Soil Technologies Corp.
Research and Development Department

Research Report

Title: Control of Powdery Mildew on Pumpkin Leaves using Permatrol

Location: Fairfield, Iowa

Crop: Pumpkin

Abstract:
The purpose of this study is to evaluate the effectiveness of Permatrol[1] on pumpkin plants infected with Powdery Mildew. To achieve this, an infected pumpkin plant demonstrating symptoms of Powdery Mildew was selected. A circular piece of paper was attached to the leaf of the plant using a paper clip and Permatrol was applied to the foliage. One day following the application of treatment the plant was observed. Due to the placement of the circular piece of paper you can observe the effects of Permatrol on the majority of the leaf compared to the circular part that was covered by the piece of paper and did not receive the treatment. At this point it was observed that the part of the foliage that received Permatrol exhibited a decrease in symptoms while the part of the plant that was not exposed to the treatment still exhibited a powdery appearance indicative of the presence of Powdery Mildew. This observation suggests that Permatrol may effectively control this disease.

Methods:
A pumpkin plant that exhibited the symptoms of Powdery Mildew was selected. The photo on the right illustrates the presence of powdery spots on the foliage previous to the application of Permatrol.

A circular piece of paper was attached to the leaf of the plant using a paper clip and Permatrol was applied to the foliage. One day following the application of treatment the plant was observed.

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[1]Permatrol is a minimum risk pesticide manufactured by Soil Technologies Corp in Fairfield, IA USA

Results:

It was observed one day following the application of Permatrol that the parts of the plant exposed to the treatment exhibited a decrease in the powdery appearance while the untreated spot did not.

Conclusions:

Results from this experiment indicate that the application of Permatrol helped to decrease symptoms associated with a Powdery Mildew infection. Moreover, effects of the treatment were observed only one day following the application.