Field Notes
July 7, 2008
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Last week was the last week we expected to find rice with panicles as small as the one at right in our verification fields. The panicle shown here is about 3/8 to ½ inch long or a few days past panicle differentiation (PD). Only one verification field was not at that point last week, however we expect it to be at least there by next week. The importance of knowing the stage of development at this time of year is in timing fungicides. As we have stated before we do not want to apply them too early or too late to maximize their benefit. Dr. Groth has said that PD plus 5 to 10 days is about as early as we should apply a fungicide to control sheath blight especially if we intend to make one application and want it to hold until the end. So far disease pressure has been heavy in only two fields, one planted to Cheniere and the other to CL161. Both required early applications of fungicides.

The photograph at left illustrates the reason that even without rain we have a great environment for disease development in rice. The droplets of water you see are from two sources, dew and guttation. Dew is simply condensation of water vapor into the liquid form when it contacts a cool surface. We have discussed guttation before. It is the excretion of excess water pressure through pores in the leaves called hydathodes. The image it creates is so attractive I just had to use it. The point is that the flooded rice field has high humidity which is necessary for dew formation and rapidly growing rice plants are going to produce water of guttation so there is plenty of moisture for pathogens to grow. This photograph was taken before the onset of daily afternoon showers.

In the April 25 edition of field notes I mentioned a weed we found in our verification field in Evangeline parish. At first I thought it was Creeping Spot Flower (*Spilanthes americana*) then started to question myself because all of the identifying features did not fit. I speculated it might be Lippia. Last week we found it in flower and it was Lippia. I missed the key feature that would have separated the two. Lippia is a member of the Verbena family thus has a square stem. Creeping Spot Flower is a member of the Sunflower family and has a round stem. Both have leaves that have similar margins, have opposite leaf arrangement, have appressed pubescence (flattened) on the stems and both have a lot of purpling. The important thing is that Lippia was controlled with a mixture of propanil, Londax and Permit. Other weeds dictated the herbicide choice. I do not know if this would have controlled Creeping Spot Flower. I know Londax alone will not.

The little critters shown at right are first instar rice stink bugs. They have just hatched from the egg cluster. In fact two eggs appear to have either failed to hatch or had not yet when the photograph was taken. At this stage they will remain clustered together. They will molt to produce second instars which begin to move and feed. Third, fourth and fifth instars are the teenagers of the bunch and will feed vigorously. We found these in a rice field that is not even in the boot stage which means we can expect a heavy population later on in the season. Had we found them a week after spraying it would have meant we had killed the adults after they had laid eggs. There is some speculation that we get some residual activity from the pyrethroid insecticides. I think if we do it is when a hatch out like the one shown occurs within a couple of days of a spray. We can probably pick up these tiny bugs but I doubt we have enough material remaining to control either the later instars or a new population of adults that might enter the field.