

# CURRICULUM VITAE

## **Dr. Hidayat-ur-Rahman**

Professor,  
Department of Plant Breeding & Genetics,  
NWFP Agricultural University, Peshawar (Pakistan).

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**Date and Place of Birth:** January 1, 1959, District Mardan, N.W.F.P. (Pakistan).

### **EDUCATION:**

Post Doctorate (Biotechnology/M.Biology/RFLP Mapping/ Microsatellites), 1998-99, University of East Anglia/John Innes Centre, Norwich (UK).

Post Doctorate (Plant Tissue Culture), 1993-94, Univ. of Tuscia, Viterbo (ITALY).

Ph.D. Agronomy (Maize Breeding) (1989), South Dakota State University (USA).

M.Sc. (Hons) Plant Breeding & Genetics (1981), University of Peshawar (Pakistan).

B.Sc. (Hons) Plant Breeding & Genetics (1979), University of Peshawar (Pakistan).

### **EXPERIENCE (Teaching and Research):**

- November 1981 to September 1982, **Scientific Officer** (Pakistan Agricultural Research Council, Islamabad).
- September 1982 to December 1988, **Lecturer** (Plant Breeding and Genetics, NWFP Agricultural University, Peshawar).
- January 1989 to April 1996, **Assistant Professor** (Plant Breeding & Genetics, NWFP Agricultural University, Peshawar).
- April 1996 to August 2001, **Associate Professor** (Plant Breeding & Genetics, NWFP Agricultural University, Peshawar).
- August 2001 to Date, **Professor** (Plant Breeding & Genetics, NWFP Agricultural University, Peshawar).

### **DISTINCTIONS**

Won Best University Teachers Award for **2006** from Higher Education Commission, Islamabad.

Won **Commonwealth Fellowship** Award for the year **1998** from **United Kingdom (UK)**.

Recognised Supervisor (**PhD Scholars**) by **HEC and Ministry of Science & Technology, Islamabad**.

## **ADMINISTRATIVE ASSIGNMENTS HELD**

- April 2004-April 2007, **Chairman**, Department of Plant Breeding & Genetics, NWFP-AUP.
- September 8 to December 15, 2008, **Chairman**, Dept. of Plant Breeding & Genetics, NWFP-AUP.
- June 04 to December 04, 2009, **Chairman**, Department of Plant Breeding & Genetics, NWFP-AUP.
- June 2005-December 2009. **Managing Director**, Agricultural University Teachers Foundation, NWFP Agricultural University, Peshawar.
- May 2002-April 2004, **Controller of Examinations**, NWFP Agricultural University, Peshawar.
- July 2003-June 2006, **Project Director/Principal Investigator**, ALP Funded Project, Sponsored by Pakistan Agricultural Research Council, Islamabad.
- July 2006-June 2009, **Project Director/Principal Investigator**, HEC Funded Project, Sponsored By Higher Education Commission, Islamabad.
- August 1992-Sept. 1996, **Deputy Provost** NWFP Agricultural University, Peshawar.
- April 1984-August 1985, **Warden** Ahmad Shah Abdaali, Hostel, NWFP Agr. University, Peshawar.

### **Planning and Management Experience:**

1. Member, University Syndicate NWFP Agricultural. University, Peshawar. (1991-93).
2. Member, Finance & Planning Committee, NWFP Agricultural University, Peshawar (1991-93).
3. Associate Editor, Sarhad Journal of Agriculture, NWFP Agricultural University, Peshawar.
4. Member Monitoring Team: Agri. Research Projects, Pakistan Science Foundation, Islamabad.
5. Convenor, National Curriculum Review Committee (Plant Breeding & Genetics, 2005-09).
6. Convenor, National Curriculum Review Committee (Genetics, 2005-09).
7. Chief Editor, Khirman, Annual Magazine, NWFP Agricultural University, Peshawar
8. Coordinator, Blood Donors Society, NWFP Agricultural University, Peshawar.
9. Member Board of Faculty, Faculty of Crop Production Sciences, NWFP-AUP.
10. Convenor, Board of Studies, Department of Plant Breeding and Genetics, NWFP-AUP.
11. Member Board of Studies, Department of Horticulture, Agricultural University, Peshawar.
12. Member Board of Studies, Department of Agronomy, Agricultural University, Peshawar.
13. Member Board of Studies, Department of Water Management, Agril. University, Peshawar.
14. Member Board of Faculty, Faculty of Crop Production Sciences, NWFP-AUP.
15. Member Board of Faculty, Faculty of Crop Protection Sciences. NWFP-AUP.
16. Member Re-entrance Committee (TIPAN), NWFP Agrilcultural University, Peshawar.
17. Member Technical Working Group (Cereal Crops), NWFP Agril. University, Peshawar.
18. Member Academic Council, NWFP Agricultural University, Peshawar.
19. Member IUCN team for Conservation of Plant Genetic Diversity in NWFP.
20. Member Board of Governors, Institute of Biotechnol.&Genetic Engg. NWFP-AUP.
21. Regional Secretary SABRAO Journal of Genetics and Breeding, Philipines.
22. Member National Curriculum Review Committee (Physiology, 2006 - 2008).

23. Member National Curriculum Review Committee (Bioinformatics, 2006–2008)
24. Member National Agricultural Education Accreditation Council, Islamabad.
25. Convenor, National Curriculum Review Committee (Plant Breeding & Genetics, 2010-15).
26. Member Board of Studies, Department of Environmental Sciences, COMSATS, Abbottabad.
27. Member Finance and Planning Committee, KP Agricultural University, Peshawar (2010-12).

**Membership with Professional Societies:**

1. American Society of Agronomy (USA).
2. South Dakota Academy of Science (USA).
3. Pakistan Botanical Society (Pakistan).
4. Weed Science Society of Pakistan.
4. Genetical Society of Pakistan.
5. Society for Advancement of Breeding Res. in Asia and Oceania (SABRAO), Manila (Phillipines).
6. Biotechnology and Genetics Society of Pakistan.
7. Pakistan Genetical Society, Hazara University, Mansehra (Pakistan).
8. Member, Near East Weed Science Society.

**Crop Varieties/ Germplasm Released:**

**Maize Parental Lines SD 45, SD 47 and SD 48** ( Crop Sci. 30:243 ).

**Maize variety IQBAL,**

Approved by Provincial Seed Council, 29<sup>th</sup> Meeting November 18, 2008,

Notification No. SOA II (AD)7(8)2007/ Vol.-VI, dated January 13, 2009.

