


Name	Prof. Dr. Syed Mehar Ali Shah				
Personal	Chairperson, Department Plant Breeding and Genetics The University of Agriculture, Peshawar-Pakistan Phone Off: +92-91-9216007 Cell: +92-316-5333271 E-mail: mehrpbg@gmail.com				
Academic Record	Degree Institution	Year	Marks (%)	Specialization	Name of the
	Post-Doc	2015		Plant Breeding/Genomics	UC-Davis (US)
	PhD	2008	94.09	Plant Breeding & Genetics	UoA-Peshawar
	M.Sc(Hons)	2002	93.80	Plant Breeding & Genetics	UoA-Peshawar
	B.Sc(Hons)	2000	91.26	Plant Breeding & Genetics	UoA-Peshawar
	F.Sc	1994	72.18	Pre-Medical	F.G. Sir Syed
	College				Rawalpindi
	Matric	1992	82.59	Science	F.G. Public School Wah Cantt
Honors and Awards	<ul style="list-style-type: none">➤ Awarded Competitive Research Grant at National Level from HEC➤ Awarded Best Presentation /Poster Award at International Rice Functional Genomics Symposium at Tuscon, Arizona, US➤ Topped the Department of Plant Breeding & Genetics in M.Sc (Hons) and B.Sc. (Hons)➤ Awarded Silver Medal in M.Sc (Hons)➤ Awarded University Bronze Medal in B.Sc(Hons)➤ Awarded Scholarship from Higher Education Commission of Pakistan for Indigenous PhD Program (2004)				
Experience	Date	Title		Institution	
	Sept 18, 2002-Feb 17, 2003	Research Fellow/Officer (BS-17)		NIFA, Peshawar	
	Feb 17, 2003- Dec 29, 2009	Lecturer		UoA-Peshawar	
	Dec 30, 2009- May 13, 2014	Assistant Professor		UoA-Peshawar	
	May 14, 2014-March 3, 2022	Associate Professor		UoA-Peshawar	
	March 4, 2022 till date	Professor		UoA-Peshawar	
Service Activity	Teaching and Research				
Brief statement of Research Interest	Development of high yielding, disease and insect resistant varieties of rice crop via conventional and non-conventional approaches				
Publications	List Attached. 57 Publications in Journals of National and International Repute				
Students Supervised	<ul style="list-style-type: none">➤ List Attached (70 M.Sc (Hons) Students Supervised -34 as a Chairman Supervisory Committee and 26 as a Member Supervisory Committee)➤ Currently Supervising 3 PhD Students and 5 M.Sc (Hons) in the capacity of Chairman Supervisory Committee				
Courses Taught	<ul style="list-style-type: none">➤ List Attached (18 Courses- 11 Undergraduate Courses and 7 Graduate Courses)				
Courses Developed	<ul style="list-style-type: none">➤ Developed Two Courses for Genetics 4 years BS Program at National Level➤ Developed Two Courses on Genomics for B.Sc (Hons) and MS/PhD➤ Member of National Curriculum Review Committee on Genetics since 2016				
Research Grants and Contracts	HEC sponsored 2.6 million Research Project which focused on the evaluation of Rice Recombinant Inbred Lines across locations				
Other Research or Creative Accomplishments	<ul style="list-style-type: none">➤ Initiated a very comprehensive study on wild species of rice in Pakistan and identified resistance against Bacterial Blight and Leafhopper in wild species of rice➤ Successfully transferred Bacterial Blight and Leafhopper resistance from wild rice into Pakistani rice cultivars viz. Bas-385, IR-6 and KSK-282➤ Started Rice Hybridization Program in 2010 and have developed high yielding Rice Recombinant Inbred Lines (RILs).➤ Active Research Collaboration with UC-Davis-US➤ Prepared the Self-Assessment Reports (SARs) of the Department of Plant Breeding and Genetics for B.Sc (Hons) and M.Sc (Hons) in 2009 & 2016.				

