F

FURTHER STUDIES ON FLOWERING AND FRUITING OF MANGO TREES

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## **APPROVAL SHEET**

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#### **ABSTRACT**

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Four independent studies were carriedout during 1992 / 93 and 1993 / 94 seasons on Taymour mango trees of about 25 years old in order to minimize the percentage of malformed panicles, fruit drop % and maximize fruit set %, tree yield and to improve fruit quality by spraying different growth substances

Results indicated that pre-bloom application of NAA at 200 ppm + ethrel at 500 ppm once as spray in Nov. gained the lowest % of malformed panicles, greatest no of fruit / panicle, lowest fruit drop % and highest tree yield to about 12 folds of the control.

In addition, such treatment resulted in the highest TSS % and TSS / acid ratio in fruit juice.

Post - bloom application of NAA at 40 ppm as one spray in late April or early May had increased number of mature fruits / panicle to over 12 folds of the control, reduced fruit drop % at different stages, increased TSS % and TSS / acid ratio in fruit juice.

The low % of malformed panicles and fruit drop, and the high fruit set % and tree yield were generally accompanied by the higher leaf IAA and lower ABA content specially after 15 days of application.

Promalin at 5 ppm and Nevirol at 100 ppm proved to be the best chemical emosculators for Taymour mango flowers. Pairi cv. may be considered as fully cross compatible pollinizer for

Taymour cv. whereas, Zebda and Hindy cvs. were partially cross compatible and partially cross incompatible pollinizers, respectively.

## **Key Words**

Mango - Taymour . Malformations, fruit set, fruit drop . flowering, fruit retention, Tree yield, fruit quality. Cross pollinations growth regulators endogenous hormones.

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#### CONTENTS

	Page
I. INTRODUCTION	1
2. REVIEW OF LITERATURE	3
3. MATERIALS AND METHODS	45
4. RESULTS AND DISCUSSION	55
4.1. First study: Effect of pre-bloom application of	
some growth substances on flowering, fruit set,	
fruit drop, yield and fruit quality	55
4.1.1. Effect on the date of beginning flowering.	
4.1.2.Effect on the percentage of malformed panicles	58
4.1.3. Effect on perfect flower percentage and sex expression ratio	62
4.1.4. Effect on number of fruits per panicles	65
4.1.5. Effect on fruit drop percentage at different growth stages	70
4.1.6. Effect on the expected tree yield	78
4.1.7. Effect on fruit physical characteristics	81
4.1.8. Effect on fruit chemical characteristics	85
4.2. <u>Second study</u> : Effect of post-bloom application of some growth substances on number of fruits per panicle, fruit drop %, yield and fruit quality of Taymour mango trees	n f t

	Page
4.2.1. Effect on number of fruits per panicle at different growth stages	89
4.2.2. Effect on fruit drop percentage at different growth stages	94
4.2.3. Effect on tree yield	101
4.2.4. Effect on some physical characteristics of fruits	104
4.2.5. Effect of some chemical characteristics of fruits	108
4.3. Third study: Changes in endogenous hormones in relation to growth substances sprays, flowering and fruiting of Taymour mango	
cv	110
4.4. <u>Fourth study</u> : Cross pollination trials	120
4.4.1. First experiment: Effect of chemical emasculation of Taymour mango flowers on pollen and pistil viability	120
4.4.1.1. Pollen grains viability	120
4.4.1.2. Pistil viability	123
4.4.2. Second experiment: The compatibility and/or incompatibility between some mango cvs	123
4.4.2.1.Pollen tube characteristics after cross pollination with different pollen donors	300
(parents)	123

	Page
4.4.3. Third experiment: Effect of different crosses, self and open pollination of Taymour mango flowers (after chemical	122
emasculation on fruit set percentage.	133
5. SUMMARY AND CONCLUSION	138
5.1. <u>First study</u> : Effect of pre-bloom application of some growth substances on flowering, fruit set, fruit drop, yield and fruit quality of Taymour mango trees	138
5.2. Second study: Effect of post-bloom application of some growth substances on number of fruits/panicle, fruit drop %, yield and fruit quality of Taymour mango trees	140
5.3. <u>Third study</u> : Changes in endogenous hormones in relation to growth substances sprays, flowering, and fruiting of trees	141
5.4. Fourth study: Cross pollination trials	142
6. REFERENCES	144
7 ADADIC SUMMARV	

## LIST OF TABLES

No		Page
Table (1)	error control of pre-bloom application of some growth substances on the date of beginning flowering of Taymour mango cv. in 1992/93 and 93/94 seasons	ng 56
Table (2):		60
Table (3):	Effect of pre-bloom application of some growth substances on perfect flower percentage and sex expression of Taymour mango cv. in 1992/1993 and 1993/1994 seasons	63
Table (4):	Effect of pre-bloom application of some growth substances on number of fruits per panicle at different growth stages in 1992/1993 season	66
Table (5):		67
Table (6):		71
Γable (7):	Effect of pre-bloom application of some growth substances on the cummulative fruit drop percentage in 1992/1993 season	73
	L Lordouge Po III 1 >> 7/1 1 >> 2002011	13

No		Page
	Effect of pre-bloom application of some growth substances on fruit drop percentage at different stages in 1993/1994 season	75
Table (9):	growth substances on the cumulative fruit drop percentage in 1993/1994 season	77
Table (10)	Effect of pre-bloom application of some growth substances on number of fruits per tree and the expected tree yield (Kg) of Taymour mango cv. in 1992/1993 and 1993/1994 seasons	79
	egrowth substances on fruit physical characteristics of Taymour mango ev in 1992/1993 season	82
	): Effect of pre-bloom application of some growth substances on fruit physical characteristics of Taymour mango cv. in 1993/1994 season	74
	3): Effect of pre-bloom application of different growth substances on some fruit chemical characteristics of Taymour mango cv. in 1992/1993 season	86
Table (14	4): Effect of pre-bloom application of different growth substances on some fruit chemical characteristics of Taymour mange cy in 1993/1994 season	