**Books/ Book Chapters Published:**

1. Shah, S. Mehar Ali, **H. Rahman** and F. M. Abbassi. 2010. Wild Rice Characterization: morphological, molecular, disease and insect resistance aspects. Lambert Academic Publishing GmbH & Co.KG, Dudweiler Landstr. 99, 66123 Saarbrucken, Germany
2. Swati MS and **H. Rahman**. 1994. Improvement of asexually propagated crops. In: Elementary Plant Breeding, pp 115-132, National Book Foundation, Islamabad (Pakistan).
3. Saleem M and **H. Rahman**. 1994. Methods of breeding cross pollinated crops. In: Elementary Plant Breeding, pp 86-113, National Book Foundation, Islamabad (Pakistan).

**Reviewer of Technical and Scientific Journals:**

1. Sarhad Journal of Agriculture.
2. Journal of Engineering and Applied Sciences.
3. African Journal of Biotechnology.
4. Pakistan Journal Plant science.
5. Gomal University Journal of Research.

6. Hazara University Journal of Genetics.

### Publications of Dr. H. Rahman in Journals with Impact Factor:

1. Wicks ZW, ML Carson, **H. Rahman** and G. Scholten. 1990. Registration of SD45, SD48 Parental lines of maize. *Crop Sci.* 30:243.
2. **Rahman H.**, ZW Wicks, MS Swati and K Ahmed. 1994. Generation mean analysis of seedling root characteristics in maize. *Maydica* 39:177-181.
3. Khalil IA, and **H. Rahman**. 1994. Effect of Paclobutrazol on growth, chloroplast pigments and sterol biosynthesis of maize. *Plant Science* 105:15-21.
4. Ahmad, H., M. Islam, I. A. Khan, H. Ali, **H. Rahman** and Inamullah. 2008. Evaluation of advanced rapeseed line HS-98 for yield attributes and biochemical characters. *Pak. J. Bot.* 40(3):1099-1101.
5. Khan, H. **H. Rahman**, H. Ahmad, H. Ali, Inamullah and M. Alam. 2008. Magnitude of combining ability of sunflower genotypes in different environments. *Pak J. Bot.* 40 (1):151-160.
6. Khan, H., **H. Rahman**, H. Ahmad, H. Ali, Inamullah and M. Alam. 2008. Magnitude of heterosis and heritability in sunflower over environments. *Pak. J. Bot.* 40(1):301-308.
7. Shah, S. M. A., **H. Rahman**, F. M. Abassi, M. A. Akhtar, A. Rafi and I. A. Khan. 2009. Resistance characterization of rice wild relatives in response to bacterial blight. *Pak. J. Bot.* 41(2):917-925.
8. Ali, S., S. J. A. Shah and **H. Rahman**. 2009. Multi-locations variability for partial resistance in wheat to *puccinia striiformis West tritici*. *Phytopathologia Medieterranea* 48:269-279.
9. Ali, S., S. J. A. Shah, **H. Rahman**, M. S. Saqib, M. Ibrahim and M. Sajjad. 2009. Variability in wheat yield under yellow rust pressure in Pakistan. *Turkish Journal of Agriculture and Forestry* 33:537-546.
10. **Rahman, H.**, I. H. Khalil, F. M. Abbasi, Z. T. Khanzada, S. M. A. Shah, Z. Shah and H. Ahmad. 2010. Cytomorphological characterization of Tea cultivars. *Pak. J. Botany* 42(1):485-495.
11. **Rahman, H.**, Durreshahwar, S. Ali, F. Iftikhar, I. H. Khalil and S. M. A. Shah. 2010. Stability analysis of maize hybrids across North West Pakistan. *Pak. J. Botany* 42(2):1089-1093.
12. **Rahman, H.**, Arifuddin, Z. Shah, M. Iqbal, I. H. Khalil and S. M. A. Shah. 2010. Evaluation of maize S2 lines in test cross combinations. II. Flowering and morphological traits. *Pak. J. Botany* 42(3):1619-1627.
13. Shah, Z., **H. Rahman**, S. M. Ali 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. Botany* 42(3):1969-1976.
14. Gul, R, **Rahman, H.**, I.H. Khalil, S. M. Ali Shah and A. Ghafoor. 2010. Heterosis for flower and fruits in tomato (*Lycopersicon esculentum* Mill.). *African J. of Biotechnology* 9(27): 4144-4151.
15. Iqbal, M., K. Khan, **H. Rahman**, I. H. Khalil, H. Sher and Jehan Bakht. 2010. Heterosis for morphological traits in subtropical maize (*Zea mays L.*). *Maydica* 55:41-48.
16. Iqbal, M., K. Khan, **H. Rahman** and Hassan Sher. 2010. Detection of epistasis for plant height and leaf area in Maize. (*Zea mays L.*) from generation mean analysis. *Maydica* 55:33-39.

17. Shah, Z., S. Rashid Ahmad and **H. Rahman**. 2010. Soil microbial biomass and activities as influenced by green manure legumes and fertilizer in rice-wheat system. Pak J. Bot. 42(4):2589-98.
18. Amanullah, M. Asif, K. Nawab, Z. Shah, M. Hassan, A. Z. Khan, S. K. Khalil, Z. Hussain, M. Tariq and H. Rahman. 2010 Impact of planting density and P- fertilizer source on the growth analysis of maize. Pak J. Botany 42(6): 4051-4061.

