## Contents

		rage
Introduction		1
Review of Litera	ture	3
Materials and M	ethods	25
Results and Disc	ussion	38
Interspecific cross	es	38
I Studied chara		41
I.1- Plant he	ight	41
1.2- Number	of branches/plant	45
1.3- Number	of leaves/plant	47
I.4- Leaf are	a	48
I.5- Earlines	s of flowering	50
I.6- Sex rati	o	52
I.7- Number	of fruits/plant	54
I.8- Fruit se	percentage	55
I.9- Fruit les	ngth	57
I.10- Fruit v	veight	58
I.11- Yield/	plant	59
I.12- Resista	nce to powdery mildew disease	59
II Pollen grains	viability	61
III Seeds develo	pment	62
IV Chemical con	nstituents	68
V Embryo cultu	ire The second s	77
V.1- Immat	ire embryos	78
V.2- Mature	embryos	91
VI Acclimatizati	on	97
VII Estrase isozy	me detection	100
- Summary		102
- References		. 111
- Arabic summar	TV	