

### KAUSER ABDULLA MALIK, Ph.D.

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#### EDUCATION:

MSc(Botany): Punjab University, Lahore, 1965  
Ph.D. (Biological Sciences): University of Aston in Birmingham. UK, 1970  
Postdoctoral : Alexander von Humboldt Fellow, Braunschweig, Germany, 1974-75.

#### EMPLOYMENT AND POSITIONS HELD:

2008-present. Distinguished National Professor, Dean Postgraduate Studies, Forman Christian College(A Chartered University), Lahore.  
2006-2008. Member, Planning Commission of Pakistan, Islamabad.  
2001-2006. Member Biosciences, Pakistan Atomic Energy Commission, Islamabad  
1998-2001. Chairman, Pakistan Agricultural Research Council, Islamabad.  
1992-1998. Chief Scientist/Director, National Institute for Biotechnology & Genetic Engineering, Faisalabad  
1987-1992 Chief Scientific Officer, Nuclear Inst. For Agri. & Biolgy (NIAB), Faisalabad  
1977-1987. Pricipal Scientific Officer, NIAB, Faisalabad  
1974-1975 Alexander von Humboldt Fellow, Braunschweig, Germany  
1971-1977 Senior Scientific Officer, NIAB, Faisalabad

**PUBLICATIONS: MORE THAN 200 IN REFEREED JOURNALS; PATENTS 8; BOOK CHAPTERS 3.**

#### SOME RECENT RESEARCH PUBLICATIONS

1. Iqbal, S., Bashir, A., Naseer, H.M., Ahmed, M. and **Malik. K.A.** 2007. Identification of differentially expressed genes in developing cotton fibers (*Gossypium hirsutum* L) through Differential Display. *Electronic Journal of Biotechnology* [online]. 15 January 2008  
<http://www.ejbiotechnology.info/content/next/index.html>
2. Khan, S.A., Zafar. Y., Briddon, R.W., **Malik, K.A.** and Mukhtar, Z. (2006). Spider venom toxin protects plants from insect attack. **Transgenic Research**, 15(3): 349-357.
3. Mirza M.S., Mehnaz S., Normand P., Prigent-Comboret C., Moenne-Loccoz Y., Bally R. and **Malik K.A.** 2006. Molecular characterization and PCR detection of a nitrogen-fixing *Pseudomonas* strain promoting rice growth. *Biol. Fertil. Soils* 43 :163-170
4. Asma Imran, Fauzia Yusuf Hafeez, Anja Frühling, Peter Schumann, **Kausar Abdulla Malik** and Erko Stackebrandt (2009) *Ochrobactrum ciceri* sp. nov., isolated from nodules of *Cicer arietinum* in Pakistan. Published online ahead of print on 14 August 2009 as doi:ijs.0.013987-0 *Int J Syst Evol Microbiol* (2009); DOI 10.1099/ijs.0.013987-0
5. Sami Ullah Khan, Asma Imran, M. J. Abdulla, S. U. Khan, M. S. Mirza, **K. A. Malik**, F. Y. Hafeez , *Ochrobactrum* sp. Pv222 exhibits multiple traits of plant growth promotion, biodegradation and N-acyl-homoserine-lactone quorum sensing., *Annals of Microbiology* 01/2014
6. Ammara Ahad, Asma Maqbool and **Kausar Abdulla Malik**, Optimization of *Agrobacterium* Mediated Transformation in *Eucalyptus Camaldulensis*, *Pak. J. Bot.*, 46(2): 735-740, 2014
7. Edwin John, Asma Maqbool and **Kausar Abdulla Malik**, Optimization of *Agrobacterium Tumefaciens* Mediated Transformation in *Populus Deltoides*, *Pak. J. Bot.*, 46(3): 1079-1086, 2014
8. Nabeela Abid, Asma Maqbool and **Kausar A. Malik**, Screening commercial wheat (*Triticum aestivum* l.) Varieties for *Agrobacterium* mediated transformation ability, *Pak. J. Agri. Sci.*, Vol. 51(1), 83-89; 2014

**9. Relevant Patent: Process for the Development of Transgenic Wheat for Increased Bioavailability of Iron and Zinc, Patent No. 639/2014**

