الاية

قال تعالى:

*وَلَولا إِذ دَخَلتَ جَنَّتَكَ قُلتَ ما شاءَ اللَّهُ لا قُوَّةَ إِلّا بِاللَّهِ إِن تَرَنِ أَنا أَقَلَّ مِنكَ مالًا وَوَلَدًا ﴿٣٩﴾فَعَسى رَبّي أَن يُؤتِيَنِ خَيرًا مِن جَنَّتِكَ وَيُرسِلَ عَلَيها حُسبانًا مِنَ السَّماءِ فَتُصبِحَ صَعيدًا زَلَقًا﴿٤٠﴾أَو يُصبِحَ ماؤُها غَورًا فَلَن تَستَطيعَ لَهُ طَلَبًا﴿٤١﴾.

سورة الكهف – الاية (٣٩-٤١)

DEDICATION

TO MY MOTHER,FATHAR,BROTHERS,SISTER , WIFE AND CHILDREN.

IDRIES.

ACKNOWLEDGEMENTS

All thanks are due to Almighty Allah (Jala-Jalalaho) who gave me health and strength and helped me tremendously to achieve this work**.**Iam greatly indebted to my supervisor Dr.Saif EL din Mohammed Kheir for his guidance, patience and keen interest and continuous participations throughout this study.

Thanks to my M.Sc.friend's.Thanks are due to staff members of Plant Protection Department, College of Agricultural Studies.

Thanks due to Administration of Horticultural Sector (Khartoum -Mogran) for nominate me this chance to study M.Sc.

Thanks are to the Ministry of Agriculture and Animal Resource of Khartoum States specially (Administration of Agricultural Extension).

Thanks to my agricultural inspectors friends in thes schemes of West Soba,South Salyate,El faki hashim and Wad ramly for facilitating the work of the experiments in the fields.

Thanks to the Shambat Research Station.

Thanks are due to Dr. Salah Daf ALLa for his kindness during statistic analysis process.

Thanks to my family who always supported me on this work, specially my wife.

Thanks are also extended to all those who gave me help for production this work.

At the first and end all thanks are due to Almighty Allah.

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English abstract:

A survey was carried out for tomato leaf miner *Tuta absoluta* (Meyrick) (Lepidoptera:Gelechiidae) on summer tomato (GS variety) in open field of four agricultural schemes of about 40 fedans in Khartoum State. The aim of survey was to evaluate the infestation of this pest on summer tomato. The results showed that no infestation scored by *Tuta absolut*a in summer tomato in all the period of experiment, although other pests were found such as:leaf miner ,leaf curl,boll worm and mealy bug . This may be due to the unsuitable Environmental conditions to the pest during July, August and September.The recommendation to cultivate the summer tomato (GS) on these months safley.

Also there was two laboratory experiments were conducted in the Department of Plant Protection,Collage of Agricultural Studies, Sudan University of Science and Technology (SUST).The first study was to examine the lethal effect of seeds ethanolic extract of *Jatropha curcas* L,against the larvae of *Tuta absoluta*. Four concentrations were used in this experiment 5%, 10%, 15% and 20% .The result showed that all the tested concentrations caused higher mortality percentage than the control. The lowest concentration 5% gave 68% mortality after 72 hrs of exposure. The highest concentration 20% scored 100% mortality not less than the mortality precentage of the standard insecticides after 72 hrs of exposure.The recommendation can be to use this extract as a control agent for *Tuta absoluta*.

The second laboratory study was to investigate the preference of larvae of Tomato leaf miner on leaves and fruits of five vegetable plants .The results showed that there was significant difference in preferences of larvae after five days of appearance of the the larvae. .The larvae only preferred the

leaves of tomato 86.7% and potato 20% while their preference in fruits was zero.After ten days also there was significant difference in preferences of the larvae.The larvae was preferred the leaves of potato 20%, tomato 13%, eggplant 10% and pepper 6.6%.On fruits the larvae only preferred tomato 33.3% and potato 3.3%.The recommendation can be avoiding cultivating other solanacae beside tomato.

الملخص

تـــم اجـــراء مســـحى عـــن حـــافرة اوراق الطمـــاطم (Meyrick) Tuta absoluta (Lepidoptera:Gelechiidae) فى الطماطم الصيفية للعينة (GS) فى حقل مكشوف فى اربعة مشاريع زراعية ل 40 فدان فى ولاية الخرطوم.هدف المسح تقييم اصابةهذه الافة للطماطم الصيفية. اوضحت النتائج بانه لا توجد اصا بات احرزت للطماطم الصيفية من*T. absoluta فى كل زمن التجربة بالرغم من وجود بعض الافات مثل:حافرةالاوراق,مرض التجعد ,ديدان الثمارو البق الدقيقى* و يعـود ذلـك ربمـا نسـبة لعـدم ملائمـة الظـروف البيئيـة للافـة خـلال الاشـهر يوليـو,اغسـطس وسبتمبر.يوصى بزراعة الطماطم الصيفية (GS) فى هذه الاشهر بامان.

كذلك اجريت تجربتين فى معمل قسم وقاية النبات--كلية الدراسات الزراعية-جامعة السودان للعلوم و التكنولوجيا.هدفت الدراسة الاولى عن اختبارالاثر القا تل لمستخلص ايثانول بذور نبات الجا تروفا *Jatropha curcas* ضد يرقات *T.absoluta*.استخدمت ا ربعة تركيزات 5% ,10%, 15% و20%. اوضحت النتائج بان كل التركيزات المختبره اعطت نسبة موت اعلى من الشاهد . اقل تركيز 5% اعطى نسبة موت 68% وذلك بعد 72ساعة من المعا ملة . اعلى تركيز 20% اعطى نسبة موت 100% بعد 72ساعة من المعا ملة لا تقل عن نسبة موت المبيد الحشرى القياسى.التوصية يمكن استخدام هذا المستخلص فى مكافحة *T. absoluta* .

الدراسة الثا نية كانت لمعرفة تفضيل يرقات حا فرة اوراق الطماطم لاوراق وثمار خمسة من نباتات الخضر.اظهرت النتائج هنالك فروق معنوية مختلفة لتفضيل اليرقة بعد مضى خمسة ايام من ظهور اليرقات. اليرقات فضلت فقط اوراق الطماطم 86.7% و البطا طس20% فى حين تفضيلها للثمار كا ن صفرا. بعد مضى عشرة ايام ايضا هنالك فروق معنوية مختلفة لتفضيل اليرقات.اليرقات فضلت اوراق البطاطس20%, الطما طم 13% , البا زنجا ن10% و الفلفلية 6.6% . فى الثمار اليرقات فضلت فقط الطما طم 33.3% و البطاطس3.3% .التوصية يجب تجنب زراعة العائلة solanacae بجانب الطما طم.