个 人 简 介

个人概况

姓名：王敏

单位：南京农业大学，资源与环境科学学院植物营养学系

职称：副教授

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教育经历

2004/09 - 2008/06，湖南农业大学，资源环境学院农业资源与环境系，学士

2008/09 - 2013/11，南京农业大学，资源与环境科学学院植物营养学系，博士（硕博连读）

工作经历

2013/12 – 2016/12，南京农业大学，资源与环境科学学院植物营养学系，讲师

2017/01 至今，南京农业大学，资源与环境科学学院植物营养学系，副教授

研究领域

植物营养与病害

植物-微生物互作

主要获奖情况

1、2015 年获江苏省优秀博士学位论文，论文题目：土传黄瓜枯萎病致病生理机制及其与氮素营养关系研究，指导教师：郭世伟教授

2、2018 年入选中国科协青年托举人才（植物营养与肥料学会）

3、2019 年入选南京农业大学第四批“钟山学术新秀”

主要科研项目

1、 氮素形态驱动下根际碳沉积与微生物组装对土传枯萎病的影响机制，32072673，国家自然科学基金面上项目， 2021-2024，58 万元，项目主持人；

2、 中国科协青年人才托举工程项目（植物营养与肥料学会），2018-2020 年，45 万元，项目主持人；

3、 耕地地力对化肥养分利用的制约与促进机制及其调控，（连作障碍抑制作物对养分吸收利用机理与消减技术，2016YFD0200305），国家重点研发计划子课题，2016-2020 年，90 万元，子课题主持；

4、 作物高产高效的土壤微生物区系特征及其调控，（外源和土著有益菌向根表趋化成膜和作用机制研究，2015CB150505），国家重点基础研究发展计划（973 计划）子课题，2015-2019 年，81 万元，子课题主持；

5、 黄瓜枯萎病菌毒素产生过程及其作用机理，KYZ201625，中央高校基本业务费，2016-2018 年，10 万元，项目主持人；

6、 硝态氮营养抑制黄瓜土传枯萎病发生的机制研究，31401941，国家自然科学基金（青年基金），2015-2017 年，25 万元，项目主持人；

7、 硝态氮营养抑制黄瓜土传枯萎病发生的机制研究，KJQN201514，中央高校基本业务费，2015-2017 年，10 万元，项目主持人。

代表性论文（第一或通讯作者）

1. Zechen Gu, **Min Wang***, Ying Wang, Linxing Zhu, Luis Alejandro Jose Mur, Jun Hu, and Shiwei Guo*. Nitrate stabilizes rhizospheric fungal community to suppress Fusarium wilt disease in cucumber. Molecular Plant-Microbe Interactions, 2020, 33(4), 590-599.
2. Ruirui Wang, Jian Huang, Aichen Liang, Ying Wang, Luis Alejandro Jose Mur, **Min Wang***, Shiwei Guo. Zinc and copper enhance cucumber tolerance to fusaric acid by mediating its distribution and detoxification and modifying the antioxidant system. International Journal of Molecular Sciences, 2020, 21(9): 3370.
3. Cuimin Gao, **Min Wang***, Lei Ding, Yupei Chen, Zhifeng Lu, Jun Hu, Shiwei Guo*. High water uptake ability was associated with root aerenchyma formation

in rice: Evidence from local ammonium supply under osmotic stress conditions. Plant Physiology and Biochemistry, 2020, 150: 171-179.

4. Yuming Sun, **Min Wang***, Luis Alejandro Jose Mur, Qirong Shen, Shiwei Guo. Unravelling the roles of nitrogen nutrition in plant disease defences. International Journal of Molecular Sciences, 2020, 21(2): 572.

5. 王敏，周犇，曾吉兴，王瑞瑞，朱林星，沈其荣，郭世伟*.硝态氮抑制尖孢镰刀菌侵染促进黄瓜生长的内在生理机制. 植物营养与肥料学报，2020, 26(10): 1-9.

6. **Min Wang**, Zechen Gu, Ruirui Wang, Junjie Guo, Ning Ling, Les G Firbank, Shiwei Guo*. Plant primary metabolism regulated by nitrogen contributes to plant–pathogen interactions. Plant and Cell Physiology, 2019, 60(2): 329–342.

7. Ruirui Wang[#], **Min Wang**[#] (equal contributor), Kehao Chen, Shiyu Wang, Luis Alejandro Jose Mur, Shiwei Guo*. Exploring the roles of aquaporins in plant–microbe interactions. Cells, 2018, 7(12): 267.

8. **Min Wang**, Limin Gao, Suyue Dong, Yuming Sun, Qirong Shen and Shiwei Guo*. Role of silicon on plant-pathogen interactions. Frontiers in Plant Science, 2017, 8:701.**（ESI 高被引论文）**

9. Jinyan Zhou[#], **Min Wang**[#] (equal contributor), Yuming Sun, Zechen Gu, Ruirui Wang, Asanjan Saydin, Qirong Shen and Shiwei Guo*. Nitrate increased cucumber tolerance to Fusarium wilt by regulating gungal toxin production and distribution. Toxins, 2017, 9(3): 100.

10. **Min Wang**, Yuming Sun, Zechen Gu, Ruirui Wang, Guomei Sun, Chen Zhu, Shiwei Guo and Qirong Shen*. Nitrate protects cucumber plants against *Fusarium oxysporum* by regulating citrate exudation. Plant and Cell Physiology, 2016, 57(9): 2001-2012.

11. **Min Wang**, Lei Ding, Limin Gao, Yingrui Li, Qirong Shen and Shiwei Guo*. The interactions of aquaporins and mineral nutrients in higher plants. International Journal of Molecular Sciences, 2016, 17(8): 1229.

12. **Min Wang**, Yuming Sun, Guomei Sun, Xiaokang Liu, Luchong Zhai, Qirong Shen and Shiwei Guo*. Water balance altered in cucumber plants infected with *Fusarium oxysporum* f. sp. *Cucumerinum*. Scientific Reports, 2015, 5:7722.

13. **Min Wang**, Ning Ling, Xian Dong, Xiaokang Liu, Qirong Shen and Shiwei Guo*. Effect of fusaric acid on the leaf physiology of cucumber seedlings. European Journal of Plant Pathology, 2014, 138: 103-112.

14. **Min Wang**, Qirong Shen, Guohua Xu, Shiwei Guo*. New insight into the strategy for nitrogen metabolism in plant cells. International Review of Cell and Molecular Biology, 2014, 310: 1-37.

15. **Min Wang,** Yinfeng Xiong, Ning Ling, Xumeng Feng, Zengtao Zhong, Qirong Shen and Shiwei Guo*. Detection of the dynamic response of cucumber leaves to fusaric acid using thermal imaging. Plant Physiology and Biochemistry, 2013, 66: 68-76.

16. **Min Wang,** Qingsong Zheng, Qirong Shen and Shiwei Guo*. The critical role of potassium in plant stress response. International Journal of Molecular Sciences, 2013, 14(4): 7370-7390.**（ESI 高被引论文）**

17. **Min Wang,** Ning Ling, Xian Dong, Yiyong Zhu, Qirong Shen and Shiwei Guo*. Thermographic visualization of leaf response in cucumber plants infected with the soil-borne pathogen *Fusarium oxysporum* f. sp. *cucumerinum*. Plant Physiology and Biochemistry, 2012, 61: 153-161.