

Update from 2024 and Future Products



INSECT PHEROMONE & KAIROMONE SYSTEMS

Your Edge - And Ours - Is Knowledge.

Brent Short and Thomas Martin

Territory Technical and Field Development Manager – East bshort@trece.com





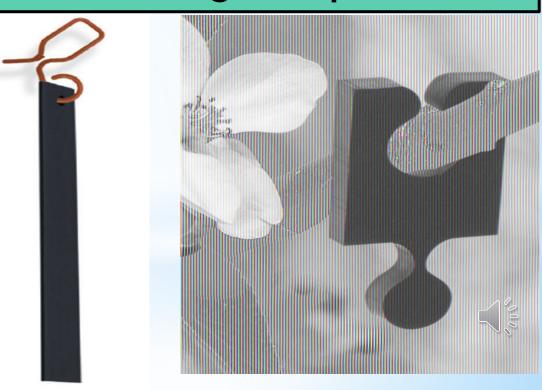
PHEROCON®

Monitoring



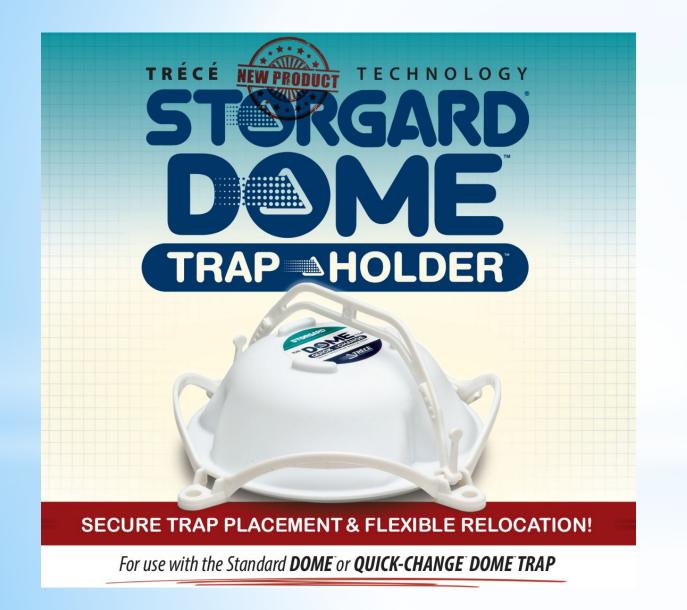
CIDETRAK®

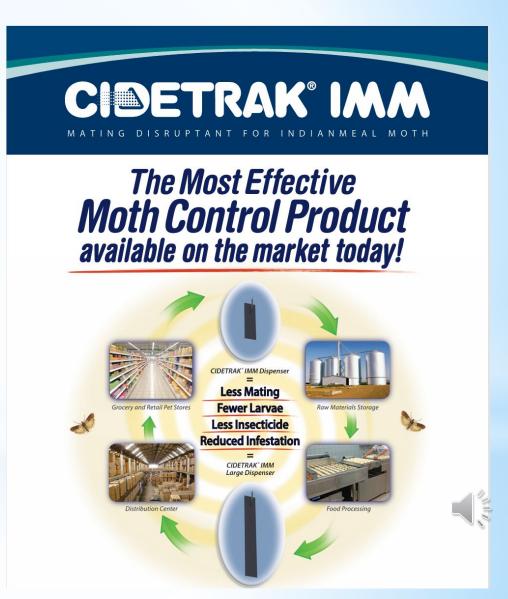
Mating Disruption





Stored Product Pests

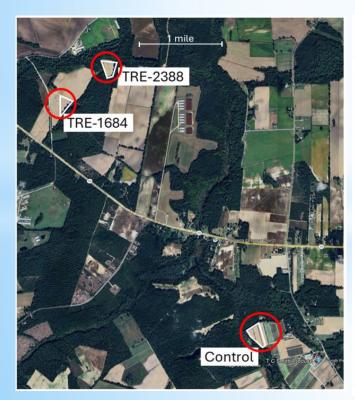




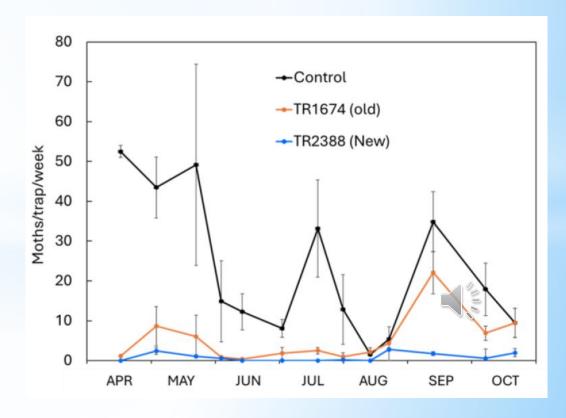


2024 IR-4 Project: Diamondback Moth Mating Disruption

- Comparison of Experimental Mating Disruption products
 - Jim Walgenbach, North Carolina State University
- Submitted for EPA registration









