**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_M. IMRAN HAMID\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**PERSONAL DETAILS**



**Date of birth:** 1982-09-09

**Present Designation:** Assistant Professor

**Place of Birth:** Sahiwal

**Citizenship:** Pakistan

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**QUALIFICATIONS**

* **Post-doc.** Institute of Microbiology, Chinese Academy of Sciences, Beijing, China

Sep, 2013-Sep, 2015

Field of study: Molecular Microbial Ecology and Diversity

* **Ph.D.** Huazhong Agricultural University, China

2007-2012

Field of study: Molecular Plant Pathology

* **M.Sc (Hons.).** University of Agriculture, Pakistan

2005-2007

Field of study: Plant Pathology

* **B.Sc (Hons.)**. University of Agriculture, Pakistan

2001-2005

Field of study: Plant Pathology

**Professional Experience**

* Jan, 2012-Present Assistant Professor University of Sargodha, Pakistan
* Sep, 2013-Sep, 2015 Post-doc Fellow Institute of Microbiology, CAS

**RESEARCH INTERESTS**

* Molecular Microbial Ecology
* Microbial Diversity and functioning
* Metagenomics
* Molecular Plant-Microbe interaction
* Biological Control Agents
* Molecular Plant Pathology
* Functional Genomics and Bioinformatics

**Memberships**

* Pakistan Phytopathological Society (PPS)
* National Academy of Young Scientists (NAYS)
* Mycological Society of China (MSC)
* American Phytopathological Society (APS)

**AWARDS**

* Research Productivity Award-2015 by Pakistan Council for Science and Technology
* 2013- CAS Fellowship for Postdoctoral and Visiting Scholars from Developing Countries
* 2007- Overseas Scholarship Scheme for MS/MPhil Leading to PhD in Selected Fields Phase-II, Batch-I (90% Seats) by Higher Education Commission (HEC), Pakistan.

