

2022 CAPS Annual Workshop



Nursery Survey 2021



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National CAPS Survey Manuals



Survey Groupings (e.g., Commodity Surveys)

- Asian Defoliator
- Corn
- Cotton
- Cyst Nematode
- Economic and Environmental
- Exotic Wood Borer / Bark Beetle
- Grape
- Mollusk
- Oak
- Palm
- Pine
- Small Grains
- Solanaceous Hosts
- Soybean
- Stone Fruit
- Tropical Hosts
- No manual

Nursery Survey- composed of selected pests of concern to Florida

2021 Nursery Survey

Target pests



Visual survey targets

- Bagrada hilaris*
Bagrada Bug
- Oxycarenus hyalinipennis*
Cotton Seed Bug
- Lycorma delicatula*
Spotted Lanternfly
- Lissachatina fulica**
Giant African Snail

Trapping survey targets

- Helicoverpa armigera*
Old World Bollworm
- Thaumatotibia leucotreta*
False Codling Moth
- Spodoptera litura*
Cotton Cutworm
- Conogethes punctiferalis*
Castor Capsule Borer
- Stenoma catenifer*
Avocado Seed Moth
- Gymnandrosoma aurantianum**
Citrus fruit borer

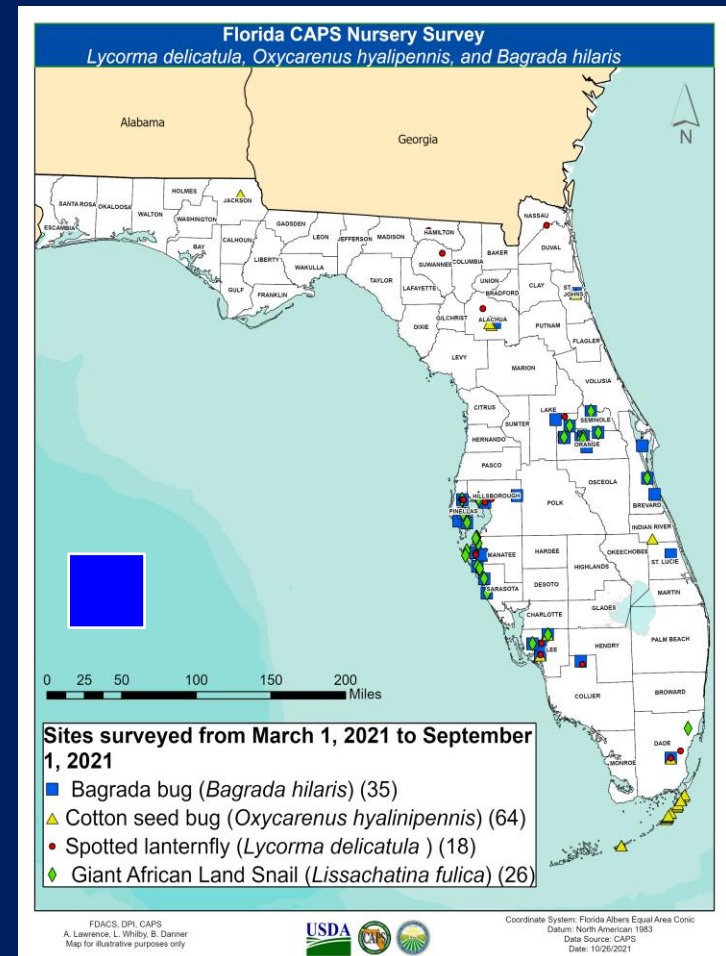
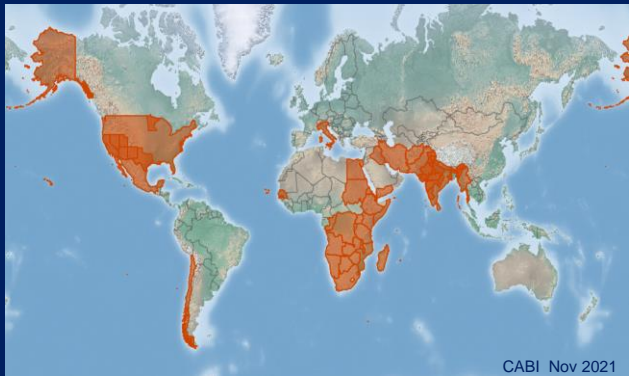
* Targets added in 2021

