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Late Planted Soybeans... Still Struggling Manganese Chlorosis on 'RR' Soybeans

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Problem: We are still getting numerous calls about many acres of later planted RR soybeans showing severe chlorosis. In past years, we would see small portions of fields, on ends, low drainage areas, etc. This year, we are seeing entire fields affected. Many have asked why we are seeing so much of this in 2009 and frankly, we don't know. So many of these crops were planted in the dry heat of June and were stunted and stressed very early, then sprayed with glyphosate and other herbicides only to be hammered with extreme wet weather in July. I can say that most of the time, these situations are caused by severe stress of some kind. Another factor of concern is that normally, this condition will disappear in a two to three week period. Unfortunately, we are seeing some entire fields suffering with this condition for more than a month.

Most observations in fields across the South appear as a manganese deficiency that is very typical of what we see following a glyphosate application. Without treatment or fairly quick recovery, these soybean crops will become somewhat idle and just sit there without continuing to grow. This can mean less nodes, less blooms, less pods and lower yields in addition to delayed maturity.

In 2006, University studies were published indicating that glyphosate may block or somehow hamper manganese and zinc metabolism in soybeans. In summary, the results showed an economic yield response to manganese applications AFTER these symptoms occurred. This study also showed that an application of manganese, tank mixed with glyphosate, DID NOT eliminate the problem. Correcting the problem was shown to average in the range of a 10 to 14 bushels per acre increase.

Solution: We have a high confidence level and favorable experience in the field with a couple of different treatments. *Manganese Plus* @ 32 Oz/acre has been applied to this condition with great results for the past eight or more years. In 2008 and especially this year, with the extreme number of acres affected, we have been recommending a combination of *PercPlus* @ 8 to 16 Oz/acre depending on the severity, tank mixed with *MicroVite* @ 32 Oz/acre. Frankly, the results have been excellent. *MicroVite* is a really neat combination formula from *DeltAg* containing *Magnesium Plus*, *Copper Plus*, *Manganese Plus*, *Zinc Plus* and *Sulfur Plus*.

Don't let this condition rob you of much needed yield when there is a proven treatment available.Make an application of *PercPlus* @ 8-16 Oz/acre along with *Manganese Plus* @ 32 Oz/acre or *MicroVite* @ 32 Oz/acre and get these crops back on track.

Next Year: Remember to apply *PercPlus* @ 16 ounces with your glyphosate in an effort to avoid this problem. At *DeltAg*, we have worked extensively with this issue for many years and have run tests on farms where symptoms have been rather chronic. We found the addition of *PercPlus* tank mixed with glyphosate helps to reduce, and many times, eliminate the problem.