

Farm Bill 2018 Old World Bollworm & Tomato Survey

ROGER BLANCO, ENVIRONMENTAL SPECIALIST
ASHLEIGH MARTIN, LABORATORY TECHNICIAN



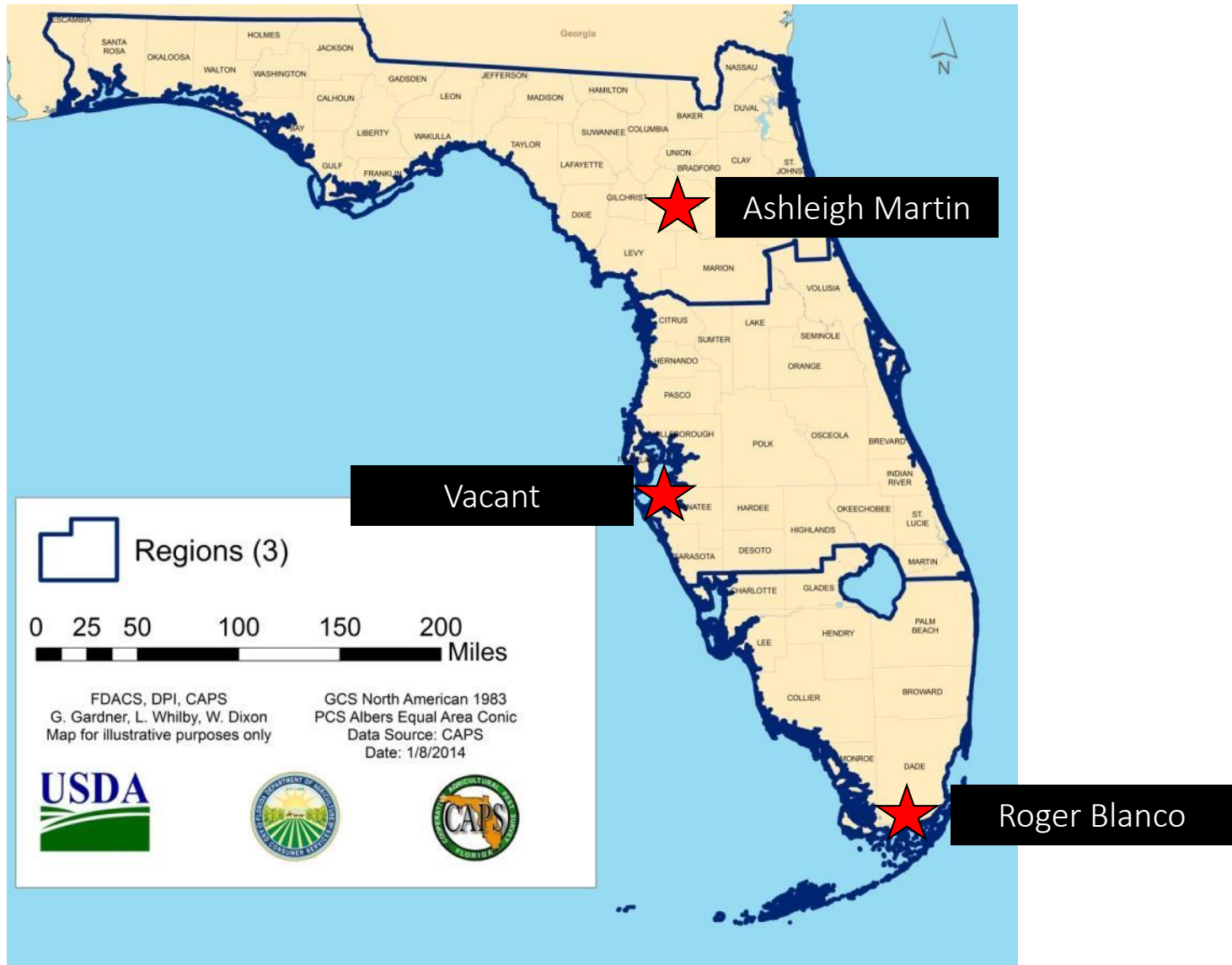
Tomato Commodity in Florida



\$262 Million in 2017, ranking #1 in the United States (USDA, NASS 2018)



Tomato Commodity Survey in Florida



Survey Sites

- Commercial fields
- Community gardens
- Public and private research fields
- Vegetable seed and seedling producers
- Tomato packing houses



