

Curriculum Vitae

Muhammad Sayyar Khan Kazi

ACADEMIC AFFILIATION:

The University of Agriculture, Peshawar, Pakistan
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EDUCATIONAL QUALIFICATION:

1991 – 1994 SSC Science, High School Charsadda, Peshawar Board
1994 – 1996 F.Sc. Pre –Medical, Islamia College Peshawar
1996 – 2000 B.Sc (Hons) in The University of Agriculture, Peshawar
2000 – 2003 M.Phil (Biotechnology), The University of Agriculture, Peshawar
2006-2010 PhD (Under MEXT scholarship at Gene Research Center, Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan
PhD Thesis title: “Present Status and Challenge for Applications on Abiotic Stress Tolerance Research on Plants”

Current Position:

Assistant Professor

Service Period:

15th January 2005 till date

RESEARCH INTERESTS:

Abiotic stresses, Transgenic approach, Utilization of important genes in plant stress tolerance, GMO regulation, biosafety and intellectual properties related issues, Environmental Risk Assessment

PUBLICATIONS:

1. **Khan MS**, Ahmad D, Khan MA (2015) Trends in genetic engineering of plants with (Na⁺/H⁺) antiporters for salt stress tolerance. *Biotechnology and Biotechnological Equipment* 29: 815-825. <http://dx.doi.org/10.1080/13102818.2015.1060868>.
2. **Khan MS**, Ahmad D, Khan MA (2015) Utilization of genes encoding osmoprotectants in transgenic plants for enhanced abiotic stress tolerance. *Electronic Journal of Biotechnology* 18(4): 257-266.
3. **Khan MS**, Ahmad D, Adnan M, Khan MA (2014) The effect of somaclonal variation on salt tolerance and glycoalkaloid content of potato tubers. *Australian Journal of Crop Science* 8(12): 1597-1604.
4. Mehtab Ullah Khattak, Iqbal Munir, Zeeshan Nasim, Aqib Iqbal, Ijaz Ali, Mian Afaq Ahmad, Javed Abbas Bangash and **Mohammad Sayyar Khan** (2014) Incidence of HIV/AIDS in Healthy Blood Donors of Khyber Pakhtunkhwa, Pakistan. *International Journal of Pure and Applied Science and Technology* 22; 18-24.
5. **Khan MS**, Munir I, Khan I (2013) The potential of unintended effects in potato glycoalkaloids. *African Journal of Biotechnology* 12: 754-766.
6. **Khan MS** (2011) The role of DREB transcription factors in abiotic stress tolerance of plants. *Biotechnology and Biotechnological Equipment* 25: 2433-2442.
7. **Khan MS** (2011) Role of sodium and hydrogen (Na⁺/H⁺) antiporters in salt tolerance of plants: Present and future challenges. *African Journal of Biotechnology* 10: 13693-13704.
8. **Khan MS** (2011) Future challenges in environmental risk assessment of transgenic plants with abiotic stress tolerance. *Biotechnology and Molecular Biology Reviews* 6: 199-213.
9. **Khan MS**, Yu X, Kikuchi A, Asahina M, Watanabe KN (2009) Genetic engineering of glycine betaine biosynthesis to enhance abiotic stress tolerance in plants. *Plant Biotechnology* 26: 125-134.
10. **Khan MS**, Ahmad D, Durrani IS, Swati ZA, Hussain M (2004) Prevalence of different begomoviruses infecting chillies in NWFP and Punjab. *Sarhad Journal of Agriculture* 20: 30-33.

11. Ahmad D, **Khan MS**, Durrani IS, Swati ZA, Hussain M (2004) RNAi based resistance against tomato leaf curl virus. *Sarhad Journal of Agriculture* 20: 22-25.

ACADEMIC PRESENTATIONS/POSTERS/SYMPOSIUM

1. **Khan MS**, Nakajyo H, Shimazaki T, Yamada K, Shigemori H, Kikuchi A, Watanabe KN. Glycoalkaloid content in transgenic potatoes with abiotic stress tolerance. 116th meeting of the Japanese Society of Breeding, September 25-27, 2009, Hokkaido University, Sapporo, Hokkaido, Japan, September-2009. (Poster presentation)
2. **Khan MS**, Watanabe KN. Transgenic plants with abiotic stress tolerance and future challenges in environmental risk assessment. The 2nd Annual South Asia Biosafety Conference, September 15-16, Taj Samudra Hotel, Colombo, Sri Lanka, September-2014. (Poster presentation).

TRAINING/WORKSHOPS

1. Theoretical and practical training on “Real Time PCR” at DEMO LAB Dubai, UAE, May, 2005.
2. Training on “Intellectual Property Rights”, three days event organized by HEC and IM Sciences with sponsorship from World Bank. From May 7-9, 2015 at Margalla Hotel, Islamabad.

RESEARCH PROJECTS:

1. **Title of the proposed project:** Environmental risk assessment studies for the potential production of transgenic oilseed rape lines with enhanced disease resistance.
Total funds requested/Status: 0.5 million. **Completed**
Funding agency: Government of Khyber Pakhtunkhwa Directorate of Science and Technology (DOST)
2. **Title of the proposed project:** Genetic Engineering of sugarcane with the rice tonoplast H⁺-PPase gene to improve sucrose content and salt tolerance.
Total funds requested/Status: 2.5 million. **Running**
Funding agency: Pakistan Science Foundation (PSF)
3. **Title of the proposed project:** Environmental Biosafety Assessment on Transgenic

Oil Seed Rape Lines harboring the Synthetic Chitinase Gene (*NiC*) Conferring Fungal Disease Resistance

Total funds requested/status: US\$ 10,000. **Running**

Funding Agency: Center for Environmental Risk Assessment (CERA)/ILSI Research Foundation (United States) under “The Biosafety Research in Pakistan Grants Program” (BRPGP).

4. **Title of the proposed project:** Production of fungal disease resistance in strawberry through genetic engineering with the antifungal synthetic chitinase gene

Total funds requested/status: 0.5 million. **Under review**

Funding agency: Government of Khyber Pakhtunkhwa Directorate of Science and Technology (DOST)

REFERENCES:

1. Prof. Dr. Safdar Hussain Shah
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