

PLANTING OF LOW-INPUT PECAN VARIETY TRIAL AT VIADAILA ONION RESEARCH FARM PROVIDES RESEARCH AND DEMONSTRATION FOR SOUTHEAST PECAN GROWERS

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EXTENSION



SITUATION

International competition, increasing storm damage, depressed domestic prices, and lower export prices are challenging to the Georgia pecan industry. Traditional southeastern varieties such as ‘Stuart’ are being pushed out of the export market due to lower percent kernel. Standard varieties such as ‘Desirable’ variable cost of production is increases drastically. To continue making profit, growers must produce pecan varieties with a greater than 50% kernel and substantially reduce variable input costs, such as fungicide applications. Fungicides account for 12% of a grower's variable costs. Since 2008, more low-input varieties are observed on the Ponder Farm in Tifton, GA receiving no fungicide sprays. These varieties have shown no scab disease while also producing high yield.



Figure 1. Shane Curry, Andrew Sawyer, Zach Williams and Ross Greene plant a ‘Kanza’ pecan tree.



Figure 2. Jennifer Miller, Jason Edenfield and Zach Williams set trees and operate the water truck.

IMPACT

In its first year of planting, the Area Agent planned and coordinated a field day for Southeast Growers. The field day brought a total of 66 pecan growers and industry from 18 counties in Georgia. Attendees represented 9,179 acres of pecan orchard land. One of the Georgia’s largest producers, Buck Paulk, said this about the meeting: *“(Young tree production) is the information growers need to hear. We talk a lot about nut production, but no one talks about how to properly manage the trees young so they can produce nuts.”*

Seven total presentations were given by the Area Agent and four UGA Extension agents. These county agents presented research information in which they collaborated with the Area Agent. 19 attendees completed evaluations. 88% of responses learned a lot about Ambrosia beetle management and budmoth management and control. 82% of responders learned a lot about the weed control presentation and 80% of responders learned a lot about young tree fertilization and an insecticide drench study. One area of improvement concerns the presentation on moisture sensors. Only 60% said they learned a lot with 26% giving a 2, indicating the need to further understand this topic. The area plans to improve on this topic for next year. Overall, 100% of respondents said they could use this information on their farm.

PRESENTATION TOPICS	None	Somewhat	Moderate	Significant
Ambrosia Beetle Management	0%	0%	11%	88%
Moisture Sensors	0%	26%	27%	60%
Fertilization Trial	0%	5%	27%	80%
Insecticide Drench Trial	0%	0%	20%	80%
Budmoth Trial & Management	0%	5%	5%	88%
Weed Control	0%	5%	12%	82%
I can use this info on my orchard	0%	0%	0%	100%

RESPONSE

To address this issue, a \$27,500 grant from the Pecan Commodity Commission was awarded to the Area Pecan Agent to plant low-input cultivars at the UGA Vidalia Onion Farm in Toombs County (Figures 1 and 2). This planting has two purposes: 1) Observation of scab on low-input varieties and 2) provide a site for research and demonstration plots (Figures 3 and 4). The site is also used to monitor for statewide insect pests such as the Asian Ambrosia Beetle. Additionally, this site is one of more than 10 locations of Flat-Headed Apple Borer trapping, a collaboration with Entomologist, Dr. Angel Acebes, to understand its biology. The site will also be used as an education for growers and industry with field days and clinics.



Figure 3. Derrick Bowen and Andrew Sawyer set out an insecticide drench study. This study is replicated in three other sites in Georgia.



Figure 4. Steven Powell and Scout Carter plant an ‘Avalon’ pecan tree in place of a row used for a fertilizer trial.



Figure 5. Appling County ANR Agent Shane Curry delivers presentation on weed control in young trees age 1 – 4.

Acknowledgements

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