



The Chem Gro Crop Watch, Issue #6, 7/9/11

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What's all the buzz about? If you live in the north-western part of Hancock County and through Henderson County, Japanese beetles have been making your lives interesting (in a not so good way). This is the third year in a row that I can remember that these insects are swarming in high numbers, and seem higher this year compared to the last two. They seem to have a sweet tooth for flower beds, fruit trees, rose bushes (pretty much any plant that you view as being desirable that has aesthetic value). They will also find their way into corn and soybean fields; which creates the economic concern to many farmers. Many people have asked me, "Where do all of these Japanese beetles come from?" Japanese beetles are the adult of what we refer to as common white grubs that live in the soil and feed on plant roots. June beetles also fall into this category, although the adult is not as aggressive to plant foliage as compared to Japanese beetles. Here are a few observations that I have made over the years with Japanese beetles on soybean and corn crops.



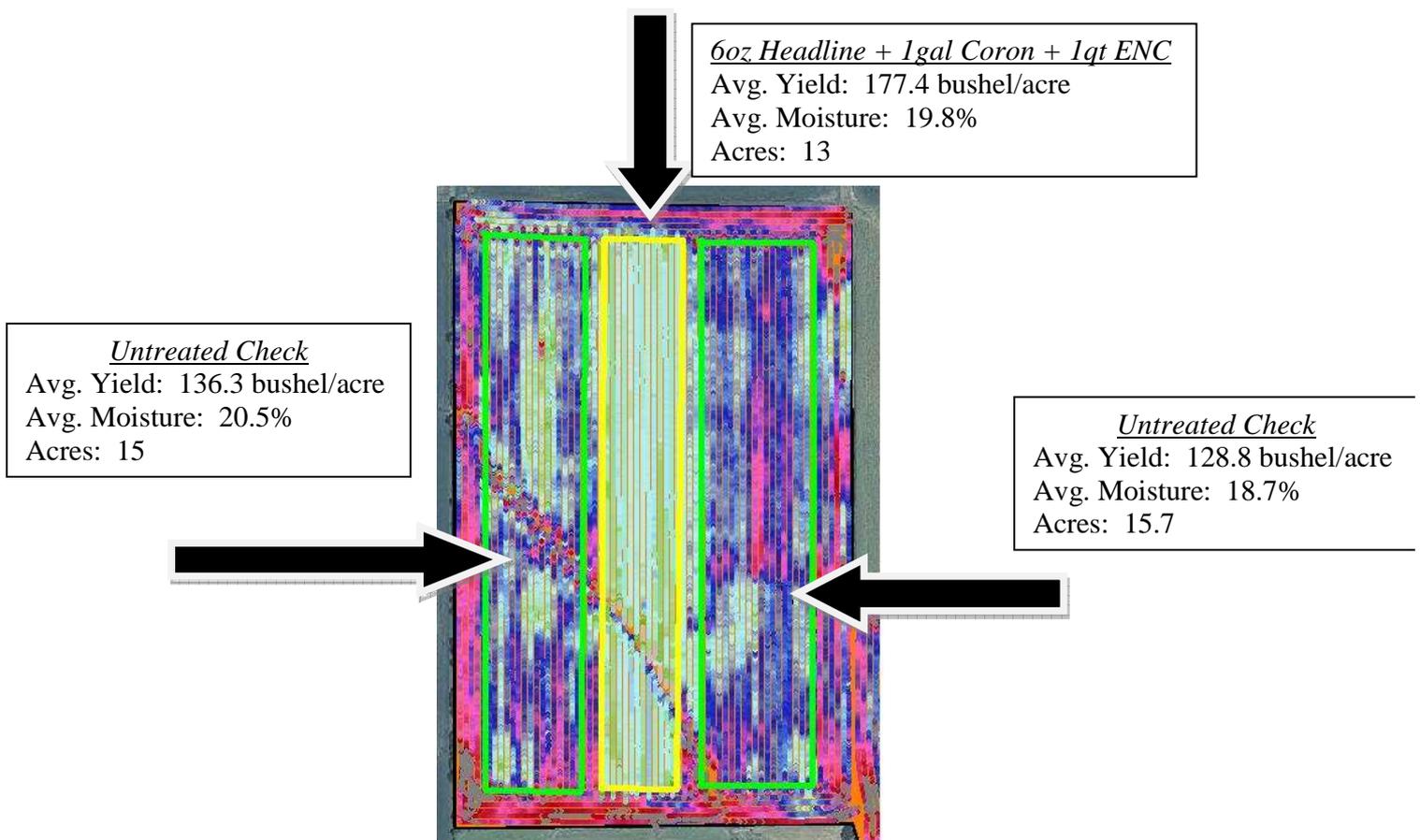
Soybeans. Japanese beetles do have an acquired taste for soybean leaves. Typically, you will find the highest concentration of beetles along the field borders, or the tallest and prettiest plants in a field if the soybeans are under any type of stress. 20% defoliation of soybean leaves is the old threshold for spraying, although one could argue that it could be less than that if soybean grain market prices remain high. Insecticide residual control will only last for about 2 weeks with most products, as the Japanese beetles are typically harder to kill than soft bodied insects; and there are constant re-infestations occurring. With that said, if there are enough beetles present with plant defoliation, then spraying is justified.

