

بسم الله الرحمن الرحيم

Sudan University of Science and  
Technology

College of Graduate Studies

**Effect of Argel Additions to soil on Flowering  
and Yield of Dry Date Palm (Phoenix dactylifera  
L.) Cultivar (Barakawi)**

أثر إضافة الحرجل إلى التربة على إزهار و إثمار النخيل الجاف  
صنف بركاوي

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## **DEDICATION**

**I dedicate this work to: My father, Mother,  
Sisters, And brothers and to all those who  
encouraged me to achieve this goal.**

**Asma**

# *Acknowledgement:*

Praise is to Allah the Almighty who gave me the health, strength the patience to complete this study.

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# Abstract

This study was conducted in ELGureir village in the Northern state to study the effect of different argel additives to the soil on flowering and yield of date palm, Barakawi cultivar.

The results revealed significant increment in flowering, and yield parameters beside fruit quality compared to the control.

The yield increment was almost double compared to the control upon addition of 3 ounces of argel. The least increment resulted from the one ounce treatment and was also significant over the control.

The increase in fruit length is a relative advantage as lengthy fruits are preferred by consumers and thus render better financial returns.

## المخلص

أجريت هذه الدراسة في قرية القرير بالولاية الشمالية لدراسة أثر تركيزات مختلفة من إضافات الحرجل إلى التربة على أزهار وإثمار نخيل البلح صنف بركاوي.

أوضحت النتائج أن إضافات الحرجل المختلفة قد أحدثت زيادات معنوية في القياسات الخاصة بالأزهار و الإنتاجية وصفات الثمار.

الزيادة الإنتاجية قاربت الضعف عند إضافة ثلاثة أوقيات للنخلة. أضعف الإنتاجات وإن كانت بزيادة معنوية على المقارنة نتجت عن إضافة أوقية واحدة من الحرجل.

الزيادة في أطوال الثمار تعتبر ميزة نسبية إذ أنها خاصية مفضلة لدى المستهلك وترفع القيمة التسويقية للمنتج.

# Cotients

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