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## BioWorks Products Included in Trial

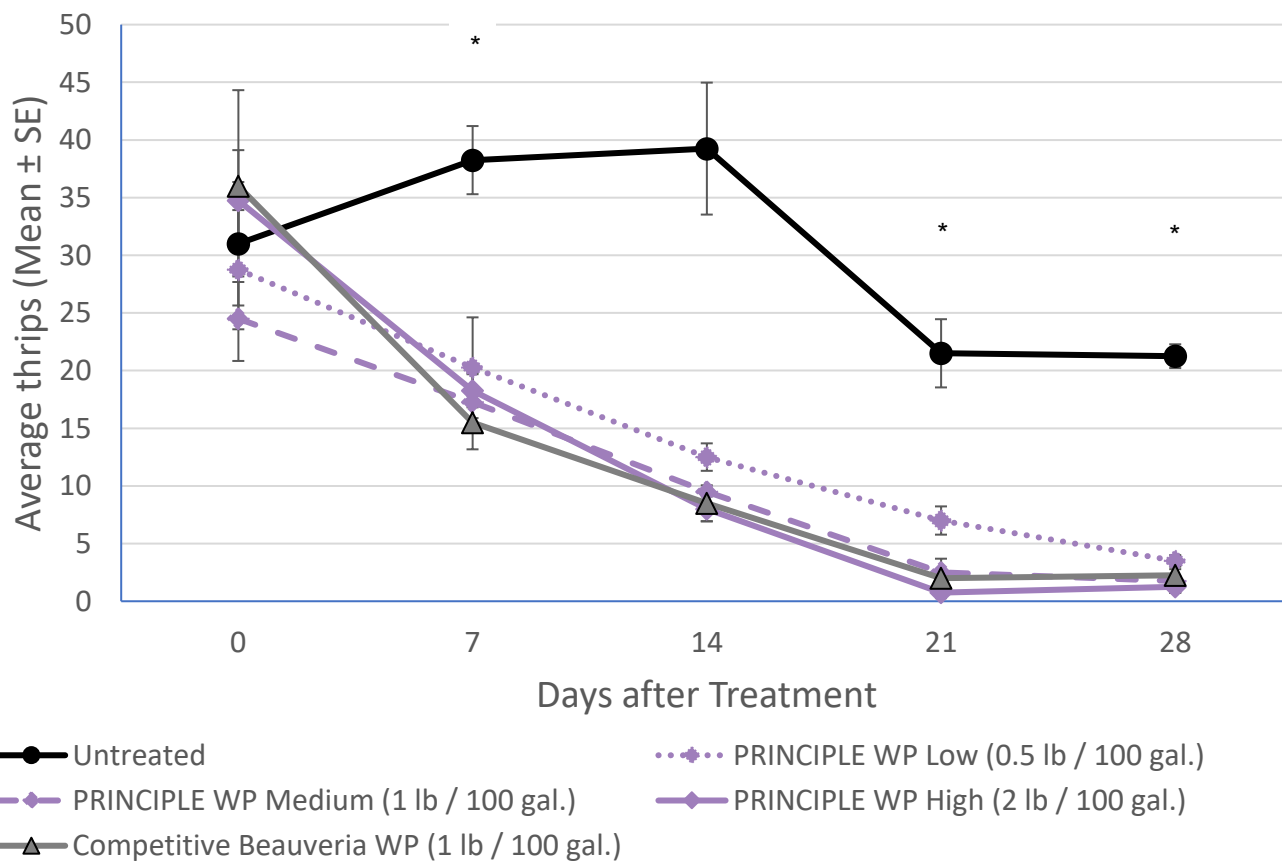
PRINCIPLE WP (*Beauveria bassiana* strain BW149)

### Summary:

PRINCIPLE WP controlled western flower thrips on cucumber.

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	Cucumber ( <i>Cucumis sativus</i> 'Straight Eight')
Location	Greenhouse
Pest	Western flower thrips ( <i>Frankliniella occidentalis</i> )
Trial Design	Randomized complete block, 4 reps/treatment
Application Dates	June 13, 20, 27, & July 4, 2024
Application Method	Foliar spray



Average number of thrips after four foliar spray applications. Data with a star indicates a statistically significant difference from the untreated control.

## Result Summary

- All PRINCIPLE WP treatments significantly reduced all stages of thrips by 7 days after initial treatment, with suppression greater than 50%.
- Greater than 90% reduction of thrips by 28 days after initial treatment for medium and high rates of PRINCIPLE WP.
- PRINCIPLE WP provided control similar to the Competitive *Beauveria* WP standard.
- No plant phytotoxicity was observed during the study.

## Recommendations from Data

- PRINCIPLE WP can be applied at 0.5 - 2 lb / 100 gallons in an integrated program to control thrips, as well as other damaging insect pests.
- Apply PRINCIPLE WP as a fine spray to full coverage. Sprench applications (apply to run off) may be desirable when targeting pupating thrips in the media.