

# CONTENTS

	Page
1. INTRODUCTION .....	1
2. REVIEW OF LITERATURE .....	4
3. MATERIALS AND METHODS .....	67
4. RESULTS AND DISCUSSION .....	84
1. <b>First experiment: <i>Effect of N-fertilizer sources, biofertilizer inoculation and foliar spray with Delfan or garlic extract on growth, yield and fruit quality of sweet peppers grown in summer season.</i></b>	84
1.1. Vegetative growth	84
1.2. Chlorophyll content	90
1.3. N uptake	95
1.4. P uptake	99
1.5. K uptake	101
1.6. Early and total yield	106
1.7. Fruit physical characteristics	114
1.8. Fruit chemical constituents	119
1.8.1. Fruit acidity, vitamin-C, sugars content	119
1.8.2. Fruit nitrate-N content	124
1.8.3. Fruit heavy metal content	127
1.8.4. Fruit micronutrients content	131
2. <b>Second experiment: <i>Effect of protecting method, chilling seeds and foliar application treatments with Delfan, sucrose and micronutrients on cold tolerance and productivity of sweet pepper grown at winter season.</i></b>	137
2.1. Vegetative growth	138
2.2. Chlorophyll content	144

2.3. N uptake	149
2.4. P uptake	151
2.5. K uptake	156
2.6. Flowering	159
2.7. Early and total yield	163
2.8. Fruit physical characteristics	173
2.9. Fruit chemical constituents	178
5. SUMMARY AND CONCLUSION .....	184
6. REFERENCES .....	199
7. ARABIC SUMMARY	