Harvesting Nature's Science







PROUD 3® Controls

Colorado Potato Beetle (Leptinotarsa decemlineata)

Research Report

SNELL Scientifics, LLC

Summary

Along with a control trial, test pesticides were directly sprayed onto groups of 10 Colorado Potato Beetles per trial. At 1 hour after exposure, the insects were moved to a clean, contained area. At various time intervals the number of alive, knocked down, and dead insects was recorded.

Purpose

To determine the efficacy of HUMA GRO[®] PROUD 3[®] and Ortho[®] MAX Garden and Landscape Insect Killer when applied as direct spray applications to Colorado potato beetles (*Leptinotarsa decemlineata*).

Description

Direct spray cartridges were positioned in groups for each product treatment type and the control in sets of four replicates to ensure accurate data collection. Ten insects were transferred to each cartridge and confirmed to be alive and mobile before all treatments. Each treatment was set up 12 inches away from the cartridges. The test products were directly sprayed on the insects using 1 trigger pull per cartridge. The number of dead, knocked down, and alive insects per cartridge was recorded at 30 min, 1 hr, 2 hr, 4 hr, 24 hr and daily time intervals. At 1 hour, the insects were transferred from the treatment cartridges into clean post-treatment cartridges.

Definitions

Alive: Insects exhibits forward motion

Knocked Down: Insects exhibits some movement, but cannot crawl

Dead: Insects exhibit no movement even when stimulated

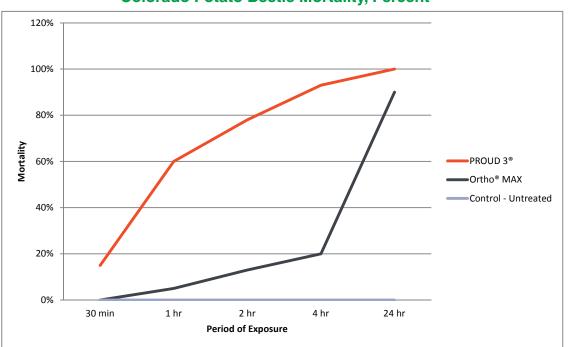
Results

The HUMA GRO[®] PROUD 3[®] formulation provided effective mortality and significantly outperformed the Ortho[®] MAX from the 30 minute to 4 hour observations. PROUD 3[®] resulted in the death of 93% of the beetles within 4 hours after the application and 100% mortality within 24 hours. HUMA GRO[®] PROUD 3[®] is an effective pesticide when applied to Colorado Potato Beetles using a direct spray application method.

Trial	30 min	1 hr	2 hr	4 hr	24 hr
Control - Untreated	0%	0%	0%	0%	0%
PROUD 3 [®]	15%	60%	78%	93%	100%
Ortho [®] MAX	0%	5%	13%	20%	90%

Average Colorado Beetle Mortality





Colorado Potato Beetle Mortality, Percent

Conclusion

HUMA GRO[®] PROUD 3[®] was the top performer with consistently greater Colorado potato beetle mortality, compared to Ortho[®] MAX, during a 24-hour period. This study indicates that HUMA GRO[®] PROUD 3[®] is a highly effective pesticide when applied to Colorado potato beetles using a direct spray application method.

Full research report available upon request.

PROUD 3[®] organic pest control is a safe, effective, organic foliar applied bactericide, insecticide, miticide and fungicide when applied using recommended methods and rates. PROUD 3[®] is OMRI-listed for organic farming.



Our HUMA GRO[®] Products Are Highly Efficient and Effective Due to Our Unique Delivery



If you would like to learn more about this top quality product, contact us directly at 480-423-6805 or visit our website at www.humagro.com.