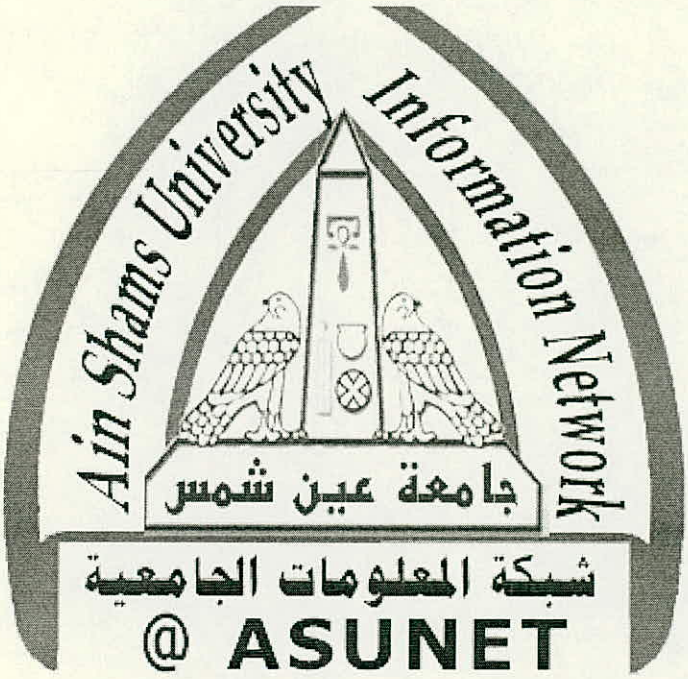

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم




# شبكة المعلومـــات الجامعية

# التوثيق الالكتروني والميكروفيلم

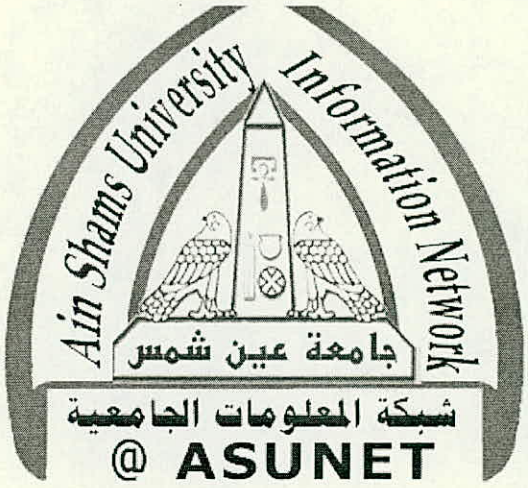

شبكة المعلومات الجامعية

# جامعة عين شمس

## التوثيق الالكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات




## يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

**To be kept away from dust in dry cool place of**
**15 – 25c and relative humidity 20-40 %**


# بعض الوثائق الأصلية تالفة


# بالرسالة صفحات

# لم ترد بالأصـــل

# Utilization of High Fructose Syrup in Preservation of Fruits Produced in North Sinai

By

**Shefaa Selim Mohamed Ismail**

B.Sc. Environmental Agricultural Sciences
Faculty of Environmental Agricultural Sciences
Suez Canal University (1995)

***Thesis***

**Submitted in partial fulfillment of the requirements for The Master Degree**

**in**

**Environmental Agricultural Sciences**
**(Food Science &Technology)**

**Agricultural Processing Department**
**Faculty of Environmental Agricultural Sciences**
**Suez Canal University**



**2002**

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**Under the supervision of:**


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Approval Sheet

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Date of Examination / / 2002.

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# Abstract

This investigation aimed to utilize supplementary high fructose syrup (HFCS-42%) which is a local product in Egypt instead of sucrose in jam manufacture. The used fruits were apple, fig, guava and peach which cultivated in North Sinai. Different blends of sucrose/HFCS-42% with the proportions of (100:0, 75:25, 50:50, 25:75, 0:100 w/w) were examined in jam manufacture. Samples were analysed directly after preparation as well as during six months of storage in refrigerator.

Chemical analysis showed that the effect of ratios of sucrose substitution by HFCS on chemical properties of the produced jams were extremely slight. Meanwhile distinct differences in chemical properties were pronounced due to changing the used fruit species.

Microbiological examination showed that the colony forming unit was less than 30 CFU/g, and there were no obvious changes were recorded during storage.

Chemical and microbiological analysis showed that the produced jams were in accordance with the local specifications as well as those of other countries.

Organoleptic evaluation showed that the jam treatment with the ratio of (HFCS 25%+S 75%) was the more preferable treatment in jam manufacture, and peach jam had the highest acceptable scores followed by guava, apple and fig jams, respectively.