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## Metabolic engineering of *Bacillus subtilis* for terpenoids production

Xue, Dan

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Metabolic **E**ngineering  
of *Bacillus subtilis* for  
**T**erpenoids **P**roduction

**DAN XUE**

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university of  
 groningen

# **Metabolic engineering of *Bacillus subtilis* for terpenoids production**

**PhD thesis**

to obtain the degree of PhD at the  
 University of Groningen  
 on the authority of the  
 Rector Magnificus Prof. E. Sterken  
 and in accordance with  
 the decision by the College of Deans.

This thesis will be defended in public on

Tuesday 10 July 2018 at 09.00 hours

by

**Dan Xue**

born on 12 December 1984  
 in Henan, China

**Supervisor**

Prof. W.J. Quax

**Assessment Committee**

Prof. G.J.W. Euverink

Prof. J.M. van Dijk

Prof. C.R. Harwood

**To my family**

# **Paranymphs**

Rita Setroikromo

Yafeng Song

# CONTENTS

<b>Chapter 1</b>	Introduction and scope of the thesis	<b>9</b>
<b>Chapter 2</b>	Metabolic engineering of <i>Bacillus subtilis</i> for terpenoid production	<b>13</b>
<b>Chapter 3</b>	Enhanced C <sub>30</sub> carotenoid production in <i>Bacillus subtilis</i> by systematic overexpression of MEP pathway genes	<b>39</b>
<b>Chapter 4</b>	A stable <i>Bacillus subtilis</i> cell factory for terpenoid production	<b>67</b>
<b>Chapter 5</b>	High level production of amorphadiene using <i>Bacillus subtilis</i> as a terpenoid cell factory	<b>93</b>
<b>Chapter 6</b>	Summary and future perspectives	<b>129</b>
	<b>Nederlandse Samenvatting</b>	<b>137</b>
<b>Appendix</b>	Acknowledgments	<b>149</b>
	List of publications	<b>155</b>
	About the author	<b>159</b>



