

CONTENTS

	<i>Page</i>
- INTRODUCTION	1
- REVIEW OF LITERATURE	3
- MATERIALS AND METHODS	46
- RESULTS AND DISCUSSION	59
I- Pots experiment: <i>"Effect of some chemical materials on tomato plants grown under saline conditions"</i>	59
1- Vegetative growth characteristics	59
2- Chemical composition of leaves	69
2.1 Photosynthetic pigments	69
2.2 Mineral composition of leaves	75
2.3 Free proline accumulation	84
3. Flowering characteristics	87
4. Yield and its components	92
5. Fruit quality	99
5.1. Vit. C, titratable acidity, T.S.S. and Sugars	99
5.2. Mineral composition of fruits	105
6. Anatomical studies	<u>110</u>
II. Field experiment: <i>"Effect of irrigation frequencies with drainage water on vegetative growth, chemical composition, yield and quality of tomato plant cultivars"</i>	120
1. Vegetative growth characteristics	120
2. Chemical composition of leaves	125
2.1. Photosynthetic pigments	125
2.2. Mineral composition of leaves	128

2.3. Free proline accumulation	132
3. Flowering characteristics	133
4. Yield and its components	134
1- Fruit quality	139
5.1 Vit. C, titratable acidity, T.S.S. and sugars.....	139
5.2 Mineral composition of fruits	142
6. Anatomical studies	144
- SAMMARY AND CONCLUSION	148
- REFERENCES	<u>157</u>
- ARABIC SUMMARY	