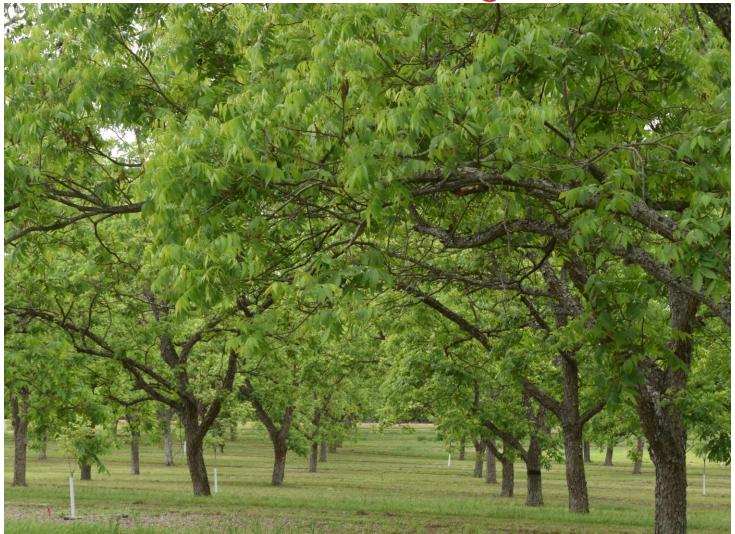
## Pecan Insect Pest Management : 2024



### Apurba Barman University of Georgia, Tifton Campus

# Pecan budmoth





- Feed on leaves, young buds
- Can cause multiple branching
- Timing of spray is important
- Chemical control: Intrepid Edge, Minecto Pro

## Ambrosia beetles



- <u>Tiny beetles, invasive species</u>
- Young trees up to 3-4 year old are more vulnerable
- Trees can recover, but more attacks could kill young trees
- Keep and eye for sawdust toothpick structure
- Prefer stressed trees, especially trees on wet areas

## Risk of ambrosia beetles

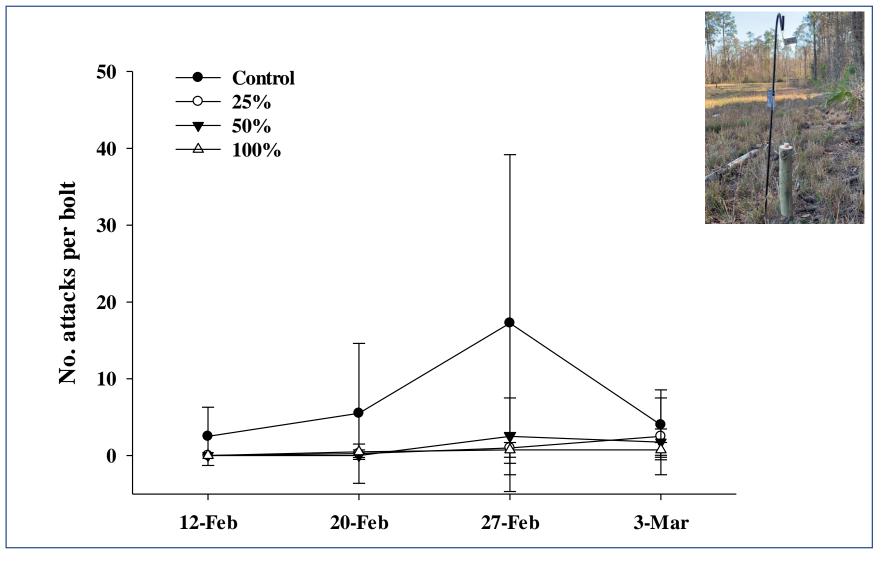


# Trapping/monitoring of ambrosia beetles

- Bolt of wood, drill hole in the middle
- Pour <u>ethanol/denatured alcohol</u>, into the hole
- ➢ Plug hole with cork
- Deploy traps along woodlines next to orchards by <u>early Feb</u>
- Look for sawdust toothpicks on bolts
- Preventative treatment of pyrethroid on tree trunk upto 3-4 feet at 7-10 days interval (Feb- April)
- Bifenthrin (Onyx Pro) label rate: 32 fl oz/100 gallons (100%)



