Dr. Muhammad Zubair Khan (PhD Japan)

Permanent Address: Drake, C/o Rizwan Yousaf, Tehsil and Post Office Rawalakot, District Poonch Azad Jammu and Kashmir. **Date of Birth:** October 10, 1980 **Marital Status:** Married	**E. mail**:zubairgenes@gmail.com **Contact No**: +923355134054 **Correspondence Address:** Department of Plant Breeding & Molecular Genetics , Faculty of Agriculture, University of Poonch Rawlakot, Old Campus, Hajira Road, Shamsabad, Rawalakot AJK Pakistan, 12350

Web Links:

https://www.researchgate.net/profile/Muhammad_Khan219

https://scholar.google.com.pk/citations?user=JC2eB5oAAAAJ&hl=en

Education

PhD ***April 2014-March 2017*** ***Thesis Title:***	**Bio-Function Development (Molecular Plant Breeding, Genetic and Metabolic Pathway Engineering)** Research Institute for Bioresources and Biotechnology, Laboratory of Plant Gene Function, Graduate School of Bio-Resources and Environmental Sciences, Division of Sciences for Biological Function, Ishikawa Prefectural University, Functional Analysis of Carotenoids Biosynthesis Genes in Sweetpotato (*Ipomoea batatas*).

Job History

University of Poonch Rawalakot	As an Assistant Professor (TTS) at the Department of Plant Breeding and Molecular Genetics from November 22, 2019 (Continue)
University of Kotli AJK	As an Assistant Professor (HEC IPFP) at the Department of Biotechnology from August 01, 2017 to 31-07-18 and on contract from 01-08-2018 to 21-11-2019.
Government service	In the Department of Agriculture, Ministry of AJK, Pakistan as an Agriculture Officer from May 21, 2012 to September 26, 2013.
Banking	In Habib Bank Ltd (HBL) as an Agriculture Finance Officer (OG-III) from December 07, 2006 to May 18, 2012.

Awards

Ministry of Education, Culture, Science, Sports and Technology (MEXT) Research Scholarship for PhD in Japan.	Awarded in March, 2013, Joined in October, 2013 and Completed in March, 2017.

Research Publications/Papers

Khan, M. Zubair, Takemura, M., Maoka, T., Otani, M., and Misawa, N. (2016). Carotenoid analysis of sweetpotato *Ipomoea batatas* and functional identification of its lycopene β- and ε-cyclase genes. *Z. Naturforsch. C*, 71 (9-10): 313-322.

Maoka, T., Otani, M., **Khan, M. Zubair**, Takemura, M., Hattan, J., and Misawa, N. (2016). Novel carotenoids produced on the interaction of the foreign carotenoid ketolase *CrtW* and endogenous epoxycarotenoids unique to sweetpotato tubers. *Tetrahedron Lett*ers, 57 (42): 4746-4748.

Khan, M. Zubair, Takemura, M., and Misawa, N. (2020). Functional identification of cytochrome P450 genes involved in carotenoid biosynthesis in sweetpotato *Ipomoea batatas*. (Latest Submission).

Ahmad, S.D., Sabir, S.M. and **Zubair, M**. (2006). Ecotypes diversity in autumn olive *(Elaeagnus umbellata* Thunb.*):* a single plant with multiple micronutrient genes. *Chemistry and Ecology*, 22: 509–521.

Ahmad, S.D., Sabir, M., and **Zubair. M.** (2005). Morphological and Biochemical Variation in *Elaeagnus umbellata* Thunb. Populations; a Multipurpose Plant for Sustainable Development of Fragile Mountains of Pakistan. *PLANT GENETICS*. *In*: *Proceedings of the 6th National Congress on Genetics,* 12-14 May 2005, Kuala Lumpur, Malaysia.

Books

Syed Dilnawaz Gerdezi and **Muhammad Zubair Khan**. (2010). Autumn Olive a Medicinal Plant from Azad Jammu & Kashmir; ©*LAP Lambert Academic Publishing AG and Co., KG*. DudweilerLandster. Saarbrucken, Germany. p., 1-128. ISBN: 978-3-8383-5979-3.

Conferences Presentations/Papers

Muhammad Zubair Khan, Miho Takemura, Takashi Maoka, Motoyasu Otani and Norihiko Misawa. (2019). Metabolic screening of carotenoids and elucidation of a carotenoids metabolic pathway in sweetpotato (*Ipomoea batatas*). In: *15th International Conference and Exhibition on Metabolomics & Systems Biology*, April 29-30, 2019, Kyoto, Japan.

Muhammad Zubair Khan, Norihiko Misawa, Miho Takemura, Motoyasu Otani, Jun-ichiro Hattan. (2018). Isolation, sequencing and functional identification of carotenoids biosynthetic pathway genes in sweetpotato (*Ipomoea batatas* L) by *E. coli* heterologous gene complementation expression system. In: *International Conference on Natural Sciences at the Interface of Climate Change, Food Security and Sustainability (NSICFSS)* 24-26th October 2018, Faculty of Sciences, University of Kotli Azad Jammu and Kashmir.

Muhammad Zubair Khan. 2017. Functional analysis of carotenoid biosynthesis genes in sweetpotato *Ipomoea batatas* (サツマイモ *Ipomoea batatas* 由来カロテノイド生合成遺伝子の機能解析), *PhD Thesis Defense/Final Presentation*. Held at: Research Institute for Bioresources and Biotechnology, Ishikawa Prefectural University, Ishikawa, Japan (Defended in Japanese language for the ceremonial issuance of doctoral degree on 21st March, 2017).

Muhmmad Zubair Khan, Miho Takemura, Motoyasu Otani, Jun-ichiro Hattan, Norihiko Misawa. (2016). Isolation and functional characterization of carotenoid cyclase genes from sweetpotato plants. A Poster Presentation, In: *The 2016 Annual Conference of the Japan Society for Bioscience, Biotechnology and Agrochemistry*, March 27-31, 2016. Sapporo Convention Center; Sapporo Bushiness Innovation Center, Hokkaido, Japan.

M. Zubair, S. D. Ahmed, and Abdul Qayyum. (2010). Clinical based evaluation of autumn - olive (*Elaeagnus umbellata* Thunb.) for antibacterial, antihypertensive, and anti- cancer activities. In: *International Conference on Utilization of Modern Agriculture Technology in Changing Environmental Perspective.* 21-23 July, 2010. Faculty of Agriculture Rawalakot, the University of Azad Jammu and Kashmir.

Ahmed, S. D., M. Sabir and **M. Zubair**. (2006). Autumn-olive, a single source of multiple micronutrient genes for cereal bio-fortification. In: *National Symposium on Biotechnology for Economic Prosperity* July 24-26, 2006, Nathiagali, Pakistan. Organized by National Commission on Biotechnology, Ministry of Science and Technology, Pakistan.

References

Professor Dr. Norhiko Misawa. Research Institute for Bioresources and Biotechnology, Ishikawa Prefectural University, 1-308 Suematsu, Nonoichi-shi, 921-8836 Ishikawa, Japan.
Phone: +81 76 227 7525; Mobile: +81 90 1886 5128; email: n-misawa@ishikawa-pu.ac.jp

Professor Dr. Syed Dilnawaz Ahmad Gardezi. Vice Chancellor, University of Kotli AJK, Pakistan: Phone: +92 301 5280796; email: dilnawazgerdezi@yahoo.com