



# Redland Response

## June 28, 2018

Presented by:

**Bryan Benson**

**Florida Department of Agriculture and Consumer Services**



# Oriental Fruit Fly Cooperative Program

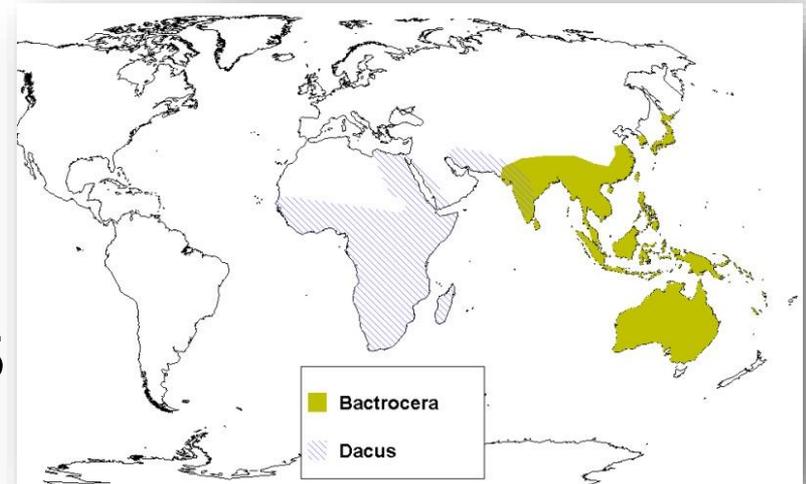


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Agriculture and Consumer Services

# History



- ◆ Native to Southeast Asia
- ◆ Introduced into Hawaii 1945
- ◆ First found in California 1960
- ◆ First found in Florida 1964
- ◆ Last detected in Miami-Dade 2015



Oriental Fruit Fly Cooperative Program



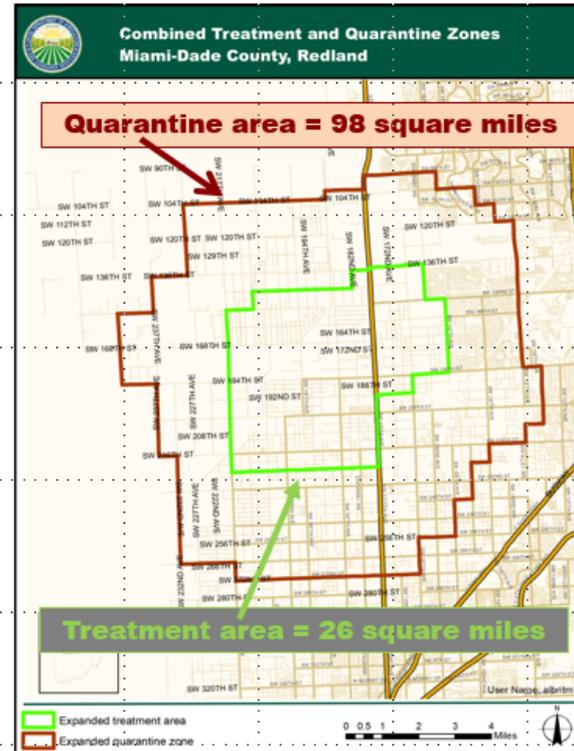
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# History



## 2015 Redland Eradication Program

- Number of flies found, triggered eradication program (165 as of 11/10/15)
- Broad host range with 430 confirmed hosts
- Area of impact is **predominantly agricultural lands**
- Crops impacted include:
  - Avocado, beans, mango, mamey, banana, guava, papaya, green beans, nursery plants
- Estimated **2,000 businesses impacted**
  - Growers, nurseries/stock dealers, fruit stands, lawn maintenance, packing houses, harvesters



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# Oriental Fruit Fly Cooperative Program



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# History



2015 detection of 45 flies in one trap



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# Action Plan

*Science-based, time tested*



## When one fly is detected

- Increase the quantity of traps placed within 81 square miles around the detection site

## Trigger for Treatment

- Two flies within a 3 mile radius within one life cycle (~30 days); or one mated female; or immature stages

## Trigger for Quarantine

- Six flies (male and/or female) in a commercial production area within a 3 mile radius during one life cycle



