



P.O. Box 4812

Greenville, MS 38704

877-594-1500

www.seedcoat.com

DeltAg Product Brief

July 11, 2012

Cloudy and Wet ... Hot and Dry ... Boron Plus Helps Your Crop

Many areas of the South are finally receiving much needed rain while areas of the Midwest are still dry. Field and lab experience over many years at DeltAg, have taught us that foliar boron applications, while not directly related to soil boron levels, can play a huge role at certain stages and in certain weather conditions in effecting final yield of some crops. Lets first look at how Boron effects crop development.

Remember, a plant has only one function, “**to reproduce its seed**”. During periods of heavy fruiting, every week there are new younger blooms getting shed due to lack of nutrients and/or water. With a heavy fruit set, any stress can cause the plant to shed younger fruit **to protect the older fruit** that is already producing seed. Foliar boron works to improve translocation of sugars, which means to hold and feed youngest fruit that have just dropped their blooms. The end result is reduced shedding of that youngest fruit that was just pollinated. Boron improves translocation, aiding the plant’s ability to ‘feed’ fruit.

Reduced Fruit Shed Behind Irrigation: Back in the 80’s and 90’s, when pulling crop petioles on strip trials and running our tissue lab, we saw a huge row to row difference in the amount of shed fruit on the tail-end of furrow irrigated crops that were boron-treated versus non-treated. Fruiting form counts showed 15% to 30% increases in fruit retention for a given week of blooms. This was most effective after the plant had already set older fruit that was sizing in the lower portion of the plant and boron had been applied ahead of furrow irrigation.

Extreme Drought: In a drought situation, a plant will struggle to translocate much needed nutrients causing sugars and metabolic processes to get out of balance. This can cause premature excessive blooming yet very poor fruit retention. This often results in late season vegetative growth, yet premature crops with reduced yields. Timely foliar boron has been shown many times to aid fruit retention during long periods of drought.

Many Crops: *Boron Plus* is utilized on many crops including cotton, soybeans, melons, commercial tomatoes, peppers, cucumbers and more. Every week of heavy blooming generates a completely new set of blooms that potentially become harvested fruit if the plant holds onto them. In our experience, one foliar application will generally carry the crop for two weeks or so.

Recommendation: Over many years DeltAg has developed a standard recommendation on blooming crops of applying 4 to 6 Oz/acre of foliar *Boron Plus*, applied twice on 14 day intervals from the 4th to 7th week of bloom.

Cotton: *Boron Plus* has frequently been applied with mepiquat chloride across the Mid-south for many years.

Soybeans: *Boron Plus* is often applied as a foliar with fungicides at R-3 and again at R-4.

Boron Plus is University proven to be more effective than higher rates of conventional sources at standard rates. DeltAg’s *CropKarb*, formulated for applications during heavy fruiting, contains ample *Boron Plus* in addition to *Potassium Plus* and *Percplus*.

Foliar *Boron Plus*, whether alone or in *CropKarb* can make a huge difference in final yield.

For more information or to receive **DeltAg Product Briefs**,
email us at info@seedcoat.com or call 877-594-1500 www.seedcoat.com