

Soil Technologies Corp.
Research and Development Department



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Teaming With Biology

Research Report

Title: The Effect of Armorex on Bermudagrass Mites

Location: Navassa, North Carolina

Principal Investigators: Dr. Rick L. Bradenburg

Date: 2022

Crop: turfgrass **Cultivar:** (Celebration™ Bermudagrass, *Cynodon dactylon*)

Abstract:

The purpose of this trial was to evaluate the effects of Armorex¹ and Abamectin² plus Cascade Plus³ on the population of mites in Bermudagrass plots. Plots of Bermudagrass were treated with Armorex and Cascade Plus and samples were extracted over a 26-day period to count the number of mites.

Methods:

Approximately 0.5 grams of grass material or tufts were collected from each plot. Samples were returned to the laboratory where the leaves were separated from the stems. The shredded plant material was then swirled in ethanol for 20 seconds and then poured through a mesh screen filter into a petri dish. The rinsate was then looked at under a stereoscope. The number of mites present was recorded.

Treatment	Rate
Control	---
Armorex	5.88 fl. oz./1000 ft ²
Abamectin 1.8% AI + Cascade Plus	64 fl. oz/A + 8 fl. oz./1000 ft ²

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

²Abamectin is an insecticide CAS # 71751-41-2

³Cascade Plus is a surfactant product manufactured by Precision Laboratories

Results:

Abamectin plus Cascade Plus had the lowest average mite count 0.75, Armorex had an average mite count of 1, and the Check group had an average of 8.25.

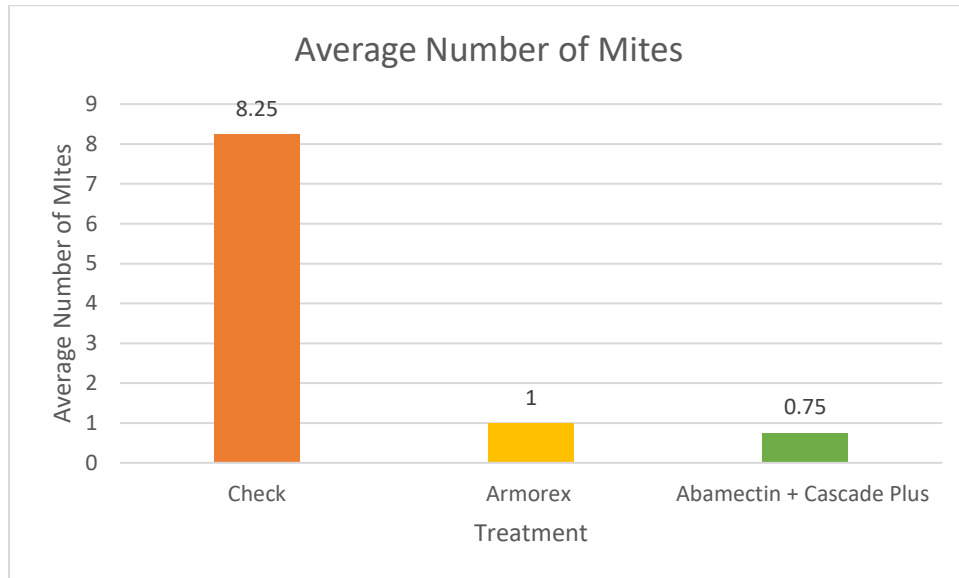


Table 1. Average Number of Mites

Conclusions:

Results from this trial demonstrate that Armorex had a statistically significant impact on the average number of bermudagrass mites relative to the control group.