## Oriental Fruit Fly Cooperative Program



# Redland Response



*Detected to date: 4 Flies*

June 1, 2018 - 1st Detection

- Enhanced detection activities

June 3, 2018 - 2<sup>nd</sup> & 3<sup>rd</sup> Detection

- Control activities initiated

June 26, 2018 – 4<sup>th</sup> Detection

- Life cycle calendar reset, daily trapping for 1 week, and weekly control activities continue



**NO QUARANTINE IN PLACE**



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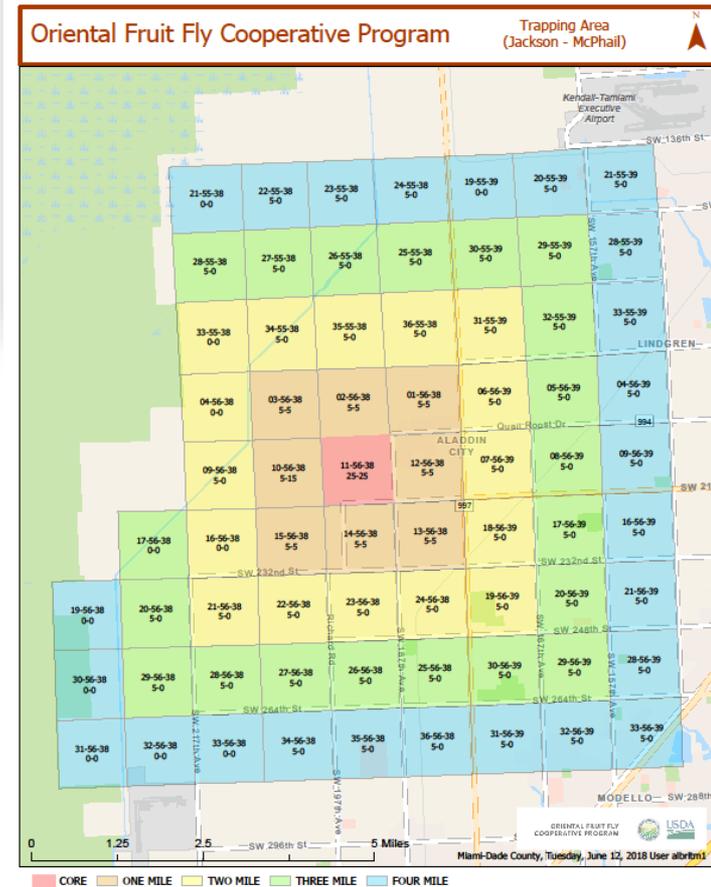
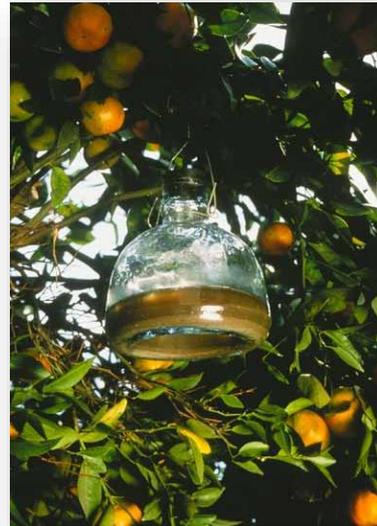
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# Trapping



Trap Total in area: **390**

Area: **59** square miles



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# Trapping



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# Larval Survey



- Larval survey conducted by entomologist around the detection area.
- Over **1400** host fruits have been examined on more than **200** properties.
- No *Bactrocera* larva have been detected.



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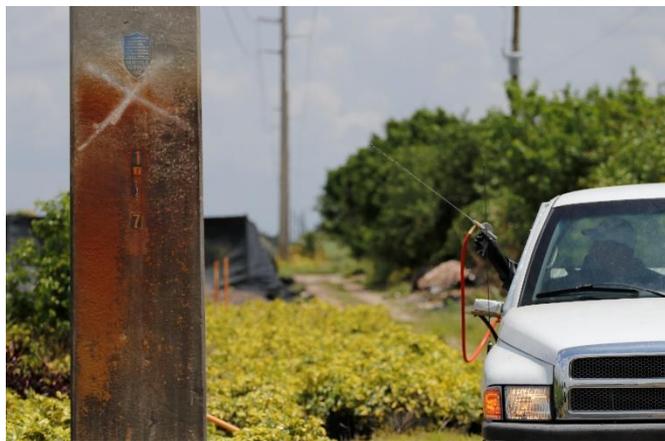


