

Field Notes
July 2, 2010
Johnny Saichuk



Last week retired county agent Eddie Eskew brought in the panicles shown at right. He had already diagnosed the problem and wanted me to see it because it is unusual. Only a small area along the edge of the field exhibited the symptoms. If you do not glance ahead the problem appears to be caused by disease. The symptoms resemble bacterial panicle blight or severe sheath blight at first glance. It is neither of these diseases.

The next series of photographs show the problem. It is caused by chinch bugs. I took the left most photograph just to show the symptoms in more detail then discovered the chinch bug on the panicle (in the red oval) once I enlarged the photograph. The two smaller photographs illustrate the differences between an adult chinch bug and a very immature one. I had never seen a completely red one like the one shown here.

No treatment was recommended in this case because the problem was localized. Had the problem been extensive an insecticide would have been recommended as it is clear the damage is significant. We have often seen chinch bugs in the panicles of nearly ripe rice without the manifestation of symptoms visible here and usually ignore them. This is different.



The disorder shown at right gets its name from the erect panicles. It is straighthead disease. Panicles or heads of affected plants do not nod over (as the one at right) because the grains do not fill; the heads stay straight.

The exact cause of straighthead has never been determined. We do know high rates of arsenic in the soil will induce it, that fields that have never been in rice before or out of production for a long time are more likely to cause it, that a field where straighthead is a problem may always have the problem and that some varieties are more susceptible to it than others.

In recent years we have seen a lot of fields exhibiting similar symptoms as a result of glyphosate drift. One of the easiest ways to separate the two is the presence of normal flag leaves (lower right). When glyphosate injury occurs the flag leaves are often shorter and twisted.



The spots on the leaf at right are a consequence of gramoxone drift. The reddish border of the spots is a little unusual, but the pattern is right, the tan center is right and we know where it came from. The good thing is that with gramoxone “what you see is what you get”. The injury will not progress beyond the symptoms shown here. I am not saying it did any good to the rice, but the damage is more cosmetic than harmful. I have seen more extensive injury when Blazer was applied to control sesbania.

From a distance the damage appeared to be more severe until I realized we had two things going on here. The farmer said the stunted plants shown below were in an area scraped hard in leveling. The problem is phosphorus deficiency. The two problems while in the same field are separate issues.