Trainings/Participation in International Conferences	<ul style="list-style-type: none"> ➤ Participated in various professional trainings and workshops related to Scientific Writing and Presentations ➤ Training on Hybrid Rice Development at China (July-August 2017) ➤ Participated in the 12th International Symposium on Rice Functional Genomics at the Tuscon, The University of Arizona US (Nov 16-19, 2014). ➤ Participated in the Tuscon Plant Breeding Institute, The University of Arizona US (January 5-9, 2015) and acquired state-of-art training on advances in genomics, bioinformatics, high throughput phenotyping and novel statistical approaches for selection, QTL mapping and G×E interactions. ➤ Participated/Poster Presentation in the International Plant and Animal Genome XXIII Conference (January 10-14, 2015), San Deigo US, a forum on recent and future projects of plant and animal genomes ➤ Attended an International Conference ‘CROPS 2015: Genomics Enabled Crop Breeding and Improvement’ from May 18-21, 2015 held at the HudsonAlpha Institute for Biotechnology in Huntsville, Alabama US ➤ Participated/Poster Presentation at the Joint Bioenergy Institute (JBEI) Annual Meeting 2015 from May 27-29, 2015 at Santa Clara, California US
Membership of Statutory Bodies	<ul style="list-style-type: none"> ➤ Syndicate Member of The University of Agriculture-Peshawar (2009) ➤ Member of Selection Board and Scrutiny Committee of several universities ➤ Member Board of Studies, Department of Plant Breeding and Genetics, The University of Agriculture, Peshawar ➤ Member Board of Studies, Department of Plant Breeding and Genetics, The University of Haripur, Haripur
Membership of Societies	<p>SABRAO (The Society for the Advancement of Breeding Research in Asia and Oceania) Pakistan Botanical Society, African Crop Science Society, Weed Science Society of Pakistan Pakistan Phytopathological Society</p>

LIST OF PUBLICATONS

MANUSCRIPTS PUBLISHED IN IMPACT FACTOR JOURNALS

1. **Shah, S.M.A.**, H. Rahman, F.M. Abbasi, M.A. Akhtar and A. Rafi. 2009. Resistance characterization of wild relatives of Rice in Response to Bacterial Blight. Pak. J. Bot. 41(2): 917-925.
2. Rahman, H., I.H. Khalil, F.M. Abbasi, Z.T. Khanzada and **S.M.A. Shah**. 2010. Cytomorphological characterization of Tea cultivars. Pak. J. Bot., 42(1): 485-495.
3. Rahman, H., S. Ali, F. Iftikhar, I.H. Khalil and **S.M.A. Shah**. 2010. Stability analysis of maize hybrids across North West of Pakistan. Pak. J. Bot., 42(2):1083-1091.
4. Khan, I.A., G. Hassan, K.B. Marwat, I. Daur, **S.M.A. Shah**, S.A. Khan and Farhatullah. 2010. Interaction of wild oat (*Avena fatua* L.) with divergent cultivars. Pak. J. Bot., 42(2): 1051-1056.
5. Rahman, H., Arifuddin, Z. Shah, **S.M.A. Shah** and I.H. Khalil. 2010. Evaluation of maize S₂ lines in test cross combinations. I: Flowering and morphological traits. Pak. J. Bot., 42(3): 1916-1927.
6. Gul, R., H. Rahman, I.H. Khalil, **S.M.A. Shah** and A. Ghafoor. 2010. Heterosis for flower and fruit traits in tomato (*Lycopersicon esculentum*). African J. Biotech., 9(27): 4144- 4151.
7. Shah, Z., H. Rahman, **S.M.A. Shah**, M. Iqbal, U. Pervaiz and Amanullah. 2010. Tillage and residue impact on microbial biomass and soil C and N dynamics under different cropping systems. Pak. J. Bot., 42(3):1969-1976.

