

Field Notes
May 22, 2009
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I knew today was going to be interesting. Before I could move my truck I got my first phone call. It went something like this:

Caller – Hey doc is there something called “Mad Cow Disease of Rice?”

Me – chuckle, then Yes, it is really Localized Decline why do you ask.

Caller – An applicator called and asked me about it because he had to spray a field for it.

Me – The phrase was started by a couple of highly irregular dealer reps. I guess they were applying zinc.

Caller – OK, that’s all I needed to know.

This is a good example of why we have to be well versed on regional common names of weeds, diseases and insects to be able to communicate with farmers, dealer reps and consultants. Earlier this week I was asked about the difference between Mexican and Texasweed. To a taxonomist it is important, but for weed control purposes there is no difference so far and I could not separate them without a key. There are a few more names I can think of that are very “colorful” and unprintable. We have to know them too.



The two photographs above may or may not be of the same thing. The one on the left was taken in Acadia parish and the one on the right in Evangeline. One is a long grain and the other is of

Jupiter. Shortly after taking the one on the left I located Dr. Don Groth on the experiment station. Before I could question him he said, “Let me guess, little brown spots.” He said they were on all varieties in his plots and he had not been able to get any sporulation in a moist chamber. The spots were confined to the lower leaves. The leaf of Jupiter in the right side photo may be brown spot because it was also showing nutrient deficiency symptoms and brown spot is often associated with low nutrient levels. The spots in the right photo are larger than those in the left, but both are on the lower leaves. I think those on the left are physiological. I think those on the right are of brown spot. I’m still waiting on a report from Dr. Groth.

I knew as soon the wind started blowing out of the north, the humidity dropped, temperatures dropped and the air conditioner quit running at night I’d see the symptoms in the pictures below. Every time these conditions show up we get calls about the tips of leaves drying out. Overall the fields will look off-color. The problem seems to be worse in older rice. The rice in these photographs is CL151 that is between green ring and panicle differentiation. Most of the younger rice appeared to be less affected. If you look carefully at the leaves in the right photo you can see them curling inward. This is a symptom of moisture deficit. Grasses have special cells in their leaves that collapse when the roots cannot take up water as fast as the leaves are losing it. They then curl inward to produce a more humid environment to reduce moisture loss. The “tip burn” is simply desiccation and the crop will be fine later.



The sequence of three photographs on this page show what we think is injury from Regiment herbicide. The variety is Neptune and may be more sensitive to this herbicide than long grain varieties. Dr. Eric Webster is conducting studies this summer to evaluate the sensitivity of medium grain varieties to a host of herbicides. We know the medium grain varieties often show more sensitivity to many herbicides and that could be part of the problem here. The farmer was advised to drain the field then topdress and reflood. It will be OK, but it is upsetting to the grower. Unfortunately, it is not predictable. We have used Regiment in two verification fields this year without any problems and will continue to use it when the problems fit the weed spectrum it will control.



The next couple of paragraphs and accompanying photographs are from Dr. Eric Webster, Extension Weed Specialist.

I have received numerous calls concerning the use certain herbicides on medium grain varieties and all hybrids. The photos attached are of studies conducted with Regiment and Grasp in 2005 and 2006. Although I do not have any medium grain photos you can get an idea of the impact of these herbicides on rice. Keep in mind several of these photos have 2 X rates which over exaggerate the injury observed under labeled rates, but these increased rates would show symptoms of rice in spray overlaps or dressing the ends of fields. In other words it is an actual situation we see everyday. Medium grain cultivars are very similar to hybrids in susceptibility to herbicides.

Also this week I observed a problem with the cause being the use of rinse water. There are several problems with this from a herbicide standpoint. Earlier in the week David Ball, Dow, sent an email discussing the problems with using this water with grass herbicides such as Clincher and Ricestar. This is a very important point but grass herbicides are not the only products that can be antagonized. Many ALS herbicides can react the same way. Products such as Regiment and Grasp should not be tank-mixed with propanil based products. Many of you have probably heard me discuss the problems with 4- and 5-way mixes. When using rinse water as the carrier these tank-mixes may be 8-, 10-, or 12-way mixes or even more. The use of this water needs to be avoided at all cost when applying herbicides.

Cypress **Regiment, Grasp, and Stam 1 X Rate**



Cypress
Regiment, Grasp, and Stam 2 X Rate



Trenasse
Nontreated vs. Grasp 4 oz/A



XP 723
Nontreated vs. Grasp 4 oz/A



Pirogue
Nontreated vs. Grasp 4 oz/A

