# **CURRICULUM VITAE**

Personal Information					
Name	Daohong Jiang	Gender	Male		
Position Title		professor			
Working Department		Plant Pathology		TV	
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### Research Interest

Mainly on Mycoviruses, plant fungal pathogens and biological control of soil-brone diseases.

- Mycoviruses that infect Sclerotinia sclerotiorum, we try to screen hypovirulence-associated mycoviruses, and study their potential on controlling Sclerotinia diseases.
- Pathogenicity and sclerotial development of S. sclerotiorum, we try to understand the pathogenicity of S. sclerotiorum on molecular levels, such as how this pathogen suppress the innate immunity of host at early stage of infection, we also try to identify genes who are involved in sclerotial formation and maturation.

Biological control of Sclerotinia diseases with mycoparasite *Coniothyrium minitans*, we especially focus on using *C. minitans* to control rapeseed (*Brassica napus*) stem white rot, and understanding the conidiation and parasitism of *C. minitans* on molecular levels.

## **Professional Memberships**

- Committee member of Chinese Mycology Society (2011-)
- Committee member of Hubei Association for science and technology (2011-)
- Vice Chief editor, Acta Phytopathologia Sinica (2009-)
- Committee member of Chinese Society for Plant Pathology (2006-)
- Committee member of Young Pathologist work councils, China Society of Plant Pathology

(2005-2009)

#### Other Roles

- Director of the Provincial Key Lab of Plant Pathology of Hubei Province (2011-)
- Member, Academic degrees committee of Huazhong Agricultural University

## **Education & Working Experience**

- Ph. D degree in 1999, Microbiology, Huazhong Agricultural University
- Master degree in 1995, Plant Pathology, Huazhong Agricultural University
- Bachelor degree in 1992, Plant Protection, Huazhong Agricultural University
- 1/2004- Professor, Plant Pathology, College of Plant Science and Technology, Huazhong Agricultural University
- 10/2004- Vice-dean, Plant Science and Technology, Huazhong Agricultural University
- 1/2001 to 12/2003 Associate Professor, Plant Pathology, College of Plant Science and Technology, Huazhong Agricultural University
- 11/2000 to 8/2001 Visiting Scientist, Department of Plant Pathology, China Agricultural University
- 2001- Principal investigator, State Key Laboratory of Agricultural Microbiology (P R China)
- 10/1999 to 10/2000 Visiting Scientist, Department of Plant Pathology, University of Kentucky
- 1/1998 to 12/2000 Lecturer, Department of Plant Protection, Huazhong Agricultural University
- 7/1995 to 12/1997 Assistant professor, Department of Plant Protection, Huazhong Agricultural University

#### **Publications**

- 1. Liu H, Fu Y, Xie J, Cheng J, Ghabrial SA, Li G, Yi X and Jiang D\*. 2012. Discovery of novel dsRNA viral sequences by in Silico cloning and implications for viral diversity, host range and evolution. PLoS One 7(7): e42147
- 2. Liu H, Fu Y, Xie J, Cheng J, Ghabrial SA, Li G, Peng Y, Yi X, and Jiang D\*. 2012.

