2020 Pecan Update

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Why So Many Green Shucks?

Green Shucks

- 65% poorly developed kernels
- 20% vivipary/rot
- 15% good kernels

Cause

- High temps increased water demand
- Shucks need adequate water during Sept/Oct to open properly
- Shucks didn't separate from shell properly and shucks retained moisture inside warm shuck
- Opt temp for pecan germination= 90-95 degrees

| | High Temps | Rainfall |
|------------------------|------------|----------|
| Sept 2019 | 95 | 0.46" |
| Avg Sept 2015- 2018 | 87.25 | 2.8" |





Biggest Problem Facing SE Pecan Industry

Shellers Don't Want Old SE orchard varieties/blend

- Western and Mexican crop consistently Wichita and Western Schley
- Need varieties with % kernel in mid 50's for consistent profitable prices
- You need
 - Export: size and quality
 - Domestic: Good quality, not necessarily size

Pecan Prices 2018 /2019

| | 2018 | 2019 |
|------------|--------------|-------------|
| Stuart | \$1.44 | \$1.55 |
| Moneymaker | \$0.8-\$1.10 | \$1.00-1.10 |



Two Different Routes for Growing Pecans

High Volume, High Input

- Hedge/Tight Spacing
 - 35 X 35
- Varieties
 - Pawnee
 - Creek
 - Caddo

High Scab Resistance, Low Cost

- Conventional Spacings
 - 25-35X50, 30 X 60, 40 X 40
- Varieties
 - Excel
 - Lakota
 - McMillan
 - Elliot



Problems & Solutions* With Old South GA Trees

Problems

- Inconsistent Production
- Low Quality
- The first to show any sign of stress

Solutions

- Sunlight, Water, Pruning
- Hedging, Whisp-Pruning
- Inter-plant and change varieties over time
- Or remove % of acreage every 3-5 years and re-plant



Hedging Old Trees

Improves Water Efficiency

- Increases Size
- Increases Quality

Other Advantages

 Allows for planting new varieties between rows

Disadvantages

- Expensive
- Hard on Equipment









Whisp, Remove, Replace

How

- Remove 1-4 large limbs per year for several years
- Interplant better varieties inbetween large trees
- Remove large trees in stages as young trees come into production

Disadvantages

- Expensive
- Time Consuming

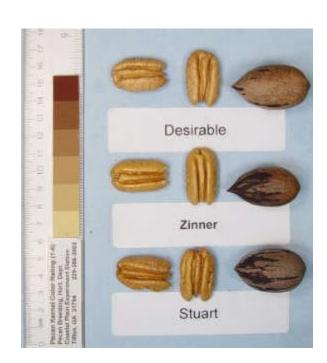




Inter-Planting in old Stuart blend Orchards

- Avalon
- Zinner
- Ellis
- Sumner
- Creek
- Oconee
- Lakota
- McMillan
- Excel





Pollinators

- Pawnee
 - Lakota, Sumner, Zinner, Desirable, Elliott, Ellis
- Creek
 - Cape Fear, Caddo, Desirable, Oconee, Pawnee
- Cape Fear
 - Caddo, Cherryle, Creek, Desirable, Elliott, Kanza, Kiowa, Lakota, Oconee, Pawnee, Sumner, Zinner, Avalon, Ellis
- Caddo
 - Cape Fear, Creek, Cherryle, Desirable, Elliott, Kanza, Kiowa, Lakota, Oconee, Pawnee, Zinner, Avalon, Ellis*
- Oconee
 - Caddo, Cape Fear, Creek, Cherryle, Desiable, Elliott, Pawnee, Avalon
- Sumner
 - Cape Fear, Cherryle, Creek, Desirable, Oconee, Pawnee
- Zinner
 - Caddo, Cape Fear, Cherryle, Creek, Desirable, Oconee, Pawnee
- Ellis
 - Caddo, Cape Fear, Cherryle, Creek, Desirable, Oconee, Pawnee
- Lakota
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- Avalon
 - Caddo, Cape Fear, Cherryle, Creek, Desirable, Oconee, Pawnee





Fertilization Recommendations for Young Trees

Focus on P,K, Zn---not N!

Rate of 10-10-10/per tree

| Year | April | June |
|------|---------|----------|
| 1 | 0 | 0.5-1 lb |
| 2 | 1-2 lbs | 1-2 lbs |
| 3 | 2-3 lbs | 2-3 lbs |
| 4 | 3-4 lbs | 3-4 lbs |

- Apply Zinc Sulfate at 1-3lb per tree for the 1st 3-4 yrs
- 2-3 sprays foliar Zn if deficiency symptoms show
- Mouse Ear Trees:
 - Apply Ni at rate of 1.5 qts/100 gallons



If You Fertigate

Amount of N/acre

| Year | April | May | June |
|------|-------|-------|---------|
| 1 | 0 | 0 | 5 lbs N |
| 2-4 | 5 lbs | 5 lbs | 5 lbs |

- Apply granular P,K, Zn over the tree row in March or April of years 1 and 2
 - 40 lbs P
 - 40 lbs K
 - 25 lbs Zn Sulfate



Growing Pecans Behind Pine Trees Year 1

| | Caliper Growth (mm) | Leaf Width | Leaf Length | Leaf Area |
|------------------|---------------------------|---------------|----------------|-----------|
| Cotton Field | 4.36a | 3.07a | 10.6a | 21.5a |
| Cleared Pines | 2.04b | 2.58b | 7.7b | 14.0b |