## **B: Foreign/ International Journals/Proceedings:**

19. **Rahman H.**, AA Boe, ZW Wicks and GG Scholten. 1988. Diallel analysis for seedling root characteristics in maize. South Dakota Academy of Sci. 67:19-27.
20. **Rahman H.**, ZW Wicks, TE Schumacher and ZA Swati. 1994. Synthesis of maize populations based on seedling root indices I: response to different levels of moisture stress. J. Genetics & Breeding 48:237-244.
21. **Rahman H.**, ZW Wicks, TE Schumacher and ZA Swati. 1994. Synthesis of maize populations based on seedling root indices II: Field evaluations for yield related traits. J. Genetics & Breeding 48:245-252.
22. **Rahman H.**, ZW Wicks and ML Carson. 1988. Comparison of five corn populations synthesised on the basis of seedling root characteristics for yield and agronomic traits. Agronomy Abstracts 1988:93.
23. **Rahman H.**, ZW Wicks and TE Schumacher. 1989. Expression of corn seedling root traits under different moisture regimes. Agronomy Abstracts 1989:120.
24. **Rahman H.**, ML Carson and ZW Wicks. 1989. Quantitative genetic analysis of northern leaf blight and leaf freckles and wilt resistance in a corn synthetic. American Phytopathological Society 1989:215.
25. Schumacher TE, **H. Rahman**, ZW Wicks and ML Carson. 1988. Response of five maize populations synthesised on the basis of seedling root characteristics to six temperature treatments. Agronomy Abstracts 1989:117.
26. Wicks ZW, **H. Rahman**, and TE Schumacher. 1989. Influence of pollen parent on kernel characteristics in corn. Agronomy Abstracts 1989:105.
27. **Rahman H.**, S Pekic, A Steed and SA Quarrie. 1999. QTL analysis for drought resistance parameters in maize. In: proceedings; International Symposium on Biotechnology of Cereals, Sept. 13-15, 1999, Bristol (UK).
28. Abdullah Jalal, **H. Rahman**, Muhammad Sayyar Khan, Khurram Maqbool and Sajid Khan. 2006. Inbreeding depression for reproductive and yield related traits in S<sub>1</sub> lines of maize. Songklanakarin J. Sci. Technology. 28(6): 1169 - 1173.
29. Khan, A., **H. Rahman**, Z. Shah and P. Shah. 2008. Plant density and nitrogen effects on growth dynamics, light interception and yield of maize. 2008. Archives of Agronomy and Soil Science 54(4):401-411.
30. Ali, S., S. Jawad A. Shah, I. H. Khalil, **H. Rahman**, K. Maqbool and Waseemullah. 2009. Partial resistance to yellow rust in introduced wheat germplasm at the north of Pakistan. Australian J. of Crop Science 3(1):37-43.
31. Khalil, IH, **H. Rahman** and Imran Khan. 2008. Genetic parameters and selection response for yield traits in bread wheat under irrigated and rain fed environments. 2008. In: Proceedings, International conference on Mathematical Biology-ICMB07, edited by K. A. Mohammad Atan, pp274-284.
32. Ali, S., **H. Rahman**, S. Jawad A. Shah, SM. Ali Shah and Farhatullah. 2009. Assessment of field resistance using host pathogen interaction phenotype for wheat yellow rust. African Crop Science Journal 17(4):213-221.

33. **Rahman, H.** 2009. Enhancing Maize Productivity Through Disease Management. In: Proceedings 10<sup>th</sup> Arab Congress of Plant protection, October 25-30, 2009, Beirut (Lebanon) pp. 138.
34. Khalil, I.A., **H. Rahman**, Durreshahwar, I. Nawaz, Hidayatullah and Farhan Ali. 2010. Response to selection for grain yield under mayis leaf blight stress environment in maize. *Biological Diversity and Conservation* 3(1):121-127.
35. Hidayatullah, I. H. Khalil, D. Lightfoot and **H. Rahman**. 2010. Estimation of genetic divergence among elite mungbean (*Vigna radiata*) genotypes by RAPD analysis. *Biological Diversity and Conservation* 3(1):75-82.

### C: National Journals/Proceedings

36. **Rahman H.**, HR Mian, MS Swati and ZA Swati. 1985. Effect of Cytozyme treatment effects on some morphological traits of maize. *Sarhad J. Agri.* 1:187-192.
37. **Rahman H.**, K Ahmad, MS Swati and A Rafi. 1985. Relationship of photosynthetic area with yield components in wheat. *Sarhad J. Agri.* 1:197-204.
38. Swati MS, **H. Rahman** and A Rafi. 1985. Studies on the effects of gamma irradiation on stem characters of maize. *Sarhad J. Agri.* 1:175-180.
39. Swati ZA, HR Mian and **H. Rahman**. 1985. Polysaccharides in relation to some agronomic characters in wheat. *Sarhad J. Agri.* 1:181-186.
40. Swati MS, **H. Rahman** and J Afsar. 1985. Response of wheat cultivars to different levels of water stress. *Sarhad J. Agri.* 1:295-304.
41. Swati MS, J Afsar and **H. Rahman**. 1985. Effects of different levels of water stress on some morphological traits of 10 wheat cultivars. *Sarhad J. Agri.* 1:327-338.
42. Swati, M.S., A. Rabbani and H. Rahman 1986. Evaluation of cytozyme growth complexes on growth and straw yield of oat cultivars. *Sarhad J. Agri.* 22:127.
43. Ahmad K, MS Swati, **H. Rahman** and Raziuddin. 1988. Relationship of traits above flag leaf node with yield components in wheat. *Sarhad J. Agri.* 4:191-197.
44. Ahmad, B., **H. Rahman**, M. Iqbal and Afzal. 1990. Effect of Complex fertilizer and frost covers on development of tobacco seedlings. *Sarhad J. Agri.* 6(3):213.
45. **Rahman H.**, 1992. Stability analysis of maize hybrids across different environments of NWFP. In: Proceedings 2<sup>nd</sup> International Symposium on new Genetical Approaches to Crop Improvement, Feb. 15-20, 1992, Karachi (Pakistan).
46. K Khan, **H. Rahman** and K Ahmad. 1992. Allozyme frequency changes in Pakistan based maize populations associated with full-sib recurrent selection for cold tolerance. *Sarhad J. Agri.* 8:449.
47. K Khan, **H. Rahman** and K Ahmad. 1992. An Allozyme study on genetic divergence of Pakistan based maize populations from Nebraska cold tolerant populations. *Sarhad J. Agri.* 8:519-526.
48. **Rahman H.**, M Ashraf and KB Marwat. 1992. Allelopathic effects of convolvulus on wheat. *Pak. J. Weed Science Res.* 5:9-13.
49. **Rahman H.**, 1992. Hybrid vs synthetic varieties in maize: a dilemma for NWFP farmers. In: Proceeding International Seminar on Seed, December 14-16, 1992, Islamabad (Pakistan).



