Control of Western flower thrips through jasmonate-triggered plant immunity

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Stellingen

(Propositions)

Behorende bij het proefschrift van Gang Chen

Control of Western flower thrips through jasmonate-triggered plant immunity

1 Plants leaves display chemical and/or physical defenses of different magnitude in response to jasmonic acid depending on their development stage, and these responses are species-specific (this thesis).

2 Besides coronatine, other defense elicitor(s) is(are) present in *Pseudomonas syringae*-derived medium, and their exogenous application can induce tomato resistance to Western flower thrips (this thesis).

3 In chrysanthemum, both constitutive and inducible resistance to thrips vary among genotypes, and the levels of both are independent from each other (this thesis).

4 Plant resistance to thrips differs along the canopy and is most likely related to the distribution of nutrients, chemical compounds, and physical structures like trichomes (this thesis).

5 Developing high throughput phenotyping is needed to determine the mechanisms underlying plant resistance to herbivores.

6 The use of elicitors to induce plant resistance to arthropod herbivores is a promising strategy for integrated pest management.

7 Uncertainty exists when we try to apply the knowledge we obtained from a model plant to a non-model plant.

8 Breeding crops with high yield would most likely weaken their adaptability (In response to editorial of Nature Plants, January 2018).

9 One published paper, generally only five to six pages, requires two months of writing, ten rounds of revisions and hundred days of experimental work.

10 A good scientist should have a philosopher's brain, a comedian's mouth and a photographer's eye (Inspired by a cyber-language).