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The impact of defense hormones on the interaction between plants and the soil microbial community

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Curriculum Vitae

Jing Zhang was born in Jinan, Shandong Province in China on 22nd, May, 1991 (28th April, 1990 on official documents). She finished her bachelor in Geographic Information Systems (GIS) in 2013 at Sichuan Agricultural University in China, then she obtained her MSc degree in Phytopathology in 2015 at the same university. In September 2015, she started her PhD project on “The impact of defense hormones on the interaction between plants and soil microbial community” under the supervision of Prof. Dr. Peter Klinkhamer, Prof. Dr. Martijn Bezemer and Dr. Klaas Vrieling in the group of Plant Sciences, at Leiden university, in the Netherlands.

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Publications

Zhan, J., K, Vrieling., P.G.L. Klinkhamer., T.M. Bezemer., 2021. Activation of hormone-associated plant defense pathways alters the effects of soil microbial communities on plant performance. *Under revision in Basic and applied ecology*.

Zhan, J., K, Vrieling., P.G.L. Klinkhamer., T.M. Bezemer., 2021. Activation of SA-associated plant defense pathway alters the composition of soil bacterial communities. *Submitted to Plant and soil*.

Zhan, J., K, Vrieling., P.G.L. Klinkhamer., T.M. Bezemer., 2021. Negative effects of soil microorganisms on plant growth only extend to the first weeks. *Under revision in Journal of plant ecology*.

Zhang, J. and Zhu, T.H., 2018. First report of *Colletotrichum boninense* causing leaf anthracnose on *Eucalyptus robusta* (Smith) in the upper reaches of Yangtze River. *Plant Disease*, 102(7), pp.1446-1447.

Qiao, T.M., Zhang, J., Li, S.J., Han, S. and Zhu, T.H., 2016. Development of nested PCR, multiplex PCR, and loop-mediated isothermal amplification assays for rapid detection of *Cylindrocladium scoparium* on *Eucalyptus*. *The plant pathology journal*, 32(5), p.414.

Zheng, L., Peng, Y., Zhang, J., Ma, W.J., Li, S.J. and Zhu, T.H., 2015. First report of *Fusarium solani* causing root rot of *Juglans sigllata* Dode in China. *Plant Disease*, 99(1), pp.159-159.

Patents

Zhu TH, Zhang J, Zhu HMY, Li SJ, Qiao TM, Han S, Wang LM, Zhang LN. A detection kit for *Cylindrocladium scoparium* on *Eucalyptus* based on LAMP method. Patent number in China: CN104164486A

Zhu TH, Zhu HMY, Li SJ, Zhang J, Liu Y, Han S, Qiao TM, Zhang LN. A strain of *Bacillus amyloliquefaciens* and its liquid formulations application on controlling of *Cenangium ferruginosum*, Patent number in China: CN103555618A

Zhu TH, Yu Q, Li SJ, Zhang J, Han S, Qiao TM, Zhang LN, Zheng L. A Thiram-resistant mutant strain of *Streptomyces sampsonii* MV-2 and its liquid formulations. Patent number in China: CN103396961A

Zhu TH, Zhu HMY, Li SJ, Zhang J, Han S, Qiao TM, Zhang LN. A method of prevention and control of forest pest in fields. Patent number in China: CN103493811A