

# Table of contents

Summary .....	I
Resumen .....	III
Resum .....	V
Table of contents .....	1
List of figures.....	3
Abbreviations.....	7
General Introduction.....	13
MOLECULAR FARMING .....	13
PLANT SYNTHETIC BIOLOGY.....	19
PLANT VIRUSES .....	23
TOBAMOVIRUS: PLANT VIRUS EXPRESSION VECTORS .....	24
POTYVIRUSES: A SOURCE OF SPECIFIC PROTEASES FOR BIOTECHNOLOGICAL APPLICATIONS.....	28
XYLANASES .....	32
GLUCOSE OXIDASE.....	33
Objectives.....	37
Objectives.....	39
CHAPTER I.....	41
Abstract.....	45
Introduction .....	46
Results.....	48
Discussion .....	56
Conclusions.....	59
Material and methods.....	59
Author contribution .....	61
Funding.....	61
Data availability.....	61
References .....	62
Supplementary Information .....	65
ctcagttcgtgttcttgtcaATGCAGGTGCAGCTCCAAGAAA.....	71
CHAPTER II.....	73
Abstract.....	77



Introduction .....	77
Results.....	80
Discussion .....	89
Materials and methods .....	92
Acknowledgements .....	96
Competing Interests .....	96
The authors declare no competing interests. ....	96
Data availability statement.....	96
Additional information .....	96
References .....	97
Supplementary Information .....	103
<b>CHAPTER III .....</b>	<b>115</b>
Abstract.....	119
Introduction .....	119
Materials and methods .....	121
Results.....	125
Discussion .....	132
Conclusion .....	135
Acknowledgements .....	135
Competing Interests .....	135
References .....	136
Supplementary Information .....	141
<b>General Discussion .....</b>	<b>145</b>
General References.....	157
<b>Conclusions.....</b>	<b>177</b>
Acknowledgements / Agradecimientos.....	181