50. Aziz A, M Saleem, **H. Rahman** and F Mohammad.1992. Genetic variability for yield and disease resistance in full and short season maize. *Sarhad J. Agri.* 8:195.
51. Aziz A, M Saleem, **H. Rahman** and F Mohammad.1992. Performance of maize hybrids under irrigated conditions. *Sarhad J. Agri.* 8:509-512.
52. Fareed M, **H. Rahman** and KB Marwat.1993. Response of wheat varieties to allelopathic effects of chenopodium mural. *Pak. J. Weed Sci. Res.* 6:30-35.
53. Saleem M, F Karim, **H. Rahman**, K Khan, GS Shah and I Ali.1993. Current maize situation in NWFP. In: *Cereal Crops Review; constraints and strategies*, NWFP Agrl. University, Peshawar.
54. Kamran S, KB Marwat and **H. Rahman**. 1994. Evaluation of S1 lines of maize for inbreeding depression in yield and agronomic traits. *Sarhad J. Agri.* 10:553.
55. Marwat KB, N Shaheen and **H. Rahman**. 1994. Heritability estimates and comparative performance of rice crosses resulting from tall and dwarf cultivars. *Sarhad J. Agri.* 10:559-569.
56. Swati MS and **H. Rahman**. 1994. Improvement of asexually propagated crops. In: *Elementary Plant Breeding*, pp 115-132, National Book Foundation, Islamabad.
57. Saleem M and **H. Rahman**. 1994. Methods of breeding cross pollinated crops. In: *Elementary Plant Breeding*, pp 86-113, National Book Foundation, Islamabad.
58. Swati MS, G Zada, A Ali, **H. Rahman** and F Mohammad. 1994. Combining ability of plant height and other lodging related traits of spring wheat cultivars under saline and fresh water conditions. *Sarhad J. Agri.* 10:655-665.
59. **H. Rahman** and HI Javed. 1982. Maize diseases and their control. In: *Maize Production Manual*, pp 65-74, Pakistan Agri. Research Council, Islamabad.
60. Mohammad F, MS Swati, **H. Rahman** and G Hassan. 1995. Heritability estimates of flag leaf lamina area and flag leaf sheath length in an 8 x 8 parent diallel of wheat. *Sarhad J. Agri.* 11: 619.
61. Hassan G, Raziuddin, S Hassan, **H. Rahman** and F Mohammad. 1995. Heritability estimates of post harvest parameters in mung bean genotypes. *Sarhad J. Agri.* 11: 469-473.
62. Swati ZA, FA Cholick, JL Gellner, **H. Rahman** and SZ Shah. 1996. Early generation selection in bulk populations of spring wheat. *Scientific Khyber* 9:9-16.
63. Gul R, **H. Rahman**, KB Marwat and MS Swati. 1997. Combining ability in maize synthetics. *Sarhad J. Agri.* 14:229.
64. Amjed M, MI Khattak and **H. Rahman**. 1997. Variation in cell wall concentrations and rumen microbial degradation in straw of divergent rice genotypes. In: *Proceedings, National symposium of Animal Nutritionists* pp133-138, November 29-30, 1997, Lahore (Pakistan).
65. Ahmed R, **H. Rahman**, G Hassan and M Imtiaz. 1998. Effect of different levels of salinity on emergence and early seedling growth of wheat genotypes. *Sarhad J. Agri.* 14:321-326.
66. Ahmed R, **H. Rahman**, G Hassan, M Ahmed and F Muhammad. 1999. Screening of maize synthetics for drought tolerance. *Pak. J. Plant Science* 5(2):121-132.
67. Ahmed R, MS Swati, **H. Rahman** and I Munir. 1997. Screening of wheat genotypes under different salt levels for yield components. *Sarhad J. Agri.* 14:283.

68. Khalil IA and **H. Rahman**. 1999. Qualitative and quantitative genetic variation for oil contents in maize genotypes. *Sarhad J. Agric.* 15(6): 559-562.
69. Swati, ZA, FA Cholick, GL Gellner and **H. Rahman**. 1998. Efficiency of crosses between high and low yielding parents of spring wheat for producing high yielding derived lines. *Pak J. Plant Sci.* 4(2): 107-116.
70. Swati, ZA, FA Cholick, GL Gellner and **H. Rahman**. 1999. Mean and variance of bulk populations as predictors of derived line performance in spring wheat. *Pak J. Plant Sci.* 5(1): 37-47.
71. Iqbal, A., I.A. Khalil and **H. Rahman** 2000. Genetic Diversity in the chloroplast pigments of maize cultivars. *J. Sci. & Tech.* 24: 9-12.
72. Khan Asif, **H. Rahman**, F.Ahmad and H. Khan. 2002. Evaluation of maize synthetics for maturity and yield under Haripur conditions. *Sarhad J. Agri.* 18:299.
73. Younas, M., **H. Rahman** and G. Hayder. 2002. Magnitude of variability for yield and yield associated traits in maize hybrids. *Asian J. of Plant Sciences* 1: 694-696.
74. **Rahman, H.**, 2003. Genetic erosion of plant genetic resources in Pakistan. Inducements and Medicaments for sustainable use. Proceedings Agro-Asia 2003. International conference on sustainable Agricultural Development and Productivity, October 7-8, 2003. Lahore.
75. **Rahman, H.**, 2003. Genetic erosion of biodiversity in Pakistan: Improving ex-situ conservation for sustainable use. Proceedings International conference on weeds and biodiversity, October 23-25, Peshawar, Pakistan.
76. Ahmad, K., **H. Rahman**, W. Ali and N. Hussain. 2004. Performance of maize hybrids for yield and yield components. *Sarhad J. Agri.* 20(3): 405-408.
77. Iftikhar H. Khalil, Arifa Farooqi, **H. Rahman** and Fazle Subhan. 2004. Selection differential and genetic gain for grain yield in wheat. *Sarhad J. Agri.* 20: 517-522.
78. Kakahel, M.Y., I.H. Khalil, **H. Rahman** and Kiramat Khan. 2004. Influence of reciprocal crosses on vegetative traits in maize. *Sarhad J. Agri.* 20: 543-547.
79. Iftikhar H. Khalil, **H. Rahman**, Muhammad Y. Kakakhel and Kiramat Khan. 2005. Performance of normal VS reciprocal crosses for yield and yield components in maize. *Sarhad J. Agri.* 21: 231-236.
80. **Rahman, H.**, Fazli Raziq and Sohail Ahmad. 2005. Screening and evaluation of maize genotypes for resistance to southern leaf blight and yield performance. *Sarhad J. Agri.* 21: 215-219.
81. S. Pervaiz, G. M. Sajid, R. Anwar and **H. Rahman**. 2005. Hormone dependent growth promotion and growth retardation of sugarcane tissue cultures for germplasm conservation. *Journal of Biological Sciences* 5(3):339-346.
82. **Rahman, H.** and H. Sadaqat. 2006. Revised curricula in Plant Breeding and Genetics, Published by Higher Education Commission, Islamabad.
83. Ihsan, H., I. H. Khalil, **H. Rahman** and M. Iqbal. 2005. Genotypic variability for morphological and reproductive traits among exotic maize hybrids. *Sarhad J. Agri.* 21(4):599-602.
84. **Rahman, H.** Tazein Bukhari and Iftikhar Ali. 2005. In Vitro regeneration ability in brassica species as influenced by gamma radiation. *Pak. J. Pl. Sci.* 11(2): 83-91.

