

DR. SHAZMA ANWAR

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 The University of Agriculture Peshawar, Pakistan
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QUALIFICATION & ACHIEVEMENTS:

PhD (year 2012)

Major: Agronomy – Crop Science.
Research Title: Physiological and biochemical mechanisms of salinity tolerance in barley.

M.Sc. (Hons)

Major: Agronomy - Crop Science with distinction M.Sc (H), Agronomy (1998-2000).
Thesis Title: Effect of sorghum extract and other weed control methods on wheat.

B.Sc. (Hons)

Major: Agronomy - Crop Science with distinction B.Sc (H), Agronomy. (1994-1998)
Review Paper Title: Performance and adaptability of various forage legumes under Peshawar valley condition.

AREA OF INTEREST:

Crop physiology, Crop and seed nutrition, Biochemical mechanisms involved in stress tolerance and Proteomics and genetics study.

EXPERIENCE:

Employer :	The University of Agriculture Peshawar, Pakistan
Job Title :	Contract Lecturer (January 2004 – March 2008)
	Permanent Lecturer (March 2008 - May 2012)
	Assistant Professor (May 2012 - Till to date)

Students research program:

Ph.D. as Major Supervisor:	2
Ph.D. as Co-Supervisor:	3
M.Sc. (Hons) as Major Supervisor:	15
M.Sc. (Hons) as Co-Supervisor:	16

- **Short Term PhD Research Attachment (SPRA)** Scholarship to University of Glasgow, UK by British Council and Higher Education Commission.
- **RESEARCH PROJECT:** As Co.PI completed project on Implementing climate smart dry chain technology for improving livelihood of the maize farming community in Pakistan. Funded by USAID USPCAS-AFS competitive Grants Program of Rs. 3.07 billion.

PUBLICATIONS:

INTERNATIONAL (IMPACT FACTOR):

1. Khan, A., A. Muhammad, A.A. Khan, **S. Anwar** and P.A. Hollington, 2019. Nitrogen affects leaf expansion and elongation rates during early growth stages of wheat. *Intl. J. Agric. Biol.* 21: 1117–1122.
2. Ahmad, N., H. Fazal, B.H. Abbasi, **S. Anwar** and A. Basir. 2012. DPPH-Free radical scavenging activity and phenotypic difference in hepatoprotective plant (*Silybum marianum* L.). Online available in *Toxicology and Industrial Health*.doi:10.1177/0748233712436637.

3. Ahmad, N., H. Fazal, B.H. Abbasi, I. Rahman, **S. Anwar**, M.A. Khan, A. Basir, H. Inayat, R. Zameer, S.A. Khalil and K.Y. Khan. 2011. DPPH-scavenging antioxidant potential in regenerated tissues of Stevia rebaudiana, Citrus sinensis and Saccharum officinarum. *J. of Med. Plants Res.* 5(14): 3293-3297.
4. **Anwar, S.**, M. Shafi, J. Bakht, M.T. Jan and Y. Hayat. 2011. Effect of salinity and seed priming on growth and biochemical parameters of different barely genotypes. *African J. Biotechnology*. 10(68): 15278-15286.

NATIONAL (IMPACT FACTOR):

5. Khan, A, M. Shafi, J. Bakht, M.O. Khan and S. Anwar. 2019. Response of wheat varieties to salinity stresses as ameliorated by seed priming. *Pak. J. Bot.* 51(6) 1969-1978.
6. Gul, H., A.Z. Khan, S.K. Khalil, H. Rehman, S. Anwar, B. Saeed, Farhatullah and H. Akbar. 2013. Crop growth analysis and seed development profile of wheat cultivars in relation to sowing dates and nitrogen fertilization. *Pak. J. Bot.* 45(3): 951-960. 0.913
7. Bakht, J., M. Shafi, H. Rehman, Raziuddin and S. Anwar. 2011. Effect of planting methods on growth, phenology and yield of maize varieties. *Pak. J. Bot.* 43(3): 1629-1633. Impact factor 0.913
8. Anwar, S., M. Shafi, J. Bakht, M.T. Jan and Y. Hayat. 2011. Response of barley genotypes to salinity stresses as alleviated by seed priming. *Pak. J. Bot.* 43(6): 2687-2691. Impact factor 0.913
9. Shafi, M., J. Bakht, M. J. Khan, M. A. Khan and S. Anwar. 2010. Effect of salinity on yield and ion accumulation of wheat genotypes. *Pak. J. Bot.* 42(6): 4113-4121. Impact factor 0.913

