Special Reference to Citrus through Modern Protection and Postharvest-losses-reduction Techniques. University of Agriculture Faisalabad, 01-04 September, 2010.
- Participation in international conference on Future Prospects of Dairy Production in Pakistan. University of Agriculture Faisalabad, Nov. 3-4, 2008.

TEACHING AND ADVISING

Undergraduate Courses:

Delivered foundational agronomy instruction to undergraduate students, including courses on *Basic Agriculture, Crop Production of Major and Minor Field Crops, Forage and Fodder Production, Organic Farming, and Biological Nitrogen Fixation*, general crop protection. His teaching emphasizes practical application of agronomic principles tailored to local and regional agricultural systems.

Graduate Courses:

Sustainable Agriculture, Modern Concepts in Crop Production, Advanced agronomy, and Soil Fertility and Plant Nutrition. These courses reflect his research focus on sustainable nutrient management, resource use efficiency, and ecological intensification.

Mentoring

Directed 4 PhD and 30 MPhil students in the field of Agronomy, focusing on topics such as integrated nutrient management, organic amendments, climate-resilient cropping systems, and sustainable agricultural practices. He continues to mentor early-career researchers and postgraduate students in both research design and scientific writing.

Research Projects

- Improving production and micronutrient enrichment of mungbean in southern Punjab. Submitted to HEC as Co-PI under National Research Program with Universities (NRPU), worth of Rs. 4.22 M (Completed)
- Exogenous application of spermidine in different rice cultivation systems, 2017 Funded by BZU Multan, 0.260 Million PKR. (completed)

- Application of enhanced fertilizer use efficiency products in wheat crop. 2016. Funded by BZU Multan, 0.300 Million PKR. Completed
- Biofortification of zinc in hybrid maize under multiple organic supplements and soil health. 2016. Funded by BZU Multan, 0.175 million PKR (completed)
- Agronomic performance of hybrid maize under integrated soil fertility management, funded by BZU Multan, Amount: 0.147 million PKR (completed), 2015
- Response of aerobic rice to different zinc fertilization techniques, Funded by BZU Multan, Amount: 0.1 million PKR (completed), 2014
- Exploring the role of boron in water saving rice cultivation. 2013. Awarded by HEC, Amount: 0.5 million PKR. (Completed)
- Studies in nursery management and application of boron and zinc in fine rice, 2007. Completed (Indigenous PhD Scholarship by HEC)
- Water quality in rice-growing watersheds in a Mediterranean climate, 2010. Completed (Under IRSIP (HEC), University of California Davis USA)

Judging other's work

Evaluating an average of **nine research papers annually** for reputed national and international journals such as *Scientific Reports*, *International Journal of Soil Science and Plant Nutrition*, *Journal of Plant Nutrition*, *Archives of Agronomy and Soil Science*, *Agronomy Journal*, *International Journal of Plant Production*, *Planta Daninha*, *Pakistan Journal of Life and Social Sciences*, *Pakistan Journal of Agriculture and Research*, and *Environmental Science and Pollution Research*.

Served as an external examiner for **MPhil thesis evaluations** at the Department of Agronomy, MNS University of Agriculture, Multan, and the College of Agriculture, Depalpur (University of Agriculture, Faisalabad).

Evaluated research proposals for funding agencies including the **National Science Foundation (South Africa)** and the **Higher Education Commission (HEC) of Pakistan** under their National Research Productivity Program.

Community Services

- Director Student Affairs (DSA), Institute of Agronomy, BZU
- Assistant Suprintendent, Hamza Hall Bahauddin Zakariya University Multan (April 2012 to March 2014)
- Superintendent, Hamza Hall Bahauddin Zakariya University, Multan (March 2014 to December 2015)
- Programme coordinator of BS Agribusiness and Marketing (2014 to 2016)
- Member in University committees like admission committee, appointing part time teachers, Departmental board of study, Departmental technical review committee (DTRC)
- Member of Faculty Board of Study, BZU