Field Notes

July 3, 2014

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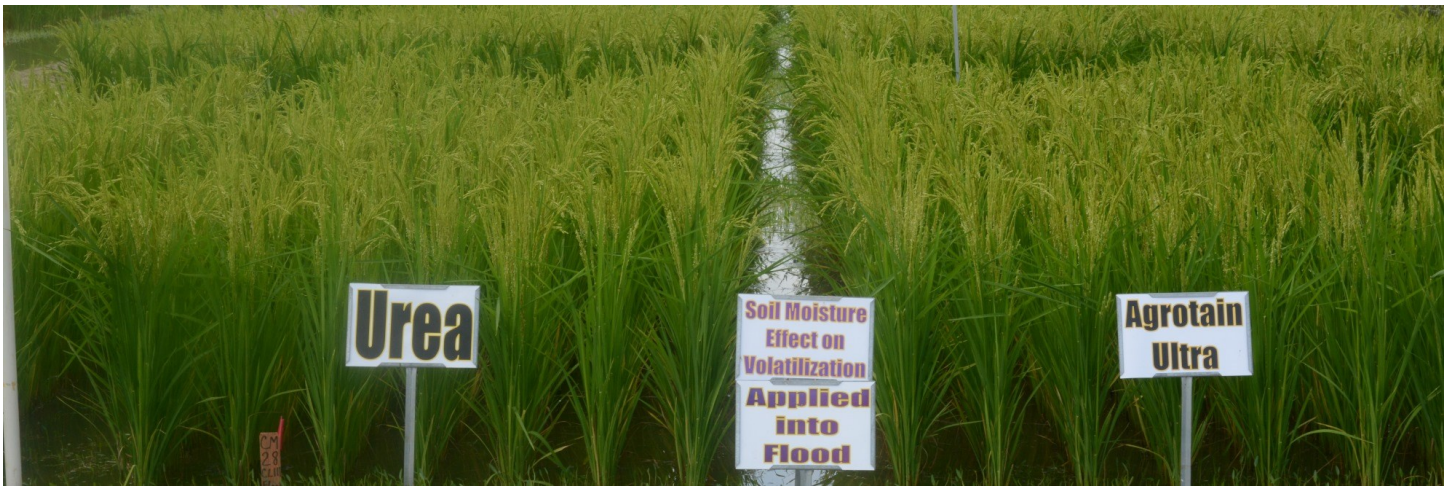
In the previous two issues of Field Notes I have commented on the very high numbers of rice water weevils (RWW) in our verification field in West Carroll parish. Last year on the same farm in a field not far from this field we encountered a similar problem. In both years the fields were planted to hybrid rice at seeding rates around 20 pounds per acre with seed treated with Cruiser Maxx.

Dr. Mike Stout has shown in some of his studies that there is somewhat less efficacy of Cruiser Maxx and Nipsit Inside in controlling rice water weevils in hybrid rice because of the method of determining dosage of insecticide. Both of these insecticides are seed treatments and the rate is based on a certain amount per 100 pounds of seed thus seeding rate determines rate of insecticide per acre.

Last year we applied a pyrethroid insecticide after permanent flood when I felt we could not tolerate anymore foliar feeding injury. Core samples pulled later revealed very high numbers of larvae. This year when it appeared to repeat the events of last year we applied a pyrethroid insecticide with the second application of Newpath (June 12) just prior to establishing permanent flood. Last week I reported we still had very high numbers of adult RWW in the field. Yesterday we pulled core samples and found from 6 to 11 larvae per core. Rice is at green ring. (Note in the photo the adult RWW swimming with the larvae—there were two in that sample.)

Considering the stage of growth of the plants and the acceptable root systems draining is not an option and I would not recommend it anyway. Some samples had very early instars and others (like that shown above) were large instars and would soon pupate.

The fact that this has now taken place two years in a row at the same general location indicates there is very heavy RWW pressure in that area and causes some concern about insecticide efficacy under these conditions. It also disappoints me that we have had to use a foliar insecticide when a seed treatment was supposed to eliminate that necessity.



Rain prevented field tours at the Rice Research Station Field Day last week, but if it had not these plots of Dr. Harrell's research demonstrated why we do not recommend applying nitrogen into young flooded rice. I wish I had taken them the day of the field day because the differences were even more dramatic. Compare the plots from top to bottom. The plots in the top photo are fully headed as a result of nitrogen deficiency—the plants ran out of nitrogen triggering the switch from vegetative to reproductive growth. On muddy soil the effect of Agrotain (or any of the other NBPT containing compounds) is also clear because the urea only plot is heading earlier. Where the nitrogen was applied to dry soil the plants are heading later and will likely yield much more than those that headed earlier. The NBPT compound helped here because the urea was applied 10 days prior to flooding.

Every year I get questions about the dimpled leaves you see in the photograph at right. This year is no exception—I got two calls earlier this week.

I once read a good physiological explanation of what causes this and unfortunately cannot locate the article or remember exactly what it said.

My best explanation is that when the leaves were emerging from the collar it was tight and/or the process was delayed causing this constriction to form. I have seen this as long as I have been working with rice and have never seen any relationship between it and yield. It is not a disease and it is not caused by an insect and herbicides to not cause it. It is a physiological phenomenon very common in rice. Cleary some environmental conditions are involved and your guess is as good as mine as to the specific conditions necessary for it to appear.

The birds shown below are black necked stilts. They have become increasingly common in rice fields often becoming somewhat of a nuisance when we are checking fields. Sweep nets tend to really upset them and they will circle and call the entire time we are there. Usually I see only a couple together. This is the largest group of stilts I have seen. Just thought it was interesting.

I hope you have a happy and safe 4th of July.