8. Khan, I.A., Z. Ullah, G. Hassan, K.B. Marwat, A. Jan, **S.M.A. Shah** and Sheraz A. Khan. 2011. Impact of different mulches on weed flora and yield of maize. Pak. J. Bot., 43(3): 1601-1602.
9. Rahman, H., S. Pekic, V. Lazic-Jancic, S.A. Quarrie, **S.M.A. Shah**, A. Pervez and M.M. Shah. 2011. Molecular mapping of quantitative traits loci for drought tolerance in maize plants. Genet. Molec. Res. 10(2): 889-901.
10. **Shah, S.M.A.**, H. Rahman, F.M. Abbasi, M.A. Rabbani, I.A. Khan, Z.K. Shinwari and Z. Shah. 2011. Interspecific variation of total seed protein in wild rice germplasm using SDS-PAGE. Pak. J. Bot., 43(4): 2147-2152.
11. Akhtar, M.A., F.M. Abbasi, H. Ahmad, M. Shahzad, **M.A. Shah** and A.H. Shah. 2011. Evaluation of rice germplasm against *Xanthomonas Oryzae* causing bacterial leaf blight. Pak. J. Bot., 43(6): 3021-3023.
12. Rahman, H., Arifuddin, Z. Shah, **S.M.A. Shah**, M. Iqbal and I.H. Khalil. 2012. Evaluation of maize S₂ lines in test cross combinations II: Yield and yield components. Pak. J. Bot., 44(1): 187-192.
13. Khan, I.A., H. Rahman, **S.M.A. Shah**, Z. Shah. S. Rahman, Ihteramullah and M. Noor. 2012. Characterization of pearl millet germplasm for various morphological and fodder yield parameters. Pak. J. Bot., 273-279.
14. Khan, I.A., G. Hassan, S.A. Khan and S.M.A. Shah. 2012. Wheat-wild oats interactions at varying densities and proportions. Pak. J. Bot., 44(3): 1053-1057.
15. Bacha, Q.U., S.M.A. Shah, Habibullah, I.A. Khalil, A. Muhammad, S.M. Azam. 2015. Heritability, genetic advance, genotypic and phenotypic correlation studies for yield and yield related traits in F₂ segregating populations of rice (*Oryza sativa*). European Acad. Res., 3(1): 1059-1078.
16. Rahman, A., S.M.A. Shah, H. Rahman, I.H. Khalil, M. Ismaeel, M.A. Raza and I.A. Khan. 2015. Genetic Variability for Morphological Parameters in F₂ Segregating Populations of Rice. Pak. J. Bot., 47(5): 1759-1765.
17. Ismaeel, M., **S.M.A. Shah**, A. Nawaz, Z. Bacha, A. Rahman and S. Suleman. 2016. Genetic variability and heterosis among rice genotypes for yield and yield associated traits. Int. J. Biosci. 9(2): 137-146.
18. **Shah, S.M.A.**, A. Rahman, H. Rahman, M. Ismaeel, S.A. Khan, I.A. Khan, A. Raza and F. Aman. 2016. Heritability and genetic advance for yield and yield related traits in F₂ rice populations. Int. J. Biosci. 9(3): 170-176.
19. Ismaeel, M., **S.M.A. Shah**, A. Nawaz, Z. Bacha, A. Rahman, S. Suleman and A. Khan. 2016. Morphological diversity of 83 rice accessions for qualitative and quantitative parameters. Int. J. Biosci. 9(3): 158-169.
20. Khan, I.A., M. Waqas., S.M.A. Shah, N. Khan and R. Khan. 2017. Evaluation of different techniques for economical control of weeds associated to chickpea. Tunisian J. Pl. Prot. 12: 115-122.
21. Khan, I.A., R. Khan, A. Jan and S.M.A. Shah. 2018. Studies on tolerance of chickpea to some pre and post emergence herbicides. Emirates J. Food Agri. 30 (9): 725-731.

