



南京农业大学

植物保护学院



首页 学院概况 师资队伍 科学研究 人才培养 学生工作 党群组织 校友风采

张正光 老师

个人简历

张正光，博士，教授，博士生导师。2002年毕业于南京农业大学植物病理学专业获博士学位。2000.4—2000.12在蛋白质工程及植物基因工程国家重点实验室从事植物对疫霉菌非寄主抗性分子机制研究；2005-2006 美国路易丝安娜州立大学健康研究中心儿童研究所从事真菌分子生物学与信号传导博士后研究。现致力于植物病原真菌分子生物学及植物与病原菌互作分子机制研究。在国内外发表研究论文50余篇，其中SCI论文20多篇。南京农业大学“133人才工程”学术带头人。2006年入选江苏省“青蓝工程”优秀骨干教师，2007年入选教育部新世纪优秀人才支持计划，2011年获江苏省青年科技奖。

研究方向

1. 植物对疫霉菌的非寄主抗性分子机制研究
2. 稻瘟病菌的致病分子机制研究。

研究课题

主持的科研项目

1. 2004.1-2006.12 疫霉菌诱导非寄主植物过敏性反应激发子基因的克隆. 国家自然科学基金项目(30300228),
2. 2005.1-2007.12 疫霉菌不同激发子诱导非寄主抗性中信号分子作用机制比较分析. 国家自然科学基金项目(30471123),
3. 2005.6-2007.12 疫霉菌激发子诱导非寄主抗性中关键基因的克隆及功能分析. 江苏省创新人才基金项目(BK2005421),
4. 2006.10-2011.9 农作物重大病害成灾机理及控制的基础研究. 国家“973”计划子课题,
5. 2008-2010 教育部新世纪人才支持计划(NCT-07-0442).
6. 2008.3-2010.10 利用病毒诱导基因沉默技术高通量筛选非寄主抗性基因及其应用. 国家“863”计划(2008AA10Z410)
7. 2008.1-2011.12 疫霉菌激发子诱发的调控过敏性细胞死亡的基因克隆及功能分析. 国家自然科学基金项目(30871605)
8. 2011.1-2013.12 由NbALY916介导的信号途径调控疫霉菌激发子诱发的过敏性细胞死亡分子机制研究. 国家自然科学基金项目(31071645)

参加科研项目5项.

研究成果

1. Qi ZQ, Wang Q, Dou XY, Wang W, Zhao Q, Lv RL, Zhang HF, Zheng XB, Wang P, Zhang ZG. MoSwi6, an MAP kinase Mps1 interacting APSES family transcription factor, is required for hyphal and conidial morphogenesis, appressorial function, and pathogenicity of Magnaporthe oryzae. *Molecular Plant Pathology* (Accepted) (Corresponding author) (IF 3.71)
2. Zhang HF, Tang W, Liu KY, Huang Q, Zhang X, Yan X, Chen Y, Wang JS, Qi ZQ, Wang ZY, Zheng XB, Wang P, Zhang ZG. Eight RGS and RGS-like proteins orchestrate growth, differentiation, and pathogenicity of Magnaporthe oryzae. *PLoS Pathogens*, 2011, 7: e1002450 (Corresponding author) (IF 9.08)
3. Zhang HJ, Wang MF, Wang W, Li DQ, Huang Q, Wang YC, Zheng XB, Zhang ZG. Silencing of G proteins uncovers diversified plant responses when challenged by three elicitors in *Nicotiana benthamiana*. *Plant Cell & Environment*, 2012, 35: 72-85 (Corresponding author) (IF 5.15)
4. Zhang LS, Lv RL, Dou XY, Qi ZQ, Hua CL, Zhang HF, Wang ZY, Zheng XB, Zhang ZG. The function of MoG1k1 in integration of glucose and ammonium utilization in Magnaporthe oryzae. *PLoS ONE*, 2011, 6(7): e22809 (Corresponding author) (IF 4.41)
5. Zhang HF, Liu KY, Zhang X, Tang W, Wang JS, Guo M, Zhao Q, Zheng XB, Wang P, Zhang ZG. Two phosphodiesterase genes, PDEL and PDEH, regulate development and pathogenicity by modulating intracellular cyclic AMP levels in Magnaporthe oryzae. *PLoS ONE*, 2011, 6(2): e17241 (Corresponding author) (IF 4.41)
6. Guo M, Chen Y, Du Y, Dong YH, Guo W, Zhai S, Zhang HF, Zhang ZG, Wang YC, Wang P, Zheng XB. The bZIP transcription factor MoAP1 mediates the oxidative stress response and is crucial for pathogenicity of the rice blast fungus Magnaporthe oryzae. *PLoS Pathogens*, 2011, 7(2):e1001302 (Corresponding author) (IF 9.08)
7. Dou XY, Wang Q, Qi ZQ, Song WW, Wang W, Guo M, Zhang HF, Zhang ZG, Wang P, Zheng XB. MoVam7, a conserved SNARE component involved in vacuole assembly, is required for growth, endocytosis, chitin distribution, ROS accumulation, and

