



# CONTENTS

## LIST OF TABLE

o

NO.	Table	Page
1	Effect of different medium types on explant response parameters of different apple rootstocks.....	26
2	Effect of different anti-oxidant treatments on explant development parameters of different apple rootstocks	29
3	Effect of different medium state on explant development parameters of different apple rootstocks...	33
4	Effect of different cytokinin types on growth and proliferation parameters of different apple rootstocks....	36
5	Effect of different 6- benzylamino purin(BAP) concentrations on growth and proliferation parameters of some apple rootstocks	42
6	Effect of medium strength on shoot elongation and rooting parameters of some apple rootstocks...	47
7	Effect of different GA <sub>3</sub> concentrations on shoot elongation and greening parameters of some apple rootstocks.....	51
8	Effect of auxin type on growth and rooting parameters of some apple rootstocks.....	54
9	Effect of auxin concentrations on growth and rooting parameters of some apple rootstocks.....	58
10	Effect of different manitole concentrations on the tissue cultural parameters of some <i>in vitro</i> apple rootstocks...	62
11	Effect of different manitole concentrations on chemical analysis parameters of some <i>in vitro</i> apple rootstocks...	70

12	Effect of different Polyethylene glycol(PEG) concentrations on the tissue cultural parameters of some <i>in vitro</i> apple rootstocks	74
13	Effect of different PEG concentrations on chemical analysis parameters of some <i>in vitro</i> apple rootstocks	81
14	Effect of different concentrations of agar on the tissue cultural parameters of some <i>in vitro</i> apple rootstocks	86
15	Effect of different concentrations of agar on chemical analysis parameters of some <i>in vitro</i> apple rootstocks	92
16	Effect of different medium types on explant response parameters of passion fruit.....	95
17	Effect of different anti-oxidant treatments on explant development parameters of passion fruit.....	97
18	Effect of medium state on explant development parameters of passion fruit	98
19	Effect of different additives on explant development parameters of passion fruit .....	99
20	Effect of different cytokinin types on growth and proliferation parameters of passion fruit .....	102
21	Effect of different 6- benzylamino purin(BAP) concentrations on proliferation parameters of passion fruit	103
22	Effect of medium strength on shoot elongation and rooting parameters of passion fruit	105
23	Effect of different GA <sub>3</sub> concentrations on shoot elongation and rooting parameters of passion fruit.....	106
24	Effect of auxin type on growth and root formation parameters of passion fruit.....	108
25	Effect of auxin concentrations on growth and root formation parameters of passion fruit .....	109

## LIST OF FIGURES

NO.		Page
1	Effect of the interaction between apple rootstock and medium types on callus production and growth	28
2	Effect of the interaction between apple rootstock and anti-oxident treatment on growth and greening	32
3	Effect of the interaction between apple rootstock and cytokinin type on proliferation and growth	39
4	Effect of the interaction between apple rootstock and BAP concentration on proliferation and growth.	45
5	Effect of the interaction between apple rootstock and medium strength on shoot elongation and greening	50
6	Effect of the interaction between auxin type and apple rootstock on rooting and greening.	57
7	Effect of the interaction between apple rootstock and Manitol concentration.	66
8	Effect of the interaction between apple rootstock and PEG concentration.	78
9	Effect of the interaction between apple rootstock and agar concentration	89

10	Effect of different anti-oxidant treatments on explant development and growth parameters of passion fruit.	98
11	Effect of different additives on explant and growth of passion fruit explants.	100
12	Effect of different BAP concentrations on growth and proliferation of passion fruit explants	104
13	Effect of different GA3 concentrations on shoot elongation and greening parameters of passion fruit shoots.	106