**List of Publications**

**International Journals**

1. **M. Imran Hamid**, Muzammil Hussain, Meichun Xiang, Yunpeng Wu, Xiaoling Zhang, Xingzhong Liu\*. 2016. Successive monoculturing assembles the rhizospheric microbial community for soybean cyst nematode suppression. *FEMS Microbio Ecology*. DOI:[10.1093/femsec/fiw222](https://dx.doi.org/10.1093/femsec/fiw222)
2. Muzammil Hussain†, **M. Imran Hamid†**, Niuniu Wang, Lin, Bin, Meichun Xiang\*, Xingzhong Liu\*. 2016. The transcription factor Skn7 regulates thermotolerance, apoptotic-like cell death and parasitism in nematode endoparasitic fungus *Hirsutella minnesotensis.* *Scientific Report*, 6: 30047. doi:10.1038/srep30047. (Equal Contribution)
3. Muzammil Hussain†, **M. Imran Hamid†\*,** Muhammad Usman Ghazanfar, Naeem Akhtar, Mubashar Raza. 2016. First report of fruit rot of strawberry caused by *Geotrichum candidum* in Pakistan. *Plant Disease*. DOI: org/10.1094/PDIS-03-16-0277-PDN. (Equal Contribution)
4. M. Usman Ghazanfar, Muzammil Hussain, **M. Imran Hamid**, Samiullah Ansari. 2016. Utilization of biological control agents for the management of postharvest pathogens of tomato. *Pak. J. Bot*. 48(5): 2093-2100.
5. Yao Su, Xianzhi Jiang, Wenping Wu, Manman Wang, **M. Imran Hamid**, Meichun Xiang and XingZhong Liu. 2016. Genomic, transcriptomic and proteomic analysis provide insight into the cold adaptation mechanism of the obligate psychrophilic fungus Mrakia psychrophila. *G3: Gene, Genomes, Genetics*. [doi.org/10.1534/g3.116.033308](http://dx.doi.org/10.1534/g3.116.033308)
6. [Jianbin Liu](http://booksandjournals.brillonline.com/search?value1=&option1=all&value2=Jianbin+Liu&option2=author); [Weijing Zhu](http://booksandjournals.brillonline.com/search?value1=&option1=all&value2=Weijing+Zhu&option2=author); [**M. Imran Hamid**](http://booksandjournals.brillonline.com/search?value1=&option1=all&value2=Mohammed+Imran+Hamid&option2=author); [Xiaoli Cheng](http://booksandjournals.brillonline.com/search?value1=&option1=all&value2=Xiaoli+Cheng&option2=author); [Niuniu Wang](http://booksandjournals.brillonline.com/search?value1=&option1=all&value2=Niuniu+Wang&option2=author)and [Jingzu Sun](http://booksandjournals.brillonline.com/search?value1=&option1=all&value2=Jingzu+Sun&option2=author)\*. 2016. Population dynamics and biocontrol efficacy of the nematophagous fungus *Hirsutella minnesotensis* in pot assay. *J Nematology*. DOI: [10.1163/15685411-00002996](http://dx.doi.org/10.1163/15685411-00002996)
7. Niuniu wang, Yongjie Zhang, Xianzhi Jiang, Chi Chu, **M. Imran Hamid**, Muzammil Hussain, Senyu Chen, Jianping Xu, Meichun Xiang\*, and Xingzhong Liu\*. 2016. Population genetic analysis of *Hirsutella rhossiliensis*, a dominant parasite of cyst nematode juveniles at a continental scale. *Appl. Environ. Microbiol*. doi:10.1128/AEM.01708-16.
8. **M. Imran Hamid**\*, Muzammil Hussain, Muhammad Usman Ghazanfar, Mubashar Raza, Xingzhong Liu. 2014. *Trichothecium roseum* causes fruit rot of tomato, orange and apple in Pakistan*. Plant Disease*. 98(9): 1271.
9. [Yunpeng Wu](https://www.researchgate.net/researcher/2057376223_Yunpeng_Wu), [Fengyu Shi](https://www.researchgate.net/researcher/77483087_Fengyu_Shi), **M. Imran Hamid**, [Yingbo Zhu](https://www.researchgate.net/researcher/78792521_Yingbo_Zhu). 2014. Endophytic bacterial diversity of wild soybean (Glycine soja) varieties with different resistance to soybean cyst nematode (*Heterodera glycines*). *Acta Micro Sinica*. 54(8):926-935.
10. Hussain, M., **M. Imran Hamid**\*, M. U. Ghazanfar. 2014. Salicylic acid induced resistance in fruits to combat against postharvest pathogens: a review. Arch. Phytopath. Plant Prot. DOI: 10.1080/03235408.2014.882111.
11. **M. Imran Hamid**, Fanyun Zeng, Jiasen Cheng, Daohong Jiang, Yanping Fu\*. 2013. Disruption of Heat Shock Factor1 Reduces the Formation of Conidia and Thermotolerance in the Mycoparasitic Fungus *Coniothyrium minitans. Fungal Gent. Biol*. 53: 42-49.
12. Zafar Iqbal, Saeed Rauf, **M. Imran Hamid**, Salman Ahmad, M. Akbar Anjum. 2013. Diagnostic tools using DNA bar coding for the identification of pathogen races and related species: a review. *Arch. Phytopath. Plant Prot*. 46(14): 1707-1716.
13. Muzammil H., M. U. Ghazanfar, **M. Imran Hamid**\*, Mubashar R. 2013. Seed borne mycoflora of some commercial wheat (triticum aestivum L.) cultivars in Punjab, Pakistan. *eSci J. Plant Path*. 02(02): 97-101.
14. Fanyun Zeng, Xiaoyan Gong, **M. Imran Hamid**, Yanping Fu, Xie Jiatao, Jiasen Cheng, Guoqing Li, Daohong Jiang\*. 2012. A Fungal Cell Wall Integrity-Associated Map Kinase Cascade in *Coniothyrium minitans* is required for Conidiation and Mycoparasitism. *Fungal Gent. Biol*. 49:347–357.
15. Bo Li, Yanping Fu, Daohong Jiang\*, Jiatao Xie, Jiasen Cheng, Guoqing Li, **M. Imran Hamid**, and Xianhong Yi. 2010. Cyclic GMP as a Second Messenger in the Nitric Oxide-Mediated Conidiation of the Mycoparasite *Coniothyrium minitans.* *Appl. Environ. Microbiol*. 76:2830–2836.

