Field Notes
June 29, 2007
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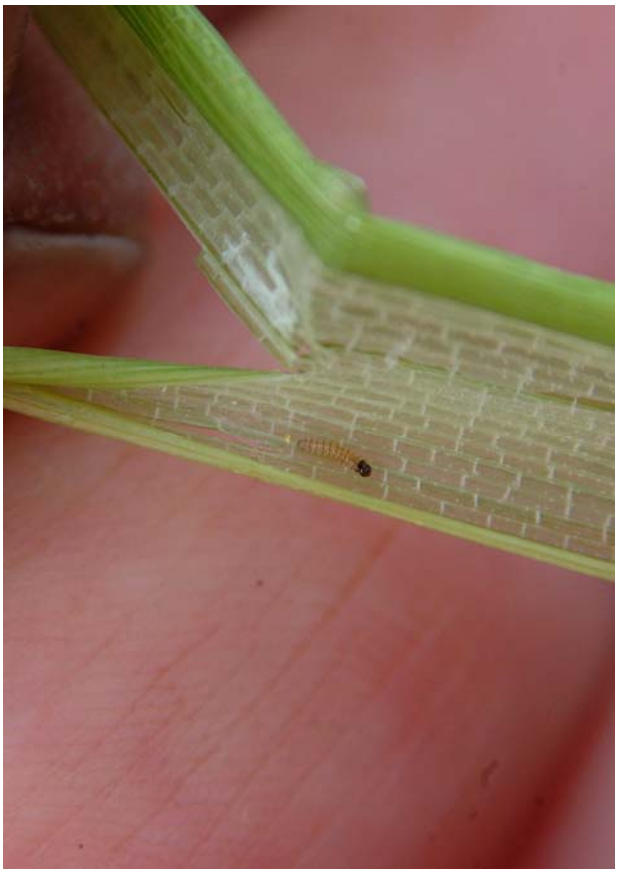
In the photograph at left is a one-half inch long panicle. It is very similar to the one we showed last week except the individual kernels are much more visible than in the photograph of last week. About a week after finding panicles of this size we are finding 3 to 4 inch long panicles and are applying fungicide where necessary. So far all except one verification field have been treated with fungicide.

From last week to this week sheath blight literally exploded in most of our fields. We were able to find it in scattered locations first then everywhere. We also found it higher up on the plants.

We have had a number of calls about panicles with blank grains and in some cases entire panicles. Usually completely white panicles (called white heads) are symptomatic of stem borer damage. In these cases no borers were found. Former extension entomologist, Boris Castro told me on one occasion that this type of damage could be caused by first instar borer larvae or by stinkbugs that fed on the panicle while it was still in the boot. There are other possible causes as well. We do not know the cause of the problem this year. If we get more reports and are able to confirm the cause we will let you know.



The three photographs in the sequence beginning at upper left and continuing clockwise are of sugarcane borer damage, a first instar borer larva inside a rice leaf sheath and a close-up of the same.

The damage in the first photograph is at the base of the leaf where the leaf sheath joins the stem. It can be easily confused with sheath blight in the field when you are looking at a lot of plants and are expecting to find disease. To separate it from sheath blight note the absence of any distinct border around the affected area and the orange color. Both of these are different from sheath blight which has a fairly distinct border around the lesion and has a grayish center.

Finding the first instar larva is important and difficult. The presence of the tiny larva (about the length of two plant cells in the leaf sheath) confirms the source of injury.

To find this insect start scouting at panicle differentiation (PD) and early boot. Look for early signs of stem borer presence which includes the orange to tan discoloration shown above. Peeling back the leaf sheath should expose the tiny larva shown in the other pictures. The discoloration visible from the outside of the leaf sheath is the result borer feeding on the inside.

We usually encounter them while scouting for sheath blight rather than scouting specifically for them. In some areas of the state the problem is more frequent thus expected.

Karate Z, Mustang Max and Prolex are the products labeled to control borers. However, to control them you must apply the insecticide while the larvae are still behind the leaf sheath. Once they have bored into the stalk insecticides are ineffective.

The large corn acreage planted in the northeastern part of the state could provide an excellent source of both sugarcane borers and rice stink bugs. As the corn plants begin to mature these insects will look for another host that is still green and actively growing. Rice will provide these requirements. Rice that has begun to mature by the time corn is harvested is less likely to be affected than rice that is still green. Several years ago we had a similar situation resulting in extremely heavy stink bug populations. Some fields in northeast Louisiana were sprayed five times that year.

We have already sprayed one verification field twice for stink bugs. This field is in Jeff Davis parish so we cannot blame it on corn. It looks like we are set up for a bad stink bug year. I hope borers remain a minor issue.

On the following page are two photographs of split rice plants showing what we believe to be 2,4-D injury. We cannot figure out why the injury occurred. It is possible the material was applied a little too early or that there was a small amount of something else left in the spray tank when the 2,4-D was applied. The primary growing points are so heavily damaged in some plants as to render normal panicle formation impossible. In some of those cases the axillary buds (buds behind leaf sheaths) will replace the original growing point much like we see in the production of second crop.

Once the panicle is removed either chemically (as in this case) or with a combine the absence of the dominant panicle allows the buds in the leaf axils to germinate. These are the panicles that show up first in second crop and the same ones we discourage development of when the stubble of the first crop is mowed or rolled.

Applying the same principles to this field means it will probably go on to make heads, but they will be from the axillary buds. The crop will be later, less even in maturity and probably lower yielding.