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研究方向:

植物病原真菌致病机制

教育经历:

2013.09 – 2018.06 南京农业大学植物保护学院, 农学博士

2009.09 – 2013.06 南京农业大学植物保护学院, 农学学士

工作经历:

2021.07 – 今 南京农业大学植物保护学院, 副研究员

2018.06 – 2021.06 南京农业大学植物保护学院, 师资博士后

承担课题:

1. 国家自然科学基金面上项目, 31972979, 活性氧诱导 MoOsm-MoPtp2 介导 MoAtf1 的磷酸化在稻瘟病菌抑制寄主防卫反应中的作用机制研究, 2020/01-2023/12;
2. 江苏省自然科学基金青年基金项目, BK20190512 稻瘟病菌致病因子

- MoYvh1 调控合成的毒性效应分子的鉴定与分析, 2019/07-2022/06;
3. 中国博士后科学基金面上项目, 稻瘟病菌致病因子 MoYvh1 调控的效应分子的鉴定与分析, 2018/08-2020/08

代表性科研成果:

1. **Liu XY**, Zhou QK, Guo ZQ, Liu P, Chai N, Cai YC, Wang WY, Yin ZY, Zhang HF, Zheng XB, Zhang ZG*. A self-balancing circuit centered on MoOsm1 kinase governs adaptive responses to host-derived ROS in *Magnaporthe oryzae*. *elife*, 2020, 9: e61605
2. Li Y#, **Liu XY#**, Liu MX, Wang Y, Zou YB, You YM, Yang LN, Hu, JX, Zhang HF, Zheng XB, Wang P, Zhang ZG*. *Magnaporthe oryzae* auxiliary activity protein MoAa91 functions as chitin-binding protein to induce appressorium formation on artificial inductive surfaces and suppress plant immunity. *mBio*, 2020, 11(2). pii: e03304-19
3. **刘昕宇**, 刘木星, 尹梓屹, 张海峰, 张正光* 稻瘟病菌与水稻互作早期侵染机制研究进展。中国科学基金 2020 年 04 期
4. Qian B, **Liu XY**, Ye ZY, Zhou QK, Liu P, Yin ZY, Wang WH, Zheng XB, Zhang HF*, Zhang ZG. Phosphatase-associated protein MoTip41 interacts with the phosphatase MoPpe1 to mediate crosstalk between TOR and cell wall integrity signalling during infection by the rice blast fungus *Magnaporthe oryzae*. *Environ Microbiol*, 2021, 23(2):791-809
5. **Liu X.**, Yang J., Qian B., Cai Y., Zou X., Zhang H., Zheng X., Wang P., Zhang Z.* (2018). MoYvh1 subverts rice defense through functions of

ribosomal protein MoMrt4 in *Magnaporthe oryzae*. PLoS Pathogens 14(4):e1007016.

6. Qian B, **Liu XY**, Zhang HF, Lang Y, Zheng XB, Wang P, Zhang ZG*.

Protein phosphatase MoPpe1 and associated protein MoSap1 mediate CWI and TOR pathway crosstalk to regulate growth and pathogenicity of *Magnaporthe oryzae*. Environ. Microbiol, 2018, 20(11): 3964–3979

7. Li Y, Yin ZY, **Liu XY**, You YM, Zou YB, Liu MX, He YL, Zhang HF, Zheng XB, Zhang ZG*, Wang P. MicroRNA-like milR236, regulated by

transcription factor MoMsn2, targets histone acetyltransferase MoHat1 to play a role in appressorium formation and virulence of the rice blast fungus *Magnaporthe oryzae*. Fungal Genet Biol, 2020, 137: 103349

8. **Liu X.**, Qian B., Gao C., Huang S., Cai Y., Zhang, H., Zheng X. and Zhang, Z.* (2016) The dual-specificity protein phosphatase MoYvh1

functions upstream of MoPdeH to regulate the development and pathogenicity in *Magnaporthe oryzae*. Molecular Plant-Microbe Interactions 29(6):496-507

9. **Liu X.**, Cai Y., Zhang X., Zhang H*., Zheng X. and Zhang Z. (2016)

Carbamoyl Phosphate Synthetase Subunit MoCpa2 Affects

Development and Pathogenicity by Modulating Arginine Biosynthesis in *Magnaporthe oryzae*. Frontiers in Microbiology 7:2023

10. Li M., **Liu X.**, Liu Z., Sun Y., Liu M., Wang X., Zhang H., Zheng X.,

Zhang Z. (2016). Glycoside Hydrolase MoGls2 Controls Asexual/Sexual

Development, Cell Wall Integrity and Infectious Growth in the Rice Blast
Fungus. PLoS One 11(9):e0162243.