Control of Western flower thrips through jasmonate-triggered plant immunity

Chen, G.

Curriculum vitae

Gang Chen was born on the 18th of December 1989 in Bazhong, Sichuan Province, China. After he finished his high school studies in Bazhong Middle School, he started the study of Forestry at the Sichuan Agricultural University in 2008 and obtained his bachelor's degree in 2012. He continued his Master study in Silviculture under the supervision of Prof. Lihua Tu and Prof. Tingxing Hu at the same university from 2012 to 2014. During the MSc, he studied the Allelopathic effects of *Cinnamomum japonicum* on the plant growth of *Impatiens balsamina* and the characteristics of soil carbon components in a secondary evergreen broad-leaved forest. In October 2014, he started his PhD project, as described in this thesis, in the research group Plant Ecology and Phytochemistry, cluster Plant Science and Natural Products, Institute of Biology Leiden under the supervision of Prof. Dr. Peter G. L. Klinkhamer and Dr. Rocío Escobar-Bravo, supported by the China Scholarship Council. His PhD research mainly involved induced and constitutive defenses in tomato and chrysanthemum and is supported by a grant to Prof. Dr. Peter G. L. Klinkhamer from the Technology Foundation STW, project 'Green Defense against Pests (GAP)'.

List of publications

Chen G, Kim HK, Klinkhamer PGL, Escobar-Bravo R. Site-dependent induction of jasmonic acid-associated chemical defenses against Western flower thrips in chrysanthemum. Submitted.

Chen G, Klinkhamer PGL, Escobar-Bravo R, Leiss KA. 2018. Type VI glandular trichome density and their derived volatiles are differently induced by jasmonic acid in developing and fully developed tomato leaves: Implications for thrips resistance. *Plant Science* 276: 87-98.

Chen G, Escobar-Bravo R, Kim HK, Leiss KA, Klinkhamer PGL. 2018 Induced resistance against Western flower thrips by the Pseudomonas syringae-derived defense elicitors in tomato. *Frontiers in Plant Science* 9: 1417.

Chen G, Chen GS, Peng Y, Xu ZF, Hu HL, Hu TX, Liu L, Tan Y, Tu LH. 2018. Allelopathic effects of leaf litter from *Cinnamomum japonicum* on vegetative and reproductive growth of *Impatiens balsamina*. *Allelopathy Journal* 44(1): 89-106.

Escobar-Bravo R, Chen G, Kim HK, Grosser K, van Dam NM, Leiss KA, Klinkhamer PGL. 2018. Ultraviolet radiation exposure time and intensity modulate tomato resistance to herbivory through activation of jasmonic acid signaling. *Journal of Experimental Botany* **70**(1): 315-327.

Escobar-Bravo R, Chen G, Grosser K, Van Dam NM, Leiss KA, Klinkhamer PGL. 2019. Ultraviolet radiation enhances salicylic acidmediated defense signaling and resistance to *Pseudomonas syringae* DC3000 in a jasmonic acid deficient tomato mutant, *Plant Signaling & Behavior* DOI: 10.1080/15592324.2019.1581560

Steenbergen M, Abd-el-Haliem A, Bleeker P, Dicke M, Escobar-Bravo R, Cheng G, Haring MA, Kant MR, Kappers I, Klinkhamer PGL *et al.* 2018. Thrips advisor: exploiting thrips-induced defences to combat pests on crops. *Journal of Experimental Botany* **69**(8): 1837-1848.