

CONTENTS

	<u>Page</u>
INTRODUCTION	1
REVIEW OF LITERATURE	3
I. Effect of Sowing Methods	3
II. Effect of Weeds Control	4
III. Effect of Irrigation	9
V. Effect of Fertilizer	14
MATERIALS AND METHODS	19
RESULTS AND DISCUSSION	27
First Experiment	27
1. Effect of Sowing Methods	27
A. Weight of Weeds	27
B. Characters of lentil	31
1. Plant height	31
2. Number of branches/plant	32
3. Number of pods/plant	33
4. Number of seeds/pod	34
5. Number of seeds/plant.....	35
6. Percentage of abortive seeds	35
7. Weight of 1000-seed	35
8. Weight of seeds/plant	36
9. Seed yield/fad.	36
10. Straw yield/fad.....	38
11. Biological yield/fad.	38
12. Harvest index	39

	<u>Page</u>
C. Chemical content of seeds	39
1. Protein content	39
2. Protein yield/fad.	40
3. Phosphorus content.....	41
2. Effect of Weed Control Treatments	41
A. Weight of Weeds	41
B. Characters of lentil	48
1. Plant height	49
2. Number of branches/plant	51
3. Number of pods/plant	52
4. Number of seeds/pod	53
5. Number of seeds/plant	55
6. Percentage of abortive seeds	55
7. Weight of 1000-seed.	56
8. Weight of seeds/plant	56
9. Seed yield/fad.	57
10. Straw yield/fad.....	60
11. Biological yield/fad.	61
12. Harvest index	62
C. Chemical content of seeds	62
1. Protein content	62
2. Protein yield/fad.	63
3. Phosphorus content	64
D. Effect of the interaction	65
Second Experiment	66

	<u>Page</u>
1. Effect of Irrigation	66
A. Weight of Weeds	66
B. Characters of lentil	71
1. Plant height	71
2. Number of branches/plant	72
3. Number of pods/plant	73
4. Number of seeds/pod	75
5. Number of seeds/plant	75
6. Percentage of abortive seeds	76
7. Weight of 1000-seed	76
8. Weight of seeds/plant	77
9. Seed yield/fad.	78
10. Straw yield/fad.	79
11. Biological yield/fad.	80
12. Harvest index	80
C. Chemical content of seeds	82
1. Protein content	82
2. Protein yield/fad.	82
3. Phosphorus content	83
2. Effect of Fertilizer	84
A. Weight of Weeds	84
B. Characters of lentil	89
1. Plant height	89
2. Number of branches/plant	91
3. Number of pods/plant	92

	<u>Page</u>
4. Number of seeds/pod	93
5. Number of seeds/plant	95
6. Percentage of abortive seeds	95
7. Weight of 1000-seed	96
8. Seed weight/plant	97
9. Seed yield/fad.	98
10. Straw yield/fad.	99
11. Biological yield/fad.	99
12. Harvest index	101
C. Chemical content of seeds	101
1. Protein content	101
2. Protein yield/fad.	103
3. Phosphorus content	104
D. Effect of the interaction	104
SUMMARY	106
ACKNOWLEDGEMENT	116
LITERATURE CITED	117
ARABIC SUMMARY	