2021 Nursery Survey

Bagrada hilaris – Bagrada bug

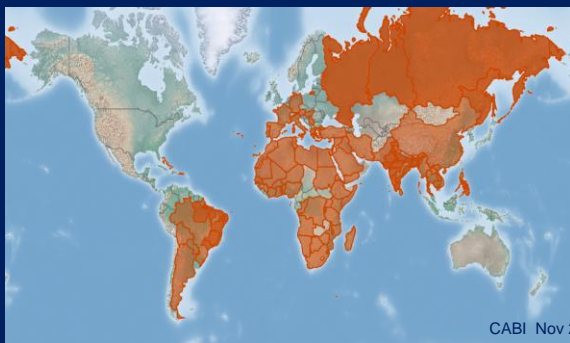


Family:
Pentatomidae
Damage:
leaves, stems,
flowers, and
seeds
Hosts: 74 plant
species in 23
families
Major hosts:
cruciferous
crops

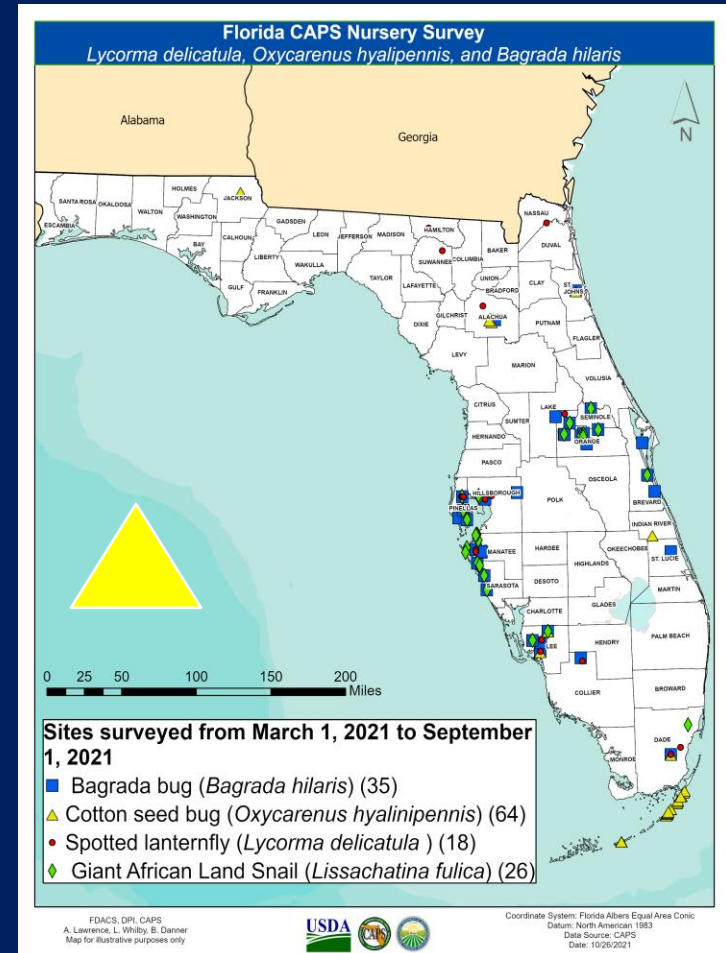


2021 Nursery Survey

Oxycarenus hyalinipennis – cotton seed bug

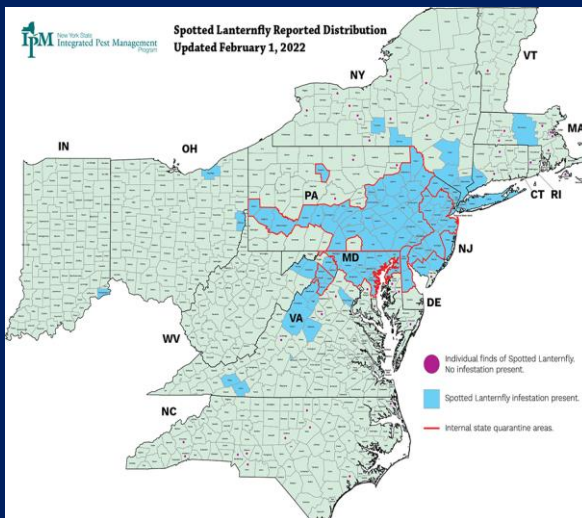


Family: Lygaeidae
Damage: Seed feeder
Major hosts:
Cotton, okra, and other Malvaceae