Corn. My experience with corn and Japanese beetles is that the beetles pretty much leave corn alone until it is done pollinating and the silks turn brown. Brown silks signal that the corn plant has successfully pollinated the kernels. If the beetles eat the brown silks, no economic harm is done to the plant. If the beetles eat yellow silk to less than 1" of the plant, then pollination can be compromised and spraying may be justified. However, in my experience, Japanese beetles usually are very confined to the borders of a corn field, which makes it very difficult to control if you are using an airplane loaded with insecticide to attempt control. Fungicide application will begin very soon in corn. I am not a believer in adding in an insecticide to every acre with the fungicide because silk clipping tends to be very rare across a whole field. Only good scouting can determine this prior to fungicide application with an airplane. A 4-wheeler sprayer with a hand boom might be the better option if only the borders of the corn field are being fed on by Japanese beetles, and you are really determined to get revenge.

The “Full Monty” fungicide program. This last winter, I wrote a Crop Watch letter describing little things that we can do as producers to our corn crop as an attempt to gain a few more bushels while corn grain market prices remain high. Using what I call the “Full Monty” fungicide program may have merit again this year.

This is now two years in a row that we received too much rain in the month of June which has had a negative impact on our corn crop. Most of Hancock County has received somewhere between 10-15 inches of rain in the month of June (normal average being around 3 inches). Generally speaking, this year’s corn crop looks MUCH better than last year which I attribute to a better root system as the corn fields were planted into extremely mellow soil conditions. Last year which many fields were planted into muddy or “heavy” soils, which compromised the root systems and their ability to access nitrogen and oxygen.

With market prices still remaining favorable, and knowing that nitrogen has been lost due to the excessive amount of rain that we’ve had, several growers are asking questions on what they can add to their fungicide application to possibly gain more bushels through foliar feeding. Below is a picture of a yield map that one of our customers who applied this “Full Monty” fungicide program in 2010. This was his design and combination of products so he definitely gets all of the credit and reward for his forward thinking and the yield gain that he received. The program was 6oz of Headline, 1 gallon Coron (foliar Nitrogen plus Boron), and 1 qt of ENC (foliar fertilizer containing N, P,K, and an assortment of micro-nutrients). The yellow outlined area in the map below increased yield 41.1 to 48.5 bushels more compared to the untreated green outlined areas on either side. I would not expect this type of yield response all of the time, but just proves to show that if corn plants are lacking in fertility or disease tolerance that actions still can be performed to capture more yield instead of just throwing in the towel.



Before vs. After. About a week and a half ago, you probably noticed many airplanes in the sky dropping urea fertilizer on many yellow, nitrogen deficient corn fields. Urea contains 46% nitrogen; which is the highest nitrogen containing dry fertilizer that is available in the market place. Below is a before and after picture showing how quickly nitrogen can be taken into the corn plant under the right conditions. This field was applied with 100# of Urea/acre on the evening of June 28th, (the picture taken June 29th). I walked this same field the next morning at around 11:00 am and I was amazed that I could not find any of the urea prills remaining on the soil surface. The soil was very moist from previous rains, and had already absorbed the urea into the upper soil profile. The second picture was taken 8 days after the airplane application. The front end rows deteriorated as they had water standing in them, but for the remainder of the field I think the visual results speak for its self!



That's my 2 cents worth.....the choice and decision is always yours.

Lonne