22. Khan, I.A, G. Hassan and **S.M.A. Shah**. 2018. Integrated approaches for weed suppression in chickpea (*Cicer areitinum*) under residual moisture after rice crop. *Planta Daninha* (v36:e018176072, Doi: 10.1590/S0100-83582018360100150)
23. Shah L., M. Yahya , **S.M.A. Shah**, M. Nadeem , A. Ali , A. Ali, J. Wang, M.W. Riaz, S. Rehman, W. Wu , R.M. Khan, A. Abbas, A. Riaz, G. B. Anis , H. Si , H. Jiang and C. Ma. 2019. Improving Lodging Resistance: Using Wheat and Rice as Classical Examples. *Intl. J. Mol. Sci.* 20:4211; doi:10.3390/ijms20174211.
24. **Shah, S.M.A.**, A. Ayub, F. Mohammad, S.N. Khan, S. Ahmad, H. Uddin. 2022. GenotypexYear interaction for yield and yield associated traits in rice (*Oryza sativa* L.). *Gesund Pflanzen* (<http://doi.org/10.1007/s10343-023-00899-0>)
25. Ullah, W., **S.M.A. Shah**, H. Ullah, I.H. Khalil, S.A. Jadoon and D. Wang. 2022. Development of rice germplasm based on genetic variability in F₅ segregating populations. *SABRAO J. Breed Genet.* 54(5):993-1003.
26. Rahman, A., F. Rahman, **S.M.A. Shah**, M.A. Shah, S.M. Rasheed. 2023. Additive main effect and multiplicative interaction for production traits in rice recombinant inbred lines using AMMI biplot technique. *Turk. J. Field Crops* 28(2): 213-220.

MANUSCRIPTS PUBLISHED IN INTERNATIONAL REFEREED JOURNALS

1. **Shah, S. M. A.**, F. Mohammad, M.S. Swati, and S. Iqbal. 2003. Genotypic variability for yield associated traits in bread wheat. *Sarhad J. Agric.* 19(4): 535-538.
2. Mohammad, F., **S.M.A. Shah**, M.S. Swati, T. Shehzad, and S. Iqbal. 2004. Genotypic variability for yield and morphological traits in bread Wheat. *Sarhad J. Agric.* 20(1): 67- 71.
3. Shehzad, T., I.H. Khalil, M.S. Swati, and **S.M.A. Shah**. 2004. Heterosis for yield and related traits in spring wheat. *Sarhad J. Agric.* 20(4): 537-542.
4. Shehzad, T., I.H. Khalil, **S.M.A. Shah**, H. Ihsan, and M.S. Swati. 2005. Heterosis estimates for some morphological traits in spring wheat crosses. *Sarhad J. Agric.* 21(1): 33-39.
5. Ali, S., **S.M.A. Shah**, A. Hassnain, Z. Shah and I. Munir. 2007. Genotypic variation for yield and morphological traits in wheat. *Sarhad J. Agric.* 23(4): 943-946.
6. Shah, Z., **S.M.A. Shah**, A. Hassnain, Z. Shah, S. Ali, I.H. Khalil, and I. Munir. 2007. Genotypic variation for yield and yield related traits and their correlation studies in wheat. *Sarhad J. Agric.* 23(3): 633-636.
7. **Shah, S.M.A.**, H. Rahman, A. Rehman, F.M. Abassi, I.H. Khalil, and A. Ali. 2008. Characterization of wild rice species in response to leaf folder, *Cnaphalocrocis medinalis*. 2008. *Sarhad J. Agric.* 24(1): 69-74.
8. Rahman, H., S. Ali, **S.M A. Shah**, S.S. Shah, N. Rahman, I.A. Khalil, I. Hussain and F. Afzal. 2008. Diversity for morphological and maturity traits in maize populations from upper Dir. *Sarhad J. Agric.* 24(3): 439-443.
9. Durrishahwar, H. Rahman, **S.M.A. Shah**, I.A. Khalil. 2008. Recurrent selection for yield and yield associated traits under leaf blight (*Helminthosporium maydis*) stress in Maize. *Sarhad J. Agric.* 24(4): 599-605.