85. Abdul Aziz, **H. Rahman** and Najibullah Khan. 2005. Screening of maize hybrids for grain yield and adaptability. Pak. J. Pl. Sci. 1(1): 61-65.
86. Shah S.S., **H. Rahman**, Iftikhar H. Khalil and Abdur Rafi. 2006. Reaction of two maize synthetics to maydis leaf blight following recurrent selection for grain yield. Sarhad J. of Agri. 22: 263- 269.
87. Shah, S.S., **H. Rahman**, I.H. Khalil and M.Iqbal. 2006. Recurrent Selection for maydis leaf blight resistance and grain yield improvement in maize. Pak. J. of Bio. Sci. 9:2610-2613.
88. Hidayatullah, I.H. Khalil, G. Hassan, Iltafullah and **H. Rahman**. 2006. Performance of local and exotic maize inbred lines of maize under agro-ecological conditions of Peshawar. Sarhad J. of Agri. 22:409-414
89. Durrishahwar, **H. Rahman**, I.H. Khalil, Arifa Farooqi and Rakhshanda Habib. 2006. Magnitude of heterosis for morphological and yield traits in sunflower. Pak. J. Pl. Sci., 12 (1): 55 – 64.
90. Ali, S., **H. Rahman**, Raziuddin and S. Salim Shah. 2006. Genetic attributes for maturity and kernel traits in two maize populations. Pak. J. Pl. Sci., 12: 123- 130.
91. Khan H., **H. Rahman** and I.H. Khalil. 2006. Genotype x environment interaction in sunflower. Pak. J. Pl. Sci., 12 (2): 183- 191.
92. Ali, S., **H. Rahman**, Raziuddin, S. Salim Shah and G. Hassan. 2006. Estimate of variability, heritability and genetic advance for fodder traits in two maize populations. Pak. J. of Bio. Sci. 9 (14): 2618- 2623.
93. Ali, S., **H. Rahman**, Raziuddin and S. Salim Shah. 2006. Magnitude of variation for fodder traits in two maize populations. Pak. J. of Bio. Sci. 9: 2662- 2666.
94. Aziz, A., **H. Rahman** and Najibullah Khan. 2007. Maize cultivar response to population density and planting date for grain and biomass yield. Sarhad J. Agri. 23:25-30.
95. Ali, W., **H. Rahman**, K.Ahmad, I.Munir and A. Khan. 2007. Genetic variability among maize hybrids for yield and yield components. Sarhad J. Agri.23:75-79.
96. **Rahman, H.**, Noor Islam, I. H. Khalil, A. Rafi and Durrishawar. 2007. Comparison of original and selected maize populations for grain yield traits. Sarhad J. Agri. 23:641-644.
97. **Rahman, H.**, Noor Islam, I. H. Khalil, A. Rafi and Durrishawar. 2007. Multiple trait selection in a maize population derived from maize variety Azam. Sarhad J. Agri. 23:637-640.
98. Ali, S., **H. Rahman**, S. Salim Shah, Ibni Amin Khalil and I. H. Khalil. 2007. Evaluation of out crossed progenies of maize for yield traits. Sarhad J. Agri. 23:629.
99. Shah, S. S., **H. Rahman**, I. H. Khalil and M. Iqbal. 2007. Recurrent selection for maydis leaf blight resistance and grain yield improvement in maize. Pak. J. Biol. Sciences 10(20): 3632-3637.
100. Ali., S., S. Jawad A. Shah, **H. Rahman** , K. Maqbool and Farhatullah. 2007. Diversity for durable resistance to yellow rust in wheat germplasm. Proceedings 3<sup>rd</sup> International Conference on Plant Pathology, November 19-20, 2007, Lahore.
101. Turi, N. A., S. S. Shah, S. Ali, **H. Rahman**, T. Ali and M. Sajjad. 2007. Genetic variability for yield parameters in maize genotypes. J. Agri. and Biol. Sci. 2(4/5).

102. **Rahman, H.**, S. Ali, S.M.A. Shah, S.S. Shah, N. Rahman, I. A. Khalil, I. Hussain and Fehmida Afzal. 2008. Diversity for morphological and maturity traits in maize populations from Upper Dir. *Sarhad J. Agri.* 24 (3):439-443.
103. **Rahman, H.** and S. M. A. Shah. 2008. Management of plant biodiversity in response to challenges of globalization in agriculture. In: Proceedings of the conference on Challenges of Globalization in Agriculture, Bara Gali Summer Camp, July 2-7, 2008, pp 125-142.
104. Shah, S. M. A. and **H Rahman**. 2008. Resistance characterization of rice wild relatives against bacterial blight response to globalization in agriculture. In: Proceedings of the conference on Challenges of Globalization in Agriculture, Bara Gali Summer Camp, July 2-7, 2008, pp 168-188.
105. Shah, S. M. A. and **H Rahman**, A. Rehman, F. M. Abbasi, I. H. Khalil and A. Ali. 2008. Characterization of wild rice species in response to leafhopper (*cnaphalocrocis medinalis*). *Sarhad J. Agri.* 24(1):69-75.
106. Durrishawar, **H. Rahman**, S. M. A. Shah, I. A. Khalil and F. Ali. 2008. Recurrent selection for yield and yield associated traits under leaf blight (*helminthosporium maydis*) stress in maize. *Sarhad J. Agri.* 24 (4):599-606.
107. **Rahman, H.**, Durrishawar, I. Nawaz, S.M. A. Shah, I. A. Khalil and M. Iqbal. 2008. Evaluation of test crosses of S1 lines for morphological and maturity traits in maize. *Sarhad J. Agri.* 24(4):619.
108. Shah, S.M.A., A. Ahmad, F. Muhammad, **H. Rahman**, G. Woras, M. Y. Khan and D. Jan. 2008. Genotypic variation of Flue Cured Virginia tobacco for yield and quality traits. *Sarhad J. Agri.* 24 (4):607-612.
109. Shah, S.M.A., **H. Rahman**, Z. Iqbal, F.M.Abbassi, Durrishawar, A. Ali, M.Y.Khan and D. Jan. 2008. Genotypic evaluation of Sugarcane genotypes for ratooning ability. *Sarhad J. Agri.* 24 (4):613-618.
110. Shah, S. M. A, Farhatullah, H. Rahman, Attaullah, Durrishawar, M. Yasir Khan, M. Sohail and Noor M. Khan. 2009. Acclimatization of Burley Tobacco germplasm under agro ecological conditions of Swat valley. *Sarhad J. Agri.* 25(1):31-36.
111. Kaleem, S, M. Ansaar, G Ahmad and **H. Rahman**. 2009. Management and economic feasibility of Potassium fertilizer for cotton cultivar FH-900. *Sarhad J. Agri.* 25(1):25-30.
112. **Rahman, H.**, I. Nawaz, S.M. A. Shah, Durrishawar, I. A. Khalil and M. Iqbal. 2008. Evaluation of test crosses of S1 lines for morphological and maturity traits in maize. *Sarhad J. Agri.* 25(2):197.
113. **Rahman, H.**, and S. M. A. Shah. 2009. Characterization of sorghum germplasm for morphological and fodder yield parameters. Proceedings Intl. Conference on Advances in Agriculture: Prospects and Potentials of Natural Resources in Food Security, August 11-12, 2009, Rawlakot (AK), pp 100.
114. Iqbal, M., K. Khan and **H. Rahman**. 2009. Genotypic and phenotypic associations among physiological traits in subtropical maize. *Sarhad J. Agri.* 25 (4):551-556.
115. Noor, M., **H. Rahman**, Durrishawar, M. Iqbal and Ihteramullah. 2010. Evaluation of Half-sib families in maize for maturity and yield attributes. *SJA* 26:
116. Khalil, IA, **H. Rahman**, Nasir Seed, Durrishawar, Iffat Nawaz, Farhan Ali, Naqibullah Khan, and M. Sajjad, and M. Saeed. 2010. Combining ability in maize single cross hybrids for grain yield: a graphical analysis. *Sarhad J. Agri.* 26(3):373-379.