- Evolutionary genomics of mycovirus-related dsRNA viruses reveals cross-family horizontal gene transfer and evolution of diverse viral lineages. BMC Evolutionary Biology 12:91.
- 3. Wu M, Jin F, Zhang J, Yang L, Jiang D and Li G. 2012. Characterization of a novel bipartite double-stranded RNA mycovirus conferring hypovirulence in the phytopathogenic fungus Botrytis porri. Journal of Virology 86: 6605-6619.
- 4. Zeng F, Gong X, Muhammad H, Fu Y, Xie J, Cheng J, Li G, Jiang D\*. 2012. The fungal cell wall integrity-associated MAP kinase cascade in the sclerotial mycoparasite fungus Coniothyrium minitans is required for conidiation and mycoparasitism. Fungal Genetics and Biology 49: 347-357.
- 5. Yu Y, Jiang D, Xie J, Cheng J, Li G, Yi X, Fu Y. 2012. Ss-Sl2, a novel cell wall protein with PAN modules, is essential for sclerotial development and cellular integrity of Sclerotinia sclerotiorum. PloS ONE 7(4): e34962.
- 6. Zhou J, Fu Y, Xie J, Li B, Jiang D, Li G, Cheng J. 2012. Identification of microRNA-like RNAs in a plant pathogenic fungus Sclerotinia sclerotiorum by High-throughput sequencing. Mol Genet Genomics 287: 275-82.
- 7. Liu H, Fu Y, Li B, Yu X, Xie J, Cheng J, Ghabrial SA, Li G, Yi X and Jiang D. 2011. Widespread Endogenization of Densoviruses and Parvoviruses in Animal and Human Genomes. Journal of Virology 85: 9863-9862.
- 8. Liu H, Fu Y, Xie J, Cheng J, Ghabrial SA, Li G, Peng Y, Yi X, and Jiang D\*. 2011. The Evolution of Virus and Host: Widespread Horizontal Gene Transfer from Circular Single-stranded DNA Viruses to Eukaryotic Genomes. BMC Evolutionary Biology 11: 276.
- 9. Xie J, Xiao X, Fu Y, Liu H, Cheng J, Ghabrial SA, Li G, Jiang D\*. 2011. A novel mycovirus closely related to hypoviruses that infects the plant pathogenic fungus Sclerotinia sclerotiorum. Virology 418: 49-56.
- 10. Qin L, Gong Y, Xie J, Jiang D, Cheng J, Li G, Huang J and Fu Y. 2011. Phosphoribosylamidotransferase gene, the first gene for purine de novo synthesis, is essential for the conidiation of sclerotial mycoparasite Coniothyrium minitans. Fungal Genetics and Biology 48: 956-965.

- 11. Qin L, Fu Y, Xie J, Cheng J, Jiang D, Li, G and Huang J. 2011. A nested-PCR method for rapid detection of Sclerotinia sclerotiorum on petals of oilseed rape (Brassica napus). Plant Pathology 21: 271-277.
- 12. Yu X, Li B, Fu Y, Jiang D\*, Ghabrial SA, Li G, Peng Y, Xie J, Cheng J, Huang J, and Yi X. 2010. A geminivirus-related DNA mycovirus that confers hypovirulence to a plant pathogenic fungus. Proceedings of the National Academy of Sciences of USA 107: 8387-8392.
- 13. Liu H, Fu Y, Jiang D\*, Li G, Xie J, Cheng J, Peng Y, Ghabrial SA, and Yi X. 2010. Widespread horizontal gene transfer from double-stranded RNA viruses to eukaryotic nuclear genomes. Journal of Virology 84: 1876-11887.
- 14. Li B, Fu Y, Jiang D\*, Xie J, Cheng J, Li G, Mahammad H, Yi X. 2010. Cyclic GMP as a second messenger in the nitric oxide mediated conidiation of the mycoparasite Coniothyrium minitans. Applied and Environmental Microbiology 76: 2830-2836.
- 15. Yang L, Li G, Zhang J, Jiang D and Chen W. 2011. Compatibility of Coniothyrium minitans with compound fertilizer in suppression of Sclerotinia sclerotiorum. Biological Control 59: 221-227.
- 16. Huang R, Li G, Zhang J, Yang L, Che H, Jiang D, and Huang H. 2011. Control of postharvest botrytis fruit rot of strawberry by volatile organic compounds of Candida intermedia. Phytopathology 101: 859-869.
- 17. Han Y, Li G, Yang L, and Jiang D. 2011. Molecular cloning, characterization and expression analysis of a pacC homolog in the mycoparasite Coniothyrium minitans. World Journal of Microbiology and Biotechnology 27: 381-391.
- 18. Ren L, Li G and Jiang D. 2010. Characterization of some culture factors affecting oxalate degradation by the mycoparasite Coniothyrium minitans. Journal of Applied Microbiology 108: 173-180.
- 19. Zheng L, Lv R, Huang J, Jiang D, Liu X, Hsiang T. 2010. Integrated control of garlic leaf blight caused by Stemphylium solani in China. Canadian Journal of Plant Pathology 32: 135-145.
- 20. Yang L, Li G, Long Y, Hong G, Jiang D, Huang H. 2010. Effects of soil temperature and moisture on survival of Coniothyrium minitans conidia in central China. Biological

