

Factors affecting the resistance mechanisms of the  
Russian wheat aphid  
(*Diuraphis noxia*) on wheat.

BY

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A thesis submitted in partial fulfillment of the requirements for the degree of

**MAGISTER SCIENTIAE**

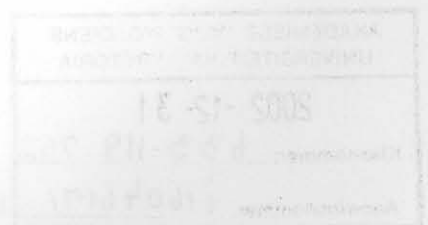
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## DECLARATION

I, the undersigned, hereby declare that the thesis submitted herewith for the degree Magister Scientiae to the University of Pretoria, contains my own independent work and has not been submitted for any degree at any other University.



Lieschen Bahlmann

June 2002

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To my brother Lorraine, you are always in my thoughts. I will never forget you.

# List of abbreviations

AA	Russian wheat aphid
ADP	<i>Diuraphis brassicae</i>
AD	Light/Dark
SD	Standard deviation
PI	Plant Introduction
kg	Kilo Grams
ARC-SGF	Agricultural Research Council/Small Grains Institute
WPT	Inter-cultivar warning field
SDS-PAGE	Sodium dodecyl sulphate-polyacrylamide gel electrophoresis
P	Percentage of the total for acrylamide and biacrylamide
C <sub>ac</sub>	Concentration of biacrylamide
MDH	Malate dehydrogenase
IEF	isoelectric focusing
SEM	Scanning electron microscope
TEMED	<i>N, N, N', N'</i> -tetramethyl-ethylenediamine
NADH	Nicotinamide adenine dinucleotide, reduced form
pI	isoelectric point

To my brother Etienne: you are always in my thoughts, I will never forget you.

# List of abbreviations

RWA	Russian wheat aphid
<i>D. noxia</i>	<i>Diuraphis noxia</i>
L:D	Light:Dark
SD	Standard deviation
PI	Plant Introduction
kDa	Kilo Dalton
ARC-SGI	Agricultural Research Council-Small Grain Institute
IWF	Intercellular washing fluid
SDS-PAGE	Sodium dodecyl sulphate-polyacrylamide gel electrophoresis
T	Percentage of the total for acrylamide and bisacrylamide
C <sub>bis</sub>	Concentration of bisacrylamide
MDH	Malate dehydrogenase
IEF	Isoelectric focusing
SEM	Scanning electron micrograph
TEMED	<i>N, N, N, 'N'</i> -tetramethyl-ethylenediamine
NADH	Nicotinamide adenine dinucleotide, reduced state
pI	Isoelectric point

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