



شبكة المعلومات الجامعية

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شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

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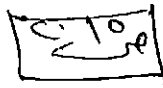
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STUDY OF SOME FACTORS AND TREATMENTS RELATED TO FLORAL BUD INDUCTION OF SOME OLIVE CULTIVARS

By

ATEF YAKOUB HALEEM YAKOUB

B.Sc. Agric. Sci. (Horticulture), Fac. Agric., Cairo Univ., 1994

M.Sc. Agric. Sci. (Pomology), Fac. Agric., Cairo Univ., 2003

THESIS

**Submitted in Partial Fulfillment of the
Requirements for the Degree of**

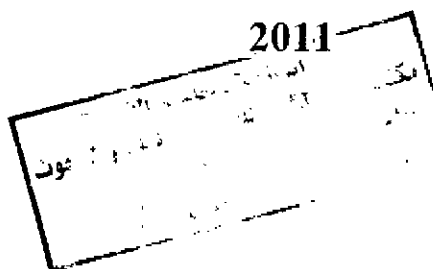
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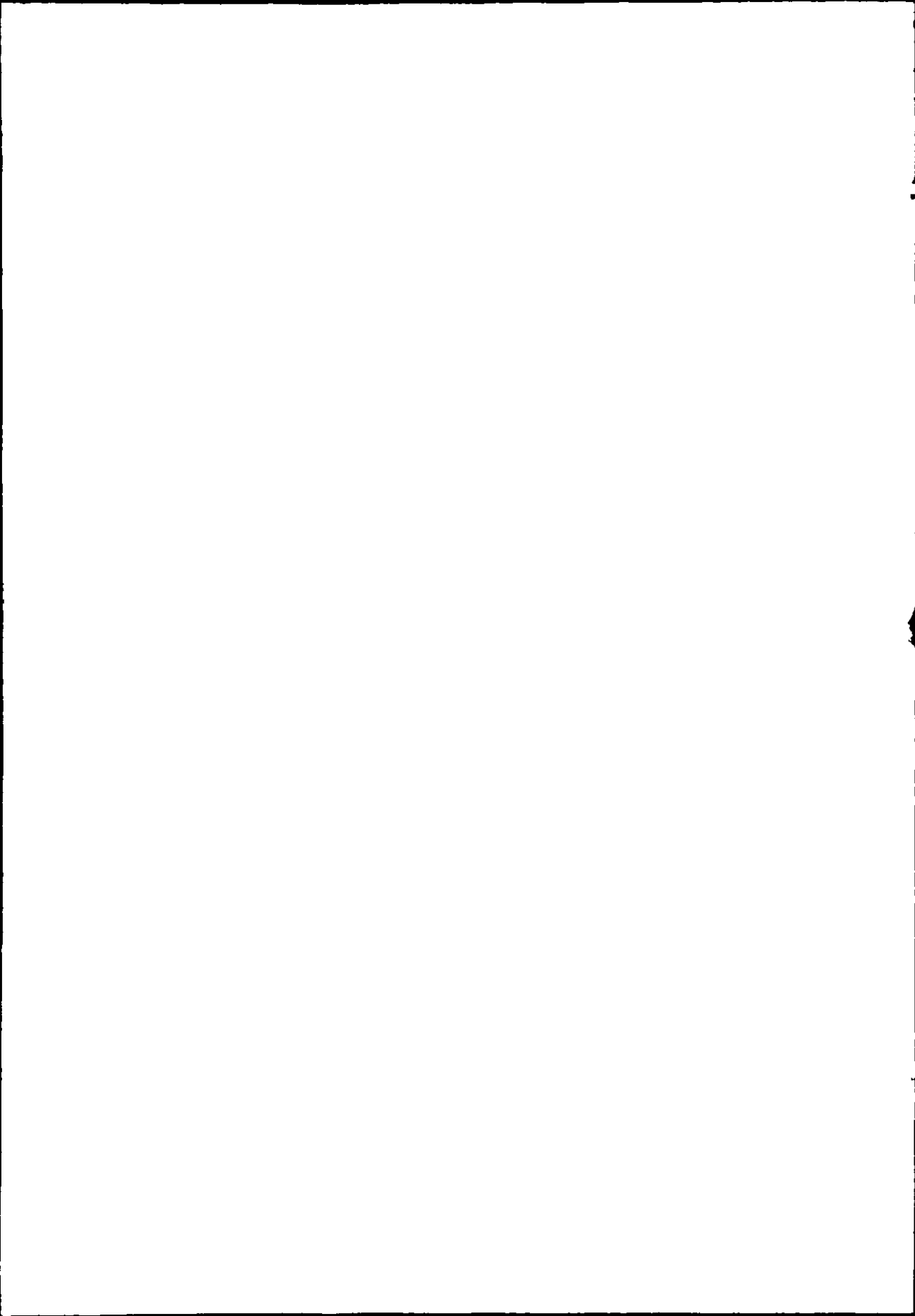
In

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**Agricultural Sciences
(Pomology)**

**Department of Horticulture Pomology
Faculty of Agriculture
Cairo University
EGYPT**





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Date: 26 / 3 / 2011

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Title of Thesis: Study of Some Factors and Treatments Related to Floral
Bud Induction of Some Olive Cultivars.
Supervisors: Dr. George Ramzy Stino
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Department: Pomology **Approval:** 26/ 3/ 2011

ABSTRACT

This study was conducted during the 2006-2007 and 2007-2008 seasons on trees of olive 'Picual' and 'Manzanillo' grown in a private orchard at Rafah, North Sinai. This investigation comprised two experiments; first experiment was designed to determine the induction period anatomically and by using leaf defoliation and study changes in endogenous content related to it in leaf and bud. In the second experiment conducted treatments (thinning at 50 % and 50 %, Mepiquat chloride spray at 500, 1000, 1500 and 2000 ppm) were used on trees at "on" bearing status to study their effect on flowering and its parameters and yield and its characteristics in the following season. The obtained results could be summarized as follows:

It is clear from results in first experiment floral induction period starting from July and August and continue till November, changes in endogenous content related to floral bud induction showed increasing in total carbohydrates, C/N ratio, potassium, total and reducing sugars and total amino acids and decreasing in total nitrogen and total phenols on leaf and bud.

Results in second experiment clarify effect of treatments on flowering parameters (flowering density, length of inflorescence, panicles/ inflorescence, flowers per inflorescence, sex ratio), fruit set and retention, yield and its parameters. In general highest significant effect on floral and fruiting parameters was found attributed to thinning 50 % of fruits in both cultivars and seasons.

Study of direction effect on flowering and its parameters and fruit set show significantly differences between four directions on these parameters, shoots at southern and northern direction carried the highest results with these parameters in both seasons and cultivars.

Key words: Olive, 'Manzanillo', 'Picual', floral induction, flowering, Mepiquat chloride, endogenous chemicals, bearing status.

Ramzy Stino

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DEDICATION

I dedicate this work to whom my heart felt thanks; to my mother and my father for their patience and help, as well as to my brothers, my sisters and finally to my lovely family, my wife and my sons Mariam and Phelopatear for their patience and for all the support they lovely offered along the period of my post graduation.

