Field Notes
May 27, 2011
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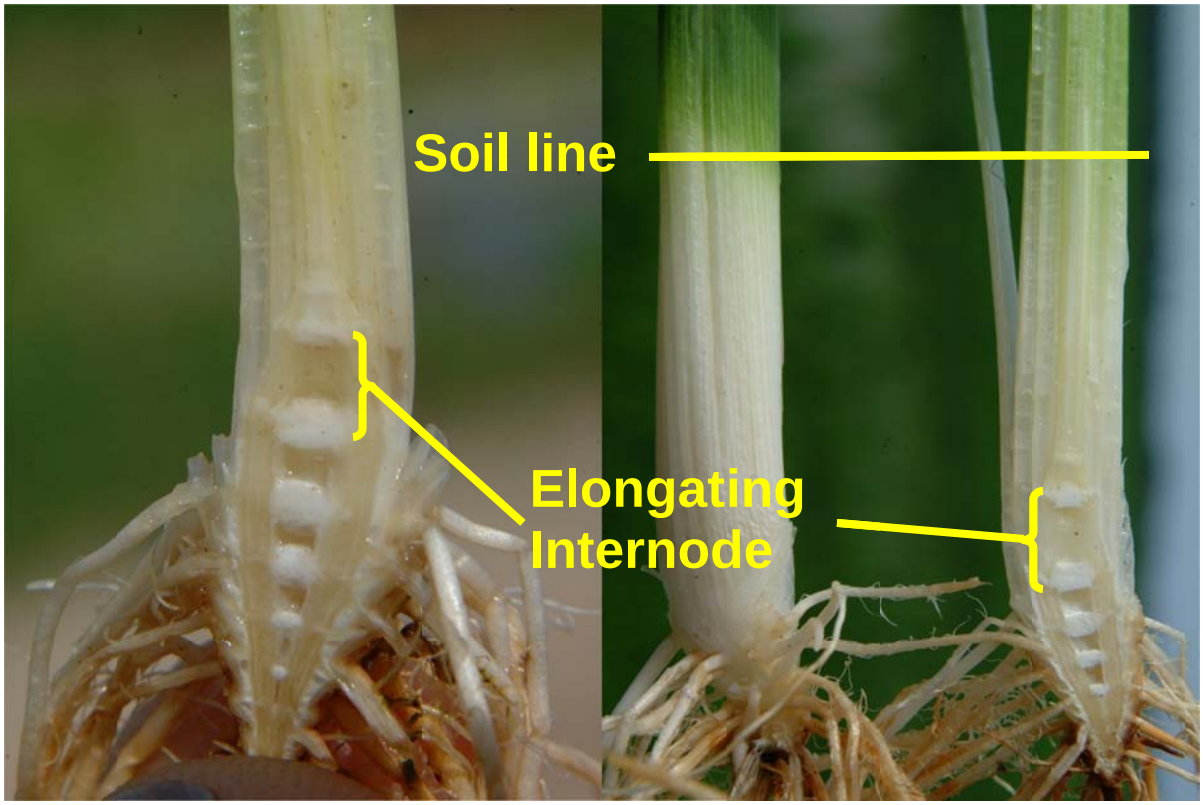
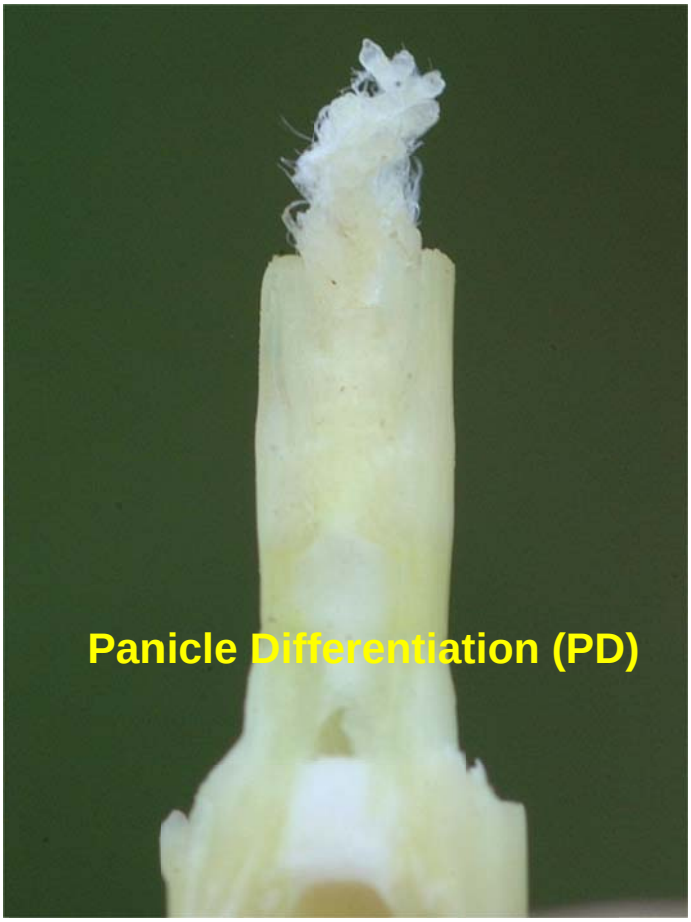


