



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



شبكة المعلومات الجامعية  
@ ASUNET



# 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 الوثائق الأصلية تالفة

# بالرسالة صفحات لم ترد بالاصل



**TECHNOLOGICAL AND MICROBIOLOGICAL  
STUDIES ON SOME JUICES**

**By**

**Ayman Sayed Dyab Rezk**

*B.Sc. Agric. (Food Science) Moshtohor, Zagazig Univ. (1990)*



**THESIS**

**Submitted in partial fulfillment of  
the requirements for the Degree of  
MASTER OF SCIENCE**

**IN**

**Agricultural Science  
(Food Technology)**

**Food Science Department  
Faculty of Agriculture, Moshtohor  
Zagazig University (Benha Branch)**

**2003**



# TECHNOLOGICAL AND MICROBIOLOGICAL STUDIES ON SOME JUICES

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**Ayman Sayed Dyab Rezk**

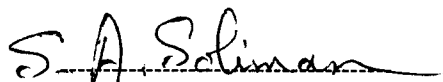
*B.Sc. Agric. (Food Science), Zagazig Univ. (1990)*

**Under the supervision of:**

**Prof. Dr. S.A. Soliman**

*Prof. of Food Technology,*

*Fac., of Agric. Moshtohor, Zagazig Univ*



**Dr. H.E.M. Bahlol**

*Assis Prof. of Food Technology,*

*Fac. of Agric. Moshtohor, Zagazig Univ.*



**Dr. A.I. El-Desouky**

*Ass. Prof. of Food Technology,*

*Fac. of Agric. Moshtohor, Zagazig Univ.*







## APPROVAL SHEET

**Name of Student : Ayman Sayed Dyab Rezk**

**Degree : M.Sc. in Agriculture (Food Technology)**

**Title of Thesis : Technological and microbiological studies on some juices**

### Approved by

**Prof. Dr. R.A. Taha**

*Prof. of Food Technology,*

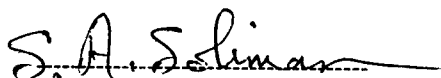
*Fac., of Agric. Ismaelia, Suez Canal Univ.*



**Prof. Dr. S.A. Soliman**

*Prof. of Food Technology,*

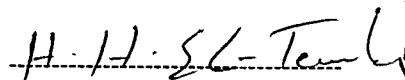
*Fac., of Agric. Moshtohor, Zagazig Univ.*



**Prof. Dr. H.H. El-Tanahy**

*Prof. of Food Technology,*

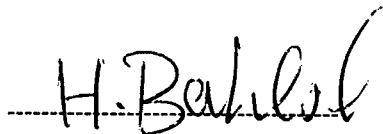
*Fac. of Agric. Moshtohor, Zagazig Univ.*



**Dr. H.E.M. Bahlol**

*Assis Prof. of Food Technology,*

*Fac. of Agric. Moshtohor, Zagazig Univ.*



**(Committee in Charge)**

**Date : 28 / 6 /2003**





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## ABSTRACT

In this study, vacuum concentration (V.C.) and serum-pulp concentration methods (S.P.) were used to produce concentrated apricot and peach juices. The juice was concentrated without any additive as control and with addition of ethylene diamine tetra-acetic acid (EDTA) and/or ascorbic acid. The concentrated juices were stored at  $-12^{\circ}\text{C}$  for nine months. Fresh and concentrated juices were chemically analyzed for some characteristics which indicate the quality of juices. Also, microbiological examination was done for fresh and concentrated juices. Furthermore, effect of adding EDTA and ascorbic acid on chemical composition and microbiological examination on concentrated apricot and peach juices were studied. Finally, sensory evaluation was done for all concentrated juices. Generally, it could be concluded that the concentrated juice produced by serum-pulp, was better than concentrated juice produced by vacuum concentration. Addition of ascorbic acid inhibited the changes in some chemical and physical characteristics, slightly better than the addition of EDTA. Both concentration methods decreased the total viable bacterial count, yeast and moulds. However, the concentrated juices produced by V.C. contained a lower number of microorganisms than the concentrated juices produced by S.P.C. method. Addition of ascorbic acid or EDTA lead to decrease the microbiological load, but ascorbic acid was more effective. The chemical, composition and organoleptic properties of fresh carrot juice, and juice preserved by heat treatment and/or addition of benzoic acid, sorbic acid, or sodium metabisulfate, were also studied.