Targets



- *Tuta absoluta*
- *Chrysodeixis chalcites*
- *Neoleucinodes elegantalis*
- *Spodoptera littoralis*
- *Spodoptera litura*
- *Helicoverpa armigera*



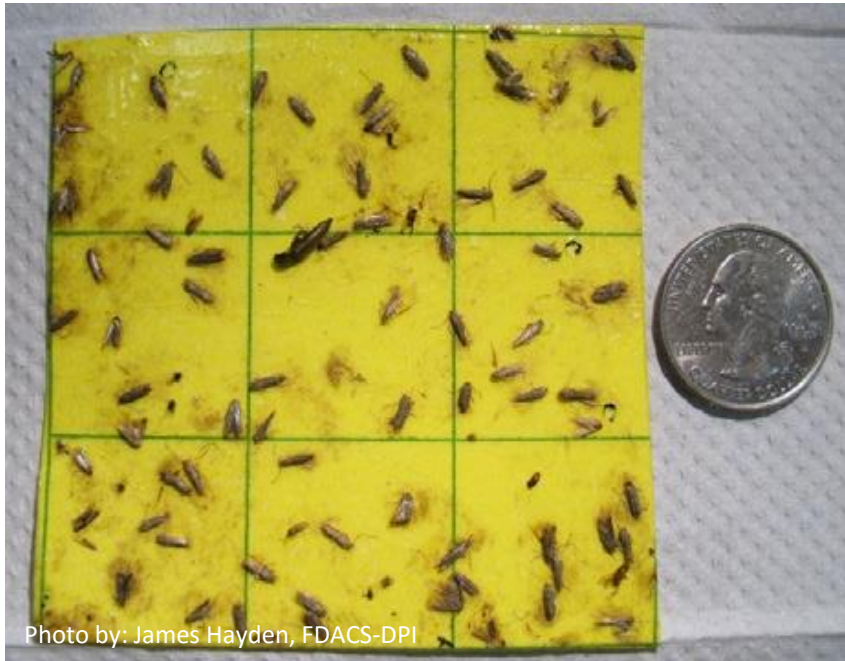


Tuta absoluta

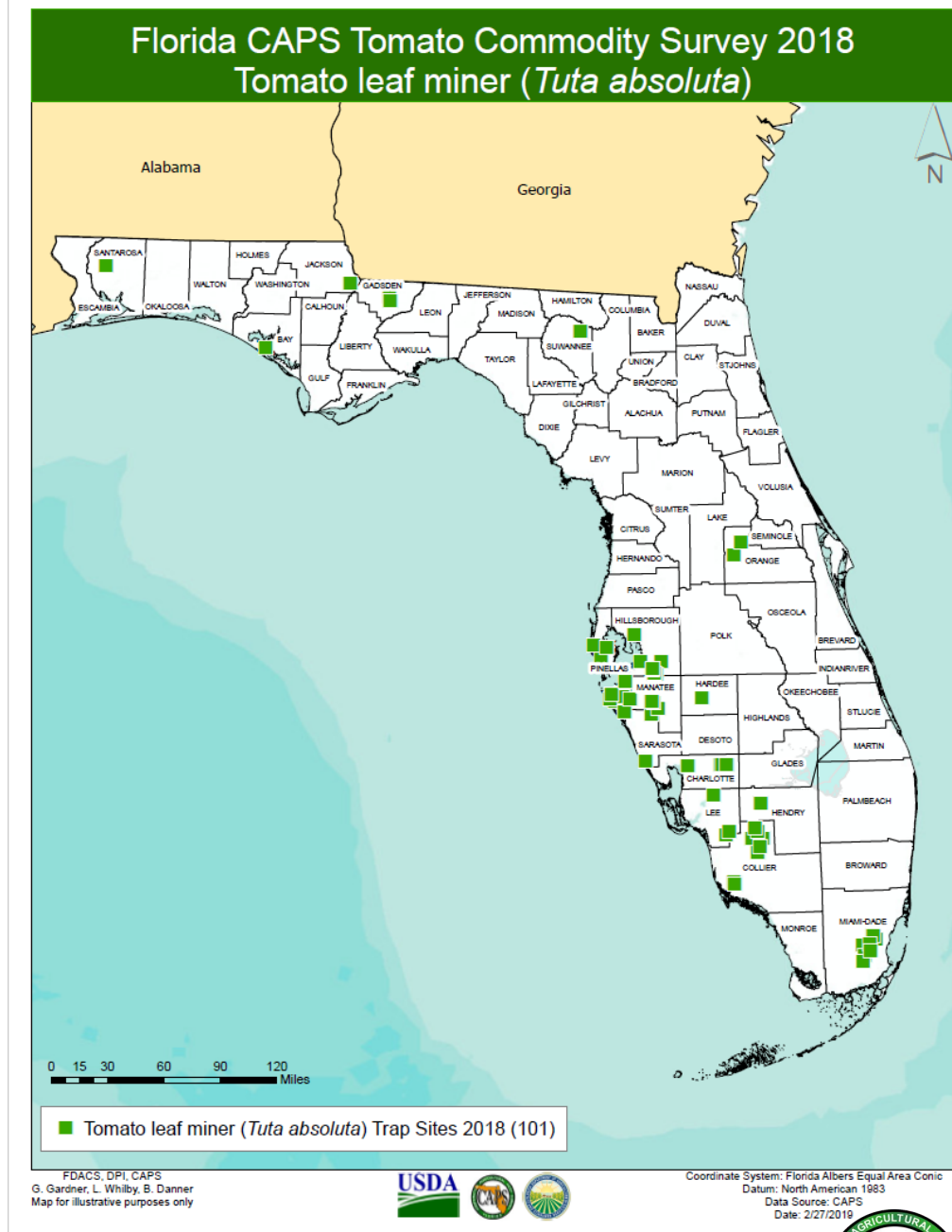
- Major pest of tomato; also affects potato, eggplant, peppers
- 80-100% losses reported in tomato