10. **Shah, S.M.A.**, A. Ahmad, F. Mohammad, H. Rahman, G. Woras, M.Y. Khan, and D. Jan. 2008. Genotypic evaluation of some flue-cured Virginia tobacco genotypes for yield and quality traits. *Sarhad J. Agric.* 24(4): 607-611.
11. **Shah, S.M.A.**, H. Rahman, Z. Iqbal, F.M. Abbassi, Durrishahwar, A. Ali, M.Y. Khan and D. Jan. 2008. Genotypic evaluation of sugarcane genotypes for ratooning ability. *Sarhad J. Agric.* 24(4): 613-617.
12. Rahman, H., **S.M A. Shah**, Durrishahwar, I. Nawaz, I.A. Khalil and M. Iqbal. 2008. Evaluation of testcrosses of S₁ lines for morphological and maturity traits in Maize. *Sarhad J. Agric.* 24(4): 619-623.
13. **Shah, S.M.A.**, Farhatullah, H. Rahman, Attaullah, Durrishahwar, M.Y. Khan, M. Sohail and N.M. Khan. 2009. Acclimatization of Burley tobacco germplasm under agro-ecological conditions of Swat valley. *Sarhad J. Agric.* 25(1): 31-36.
14. Rahman, H., I. Nawaz, **S.M.A. Shah**, Durrishahwar, I.A. Khalil, M. Iqbal, M. Sohail and M.Y. Khan. 2009. Evaluation of test crosses derived from maize variety Azam for yield and yield associated traits. *Sarhad J. Agric.* 25(2): 197-201.
15. Ali, S, H. Rahman, S.J.A. Shah, **S.M.A. Shah** and Farhatullah. 2009. Assessment of field resistance using host-pathogen interaction phenotype for wheat yellow rust. *African Crop Sci. J.* 17(4): 213-221 (International Refereed Journal).
16. Noor, M., H. Rahman, Durrishahwar, M. Iqbal, S.M.A. Shah and Ihteramullah. 2010. Evaluation of maize half sib families for maturity and grain yield attributes. *Sarhad J. Agric.* 26(4): 545-549.
17. Sajid, M., S.A. Khan, H. Khurshid, J. Iqbal, A. Muhammad, N. Saleem and S.M.A. Shah. 2015. Characterization of rice (*Oryza sativa*) germplasm through various agro-morphological traits. *Sci. Agri.* 9(2): 83-85.
18. Rahman, Z., **S.M.A. Shah**, H. Rahman, F. Mohammad, M.A. Raza and I.A. Khan. 2017. Assessment of rice genotypes against bacterial leaf blight resistance. *Sarhad J. Agric.* 33(2): 293-297.
19. Iqbal A., I.H. Khalil, **S.M.A. Shah** and M.S. Kakir. 2017. Estimation of heritability, genetic advance and correlation for morphological traits in spring wheat. *Sarhad J. Agric.* 33(4): 674-679.
20. Sohail, A., S. Shah, Farhatullah, **S.M.A. Shah**, S. Ali, A. Izzam and Q. Hussain. 2018. Assessment of genetic variability, heritability and selection response for morph-yield traits in brassica. *Pure Appl. Biol.*, 7(1): 50-56.
21. Sohail, A, H. Rahman, M. Y. Khan, T. Burni, **S.M.A. Shah**, R. Naz and Manzoor. 2018. Estimation of genetic variability, heritability, index of variation and correlation in the half sib families of CIMMYT maize population CZP-132011. *Pure Appl. Biol.*, 7(1): 365-37.
22. Sohail, A, M.Y. Khan, T. Burni, Farhatullah, I. H. Khalil and **S.M.A. Shah**. 2018. A study on molecular surveillance of *Theeria spp.* infection and its impact on hematological and biochemical changes in naturally infected small ruminants at Multan, Pakistan. *ARPJ. Agric. Bio. Sci.* 13 (1): 1-7.