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# Male Annihilation Technique (MAT) Treatments



- Attracts and kills fruit male fruit flies
- Breaks the reproduction cycle of fruit flies
- Applied weekly or biweekly to utility poles, tree trunks and other inanimate objects



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# Male Annihilation Technique (MAT) Treatments



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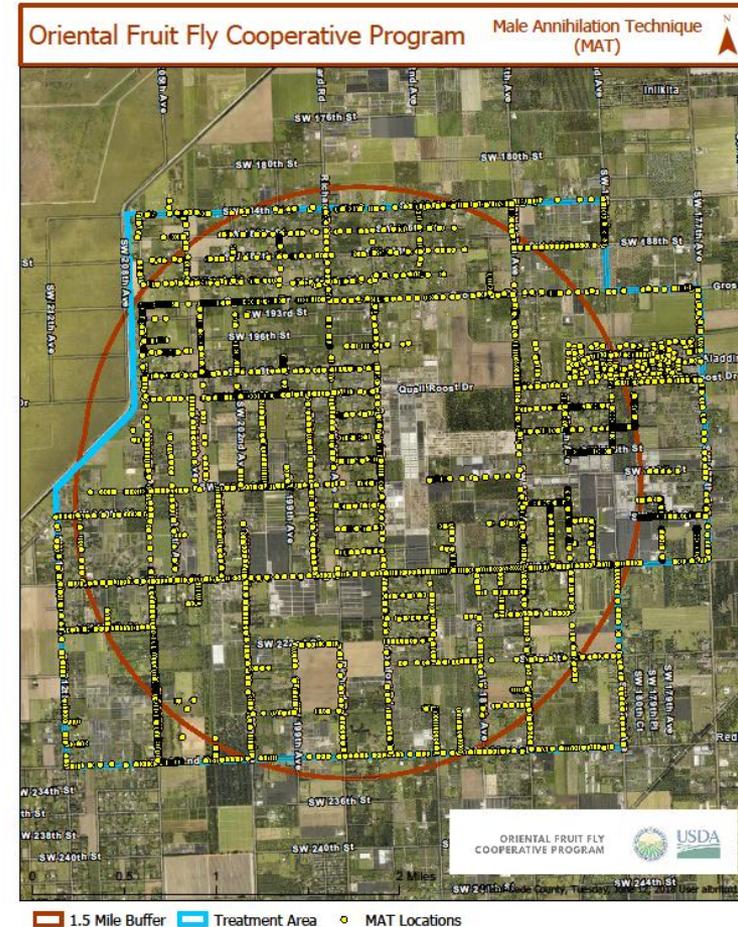


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# Male Annihilation Technique (MAT) Treatments



- Public notification on June 5
- Treatments began June 6
- Over **4,500** spot treatments applied (1<sup>st</sup> treatment)
- Treatments will be applied for two life cycles (~60 days) after last detection



## Oriental Fruit Fly Cooperative Program



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# Town Hall Meeting with Growers

## June 13, 2108



# Oriental Fruit Fly Cooperative Program



# Voluntary Pre-harvest Treatments



- **No quarantine in place at this time.**
- Bait treatments are not required for movement of fruits and vegetables.
- Voluntary pre-harvest treatments may be applied in accordance with the approved product label (Gowan Malathion 8 or GF-120)
- Voluntary pre-harvest treatments will count for certification in the event of a quarantine.

**Gowan**  
The Go To Company

P.O. Box 5569 • Yuma, AZ 85366-5569 • Phone (928) 783-8844 • FAX (928) 343-6255

*JE da/11/13*

**FIFRA §24(c) REGISTRATION**  
EPA SLN NO.: FL-150007

**SPECIAL LOCAL NEED REGISTRATION**  
FOR DISTRIBUTION AND USE ONLY WITHIN THE STATE OF FLORIDA

*For use in the control of exotic (non-established, quarantinable) fruit fly members of the family Tephritidae, including but not restricted to, Mediterranean fruit fly (Ceratitis capitata), Oriental fruit fly (Bactrocera dorsalis), Mexican fruit fly (Anastrepha ludens), Caribbean fruit fly (Anastrepha suspensa), Melon fruit fly (Bactrocera cucurbitae), Olive fruit fly (Dacus oleae), Peach fruit fly (Bactrocera zonata), Guava fruit fly (Bactrocera correcta), and Queensland fruit fly (Bactrocera tryoni).*

