2021 Non-Bearing Pecan Update

Andrew Sawyer, Southeast Georgia Area Pecan Agent



Talking Points

- 1. Horticulture effects of phosphite sprays on nonbearing trees
- 2. Terra-Sorb on newly planted trees
- 3. Drenching insecticide on newly planted trees
- 4. Most common young tree issues



Should we spray non-bearing trees?

Probably "no" is the right answer

- 2020 UGA Pecan Team



5-Year Desirable, Effingham County 6/11/19



Horticulture effects of phosphite on young trees

K-Phite7LP sprayed on 2-year-old Caddo 5 applications

<u>Treatments</u>

- 2 quarts K-phite / acre, every three weeks
- 2 quarts K-phite / acre, every six weeks
- 4 quarts K-phite / acre, every three weeks
- 4 quarts K-phite / acre, every six weeks
- Control





Initial Observations



2 qt/A, every 3 weeks

4 qt/A, every 3 weeks

Scab on control







Height & Caliper





Phosphite on Non-Bearing Summary

- Phosphite DOES control scab
- There was not enough scab to spray (Median 2.5)
- Each treatment had more phytoxicity than control, rate mattered
- There were no differences in leaf nitrogen
- Trees were able to pick up phosphorus
- K-Phite did supply potassium
- There were no differences in tree height or caliper. No horticulture benefit to the trees was observed.



Terra-sorb



- Developed for landscape and horticulture industry
- Use for tree seedlings, bareroot plants and hydroseeding
- Super absorbent, hydrogel material claims to increase water-holding capacity of soil 150 times its weight in water
- Mix with water and let gel, then dip roots and plant
- A.I. 93% Potassium Polyacrylate







Leaf Analysis







Difference in Height (In) and Caliper (cm)



Site of 2021 planting of low-input pecan trees for small plot demonstration and long-term scab evaluation at Vidalia Onion Research Farm in Toombs County.

Drenching Insecticide on New Trees





Treatments

Rate/Acre Rate/Tree

1. Sivanto	21 oz	1.28 oz
2. Admire	14 oz	0.5 oz
3. Movento	9 oz	0.33 oz
4. Velum Prime	6.8 oz	0.25 oz
5. Control		

No difference in any treatment after products drenched over top of planted trees.

2021: Will replicate same trial by drenching into planting hole to rule out photodegradation of insecticide.

Common issues of newly planted trees











Acknowledgements



Georgia Pecan Commodity Commission



Georgia Pecan Growers Association



Research Acknowledgements

County Agents John Bennett Derrick Bowen Scout Carter Shane Curry James Jacobs Raymond Joyce Jennifer Miller Jay Porter Aubrey Shirley

Growers Chris Clough Dennis Holley Tim Jackson RG Lamar Daniel/Jennifer Miller Arren Moses Hope/Adam Oliver Tim/Ryan Lott

Industry Tim Feathers Jake Ford Keith Rucker Gary Veal Specialists
Angel Acebes
Jason Brock
Tim Brenneman
Lenny Wells



Acknowledgements

UGA Extension Pecan Team Derrick Bowen (Tatnall County) Scout Carter (Tatnall County) Doug Collins (Lee County) Shane Curry (Appling County) Michasia Dowdy (Brooks County) Lucy Ray (Morgan County) Ben Reeves (Berrien County) Aubrey Shirley (Tatnall County)





Photo by CC BY-NC



agsawyer@uga.edu

(912) 512-3030

