Florida - First Finds

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National Plant Board 2019 - Kalispell
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The Last Five Years - New Records

- 2014 = 13 State and 17 US/Hemisphere Records = 30
- 2015 = 13 State and 14 US/Hemisphere Records = 27
- 2016 = 15 State and 13 US/Hemisphere Records = 28
- 2017 = 13 State and 22 US/Hemisphere Records = 35
- 2018 = 10 State and 18 US/Hemisphere Records = 28
Florida: New Established Exotics, 1980-2018

Total Exotics Detected per Year
1980-2018
Early Detection and Rapid Response

- **Cooperative Agricultural Pest Survey**
  - High risk trapping (port environs, large importing nurseries, etc.)

- **Cooperative Fruit Fly Program**
  - 56,000 traps checked every 2-3 weeks

- **Plant Inspection Unit**
  - \(\approx 400\) inspectors (nursery, citrus, detector dogs, etc.)
First Find!
Florida State Collection of Arthropods (FSCA)

- Ranked among Top 5 in North America and top 15 in the world
- 10,000,000 prepared specimens and millions more held in bulk alcohol and dry storage
- 40 Ph.D. level entomologists, nematologists and plant pathologists and associated staff
Risk Assessment - Is this thing a pest?
No Apparent Risk

- Pass information off to specialists typically university
- Research pathway as other pests may follow
- Continue to monitor over time

*Ochropepla inaequalis*  
*Siskiwitia sp.*
Yes, this is a pest!

- Contact Major Grower Groups
- Create Working Group (FDACS-DPI, University, PPQ, ARS, USFS, etc.)
- Pathway Analysis
- Delimitation Surveys
- **Determine Course of Action**
  - Eradication
  - Control
    - Chemical
    - Cultural
    - Biological
Old World Bollworm Delimitation Survey

OWB Delimitation Survey 2015 - Manatee County - 7/22/2015

State Overview

FDACS, DPI, CAPS
G. Gardner, L. Whilby
Map for illustrative purposes only

GCS North American 1983 PCS Albers Equal Area Conic
Data Source: CAPS
Prepared Date: 7/22/2015
Typical Fruit Fly Delimiting Programs

Guava Fruit Fly Detections St. Petersburg
Pinellas County, May 3, 2018

Oriental Fruit Fly Detections Mount Dora
Lake County, January 18, 2017

Legend:
- Fruit Fly Detection
- 1.5 Mile Buffer
- Persons Requiring Prior Notification of Pesticides
- CORE
- ONE MILE
- TWO MILE
- THREE MILE
- FOUR MILE
- Commercial Citrus (PCS)
- Abandoned Citrus (PCS)
Lychee Erinose Mite (Aceria litchi) Detections in FL 2018

Lychee Erinose Mite Positive Sample Locations
- Positive Nuisance (12)
- Positive Groves (5)
- Positive Non-Agricultural Properties (12)

Lychee Erinose Mite (Aceria litchi) Detections and Negatives

Lychee Erinose Mite Positive Sample Locations
- Positive Nuisance (26)
- Positive Groves (5)
- Positive Non-Agricultural Properties (12)
Red Palm Mite Delimiting Program

CAPS Red Palm Mite, *Raoiella indica* Hirst, Survey in Southern Florida
1/9/2008

For more information refer to:
http://www.aee.org/ffr
http://www.fppa.org
http://www.miami.gov/depwm

Map created by CAPS / Andrea Chavez
Eradication Programs – Last 10 Years

- Cotton Seed Bug
  - 2011 = Florida Keys
- Mediterranean Fruit Fly
  - 2010 = Boca Raton
  - 2011 = Pompano Beach
- New World Screwworm
  - 2016 = Florida Keys
- Oriental Fruit Fly
  - 2015-16 = Homestead
  - 2018 = Homestead
- Wild Red Rice
  - Current – Miami-Dade
- Giant African Snail
  - Current – Miami-Dade and Broward Counties

Bold = active eradication programs
Research and Development

- R & D scientists work to optimize eradication procedures based on biology.
Giant African Snail & Oriental Fruit Fly

Quarantine area = 98 square miles

Treatment area = 26 square miles
Hotwash
Chemical Control, BMPs, etc.

- Typically hand off to extension and university
Biological Control Programs

- Foreign Exploration
- Quarantine Work – non-target testing, etc.
- Petition for Release
- Mass Rearing
- Release and Establishment
Thank You!