**GOWAN MALATHION 8 FLOWABLE**  
AGRICULTURAL INSECTICIDE  
EPA Reg. No. 10163-21

ACTIVE INGREDIENT	% By Wt.
Malathion (O,O-dimethyl phosphorodithioate of diethyl mercaptosuccinate)	79.5%
INERT INGREDIENTS	20.5%
<b>TOTAL</b>	<b>100.0%</b>

## Specimen Label

**Dow AgroSciences**

**GF-120<sup>®</sup> NF Naturalyte<sup>™</sup>**  
Fruit Fly Bait

Insecticidal Bait  
®Trademark of Dow AgroSciences LLC

For selective attractance and control of multiple species of tephritid fruit flies infesting any tree, fruit, nut, vine, vegetable or food crop and ornamentals, and on vegetation which may serve as resting sites for adult flies

Group	5	INSECTICIDE
Active ingredients:		
spinosad (a mixture of spinosyn A and spinosyn D)		0.02%
Other ingredients: includes water, sugars and plant proteins and extracts		99.98%
Total		100.00%

Contains 0.02% active ingredient on a weight basis - 0.002 lb al per gallon

For Organic Production

**OMRI**  
Listed

Listed by the Organic Materials Review Institute (OMRI) for use in organic production.

**Precautionary Statements**  
Hazards to Humans and Domestic Animals  
EPA Reg. No. 62719-498



## Oriental Fruit Fly Cooperative Program





# OFF Program Information



OFF Website:

[www.freshfromflorida.com/OFF](http://www.freshfromflorida.com/OFF)

- Program Updates
- Host List
- Pest Alert
- Program Treatment Area
- Frequently Asked Questions



## Oriental Fruit Fly Cooperative Program – Miami, Florida

### Daily Report: June 26, 2018

- THERE IS NO QUARANTINE IN PLACE
- 4 Oriental fruit flies detected
- No new detections since June 26, 2018

### Program Information

Commissioner of Agriculture Adam H. Putnam is dedicated to protecting Florida's \$123 billion agriculture industry from invasive pests and disease.

The Oriental fruit fly, *Bactrocera dorsalis*, is one of the world's most serious exotic fruit flies. The fly infests over 430 different fruits, vegetables and nuts by laying their eggs in the hosts making them unmarketable. The Florida Department of Agriculture and Consumer Services (FDACS), along with the U.S. Department of Agriculture (USDA) are working diligently to eradicate this pest.

The FDACS and USDA monitor more than 56,000 fruit fly traps statewide as an early detection network against exotic fruit fly introductions that threaten Florida's agriculture industry.

The Oriental fruit fly has been detected several times in Florida since 1964, and each time it has been successfully eradicated. The last detection was in Broward County in July 2017. This species is considered one of the most serious of the world's fruit fly pests due to its potential economic harm.

The department has confirmed the detection of Oriental fruit flies in south Miami-Dade County. The initial fly was discovered on June 1, 2018, during routine trapping, and two additional flies were discovered on June 3, 2018, during expanded trapping activities encompassing a 59-square mile area.

Treatments are being conducted in a 1.5-square-mile area around the fly detections. The treatment consists of a bait and insecticide mixture. Flies are killed when they feed on the bait. The treatment may be applied weekly to the upper portion of utility poles, trees, and other inanimate objects out of the normal reach of people and pets. Treatments are applied for a period of two life cycles of the fly (approximately 60 days) past the date of the last detection.

### Media Inquiries

Contact the Office of Communications  
(850) 617-7737  
[Communications@FreshFromFlorida.com](mailto:Communications@FreshFromFlorida.com)

[Subscribe to the Commissioner's Email Update](#)

### Contact

**Division of Plant Industry Helpline**  
Contact us Monday - Friday, 8 a.m. - 5 p.m. EST  
1-888-397-1517  
(352) 395-4600 (Outside North America)  
[DPIHelpline@FreshFromFlorida.com](mailto:DPIHelpline@FreshFromFlorida.com)

**After Hours**  
To report suspect fruit movement violations, call  
1-800-342-5869



# Oriental Fruit Fly Cooperative Program



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# OFF Previous Florida Detections