Spread of tomato leafminer *Tuta absoluta* from South America worldwide since 2006





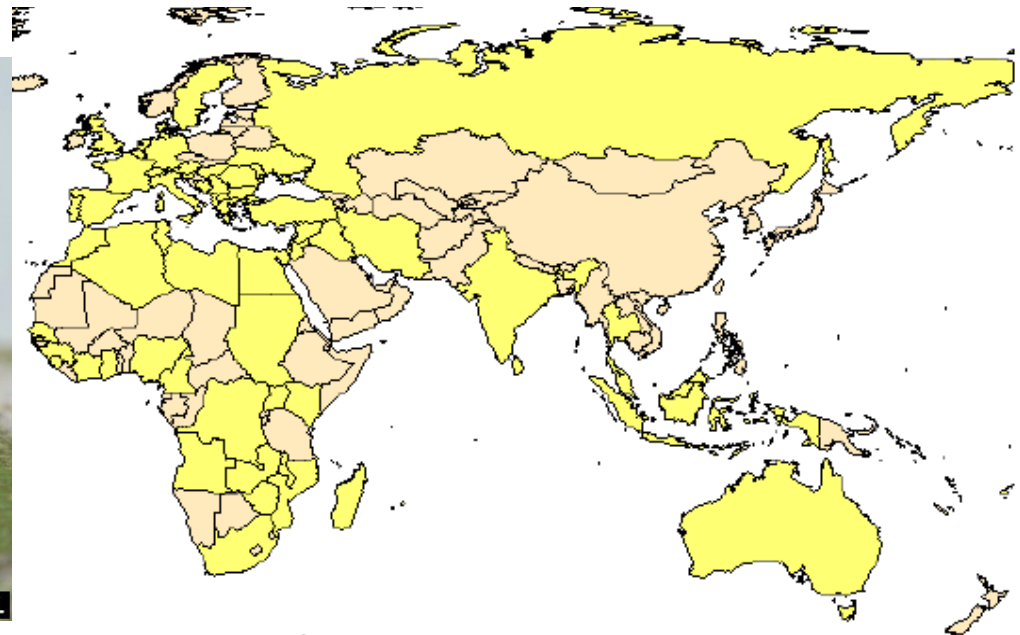
Tuta absoluta
Not detected



Chrysodeixis chalcites

- Hosts include soybean, cotton, tobacco, beans, tomato, potato, and chrysanthemum
- 378 interceptions since 1984*