**Relevant Research Projects Completed**

- 1) Physiological and biochemical aspects of nitrogen fixation and denitrification in Kallar grass roots associated bacteria. Funded by USNSF grant No. INT. 8319228 1985-90. US \$ 100,000/-;
- 2) Associative N<sub>2</sub>-fixation in grasses growing in saline environments: Funded by US National Academy of Sciences. (CRG.BNF-PK-1-83-15) 1985-91. US \$ 700,000;
- 3) Contribution of biological nitrogen fixation to rice grown on salt affected areas. Funded by US National Academy of Sciences (BOSTID/PARC) PAK-CS-PB-19, 1992-94 US \$ 50,000/- ;
- 4) Use of plant growth promoting rhizobacteria and Azolla to increase rice productivity. Pak-China Collaborative project funded by PSF, 1994-97. US \$ 20,000/-
- 5) Microbial diversity and molecular signals controlling Plant-Microbe interaction in the rhizosphere. Pakistan Academy of Sciences 2009-211; Rs 2.4 million
- 6) Development of wheat with low phytate for increasing bioavailability of iron and zinc, Funded by Punjab Research Agricultural Board (PARB) Project No. 188, March 2010, Rs. 26.572 million.

**Ongoing research Projects**

- 1) Enhancing Fertilizer Use Efficiency in Wheat by Using Transgenic Approach, Funded by (ALP-PARC), 2014, Rs. 15.813 million
- 2) Microbial Diversity and Metagenomic Analysis of Rhizosphere of Plants Growing in Extremely Halophytic and Xerophytic Environments, Funded by Higher Education Commission (HEC) No. 20-2038/NRPU/R&D/HEC/12, Rs. 4,478,100 Million.

**SYNERGISTIC ACTIVITIES (LAST 5 YEARS)**

- 1) *Editorial Boards and other reviewing:* Pakistan Journal of Botany, Proceedings of Pakistan Academy of Sciences *Ad hoc* reviewer for several journals and grant proposals; Focal Person for all research grants related to Biotechnology submitted to Higher Education Commission.
- 2) *Outreach and Other Activities:* Member Syndicate of University of veterinary and Animal Sciences, Lahore and Government College University Faisalabad; Member, BoG of WWF, Pakistan; Member Executive Board of International Centre for Chemical and Biological Sciences (ICCBS), Karachi; Member, BoT, LUMS, Lahore

**Life Time Achievement Award by Pakistan Botanical Society 2011; Fellow, Pakistan Academy of Sciences; Fellow Third World Academy of Science (TWAS); ISESCO Prize in Biology 1997; Civil Awards by the President of Pakistan for Science (*Hilal-e-Imtiaz*) 2004; Sitara-e-Imtiaz 1998, Tamgha-e-Imtiaz 1988**

**Graduate/Postdoc Advisor; Other Training:**

**Ph.D. Advisor: Supervised 20 PhD students. Some of these are:**

Dr Yusuf Zafar (DG, Agri & Biotech; PAEC, Islamabad); Dr Rakhshanda Bilal (Director, DESTO, Karachi); Dr Samina Mehnaz (Professor, FCCU, Lahore); Dr Tariq Mahmood (Dy Chief Scientist, NIAB, Faisalabad); Dr Khalid Mahmood (Dy Chief Scientist, NIAB, Faisalabad); Dr Romana Tabassum (Dy Chief Scientist, NIBGE, Faisalabad) Dr Asma Imran (Senior Scientist, NIBGE, Faisalabad)

**Postdoctoral Advisor:** Dr Asghari Bano (Dean, Quaid-e-Azam University, Islamabad); Dr Fauzia Yusuf (Professor/Chairperson Biosciences, CIIT, Islamabad)

**Research Assignment** for two months in the lab of Prof. Ann Hirsch at UCLA, One month research on microbial ecology at University of Michigan, East Lansing

**Co-Oganized US-Pak Symposium on Abiotic Stresses in Plants at UCD with Prof, Ed Blumwald 2007**

**Undergraduate Students:**

Supervised research projects of over 15 undergraduates during last two years

**Current PhD students being supervised 3; Research Associates 4**