

Based on the calls I'm getting and my own observations I can't decide whether disease pressure is heavy or light or whether stink bug pressure will be heavy or light this year. In most of our verification fields disease pressure remains light, but I am getting reports of normal to heavy sheath blight in several areas. I also got one report of blast in CL161 last week. Below are two photographs the left one illustrates very early sheath blight lesion and the right one a well developed leaf blast lesion.

The sheath blight lesion is described as a "water soaked" spot because it appears as though the affected area is saturated with water, however it reminds me of tissue that has been bruised physically. In either case the symptom indicates destruction of cell walls and membranes allowing the cell contents to leak out into surrounding tissue as the fungus penetrates and spreads throughout the leaf sheath. As the spot ages it darkens then will form a grayish center with an indistinct border. A very distinct border would be more indicative of brown bordered leaf and sheath spot caused by another species of *Rhizoctonia*.

Blast lesions are described as spindle shaped. The descriptive terms of science often have origins unfamiliar today, but easily visualized when the problem was first described. A spindle was once a common item. It is the wooden dowel tapered toward both ends used to wind thread or yarn on when everyone used to spin fibers into thread or yarn for weaving. Because the blast lesion is wider in the middle than either end it is said to be spindle shaped.



In our most advanced verification field we expected to find lots of stink bugs last week, but only found a few. Later the same morning one farmer called to say he was picking up 30 in 10 sweeps when our threshold is 30 in 100 during the first two weeks of heading. In Natchitoches parish we found two egg clusters in rice not even at green ring. Who knows what we will find later. Our threshold values are listed as 30 per 100 sweeps early then 100 per 100 sweeps in the soft and hard dough stages. This does not mean that one day the threshold is 30 and the next it is 100. This is another one of those judgment calls. As the rice matures the number of stink bugs required to cause economic damage also increases. For example, our field in Acadia parish will probably be in late flowering to early milk. If stink bug numbers are averaging 25 to 30 per 100 sweeps we may not treat especially if all we find are adults. I get much more nervous when the population is mixed between adults and nymphs because growing teenagers can eat more than an adult even in the insect world. If the numbers are averaging 45 to 50 per 100 sweeps we'll pull the trigger without hesitation, but the following week that may not be enough to justify treatment.

Another issue that bothers me when scouting for insects is the occurrence of sub-threshold numbers over an extended period of time. If for two to three weeks in a row we find just below what we would normally consider a threshold we might treat because of the extended exposure time the crop is subjected to. I have heard others in the business voice their concerns about this phenomenon too and have yet to see any research on the subject so I might be wrong, but I would rather treat than let a farmer's crop get damaged because I had to "color inside the lines."



Rice stink bug eggs hatching.



Rice stink bug nymph.

A few years ago Eddie Eskew, county agent in Jeff Davis parish called me to look at damage that was similar to borers, but they couldn't find any and the damage seemed to be confined to the edges of the field. We finally found a grub in the crown of the affected plants, but still did not know what it was or if it was the culprit. A few years later I found the same insect in a verification field in Madison parish and again no adult, but this time I brought some of the grubs back with me and they became adults. It turned out to be a well documented insect in other parts of the world and some other states, but one we had not seen much. It is called the rice levee billbug. Last week I noticed them in two or three fields. I don't know if that means there are more this year or that I happened to notice them. The adult looks like a rice water weevil in the photographs, however it is about a half-inch long as is the grub. It is more a curiosity than a problem – I hope.



Rice levee billbug grub.



Rice levee billbug adult.

In the continuing saga of green ring (internode elongation) I received the following comments from rice physiologist Dr. Richard Dunand after last weeks issue of Field Notes and thought I should pass them along to you.

When dissecting main culms at maturity most of the time, there have been five distinct internodes with the first (lowest) internode at least an inch in length. Sometimes though, there are a few main culms with four or six distinct stem internodes (the lowest at least an inch in length), and only rarely one with seven distinct internodes. All of these stems regardless of internode number were very close in total length. Since the breeders do not breed for uniformity in internode number but do breed for uniformity in height, this slight variation in number of internodes does not surprise me. These observations have led me to conclude that a true stem internode is an inch or more in length when fully elongated in our current varieties. With this in mind, I have many times found in mature main culms six internodes and the lowest

one was no more than about a half inch in length with a distinct secondary (not filamentous) short root system originating from the upper node of this short internode. Because of the internode length and associated root system originating from the upper node, I usually discount it as an elongated upper crown internode.

What brought this discussion up was the photograph of what I described as green ring that was not green. Technically the elongating internode we refer to as the green ring is a true stem internode. Dr. Dunand questioned whether that internode was in fact the uppermost crown internode or the first stem internode. All I know is that it elongated and was not green as was evidenced when we visited the field last week and determined it was just past green ring.