3.9.2 NAA 100 μg/ml stock solution 48
3.9.3 Ethrel 100 μg/ml stock solution 48
3.10 Spraying of chemicals 48
3.11 Sampling procedure and observations recorded 49
3.12 Vegetative characters 49
3.12.1 Number of leaves 49
3.12.2 Length of 'D' leaf 49
3.13 Reproductive characters 50
3.13.1 Percentage of flowering 50
3.13.2 Fruit maturity period i.e. flowering-harvest interval (days taken from flowering to harvest) 50
3.13.3 Production of propagules 51
3.13.4 Length of fruit 51
3.13.5 Circumference of fruit 51
3.15.6 Fruit weight (with and without crown) 51
3.13.7 Fruit yield without crown 51
3.14 Biochemical parameters 52
3.14.1 Metabolic status of 'D' leaf 52
3.14.1.1 Chlorophyll content of 'D' leaf 52
3.14.1.2 Nitrogen content of 'D' leaf 53
3.14.1.3 Reducing, non-reducing and total sugar content of 'D' leaf 53 - 54
3.14.2 Fruit quality 54
3.14.2.1 Sugars of the fruits 54
3.14.2.2 Acid hydrolysable polysaccharide (AHP) 55
3.14.2.3 Ascorbic acid content of fruit 55
3.14.2.4 Total titratable acidity 56
3.15 Statistical analysis 56
3.15.1 Standard error of means (S.Ed ±) 57
3.15.2 Critical differences (CD) 57

4. EXPERIMENTAL FINDINGS 58 - 82

4.1 Vegetative characters 58
4.1.1 Number of leaves 58 - 62
4.1.2 length of 'D' leaves 62 - 66
4.2 Bio-chemical parameters of 'D' leaf 66
4.2.1 Sugar content of 'D' leaf 66 - 68
4.2.2 Nitrogen content of 'D' leaf 69 - 70
4.2.3 Chlorophyll content of 'D' leaf 70 - 72
4.3 Reproductive characters 72
4.3.1 Flowering and related changes 72 - 75
4.3.2 Fruit characters and yield 75 - 78
4.4 Biochemical parameters of fruits 78
4.4.1 Sugar content of the fruit 80
4.4.1. (i) Reducing sugar 80
4.4.1. (ii) Non-reducing sugar 80
4.4.1. (iii) Total sugar 80
4.4.2 Acid hydrolysable polysaccharide content of the fruit (AHP) 81
4.4.3 Vitamin-C (ascorbic acid) content of the fruit 81 - 82
4.4.4 Total titratable acidity of the fruits 82

5. GENERAL DISCUSSION 83-97

5.1 Vegetative growth and metabolic status of 'D' leaves. 84
5.2 Reproductive characters 89
5.2.1 Flowering 89 - 91
5.2.2 Fruit maturity period i.e. flowering-harvest interval 92
5.2.3 Production of propagules 92 - 93
5.2.4 Quality of fruits 93 - 94
5.2.5 Length, breadth and weight of the fruit 95 - 97
5.2.6 Yield 97

6. SUMMARY 98 - 106

7. BIBLIOGRAPHY 107 - 125

APPENDIX 126 - 130