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BioWorks Products Included in Trial

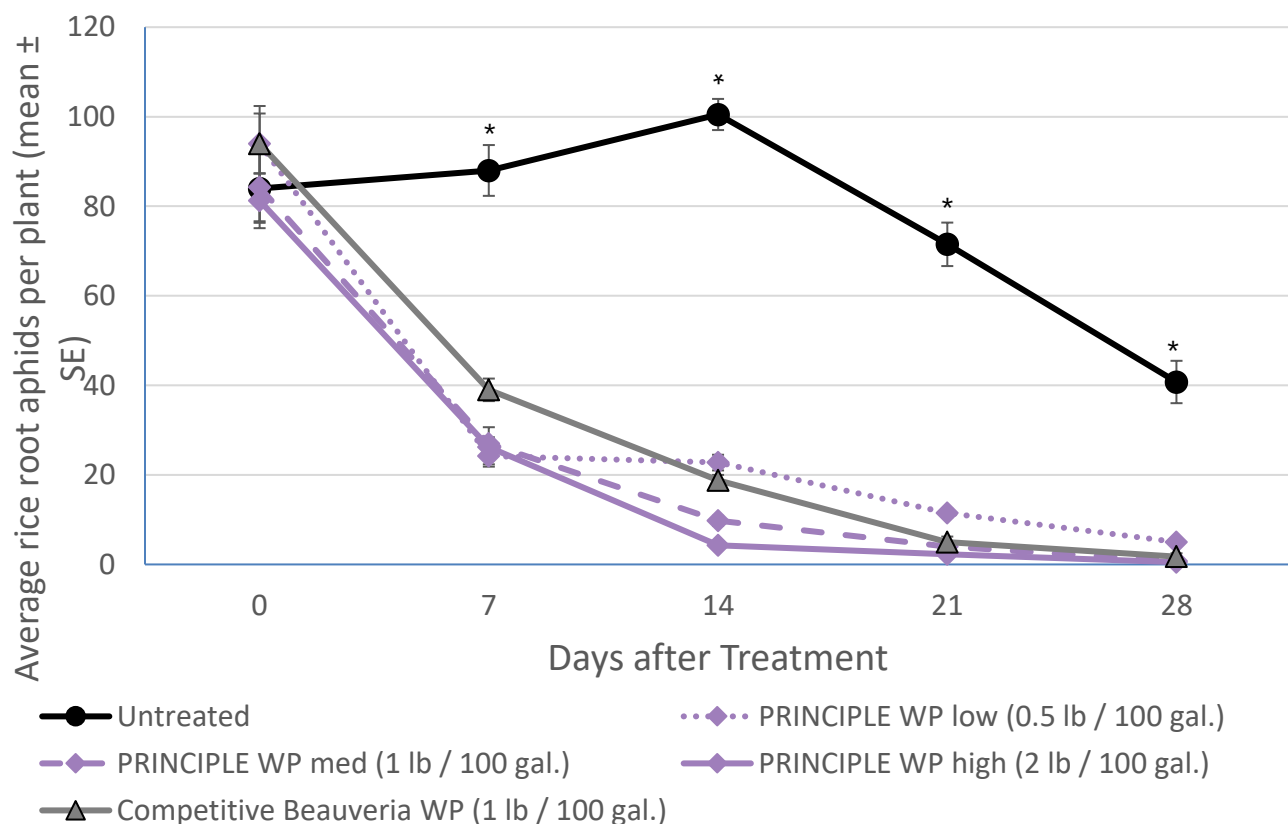
PRINCIPLE WP (*Beauveria bassiana* strain BW149)

Summary:

PRINCIPLE WP controlled rice root aphids on hemp.

Treatment	Rate/100 Gallons
Untreated Control	-
PRINCIPLE WP	0.5 lb
PRINCIPLE WP	1 lb
PRINCIPLE WP	2 lb
Competitive <i>Beauveria</i> WP	1 lb

Method Summary	
Crop	Hemp (<i>Cannabis sativa</i> 'Afgan')
Location	Greenhouse
Pest	Rice Root Aphids (<i>Rhopalosiphum rufiabdominalis</i>)
Trial Design	4 applications on a 7-day interval, starting at day 0, 4 reps/treatment
Application Dates	September 2024
Application Method	Drench



Average number of aphids per plant after four drench applications. Data with a star indicates a statistically significant difference from the untreated control.

Result Summary

- By 7 days after treatment, all PRINCIPLE WP treatments significantly reduced root aphids by more than 70%
- By 14 days after treatment, medium and high rates of PRINCIPLE WP provided greater than 90% suppression of root aphids.
- PRINCIPLE WP was at least as effective as the Competitive *Beauveria* WP at reducing root aphid numbers.
- No plant phytotoxicity was observed during the study.

Recommendations from Data

- PRINCIPLE WP can be applied as a drench to the media at 0.5 - 2 lb / 100 gallons in an integrated program to control rice root aphids, as well as other damaging foliar and soil dwelling insect pests.



Rice root aphids killed by *Beauveria bassiana*.