### Evaluation of <u>application rate</u> of bifenthrin (Waycross, GA)



# Pecan phylloxera

- Pecan phylloxera pressure was high
- Two types of phylloxera species: leaf and stem
- Stem phylloxera is more damaging
- Infestation is likely on the same trees as the adults lay eggs near the base





# Pecan phylloxera

- Application of Imidacloprid right around the budbreak can reduce the heavy infestation
- Pecan can tolerate moderate level of early phylloxera infestation
- Galls can host first generation of hickory shuckworms as there are no nuts present that time



# Pecan nut casebearer

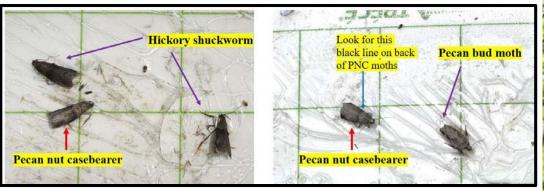
- Egg laying occur in mid-May
- Monitor for adult emergence, timing is critical to target the immature
- During heavy crop load, serve as a natural thinning mechanism
- Management options:
  - Intrepid, Intrepid Edge and Dimilin





# Remote monitoring of pecan nut casebearer

- ➤Time of application is <u>KEY</u> for PNC control
- Frequent orchard visit is a limiting factor
- Daily, AI based counts of moths on any device





## Pecan nut casebearer

- PNC infestation was light
- Multi-county PNC monitoring for BioFix program will resume for the next year and data will be available through







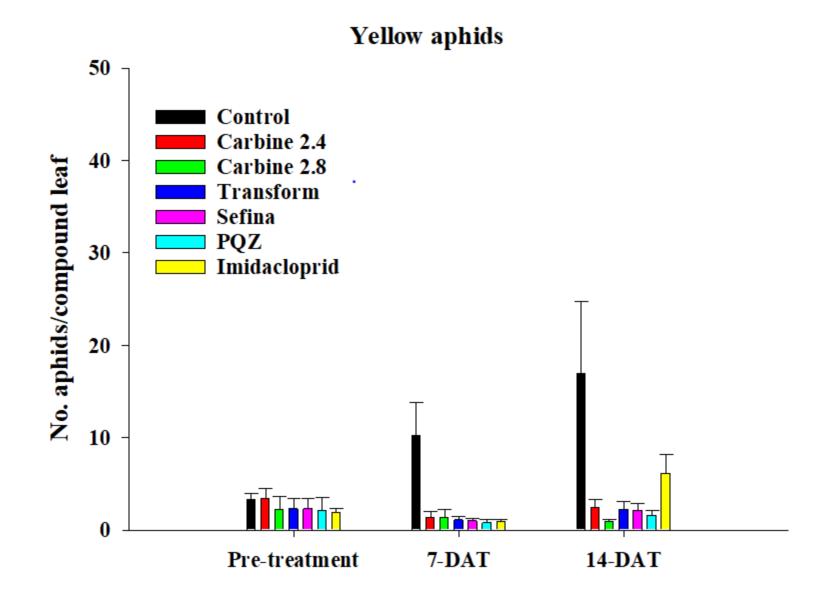
#### https://pecan.agpestmonitor.org/

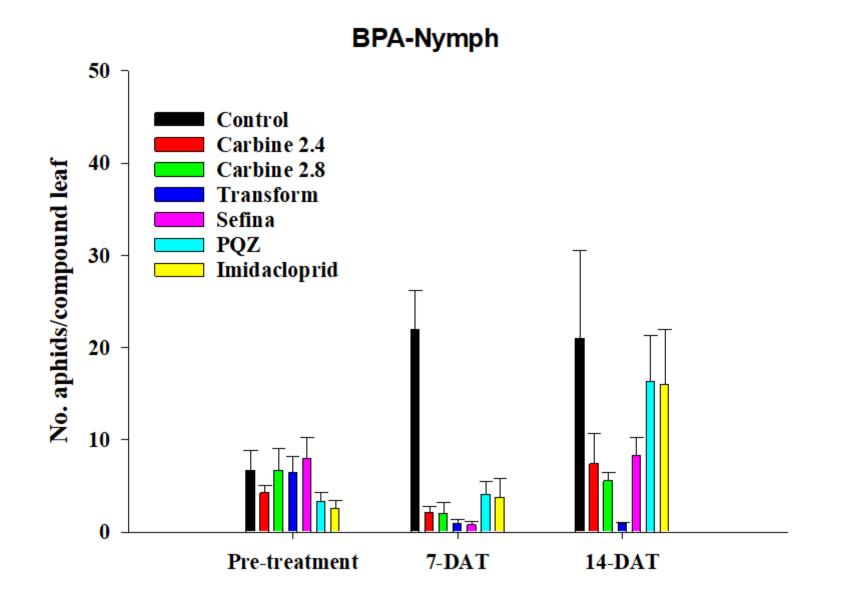
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# Aphid management

