

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



## **Research Report**

**Title:** Powdery Mildew Control on Greenhouse Roses

**Location:** Watsonville, CA

**Principal Investigators:** S. Tjosvold  
University of California

**Crop:** Rose (Fiesta Parade)

**Date:** 1999

### **Abstract:**

The purpose of this trial was to assess the efficacy of the powdery mildew treatment, Permatrol<sup>1</sup> on roses grown in a greenhouse setting. Applications of Permatrol at 0.25% were administered three times to rose plants of the Fiesta Parade variety. At a rate of 0.5%, Permatrol was applied to rose plants twice, and a control consisting of water and an adjuvant was applied to plants three times. After the application of treatments, the plants were evaluated for the presence of powdery mildew lesions. The 0.25% rate of Permatrol had 81.6% fewer lesions than the control. The 0.5% rate of Permatrol had 88.7% fewer lesions than the control. These findings demonstrate the effectiveness of Permatrol in treating powdery mildew compared to the control.

### **Methods:**

Trials were conducted on miniature roses in a greenhouse setting. Permatrol at 0.25% was applied three times on 9/2, 9/9 and 9/16/1999. At a rate of 0.50%, Permatrol was applied on 9/9, and 9/16/1999. The control consisted of three treatments of water plus adjuvant on 9/2, 9/9, and 9/16/1999.

### **Results:**

On 9/21/1999 the mean number of leaves with one or more powdery mildew lesions was recorded. The 0.25% rate of Permatrol had 81.6% fewer lesions than the control. The 0.5% rate of Permatrol had 88.7% fewer lesions than the control.

<sup>1</sup> Permatrol is a natural fungicide manufactured by Soil Technologies Corp in Fairfield, IA, USA

<b>Treatment</b>	<b>Rate (% v/v)</b>	<b>Powdery Mildew</b>
Control	Water + Adjuvant	28.2 a
Permatrol	0.25	5.2 b
Permatrol	0.5	3.2 b

Table 1: Results of all Treatments

**Conclusions:**

Results of this trial indicate that both rates of Permatrol provided protection against powdery mildew. The 0.25% rate of Permatrol demonstrated 81.6% fewer lesions than the control. The 0.5% rate of Permatrol had 88.7% fewer lesions than the control.

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