Soil Technologies Corp. Research and Development Department

Research Report



Title: Effect of Armorex on Cucumber Plants with Mites

Location: Jordan River Valley, Jordan

Principal Investigators: Hisham Hamdan, Greenland Research Station

Crop: Cucumber

Date: November 2019

Abstract:

The purpose of this study was to evaluate the effectiveness of Armorex¹ in treating spider mites in cucumber plants. Cucumber plants were sprayed with Armorex at a rate of 100 ml/200 L water (0.05% dilution rate) and the spider mite infestation was monitored following the application. Following the treatment, it was observed that 75% of the spider mites were killed.

Methods:

Cucumber plants that were 55 days old and infested with spider mites, were sprayed with Armorex at a rate of 100 ml/200 L water. Following the application of Armorex, the spider mite population was observed.

Results:

Investigators observed that the application of Armorex at 100 ml/200 L (0.05% dilution rate) reduced the population of spider mites in cucumber plants by 75% after the time of application. Furthermore, investigators found zero side effects or signs of phytotoxicity in the plants after the application of treatment.

Photos 1-8 on the following pages document the spider mite infestation before and after the application of Armorex.

Conclusions:

Results from this report suggest that Armorex at 100 ml/200 L (0.05% dilution rate) provided a 75% reduction in spider mite populations in cucumber plants without any observed side effects or phytotoxicity in plants. This demonstrates a promising miticide capability for Armorex.

¹Armorex is an OMRI listed minimum risk pesticide manufactured by Soil Technologies Corp. in Fairfield, IA USA

TRIAL REPORT

Product: ARMOREX	
Chemical Composition: Sesame oil 5% / Clove oil 1%	
Manufacturer Co.: Soil Technologies Corp.	
Volume of sample: 4 L	
Location / Area: experimental station	
Rate of application used: 100ml/200L	
Treated Crop: Cucumber	Age of crop: 55 days
Objective of the product: Miticide الهدف	
Pesticides or fertilizers mixed with the product: none	
Effects of product on treated crop:	
On flowers: NONE	
On leaves: about 75% of spiders were killed.	
On fruits: NONE	
Side effects of the product on the plant: there are no any side effects on the plant.	
Comparison with other competitive products: it is very good at fighting the mites and spiders.	
Farmer Opinion:	
Agronomist Opinion: the product is excellent.	

