

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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

By

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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 parasitic flowering plant *Orobanche ramosa* . on tomato plant

The herbicides used were Goal at two doses (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 ramosa* these as pursuit at two rates tested were significantly effective in decrease the number of *Orobanche ramosa*/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 شمبان  
موسم الشتاء 2004-2005 وكان الهدف من الدراسة معرفة  
مدى تأثير وفاعلية تطبيق المكافحة الكيميائية باستخدام مبيدي  
الحشائش القول® wp والبيرسوت وسحوق اوراق  
النيم لمكافحة طفيل الهالوك في محصول الطماطم .

وقد استخدم مبيدي الحشائش بجرعتين (ml1.9 ml 1.5 - ml 1.5 -  
(1ml/L-ML/L 1.5) / القول والبيرسوت على التوالي .

ومسحوق النيم 10 جرام - 20 جرام للحفرة. في ثلاثة مكررات  
وقد اظهرت النتائج في هذه التجربة ان كل المعاملات ادت  
إلى تأثير غير معنوي في خفض الاصابة بالهالوك وعددية الطفيل  
وفروعه والوزن الرطب والجاف مقارنة مع الشاهد.

واظهرت النتائج ان مبيدي الحشائش والبيرسوت ادى الى  
خفض الاصابة بالهالوك في الجرعة الثانية ولكن ادى للتاثير على  
الانتاجية حيث اصبح عدد الثمار كبير ولكن الوزن قليل وكانت  
اعلى انتاجية للطماطم قد لوحظت في الجرعة المنخفضة لوراق  
النيم (GM/ hole 10) عند مقارنتها مع الجرعات الاخرى  
والشاهد. والنتائج التي اظهرتها التجربة في هذا العمل اوضحت  
ان مبيدي الحشائش والبيرسوت والقول اديا الى تأثير معنوي في  
خفض عدديه طفيل الهالوك وعدد فروعه وكذلك الوزن الرطب  
والجاف مقارنة مع الشاهد ولكن في حالة الانتاجية هنالك تأثير  
غير معنوي على عدديه الثمار وزونها حيث كان اقل من عدديتها  
وزونها كما في حالة مسحوق النيم .

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

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