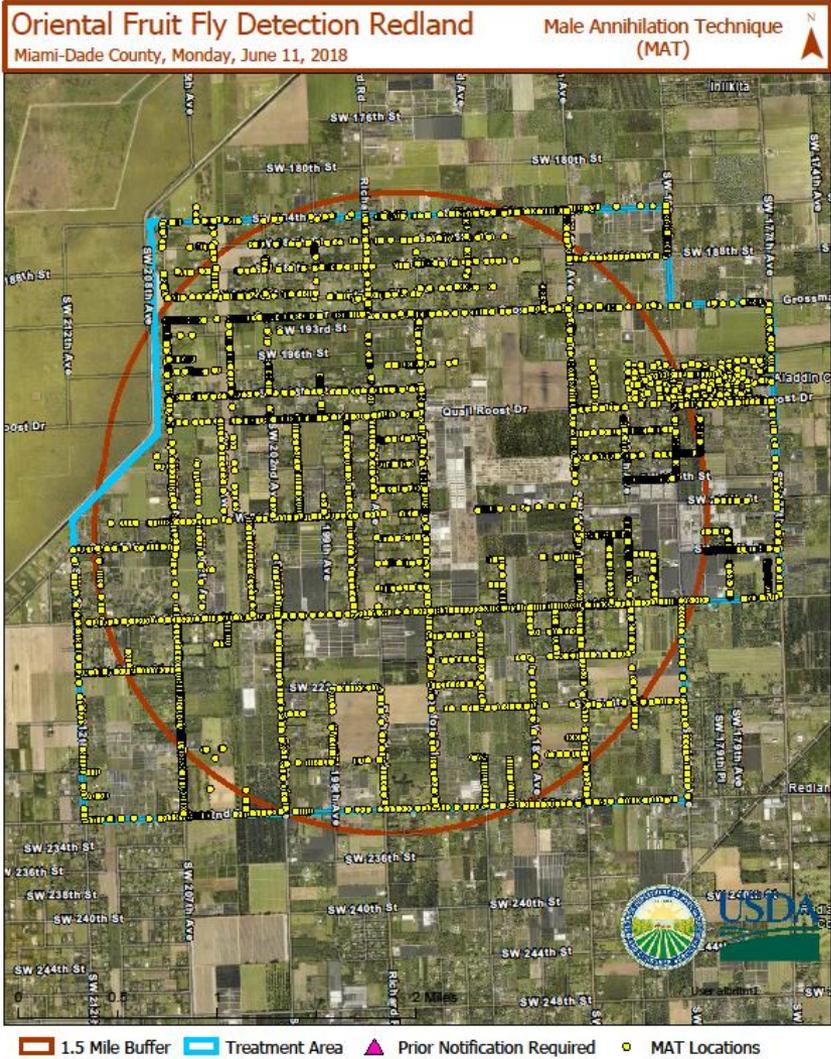
- 1964: Pinellas – **1 fly**  
2-month trapping
- 1969: Miami – **1 fly** – \$25K  
2-month trapping
- 1994: Broward – **1 fly** - \$100k  
3-month trapping
- 1995: Pinellas – **3 flies** - \$530k  
3-month **eradication program**
- 1999: Hillsborough – **16 flies** - \$100k  
3-month **eradication program**
  - 1999: Volusia – **1 fly**  
3-month trapping
  - 1999: Brevard – **2 flies**  
3-month trapping
  - 2000: Manatee – **1 fly**  
3-month trapping
  - 2001: Orange – **1 fly**  
3-month trapping
- 2001: Sarasota – **2 flies** - \$100K  
3-month **eradication program**
- 2002: Orange – **2 flies**  
3-month trapping
- 2002: Broward – **1 fly**  
3-month trapping
- 2007: Hillsborough – **1 fly**  
3-month trapping
- 2007: Orange – **1 fly**  
3-month trapping
- 2007: Orange – **1 fly**  
3-month trapping
- 2008: Orange – **2 flies**  
3-month trapping
- 2010: Pinellas – **2 flies**  
3-month trapping
- 2014: Broward – **1 fly**  
3-month trapping
- 2015: Miami-Dade – **165 flies** - **\$2.1M**  
6-month **eradication program**
- 2017: Lake, Pinellas, Broward – **1 fly each**  
3-month trapping
- 2018: Miami-Dade – **3 flies**  
On-going **eradication program**



## Redland OFF Eradication



# MAT Treatments



## Oriental Fruit Fly Cooperative Program





Thank You





# Trap Sites



## Oriental Fruit Fly Cooperative Program



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