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Some physiological studies on fruiting of Haiany and Halawy date cultivars under Assiut conditions

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CONTENTS

| | Page |
|---|------|
| Introduction | 1 |
| Review of Literature | 6 |
| 1- Vegetative growth | 6 |
| 1.1. Growing of the stem and new leaves | 6 |
| 1.2. Annual net increment in new leaves | 9 |
| 2- Flowering | 10 |
| 2.1. Flowering bud formation and differentiation | 10 |
| 2.2. Time of spathe emerge and bursting | 12 |
| 2.3. Annual production of inflorescences | 13 |
| 3- Artificial pollination importance | 15 |
| 4- Fruit thinning effects | 18 |
| 5- Seasonal changes | 22 |
| A- Fruit physical changes | 22 |
| P. Fruit chamical changes | 27 |
| B- Fruit chemical changes | 33 |
| | |
| Results and Discussion | 39 |
| The first experiment | 39 |
| 1- Seasonal and annual net increment of new leaves | 39 |
| 2- Distribution of leaves and inflorescences in response to leaf | 4.0 |
| ages | 43 |
| 3- Percentage of leaves subtended by female inflorescence and | |
| contribution of different leaf ages in their final number per | 48 |
| palm | |
| 4- Percentage of contribution of the different leaf ages in the total | , |
| number of inflorescences per palm | 52 |
| 5- Palm productivity | 52 |
| 5.1. Bunch weight | 52 |
| 5.2. Yield (kg)/palm | 55 |
| 5.3. Biennial bearing index | 59 |
| The second experiment | 64 |
| A- Yield index | 64 |
| B- Changes in physical fruit properties | 74 |
| 1- Fruit weight | 74 |
| 2- Seed weight | 82 |
| 3- Flesh weight percentage | 88 |
| 4- Fruit dimensions | 94 |
| C- Chemical changes in the developing fruits | 106 |
| 1- Changes in total soluble solids | 106 |
| 2- Changes in sugar contents | 113 |
| A- Total sugars | 113 |
| B- Reducing sugars | 120 |
| 3- Changes in total acidity | 127 |
| Summary and Conclusion | 134 |
| Literature Cited | 142 |
| Arabic Summary | - |

LIST OF TABLES

| Table | Title | Page |
|---------|---|--------------|
| No. | | |
| 1 | The rate of producing new leaves of Halawy and Haiany date | |
| | palms every two months during 2000, 2001 and 2002 seasons | 41 |
| 2 | Distribution of leaves and inflorescences in response to leaf | |
| | ages of Halawy and Haiany date cultivars during 2000, 2001 | |
| | and 2002 seasons | 46 |
| 3 | The percentage of leaves substended by inflorescences in | |
| | response to their age of Halawy and Haiany date cv. during | |
| | 2000, 2001 and 2002 seasons. | 50 |
| 4 | The percentage of contribution of the different leaf ages of | |
| | Halawy and Haiany date cvs. in the final number of | |
| | inflorescences per palm during 2000, 2001 and 2002 seasons | 50 |
| 5 | Effect of leaf ages of Halawy and Haiany date cvs. on bunch | |
| | weight (kg) during 2000, 2001 and 2002 seasons | 57 |
| 6 | Contribution of different leaf ages of Halawy and Haiany | |
| | date cv. in their final yield (kg)/palm during 2000, 2001 and | |
| | 2002 seasons | 57 |
| 7 | Palm biennial bearing in response to the cultivar and leaf ages | |
| | during 2000, 2001 and 2002 seasons | 62 |
| 8 | Effect of pollination rate on fruit set, fruit retention | |
| | "percentage" and bunch weight (kg) of Halawy and Haiany | |
| | date cultivars during 2000, 2001 and 2002 seasons | 66 |
| 9 | Effect of thinning treatments on fruit set, fruit retention | |
| | "percentage" and bunch weight (kg) of Halawy and Haiany | |
| | date cultivars during 2000, 2001 and 2002 seasons | 72 |
| - 10 | Seasonal fruit weight changes (g) of Halawy and Haiany date | |
| | cultivars as affected by pollination rate during 2000, 2001 | |
| | and 2002 seasons | 76 |
| 11 | Seasonal fruit weight changes (g) of Halawy and Haiany date | |
| | cultivars as affected by thinning treatments during 2000, 2001 | |
| | and 2002 seasons | 80 |
| 12 | Seasonal seed weight changes (g) of Halawy and Haiany date | |
| | cultivars as affected by pollination rate during 2000, 2001 | |
| | and 2002 seasons | 83 |
| 13 | Seasonal seed weight changes (g) of Halawy and Haiany date | |
| | cultivars as affected by thinning treatments during 2000, 2001 | |
| | and 2002 seasons | 86 |
| 14 | Seasonal flesh weight changes (%) of Halawy and Haiany | - |
| | date cultivars as affected by pollination rate during 2000, | |
| | 2001 and 2002 seasons | 89 |
| 15 | Seasonal flesh weight changes (%) of Halawy and Haiany | 0, |
| | date cultivars as affected by thinning treatments during 2000, | |
| | 2001 and 2002 seasons | 92 |
| <u></u> | | |