23. Sohail, A, H. Rahman, Farhat Ullah, **S.M.A. Shah**, T. Burni and S. Ali. 2018. Evaluation of F₄ wheat (*Triticum aestivum*) genotype for variability, heritability and genetic advance and correlation studies. J. Pl. Breed. Genet. 6(1):01-07.
24. Ismaeel M., **S.M.A. Shah**, A. Rahman and M.A. Raza. 2018. Heritability and heterosis for yield and yield related traits in rice. Sarhad J. Agric. 34(3): 543-549.
25. Ismaeel, M., S.M.A. Shah, S. Suleman, A. Raza and M. Anwar. 2018. Assessment of genetic variability, heterosis and heritability for morphological parameters in rice. Pure Appl. Biol. (Available online <http://dx.doi.org/10.19045/bspab.2018.700174>).
27. Iqbal A., S.M.A. Shah, H. Rahman, F. Aman and A. Rahman. 2018. Genetic variability, heritability and genetic advance for morphological traits in F_{5,6} rice lines. Sarhad J. Agric. 34(4): 888-895.
28. Khan, M.U., S.M.A. Shah, H. Rahman, A. Iqbal and E. Aslam. 2018. Evaluation of maize hybrids for yield and maturity traits. Sarhad J. Agric. 35(1): 7-12.
29. Aziz-ur-Rahman and S.M.A. Shah. 2019. Genotype x Environment Interaction for Yield and Associated Traits in Rice. Sarhad J. Agric. 35(2): 532-538.
30. Rajab, H., M.S. Khan, S.H. Shah and S.M.A. Shah. 2019. Genetic Transformation of Tobacco *Serine Acetyltransferase 4 (NtSAT4)* gene in *Brassica napus* L. Sarhad J. Agric. 35(4): 1224-1233.
31. Aman, F., N. Ara and S.M.A. Shah. 2021. Genetic diversity among Pea (*Pisum sativa* L.) genotypes for maturity and yield traits. Sarhad J. Agric. 37(2): 386-397.
32. Aman, F., N. Ara and S.M.A. Shah. 2021. Combining ability studies for yield and related traits in Pea. J. Biodiversity and Environ. Sci. 18(6):77-86.

BOOKS WRITTEN:

1. **Shah, S.M.A.**, H. Rahman, F.M. Abbasi. 2010. Wild Rice Characterization: Morphological, Molecular, Disease and Insect Resistance Aspects. Lambert Academic Publishing. ISBN No. 978-3-8433-5074-7.

M.Sc. (Hons) STUDENTS THESES SUPERVISED AS A MAJOR SUPERVISOR

1. Zahid Iqbal. 2005. Screening of Different Sugarcane Genotypes for Ratooning Ability.
2. Shah Muhammad Arif. 2010. Morphological and Biochemical Characterization of Wide Cross Derivatives in Rice.
3. Muhammad Sohail. 2010. Genetic Diversity in Wild Rice Germplasm for Morphological Parameters and Bacterial Leaf Blight Resistance.
4. Zahra Jabeen. 2010. Genotypic Evaluation of Rice Germplasm for Morphological Parameters.
5. Nazma Naeem. 2010. Genetic Diversity in Rice Genotypes for Qualitative and Quantitative Parameters.
6. Muhammad Riaz. 2012. Genetic Diversity in Indigenous Germplasm for Qualitative and Quantitative Traits.
7. Muhammad Younas. 2012. Combining Ability and Heterosis Studies in Diallel Crosses of Rice.

8. Zia-ur-Rahman. 2013. Genetic Diversity in Rice Genotypes for Morphological Traits and Bacterial Leaf Blight Resistance.
9. Said Suleman. 2013. Assessment of Genetic Variability and Heterosis for Yield and Yield Associated Traits in Rice.
10. Rafiullah. 2013. Genetic Variability for Yield and Yield Associated Traits in Wheat Germplasm under Normal and Rainfed Conditions.
11. Aziz-ur-Rahman. 2013. Genetic Variability for Yield and Yield Associated Traits in F₂ Segregating Populations of Rice.
12. Muhammad Ismaeel. 2014. Genetic Variability and Heterosis for Morphological Traits in Rice.
13. Qazi Uzair Bacha. 2014. Heritability and Correlation Studies for Yield and Yield Related Traits in F₂ Segregating Populations of Rice.
14. Asad Ullah Khan. 2015. Genetic Variability for Yield and Yield Associated Traits in F₃ Populations of Rice
15. Mujahid Ali. 2015. Heritability and Selection Response for Yield and Yield Related Traits in Rice.
16. Fasih-Ud-Din. 2016. Heritability and Genetic Advance for Yield and Yield Related Traits in F₄ Rice Populations.
17. Wasif Ullah Khan. 2017. Genetic Variability for Morphological Traits in F₅ Segregating Populations of Rice.
18. Ibrar Khattak. 2017. Genetic Variability for Yield and Yield related Traits in F₅ Populations of Rice.
19. Arshad Iqbal. 2017. Genetic Variability and Correlation Studies for Production Traits in Rice.
20. Zia ud Din. 2017. Heritability and Genetic Advance for Yield and Yield Associated Traits in Rice.
21. Abdullah Izam. 2018. Genotypic Divergence for Yield and Yield Components in F_{5,6} Lines.
22. Farhan Ahmad Shah. 2019. Genetic Variability in Rice Genotypes Using Gamma Irradiation.
23. Adeel Khan. 2019. Genetic Variability and Traits Association in Tomato (*Lycopersicon esculenum* Mill.)
24. Jawad Khan. 2019. Genetic Variability and Correlation Studies for Morphological Traits in Cucumber.
25. Bashrat Hussain. 2020. Evaluation of winter wheat genotypes for yield and yield related traits across environments.
26. Abbas Khan. 2021. Genotypic performance of Rice Recombinant Inbred Lines in irrigated and water-stress conditions.
27. Kainat Bibi. 2021. Broad-sense heritability and genetic advance for yield related traits using F₂ rice populations.