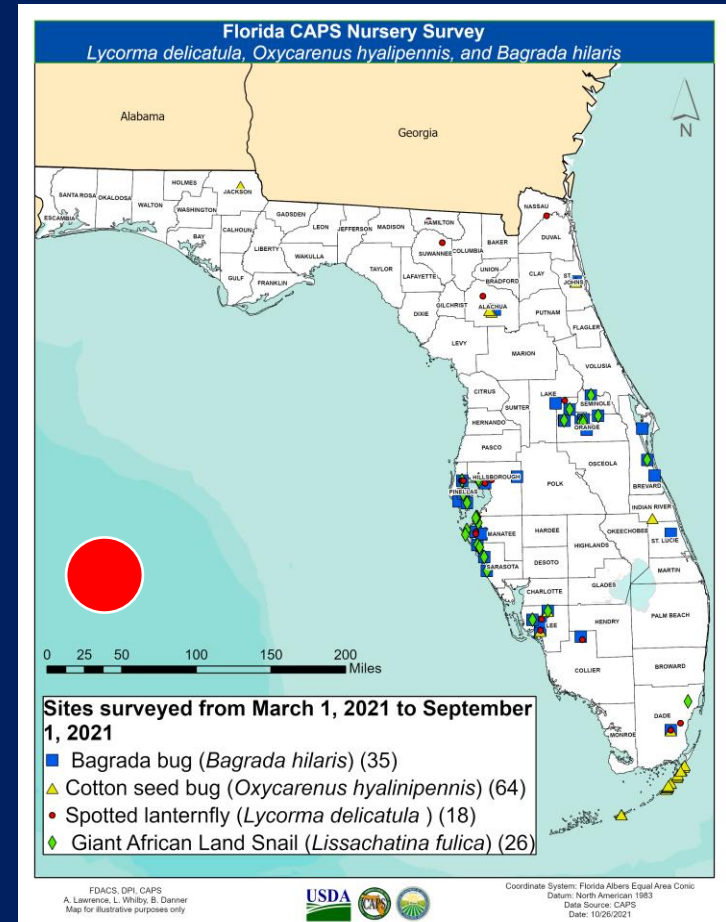


2021 Nursery Survey

Lycorma delicatula – spotted lanternfly



Family:
Fulgoridae
Damage: phloem
feeders
Distribution:
China, SE and E
Asia
Major hosts:
tree of heaven,
chinaberry, grape

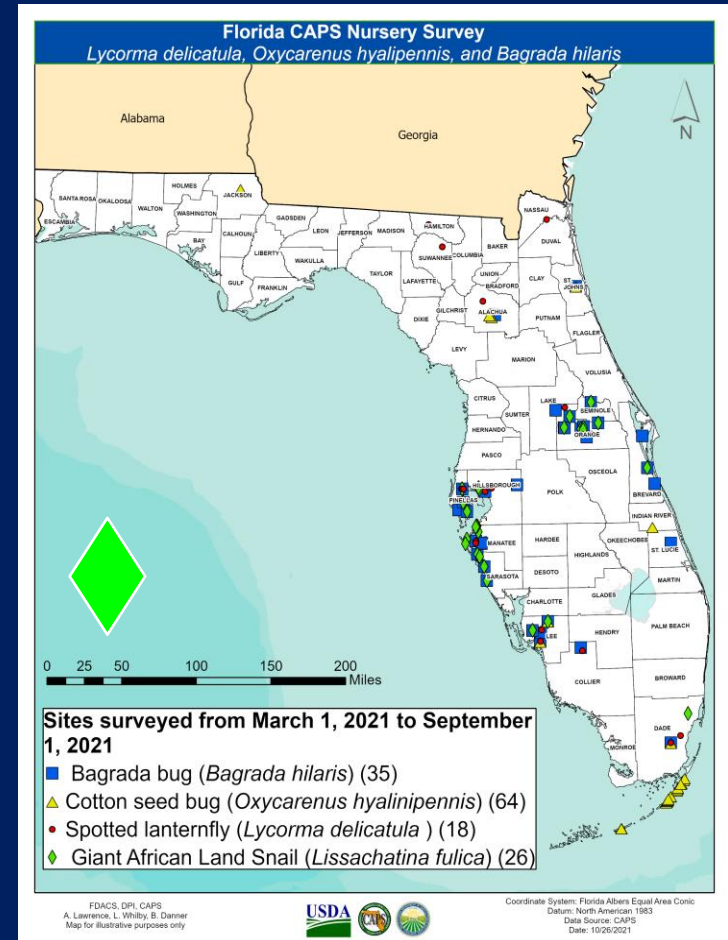
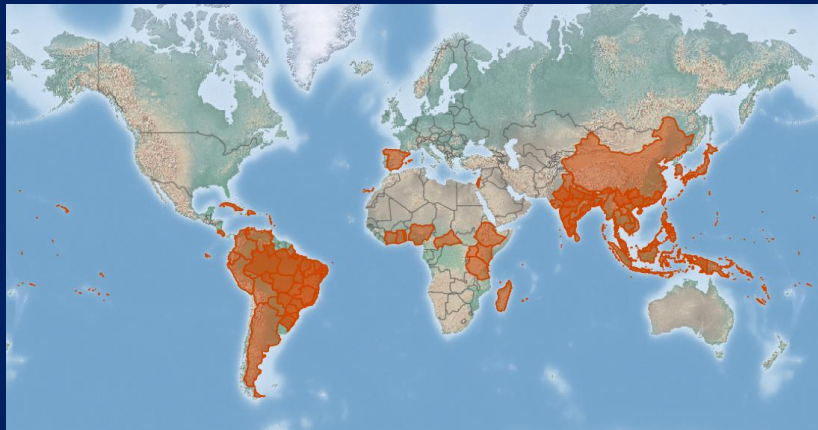


