



*the Almond*  
**CONFERENCE**  
2019

# Sterile Insect Control of Navel Orangeworm



california  
**almonds**  
Almond Board of California

# Session Speakers

Josette Lewis, ABC

Houston Wilson, UC Riverside

Melissa Tesche, Okanagan-Kootenay Sterile  
Insect Release Program

Neil Morrison, Oxitec

Nathan Moses-Gonzales, M3 Consulting Group



Houston Wilson,  
UC Riverside



Melissa Tesche,  
Okanagan-Kootenay Sterile  
Insect Release Program





OXITEC





# Oxitec's 2<sup>nd</sup> Generation Insect Technology

TARGETED SUPPRESSION ✓

MALE-ONLY RELEASES ✓

(male mosquitoes do not bite)

SAFE, NON-TOXIC, NON-ALLERGENIC ✓

TRACEABLE IN THE FIELD ✓



## OXITEC'S MALE INSECTS CARRY TWO INTRODUCED GENES

### MALE-SELECTING SELF-LIMITING GENE

Non-toxic, non-allergenic gene product (tTAV protein)

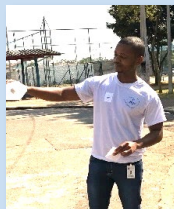
After Oxitec males mate with wild-type females, the progeny receive a copy of a self-limiting gene that prevents females from developing into adults

#### MANUFACTURING



- Male-only production
- Egg/pupae releases and release devices enabled

#### DEPLOYMENT

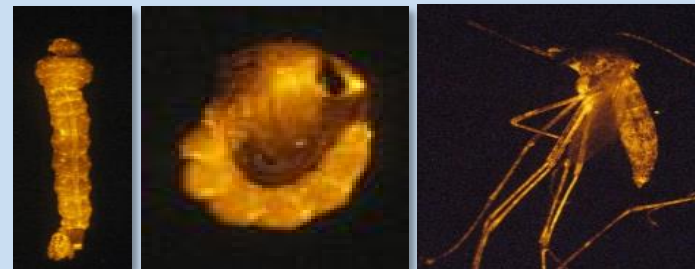


- Suppresses target insect population
- Multi-generational suppression potential
- Gene is self-limiting in environment

### MARKER GENE

Easy track-and-trace in the field

Non-toxic, non-allergenic gene product (DsRed2 protein)