**Reported Distribution of *Chrysodeixis chalcites*,
Golden Twin Spot Moth**



Neoleucinodes elegantalis



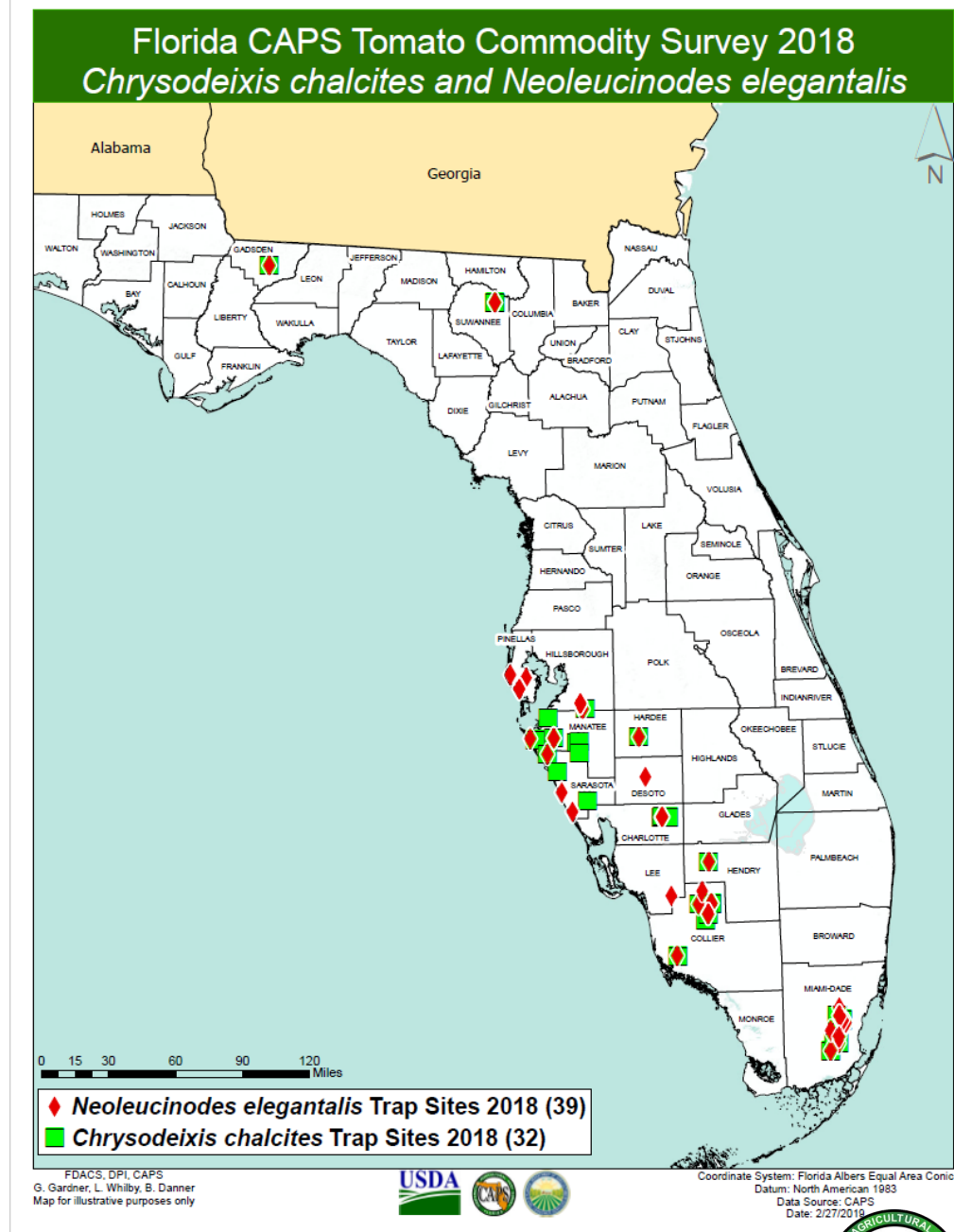
- Hosts include tomato, eggplant, and peppers
- 2013 CAPS additional pest of concern
- Category 1 pest OPEP 2019
- >1200 interceptions since 1984*