2021 Nursery Survey

Lissachatina fulica- Giant African Snail

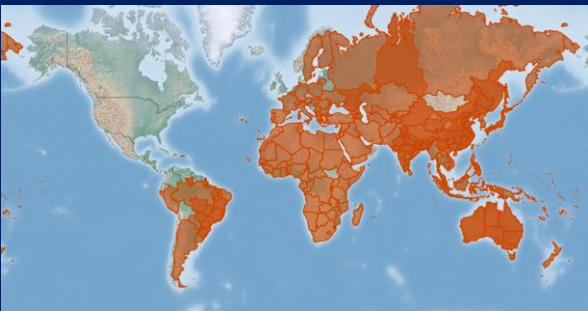


Family:
Achatinidae
Damage: living
plant tissue of a
broad variety,
detritus

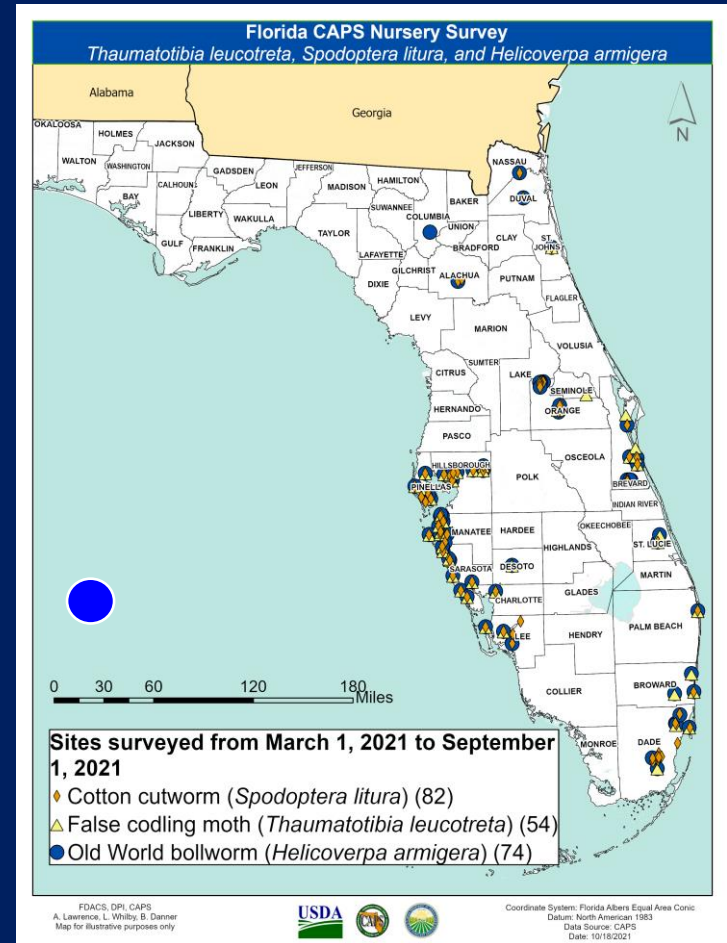


2021 Nursery Survey

Helicoverpa armigera – old world bollworm

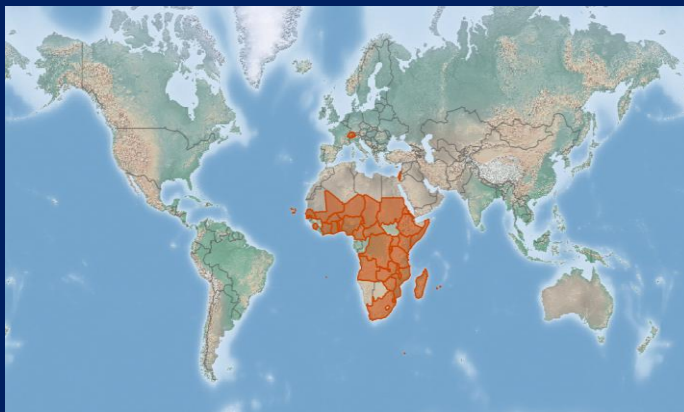


Family:
Noctuidae
Damage:
reproductive
parts
Hosts:
Polyphagous, at
least 60
economically
important plants,
incl: corn, cotton,
soybean,
sorghum, and
solanaceous
crops



2021 Nursery Survey

Thaumatotibia leucotreta - false codling moth



Family:
Tortricidae
Damage: fruit
feeder
Hosts:
Polyphagous,
>50 plant spp.
incl: avocado,
citrus, corn,
cotton,
Solanaceous
plants,
macadamia,
stone fruits



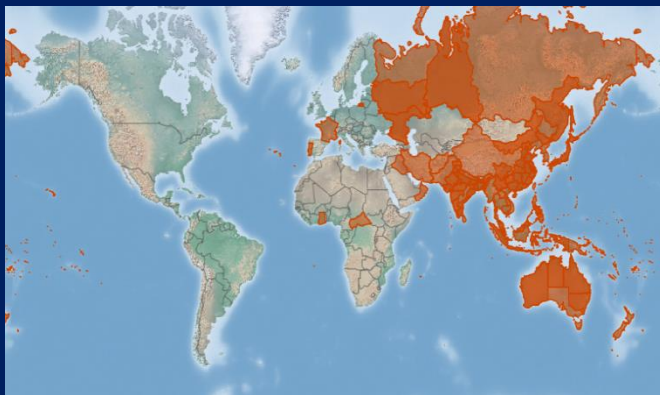
2021 Nursery Survey

Spodoptera litura – cotton cutworm



UGA5190079

Natasha Wright, Florida Department of Agriculture and Consumer Services, Bugwood.org



Family:
Noctuidae
Damage: leaf
feeder
primarily
Hosts: 120
species incl:
crucifers,
nightshades,
bean, cotton,
taro

