

## PLANT NUTRIENTS

**AdvanSix Sulf-N® Ammonium Sulfate****Form of Sulfur Important for Corn and Wheat Starter**

On corn and wheat, spring applications of sulfur should be made in the sulfate form for best results. According to Dr. George Rehm, agronomist with the University of Minnesota, sulfate is immediately available to crop roots. In fact, it is the only form of sulfur that crop roots can absorb. Elemental sulfur, on the other hand, is not readily available to crop roots until it is converted to the sulfate form.

Conversion from elemental to sulfate sulfur is triggered by the thiobacillus thiooxidans bacteria that is present in all soils, explains Rehm. But this bacteria is not active under cool soil temperatures. "You won't get conversion to sulfate until the soil warms up and the bacteria become active," says Rehm.

Even under warm soil temperatures, the conversion of elemental sulfur to sulfate takes time. In University of Minnesota studies conducted during day-time temperatures of at least 65°F, it took 30 days for elemental sulfur to convert into the sulfate form.

Small grains and corn need sulfur early in their lifecycles, says Rehm. Supplying sulfur in the readily available sulfate form gives crops an earlier start, speeds up maturity and improves yield.

In Rehm's studies, sulfate sulfur has increased spring wheat yields by up to 10 bushels per acre when grown in coarse-textured soils with organic matter levels of 1.5 or less. He has also recorded yield increases of up to 20 percent when applying sulfate sulfur to corn grown in coarse-textured soils with organic matter levels of 3.0 percent or less.

**Sulf-N® ammonium sulfate** (21-0-0-24S) supplies 100 percent of its sulfur in the readily available sulfate form.



Sulfur-deficient patch in wheat field.

**Contact AdvanSix**

To learn more about the benefits of Sulf-N® Ammonium Sulfate, visit [AdvanSix.com](http://AdvanSix.com) or [SulfN.com](http://SulfN.com) or call: **1-844-890-8949** (toll free, U.S./Can.) **+1-973-526-1800** (international)

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**AdvanSix Caring™**

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