



In the June 14th edition of Field Notes I provided photographs of the most severe infestation of rice water weevils I have experienced. The field was planted to a hybrid at 21 pounds per acre of Cruiser treated seed. Concern about the low seeding rate and consequent low insecticide rate per acre prompted the recommendation of a pyrethroid insecticide. At the time I was concerned that the foliar insecticide application might not be justified.

Yesterday we sampled with a bucket (a device I thought we had retired) and found from 9 to 4 larvae per sample. Normally this would cause a lot of concern, but for several reasons I am confident we will be OK. If you read Dr. Gus Lorenz's comments in Rice Fax this week they discuss a similar situation in his plots.

First and foremost, the roots of the plants look good. This rice was planted on April 29th. A month later the field was still not flooded and we began to notice weevil feeding scars on one end of the field. On June 6, the field had been flooded almost a week and heavy water weevil feeding scars were noted throughout the field. At that time I began to wonder if we should treat to reduce the adult feeding damage, a practice we do not normally recommend, but have had to do three or four times in my career. After discovering the larvae I wished we had treated a week earlier. We will monitor the situation, but do not plan to drain the field. The rice plants have between 1/4 inch and 1/2 inch internode elongation.

After visiting with Dr. Stout he said he was not surprised. The combination of relatively long interval between planting and flooding (and egg laying by weevils), low seeding rate which means low insecticide rate per acre, and extremely high weevil population all added up to this situation.

Last year was a fairly light year as far as rice stink bug pressure goes. This year is NOT. Take a look at the photograph below and you will get an idea of the population that is already out there. In this case it is crabgrass on the levee, however we have noticed them on every grass around the fields and in fields that are not even flowering. Rice stink bugs are almost exclusively grass feeders.

Dr. Stout is evaluating our threshold values which depending on the outcome of the study could result in higher numbers than are currently used to justify insecticide application. Until that study is concluded we continue to recommend treatment when there are 30 per 100 sweeps from flowering to milk and 100 per 100 sweeps in soft to hard dough. There is no distinct point at which the threshold changes, it is really a sliding scale which requires some judgment. We have had to spray one verification already.

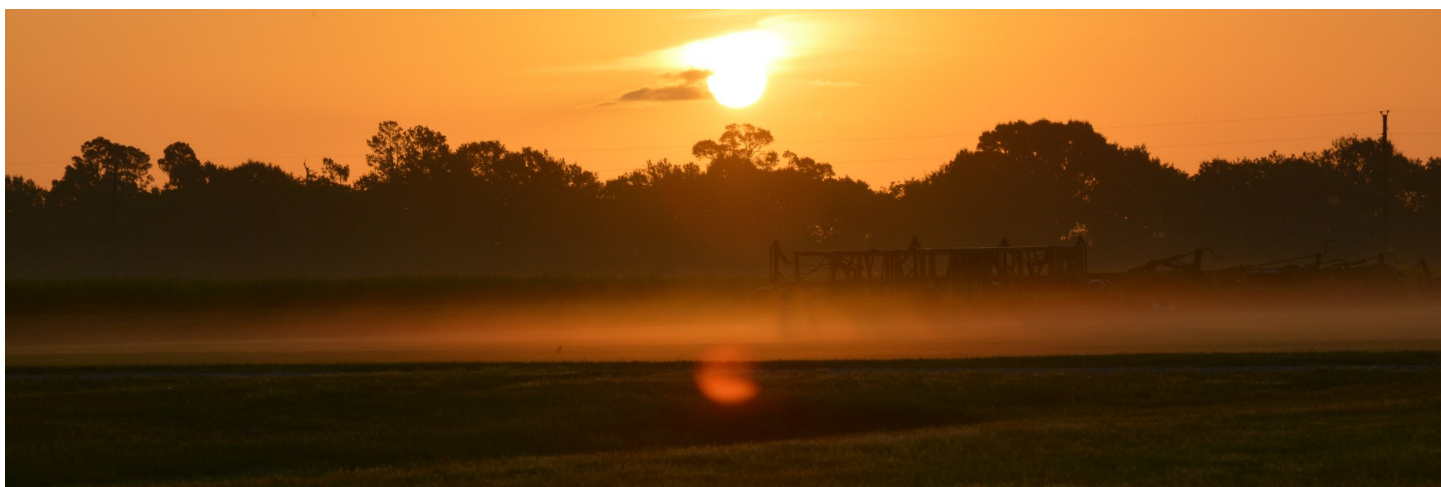
All of the stink bugs in the photograph are adults, but when sweeping, the immature instars should be counted too. Often I will pick up a hatch-out (see last week's edition) and do not count the first instars. I will note that I found a hatch out because that is a good indication of things to come.

If you treat a field and in checking it a week later find high numbers again it is important to note whether the stink bugs are immature stages or adults. The immature stink bugs do not have wings which means they were present at the time of treatment and were not controlled. If only adults are found they could easily have flown in from another rice field or another crop. If there is corn or grain sorghum nearby, as those crops mature rice stink bugs will migrate out of those fields and into rice fields. Corn is notorious for producing very high populations of rice stink bugs.





In one of our verification fields planted to a Clearfield variety there were several areas of resistant rice plants that are likely progeny of red rice crosses with some previously grown Clearfield variety. The farmer tried spot treating with Beyond without success then followed our recommendation of using glyphosate. The small area of “good” rice that will be affected is minor compared to what would happen if this group of plants was allowed to produce seed. Even if the plants are not killed glyphosate will significantly reduce seed formation.



At the South Station field day last week someone asked Dr. Webster if there was a time of year when temperature inversions were more likely to occur. He answered that temperature inversions occur every day at some location. Wednesday morning as I drove into the station the obvious layer of fog suspended just above the land presented too good an opportunity not to stop and photograph it.

This is the time of day many applicators prefer to spray because there is little to no wind movement. If this area had been sprayed the fine droplets would likely have been suspended in the fog layer resulting in highly unpredictable movement off target. In Arkansas spraying cannot begin until temperatures have risen three degrees above the morning low specifically to avoid temperature inversions. All temperature inversions are not visible, but they all cause the same type of problem. The three degree rule might be a good one to use just to be on the safe side.