INTERNATIONAL:

10. Islam, M., S. Anwar, M. Shafi, J. Bakht. 2019. Stimulatory effect of phosphorus solubilizing bacteria and phosphorus management on P uptake, phosphorus use efficiency and crude protein of wheat. *Int. J. Biosci.* 15(3): 344-356. *Int. J. Biosci.* 15(3): 344-356.
11. Jalal, R, A.Z. Khan, S. Anwar, J. Ahmad, B. Safia, F. Ahmad, S. Iqbal, Z. Ali, M. Ahmad, A. Aziz, A.R. Khan and A. Saleem. 2019. Influence of different pre sowing seed invigoration techniques on early growth of different maize hybrids *Int. J. Biosci.* 15(2): 370-379.
12. Ahmad, J., S. Anwar, F. Ahmad, S Iqbal, N. Ullah, Ali S.M. Shah, M. Ali, A. Rauf Khan, M. Meboob, I. Nawaz, I. Ullah, M. Ahmad, M. Khan M and A. Saleem. Dry matter partitioning and phenological traits of maize as influenced by diverse levels of humic acid. *Open Access Journal of Agricultural Research*. 4(1): DOI: 10.23880/oajar-16000220, ISSN: 2474-8846. Pg. 000220.
13. M. Alamzeb, S. Anwar, A. Iqbal, S. Meizhen, M. Iqbal, Sara, M. Ramzan and A. Tabassum. 2018. Application of organic sources and nitrogen affect dry matter partitioning in wheat under tillage systems. *Pakistan Journal of Agricultural Research*. 30 (2). 106-115.
14. M. Alamzeb, S. Anwar, A. Iqbal, B. Parmar and M. Iqbal. 2017. Organic sources nitrogen and tillage systems improve wheat productivity and profitability under semiarid climates. *Journal of Pharmacognosy and Phytochemistry*. 6 (Special issue Part B): 73-78.
15. Iqbal, B., B. Ahmad, Inam Ullah, A.A. Khan, S. Anwar, Z. Muhammad, G. Ahmad, D. Muhammad and S. Khan. 2016. Response of triticale to phosphorus, sulphur and different irrigation levels. *Inter. J. of Agri. and Envir. Res.* 2(4): 303-308.
16. Anwar, S., F. Iqbal, W. Ali Khattak, M. Islam, B. Iqbal and S. Khan. 2016. Response of wheat crop to humic acid and nitrogen levels. *EC Agriculture*. 3(1): 558-565.
17. Khan, A., S. Anwar and M. Z Afzidi. 2015. Response of mung bean (*vigna radiata* l.) cultivars to various levels of phosphorous application in agro climatic condition of Peshawar. *International Journal of Agricultural and Environmental Research*. 1(2): 68-72.

18. Anwar, S., W. Ali Khattak, Inamullah, M. Islam, S. Bashir, M. Shafi, and J. Bakht. 2015. Effect of sowing dates and seed rates on the agro-physiological traits of wheat. *Journal of Environment and Earth Sciences*. 5(1): 2225-0948(online).
19. Munir, S., S. Anwar and M. Rehan. 2016. Assessing the impact of ground level ozone on agricultural crops in the United Kingdom. *Inter. J. of Agri. and Envir. Res. (IJAAER)*. 2(3): 212-224. ISSN 2414-8245 (Online).ISSN 2518-6116 (Print)
20. Bashir, S., S. Anwar, B. Ahmad, Q. Sarfraz, W. Ali Khattak, M. Islam. 2015. Response of wheat crop to phosphorus levels and application methods. *Journal of Environment and Earth Sciences*. 5(9): 151-155.
21. Ahmad, N, S. Anwar, H. Fazal and B.H. Abbasi. 2013. Medicinal plants used in indigenous therapy by people of Madyan Valley in district Swat, Pakistan. *Int. J. Med. Arom. Plants*. 3 (1): 47-54.
22. Saeed, B., H. Gul, F. Ali, A.Z. Khan, S. Anwar, Nasrullah, S. Alam, S. Khalid, A. Naz, H. Fayyaz, Azra. 2013. Contribution of soil and foliar fertilization of nitrogen and sulfur on physiological and quality assessment of wheat (*Triticum aestivum L.*). *Natural Science* 5 (9): 1012-1018.

