

INDEX

Resum.....	
Resumen.....	
Abstract	
1. Introduction and objectives	1
1.1. Pest management in urban landscapes	2
1.1.1. Urban landscapes.....	2
1.1.2. Urban pest management	3
1.2. Mealybugs	4
1.2.1. General characteristics.....	4
1.2.2. Mealybugs as invasive pests	7
1.2.3. Taxonomy	8
1.2.4. Sampling.....	11
1.2.5. Management.....	12
1.2.6. Biological control.....	13
1.2.7. Mealybugs in urban landscapes	15
1.3. The Bougainvillea mealybug <i>Phenacoccus peruvianus</i>	16
1.2.1. Genus <i>Phenacoccus</i>	16
1.2.2. <i>Phenacoccus peruvianus</i>	16
1.4. Justification and objectives	19
2. Molecular and morphological characterisation of Pseudococcidae surveyed on crops and ornamental plants in Spain	20
2.1. Introduction	22
2.2. Material and Methods	24
2.3. Results	28
2.4. Discussion	32
2.5. Acknowledgements	34

2.6. Supplementary material.....	34
3. Seasonal phenology, spatial distribution and sampling plan for the invasive mealybug <i>Phenacoccus peruvianus</i> (Hemiptera: Pseudococcidae)	40
3.1. Introduction	42
3.2. Material and Methods	43
3.3. Results	47
3.4. Discussion	56
3.5. Acknowledgements	59
4. Fortuitous biological control of the invasive mealybug <i>Phenacoccus peruvianus</i> in Southern Europe	60
4.1. Introduction	62
4.2. Material and Methods	63
4.3. Results	66
4.4. Discussion	70
4.5. Acknowledgements	73
5. Reproductive strategies and food sources used by <i>Acerophagus</i> n. sp. <i>near coccois</i>, a new successful parasitoid of the invasive mealybug <i>Phenacoccus peruvianus</i>	74
5.1. Introduction	76
5.2. Material and Methods	77
5.3. Results	81
5.4. Discussion	84
5.5. Acknowledgements	88
6. General discussion	89
7. Conclusions	94
8. References	97

