



Sulf-N® News

Getting an Extra Cotton Bale From Sulfur

Fertilizer research trials in southwest Georgia demonstrated a yield response of nearly one bale of cotton per acre from sidedress applications of sulfur, according to University of Georgia Extension agronomist Glen Harris, who conducted the study.

Harris saw yields jump from two bales per acre to nearly three bales per acre during the 2014 growing season on sandy soils near Camilla, Georgia, where he was studying sidedress applications of fertilizers with and without sulfate sulfur.

Some takeaways from Harris' observations, which he shared in grower meetings last winter, include:

- “Basically, where we applied sulfur, we had three-bale cotton. Any nitrogen sidedress fertilizer that did not contain sulfur looked pretty terrible, but it still made two-bale cotton,” he says.
- “When commodity prices are down, farmers look for things they can cut back on,” Harris notes. “I tell them, ‘ten pounds of sulfur doesn’t cost a lot – you don’t need to cut it out.’”
- Cotton responds well to sulfate sulfur whether the nutrient is applied at planting or as a sidedress
- Harris uses tissue testing to guide nutrient applications in an effort to maintain a nitrogen-to-sulfur ratio between 15:1 and 10:1
- Current University of Georgia recommendations of 10 pounds of sulfur per acre for corn and cotton may not be high enough, especially in corn. “Basically, you definitely need your 10 pounds,” Harris tells growers. “But what gets interesting is in corn we’re pushing higher yields and farmers are pushing higher rates of nitrogen. The question is, is 10 pounds enough when you’re putting on 300 pounds of nitrogen?”

Harris' observations echo a growing body of evidence that cotton is very responsive to sulfur applications, particularly in the sandy soils of the Coastal Bend:

- A three-year Florida study demonstrated average yield increases of 35% following applications of 20 to 40 pounds of sulfur
- In Alabama, a three-year trial showed a 26% yield increase following the application of 20 pounds of sulfur
- Weathered, sandy ultisols tend to be low in sulfur. Coupled with rain leaching sulfur below the root zone, sandy southern soils tend to show dramatic results from applications of sulfate sulfur, particularly in cotton
- A cotton crop can remove as much as 12 pounds of sulfur per acre for every bale of yield
- Plants use both nitrogen and sulfur to manufacture proteins and chlorophyll, so maintaining a healthy ratio between nitrogen and sulfur is vital. An optimal nitrogen-to-sulfur ratio is around 10:1.

Harris says he will be studying more factors in sulfur application in the years to come, including comparisons of source and timing. Good luck with your spring work!

For more information on the use of Sulf-N® ammonium sulfate in cotton, [click here](#). Also feel free to contact [Mercedes Gearhart](#), Senior Agronomist for AdvanSix.

Contact AdvanSix

To learn more about the benefits of Ammonium Sulfate, visit Advansix.com or SulfN.com or call: 1-844-890-8949 (toll free, U.S./Can.) +1-973-526-1800 (international)

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