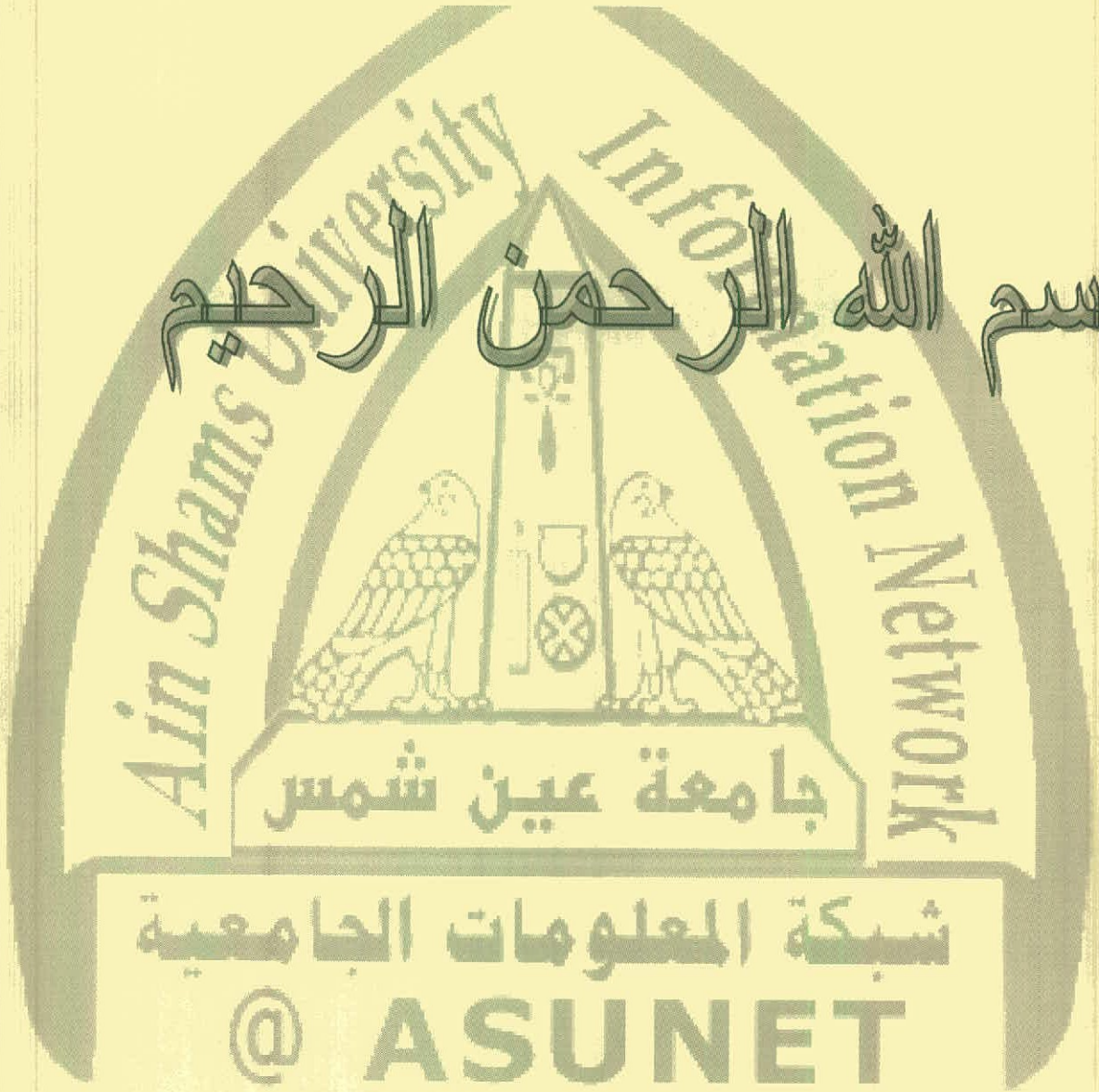
شبكة المعلومات الجامعية



بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائـــــــق الاصليـــــة تالفـــة

بالرسالة صفحات لم ترد بالاصل

EFFECT OF THE GROWTH RETARDANT PACLOBUTRAZOL ON GROWTH AND YIELD OF PEACH TREES.

