SAJID UL GHAFOOR



CONTACT »»

Department Of Genetics

Mailing Address: Hazara University Garden Campus Mansehra,

Pakistan

Zip Code: 21300

Office: +92-997414131 **Mobile:** +92-3349664001

E-Mail: <u>sajidhu@hotmail.com</u>, <u>sajid@hu.edu.pk</u>

Personal Information ▼			
Birth date:	9th December, 1977	Nationali	lity: Pakistan
Education •			
MPhil Biotechno & Genetic Engineering	ology	2003-2004 (26 th Sep, 2005)	Genetics, Molecular Biology, Biochemistry, Tissue Culture, Genetic Engineering, Biotechnology, Safety consideration in biological processes. NWFP Agricultural University Peshaw Pakistan
MPhil Dissertat	tion		Molecular Characterization of Ephedra Species found in Pakistan
M Sc Botany		1999-2000 (20 March, 1999 10 January, 2001)	Algae, Fungi, Plant Pathology, Biochemistry, Plant Ecology, Plant Geography, Genetics, Bryophytes, Pteridophytes, Gymnosperms, Taxonomy, Anatomy, Embryology of Angiosperms, Medicinal Plants, Economic Botany
B Sc Botany		1997-1998 (27 th Nov, 1998)	Botany, Zoology, Geography <u>University of</u> <u>Peshawar Pakistal</u>
B Ed (Additiona	ıl)	1 year (19 th Dec, 2002)	Educational Psychology, Guidance & Counseling, Perspectives of Education & Contemporary Social <i>University of</i> issues, Curriculum & instruction, Foundation of <i>Peshawar Pakistal</i> Education, Methods of Teaching in Physical and Biological Science. Class room management.

Research Interests •

- 1. Study of Biodiversity of Plants through Molecular Markers.
- 2. Plant Phylogenetics.
- 3. Mutation detection in genes responsible for Human Diseases and Cancer genetics
- 4. Developmental Genetics Pathways in Plant or Animals.

Employment Record in Pakistan -

A. HIRA SCHOOL & COLLEGE

01st **Apr, 2000 - 30**th **Jul, 2002** (2 Years, 3 months, 29 Days)

Sharif Abad, Haji Baba Road, Mingora Swat.

- 1. Lecturer for F.Sc Botany and Zoology Classes.
- 2. Teacher Trainer for Biology.
- 3. Science Club Organizer.

B. UNIVERSITY OF MALAKAND

13 Sep, 2004 – **15**th Jul, 2006 (1 Year, 10 months, 2 Days)

Preservation and Research on High Valued Medicinal Plants

A Project at Sheringal High Altitude Research Center University of Malakand District Dir (Upper)

- 1. Research fellow in Mushroom Biology.
- 2. Run a Tissue Culture Laboratory of various Medicinal Plants including *Morchella* (Mushroom).
- **3.** Study of local Medicinal plants.

C. HAZARA UNIVERSITY MANSEHRA (Garden Campus)

13th Oct, 2006 till date

- **1.** Assistant Professor Department of Genetics.
- **2.** Major subjects Taught are introductory Bioinformatics, Human Genetics, Genetic Engineering, Research Techniques, Project Planning & Report writing, and Developmental Genetics
- 3. Established Computer and Molecular Genetics Laboratories.
- 4. Obtained best performance award 2007.

Research Experience •

A. WORLDWIDE FUND FOR NATURE (WWF) PAKISTAN

January 1999- January 2000 (1 Year)

Conservation trainee in Ethnobotany under WWF- Pakistan, 34 D-2 Sahibzada Abdul Qayum Road University Town Peshawar Pakistan.

1.. Wrote a report "The Natural Resources and Human Ecology of Mount Eelum" which include thorough study of local community, plant resources, related problems and their solutions.

B. WORLD WIDE FUND FOR NATURE (WWF) PAKISTAN

July 2003- July 2004 (1 Year)

34 D-2 Sahibzada Abdul Qayum Road University Town Peshawar Pakistan.

- 1. Completed a project on "Potential and Prospects of Growing Morchella in Natural Environment".
 - a. Field work conducted at Botanical Garden of GPGC Jahanzeb College Saidu Sharif Swat
 - **b.** Lab work (Tissue Culture) was carried out in collaboration with Institute of Biotechnology and Genetic Engineering N-WFP Agricultural University Peshawar.
- 2. A Report was submitted to WWF-Pakistan.