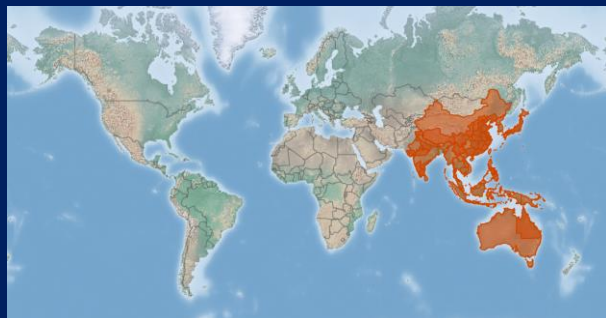


2021 Nursery Survey

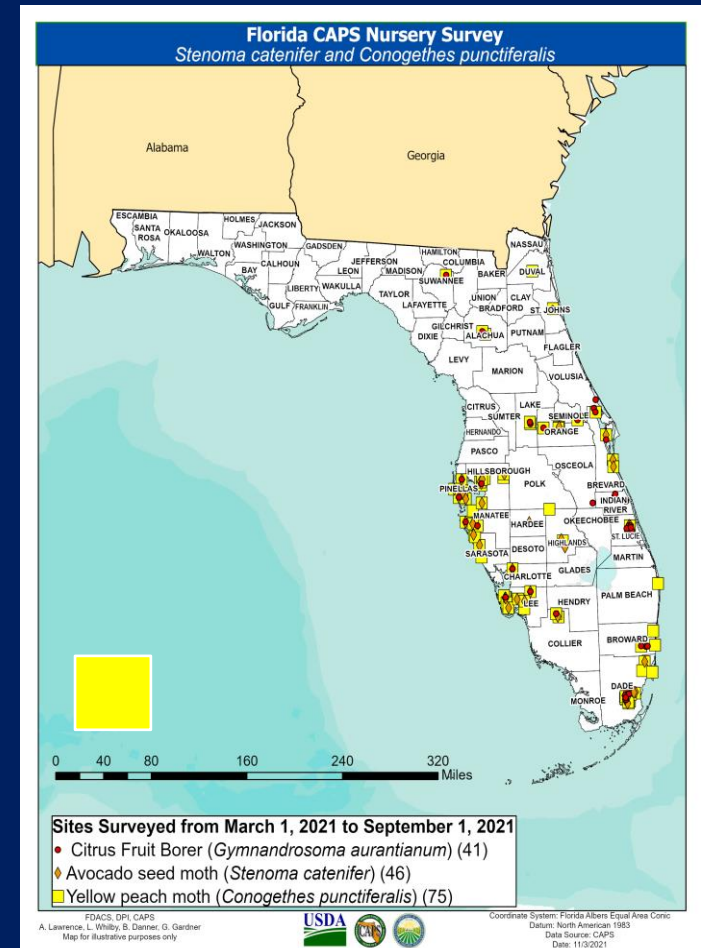
Conogethes punctiferalis - castor capsule borer



ICAR-National Bureau of Agricultural Insect Resources



Family: Crambidae
Damage: bores into stems, shoots, buds, fruits, and seeds
Hosts: Tropical subtropical, and temperate fruits incl: peach, guava, longan, cacao. Also cotton, sorghum, castor bean, gingers



