

CONTENTS

	Page
1- INTRODUCTION	1
2-REVIEW OF LITERATURE	2
2-1 Methods for measuring stability	2
a. Linear regression method	2
b. Cluster analysis method	3
c. Principal components analysis method	5
d. Geometrical methods	7
2-2. Variance components	9
2-2.1. Yield	9
2-2.2. Boll weight	11
2-2.3. Lint percentage	13
2-2.4. Seed index	15
2-2.5. Lint index	17
2-2.6. Earlines Percentage	18
2-2.7. Fiber Properties	18
3- MATERIALS AND METHODS	20
4- RESULTS AND DISCUSSION	31
4-1. Analysis of variance	31
4-2. Comparisons between stability methods	42
4-2.1 Seed cotton yield	42
4-2.2 Lint Yield	55
4-2.3 Boll weight	68
4-2.4 The lint percentage	76
4-2.5 Earliness percent	84
4-2.6 Seed index	92
4-2.7 Lint index	105
4-2.8 Micronair readings	115
4-2.9 Presley ratio	126
4-2.10 2.5% Span Length	134
4-2.11. 50 % Span Length	147
4-2.12. Uniformity Ratio (UR)	162
5-CONCLUSIONS	170
6-SUMMARY	173
7-LITERATURE CITED	179
8-APPENDIX	
9-ARABIC SUMMARY	