Agronomist: Eng.: Hisham Hamdan Date: 11/6/2019

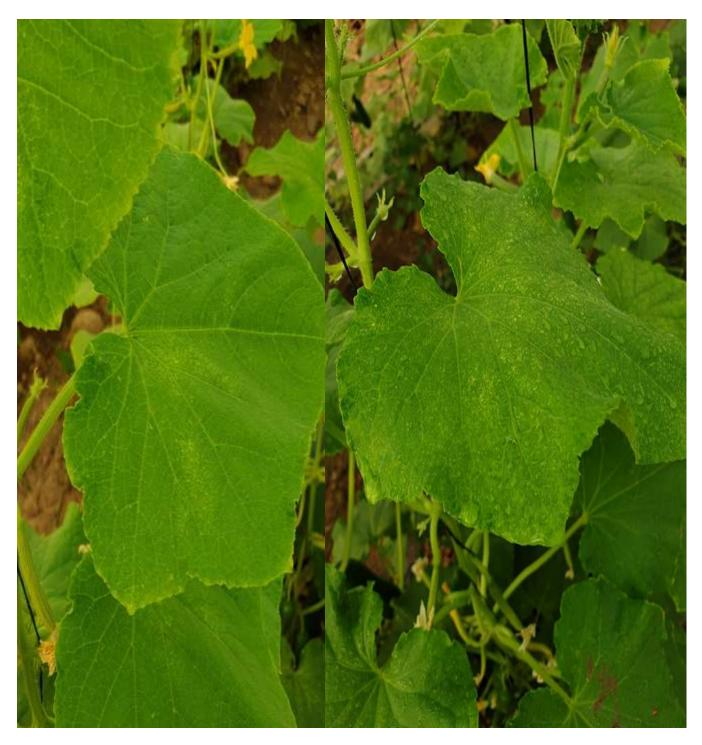


Photo 1: Before treatment



Photo 2: Before treatment

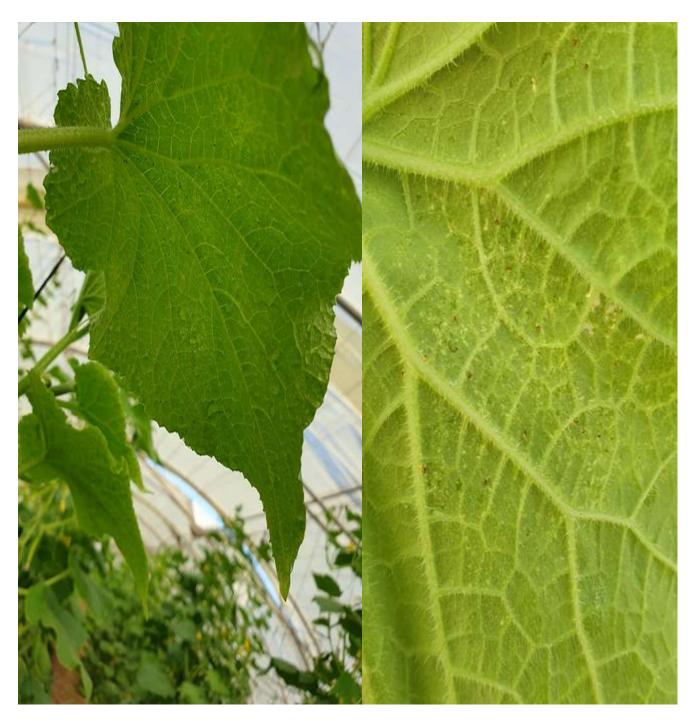


Photo 3: Before treatment



Photo 4: Before treatment

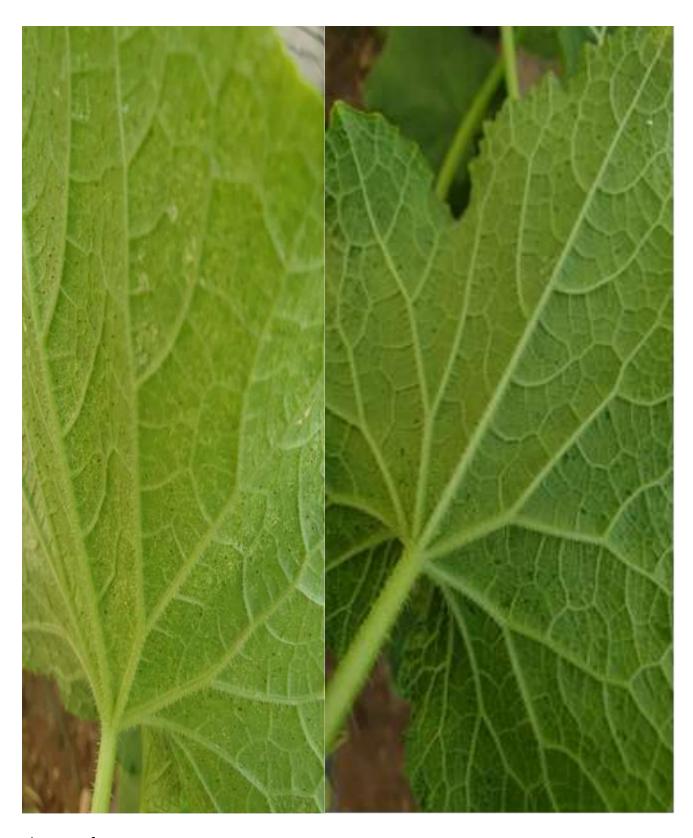


Photo 5: After treatment



Photo 6: After treatment

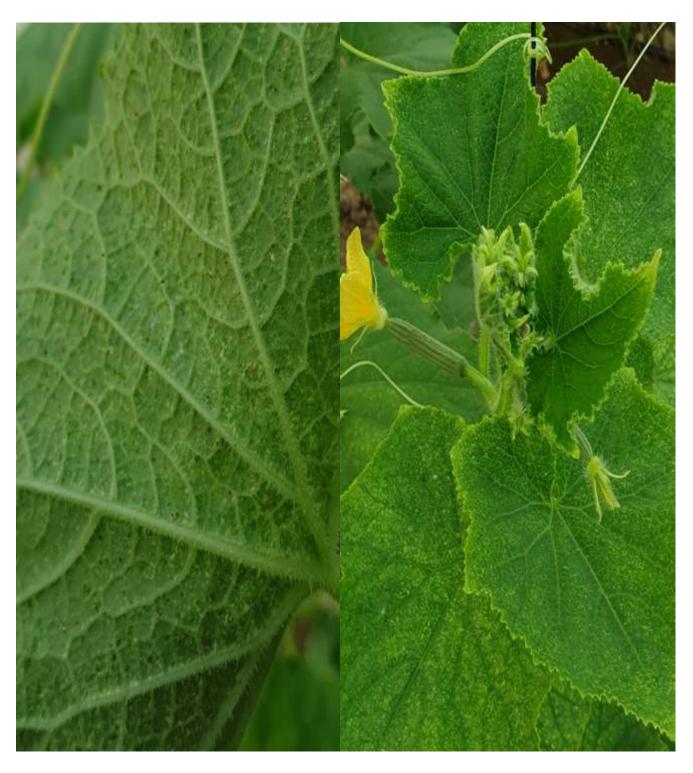


Photo 7: After treatment



Photo 8: After treatment