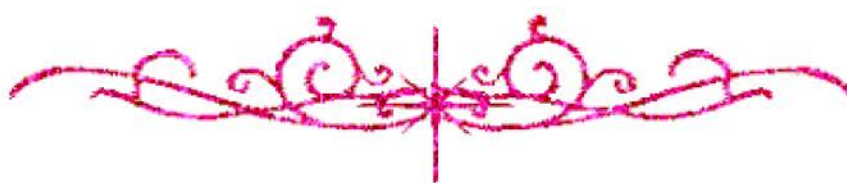


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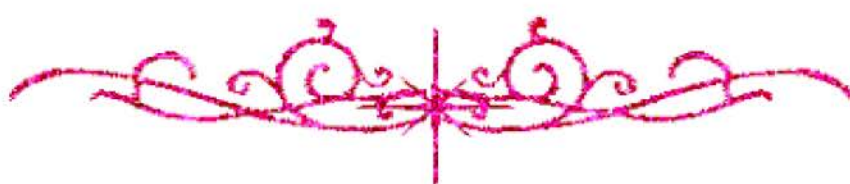
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شبكة المعلومات الجامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

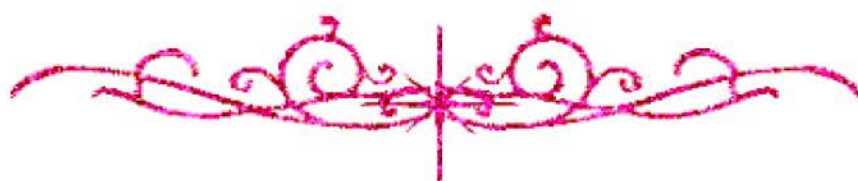
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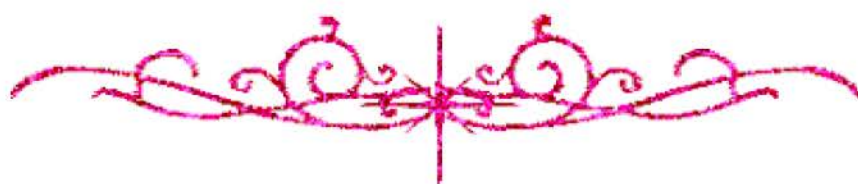
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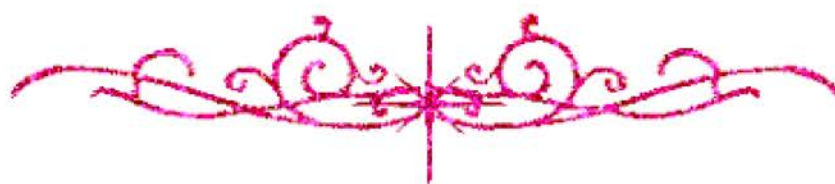
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بالرسالة صفحات لم ترد بالأصل



**EFFECT OF EXTRACTION SYSTEMS AND
PROCESSING TECHNIQUES ON THE
QUALITY OF VIRGIN OLIVE OIL**

By

Azza Abd Alla Ahmed Ahmed

B.Sc. (Food Technology), Fac. of Agric,
Ain Shams University (1990)
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THESIS

**Submitted in Partial Fulfillment of
The Requirements for the Degree of
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In
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Cairo University**

2002

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ABSTRACT

This study was carried out to investigate some physical, chemical and sensory changes that takes in virgin olive oil of three varieties, Arbequine, Coratina and El-Salam at two stage of ripening, different extraction systems and conditions. Also, separation and identification of fatty acids, unsaponifiable matters and polyphenolic compounds of virgin olive oil samples were analyzed by G.L.C and HPLC. Besides, the changes of some physical and chemical properties of investigated olive oils during storage at room temperature for 18 months were studied. The obtained results showed that the Coratina variety gave the highest oil yield and good physicochemical and organoleptic characteristics. The yield of oil percent was increased with advancement of fruit ripening. Besides, the addition of vegetable water during extraction of olive oil produced high quality oil and highest yield percent. The malaxation for 60 minutes gave highest oil yield, meanwhile, malaxation for 15 min. produced better characteristics for olive oil for all investigated varieties. The centrifugation system produced high amount of olive oil but less quality than pressing system. Also, the olive oil extracted by pressing from Coratina variety October harvest have the highest stability after storage for 18 months when used vegetable water with malaxation for 15 min. Meanwhile, the centrifugation system produced olive oil have less stability during storage period compared to pressing system.

Keywords: Olive, variety, oil, pressing, centrifugation, stability, malaxation, vegetable water.

Use Other Side if Necessary

M. M. El-Nikeety

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