

# **DEDICATION**

To the soul of my father.

To my dear mother,

Brothers, sisters and friends

With love and respect

Hajer

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## LIST OF ABBREVIATION

Cm	Centimeter
ml	Milliliter
°C	Centigrade degrees
Kg	Kilogram
L	Litre
c.v%	Coefficient of variance
ANOVA	Analysis of variance
Fig	Figure
g	Gram
IPM	Intergrated pest management
d.f	Degree of freedom
Ach E	Acetyl choline esterase

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## ABSTRACT

In the present work, systemic and contact toxicity of garlic emulsion and garlic with green water extract was evaluated on cotton aphid *Aphis gossypii* Gol.

The study was carried out on okra plant which was grown in polyethylene bags inside a greenhouse at the faculty of agricultural studies, Shambat during the period from January to March 2004.

The plants were infested with aphids and the effects of garlic and garlic with green chilli emulsions were studied by direct spraying to the okra foliage. The two emulsions were used at the following concentrations 2.5%, 5% and 10% in addition to malathion 57% in a concentration of 3cm<sup>3</sup> /L: the latter was used as a reference standard product.

The results obtained were statistically analysed and the following findings were shown: malathion was found to be the most effective compared to garlic and garlic with green chilli emulsions. With regard to garlic emulsion, the concentration 10% was found to be more effective than 2.5% and 5%. The same results were found for garlic with green chilli in which 10% concentration was more effective than 2.5% and 5%. The 10% concentration of garlic with chilli appeared more effective than garlic alone.

## ملخص الأطروحة

في هذا البحث تم تقييم الاثر الجهازى والاثـر عن طريق الملاسة لمستحلب الثوم ومستحلب الثوم مضافا اليه المستخلص المائى للشطة الخضراء على حشرة المن (*Aphis gossypii* Gol).

اجريت الدراسة على نبات البامية الذى تم زراعته فى اكيريا من البلاستيك داخل الصوبة المحمية بكلية الدراسات الزراعية بشمبات فى الفترة من يناير الى مارس 2004.

تم اصابة النبات بحشرة المن ودراسة تأثير مستحلب الثوم ومستحلب الثوم مضاف اليه مستخلص الشطة عن طريق الرش المباشر للنبات. تم استخدام المستحلبين بالتراكيز التالية 2.5% ، 5% ، 10% بالاضافة الى مبيد الملاثيون 57% بتركيز 3سم<sup>3</sup>/لتر والذى تم استخدامه كمرجع قياسى تم تحليل النتائج المتحصل عليها احصائيا والتى اظهرت الحقائق التالية: اظهر المبيد الكيمائى الملاثيون فعالية اكبر مقارنة مع مستحلبات الثوم والثوم مضاف اليه الشطة فيما يخص مستحلب الثوم اظهر تركيز 10% فعالية اكبر من تركيزى 2.5% و 5%

نفس النتائج تم الحصول عليها بخصوص مستحلب الثوم مضاف اليه الشطة حيث وجد تركيز 10% اكثر فعالية من تركيز 2.5% و 5%. تركيز

10% من مستحلب الثوم المضافة اليه الشطة كان اكثر فعالية من مستحلب

الثوم على حدة.