

CONTENTS

	Page
* INTRODUCTION.....	1-3
* REVIEW OF LITERATURE.....	4-63
* MATERIALS AND METHODS.....	64-82
1- Effect of pollen substitutes on queen rearing activity:	63
a) Harvesting of Royal jelly.....	66
b) Preporation of queen cups.....	68
2- Rearing queen Honey bee larvae in queenright colonies.....	75
3- Effect of queen cups typs on the queen rearing activity.....	77
4- Effect of grafting types on acceptance of grafted worker larvae.....	79
5- Effect of worker larvae age on acceptance of queen rearing activity.....	80
6- Effect of grafted by worker eggs on acceptance of grafted queen cells.....	81
7- Effect of the factors which studient in these experiments on the biometric character of emerged queens.....	82
* RESULTS AND DISCUSSION.....	83-155
1- Effect of feeding honeybee colonies on the acceptance of worker larvae and the number of emergence queens during queen rearign, in queenless colonies.....	83
2- Rearing queen honeybee larvae in queenright colonies and in other colonies with queen restricted to the brood chamber by queen exculder or wire screen exculder.....	96
3- Effect of transplanted worker egg during queen rearing in queenless colonies.....	107

CONTENTS /Cont.

	Page
4- Effect of grafting honeybee larvae with royal jelly (wet graft) and without royal jelly (Dry graft) on the acceptance of transplanting larvae....	116
5- Correlation between the age of worker larvae was grafted in queen-cups from wax and results of queen rearing activity.....	121
6- The effect of construction material of queen-cups on acceptance of the worker larvae for queen rearing.....	127
a) Effect of bee-wax cups and plastic cups on acceptance of queen larvae.....	128
b) Effect of queen-cups mixing with paraffin wax on the acceptance of grafted worker larvae during queen rearing.....	130
c) Effect of queen cups mixing with pollen grains and dipping wax-cups in propolis on acceptance of worker larvae during queen rearing.....	133
7- Correlation between some factors affecting on honeybee brood was grafted and the characteristics of the resultant queens.....	138
a) Effect of feeding the colonies on the biometric characteristics of honeybee queens which accepted and reared queens in these colonies.....	138
b) Effect of the age at which honeybee brood was grafted on the biometric characteristics of reared queens.....	144