沈丹宇

职　　称：副教授，硕士生导师

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研究方向：

1、疫霉菌与植物互作的生物信息学研究

2、生物熏蒸技术的应用与基础

教育经历：

2009.09 – 2014.06 南京农业大学植物保护学院，农学博士

2005.09 – 2009.06 沈阳农业大学植物保护学院，农学学士

工作经历：

2019.01 – 至今，南京农业大学植物保护学院，副教授

2018.07 – 2018.12，南京农业大学植物保护学院，助理研究员

2014.07 – 2018.06，南京农业大学生命科学学院，师资博士后

执教课程：

本科生《生物信息学》

承担课题：

1. 国家自然科学基金面上项目（32070139），2021.01-2024.12，主持
2. 国家自然科学基金青年项目（31501589），2016.01-2018.12，主持
3. 中央高校基本科研业务费（KJQN201660）：，2016.01-2018.12，主持
4. 中国博士后科学基金面上项目（2015M571770），2016.01-2017.12，主持

代表性科研成果：

1. **Shen D**, Nyawira K, Xia A*. New discoveries and applications of mosquito fungal pathogens. **Current Opinion in Insect Science**, 2020, 40:111-116.
2. Lu X, Dai T, Yu J, Dou D, **Shen D***. Rapid and visual detection of *Phytophthora infestans* using a lateral flow strip-based recombinase polymerase amplification assay. **Plant Disease**, 2020, 11:2774-2778. (通讯作者)
3. **Shen D**, Wang J, Dong Y, Zhang M, Tang Z, Xia Q, Nyawira K, Jing M, Dou D, Xia A*. The glycoside hydrolase 18 family chitinases are associated with development and virulence in the mosquito pathogen *Pythium guiyangense*. **Fungal Genetics and Biology**, 2020, 135:103290.
4. **Shen D**, Tang Z, Wang C, Wang J, Dong Y, Chen Y, Wei Y, Cheng B, Zhang M, Laura J. Grenville-Briggs, Tyler BM, Dou D, Xia A*. Infection mechanisms and putative effector repertoire of the mosquito pathogenic oomycete *Pythium guiyangense* uncovered by genomic analysis. **PLoS Genetics**, 2019, 15(4):e1008116.
5. **Shen D**, Dong Y, Wei Y, Zhang M, Wang J, Tang Z, Xia Q, Nyawira K, Jing M, Dou D, Xia A*. Genome-wide and functional analyses of tyrosine kinase-like family genes reveal potential roles in development and virulence in mosquito pathogen *Pythium guiyangense*. **Fungal Genetics and Biology**, 2019, 130:11-18.
6. Yu J#, **Shen D#**, Dai T, Lu X, Xu H, Dou D*. Rapid and equipment-free detection of *Phytophthroa capsici* using lateral flow strip-based recombinase polymerase amplification assay. **Letters in Applied Microbiology**, 2019, 69:64-70. (共同一作)

7. Dai T, Yang X, Hu T, Jiao B, Xu Y, Zheng X, **Shen D***. Comparative evolution of a novel recombinase polymerase amplification-lateral flow dipstick (RPA-LFD) assay, LAMP, conventional PCR, and leaf-disc baiting methods for detection of *Phytophthora sojae*. **Frontiers in Microbiology**, 2019, 10:1884. (通讯作者)
8. Yu J, Zhao Y, Ai G, Xu H, Dou D, **Shen D***. Development of multiplex PCR assay for simultaneous detection of five cucumber pathogens based on comparative genomics. **Australasian Plant Pathology**, 2019, 48:369-372. (通讯作者)
9. **Shen D**, Li Q, Sun P, Zhang M, Dou D*. Intrinsic disorder is a common structural characteristic of RxLR effectors in oomycete pathogens. **Fungal Biology**, 2017, 121:911-919.
10. **Shen D**, Chai C, Ma L, Zhang M, Dou D*. Comparative RNA-Seq analysis of Nicotiana benthamiana in response to *Phytophthora parasitica* infection. **Plant Growth Regulation**, 2016, 80:59-67.

社会服务工作：

Molecular Plant-Microbe Interactions、Fungal Genetics and Biology、Plant Disease、Sensors、Frontiers in Microbiology、Current Genetics、Phytopathology Research 等期刊审稿人