



DeltAg Product Brief
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Winter Wheat and Leaf Burn

Many growers will apply liquid nitrogen over their wheat. Some growers broadcast while others dribble nitrogen liquid on the ground. These applications of nitrogen often cause foliar leaf burn. This problem can get magnified when the wheat is stressed from excessive moisture. The use of 4% or 5% liquid sulfur added to the nitrogen solution can also increase this burn problem. The severity of the burn is dependent on moisture, temperature, humidity, sunlight and other factors. This foliar burn creates stress that can slow tillering, delay joint movement and reduce yields.

Reduce Foliar Burn: *DeltAg Sulfur Plus* at 32 to 48 ounces/acre added to liquid nitrogen has been observed by many growers to reduce and sometimes eliminate this burn. It is best to apply straight nitrogen with only *Sulfur Plus* added and no other sulfur material in the mix.

Sulfur and Our Soils: Is the crop getting enough sulfur when using only *Sulfur Plus*? One quart of *Sulfur Plus* only contains 1/4th of one pound of actual sulfur. A well known fact in agronomy is that most sulfur used by plants comes from residual sulfur that is part of the organic matter in our soils. *Sulfur Plus* is not formulated to deliver pounds of sulfur, but to take advantage of this organic residual sulfur. *Sulfur Plus* is designed to help a plant to access this organic residual sulfur. Comparisons have been made on farms and in replicated trials against other sulfur sources. The result is better tissue levels, better response to nitrogen and higher yields. To use *Sulfur Plus* is NOT to apply pounds of sulfur but to aid crop response to residual soil sulfur.

When NOT to Use *Sulfur Plus*: The only exception to this practice of using *Sulfur Plus* would be when your soils are very coarse textured sand that is low in organic matter (below 0.5%). In this situation we recommend a conventional sulfur source and for wheat our preference is almost always granular ammonium sulfate.

The Bottom Line: Apply *Sulfur Plus* overhead with liquid nitrogen with your first wheat nitrogen application.

Spring Tillering: If you are looking at fall planted wheat, consider a foliar application of *PercPlus* at 16 to 24 ounces at Spring greenup. This application may be made with foliar herbicides or with liquid nitrogen. This has been a long standing practice in wheat for improving tillering.

Early Boot or Flag Leaf: When its time to make a fungicide application, consider adding *CropKarb* at 32 ounces per acre to increase final yield and quality. Amazingly, we have had no reports of compatibility issues over the past four years of applying *CropKarb* with fungicides and the results have been very positive.