2021 Nursery Survey

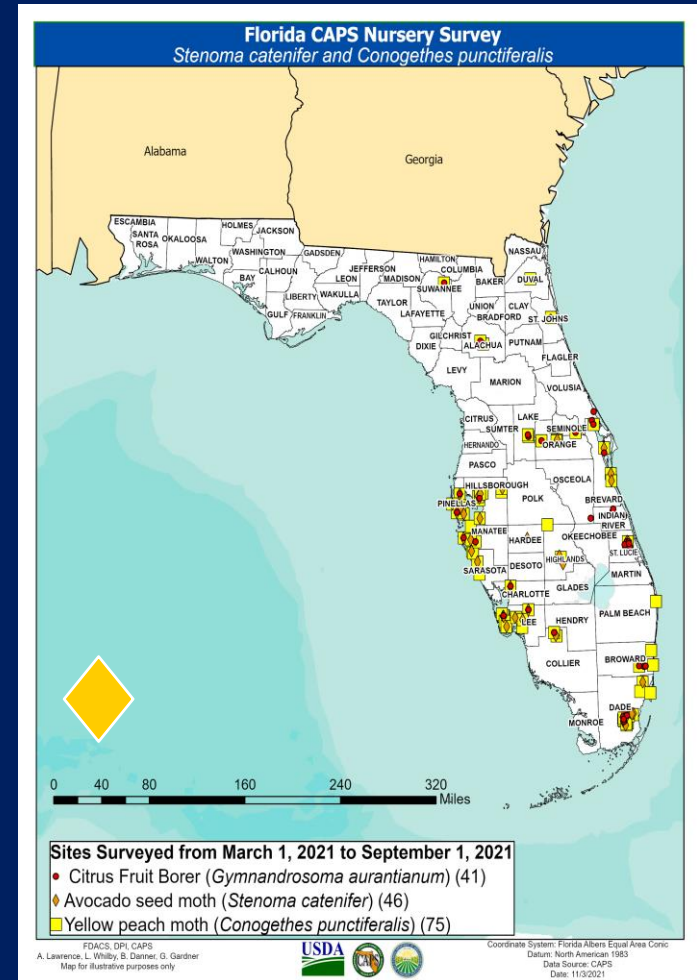
Stenoma catenifer – avocado seed moth



Family:
Elachistidae
Damage: stems,
fruit, and seeds
Hosts: avocado



Mark Hoddle, UCR

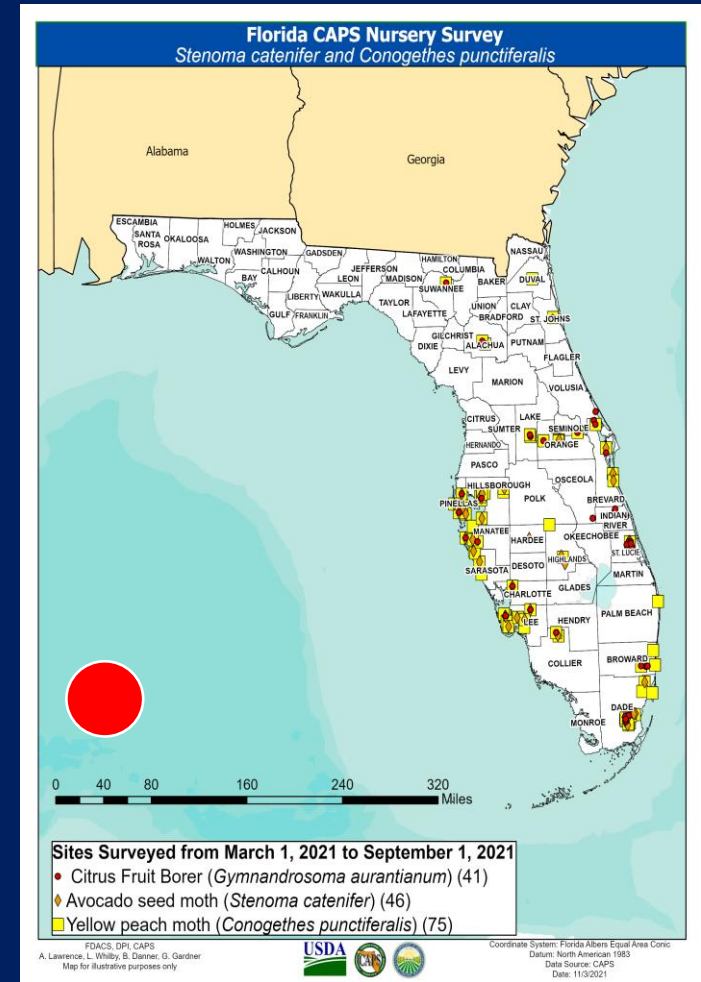


2021 Nursery Survey

Gymnandrosoma aurantianum- Citrus fruit borer



Family:
Tortricidae
Damage: fruit,
nut
Hosts: citrus,
macadamia
nut, Spanish
lime, + other
fruits



