Use of FGD Gypsum in No-Till Cotton Management Systems

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Associate Professor – Extension Soil Scientist
Today’s Presentation

Some of our efforts in AR

Why…

Issues with no-till cotton, but applies to corn and soybean as well.

Please note the units lb, inches, acres…
Effect of Soil Crusting on Seedling Emergence
Hill drop...

12 – 14 inches

42,000 – 45,000 seeds per acre
Aluminum Toxicity
Zinc deficiency
Soil Moisture Levels at Two Soil Depths

% Moisture

Hours

1 132 263 394 525 656 787 918 1049

5 inches 15 inches

Saturation

Irrigation
Depletion of the Sparta Aquifer

As much as 100 ft
3-4 inches
Soil Compaction in Corn

Yield bu/a

≈ $100/acre
<table>
<thead>
<tr>
<th>Crop</th>
<th>% of Soil Samples with S &lt; 25 lb/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybean</td>
<td>9</td>
</tr>
<tr>
<td>Cotton</td>
<td>21</td>
</tr>
<tr>
<td>Wheat</td>
<td>14</td>
</tr>
<tr>
<td>Corn</td>
<td>62</td>
</tr>
</tbody>
</table>
In Summary

Soil crusting...

Ameliorate subsoil acidity...

Provide a sulfur source...
Funding Provided by

State Cotton Support Committee

Thank You...

Nu-Till

Ag Spectrum