

**Soil Technologies Corp.**  
**Research and Development Department**



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## Research Report

**Title:** Effect of Robust on *Rhizoctonia solani* in Potato

**Location:** Egypt (in the newly reclaimed land in the Nubaria area, 120km to the west of Cairo)

**Crop:** Potato

**Date:** June 2008 - 2009

### **Abstract:**

The purpose of this study was to evaluate the effects of the soil inoculant, Robust<sup>1</sup>, on the presence of *Rhizoctonia solani* (Black Scurf) in potatoes. One application of three doses of Robust (500g, 600g, and 750g per ton seeds) were tested and compared to an untreated control. Observations show that the untreated control had a disease severity level of 78% while the 600g and 750g doses had a disease severity rating of less than 10% with the 500g treatment having a disease severity of 18%. These results suggest Robust as being an effective control agent for Black Scurf in potatoes.

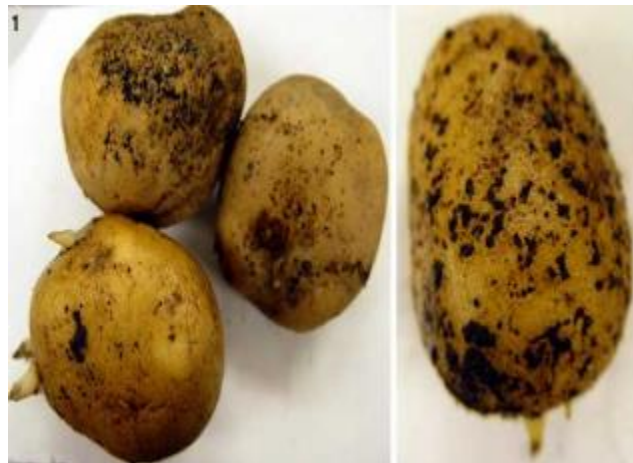


Figure 1: Black Scurf (*Rhizoctonia solani*) on potatoes

**Methods:**

Three rates of Robust (500g, 600g and 750g per ton seeds) were tested and compared to an untreated control area. Each treatment area consisted of one center pivot of 120 feddan (1 Ha=2.4 feddan). One application was utilized in late 2008 and observations were made in early 2009.

**Results:**

The observation showed nominal difference between the treatment of 600g and 750g. The disease severity percentage was less than 10% with the 600g and 750g dosages. The 500g treatment was more than 18% severity level. The untreated area had a 78% disease severity level.

**Conclusions:**

Results from this trial indicate a potential for Robust as an effective control measure against Black Scurf in potatoes. The 600g and 750g dosages provided disease severity levels of less than 10% compared to the control which had a disease severity rating of 78%.

**Additional Note:**

As a result of these findings, three major Egyptian potato seed companies began to utilize Robust on a commercial scale in 2009 and 2010.