- pathogenesis of *Magnaporthe oryzae*. PLoS ONE, 2011, 6(1): e16439 (Corresponding author) (IF 4.41)
8. Song WW, Dou XY, Qi ZQ, Wang Q, Zhang X, Zhang HF, Guo M, Dong SM, Zhang ZG, Wang P, Zheng XB. R-SNARE homolog MoSec22 is required for conidiogenesis, cell wall integrity, and pathogenesis of *Magnaporthe oryzae*. PLoS ONE, 2010, 5: e13193 (Corresponding author) (IF 4.41)
9. Zhang HF, Liu KY, Zhang X, Song WW, Dong YH, Zhao Q, Guo M, Zheng XB, Zhang ZG. A two-component histidine kinase, SLN1, is required for cell wall integrity and pathogenicity of the rice blast fungus, *Magnaporthe oryzae*. Current Genetics, 2010 56:517-528 (Corresponding author) IF 2.32)
10. Zhang HJ, Zheng XB, Zhang ZG. The role of vacuolar processing enzymes in plant immunity. Plant Signaling and Behavior, 2010, 5: 1565-1567 (Corresponding author)
11. Zhang HJ, Dong SM, Wang MF, Wang W, Song WW, Dou XY, Zheng XB, and Zhang ZG. The role of vacuolar processing enzyme (VPE) from *Nicotiana benthamiana* in elicitor-triggered hypersensitive response and stomatal closure. Journal of Experimental Botany, 2010, 61: 3799-3812 (Corresponding author) (IF 4.82)
12. Guo M, Guo W, Chen Y, Dong SM, Zhang X, Song WW, Wang W, Wang Q, Lv RL, Zhang ZG, Wang YC, Zheng XB. The bZIP transcription factor Moatf1 mediates oxidative stress responses and is necessary for full virulence of the rice blast fungus *Magnaporthe oryzae*. Molecular Plant-Microbe Interaction, 2010, 23: 1053-1068 (Corresponding author) (IF 4.4)
13. Zhang HJ, Fang Q, Zhang ZG, Wang YC, Zheng XB. The role of respiratory burst oxidase homologs in elicitor-induced stomatal closure and hypersensitive response in *Nicotiana benthamiana*. Journal of Experimental Botany, 2009, 60: 3109-3122 (Corresponding author) (IF 4.82)
14. Zhang HF, Zhao Q, Liu KY, Zhang ZG, Wang YC, Zheng XB. MgCRZ1, a transcription factor of *Magnaporthe grisea*, controls growth, development and is involved in full virulence. FEMS Microbiology Letter, 2009, 293: 160-169 (Corresponding author) (IF 2.27)
15. Gan YZ, Zhang LS, Zhang ZG, Dong SM, Li J, Wang YC, Zheng XB. The LCB2 subunit of the sphingolipid biosynthesis enzyme serine palmitoyltransferase can function as an attenuator of the hypersensitive response and Bax-induced cell death. New Phytologist, 2009, 181: 127-146 (Corresponding author) (IF 6.52)
16. Dong SM, Zhang ZG, Zheng XB, Wang YC. Mammalian pro-apoptotic bax gene enhances tobacco resistance to pathogens, Plant Cell Reports, 2008, 27(9):1559-69 (IF 1.97)
17. Li L, Shen G, Zhang ZG, Wang YL, Thompson JK, Wang P. Canonical heterotrimeric G proteins regulating mating and virulence of *Cryptococcus neoformans*. Molecular Biology of the Cell. 2007, 18: 4201-4209 (IF 6.56)