117. Khalil, IA, **H. Rahman**, Naveedur Rahman, Durreshawar, I. H. Khalil, M. Sajjad, M. Ishaq and M. Iqbal. 2010. Biplot analysis for yield stability of maize hybrids in North West of Pakistan. *SJA* 26:
118. Ahmad, B., I. H. Khalil, M. Iqbal and **H. Rahman**. 2010. Genotypic and phenotypic correlation among yield components in bread wheat under normal and late plantings. *Sarhad J. Agri.* 26(2):259
119. Rahman, H. and Durrishahwar. Reaction of two maize populations to S1 line recurrent selection under leaf blight stress. Proceedings 13<sup>th</sup> Congress Mediterranean Phytopathological Union, June 19-25, 2010, Rome (Italy) PP 505.

### **M.Sc. (Hons) Students Theses Supervised:**

1. Relationship of Photosynthetic Area with Yield and Yield Components in Wheat (*Triticum Aestivum L.*) Variety Pak-81 and C 591 (Khurshid A., 1985).
2. Drought Tolerance Potentials of Wheat Genotypes. (Niaz Ali, 1990).
3. Screening Wheat Cultivars for Salt Tolerance under Field Condition. (Muhammad Arif, 1991).
4. Heritability Estimates of Some Plant and Yield Characters of Wheat under Saline Conditions. (Muhammad Younas, 1992).
5. Response of Wheat Genotypes to High Altitude and Different Levels of Fertility Under Rainfed Conditions of DIR. (Jamil-Ur-Rehman, 1992).
6. Screening of Wheat (*Triticum Aestivum L.*) Genotypes under Different Levels of Salt. (Riaz Ahmad, 1992).
7. Genetic Variability for Drought Tolerance in Maize (Sher Bahadur, 1992).
8. Genetic Variability Among Maize Synthetics (Aftab Ahmad Khan, 1992).
9. Stability Analysis of Maize Hybrids Across Different Locations of NWFP (Waqar Hassan, 1992).
10. Path Coefficient Analysis for Yield and Yield components in Wheat Genotypes (Assad Ali, 1992)
11. Correlations and Path Analysis of Yield Related Traits in Maize Synthetics (Arif Saeed Aqlan Al-Hammadi, 1992).
12. Diallel Analysis for some Agronomic Traits in Rice (M. Tahir, 1993).
13. Genotype x Environment Interactions of Maize Hybrids Across different Locations of NWFP (Muhammad Arshad, 1993).
14. Diallel Analysis of Yield and Related Traits in Early Maturing Maize Synthetics (Muhammad Riaz, 1993).
15. Performance of S1 Lines of Maize for Yield and Yield Components (Shahzad Kamran, 1993).
16. Genotype x Environment Interactions Maize Hybrids across Different Locations of NWFP (Said Nabi Shah, 1993).
17. Relationship of Seedling Root Traits with drought tolerance potentials of Maize synthetics. (Rizwan Ahmad, 1993).
18. Screening of segregating generations of wheat for salinity tolerance (Aftab Ahmad, 1993).
19. Heterotic Study in Sunflower (*Helianthus annuus L.*) ( Nasir Ali Akhunzada, 1994).
20. Relationship of Seedling Root Characteristic with Yield Performance in Maize Hybrids. (Samiullah Khalil, 1995).
21. Screening for Cold Tolerance in Sugarcane (*Saccharum Offictnarum L.*) (Ch. Muhammad Mansoor Shahid Bath, 1995).

22. Evaluation of Wheat Genotypes Under Irrigated Conditions in Peshawar (Muhammad Rahman, 1995).
23. Evaluation of Twelve Sunflower Hybrids at Three Different Locations of NWFP (Jamal Abdul Nasir, 1995).
24. Inbreeding depression in maize resulting from one generation of self-pollination (Iftikhar Ahmad, 1996).
25. Evaluating maize inbred lines for heterosis (Jehangir Khan, 1997).
26. Improving Maydis Leaf Blight Resistance in Maize Through S1 Method of Selection. (Aamer Durrani, 1997).
27. Screening of Maize Varieties under Drought and Low Inputs Levels Across Locations. (Muhammad Farooq, 1998).
28. Heterosis for Seed Yld. and Oil Content in Sunflower (Nadeem Akhtar, 1999).
29. Screening Maize synthetics for leaf blight resistance (Sohail Ahmad, 2005).
30. Magnitude of genetic variability in maize populations (Riaz Ahmad, 2000).
31. Morphological markers as drought tolerance indicators in maize hybrids (M. Yunas Sheikh, 2002).
32. Performance of single and double cross hybrids and their correlations in sunflower (Salman Ahmad, 2002).
33. Reciprocal differences for yield & yield components in maize hybrid Baber (S. M. Yousaf, 2004).
34. Regeneration efficiency in sugarcane as affected by media regimes (Syeda Asifa Ara, 2004).
35. In Vitro Study of Drought Tolerance Potential in Potato (Shafqat Ullah, 2003)
36. Quantification of Inbreeding depression in S<sub>1</sub> lines of maize variety Pahari (Abdullah Jalal, 2006).
37. Magnitude of Genetic variability among maize hybrids (Daud Alam, 2003).
38. Effects of Irradiation treatments on *In-vitro* regeneration of brassica (Tazien Bukhari, 2005).
39. RNAi Interference mediated resistance of DNA-A and DNA-B against tomato leaf curl virus (Nadia Anwar, 2003).
40. Invitro response of Tea Cultivars to hormone levels( Saeeda Anwar, 2003)
41. Hormonal effects on callus induction in sugarcane (Saira Pervaiz, 2003).
42. Performance of S<sub>1</sub> lines of Maize Variety Azam (Mehboob Ahmed, 2003).
43. Evaluation of self incompatibility in sunflower hybrids (Bilal Murtaza , 2004).
44. General Combining ability studies in yellow Maize (Syed Aziz Anwar, 2004).
45. Evaluation of maize diallel crosses for grain yield (M. Fahim Durrani, 2004).
46. Study of General Combining ability in white maize (Khalid Naseer, 2004).