C. RESEARCH PROJECTS

- 1. Haplotypic diversity and dental traits variation in the major ethnic groups of Haripur. Department of Genetics Hazara University Mansehra Pakistan. Funded by Directorate of Science & Technology Government of Khyber Paktoonkhawa. (Working as Co-Pi).
- 2. Aamir Iqbal. Evaluation of Mitochondrial DNA Mutations Associated with Diabetic Patients in Malakand Agency. (Under Co-supervision)
- 3. Rabia Gul. Analysis of Mutations in Lysine tRNA gene in Diabetic Patients of Mansehra. (Under Co-supervision)
- 4. Adnan Ali Khan. Analysis of LeutRNA gene related to Diabetes mellitus in patients from South Waziristan. (Under Co-supervision)
- 5. Muhammad Abubakar. Study of Mitochondrial DNA mutations Associated with Diabetes mellitus in patients from Charsadda. (Under Co-supervision)

D. GUIDANCE OF STUDENTS

A. MPhil Thesis Supervised

- 1. Hussain 2018. Molecular Anaylsis of Exon-II (HBB) of Beta Thalassemia Subjects from Mansehra.
- Wasaf Sadiq, 2018. Molecular Anaylsis of Exon-II (HBB) of Beta Thalassemia Subjects from Mansehra.
- 3. Rainaz, 2018. Molecular Anaylsis of Exon-I (HBB) of Beta Thalassemia Subjects from Mansehra.
- 4. Tehseen Ullah. 2019. Screening of Leaf Rust Resistance Genes in Selected Advanced Wheat Lines.
- 5. Rohma Nazir. 2018. DNA barcoding for identification of Juniperus spp. From Hunza.
- 6. Samman Iqbal. 2018. Molecular Phylogenetics of Junipers from Hunza.
- 7. Wajid Iqbal 2020. "Molecular Analysis of MT-TW Gene in Subjects with Breast Cancer In Swat".

B. MPhil Thesis Co- Supervised

- Aneela Afridi. Genetic Diversity for drought Resistance in wheat using Physiological Trait Analysis. 2012. Department of Genetics Hazara University Mansehra.
- 2. Tayiba Hayat. Estimation of Genetic Diversity in *Nicotiana tabacum* cultivars grown in District Manshera. **2011.** Department of Genetics Hazara University Mansehra.
- 3. Muhammad Ajmal. Genetic characterization of *Berberis* species collected from Kunhar River catchment using morphological and molecular markers. **2011**. Department of Genetics Hazara University Manshera.
- Israr Ahmad. DNA Based reassessment of Mentha Species from Kunhar River Catchment. 2011. Department of Genetics Hazara University Mansehra, Pakistan.
- Khatiba Bibi. Characterization of Wheat Genotypes through Randomly Amplified Polymorphic DNA Markers. 2010. Department of Botany Hazara University Mansehra, Pakistan.
- 5. Farzana Akram. Genotypic Elaboration of Chickpea Lines Using RAPD Markers. 2008. Department of Botany Hazara University Mansehra, Pakistan.

MSc Thesis Supervised

- 1. Naveed Khan. Mutations detection of beta thalassemia. 2010. Department of Genetics Hazara University Mansehra, Pakistan.
- Nooria Ali Khan Genetic Diversity in Six Genotypes of Pavo found In Pakistan. 2008. Department of Genetics Hazara University Mansehra, Pakistan.
- IMAD UD DIN. An Assessment of Genetic Diversity Based on Seed storage Protein Profile in Olives. 2008. Department of Genetics Hazara University Mansehra, Pakistan.
- 4. Farah Hameed Genetic Diversity among Three Genera of Phasianidae. **2008**. Department of Genetics Hazara University Mansehra, Pakistan.
- 5. Javeria Sundus Prevalence of Breast Cancer in Hazara Region of NWFP. **2008**. Department of Genetics Hazara University Mansehra, Pakistan. *(Review).*
- 6. Mehwish Sadaqat. Global Sheep Diversity **2008**. Department of Genetics Hazara University Manshera. Pakistan. Department of Genetics Hazara University Manshera. Pakistan. (*Review*)
- 7. Ibrar ul Haq Mechanism of Chromosomal Pairing 2007. Department of Genetics Hazara University Mansehra, Pakistan. (Review)
- 8. DNA fingerprinting and its uses in Plant Improvement. **2007**. Department of Genetics Hazara University Mansehra, Pakistan. (*Review*)
- D. Uzma Habib. Insitu Hybridization in Brassica napus 2007. Department of Genetics Hazara University Mansehra, Pakistan. (Review).

