

A proprietary 3rd party research company conducted the research.

BioWorks Products Included in Trial

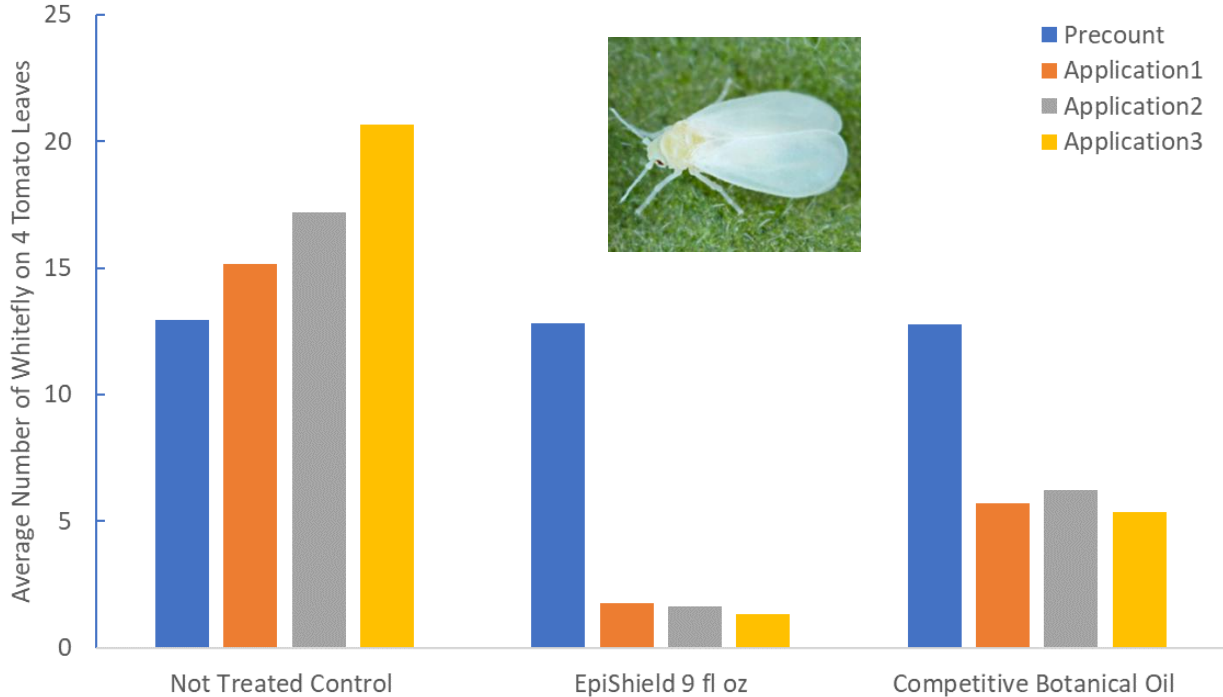
EpiShield[™]

Summary:

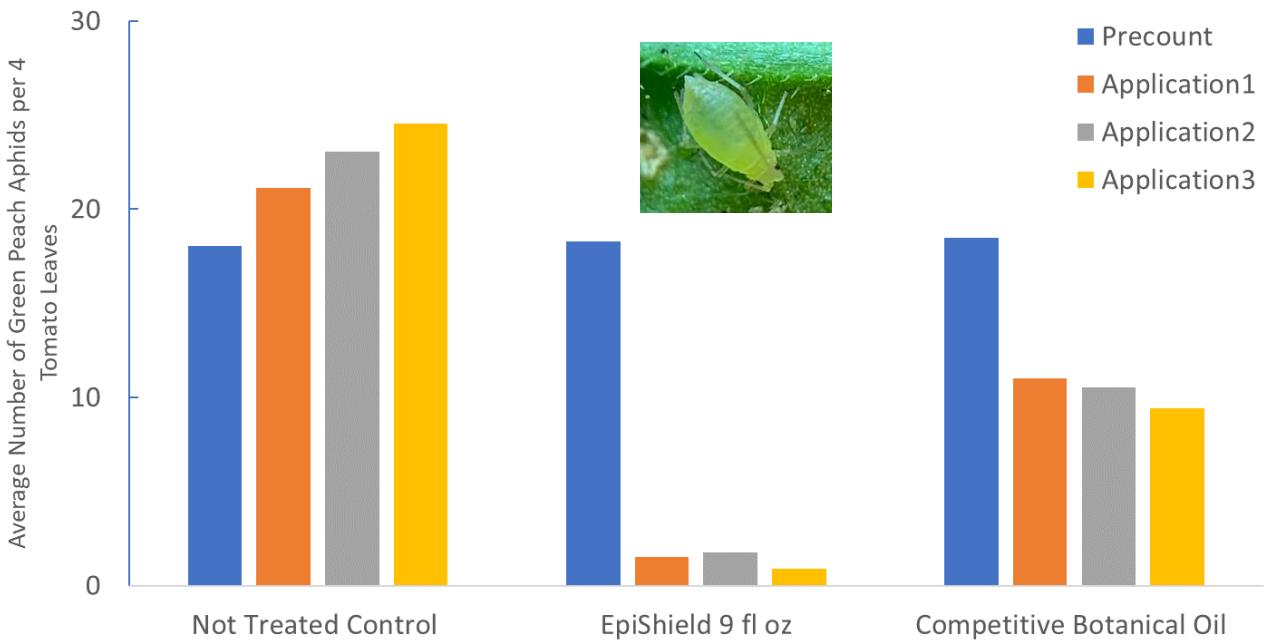
EpiShield controlled whiteflies, aphids, mites, and thrips on greenhouse grown tomatoes.