NATIONAL (IN HIGHER EDUCATION COMMISSION APPROVED JOURNALS):

23. Aziz, N., S. Anwar, S. Kashmir, J. Ahmad, B. Saeed, S. Khan. 2019. Response of wheat varieties to different zinc application methods. *Pure and Applied Biology*. 8(1): 485-495.
24. Saifullah., S. Anwar, G.R. Khan, M.M. Anjum, N. Ali, A. Jalal, K. Ali, K.U. Zaman, M. Miraj and A. Sohail. 2019. Effect of potassium and sulfur on grain yield, oil concentration and fatty acid profile of sunflower. *Pure and Applied Biology*. 8(1): 139-150.
25. Manzoor, A. Sohail, S. Ali, M. O. Khan, S. Anwar, H. Nawaz, F. Ahmad, J. Ahmad, M.W. Abbas and M. Kefayatullah. 2019. Impact of potassium levels and application timing on dry matter partitioning of wheat crop in Peshawar valley *Pure and Applied Biology* 8(1): 9-15.
26. Manzoor, A. Sohail, S. Ali, S. Anwar, M.O. Khan, S. Nawaz, F.A. Shah, I. Ali, J. Iqbal, J. Ahmad, F. Ahmad, H. Nawaz and M. Kefayatullah. 2019. Response of planting methods and deficit irrigation on growth and yield attributes of maize under semi-arid conditions. *Pure and Applied Biology* 8(1): 706-717.
27. Anwar, S., M. Amin, B. Saeed, S. Khan, M.O. Khan, S. Kashmir and M. Islam. 2018. Enhancing productivity of late sown wheat with hydro-priming. *Pure and Applied Biology*. 7(4): 1339-1345.
28. Shafi M., Z. Khan, M.O. Khan, H. Ahmad, J. Bakht and S. Anwar. 2018. Enhancing wheat yield through integrated nitrogen and weed management practices. *Pakistan Journal of Weed Science Research*. 24(3): 187-201.
29. Anwar, S., Z. Rehman, B. Saeed, M. Islam, M.O. Khan and J. Ahmad. 2018. Response of mung bean to organic sources and nitrogen levels. *Pure and Applied Biology*. 7(2): 692-699.
30. Anwar, S., A. Hussain, M. Islam, Z. Hussain, Ikramullah, M.N. Sohaib and N. Khan. 2017. Effect of aqueous extracts of allelopathic plants on growth and biomass of wheat and weeds. *Pure and Applied Biology*. 6(4): 1161-1170.
31. Khan, A., M. Shafi, J. Bakht and S. Anwar. 2017. Effect of salinity and seed priming on growth characters of wheat varieties. *Sarhad J. Agric.* 33(3): 435-446.
32. Anwar, S., Waseem Ullah, M. Islam, M. Shafi, A. Iqbal and M. Alamzeb. 2017. Effect of nitrogen rates and application times on growth and yield of maize (*Zea mays L.*). *Pure and Applied Biology*. 6(3): 908-916.
33. Abbas, W., S. Anwar, W. Akram, W.A. Shah, M. Islam, B. Iqbal, Ikramullah, W.A. Khattak, S. Hussain, M.A. Zeb and A. Iqbal. 2016. Response of barley varieties to phosphorus and sulphur levels. *Pure and Applied Biology*. 5(2): 247-254.

