DEDICATION

To the soul of my beloved father who stood beside me during the early stages of this research and who took me together with the other members of my family under his wing with all compassion, guidance, inspiration and the ideal bringing – up.

Widad M.H.
ACKNOWLEDGEMENTS

I wish to express my sincere gratitude and appreciation to my supervisor Prof. Asim Ali Abdelrahman for his invaluable guidance and help during the stages of the practical work and the preparation of this study.

I am also grateful to Dr. Awad Khalafalla the Head of Department of Plant Protection, College of Agricultural Studies, Sudan University of Science and Technology. My gratitude and deep appreciation are also due to Dr. Abdel Bagi Elsayed Ali of the same department.

I am deeply indebted to my husband Tarig, to my mother, sisters, and brothers.

Last but not the least, sincere thanks to Abd El Hamed Abd El Rahim for typing this study.
ABSTRACT

Pods of *Acacia nilotica* were tested in powder form as seed dresser against *Bruchidius incarnatus* (Boh) on broad bean.

The pod powder of *A. nilotica* was tested at three different rates viz, one gram, two grams and three grams per 400 broad-bean seeds.

In the treatments in which the doses of one gram, 2 grams and 3 grams of powder were used, the beetles died after 6, 4 and 3 days respectively compared to 8 days in the control treatment.

There were no significant differences among these rates with regard to the reduction of oviposition except the 3 grams dose rate which reduced oviposition by 67% compared to the control.

There was no significant difference between any of the two rates, one and two grams when compared with the control treatment in reducing egg hatching. The higher dose (3 grams) gave 23% reduction in egg hatching.

The 3-grams dose was the only treatment that reduced adult emergence significantly (67%) compared to the control treatment.
بسم الله الرحمن الرحيم

خلاصة الأطرحة

أُختبرت إمكانية استخدام ثمار نبات السنط كمبيد نباتي تم به تغير حبوب القول المصري وذلك لمكافحة خنفساء القول المصري Bruchidius incarnatus. لقد أثبت مسحوق ثمار السنط فعاليته على موت الحشرة الكاملة، إنتاج البيض وفقه وكذلك خروج الحشرة الكاملة من الشرفة.

استخدم مسحوق ثمار السنط بأوزان واحد جرام ، ٢ ، ٣ جرامات مقارنة مع الشاهد، وكل معاملة من المعاملات أشتملت على ١٠٠ حبة من القول المصري. أعطي التركيز ٣ جم أفضل النتائج فقد ماتت جميع الحشرات خلال ثلاثة أيام من بداية التجربة، في المعاملات المستخدمة فيها ١ ، ٢ جرام مات الخناضس بعد ٦ ، ٤ أيام على التوالي بالمقارنة مع الشاهد الذي استغرق موت الخناضس فيه ٨ أيام.

أما فيما يختص بوضع البيض فلم توجد هنالك فروقات معنوية بين مختلف الجرعة ماعدا الجرعة الكبرى (٣ جم) والتي أدت إلى تخفيض وضع البيض بنسبة ٦٧% مقارة بالشاهد. أما بالنسبة لفقس البيض الخناضس لا توجد فروقات معنوية بين المعاملة ١ و ٢جم والشاهد أما المعاملة ٣ جم فقد خفضت فقس البيض بنسبة ٣٢%.

أما المعاملة ذات ٣ جم وهي المعاملة الوحيدة التي خفضت نسبة خروج الحشرة البالغة من الشرفة وكان ذلك بنسبة ٢٧٪.
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