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Control Of Broomrape *(Orobanche ramosa L.)* By Using Two (Herbicides) And One Natural Product (Neem Leaves Powder) On Tomato Crop

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Dedication

to my parents

brothers

sisters

for all my love

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Thanks above all to allah who offered me health to do this work

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Abstract

This study was conducted at the Agricultural Research Corporation farm, Shambat in the season 2004-2005 .this study aimed for control of the parastic flowering plant Orobanche ramosa . on tomato plant

The herbicides used were Goal at two does (1.9 ml/L -1.5/L ml) and Pursuit at two doses 1 ml/ L – 0.5 ml /L) .Neem leaves at two doses (10 gm / hole – 20 / hole) . In three replicates The results revealed that there were significant differences on Orobanche ramosa on number of Orobanche / plants and number of branches although effect on fresh and dry weights compared to control .The yield of tomato (number and weight of fruits) had been decreased by treatments of chemicals. Goal herbicide at two rates tested was not effective in controlling Orobanche ramose these as pursuit at two rates tested were significantly effective in decrease the number of Orobanche ramose/plant and the shoots of orobanche/plant Neem leaves powder on the other land also decreased the number of shoots of orobanche the effect of both pursuit herbicide and Neem leaves on the fresh weight and dry weight also significantly low compared to control.

Goal herbicide also did not affect the fresh weight or dry weight of orobanche yield of tomato was significantly increased over the control in pursuit herbicides treatments and Neem leaves powder Goal herbicides at two rates tested did not increased Tomato yield compared to control .

ملخص الدراسة

أجريت هذه الدراسة بمزرعة هيئة البحوث الزراعية شمبات موسم الشتاء 2004-2005 وكان الهدف من الدراسة معرفة مدى تاثير وفاعلية تطبيق المكافحة الكيميائية باستخدام مبيدى الحشائش القول® wp Goal و البيرسوت وسحوق اوراق النيم لمكافحة طفيل الهالوك فى محصول الطماطم .

وقد استخدم مبيدى الحشائش بجرعتين (1.5 ml - 1.9ml) (1ml/L-ML/L 1.5) / القول والبيرسوت على التوالى . ومسحوق النيم 10 جرام – 20 جرام للحفرة. فى ثلاثة مكررات

وقد اظهرت النتائج فى هذه التجربة ان كل المعاملات ادت الى تاثير غير معنوى فى خفض الاصابة بالهالوك وعددية الطفيل وفروعه والوزن الرطب والجاف مقارنة مع الشاهد.

واظهرت النتائج ان مبيد الحشائش البيرسوت ادى الى خفض الاصابة بالهالوك فى الجرعة الثانية ولكنه ادى للتاثير على الانتاجية حيث اصبح عدد الثمار كبير ولكن الوزن قليل وكانت اعلى انتاجية للطماطم قد لوحظت فى الجرعة المنخفضة لاوراق النيم (10 GM/ hole) عند مقارنتها مع ا لجرعات الاخرى والشاهد. والنتائج التى اظهرتها التجربة في هذا العمل اوضحت ان مبيدى الحشائش البيرسوت والقول اديا الى تاثير معنوي في خفض عددية طفيل الهالوك وعدد فروعه وكذلك الوزن الرطب والجاف مقارنة مع الشاهد ولكن في حالة الانتاجية هنالك تاثير غير معنوى على عددية الثمار ووزنها حيث كان اقل من عدديتها ووزنها كما في حالة مسحوق النيم .

مما سبق يمكن التوصية باستخدام القول والبيرسوت بجرعات منخفضة لخفض الاصابة بالهالوك حتى لاتتاثر الانتاجية .

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