34. Anwar, S., I. Khan, N. Ali, B. Iqbal, S. Khan, M.M. Anjum, M.O. Iqbal and S. Hussain. 2016. Phenological traits of wheat response to different levels of humic acid and brassinolide. Pure and Applied Biology. 5(4): 782-787.
35. Anwar, S., I. Khan, S. Hussain, M.M. Anjum, B. Iqbal, A. Hussain, M.O. Iqbal and N. Ali. 2016. Wheat response to different levels of humic acid and brassinolide. Pure and Applied Biology 5(4): 822-829.
36. Anwar, S., Israeel, B. Iqbal, A.A. Khan, Imran, W. A Shah, M. Islam, W.A. Khattak, Ikramullah, W. Akram and W. Abbas. 2016. Nitrogen and phosphorus fertilization of improved varieties for enhancing phonological traits of wheat. Pure and Applied Biology 5(3): 511-519.
37. Anwar, S., Israeel, B. Iqbal, S. Khan, M. Faraz, N. Ali, S. Hussain and M.M. Anjum. 2016. Nitrogen and phosphorus fertilization of improved varieties for enhancing yield and yield components of wheat. Pure and Applied Biology. 5(4): 727-737.
38. Anwar, S., F. Iqbal, W. Ali Khattak, M. Islam, B. Iqbal and S. Khan. 2016. Response of wheat crop to humic acid and nitrogen levels. EC Agriculture. 3(1): 558-565.
39. Abbas, W., S. Anwar, W. Akram, W.A. Shah, M. Islam, B. Iqbal, Ikramullah, W.A. Khattak, S. Hussain, M.A. Zeb and A. Iqbal. 2016. Response of barley varieties to phosphorus and sulphur levels. Pure and Applied Biology. 5(2): 247-254.
40. Munir, S., S. Anwar and M. Rehan. 2016. Assessing the impact of ground level ozone on agricultural crops in the United Kingdom. International Journal of Agriculture and Environmental Research. 2(3): 212-224. ISSN 2414-8245 (Online).ISSN 2518-6116 (Print)
41. Islam, M., S. Anwar, Anjum, B. Khan, W. A Shah, M. Ali, Subhan Ud Din, N. Khan and N. Ali. 2016. Effect of nitrogen fertilization and decapitation stress on *Triticum aestivum* L. (Wheat) productivity. Pure and Applied Biology. 5(2): 317-325.
42. Iqbal, B., B. Ahmad, Inam Ullah, A.A. Khan, S. Anwar, Z. Muhammad, G. Ahmad, D. Muhammad and S. Khan. 2016. Response of triticale to phosphorus, sulphur and different irrigation levels. International Journal of Agriculture and Environmental Research. 2(4): 303-308.
43. Iqbal, B., B. Ahmad, Inam Ullah, Imran, A.A. Khan, S. Anwar, A. Ali, K. Shahzad and S. Khan. 2016. Effect of phosphorus, sulphur and different irrigation levels on phenological traits of Triticale. Pure and Applied Biology. 5(2): 303-310.
44. Iqbal, B., M.T. Jan, Z. Mohammad, A.A. Khan, S. Anwar, Imran and K. Shahzad. 2016. Phenological traits of Maize influenced by integrated management of compost and fertilizer Nitrogen. Pure and Applied Biology. 5(1): 58-63.
45. Shah.W.A., Z. Hayat, Ikramullah, S. Anwar and B. Iqbal. 2016. Response of different wheat varieties to various seed rates. Pure and Applied Biology. 5(3): 529-537.
46. Shah.W.A., Z. Hayat, R. Amin, S. Anwar, M. Islam and Anjum. 2016. Yield and yield components of wheat as affected by different seed rates and nitrogen levels. Pure and Applied Biology 5(3): 547-553.
47. Islam, M., S. Anwar, S. Bashir, W.A. Khattak, Imran, M. Ali and N. Khan. 2015. Growth and yield components of wheat varieties as affected by dual purpose practices. Pure and Applied Biology. 4(4): 491-496.
48. Khan, A., S. Anwar and M. Z Afridi. 2015. Response of mung bean (*vigna radiata* L.) cultivars to various levels of phosphorous application in agro climatic condition of Peshawar. International Journal of Agricultural and Environmental Research. 1(2): 68-72.

MEMBERSHIP:

1. Life Member Pakistan Weed Science Society.
2. Life Member Pakistan Botanical Society.
3. Member Soil Science Society of Pakistan.
4. Life Member Pakistan Agronomy Society.

REFERENCES:**1. Prof. Dr. Jehan Bakht**

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