2021 Nursery Survey



Number of traps: 398

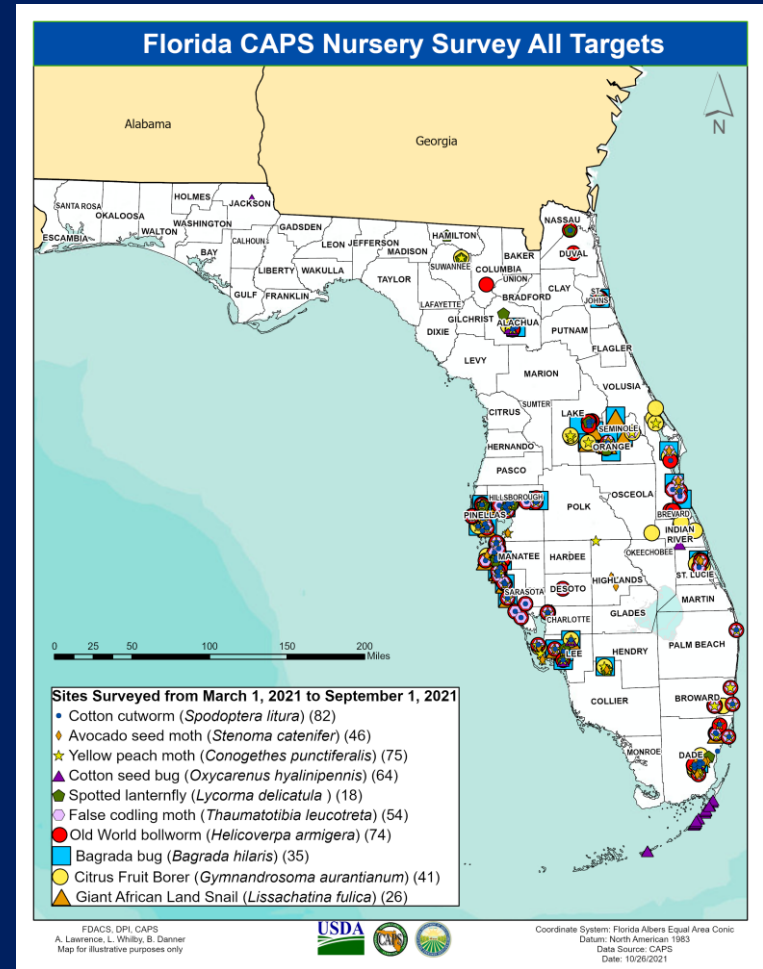
Number of visual sites: 208

Number of trap checks/ site visits: 6076

Number of specimens submitted: 2623

Number of NAPIS entries: 5304

No targets found





2021 Nursery Survey Records

7 New Records:

County	Record	Organism
Brevard	County	<i>Gymnandrosoma desotatum</i>
DeSoto	County	<i>Sereda tautana</i>
Suwannee	County	<i>Cydia marita</i>
Alachua	County	<i>Ecdytolopha mana</i>
Manatee	County	<i>Gymnandrosoma desotatum</i>
St Johns	State	<i>Cucumovirus</i> cucumber mosaic virus on Canna lily
Monroe	Host	<i>Begomovirus</i> Cabbage leaf curl virus on <i>Teramnus labialis</i>

2022 Nursery Survey



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- ❑ *Lymantria dispar asiatica**
- ❑ *Cydalima perspectalis**
Box tree moth

* Target added in 2022

2022 Nursery Survey