- Control 55: 27-33.
- 21. Zhang J, Wu M, Li G, Yang L, Yu L, Jiang D, Huang H, Zhuang W. 2010. Botrytis fabiopsis, a new species causing chocolate spot of broad bean in central China. Mycologia 102: 1114-1126.
- 22. Wu M, Zhang L, Li G, Jiang D, Ghabrial SA. 2010. Genome characterization of a debilitation-associated mitovirus infecting the phytopathogenic fungus Botrytis cinerea. Virology 406: 117-126.
- 23. Zhang L, Wu M, Li G, Jiang D, Huang H. 2010. Effect of Mitovirus infection on formation of infection cushions and virulence of Botrytis cinerea. Physiological and Moecular Plant Pathology 75: 75-80.
- 24. Zheng L, Lv R, Huang J, Jiang D, Hsiang T. 2010. Isolation, Purification, and Biological Activity of a Phytotoxin Produced by Stemphylium solani. Plant Disease 94: 1231-1237.
- 25. Liu H, Fu Y, Jiang D\*, Li G, Xie J, Peng Y, Yi X, Ghabrial SA. 2009. A novel mycovirus that is related to the human pathogen Hepatitis E virus and rubi-like viruses. Journal of Virology 83: 1981-1991.
- 26. Zhang L, Fu Y, Xie J, Jiang D\*, Li G, Yi X. 2009. A novel virus that infecting hypovirulent strain XG36-1 of plant fungal pathogen Sclerotinia sclerotiorum. Virology Journal 6: 96.
- 27. Wang X, Li G, Jiang D and Huang H. 2009. Screening of plant epiphytic yeasts for biocontrol of bacterial fruit blotch (Acidovorax avenae subsp citrulli) of hami melon. Biological Control 50: 164-171.
- 28. Bernardes-de-Assis J, Storari M, Zala M, Wang W, Jiang D, Li S, Jin M, McDonald B, and Ceresini P. 2009. Genetic Structure of Populations of the Rice-Infecting Pathogen Rhizoctonia solani AG-1 IA from China. Phytopathology 99: 1090-1099.
- 29. Yang L, Li G, Jiang D, Huang H. 2009. Water-assisted dissemination of conidia of the mycoparasite Coniothyrium minitans in soil. Biocontrol Science and Technology 19: 779-796.
- 30. Zhang J, Li G., Jiang D. 2009. First Report of Garlic Leaf Blight Caused by Botrytis porri in China. Plant Disease 93: 1216.

- 31. Xie J, Fu Y, Jiang D\*, Li G, Huang J, Li B, Hsiang T and Peng Y. 2008. Intergeneric transfer of ribosomal genes between two fungi. BMC Evolutional Biology 8: 87.
- 32. Li H, Fu Y, Jiang D\*, Li G, Ghabrial SA and Yi X. 2008. Down-regulation of Sclerotinia sclerotiorum gene expression in response to infection with Sclerotinia sclerotiorum debilitation-associated RNA virus. Virus Research 135: 95-106.
- 33. Yang L, Xie J, Fu Y, Jiang D\*, Li G and Lin F. 2008. Antifungal substances produced by Penicillium oxalicum strain PY-1-potential antibiotics against plant pathogenic fungi. World Journal of Microbiology and Biotechnology 24: 909-915.
- 34. Zhang J, Zou Q, Li G., Jiang D, Huang H. 2008. First report of onion bulb rot caused by Botrytis aclada in China. Plant Disease 92: 1133.
- 35. Wan M, Li G, Zhang J, Jiang D, Huang H. 2008. Effect of volatile substances of Streptomyces platensis F-1 on control of plant fungal diseases. Biological Control 46: 552-559.
- 36. Gong X, Fu Y, Jiang D\*, Li G and Yi X. 2007. L-arginine is essential for conidiation in the filamentous fungus Coniothyrium minitans. Fungal Genetics and Biology 44: 1368-1379.
- 37. Yang R, Han Y, Li G, Jiang D, Huang H. 2008. Effects of Ambient pH and Nutritional Factors on Antifungal Activity of the Mycoparasite Coniothyrium minitans. Biological Control 44: 116-127.
- 38. Ren L, Li G, Han Y, Jiang D, Huang H. 2007. Degradation of oxalic acid by Coniothyrium minitans and its effects on production and activity of b-1,3-glucanase of this mycoparasite. Biological Control 43: 1-11.
- 39. Yang R, Han Y, Li G, Jiang D, Huang H. 2007. Suppression of Sclerotinia sclerotiorum by antifungal substances produced by the mycoparasite Coniothyrium minitans. European Journal of Plant Pathology 119: 411-420.
- 40. Wu M, Zhang L, Li G, Jiang D, Hou M and Huang H. 2007. Hypovirulence and double-stranded RNA in Botrytis cinerea. Phytopathology 97: 1590-1599.
- 41. Xie J, Wei D, Jiang D\*, Fu Y, Li G, Ghabrial SA and Peng Y. 2006. Characterization of debilitation-associated mycovirus infecting the plant-pathogenic fungus Sclerotinia

