

Curriculum Vitae

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Education:

- 1995.12 Ph.D in Plant Pathology, Northwestern Agricultural University, Yangling, and Institute of Genetics, Chinese Academy of Sciences, Beijing, China.
- 1992.07 Master of Agronomy in Plant Pathology, Northwestern Agricultural University, Yangling, China.
- 1989.07 Bachelor of Agronomy in Plant Protection, Northwestern Agricultural University, Yangling, China.

Research Experience:

- 2006.04-current: Professor of Plant Pathology, College of Plant Protection, Northwest A & F University, Yangling, China.
- 2001.05-2006.03: Research Fellow, Plant Cell Biology Group, Research School of Biological Sciences, The Australian National University, Canberra, Australia.
- 1996.01-2001.04: Postdoctoral Fellow, Department of Plant Pathology, University of California at Davis, California, USA.

Current Research funding:

1. China Agriculture Research System (CARS-10, 2011.01-2015.12, 3.5 million RMB, Program Scientist for potato late blight control);
2. National Natural Science Foundation of China (#30971881, 2010.01-2012.12, 340k RMB);
3. National Natural Science Foundation of China (#31125022, 2012.01-2014.12, 2.0 million RMB);
4. The National Basic Research Program (973 Program) from Ministry of Science and Technology (#2012CB114000, 2012.1-2015.12, 1.1 million RMB);

Publications:

1. Kale, S. D., Gu, B., Capelluto, D. G. S., Dou, D., Feldman, E., Cronin, A., Arredondo, F. D., Fudal, I., Rouxel, T., Lawrence, C. B., **Shan*, W.**, and Tyler*, B. M. 2010. External lipid PI3P mediates entry of eukaryotic pathogen effectors into plant and animal host cells. **Cell** 142: 284-295.
2. Zhang, M., Meng, Y., Wang, Q., Liu, D., Quan, J., Hardham, A. R., and **Shan, W.** 2012. PnPMA1, an atypical plasma membrane H⁺-ATPase, is required for zoospore development in *Phytophthora parasitica*. **Fungal Biology** 116: 1013-1023.
3. Liu, J., Luo, S. Z., Zhang, Q., Wang, Q. H., Chen, J. F., Guo, A. G., and **Shan, W***. 2012. Tn5 transposon mutagenesis in *Acidovorax citrulli* for identification of genes required for pathogenicity on cucumber. **Plant Pathology** 61: 364-374.
4. Zhang, M., Wang, Q., Xu, K., Meng, Y., Quan, J., and **Shan*, W.** 2011. Production of dsRNA sequences in host plant is not sufficient to initiate gene silencing in the colonizing oomycete pathogen *Phytophthora parasitica*. **PLoS ONE** 6 (11): e28114.
5. Gu, B., Kale, S. D., Wang, Q., Wang, D., Pan, Q., Cao, H., Meng, Y., Kang, Z. Tyler, B. M., and **Shan, W***. 2011. Rust secreted protein Ps87 is conserved in diverse fungal pathogens and contains a RXLR-like motif sufficient for translocation into plant cells. **PLoS ONE** 6 (11): e27217.
6. Wang, Y., Meng, Y., Zhang, M., Tong, X., Wang, Q., Sun, Y., Quan, J., Govers, F., and **Shan*, W.** 2011. Infection of *Arabidopsis thaliana* by *Phytophthora parasitica* and identification of variation in host specificity. **Molecular Plant Pathology** 12: 187-201.
7. Wang, Q., Han, C., Ferreira, A. O., Yu, X., Ye, W., Tripathy, S., Kale, S. D., Gu, B., Sheng, Y., Wang, X., Zhang, Z., Cheng, B., Dong, S., **Shan, W.**, Zheng, X., Dou, D., Tyler, B. M., Wang, Y. 2011. Transcriptional programming and functional interactions within the *Phytophthora sojae* RXLR effector repertoire. **Plant Cell** 23: 2064-2086.
8. Liu, T., Ye, W., Ru, Y., Yang, X., Gu, B., Tao, K., Lu, S. Dong, S., Zheng, X., **Shan, W.**, Wang, Y., and Dou, D. 2011. Two host cytoplasmic effectors are required for pathogenesis of *Phytophthora sojae* by suppression of host defenses. **Plant Physiology** 155 : 490-501.
9. Narayan, R. D., Blackman, L. M., **Shan, W.**, Hardham, A. R. 2010. *Phytophthora nicotianae* transformants lacking dynein light chain 1 produce non-flagellate zoospores. **Fungal Genetics and Biology** 47: 663-671.

10. Gan, P. H. P., **Shan, W.**, Blackman, L. M., and Hardham, A. R. 2009. Characterization of cyclophilin-encoding genes in *Phytophthora*. **Molecular Genetics and Genomics** 281: 565-578.
11. Hardham, A.R. and **Shan, W.** 2009. Cellular and molecular biology of *Phytophthora*-plant interactions. **The Mycota, Plant Relationships V**, Second Edition, edited by H. B. Deising. Springer-Verlag, Berlin. Pp. 3-27.
12. **Shan, W.**, Liu, J., and Hardham, A. R. 2006. *Phytophthora nicotianae* PnPMA1 encodes an atypical plasma membrane H⁺-ATPase that is functional in yeast and developmentally regulated. **Fungal Genetics and Biology** 43: 583-592.
13. **Shan, W.**, Marshall, J. S., and Hardham, A. R. 2004. Gene expression in germinated cysts of *Phytophthora nicotianae*. **Molecular Plant Pathology** 5: 317-330.
14. **Shan, W.** and Hardham, A. R. 2004. Construction of a bacterial artificial chromosome library, determination of genome size, and characterization of an *Hsp70* gene family of *Phytophthora nicotianae*. **Fungal Genetics and Biology** 41: 369-380.
15. **Shan, W.**, Cao, H., Leung, D., and Tyler, B. M. 2004. The *Avr1b* locus of *Phytophthora sojae* encodes an elicitor and a regulator required for avirulence on soybean plants carrying resistance gene *Rps1b*. **Molecular Plant-Microbe Interaction** 17: 394-403.
16. Chamnanpant, J., **Shan, W.**, and Tyler, B. M. 2001. High frequency mitotic gene conversion in genetic hybrids of the oomycete *Phytophthora sojae*. **Proceedings of National Academy of Sciences USA** 98: 14530-14535.