By

SAMAR ABD EL TAWAB MOHAMMED
B.Sc. Agriculture (Horticulture), Ain Shams University 1994

A Thesis Submitted in partial fulfillment of the requirements for the degree

of

Master of Science

in

Agricultural Science

(Pomology)

Department of Horticulture.

Faculty of Agriculture, Ain Shams University.

2001

APPROVAL SHEET

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ABSTRACT

Samar Abdel Tawab Mohamed. Effect of the growth retardant paclobutrazol on growth and yield of peach trees. Unpublished Master of Science thesis, Horticulture Department, Faculty of Agriculture, Ain Shams University, 2001.

The effect of PP_{333} on vegetative growth, yield and fruit quality of Florda prince, Tropic snow and Swelling peach cvs. was studied during 1996 / 97, 1997 / 98 and 1998 / 99 seasons.

Results indicated that paclobutrazol application either at full bloom or after fruit harvesting considerably reduced shoot and internode length but increased markedly shoot thickness and number of flower buds, regardless of number of applications. This was true for the three studied peach cvs. in both seasons of study. Twice application in two successive seasons was more effective than one application. In other words, PP_{333} treatment proved to have a carry on effect in the following season.

PP_{333} applied at full bloom significantly increased tree yield in kg and the increment reached 100 % (Florda prince cv.), 80 % (Tropic snow cv.) and 165% (Swelling cv.) over the control when the application was done twice in two successive seasons.

In addition, cultar (PP_{333}) either at 1 ml or 2 ml / tree at full bloom markedly increased fruit weight, fruit height, fruit diameter, flesh thickness, fruit colour % and T.S.S. % in fruit juice at harvesting date of all the

considered cvs. On the other hand, acidity % did not respond to PP_{333} application.

Paclobutrazol added at 0.5 or 1ml / tree after fruit harvest considerably increased tree yield to about 62 – 124 % in Florda prince cv., 33 – 63 % in Tropic snow cv., and 80 - 165% in Swelling cv. In general, a twice application was better than once application.

PP_{333} whether at lower or higher level added after fruit harvest, significantly increased fruit weight, fruit colour %, fruit height and flesh thickness in both seasons, but it reduced fruit firmness in one season. On the other hand, such application failed to affect acidity % in both seasons. This was true for all fruit quality parameters in the three studied cvs. Meanwhile, twice applications seemed to be more effective than once addition as Florda prince cv. was concerned, whereas the effect of number of applications differs from one season to another as Tropic snow and swelling cvs. were considered.

Kay words:

Peach, growth regulators, paclobutrazol, PP_{333}, soil drench

ACKNOWLEDEGEMENT

I wish to afford my great appreciation to **Prof. Dr. Mohamed Abou Rawash,** Prof. of Pomology, Horticulture Dept. Ain Shams University for his supervision, valuable advices, kind encouragement and his efforts during the course of this study.

I wish to express my deepest gratitude to **Prof. Dr. Assem Shaltout,** Prof. of Pomology, Horticulture Dept., Ain Shams University, for his unfailing help. Sincere thanks for his great efforts, valuable advices and significant supports. I would like afford my profound thanks to him for his construction criticism and wise supervision.

Great thanks and sincere gratitude to **Dr. Hassan El-Wakeel,** Associate Prof. of Pomology, Horticulture Dept., Ain Shams Univ. for his great efforts and kind advice's, and I'm deeply indebted to him profound gratitude for his kind help to overcoming the difficults during the course of study.

Finally I wish to express my thanks to my family, colleagues, and every one help me to make this work possible.