Treatment	Rate/100 Gallons
Untreated Check	-
Competitive Oil	64 fl oz
EpiShield	9 fl oz

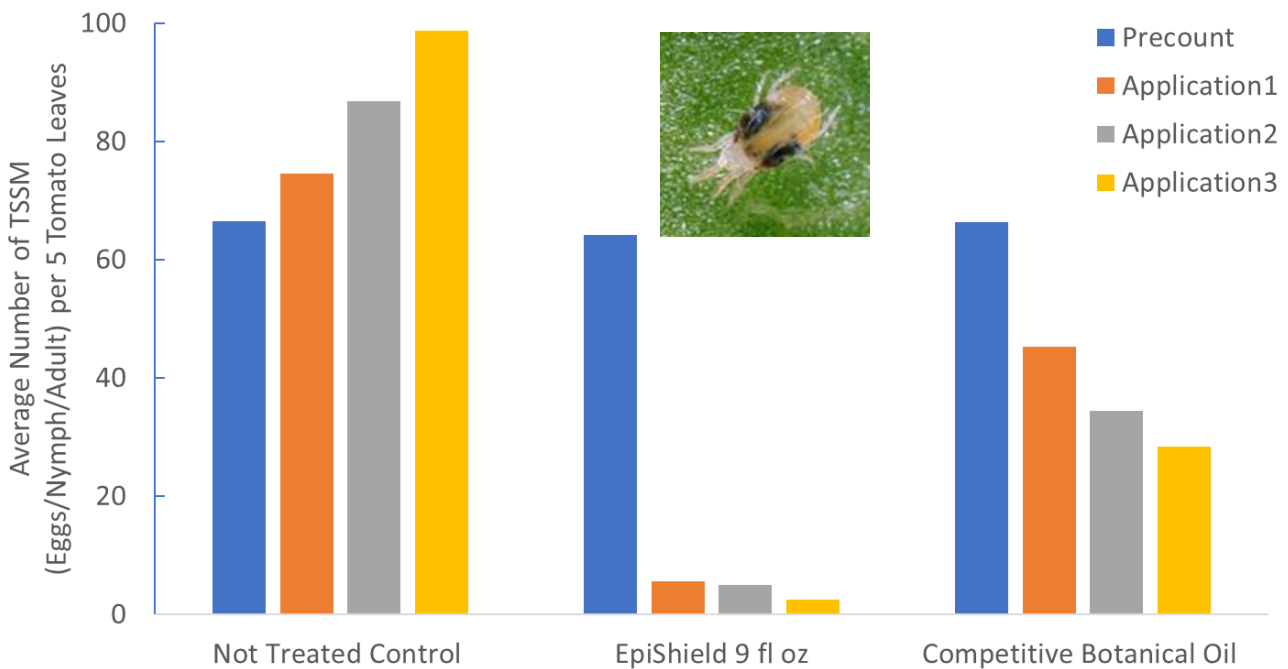
Method Summary	
Crop	Tomato (IZMIR F1)
Location	Greenhouse
Pest	Greenhouse whitefly (<i>Trialeurodes vaporariorum</i>) Green peach aphids (<i>Myzus persicae</i>) Twospotted spider mites (<i>Tetranychus urticae</i>) Western flower thrips (<i>Frankliniella occidentalis</i>)
Trial Design	Randomized complete block
Application Method	Foliar Spray



