Dr. Zahoor Ahmed Wani (PhD)
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Education

2012 -2017	PhD in Plant sciences from AcSIR−Academy of Scientific & Innovative Research (http://www.acsir.res.in/) Place of work: CSIR−Indian Institute of Integrative Medicine (IIIM), Canal Road, Jammu, India (http://www.iiim.res.in/) Thesis title: **Exploring the endophytic fungal community associated with *Crocus sativus* L. and its role in restructuring the apocarotenoid metabolism and stress adaptation.**
2009 – 2011	M.Sc. (Botany) First Division Department of Botany, University of Kashmir, Srinagar, J&K, India

Research & Teaching Experience

I am working as an Assistant Professor in the Department of Botany at Government Degree College Anantnag, Jammu and Kashmir, India. I qualified National Eligibility Test securing 47th rank in 2011 and was awarded Research Fellowship by CSIR, Govt. of India to pursue my research career and completed PhD in 2017. My research specialization is in plant molecular ecology and my research work focused on understanding the basic intricacies of plant-endophyte associations and the ways to modulate them for desired purposes. I have contributed to various publications in reputed journals in the field of endophyte biology, including four books and three chapters. I have

June 2014 – June 2017	Senior Research Fellow, Plant Biotechnology Division, CSIR -Indian Institute of Integrative Medicine (IIIM), Canal Road, Jammu, J&K, India
June 2012 – January 2014	Junior Research Fellow, Microbial Biotechnology Division, CSIR-Indian Institute of Integrative Medicine (IIIM), Canal Road, Jammu, J&K, India.

Publications

- **Wani ZA,** Kumar A, Sultan P, Bindu K, Riyaz-Ul-Hassan S, Ashraf N* (2017) *Mortierella alpina* (CS10E4), an oleaginous fungal endophyte of *Crocus sativus* L. enhances apocarotenoid biosynthesis and stress tolerance in host plant. *Scientific Reports* 7(1):8598.
- Arora P, **Wani ZA,** , Ahmad T, Sultan P, Gupta S, Riyaz-Ul-Hassan S* (2019) Community structure, spatial distribution, diversity and functional characterization of culturable endophytic fungi associated with *Glycyrrhiza glabra* L. *Fungal Biology* https://doi.org/10.1016/j.funbio.2019.02.003
- **Wani ZA**, Ahmad T, Nalli Y, Ali A, Singh AP, Vishwakarma RA, Ashraf N, Riyaz-Ul-Hassan S* (2018) Porostereum sp., Associated with Saffron (*Crocus sativus* L.), is a Latent Pathogen Capable of Producing Phytotoxic Chlorinated Aromatic Compounds. *Current Microbiology* doi: 10.1007/s00284-018-1461-9
- **Wani ZA**, Mirza DN, Arora P, Ashraf N, Riyaz-Ul-Hassan S* (2016) Molecular phylogeny, diversity, community structure and plant growth promoting properties of fungal endophytes associated with the corms of saffron plant: An insight into the microbiome of *Crocus sativus* Linn. *Fungal Biology* 120:1509 -1524.
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- Arora P, **Wani ZA**, Nalli Y, Ali A, Riyaz-Ul-Hassan S* (2016) Antimicrobial Potential of Thiodiketopiperazine Derivatives Produced by Phoma sp., an Endophyte of *Glycyrrhiza glabra* Linn. *Microbial Ecology* 72:802-812.
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- Baba SA, Mohiuddin T, Basu S, Swarnkar MK, Malik AH, **Wani ZA**, Abbas N, Singh AK, Ashraf N* (2015). Comprehensive transcriptome analysis of *Crocus sativus* for

discovery and expression of genes involved in apocarotenoid biosynthesis. *BMC Genomics* 16:698.

- Baba SA, Malik AH, **Wani ZA**, Mohiuddin T, Shah Z, Abbas N, Ashraf N* (2015) Phytochemical analysis and antioxidant activity of different tissue types of *Crocus sativus* and oxidative stress alleviating potential of saffron extract in plants, bacteria, and yeast. *South African Journal of Botany* 99: 80–87.

Patent filed

- PADMANABHAN, A ALI, D PRASHANT, UNNI R, R Syed, WANI Z A (2022). Phialomustin B a natural product isolated from an endophytic fungus *Phialophora Mustea* with novel therapeutic potential for Parkinson's disease (PD) and Amyotrophic lateral sclerosis (ALS) disease. *Ref. No. 0040NF2022*.

Books

- **Zahoor Ahmed Wani, Mohmad Aarif (2024)** Mycology and Plant Pathology. Mamta Publications Pvt. Ltd. ISBN 978-9-349536-21-0
- **Zahoor Ahmed Wani (2023)** Commercial Medicinal and Aromatic Plants**.** Renascence Publishers ISBN: 978-93-92282-72-0**.**
- **Zahoor A. Wani (2022).** Endophyte Biology: Recent Findings from Kashmir Himalayas. AAP/CRC Press, Taylor & Francis. ISBN 9781774638323.
- **Zahoor Ahmed Wani (2021)** Fungal Endophytes of *Crocus sativus* and their applications. LAP Lambert Academic Publishing ISBN 978-620-2-67032-6.

Book chapter

- **Zahoor Ahmed Wani**, Nasheeman Ashraf **(**2018) Transcriptomic studies revealing enigma of Plant-pathogen interaction. A Singh IK. Singh (eds.), *Molecular Aspects of Plant-Pathogen Interaction*, Springer Nature Singapore Pte Ltd. https://doi.org/10.1007/978-981-10-7371-7_10.
- **Zahoor Ahmed Wani** (2022) "Diversity and Bioprospection of the Fungal Endophytic Microbiome of *Crocus sativus* L. (Saffron). In: Vakhlu J, Ambardar S, Salami SA, Kole C. (eds) *The Saffron Genome. Compendium of Plant Genomes*. Springer, Cham. https://doi.org/10.1007/978-3-031-10000-0_9 .
- **Zahoor Ahmed Wani** (2023) Fungal Endophytes: An Accessible Natural Repository for Discovery of Bioactive Compounds. In: Deshmukh SK, et al. (Eds): *Fungi Bioactive Metabolites*. Springer Nature Singapore Pte Ltd. ISBN 978-981-99-5695-1.