28. Maaz Ullah. 2021. Genetic variability for yield and yield attributes among M₂ rice generations.
29. Wajid Khan. 2022. Genetic variation among green super rice lines for yield associated Traits
30. Tariq Ahmad. 2023. Heritability and genetic Advance for yield and associated traits in F₂ rice segregating populations.
31. Muhammad Immad Khan Khalil . 2023. Genetic variability among M₃ rice populations for yield related traits.
32. Muhammad Hisham. 2023. Genetic Variability among mutant rice populations for morphological and yield contributing traits
33. Bismillah Khan. 2023. Genetic Improvement for yield traits in rice segregating populations
34. Muzammil Ahmad. 2024. Genetic improvement of F₄ rice segregating populations for yield traits.
35. Afraz Nasim. 2024. Water-Stress tolerance in the newly developed rice populations for yield traits
36. Muneeb Ahmad Khan. 2024. Water stress tolerance in rice for yield and related traits

M.Sc (Hons) STUDENTS THESES SUPERVISED AS A MEMBER SUPERVISORY COMMITTEE

1. Ashfaq Ahmad. 2004. Genotypic Evaluation of Some Virginia Tobacco (*Nicotiana tabaccum* L.) for Yield and Quality Traits.
2. Akhtar Ali. 2004. Genotypic Evaluation of Wheat Genotypes Across Environments. .
3. Sajid Muhammad. 2004. Genetic Variability and Traits Correlation in Wheat (*Triticum aestivum*).
4. Attaullah. 2005. Acclimatization of Brazalian Burley Tobacco (*Nicotiana tabacum*) Germplasm under Agro-ecological Conditions of Swat Valley.
5. Said Salman. 2005. Combining Ability in Wheat Using Diallel Analysis.
6. Hina Fayyaz. 2009. Evaluation of Maize S₂ Lines for Yield and Morphological Traits in Test Cross Combinations.
7. Izhar Hussain. 2009. Genotype by Environment Interactions of Maize Hybrids Across Different Locations of NWFP.
8. Liaqat Shah. 2011. Evaluation of Testcrosses for Grain Yield and Related Traits in Maize Variety Azam.
9. Muhammad Idrees. 2011. Testcross Performance of S₂ Lines for Yield and Yield Related Attributes in Maize Variety Sarhad White.
10. Asif Ali. 2012. Line × Tester Analysis for Grain Yield and Yield Related Traits in Maize Variety Sarhad White.
11. Sahir Hameed Khattak. 2012. Genetic Diversity in Indigenous and US Ancestral Soybean Lines.
12. Sheraz Ahmad. 2012. Genotypic Variability for Morphological and Quality Traits Across Environments in Tobacco.