47. Magnitude of Heterosis in Sunflower (*H. annuus L.*) (Durreshahwar, 2005).
48. Changes in Soil Microbial Biomass and Mineralizable Carbon and Nitrogen as Influenced by Cropping Systems & Mnagmt Practices (Zia-Ul-Islam, 2005).
49. Cytomorpholgalical Characterization of Tea Cultivars (Zareen Taj, 2005).
50. Multiple Trait Selection in a Population Derived From Maize Variety Dehqan (Noor Islam, 2005).
51. Fertilizer Use Efficiency and Corn Yield as Influenced by Urease and Nitrification Inhibitors and Compost (Khadim Muhammad Dawar, 2006).
52. Assessment of wheat genotypes under rainfed conditions ( Imran Khan, 2006).
53. Microbial Biomass and Mineralizable Carbon and Nitrogen in Selected Soil Series of Peshawar Valley (Yousaf Noor, 2006).
54. Molecular Evaluation of Elite Wheat Lines Selected for Rust Resistance and Yield Potential. (Quahir Sohail, 2006).
55. Genetic Variability for Fodder Yield and Morphological Parameters in Pearl Millet (M. Fawad Qaisar, 2006).
56. Stability Analysis of Maize Hybrids Across Different Locations of NWFP (Fatima Iftikhar, 2006).
57. Response of Maize Populations to Plant Density (Abdul Aziz, 2006).
58. Magnitude of Variability for Yield and Morphological Parameters in Maize Hybrids (Syed Majid Rasheed, 2007).
59. Characterization of *Brassica Napus* Germplasm Based on Molecular and Biochemical Approaches (Shahid Ali, 2007).
60. Prevalence of Hepatitis B Surface Antigen in Intravenous Drug Addicts in NWFP, Pakistan. (Bibi Shamim Saleha, 2007).
61. Genetic Improvement for Maydis Leaf Blight Resistance Using S<sub>1</sub> Line Recurrent Selection in Maize Variety Sarhad White (Farhan Ali, 2007).
62. Response of Maize Variety Azam to S<sub>1</sub> Recurrent Selection for Grain Yield Under Maydis Leaf Blight Stress Environment (Ibni Amin Khalil, 2007).
63. Genotype X Environment Interactions of Maize Hybrids Across Different Environments of NWFP (Naveedur Rahaman, 2008).
64. Test Cross Performance of Maiz S<sub>1</sub> Lines Derived From Maize Variety Azam (Iffat Nawaz, 2008).
65. Test Cross Performance of Maize S<sub>1</sub> Lines Derived From Maize Variety Sarhad White (Mareeya Munir, 2008).
66. Comparative Evaluation of Single and Double Cross Maize Hybrids Under Peshawar Conditions (Nasir Saeed, 2008).
67. Evaluation of Wheat Cultivars With Diverse Genetic Background for Yield and Quality Parameters. (Muhammad Saeed Abbakhail, 2008).



68. Response of Basmati and non Basmati rice cultivars towards ionic and non-ionic stresses (Muhammad Abrar, 2008).
69. Adult Plant Resistance to Stripe Rust in Wheat. (Sajid Ali, 2008).
70. Evaluation of S1 lines maize test crosses derived from from Maize Variety Azam (Arifuddin, 2009).
71. Performance of S1 lines maize Test Crosses Derived From Maize Variety Sarhad White (Hina Fayaz, 2009).
72. Genotype X Environment Interactions of Maize Hybrids (Izhar Hussain, 2009).
73. Evaluation of Half Sib families derived from maize variety Azam (Muhammad Ishaq, 2010).
74. Characterization of Rice germplam for morphological attributes (Muhammad Sohail, 2010).
75. Genotypic correlations and heritability estimates in mungbean genotypes (Sabra Begum, 2010).
76. Genotypic evaluation of rice germplasm for morphological parameters (Zahra Jabeen, 2010).
77. Evaluation of Half-sib families derived from maize variety Pahari (Muhammad Noor, 2010).
78. Effect of Osmotic and Ionic stresses on regeneration capacity of rice (Sidra Sardar, 2010)

### **Presentations at Professional Meetings/Meetings Attended:**

1. Annual Meeting. North and South Dakota Academy of Science. Bismark, ND (USA) April 28-30, 1988.
2. Annual Meetings, American Society of Agronomy, Anaheim, CA, (USA) November 27 – December 2, 1988.
3. Annual Meetings, South Dakota Academy of Science, Rapid City, SD (USA) Feb. 24-25, 1989.
4. North Central ASA Annual Meetings Columbia, Missouri (USA) August 20 – 24, 1989.
5. Annual Meetings, American Phytopath. Society, Richmond, VA, (USA) August 20-24, 1989.
6. Annual Meetings, American Society of Agronomy. Las Vegas, NV, (USA) October 15-20.
7. Stadlar Genetics Symposium, University of Missouri, Columbia (USA) March 12-15, 1989.
8. North Central ASA Annual Meetings, Ames, Iowa (USA), June 28-30, 1989.
9. Intl. Workshop on Drought Resistance in Cereals, CIMMYT, Mexico, September 13-15, 1989.
10. CIMMYT, Asian Regional Maize Workshop, September 21-27, 1990, Islamabad (Pakistan).
11. Second International Symposium on New Genetical Approaches to Crop Improvement, February 15-20, 1992, Karachi (Pakistan).
12. International Seminar on Seed. December 14-16, 1992, Islamabad (Pakistan).
13. All-Pakistan Science Conference, November 4-6, 1997, Peshawar (Pakistan).
14. Biotechnology, Research Tools; and Triumphs, September 10-12, 1999 Bristol, England.
15. Annual Meetings; Maize, Sorghum and Millets Scientists. April 11-12, 2002, NARC, Islamabad.
16. International Conference on Sustainable Agricultural Development and Productivity, October 7-8, 2004, Lahore (Pakistan).
17. International Conference on Weeds and Biodiversity, October 23-25, 2003, Peshawar (Pakistan).
18. National Workshop on WTO Challenges and the Role of Agricultural Universities, Action Aid Pakistan, June 23-25, 2004, Islamabad (Pakistan).
19. Seed Production and Multiplication of Improved Maize Varieties, Seminar Organised by Out Reach Directorate, May 12-14, 2005, NWFP- AUP.
20. National Seminar on Sustainable Agricultural Productivity, organised by MINFAL, June 12-14, 2005, Islamabad.
21. National Workshop on Crop Improvement: Conventional and Biotechnological Approaches, Aug. 28-30, 2006, Arid Agricultural University, Rawalpindi.
22. International Symposium on Sustainable Crop Improvement and Integrated Management, 14-16 September, 2006, University of Agriculture, Faisalabad.