MSc Thesis Co-Supervised

- Bibi Rabia Tabassum. Estimation of Genetic Variability in Nullisomic –Tetrasomic and Ditelosomic Lines of Hexaploid Wheat. 2008. Department of Genetics Hazara University Manshera.
- Abdul Qayum. Studies on Genetic Diversity in Maize Using Randomly Amplified Polymorphic DNA. 2008. Department of Genetics Hazara University Manshera.
- Mudasara Mustafa. Project Planning for Bringing DNA microarray technology to Pakistan. 2008. Department of Genetics Hazara University Manshera.

Publications ▼

- 1. Aziz-ud-Din K., M. Rauf, **S. Ghafoor** and Inamullah. 2016. Efficient use of artificial micro-RNA to down regulate the expression of genes at the post-transcriptional level in Arabidopsis thaliana. Genetics and molecular research, 15(2).
- 2. Iqbal A., I Ahmad, H Ahmad, **S. Ghafoor** and A Razz. 2013. Genetic characterization of Berberis species collected from Kunhar River catchment using morphological and molecular markers. International Journal of Biosciences 3 (5), 35-42.
- 3. Inamullah., M. Idrees, H. Ahmed, S. Ghafoor, M. Ali, L. Ali and A. Ahmed. 2011. Hepatitis C virus genotypes circulating in district Swat of Khyber Pakhtoonkhaw, Pakistan. Virol J 8 (16) http://www.biomedcentral.com/content/pdf/1743-422x-8-16.pdf.
- 4. Bibi S., H Ahmad, S Ghafoor, K Begum, SG Afridi and IA Khan. 2010. Genetic Analysis of Some Commonly Grown Genotypes of Maize in Pakistan

