

Soil Technologies Corp.
Research and Development Department



SOILTECH
Teaming With Biology

Research Report

Title: Armorex for Large White Grub Control

Location: Outlaw Golf Course
Desert Mountain Properties
Carefree, AZ USA

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

Crop: Bermudagrass (*Cynodon dactylon*)

Date: 2021

Abstract:

The purpose of this trial was to evaluate the effectiveness of Armorex in treating 3rd instar Masked Chafer grubs *Cyclocephala sp.*, or Large White Grubs, compared to the standard treatment of Imidacloprid.

Methods:

Treatments were applied to large plots (40 ft x 70 ft) on October 13, 2021 with five replications per treatment group. Following the treatment applications, each plot was irrigated with 0.25 inches of water.

Samples were taken 13 days post treatment on October 26, 2021 where the soil, roots, thatch, and turf were thoroughly inspected for the presence of live grubs.

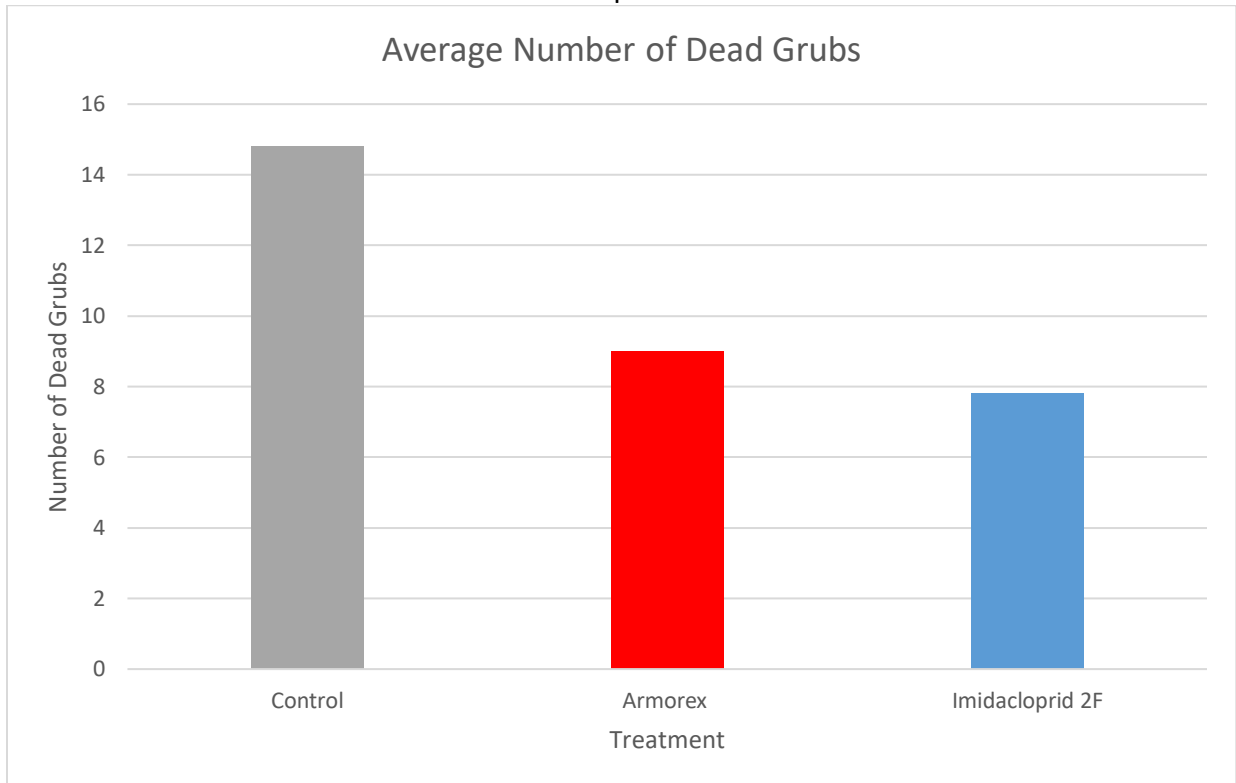
Results:

The average number of dead grubs per treatment group can be found in the below graph.

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

²Imidacloprid 2F is a chemical insecticide CAS # 138261-41-3

Graph 1.



Conclusions:

Armorex did not provide a high level of control against large grubs, but did comparably well as compared to the Imidacloprid standard. Effective control of third instar white grubs is difficult with today's products.