

# بسم الله الرحمن الرحيم



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# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

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# بعض الوثائق الأصلية تالفة



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بالرسالة صفحات

لم ترد بالأصل



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**RESPONSE OF GUAVA TREES TO SOME  
IRRIGATION AND FERTILIZATION  
TREATMENTS**

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Presented to the Graduate School  
Faculty of Agriculture, Alexandria University  
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in

**Pomology**

By

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# **RESPONSE OF GUAVA TREES TO SOME IRRIGATION AND FERTILIZATION TREATMENTS**

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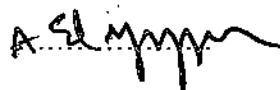
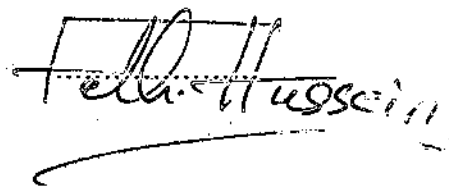
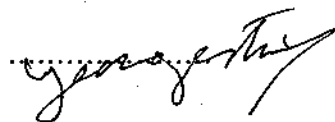
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***DEDICATED***

**TO:**

**The Memory of My Mother**

**My Dear Father and Sister**

**My Dear Husband**

**My Dear Daughters and to My Lovely Son.**

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# CONTENTS

|                                                                                                                              | Page |
|------------------------------------------------------------------------------------------------------------------------------|------|
| <b>I- INTRODUCTION .....</b>                                                                                                 | 1    |
| <b>II- REVIEW OF LITARETURE .....</b>                                                                                        | 3    |
| 1- Chemical composition of guava leaves and fruits .....                                                                     | 3    |
| 2- Effect of soil fertilization on leaf mineral content and physico-chemical characteristics of guava leaves and fruits..... | 11   |
| 3- The effect of irrigation on growth, fruit set, yield and physico-chemical characteristics of guava leaves and fruits..... | 22   |
| <b>III- MATERIALS AND METHODS.....</b>                                                                                       | 27   |
| <b>IV- RESULTS AND DISCUSSION.....</b>                                                                                       | 33   |
| Effect of Nitrogen, Potassium Fertilization and Irrigation Treatments on:                                                    | 33   |
| <b>1- Vegetative growth .....</b>                                                                                            | 33   |
| 1.1- Number of shoots .....                                                                                                  | 33   |
| 1.2- Average of shoot length .....                                                                                           | 35   |
| <b>2- Yield.....</b>                                                                                                         | 35   |
| 2.1- Number of flowers/tree .....                                                                                            | 35   |
| 2.2- Fruit set % .....                                                                                                       | 37   |
| 2.3- Number of fruits/tree.....                                                                                              | 39   |
| 2.4- Yield .....                                                                                                             | 40   |
| <b>3- Fruit quality.....</b>                                                                                                 | 42   |
| 3.1- Fruit weight .....                                                                                                      | 42   |
| 3.2- Fruit pulp thickness.....                                                                                               | 45   |
| 3.3- Fruit firmness.....                                                                                                     | 46   |
| 3.4- Juice T.S.S .....                                                                                                       | 47   |
| 3.5- Juice acidity .....                                                                                                     | 48   |
| 3.6- Juice Vitamin C content .....                                                                                           | 50   |
| 3.7- Total pectin .....                                                                                                      | 52   |
| 3.8- Nitrate-nitrogen content of fruits .....                                                                                | 53   |
| 3.9- Fruit tannins % .....                                                                                                   | 54   |
| 3.10- Carbohydrates .....                                                                                                    | 56   |
| 3.10.1- Total sugars .....                                                                                                   | 56   |
| 3.10.2- Reducing sugars .....                                                                                                | 57   |
| 3.10.3- Non-reducing sugars .....                                                                                            | 58   |
| 3.10.4- Starch .....                                                                                                         | 59   |

|                                           |            |
|-------------------------------------------|------------|
| <b>4- Fruit mineral content.....</b>      | <b>61</b>  |
| 4.1- Macro elements of guava fruits ..... | 61         |
| 4.1.1- Nitrogen .....                     | 61         |
| 4.1.2- Phosphorus .....                   | 62         |
| 4.1.3- Potassium .....                    | 64         |
| 4.1.4- Calcium .....                      | 66         |
| 4.1.5- Magnesium .....                    | 67         |
| 4.1.6- Sodium .....                       | 69         |
| 4.2- Micro-elements .....                 | 70         |
| 4.2.1- Iron .....                         | 70         |
| 4.2.2- Copper .....                       | 72         |
| 4.2.3- Manganese .....                    | 73         |
| 4.2.4- Zinc .....                         | 75         |
| <b>5- Leaf mineral content .....</b>      | <b>77</b>  |
| 5.1- Macro elements of guava fruits ..... | 77         |
| 5.1.1- Nitrogen .....                     | 77         |
| 5.1.2- Phosphorus .....                   | 79         |
| 5.1.3- Potassium .....                    | 81         |
| 5.1.4- Calcium .....                      | 82         |
| 5.1.5- Magnesium .....                    | 84         |
| 5.1.6- Sodium .....                       | 86         |
| 5.2- Micro-elements .....                 | 87         |
| 5.2.1- Iron .....                         | 87         |
| 5.2.2- Copper .....                       | 89         |
| 5.2.3- Manganese .....                    | 91         |
| 5.2.4- Zinc .....                         | 92         |
| <b>TABLES.....</b>                        | <b>95</b>  |
| <b>V- SUMMARY AND CONCLUSION .....</b>    | <b>135</b> |
| <b>VI- LITERATURE CITED .....</b>         | <b>147</b> |
| <b>VII- ARABIC SUMMARY .....</b>          |            |

## **INTRODUCTION**

## I- INTRODUCTION

The guava tree "*Psidium guajava* L." is one of the oldest cultivated trees in the world. It is believed that its culture started first in Latin America and then spread from Mexico and Peru to all tropical and subtropical areas in the world.

The guava is a hardy plant which grows in most soil types. Although the guava can tolerate low soil moisture condition, availability of water constantly will promote fast growth and leaf flushes. A warm, humid condition is most optimum for guavas.

In Egypt, Guava plantations are widely distributed especially in Beheira, El-Sharkia, around Alexandria and in newly reclaimed lands.

Guava can grow in many types of soils and it can grow under a wide range of climatic and soil conditions (Bourke, 1976). The tree is fairly drought, tolerant and can tolerate alkaline soil up to pH 8.2 (Somson, 1980).

The total guava area in A.R.E. is 27.040 thousand feddans in 1997 and the annual production is approximately 195.022 tons of guava fruits (C.A.P.M.S.).

Guava is considered a main fruit for export. Fruits are rich in Vitamin C and are consumed either fresh or incorporated in the preparation of Jam, Jelly and Nectar. Guava is marketed in full ripe stage and must be consumed immediately or stored at low temperature (Rofael, 1985).

This investigation was carried out on seedy guava trees to study the effect of soil application of nitrogen and potassium on:

1. The leaf mineral content, shoot growth, fruit set and yield of the trees.
2. Fruit quality including fruit mineral content at harvest time.
3. The amount and time of irrigation in relation to leaf, fruit mineral content and fruit quality.