FURTHER STUDIES ON FLOWERING AND FRUITING OF MANGO TREES

By

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B.Sc. Agric., Horticulture, Ain Shams Univ. 1977
M.Sc. Agric., Horticulture, Ain Shams Univ. 1989

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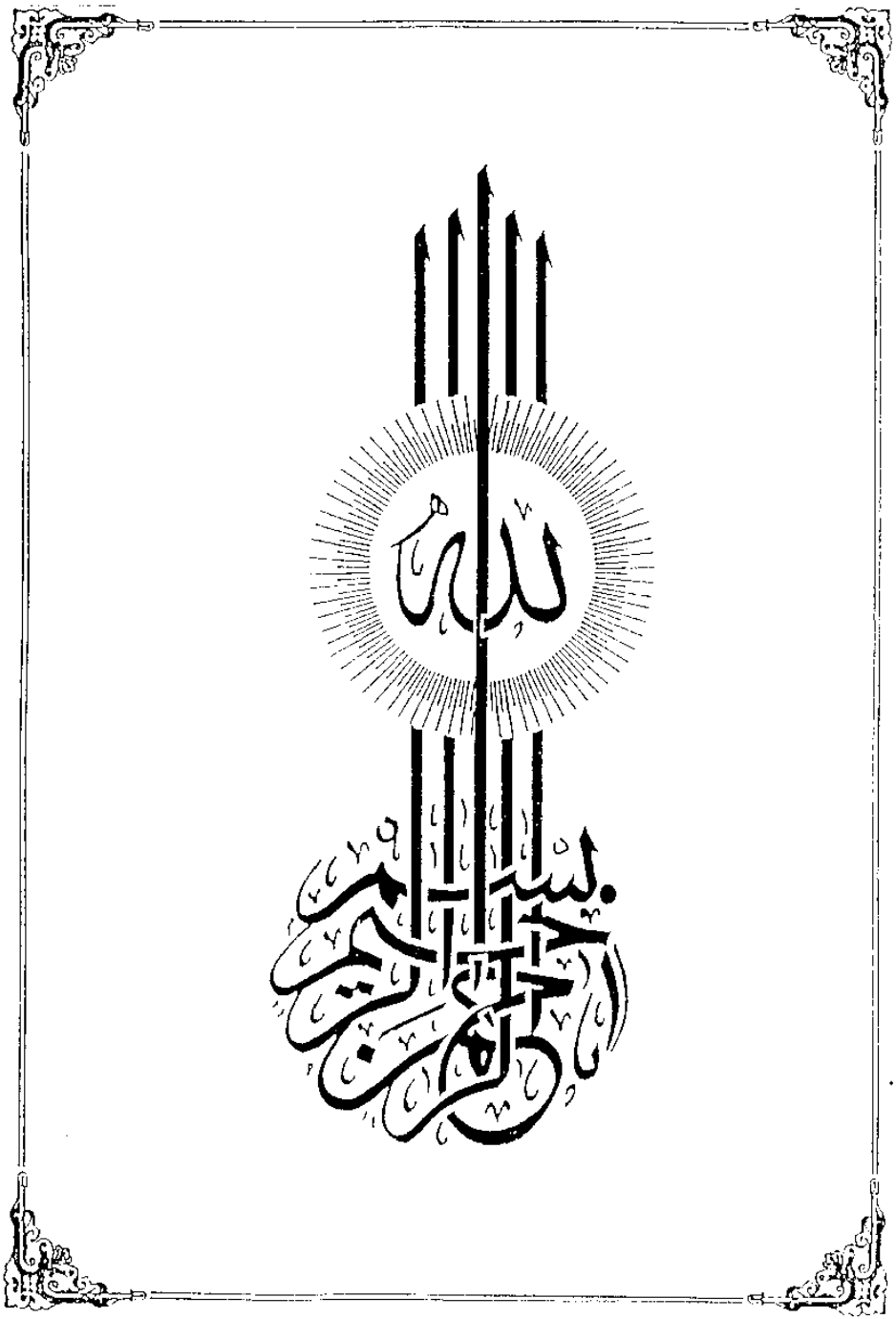

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ABSTRACT

Sanaa Samy Ebeed, Further Studies on Flowering and Fruiting of Mango trees. Unpublished Doctor of Philosophy thesis, Ain Shams University Faculty of Agriculture, Horticulture Department 1996 .

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 emasculators 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

LIST OF TABLES