23. National Conference on Training of Trainers in Plant Biodiversity, November 23-25, 2006, Centre of Plant Biodiversity, University of Peshawar.
24. National Travelling Seminar on Fodder Crops: Research: Achievements and Prospects, February 20-25, 2006, National Agri. Research Centre, Islamabad.
25. National Seminar on Variety Patenting and Breeder Rights, Federal Seed Certification, May 14-15, 2006, NARC, Islamabad.
26. National Seminar on Technological Interventions for Enhanced Productivity via Crop Genotype Manipulations, October 11-12, 2006, Pakistan Academy for Rural Development, Peshawar.
27. Annual Meetings, National Cooperative Maize and Millets Program, May 17-18, 2007, National Agriculture Research Centre, Islamabad.
28. Annual Planning Meetings, National Cooperative Fodder Research Program, May 20-23, 2008, University of Agriculture, Faisalabad (Pakistan).
29. International Conference on Advances in Agriculture: Prospects & Potentials of Natural Resources in Food Security, August 11-12, 2009, Faculty of Agriculture, Rawalakot, University of Azad Jammu & Kashmir.
30. Tenth Arab Congress of Plant Protection, October 25-30, 2009, Beirut (Lebanon)

## **Ph.D. SCHOLARS SUPERVISION:**

### **A. Completed as Major Supervisor:**

1. **Hakim Khan (2004)**  
**Thesis Title:** Magnitude of Heterosis and Combining ability in Sunflower Over Environments.
2. **Syed Salim Shah (2006)**  
**Thesis Title:** Recurrent Selection for Maydis Leaf Blight Resistance and Grain Yield Improvement in Maize.
3. **Sardar Ali (2006)**  
**Thesis Title:** Comparison of Selection Gain in Two Maize Populations for Grain and Fodder Yield.
4. **Syed Mehar Ali Shah (2008)**  
**Thesis Title:** Morphological, Molecular and Resistance Characterization of Wild Species of Rice and F<sub>1</sub> Hybrids.
5. **Muhammad Iqbal (2009)**  
**Thesis Title:** Genetic Analysis of Yield Attributes in Crosses Derived from Early and Late Maturing Maize Populations.
6. **Durreshawar (2010)**  
**Thesis Title:** Response of Two Maize Populations to S1 Line Recurrent Selection Under Maydis Leaf Blight Stress.

### **B. Completed as Member Supervisory Committee:**

7. **Inamullah (2004)**  
**Thesis Title:** Inheritance of Important Traits in Bread Wheat Using Diallel Analysis.
8. **Ghulam Hassan (2004)**  
**Thesis Title:** Diallel Analysis of Some Important Parameters in Wheat Under Irrigated and Rainfed Condition.
9. **Farhad Ahmad (2005)**  
**Thesis Title:** Genetic Analysis of Some Important Production Traits in Bread Wheat (*Triticum aestivum L.*).
10. **M. Azim Khan (2006)**  
**Thesis Title:** Interference of Holy Thistle (*Silybum marianum*) in Wheat at Different Densities.
11. **Baharullah Khattak (2008):**  
**Thesis Title:** Biological Management of Root Knot Nematodes (*Meloidogyne javanica*) with *Trichoderma harzianum* RIFAI in Tomato.
12. **Riaz Ahmad (2008):**  
**Thesis Title:** Sequence Analysis of a Cytoplasmic Male Sterile and Restorer Gene in *Brassica napus* Inbred Lines and Prediction of Heterosis in Canola Hybrids Using Molecular Markers.
13. **Bashir Ahmad (2009)**  
**Thesis Title:** Generation Mean Analysis of Yield and Maturity Attributes in Wheat Crosses Derived From Early and Late Maturity Groups.

14. **Syed Rashid Ahmad (2010)**  
**Thesis Title:** Management of Legumes for Improving Soil Organic Fertility and Crop Productivity in the Rice-Wheat System.
15. **Latafat Perveen (2010)**  
**Thesis Title:** Stability and Genotype X Environment Interactions of Wheat Genotypes Across Different Locations of NWFP.

**C: Under Progress as Major Supervisor:**

1. **Naveed Ahmad**  
**Thesis Title:** Comparative Response of Early and Late Maturing Maize Populations Under Moisture Stress and Non-stress Environments.
2. **Rahmani Gul**  
**Thesis Title:** Generation Mean Analysis of Yield Components in Tomato.
3. **Syed Majid Rasheed**  
**Thesis Title:** Development and Evaluation of Modified Double Cross Hybrids in Maize.

**D. Under Progress as Member Supervisory Committee (Ph.D. Students):**

1. Mr. Hidayatullah (P. Breeding and Genetics)
2. Mr. Ikramullah (P. Breeding and Genetics)
3. Mr. Shah Sawar Khan (P. Breeding and Genetics)
4. Mr. Qaizar Ahmad Khan (P. Breeding and Genetics)
5. Ms. Hasina Gul (Agronomy)
6. Ms. Bina Saeed (Agronomy)

**Research Projects Completed:**

1. Stability analysis of Maize germplasm for greater adaptation in NWFP. (Funded by TIPAN, NWFP Agricultural University, Peshawar).
2. Quantification of Maize yield losses from Leaf Blights and improving maize populations for grain yield and leaf blight resistance (Funded by Pak. Agr. Res. Council, Islamabad).  
Duration: Three years (July 2003 – June 2006).  
Funding amount, Rs.2.173 million.
3. Production of modified double cross maize hybrids as source of low cost seed. Funding Source: Higher Education Commission, Islamabad  
Duration: Three years: (July 2006 – June 2009)  
Funding amount, Rs.1.705 million.