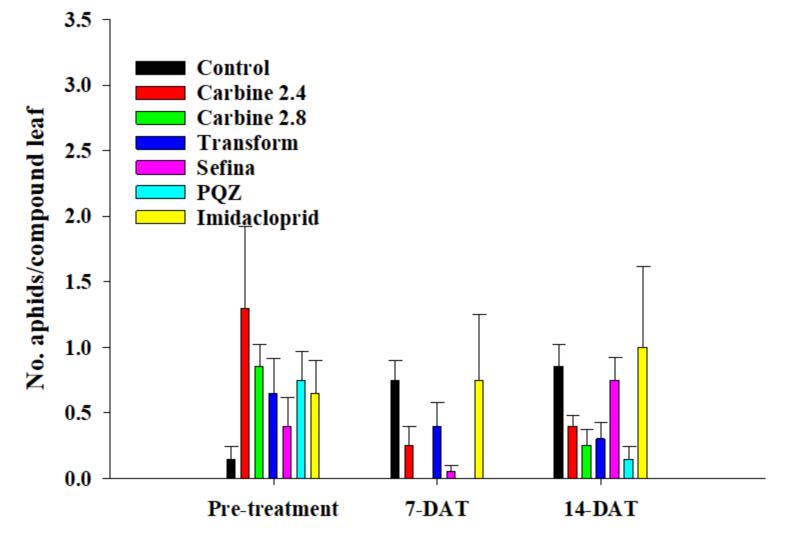


- Yellow aphids are not a serious problem in most cases
- Moderate level of yellow aphids help beneficial establishment
- Back aphid feeding cause leaf yellowing (chlorosis), leading premature fall, therefore needs attention





### **BPA-Adult**



# Aphid Summary

- 1. Ignore yellow aphids if you can
- 2. <u>**Don't use**</u> any broad spectrum insecticides, such as pyrethroids
- 3. Ignore black aphids before June

<u>If you have susceptible verities:</u> Sumner/Gloria Grande/Schley

- Apply imidacloprid via drip in early/mid June OR Pro Gibb 3x, every 10 days, starting July
- 2. If black aphids flare up in 3-4 wks, apply Closer, Carbine, PQZ, Safina -- *ROTATE*
- 3. Use Nexter late season if needed for black aphids when mites build



# Pecan Leaf Scorch Mite



- > Make sure if this is mite or something else
- Mostly seen around August/September
- ➢ Favorable condition: dry and dust
- Found more in lower and inner canopy
- THRESHOLD: <u>start</u> to see damage and there are 40-50 mites per leaflet, spray.
- ➢ CONTROL
  - > Abamectin (label)
  - > Acramite (24 oz)
  - Envidor (18 oz)
  - ➢ Nexter (7.5 − 17 oz)
  - Magister (36 oz)
  - Portal (2 pt)

# Pecan leafminer



Serpentine leafminer



Surface blotch leafminer

- Blotch leafminers seem to be most common in GA pecan
- High infestation could reduce the productivity of leaves
- Undamaged leaf areas are still productive
- Unlike black pecan aphids, leaves are likely to retain on trees after the infestation

# Blotch leafminer

Sticky traps could provide early indication
Larvae feed under the epidermis of leaf
Parasitoids species acts upon reducing the population
Two layer of protection and non-feeding habit at the later life stage

Intrepid, imidacloprid seem to suppress populations



# **Acknowledgements**





- Pecan Growers
- UGA Pecan Team
- UGA County Agents

Contact information: abarman@uga.edu Cell: 229-402-9016