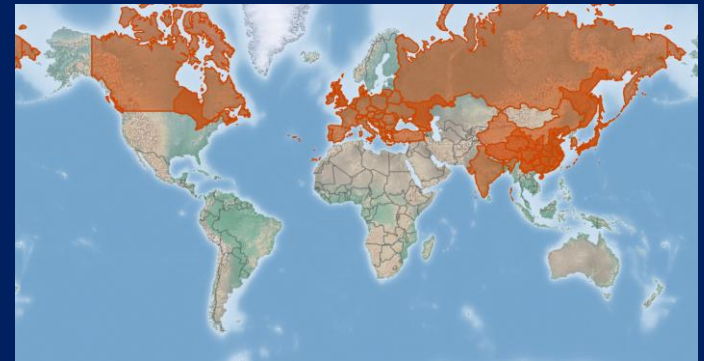
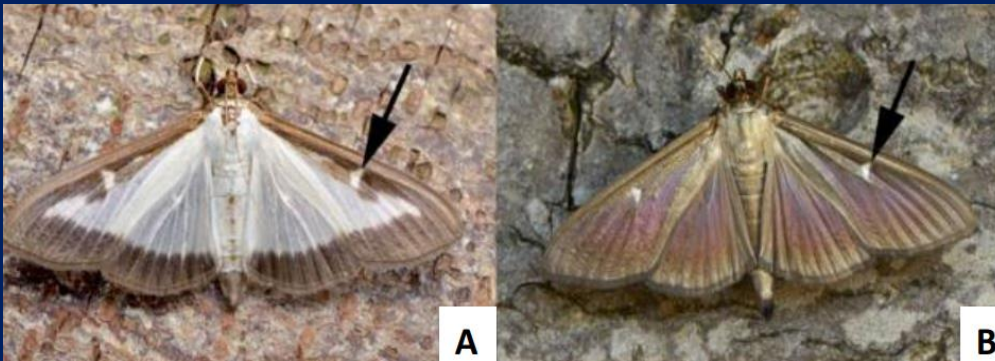
Lymantria dispar asiatica- Asian Gypsy moth (AGM)



- European gypsy moth (EGM) currently in the Northeast
- Distribution: Eastern Russia, Mongolia, China, Korea
- AGM has broader host range than EGM
- Feed on >500 tree and shrub species
- Unlike EGM, AGM females fly
- Damage: leaf feeding- severe defoliation; death
- Past detections in the USA include: WA, OR, GA, OK, SC, TX, ID, NC (Also British Columbia)
- FL hosts include: oak, sweetgum, willow, elm, maple, pine, persimmon
- Monitoring: Delta trap with pheromone lure

2022 Nursery Survey

Cydalima perspectalis- Box tree moth



- Currently in Ontario, Canada
- USA- detected in MI, CT, SC
- Preferred host: Boxwood (*Buxus* spp.)
- Other hosts: *Euonymus* spp., purple holly, and orange jessamine
- Damage: leaf, stem, and bark
- Monitoring: bucket trap and lure