| Table | Title | Page |
|-----------|---|------|
| No. 16 | Seasonal fruit height changes (cm) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 96 |
| 17 | Seasonal fruit height changes (cm) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 99 |
| 18 | Seasonal fruit diameter changes (cm) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 102 |
| 19 | Seasonal fruit diameter changes (cm) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 104 |
| 20 | Seasonal total soluble solids changes (%) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 108 |
| 21 | Seasonal total soluble solids changes (%) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 111 |
| 22 | Seasonal total sugars changes (%) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 115 |
| 23 | Seasonal total sugars changes (%) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 118 |
| . 24 | Seasonal reducing sugars changes (%) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 122 |
| 25 | Seasonal reducing sugars changes (%) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 125 |
| 26 | Seasonal total acidity changes (%) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 129 |
| 27 | Seasonal total acidity changes (%) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 132 |

LIST OF FIGURES

| Figure No. | Title | Page |
|---------------|--|------|
| 1 | The rate of producing new leaves of Halawy and Haiany date palms every two months during 2000, 2001 and 2002 seasons | 42 |
| 2 | Distribution of leaves and inflorescences in response to leaf ages of Halawy and Haiany date cultivars during 2000, 2001 and 2002 seasons | 47 |
| 3 | The percentage of leaves substended by inflorescences in response to their age of Halawy and Haiany date cv. during 2000, 2001 and 2002 seasons. | 51 |
| 4 | The percentage of contribution of the different leaf ages of Halawy and Haiany date cvs. in the final number of inflorescences per palm during 2000, 2001 and 2002 seasons | 51 |
| 5 | Effect of leaf ages of Halawy and Haiany date cvs. on bunch weight (kg) during 2000, 2001 and 2002 seasons | 58 |
| 6 | Contribution of different leaf ages of Halawy and Haiany date cv. in their final yield (kg)/palm during 2000, 2001 and 2002 seasons | 58 |
| 7 | Palm biennial bearing in response to the cultivar and leaf ages during 2000, 2001 and 2002 seasons | 63 |
| 8 | Effect of pollination rate on fruit set, fruit retention "percentage" and bunch weight (kg) of Halawy and Haiany date cultivars during 2000, 2001 and 2002 seasons | 67 |
| 9 | Effect of thinning treatments on fruit set, fruit retention "percentage" and bunch weight (kg) of Halawy and Haiany date cultivars during 2000, 2001 and 2002 seasons | 73 |
| 10 | Seasonal fruit weight changes (g) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 77 |
| 11 | Seasonal fruit weight changes (g) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 81 |
| 12 | Seasonal seed weight changes (g) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 84 |
| 13 | Seasonal seed weight changes (g) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 87 |
| 14 | Seasonal flesh weight changes (%) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 90 |
| 15 | Seasonal flesh weight changes (%) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 93 |

| Figure | Title | Page |
|----------|---|------|
| No 16 | Seasonal fruit height changes (cm) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 97 |
| 17 | Seasonal fruit height changes (cm) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 100 |
| 18 | Seasonal fruit diameter changes (cm) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 103 |
| 19 | Seasonal fruit diameter changes (cm) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 105_ |
| 20 | Seasonal total soluble solids changes (%) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 109 |
| 21 | Seasonal total soluble solids changes (%) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 112 |
| 22 | Seasonal total sugars changes (%) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 116 |
| 23 | Seasonal total sugars changes (%) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 119 |
| 24 | Seasonal reducing sugars changes (%) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 123 |
| 25 | Seasonal reducing sugars changes (%) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 126 |
| 26 | Seasonal total acidity changes (%) of Halawy and Haiany date cultivars as affected by pollination rate during 2000, 2001 and 2002 seasons | 130 |
| 27 | Seasonal total acidity changes (%) of Halawy and Haiany date cultivars as affected by thinning treatments during 2000, 2001 and 2002 seasons | 133 |

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INTRODUCTION

Date palm (*Phoenix dactylifera* L.) has been associated with people's life for many years. It is believed that this tree is blessed since it is mentioned in many verses in the Holy Qura'an and in many of the sayings of the profit. The date palm tree has been a source of nutrition and a shelter against harsh conditions. No wonder, date palms have been of great importance in the Arab world.

In Egypt, date palm culture extends from north to south, from the relatively cool and humid region of the Mediterranean (Lat. 31N) to the extremely hot and dry region of Aswan (Lat. 22N). At present, 2000 or more different cultivars are known to exist allover the world, but only a few important ones have been evaluated for their agronomic performance and fruit quality. The varieties grown include, soft, semi-dry and dry dates, according to the prevalent environmental conditions.

The Genus Phoenix is characterized as a dioecious plant with separate male and female trees. However, in order to improve fruit set, date palms are generally pollinated artificially. The date palm like other monocotyledonus has only a terminal single growth point which produces the blooms (flower clusters and fronds leaves). The mature female products throughout a six week periods during March, April and early May.

The successful orchard management practices are directed towards providing adequate flower thinning before or after pollination to induce more fruit setting and to cause those left to become larger and of a better quality. Additionally to insure adequate flowering the following year and to relieve the alternate bearing in some date cultivars.