- sclerotiorum. J Gen Virol 87: 241-249.
- 42. Li G, Huang H, Miao H, Erickson RS, Jiang D, Xiao Y. 2006. Biological control of Sclerotinia diseases of rapeseed by aerial applications of the mycoparasite Coniothyrium minitans. European Journal of Plant Pathology 114: 345-355.
- 43. Li M, Gong X, Zheng J, Jiang D\*, Fu Y, Hou M. 2005. Transformation of Coniothyrium minitans, a parasite of Sclerotinia sclerotiorum, with Agrobacterium tumefaciens. FEMS Microbiol Lett 243: 323-329. 9
- 44. Jiang D and Ghabrial SA. 2004. Molecular characterization of the chrysovirus Penicillium chrysogenum virus: the type species of a new family of dsRNA mycoviruses with multipartite genomes. Journal of General Virology 85: 2111-2121.
- 45. Cheng J, Jiang D\*, Yi X, Fu Y, Li G and Whipps JM. 2003. Production, survival and efficacy of Coniothyrium minitans conidia produced in shaken liquid culture. FEMS Microbiol Lett 227: 127-131.
- 46. Cheng J, Jiang D\*, Fu Y, Li G., Peng Y and Ghabrial SA. 2003. Molecular characterization of a dsRNA totivirus infecting the sclerotial parasite Coniothyrium minitans. Virus Research 93: 41-50.
- 47. Caston JR, Ghabrial SA, Jiang D, Rivas G, Alfonso C, Roca R, Luque D and Carrascosa JL. 2003. Three-dimensional structure of Penicillium chrysogenum virus: a double-stranded RNA virus with an genuine T=1 capsid. Journal of Molecular Biology 331:417-431.
- 48. Li G, Wang D, Jiang D, Huang HC. 2000 First report of Sclerotinia nivalis on lettuce in central China. Mycological Research 104: 232-237.
- 49. Li Guoqing, Jiang Daohong, Wang Daoben, Rimmer R. 1999 Double-stranded RNAs associated with hypovirulence of Sclerotinia sclerotiorum. Progress in Nature Science 9: 837-841.
- 50. Jiang D, Fu Y, Yi X, Wang DB.1998. Transmissible hypovirulent element in isolate Ep-1PN of Sclerotinia sclerotiorum. Chinese Science Bulletin 43: 779-781.

#### **Additional Information**

### Honor and awards

- 2007- Nominated as "Scientist for China Agriculture Research System" by Ministry of Agriculture of P R China (2007-)
- 2011, Funded by China National Funds for Distinguished Young Scientists (31125023)
- 2006, Funded by Program for New Century Excellent Talents in University, Ministry of Education of P R China
- 2004, Funded by Natural Science Foundation of Hubei Province for distinguish Young Scientist
- 2003, Fund by Special Program of Ministry of Education of China for Distinguished Young Teachers in College and University
- 2003, Funded by Fok Ying Dung Education Foundation for Young Teachers in College and University (Ministry of Education of P R China)
- 2010- Awarded as "Young expert with outstanding contributions for Hubei Province"
- 2007- Rewarded as "Youth Science and Technology Award of Hubei Province"
- 2006, Rewarded by Fok Ying Dung Education Foundation (Ministry of Education of P R China), and Ranked No. 1 in Research Group
- 2005, Awarded as "Potential Young Scientist of Wuhan City" by the committee of Science and Technology of Wuhan City
- 2004, Awarded as "Expert on teaching and research among young workers in Hubei Province" by Government of Hubei Province