## Acreage

<table>
<thead>
<tr>
<th>Crop</th>
<th>Alabama</th>
<th>Arkansas</th>
<th>Georgia</th>
<th>Louisiana</th>
<th>Mississippi</th>
<th>Tennessee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybeans</td>
<td>280,000</td>
<td>3,100,000</td>
<td>130,000</td>
<td>1,130,000</td>
<td>1,950,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Corn</td>
<td>280,000</td>
<td>830,000</td>
<td>380,000</td>
<td>550,000</td>
<td>590,000</td>
<td>850,000</td>
</tr>
<tr>
<td>Cotton</td>
<td>510,000</td>
<td>580,000</td>
<td>1,350,000</td>
<td>260,000</td>
<td>700,000</td>
<td>360,000</td>
</tr>
<tr>
<td>Peanuts</td>
<td>170,000</td>
<td>25,000</td>
<td>670,000</td>
<td>--</td>
<td>25,000</td>
<td>--</td>
</tr>
<tr>
<td>Rice</td>
<td>--</td>
<td>1,400,000</td>
<td>--</td>
<td>400,000</td>
<td>150,000</td>
<td>--</td>
</tr>
<tr>
<td>Wheat</td>
<td>170,000</td>
<td>90,000</td>
<td>210,000</td>
<td>--</td>
<td>40,000</td>
<td>300,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,410,000</strong></td>
<td><strong>6,026,000</strong></td>
<td><strong>2,740,000</strong></td>
<td><strong>2,340,000</strong></td>
<td><strong>3,45,000</strong></td>
<td><strong>3,010,000</strong></td>
</tr>
</tbody>
</table>

**Total Row Crop Acres: 19,080,000**
2019 Issues

• Delayed planting

• Delayed harvest
  • Yield loss

• Wilted cotton

• CLRDV

• Fertility
Planting Progress

Cotton Yield:
- 2013: 1,203 lbs
- 8 Year Average: 1,118 lbs
- 2019: 1,082 lbs
2019 Issues

- Delayed planting
- Delayed harvest
  - Yield loss
- Wilted cotton
- CLRDV
- Fertility
<table>
<thead>
<tr>
<th>Year</th>
<th>Arkansas</th>
<th>Louisiana</th>
<th>Mississippi</th>
<th>Missouri</th>
<th>Tennessee</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>1,102 (6th)</td>
<td>1,031 (4th)</td>
<td>1,082 (5th)</td>
<td>1,265 (2nd)</td>
<td>1,116 (1st)</td>
</tr>
<tr>
<td>2018</td>
<td>1,133 (3rd)</td>
<td>1,067 (3rd)</td>
<td>1,141 (4th)</td>
<td>1,373 (1st)</td>
<td>1,041 (4th)</td>
</tr>
<tr>
<td>2017</td>
<td>1,177 (1st)</td>
<td>894 (10th)</td>
<td>1,038 (6th)</td>
<td>1,212 (3rd)</td>
<td>1,033 (5th)</td>
</tr>
<tr>
<td>2016</td>
<td>1,075 (8th)</td>
<td>939 (9th)</td>
<td>1,207 (2nd)</td>
<td>1,021 (10th)</td>
<td>1,104 (2nd)</td>
</tr>
<tr>
<td>2015</td>
<td>1,092 (8th)</td>
<td>810</td>
<td>1,024 (7th)</td>
<td>1,097 (6th)</td>
<td>1,046 (3rd)</td>
</tr>
<tr>
<td>2014</td>
<td>1,145 (2nd)</td>
<td>1,154 (2nd)</td>
<td>1,232 (1st)</td>
<td>1,117 (4th)</td>
<td>878 (10th)</td>
</tr>
<tr>
<td>2013</td>
<td>1,133 (3rd)</td>
<td>1,223 (1st)</td>
<td>1,203 (3rd)</td>
<td>968 (12th)</td>
<td>853 (11th)</td>
</tr>
<tr>
<td>2012</td>
<td>1,064 (10th)</td>
<td>1,020 (5th)</td>
<td>1,014 (9th)</td>
<td>1,063 (8th)</td>
<td>946 (6th)</td>
</tr>
<tr>
<td>8-Year Average</td>
<td>1,115</td>
<td>1,017</td>
<td>1,118</td>
<td>1,140</td>
<td>1,002</td>
</tr>
<tr>
<td>6 Prior Years</td>
<td>987</td>
<td>829</td>
<td>887</td>
<td>999</td>
<td>817</td>
</tr>
<tr>
<td>Difference</td>
<td>128</td>
<td>188</td>
<td>231</td>
<td>141</td>
<td>185</td>
</tr>
</tbody>
</table>
2019 Issues

- Delayed planting
- Delayed harvest
  - Yield loss
- Wilted cotton
- CLRDV
- Fertility
2019 Issues

• Delayed planting

• Delayed harvest
  • Yield loss

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• Fertility
What is Going On?

• Nutrient deficiency

• Nitrogen?

• Sulfur?

• How do you fix?
Mid-Season Potassium Applications

- Numerous calls over past couple of years
- Return on investment
- Foliar applications?
- 50 lbs? MOP
Potassium Accumulation in Cotton

Source: Oosterhuis and Berkowitz/IPNI
Potassium Return on Investment

- 2 Foliar + Application: $28
- 4 Foliar + Application: $56
- Potash + Application:
  - 67 lb - $20
  - 134 lb - $31
  - 200 lb - $43
  - 267 lb - $55
  - 333 lb - $66
Soil Test Potassium Levels

![Graph showing soil test potassium levels for different F and MOP treatments in pre-season and post-season.](image-url)
Based on 36,000 plants/A, there were 9,545 miles of roots /A

Source: Schwab, Mullins & Burmester, 2000/IPNI
## Limestone Increases Fertilizer Efficiency and Decreases Soil Acids

<table>
<thead>
<tr>
<th>Soil Acidity</th>
<th>Nitrogen</th>
<th>Phosphate</th>
<th>Potash</th>
<th>Fertilizer Wasted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Acid — 4.5 pH</td>
<td>30%</td>
<td>23%</td>
<td>33%</td>
<td>71.34%</td>
</tr>
<tr>
<td>Very Strong Acid — 5.0 pH</td>
<td>53%</td>
<td>34%</td>
<td>52%</td>
<td>53.67%</td>
</tr>
<tr>
<td>Strongly Acid — 5.5 pH</td>
<td>77%</td>
<td>48%</td>
<td>77%</td>
<td>32.69%</td>
</tr>
<tr>
<td>Medium Acid — 6.0 pH</td>
<td>89%</td>
<td>52%</td>
<td>100%</td>
<td>19.67%</td>
</tr>
<tr>
<td>Neutral — 7.0 pH</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>00.0%</td>
</tr>
</tbody>
</table>
How much cotton does it take to pay for a ton of lime?

~ 60 pounds of lint
Effect of Terminal Removal

Lint Yield (lb/ac)

4-leaf
Pinhead Square
1st Bloom
1st Blm + 4 wks

0 Nodes
2 Nodes
4 Nodes
6 Nodes
8 Nodes
Foliar Nitrogen After Terminal Loss

![Graph showing lint yield (lb/ac) for different treatments and time points after clipping.]
Contact Information

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