**HEC Recognized Journal**

1. Raza, M., M. Hussain, M. U. Ghazanfar, **M. Imran Hamid**\* and S. Asad. 2014. Characterization and pathogenicity of *Bipolaris sorokiniana* causes spot blotch of wheat in Pakistan. *Int. J. Agri. Appl. Sci*. 6(2):34-41.
2. [Mubashar Raza](https://www.researchgate.net/researcher/2049830504_Mubashar_Raza), [Muhammad Usman Ghazanfar](https://www.researchgate.net/researcher/84210975_Muhammad_Usman_Ghazanfar), [Muzammil Hussain](https://www.researchgate.net/researcher/2080148624_Muzammil_Hussain), **M. Imran Hamid**. 2014. [Effect of nutrient mediums and blue light on dry mass production of *Trichoderma*](https://www.researchgate.net/publication/266387815_Effect_of_nutrient_mediums_and_blue_light_on_dry_mass_production_of_Trichoderma?ev=prf_pub).  3rd International Conference of Pakistan Phytopathological Society, Karachi.
3. [Muzammil Hussain](https://www.researchgate.net/researcher/2080148624_Muzammil_Hussain), [Muhammad Usman Ghazanfar](https://www.researchgate.net/researcher/84210975_Muhammad_Usman_Ghazanfar), **M. Imran Hamid**, [Mubashar Raza](https://www.researchgate.net/researcher/2049830504_Mubashar_Raza), [Touseef Hussain](https://www.researchgate.net/researcher/60019313_Touseef_Hussain). 2014. [Exogenous application of salicylic acid induced resistance in harvested tomato fruit against sour rot and *Rhizopus* rot](https://www.researchgate.net/publication/266387702_Exogenous_application_of_salicylic_acid_induced_resistance_in_harvested_tomato_fruit_against_sour_rot_and_Rhizopus_rot?ev=prf_pub).  3rd International Conference of Pakistan Phytopathological Society, Karachi.
4. Hussain, M., M. U. Ghazanfar, Z. Iqbal, **M. Imran Hamid**\*, M. A. Zahid, T. Hussain, M. Raza, A. U. Haq. 2014. *In vitro* evaluation of fungicides and plant extracts for suppressing growth of *Macrophomina phaseolina. Int. J. Agri. Appl. Sci*. 6(2):14-19.
5. **M. Imran Hamid**\*, M Aslam Khan, Zafar Iqbal, M Usman Ghazanfar, Yasir Iftikhar, and Naeem Akhtar. 2012. Correlation of Environmental Conditions with Bacterial Blight Disease of Cotton (*Gossypium hirsutum* L.). *Pak. J. Phytopath*. 24(1):39-43.
6. Munawar A. Noor, **M. Imran Hamid**\*, Zafar Iqbal, Habib Ullah. 2012. Physio-morphological Determination of Potato Crop Regulated by Potash Management through Different Methods*. Int. J. Agri. Appl. Sci*. 5(1): 24-31.

**Publications in progress:**

1. **M. Imran Hamid**, Muzammil Hussain, Yunpeng Wu, Meichun Xiang, Xiaoling Zhang, Weiming Hu, Senyu Chen, Xingzhong Liu\*. 2016. Rhizosphere and cysts microbiome involvement in suppressive soils of soybean cyst nematode. *Microbiome*. Submitted
2. **M. Imran Hamid**, Xingzhong Liu\*. (2016). Density-dependent key Bio-control agents and Microbiome are Indispensible for Disease Suppressive soils of Soil borne Pathogens. To be submitted in *Annual reviews of phytopathology*.
3. **M. Imran Hamid**, Muzammil Hussain, Meichun Xiang, Yunpeng Wu, Xiaoling Zhang, Xingzhong Liu\*. (2016). Fungal Community association in rhizosphere and cysts of soybean cyst nematode suppressive soils with diverse monoculture histroy. In preparation
4. **M. Imran Hamid**, Muzammil Hussain, Meichun Xiang, Yunpeng Wu, Xiaoling Zhang, Xingzhong Liu\*. (2016). Rhizospheric and cysts bacterial community responses in soybean cyst nematode suppressive soils. In preparation.

**Future Research Plans**

Plants are the key determinant of microbial community structure in the soil and also recruit special microbial groups in rhizosphere for protection against pests. The deposition of plant mucilage and root exudates directly influence assemblage and activities of rhizosphere microbiome. The excursion of nematode in the rhizosphere influences quality and quantity of root exudates which have directs effect on pathogenic and beneficial microbes. We seek to explore and understand the diversity and functioning of the microbial communities and respective biotic, abiotic factors shaping these bacterial and fungal groups. Beside basic ecological mechanisms, we are also studying the microbial functional genes to improve their parasitic abilities and adoptation in adverse environmental conditions. By keeping in view the recent achievements in the field of microbial ecology and diversity, major research projects will be designed to investigate the fungal and bacterial groups involved in special functions in micr-environments and their interactions with host and pathogens.

**References**

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