- Using Maize Specific Simple Sequence Repeat (SSR) Primers Current Research Journal of Biological Sciences 2 (4), 259-261.
- 5. Inamullah, I. A Khan, H. Ahmad, **S. Ghafoor,** SG. Gul, I. Muhammad and M. ilyas. 2010. Storage Protein Profile of Rice Varieties Commonly Grown in Pakistan. Asian Journal of Agricultural Sciences 2(4): 120-123. ISSN: 2041-3890
- 6. Khan MW, IA Khan, H Ahmad, H Ali, **S. Ghafoor**, M Afzal, FA Khan and M Shah. 2010. Estimation of genetic diversity in walnut. Pak. J. Bot 42 (3), 1791
- Ghafoor S., H. Ahmad, and I. A. Khan. 2010. Molecular analysis of Ephedra species found in Pakistan: use of RAPD markers to resolve species anomalies in the genus Ephedra (MPhil thesis). Published by VDM Verlag Dr. Müller ISBN-13: 978-3639232936. http://www.amazon.com/MOLECULAR-ANALYSIS-EPHEDRA-SPECIES-PAKISTAN/dp/3639232933/ref=sr 1 1?ie=UTF8&s=books&gid=1276278144&sr=1-1.
- 8. Nazia Akbar., H. Ahmad, **S. Ghafoor**, I. A. Khan. **2010.** Phylogeny and Genetic Diversity Studies in Capsicum Using Seed Storage Proteins. Current Research. *Journal of Biological Sciences*. 2 (4) 250.
- 9. Ikram M., H. Ahmad, **S. Ghafoor**, Sahib Gul Afridi, Khaist Begum and Imtiaz Ahmad Khan **2010.** Identification of RAPD Primers Specific for Wheat Homoeologous Group 1 and 3 Chromosomes. *Asian Journal of Agricultural Sciences*.
- 10. Khaist B., H. Ahmad, **S. Ghafoor**, S. Gul Afridi, I. Muhammad and I. A. Khan **2010**. Identification of RAPD Primers Linked to Leaf Rust Resistant Gene *Lr51* Introgressed from *Triticum speltoides* to Common Wheat (*Triticum aestivum* L.). *Current Research Journal of Biological Sciences*.
- 11. Shazia S., A. Habib, B. Yasmin, **S. Ghafoor** and I. A. Khan **2010**. Comparative Genomic Studies in Leguminous Species Current Research *Journal of Biological Sciences* 2(3): 178-182. ISSN: 2041-0778.
- 12. Shaista B., H. Ahmad, K. Begum, **S. Ghafoor** and I. A. Khan **2010.** Identification of RAPD Marker for Chromosome 1D of Common Wheat. Asian *Journal of Agricultural Sciences* 2(2): 51-52, ISSN: 2041-3890.
- 13. Nazia A., H. Ahmad, **S. Ghafoor**, K. Begum, Sahib Gul Afridi, I. Muhammad and I. A. Khan **2010**. Estimation of Genetic Diversity in Capsicum Germplasm Using Randomly Amplified Polymorphic DNA Asian *Journal of Agricultural Sciences* 2(2): 53-56, ISSN: 2041-3890.
- 14. Arifa A. K., H. Ahmad, **S. Ghafoor,** K. Begum, I. A. Khan **2010.** Frequency Distribution of Hepatitis in Three Districts of Hazara Division. Asian *Journal of Medical Sciences* 2(1): 37-39, ISSN: 2040-8773.
- 15. Rahman I., H Ahmad, I Sirajuddin, I Ahmad, FM Abbasi, M Islam and **S Ghafoor**. **2009**. Valuation of rapeseed genotypes for yield and oil quality under rainfed conditions of district Mansehra. *African Journal of Biotechnology* 8(24).
- 16. Ilyas M., Alam M; Ahmad H; S. Ghafoor. 2009. Abortion and protection of the human fetus: religious and legal problems in Pakistan. *Hum Reprod Genet Ethics*;15(2):55-9.
- 17. Ahmad, H., S. M. Khan, S. Ghafoor and N. Ali 2009. Ethnobotanical study of Upper Siran. J Herbs, Spices & Medicinal Plants USA, 15:86–97.
 - [www.informaworld.com/smpp/content~content=a909520063~db=all~order=page.
- 18. Ali, A., I. A. Khan, H. Ahmad and S. Ghafoor. 2009. Development of RAPD-Based Molecular Markers for Chromosome 5A of Common Wheat. *Pak. J. Bot.* 41(2): 691-694.
- 19. Ghafoor, S., M. M. Shah, H. Ahmad, Z.A. Swati, S. H. Shah, A. Pervez and U. Farooq. 2007. Molecular characterization of Ephedra species found in Pakistan. www.funpecrp.com. Genetics and Molecular Research, 6: 1123-1130.
- 20. Sirajuddin, H. Ahmad, M. Rahman and **S. Ghafoor**. **2005**. Floristic and Natural Resources of Mountain Eelum Swat. Int. Chem. Pharm. Med. J. 2: 271-277.
- 21. **Ghafoor. S.**, Habib Ahmad., Safdar Hussain Shah and Zahoor Ahmad Swati. **2004**. Production and Marketing of Morels (Morchella) in Swat valley. Proceedings of International workshop of Medicinal and Aromatic plants of Pakistan Islamabad. pp 104-114.

22. Ahmad, H., K. Ali and S. Ghafoor. 2002. Optimizing methods for clonal propagation of the Common Olive. Sc. Khyb. 15: 107-111.

Additional Information -

- 1. Obtained Trainings from Higher Education Commission of Pakistan on Modern Methods of Teaching for 45 days.
- 2. Obtained an advance training sponsored by HEC held in AIT Thailand for 25 days.
- 3. Organized 1 workshop and 4 seminars (3 national and 1 international) at Department of Genetics.
- 4. Worked as field supervisor for the research team led by Prof Dr Brian Hemphill (CSUB California US) to collect the largest dental casts' collection in Northern areas of Pakistan from various ethnic groups for 3 months.
- 5. Obtained skillful trainings (1 year) in a government hospital to work as a paramedic.
- 6. Elected member of Hazara University Academic Staff Association from March 2011-March 2012 & March 2014-March 2015.
- 7. Elected member of Academic Council for three years December 2012-December 2015.
- 8. Life time member of Pakistan Botanical Society.
- 9. Designed courses for Biotechnology & Genetic Engineering in Department of Genetics and under National Curriculum Review committee Higher Education Commission, for Pakistan

www.hec.gov.pk/insidehec/.../curriculumrevision/.../biotechnology.doc