



Universiteit
Leiden
The Netherlands

Involvement of host and bacterial factors in *Agrobacterium*-mediated transformation

Shao, S.

Citation

Shao, S. (2019, November 28). *Involvement of host and bacterial factors in Agrobacterium-mediated transformation*. Retrieved from <https://hdl.handle.net/1887/80841>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/80841>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The following handle holds various files of this Leiden University dissertation:
<http://hdl.handle.net/1887/80841>

Author: Shao, S.

Title: Involvement of host and bacterial factors in *Agrobacterium*-mediated transformation

Issue Date: 2019-11-28

Stellingen

Behorende bij het proefschrift

Involvement of host and bacterial factors in *Agrobacterium*-mediated transformation

- 1 The Ada2 protein suppresses T-DNA integration in yeast. (this thesis).
- 2 Extrachromosomal T-circles are formed and temporarily present in yeast cells transformed by *Agrobacterium*. (this thesis).
- 3 The VirD2 protein acts in the host cell nucleus to promote transformation by T-DNA. (this thesis).
- 4 Recombination events between different Ti plasmids can lead to co-integrate formation; disintegration of such co-integrates may be the source of the evolution of new types of Ti plasmids. (this thesis).
- 5 It is unlikely that nopaline-type Ti-plasmids originate from nopaline-type opine-catabolic plasmids as proposed. (Kuzmanović & Puławska, Genome Biology and Evolution, 2019, 11: 1525-1540).
- 6 Efficient T-DNA delivery without T-DNA integration will be important for future plant genome engineering.
- 7 The plant-pathogenic *Agrobacterium* strain 12D1 was reported to harbor a tumor-inducing plasmid, but this is not supported by sequence data which reveal an absence of T-DNA and virulence genes in this plasmid. (Wu et al., Molecular Plant-Microbe Interactions, 2019, 32: 961-971).
- 8 Some authors reported that *Agrobacterium* strain C58c1 was used for plant transformation, but as this strain lacks a Ti-plasmid this must be an annoying mistake based on the ignorance of both authors and reviewers. (for instance: He et al., Journal of Genetics and Genomics, 2007, 34: 1053-1060).
- 9 Fitness requires concentration, patience and persistence, like doing a PhD.
- 10 Your attitude determines whether you consider an experiment a success or a failure.