PHEROCON® - Insect Monitoring

- PHEROCON STKYTM CANOPYTM TRAPS (PATENT PENDING)
 - ☐ Spotted Wing Drosophila (*Drosophila suzukii*)
 - Ambrosia Beetles (Xylosandrus spp., Anisandrus maiche, etc...)
 - Hibiscus Bud Weevil (Anthonomus testaceosquamosus)
 - Leaffooted Bug (*Leptoglossus zonatus*) with ENHANCED ADHESIVE
 - Western Flower Thrips (Frankliniella occidentalis)
 - Pacific Flatheaded Borer (*Chrysobothris mali*)







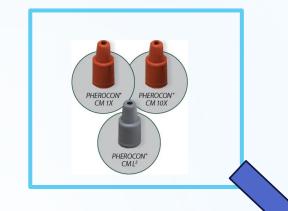


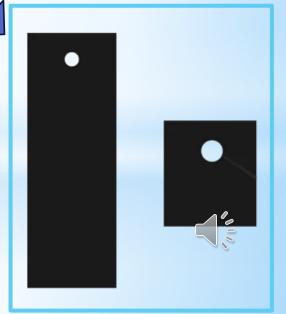




PHEROCON® - Insect Monitoring

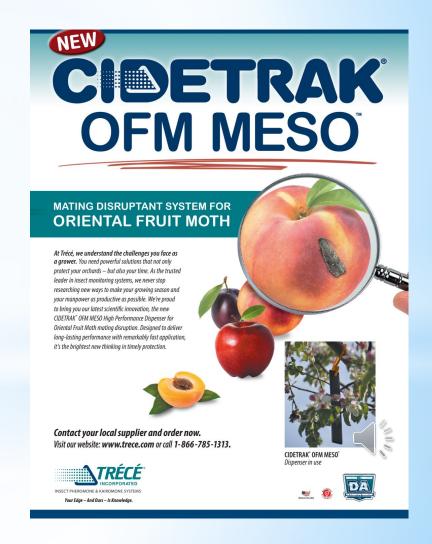
- Enhanced Lure Substrate
 - PVC Base
 - Navel Orangeworm (Amyelois transitella)
 - Peach Twig Borer (Anarsia lineatella)
 - Oriental Fruit Moth (Grapholita molesta)
 - Macademia Nut Borer (Cryptophlebia ombrodelta)
 - Corn Earworm (Helicoverpa zea) pending
 - Other
 - Brown Tail Moth (*Euproctis chrysorrhoea*)
 - Dogwood Borer (Synanthedon scitula) pending
- Enhanced Lures
 - Roy Trop Moth (Cydalima perspectalis)





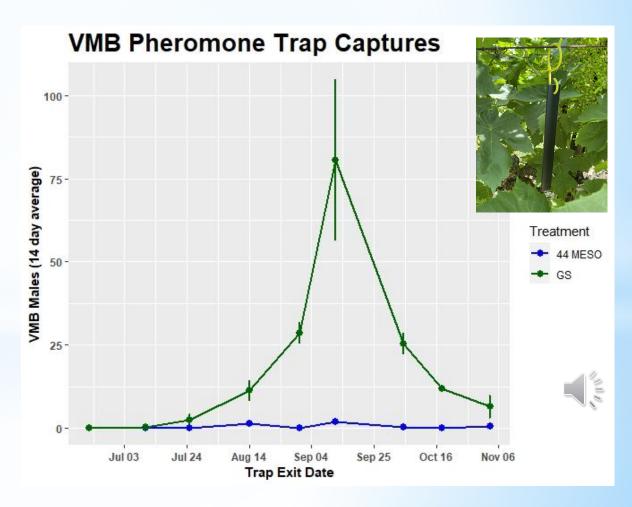


- CIDETRAK OFM-L MESO (Grapholita molesta)
 - CA, HI registration



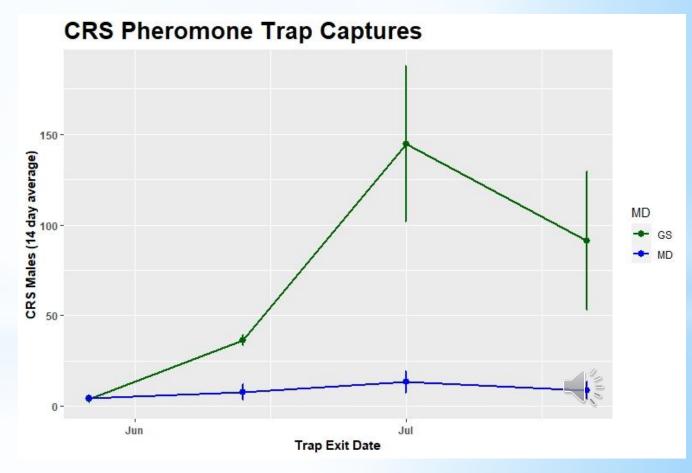


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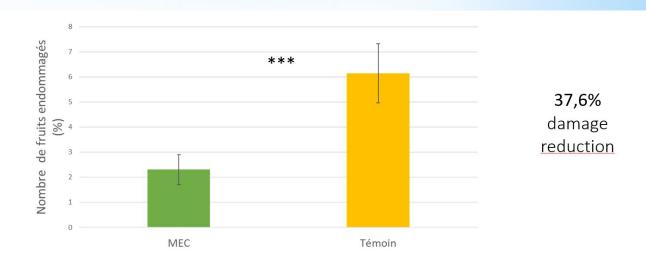


