

CONTENTS

	Page
1. INTRODUCTION	1
2. REVIEW OF LITERATURE.....	4
Effect of biofertilizer on the plant.....	5
Effect on vegetative growth.....	5
Effect on the essential oil content and yield.....	12
Effect on chemical content.....	19
Nitrogen phosphorus and potassium determination...	22
Effect of organic manure on plants.....	24
Effect on vegetative growth	25
Effect on the essential oil content and yield.....	29
Effect on chemical content.....	32
Nitrogen, phosphorus and potassium determination...	34
Effect of NPK fertilization on the plant	36
Effect on vegetative growth.....	36
Effect on the essential oil content and yield.....	41
Effect on chemical content.....	46
Nitrogen, phosphorus and potassium determination...	49
Storage period	51
3. MATERIAL AND METHODS.....	53
3. Data recorded.....	58
3. 1. Vegetative growth parameters.....	58
3. 2. The determination of chemical constituents.....	58
3.3. Storage period.....	60

	Page
4. RESULTS AND DISCUSSION.....	61
4.1. Vegetative growth	61
4. 1. 1. Plant height	61
4. 1. 2. Number of branches per plant	66
4. 1. 3. Number of leaves per plant.....	71
4. 1. 4. Fresh weight of leaves per plant	76
4. 1. 5. Dry weight of leaves per plant.....	76
4. 2. The chemical constituents of the plants	85
4. 2. 1. Essential oil content.....	85
4. 2. 2. Mineral content of herb.....	90
4. 2. 2.1. Nitrogen percentage.....	90
4. 2. 2.2. Phosphorus percentage	95
4. 2. 2.3. Potassium percentage	96
4. 2. 3. Photosynthetic pigments	96
4. 2. 3. 1. Chlorophyll A and B contents..	96
4.2.4. Oil components by GLC.....	99
4.3.Effect of mineral, organic and biofertilization on <i>Mentha peprita</i> on storage period (days).....	104
5. SUMMARY.....	109
6. REFERENCES	116
7. ARABIC SUMMARY.....	-