13. Muhammad Amir. 2012. Genotype \times Year Interaction and its Implications on Heritability and Association of Traits in Mungbeen Genotypes.
14. Kaleem Ullah. 2012. Genotypes \times Location Interaction and Heritability for Morphological and Yield Traits in Irrigated Wheat.
15. Habibullah. 2014. Performance of S5 Lines in Test Crosses for Yield and Yield Related Traits in Maize Variety Azam.
16. Nauman Saleem. 2014. Evaluation of Test Crosses Derived from Maize Variety Sarhad White for Yield and Yield Associated Traits.
17. Faiza Zoha Zafar. 2017. Genetic Diversity among F_{3:4} Populations of *Brassica Napus* L.
18. Tauqeer Ahmad. 2017. Combining Ability Analysis in Popcorn.
19. Saad Saeed. 2017. Genotype by Environment Interaction for Yield and Yield Associated Traits in Bread Wheat.
20. Shahzad Ahmad. 2018. Combining Ability and Heterosis in White Maize Using Diallel Crosses.
21. Waleed Khan. 2018. Diallel Analysis of Yellow Maize Inbred Lines for Grain Yield and Associated Traits.
22. Attaullah. 2018. Genetic Advance and Traits Association in Normal and Late Planted Wheat.

M.Sc (Hons) STUDENTS THESES SUPERVISED AS A MEMBER SUPERVISORY COMMITTEE OF OTHER DEPARTMENTS

1. Sayed Jamaluddin Reshad. 2009 (Weed Science Department). Integrated Weed Management in Tomato (*Lycopersicon esculentum*).
2. Ayesha Bibi. 2009 (Department of Plant Pathology). Studies on the Characterization and PCR identification of the Pathogen and Chemical Control of the Bacterial Blackleg and Soft Rot of Potato.
3. Ghulam Ullah Saqib. 2010 (Department of Agronomy). Evaluation of Buckwheat Species for Yield and Yield Components under Various NP Levels in Skardu Baltistan.
4. Muhammad Imran. 2010 (Weed Science Department). Effect of Different Herbicides and Weeds Extracts on the Yield and Yield Components of Wheat.
5. Muhammad Shahid. 2011 (Plant Pathology Department). Evaluation of Rice Germplasm against Bacterial Blight under Natural Conditions and Detection of Pathogen through Polymerase Chain Reaction.
6. Alia Islam. 2012 (Plant Pathology). Virulence Comparison of *Xanthomonas Oryzae* Isolates and Assessment of Varietal Resistance.
7. Hala Rajab. 2013 (Institute of Biotechnology and Genetic Engineering). Production of Genetically Engineered Oil Seed Rape (*Brassica napus*) for Enhanced Fungal Resistance.
8. Haris Khan. 2016 (Department of Agronomy). Response of Brassica to the Integrated Weed Management of Nitrogen and Farm Yard Manure.
9. Atifullah. 2017. (Department of Horticulture). Effect of Different Concentrations of Acetyl Salicylic Acid on Tomato (*Solanum lycopersicum* L.) under Different Growth Conditions.

10. Sajjad Ahmad. 2017. Impact of Sowing Methods, Nitrogen and Zinc Levels on the Productivity of Rice in Swat Valley.
11. Anum Ali. 2017 (Institute of Biotechnology and Genetic Engineering). Assessment of Genetic Diversity in Tomato (*Solanum lycopersicum* L.) Germplasm Using Morphological, Molecular and Biochemical Markers.
12. Maria Jamal. 2017 (Institute of Biotechnology and Genetic Engineering). Genetic Characterization of Glutathione Over-expresser Transgenic Tobacco Lines and Evaluation of their Performance under Cadmium Stress.

PHD STUDENTS SUPERVISED AS CHAIRMAN SUPERVISORY COMMITTEE

1. Mr. Aziz-ur-Rahman. 2019. Stability analysis of rice recombinant inbred lines.
2. Mr. Fasih-ud-Din (PhD Dissertation sent for foreign evaluation). 2024. Genetic analysis for maturity and yield associated traits in rice.

COURSES TAUGHT

Under-Graduate Courses

1. Principles of Evolution
2. Non-conventional Approaches in Plant Breeding
3. Biodiversity and Plant Genetic Resources
4. Breeding Sugar Crops
5. Breeding Field Crops
6. Introductory Genetics
7. Biodiversity and Plant Genetic Resources
8. Breeding Vegetable Crops
9. Breeding Sugar Crops
10. Botany
11. Genomics in Agriculture
12. Internship

Graduate Courses

1. Advanced Genetics
2. Advances in Molecular and Microbial Genetics
3. Advanced Cytogenetics
4. Field Crops Evolution
5. Molecular Evolution
6. Cereal Genetics
7. Plant Genomics
8. Thesis