18. Li J, Zhang HF, Zhang ZG, Wang YC, Zheng XB. Cloning of genes encoding nonhost hypersensitive response-inducing elicitors from *Phytophthora boehmeriae*. Chinese Science Bulletin, 2007, 52: 231-237 (Corresponding author) (IF 0.77)
19. Zhang ZG, Zheng XB, Wang YC, Ko WH. Evaluation of the rearrangement of taxonomic position of *Peronophythora litchii* based on partial DNA sequences. Botanical Studies, 2007, 48: 79-89. (IF 0.88)
20. Zhang ZG, Li YQ, Wang YC, Zheng XB. Molecular Detection of *Phytophthora capsici* in infected plant tissues, soil and water. Plant Pathology, 2006, 55: 770-775 (IF 2.01)
21. Wang ZY, Wang YC, Zhang ZG, Zheng XB. Genetic relationships among Chinese and American isolates of *Phytophthora sojae* assessed by RAPD markers. Chinese Science Bulletin, 2006, 51: 2095-2012 (IF 0.77)
22. Wang ZY, Wang YC, Chen XR, Shen G, Zhang ZG, Zheng XB. Differential screening reveals genes differentially expressed in low- and high-virulence near-isogenic *Phytophthora sojae* lines. Fungal Genetics and Biology, 2006, 43: 826-839 (IF 3.43)
23. Zhang ZG, Zhang JY, Wang YC and Zheng XB. Molecular detection of *Fusarium oxysporum* f. sp. *niveum* and *Mycosphaerella melonis* in infected plant tissues and soil. FEMS Microbiology Letter, 2005, 249: 39-47 (IF 2.27)
24. Zhang ZG, Chen RH, Wang YC, Wang KR, Zheng XB. Molecular detection of *Verticillium albo-atrum* by PCR Based on ITS Sequences. Agricultural Sciences in China, 2005, 4(10): 760-766
25. Li J, Zhang ZG, Ji R, Wang YC, Zheng XB. Hydrogen peroxide regulates elicitor PB90-induced cell death and defense in non-heading Chinese cabbage. Physiological and Molecular Plant Pathology, 2006, 67: 220-230 (co-first author) (IF 1.4)
26. Ji R, Zhang ZG, Wang YC, Zheng XB. *Phytophthora* elicitor PB90 induced apoptosis in suspension cultures of Tobacco. Chinese Science Bulletin, 2005, 50: 435-439 (IF 0.77)
27. Wang YC, Hu DW, Zhang ZG, et al.. Purification and immunocytolocalization of a novel *Phytophthora boehmeriae* protein inducing the hypersensitive response and systemic acquired resistance in tobacco and Chinese cabbage. Physiological and Molecular Plant Pathology, 2003, 63: 223-232 (IF 1.4)
28. Zhang ZG, Wang YC, Li J, et al.. The role of SA in the hypersensitive response and systemic acquired resistance induced by the elicitor PB90 of *Phytophthora boehmeriae*. Physiological and Molecular Plant Pathology, 2004, 65: 31-38 (IF 1.4)
29. Zhang ZG, Zhang JY, Zheng XB et al.. Molecular distinctions between *Phytophthora capsici* and *Ph. tropicalis* based on ITS sequences of ribosomal DNA. J. Phytopathology, 2004, 152: 358-364 (IF 0.896)

获得荣誉

1. 2005年获教育部提名国家自然科学基金二等奖，疫霉菌多样性及其产生机制（3 / 7）。
2. 2007年获教育部科学技术进步一等奖，重要植物病原生物快速分子检测技术研究及其应用（5/9）

社会兼职

国际期刊PLoS ONE编委

联系方式

025-84396972 (Tel) Email: zhgzhang@njau.edu.cn

地址：江苏省南京市玄武区卫岗1号 邮政编码：210095 电话：025-84395240

Copyright 2006-2011 南京农业大学植物保护学院

