## CONTENTS

	Page
I. INTRODUCTION	1
2. REVIEW OF LITERATURE	5
2-1 Effect of salinity levels on:	
2-1-1 Plant growth characteristics	6
2-1-2 Chemical composition of plant foliage	9
2-2-3 Yield and its components	14
2-2 Effect of phosphorus application on:	
2-2-1 Plant growth characteristics	17
2-2-2 Chemical composition	18
2-2-3 Yield and its components	19
2-3 Effect of potassium treatment on:	
2-3-1 Plant growth characteristics	22
2-3-2 Chemical composition of plant organs	23
2-3-3 Yield and its components	24
2-4 Effect of zinc treatment on:	
2-4-1 Plant growth characteristics	25
2-4-2 Chemical composition of plant organs	27
2-4-3 Yield and its components	28
2-5 Effect of Thidiazuron foliar application on plant growth, chemical	
composition, dry seed yield and its components	31
3. MATERIALS AND METHODS	33
4. RESULTS AND DISCUSSION	40
4-1 Nursery experiment:	
4-1-1 Effect of hardening salinity levels of irrigation water	
during nursery period on growth characteristics of Mung	
Bean seedlings	41
4-1-2 Effect of hardening salinity levels of irrigation water	
during nursery period on survival % of mung bean	
seedlings	
	44

4-2 Field experiment:	46
4.2.1 Vegetative growth characteristics	46
4.2.1.a Effect of foliar application treatments on vegetative growth	
of Mung Bean plants grown under saline conditions	46
4.2.1.b Effect of hardening salinity treatments during nursery	
period on Mung Bean growth after growing in the	
field	50
4.2.1.c Effect of the interaction between foliar application x	
salinity levels treatments on growth characters of Mung	
Bean Plants	53
4.2.2 Chemical Compositions of mung bean foliage	57
4.2.2.a Effect of foliar application treatments on chemical	
composition of Mung Bean foliage	57
4.2.2.b Effect of hardening salinity levels of irrigation water	
during nursery on chemical composition of Mung Bean	
foliage	63
4.2.2.c Effect of the interaction between foliar application x	
salinity levels treatments on chemical composition of	
Mung Bean foliage	65
4.2.3 Yield and Yield components	67
4.2.3.a Effect of foliar application treatments on yield and its	
components of Mung Bean under saline condition	67
4.2.3.b Effect of hardening salinity levels of irrigation water	
during nursery on yield and yield components of Mung	
Bean grown under saline conditions	72
4.2.3.c Effect of the interaction between foliar application x	
salinity levels treatments on yield and yield components	
of Mung Bean Plants	76
4.2.4 Chemical composition of mung bean seeds	79
4.2.4.a Effect of foliar application treatments on chemical	
composition of mung bean seeds produced under saline	
conditions	79

. 4.2.4.b Effect of hardening salinity treatments during nursery	
period on chemical composition of mung bean seeds	
produced under field saline conditions.	83
4.2.4.c Effect of the interaction between foliar application x	
hardening salinity treatments during nursery period on	
chemical composition of mung bean seeds produced under	
salinity stress	86
5. SUMMARY	89
6. REFERENCES	99
7. ARABIC SUMMARY	1