Last week I got a call from a concerned farmer who said he thought his rice should be at green ring and that he thought he could see evidence of joint movement, but there was no green color. I really do not know the origin of the term "green ring" although I know it was in use before I became involved in rice production. It was developed to help farmers identify internode elongation which represents the change from vegetative to reproductive growth in rice and other grasses. When rice is water seeded or planted very shallow the internode that begins to elongate will show green color as a consequence of chlorophyll (the green pigment in plants) accumulation. If, as in the plants shown above the seed was placed below the soil line chlorophyll will not accumulate. The plant at right really demonstrates it well because it is easy to see that at least one inch of the plant (not the stem, there is no stem yet, just rolled leaves) is blanched white. Exposure to sunlight would cause this area to turn green, but without sunlight it remains white. This does not stop the plant from growing or the internode from elongating. So, the key is recognizing that the plant is changing. This is the critical time for a number of cultural practices such as topdressing with nitrogen fertilizer or the timing of some herbicide applications.

By the way, splitting stems is the best way to determine the status of the rice plants in terms of growth stage. The current DD50 program is way off this year. Part of the problem is the weather and part the program. I am working on the program part. Maybe you know somebody who can help with the weather.

Last week in our verification field of Jupiter in Cameron parish we found a few plants reaching the stage shown at right. It is Panicle Differentiation or PD. There has been some confusion about **green ring** or **internode elongation**, **panicle initiation (PI)**, and **panicle differentiation (PD)**. I have seen all of these terms on everything from popular publications to herbicide labels.



Green Ring or Internode Elongation is explained on the first page.

Panicle Initiation, is only visible with a microscope and is sometimes considered to be the same as green ring; it is not. Often the two are very close in timing, but the processes are different.

Panicle Differentiation is the term used to describe the time at which the embryonic panicle becomes visible with some magnification or if you have good eyes it can be seen without a hand lens.

At left is a photograph of two pests of rice. The leaf spot is blast, but the leaf is not rice, it is creeping rivergrass (aka Habetz grass, perennial barnyardgrass). About 20 years ago when we were just starting to deal with creeping rivergrass in the area just south of Crowley we were trying various herbicides on it. I cannot remember what was applied, but I do remember being called to take a look at the plot because those who had applied it thought they were getting some activity. It was covered with spots like this and the grass was melting away in some areas. At the time I said I thought it was blast, but never took the time to confirm it. Well, we have creeping rivergrass in our field of Jupiter in Cameron parish and have confirmed blast on both the grass and Jupiter. So far it is actually helping because it seems to be causing more injury to creeping rivergrass than to Jupiter. We will apply fungicide later.