OXITEC





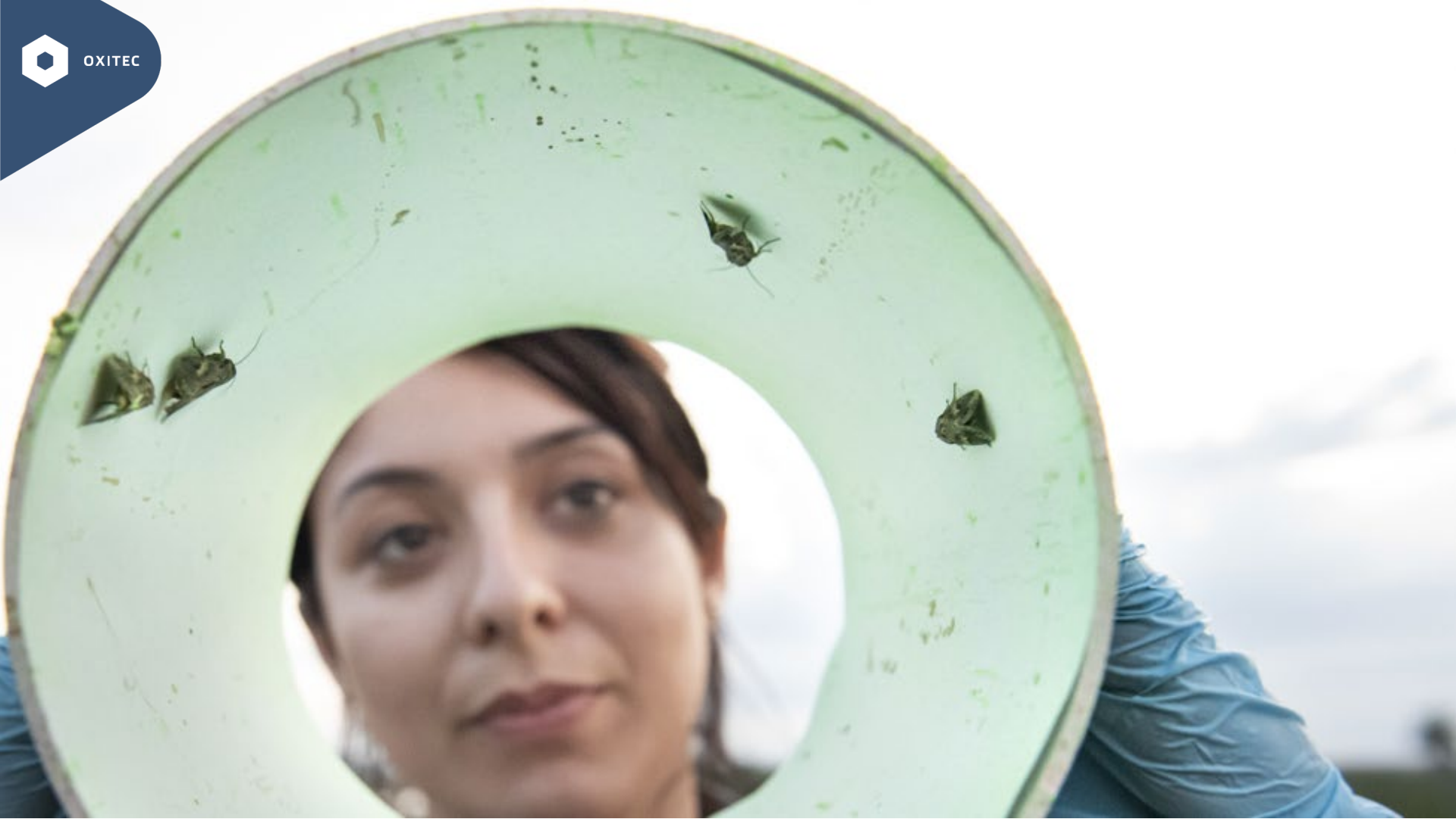
OXITEC







OXITEC



Nathan Moses-Gonzales,  
M3 Consulting Group

Video





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# Sterile Insect Control of Navel Orangeworm



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# Upcoming Sessions at 3:30 p.m.

- Incentive Assistance: Help Applying for Grants That Fund On-Farm Practices (Room 1)
- South Korea and Japan: Almonds Make Life Beautiful (Room 2)
- Pest Management Considerations in an Ever-Changing Regulatory Environment (Room 3)



# Visit the Exhibit Halls and Participate in the Passport Game

• 3P Partners	#2206	• K·Coe Isom	#707
• ABC Booth	#526	• Lincoln Agribusiness Services	#733
• AC Horn	#421	• Napasol	#2205
• Ag Spray Equipment	#2203	• NETZSCH Premier Technologies	#218
• Bayer CropScience	#127	• Satake	#521
• Best Drayage	#2112	• Suterra, LLC	#1638
• Bird Gard, LLC	#1812	• TOMRA Sorting Solutions	#335
• Borrell USA	#327	• Trécé, Inc	#516
• Cablevey Conveyors	#217	• Valent U.S.A.	#621
• Central Life Sciences	#917	• Westbridge Agricultural Products	#1534
• JAX, Inc.	#413	• Wilkey Industries	#320
• JKB Energy	#635	• Yara North America	#627

**The first 500 attendees to turn in a completed passport card to the ABC booth (#526) will receive a hat and will be entered to win one of seven amazing prizes!**



# Research Poster Session

Wednesday, 4:30 p.m. – 6:00 p.m.

Pavilion & Building D

## Featured Topics:

- Soil Quality (e.g., Cover Crops, Composts, Whole Orchard Recycling)
- Pest Management
- Irrigation Management
- Biomass/Co-Products
- Almond Leadership Special Projects (Building D)





# Shuttle Schedule

Shuttle service will be provided by The Almond Conference from the downtown hotels to Cal Expo daily.

- Downtown Pickup Location: Hyatt Sacramento Front Drive
- Cal Expo Pickup and Drop-Off Location: Blue Gate

## Shuttle Schedule:

- Tuesday, Dec. 10
  - 6:45 a.m. – 6:30 p.m.
- Wednesday, Dec. 11
  - 6:45 a.m. – 6:30 p.m.
- Thursday, Dec. 12
  - 6:45 a.m. – 1:30 p.m.



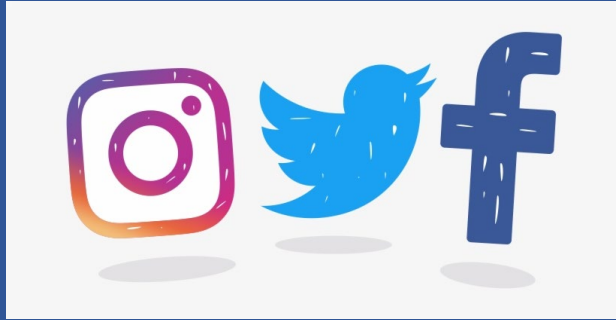
# 2019 Research Update



Pick up a  
copy at the  
ABC booth  
#526



# Join the Conversation!



Use **#AlmondConf** to share highlights  
from The Almond Conference

# Dedicated Trade Show Time

4:30 p.m. – 6:00 p.m.

**Social Reception Sponsored by:**





# 10 YEARS OF PROGRESS

JOIN THE JOURNEY

It's all there at

[SustainableAlmondGrowing.org](https://SustainableAlmondGrowing.org)



# Join Tonight's Social Reception

## Come and Sample: ALMOND BROWN ALE

### Stop by:

The Almond Board Lounge in Building D.

### Sample:

Almond brown ale during the Tuesday and Wednesday receptions.

This almond beverage is the result of a special project from Dominique Camou and Lucas Schmidt in collaboration with **Tembler Brewing Company**.

Industry members and attendees are welcome to stop by and have a taste.

### When:

Tuesday and Wednesday evening reception from 4:30–6:00 p.m.



**4:30 p.m. – 6:00 p.m. - Pavilion + Building D**

**Thank you!**