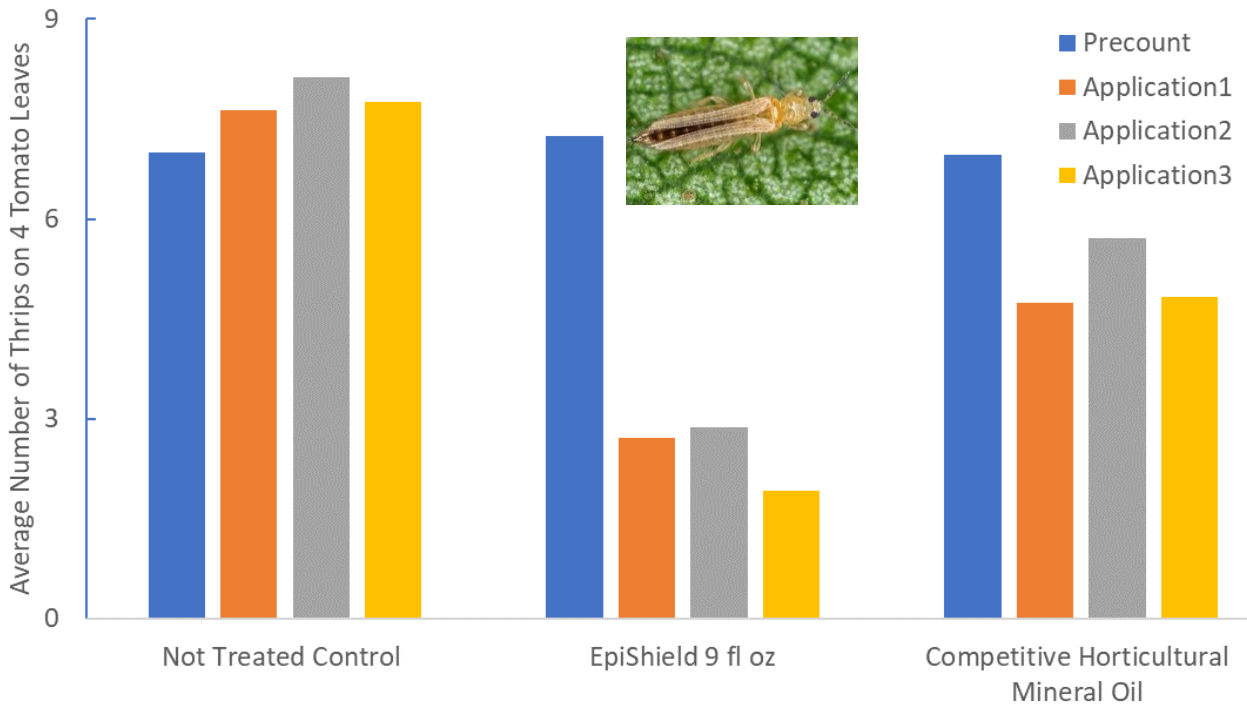
Average number of greenhouse whitefly per 4 leaves. Three applications were made three days apart, data recorded one day after treatment (November 29, December 2, & 5 2021). EpiShield at 9 fl oz caused an 89.7% reduction and a competitive oil product caused a 58% reduction of greenhouse whiteflies after 3 applications.



Average number of green peach aphids per 4 leaves. Three applications were made three days apart, data recorded one day after treatment (October 9, 12, & 15 2021). EpiShield at 9 fl oz caused a 95% reduction and a competitive oil product caused a 48.9% reduction of green peach aphids after 3 applications.



Average number of twospotted spider mites. Three applications were made three days apart, data recorded one day after treatment (October 1, 4, & 7 2021). EpiShield at 9 fl oz caused a 95.7% reduction and a competitive oil product caused a 52.1% reduction of twospotted spider mites after 3 applications.



Average number of western flower thrips per 4 leaves. Three applications were made three days apart, data recorded one day after treatment (November 22, 27, & December 2, 2021). EpiShield at 9 fl oz caused a 73% reduction and a competitive oil product caused a 29.5% reduction of western flower thrips after 3 applications.

Result Summary

- EpiShield (15% peppermint oil, 10% clove oil & 3% sodium lauryl sulfate) significantly reduced whitefly, aphids, mites and thrips after three applications.
- EpiShield did not cause plant phytotoxicity during the study.

Recommendations from Data

- Apply EpiShield at 0.07% (9 fl oz/100 gallons) for control of arthropods.
- Apply EpiShield as a fine spray to full coverage but not the point of run off.
- EpiShield is ideal for integrated pest programs against damaging arthropod pests.