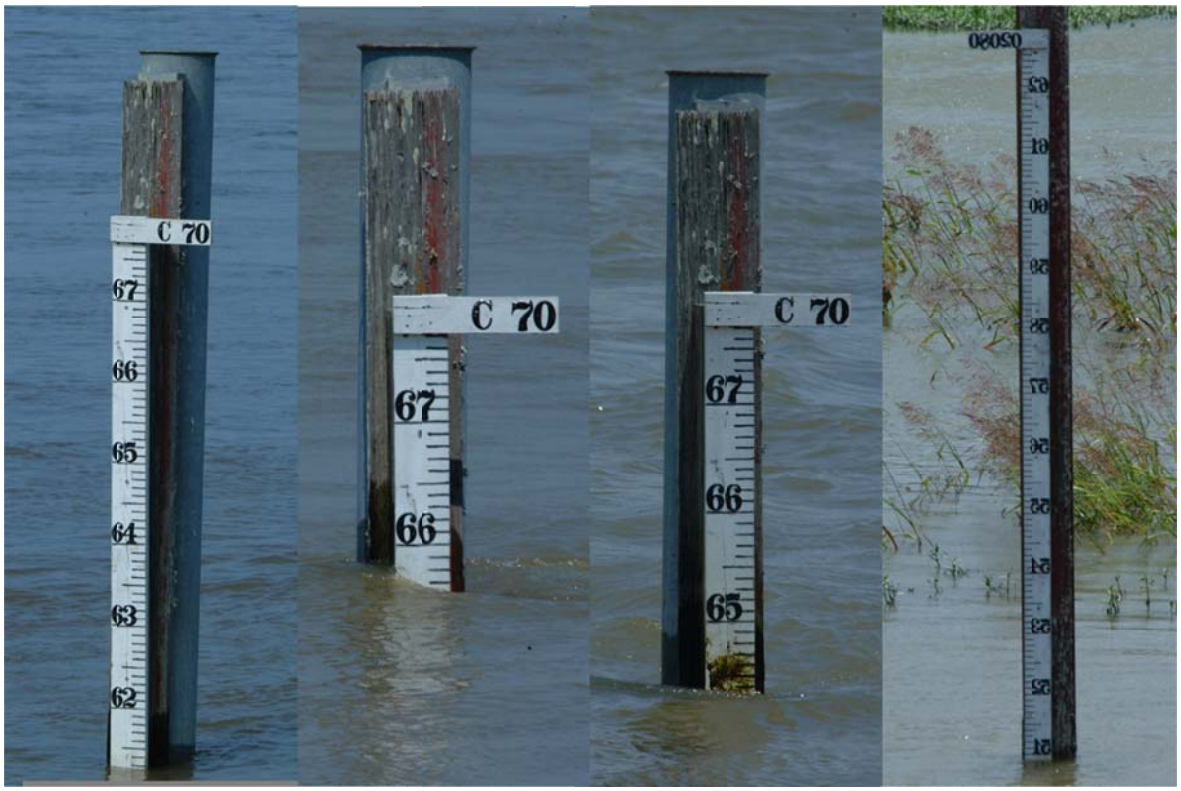
In those fields where blast is a problem we will probably use Gem or Stratego because the active ingredient in Gem is just a little better than the active ingredient in Quadris on blast. The opposite is true of sheath blight. Stratego is a mixture of Gem and the active ingredient in Tilt (propiconazole). If we have both diseases (sheath blight and blast) we might add some Quadris to Stratego to improve the spectrum of coverage. It will depend on severity of the disease and stage of growth of the plants at the time of application.

I put this photograph in for the "Doubting Thomases" out there who thought I was either foolish or wasting my time putting a something next to our rain gauge (a totally useless object so far this year) to provide a perch for visiting birds. I finally got a chance to take this last week.

On the next page are a series of photographs documenting more of the Mississippi River flooding. I remain confident in the levee system in spite of the impressive power of the river because it is so dry other than the water in the river.

It is quite ironic to have an excess of water on one side of the levee and a shortage on the other. One farmer was quoted in the paper as saying he was worried about the river on one side and needed rain on the other so he didn't know what to pray for. I understand. Farmers in Calcasieu, Cameron, Jeff Davis, and Vermilion are running out of fresh water. The AgCenter has put together a meeting at the Lake Arthur Community Center next Friday, June 3, at 9:00 a.m. to address some of these issues. For more information about the meeting contact your local county agent.

You can compare the photograph of the Vidalia medical center in last week's edition to this one and get an idea of the water level changes. From what I could observe both across the river and at the gauges the river had dropped about a foot, but the backwater was way up as was expected.



The gauges above are from left to right: gauge C70 just outside of the Old River Control Structure on May 10, gauge C70 on May18, gauge C70 on May25, and gauge 2080 in the spillway just opposite gauge C70 taken on May 25.