Soil Technologies Corp.
Research and Development Department

Research Report

Title: Greenhouse Trial on Tomato Using Intercept

Crop: Tomato

Date: 1980

Abstract:
The purpose of this study is to evaluate the effect of Intercept[1] on tomato plants grown in soil contaminated with *Rhizoctonia solani*. The products Intercept, *Streptomyces* SR 57[2], and Intercept + *Streptomyces* SR 57 were applied to tomato plants in a control group containing regular potting soil and on plants in soil that was infected with *Rhizoctonia solani*. All groups were observed for the amount of plants emerged and for the weight of dry shoot matter. Plants treated with Intercept + *Streptomyces* SR 57 produced the best results in terms of plants emerged and dry shoot matter and plants treated with Intercept alone produced the second best results in plants.

Methods:
For this trial tomato plants were split into two groups: a control group and a group of plants that were planted in soil that was infested with the pathogen *Rhizoctonia solani*. Both groups received the treatments: Intercept, *Streptomyces* SR 57[2], and Intercept + *Streptomyces* SR 57. Intercept was applied to the seeds at the time of planting.

Results:
Plants that were treated with Intercept and Intercept + *Streptomyces* SR 57 performed the best in terms of number of plants emerged as well as dry shoot matter. Both treatments had 4.6 plants emerge in the control group, while plants that were treated with Intercept + *Streptomyces* SR 57 produced slightly more plants in the infected soil. In terms of highest dry shoot matter Intercept + *Streptomyces* SR 57 performed the best, and plants treated with Intercept alone produced the second best results. Overall, Intercept with the addition of *Streptomyces* SR 57 produced the best results with Intercept treated plants having the second strongest results. Plants that were treated with *Streptomyces* SR 57 alone had the third strongest results. Results across all treatments are shown in the table below.

[1]Intercept is a liquid inoculant developed and manufactured by Soil Technologies in Fairfield, IA, USA
[2]*Streptomyces* SR 57 is a strain of soil bacteria

Table 1. Results of All Treatments

	Plants Emerged (number)		Shoot Dry Matter (grams)	
Treatment	Control	+Rhizoctonia	Control	+Rhizoctonia
Control	4.4	1.8	3.9	2.8
Intercept	4.6	3.8	4.6	4.1
Streptomyces SR 57	4.0	0.4	4.4	2.9
Intercept +*Strept*. SR 57	4.6	4.2	5.5	4.7

Conclusions:

Plants treated with Intercept + *Streptomyces* SR 57 produced the best results in terms of total emerged plants and dry shoot matter while plants treated with Intercept alone produced the second best plants. These results indicate that Intercept used in conjunction with *Streptomyces* SR 57 provided better results than plants treated with Intercept and *Streptomyces* SR 57 alone.