* AQAS database



Chrysodeixis chalcites
Neoleucinodes elegantalis
 Not detected



Spodoptera littoralis
Spodoptera litura
Helicoverpa armigera

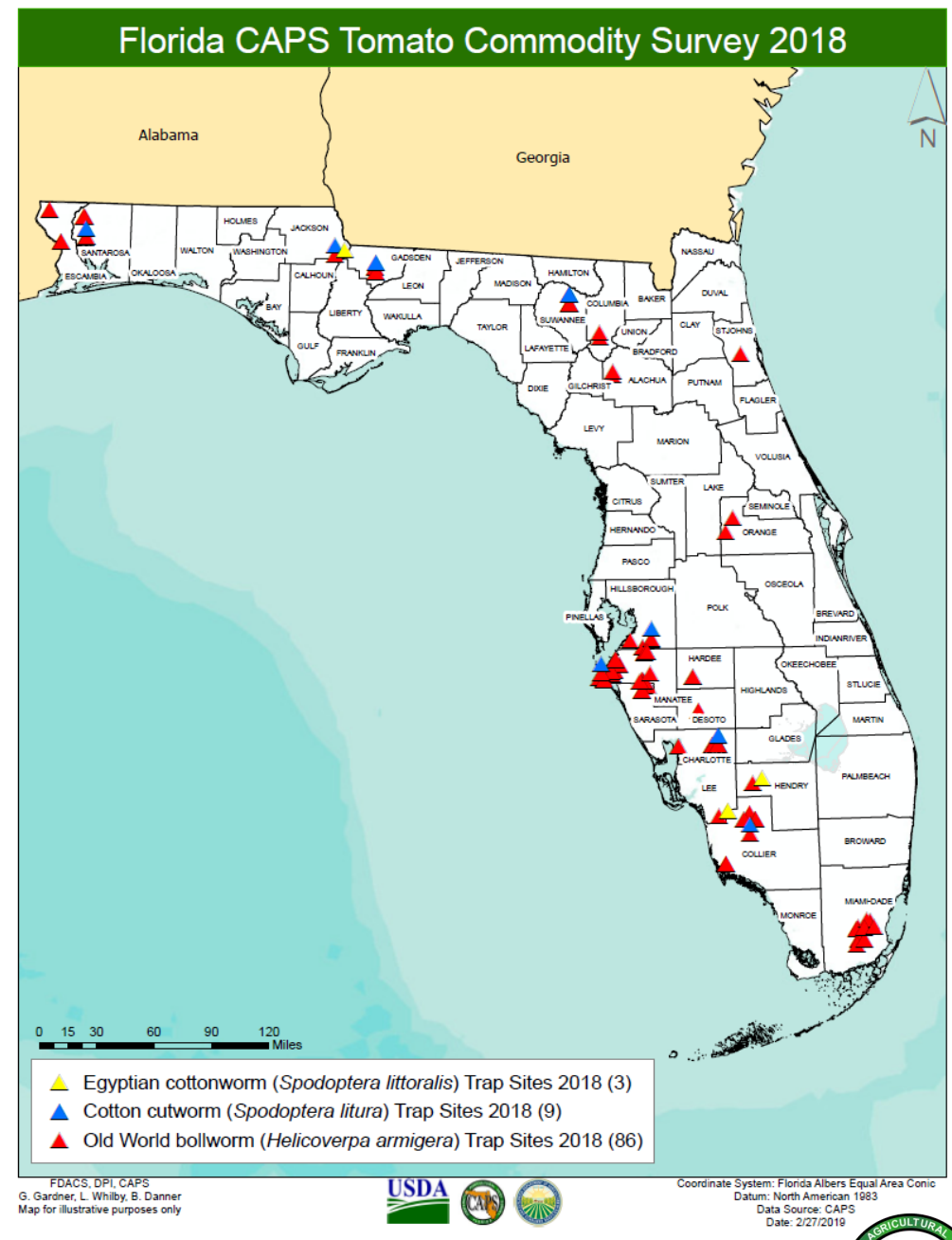
- Polyphagous
- Major pests of tomato
- Intercepted >4000 times since 1985 *





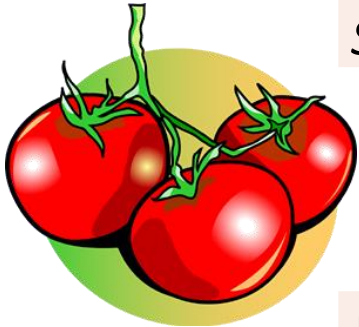
Spodoptera littoralis
Spodoptera litura
Helicoverpa armigera

Not detected



2018 Survey Results

Target	Specimens Collected
<i>Helicoverpa armigera</i>	2,247
<i>Tuta absoluta</i>	182
<i>Chrysodeixis chalcites</i>	179
<i>Spodoptera litura</i>	77
<i>Neoleucinodes elegantalis</i>	10
<i>Spodoptera littoralis</i>	7



2,702 Specimens collected; 0 Targets found

Records	
New host record	<i>Cercospora apii</i> s. lat on <i>Smallanthus sonchifolius</i> (Peruvian ground apple)

Looking Ahead

Dropping: *Spodoptera littoralis*

Adding: *Thaumatotibia leucotreta*

