

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



**SOILTECH**  
Teaming With Biology

## **Research Report**

**Title:** Mole Cricket Control in Turfgrass

**Location:** Minnesott Beach Golf and Country Club  
Arapahoe, NC USA

**Principal Investigators:** Rick L. Brandenburg, Ph.D

**Crop:** Hybrid Bermudagrass, (*Cynodon dactylon*)

**Date:** Summer 2021

### **Abstract:**

The purpose of this trial was to evaluate the effect of Armorex<sup>1</sup> in treating Tawny Mole Crickets (*Scapteriscus vicinus*) in turfgrass compared to conventional insecticide treatment, Triple Crown<sup>2</sup> and a control group. Treatments were applied to plots in July and were later sampled and rated for mole cricket damage.

### **Methods:**

Treatments were applied to 15 x 15 ft plots using randomized complete block design with four replications.

On July 2, a CO2 backpack sprayer was used to apply treatments and were irrigated within one hour.

Plots were then evaluated in late July and rated for mole cricket damage using a scale of 0-9. For this rating scale, 0 represents no damage and 9 represents severe damage. Plots were evaluated 23, 34, 47, 83, and 95 days after the application of treatments.

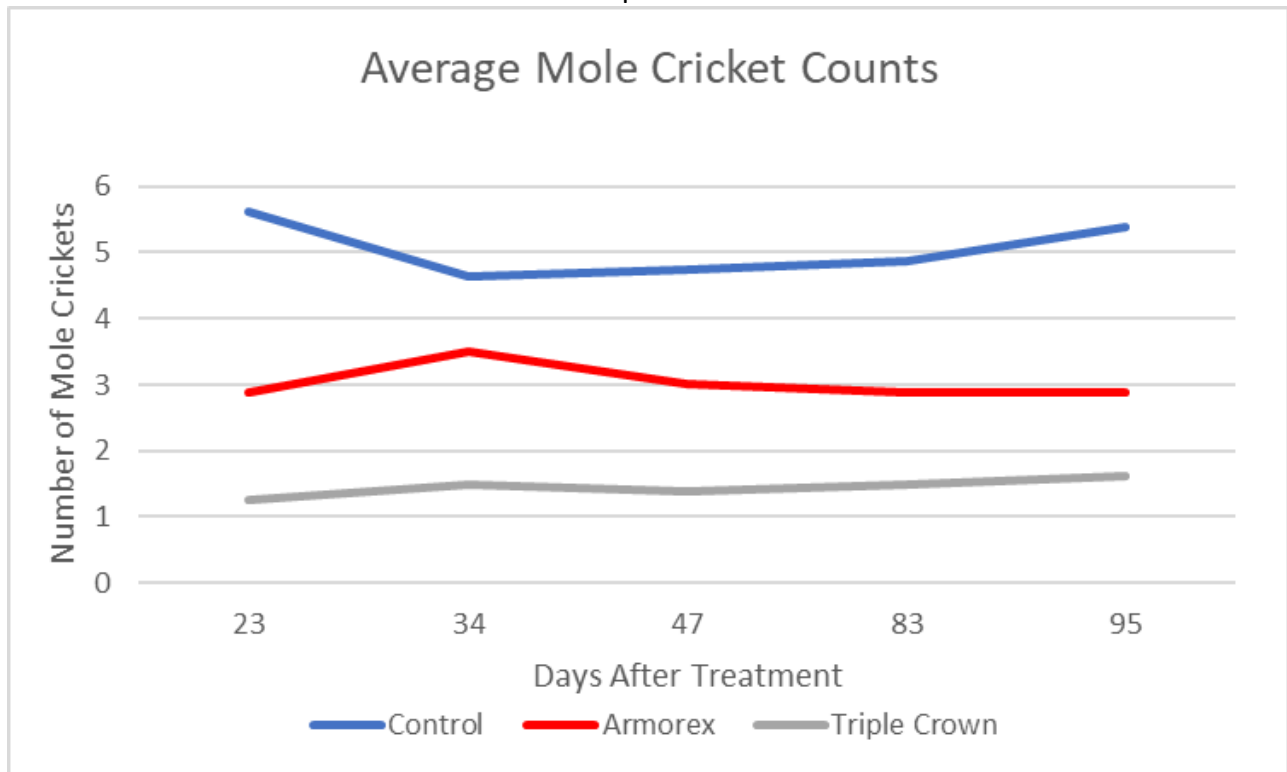
### **Results:**

Results for each treatment are demonstrated in the bar graph below.

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

<sup>2</sup>Triple Crown is an insecticide composed of Zeta-Cypermethrin (CAS #97955-44-7), Bifenthrin (CAS # 82657-04-3), and Imidacloprid (CAS # 138261-41-3)

Graph 1.



**Conclusions:**

The mole cricket infestation was high but not overwhelming so the level was good for evaluating product efficacy. Triple Crown insecticide (a very efficacious standard) provided very good control during the duration of the trial. The single Armorex treatment provided a “fair” reduction in the amount of damage from mole crickets.