

A couple of weeks ago I showed the photograph at right in that week's issue of Field Notes. Since then we have seen several fields of CL151 showing the same symptoms. We think it is potassium deficiency, but it has been suggested that it could also be late season sulfur deficiency. In each case the field was in some stage of grain fill so it is not likely that this deficiency will affect yield significantly. To be sure of the cause we collected flag leaves with and without symptoms from two fields. We will send them to the plant testing lab which should disclose any major differences in nutrient content.



If it is potassium it raises the question, "Why?" It is possible that this variety could require more potassium than others or that it translocated more to the seeds than other varieties might. We just do not know. If our tissue sample analysis shows a clear potassium deficiency **AND** that field is to be second cropped I would consider adding some potassium fertilizer with the nitrogen for the second crop.

On the next page are three photographs taken yesterday in the same field. The farmer noticed tip burn evident in the first two photographs. When we pulled up plants we discovered what we believe to be the problem. We think it is iron toxicity. The black discoloration of the crown area of the plant is one form of iron that has accumulated on the lower stem and upper part of the root system. If it had been black in the center of the root system with associated loss of root mass accompanied by a rotten egg odor it would have been hydrogen sulfide. The majority of the root system was fine and there was no foul odor. The farmer told us his well produces a lot of iron and that where he used surface water on the same variety he did not have this problem.

Unfortunately, we do not have any research based advice to give to him. In some fields I have seen similar problems corrected by building a small paddy levee near the well outlet. This small paddy serves as a sacrificial area, allows the water to warm (cold water appears to be involved in some cases) and oxygenates the water which also appears to help.



Until last week we had not picked up enough stink bugs to warrant spraying. I had hoped the heat might reduce their numbers, but we are beginning to find populations worthy of spraying. We are also finding more sheath blight in later rice than we did in earlier planted rice. Only one field received fungicide without the presence of disease. This field is a seed rice field and we wanted to make sure we did not have kernel smut or false smut show up late. These diseases do not give us a warning. There is also some concern about Cercospora (Narrow Brown Leaf Spot) even though none was detected early.

Last week I also mentioned the possibility of panicle blight developing because of the high night time temperature we are experiencing now. Add that to the effect of high temperatures on pollination and it gives me reason to be concerned. We'll just have to keep an eye on things.

We recommended draining our earliest field this Friday. Next week we may add a couple to that list.