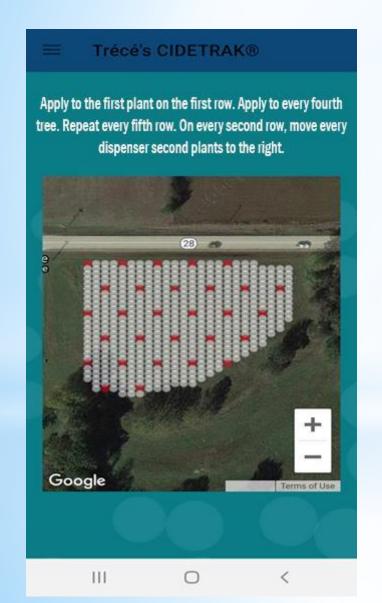
Figure 4: Mean percentage of blackheaded fireworm damaged harvested in treated (MEC) and control fields. Error bars representing standard errors; with α =0,05

- CIDETRAK BHFW MEC (Rhopobota naevana)
 - Submitted to EPA





CIDETRAK® Installation Calculator



Functionality

- Web/mobile (iPhone/Android)
- Calculates dispenser quantities/spacing
- Overlay onto satellite images
- Save data by orchard and/or annual later use

IPM Return on Investment Calculator

Created by: Thomas Martin

Navel Orangeworm (NOW) is the #1 pest in tree nuts in California. We know that Integrated Pest Management (IPM) strategies help mitigate damage caused by NOW, but how do we know when the benefit is greater than the cost?

The IPM Return on Investment Calculator uses the following factors to estimate the Return on Investment (ROI) of NOW IPM strategies:

- Yield (lbs/acre)
- Rejects (%)
- Price of Commodity (\$/lbs)
- Quality Bonuses from Processor (\$/lbs)
- · Cost of IPM Practice (\$/acre)

Let's get started

Choose Crop to Model IPM:





Almond IPM Research Summary

Created by: Thomas Martin

The 5 pillars of IPM for NOW in Almonds are:

- · Winter Sanitation
- · Mating Disruption
- Timely Harvest
- Monitoring
- Chemical Application

The model uses academic research of each practice to INDIVIDUALLY estimate an expected reduction in damage. Then, it combines the estimate with information from processors to estimate the dollar value of the damage reduction.

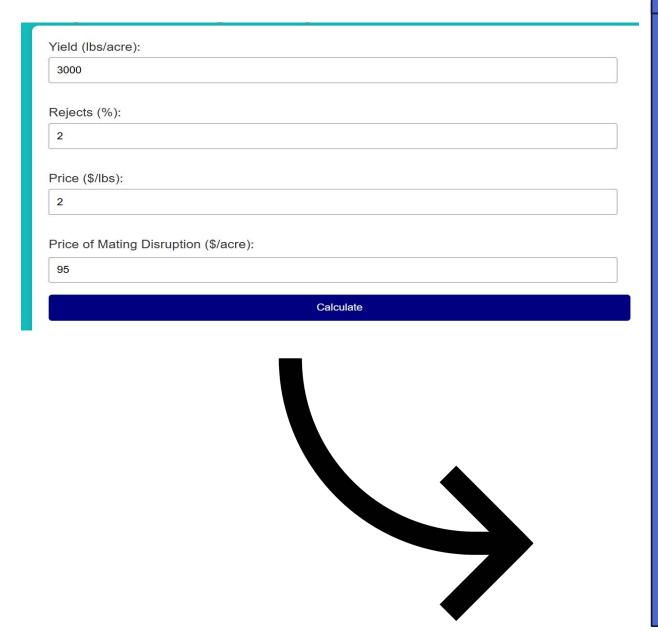
Which IPM Practice do you want to look at first?





3000			
Rejects (%):			
2			
Price (\$/lbs):			
Price of Mating Disrup	tion (\$/acre):		





Total Original Value:

Total Original Value: \$5997.60

Total Mating Disruption Value:

Total MD Value: \$6177.60

Difference with cost of MD included:

Difference with cost of MD included: \$180.00 - \$95.00 = \$85.00/Acre

Return on Investment (ROI):

Return on Investment (ROI): 89.47%

\$ Difference due to Yield change:

\$ Difference due to Yield change: \$60.00

\$ Difference due to Quality Bonus change:

\$ Difference due to QB change: \$120.00





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