

CONTENTS

Title	Page
I. INTRODUCTION	1
II. REVIEW OF LITERATURE	4
II.a- Heritability and genetic advance	4
II.b- Selection criteria	23
III- MATERIALS AND METHODS	33
IV- RESULTS AND DISCUSSION	39
IV.1- Effect of selection in early generation	39
IV.1.1- Number of spikes per plant	39
IV.1.2- Number of kernels / spike	44
IV.1.3- Weight of 1000-kernels	49
IV.1.4- Grain yield (gm/plant)	53
IV.2- Direct and indirect selection criteria	57
IV.2.1- The first population	57
IV.2.2. The second population.....	64
IV.2.3- The third population.....	71
IV.2.4- The fourth population	77
V- SUMMARY	83
VI- REFERENCES	89
VII- ARABIC SUMMARY	-