

Field Notes
August 3 2006
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Since last week we have received many phone calls concerning the damage the fungus *Cercospora* has done to the rice crop in south Louisiana. In the last issue of Field Notes and in the previous one the problem was discussed which prompted more questions than it apparently provided answers.

I did use an older specific name for the organism than is the currently accepted name. In the publication "Compendium of Rice Diseases" published by the American Phytopathological Society, it is listed as *Cercospora oryzae*, however in other publications it is referred to as *Cercospora janseana* all of which means nothing if you are a producer, but I do not want to give some of my "friends" an opportunity to correct me. The publication mentioned above can be purchased directly from APS press at: www.shopapspress.org/disease-diagnostic-series.html. Other vendors offer it too, but this is the most direct source. They also have similar publications on most of the crops grown in Louisiana.

We are continuing to discuss the effects of this unexpected problem. Of particular interest is the possible effect on ratoon crop rice. The simple answer is, "We don't know." Dr. Don Groth has said it is the most common disease in second crop plots, but before this year was never of any consequence. Jacko Garrett has insisted to me that he has had this problem for several years and that it severely limits second crop yields. Unfortunately, we do not have any replicated studies where its effects have been carefully evaluated.

Lots of farmers are saying the same things: the straw is not just dry, it is dead; there is no regrowth showing yet; there is too much dust behind the combines (never a good sign); the fields are dropping in moisture from 20% or better to 16% or lower in just a few days; and other unprintable things. Everyone wants to know whether the field should be fertilized and flooded with the assumption stubble will sprout to produce the ratoon crop or should it just be flushed or should it be abandoned.

What I am personally recommending to most is to carefully inspect several areas of the field for any signs of regrowth, especially from the crown of the plant. If there is the answer is to fertilize and flood as usual. If there is no sign of bud development and the field is muddy and afternoon showers are keeping it moist I would just wait and see, but make a decision in no more than a week. If it is dry it might have to be flushed then evaluated again.

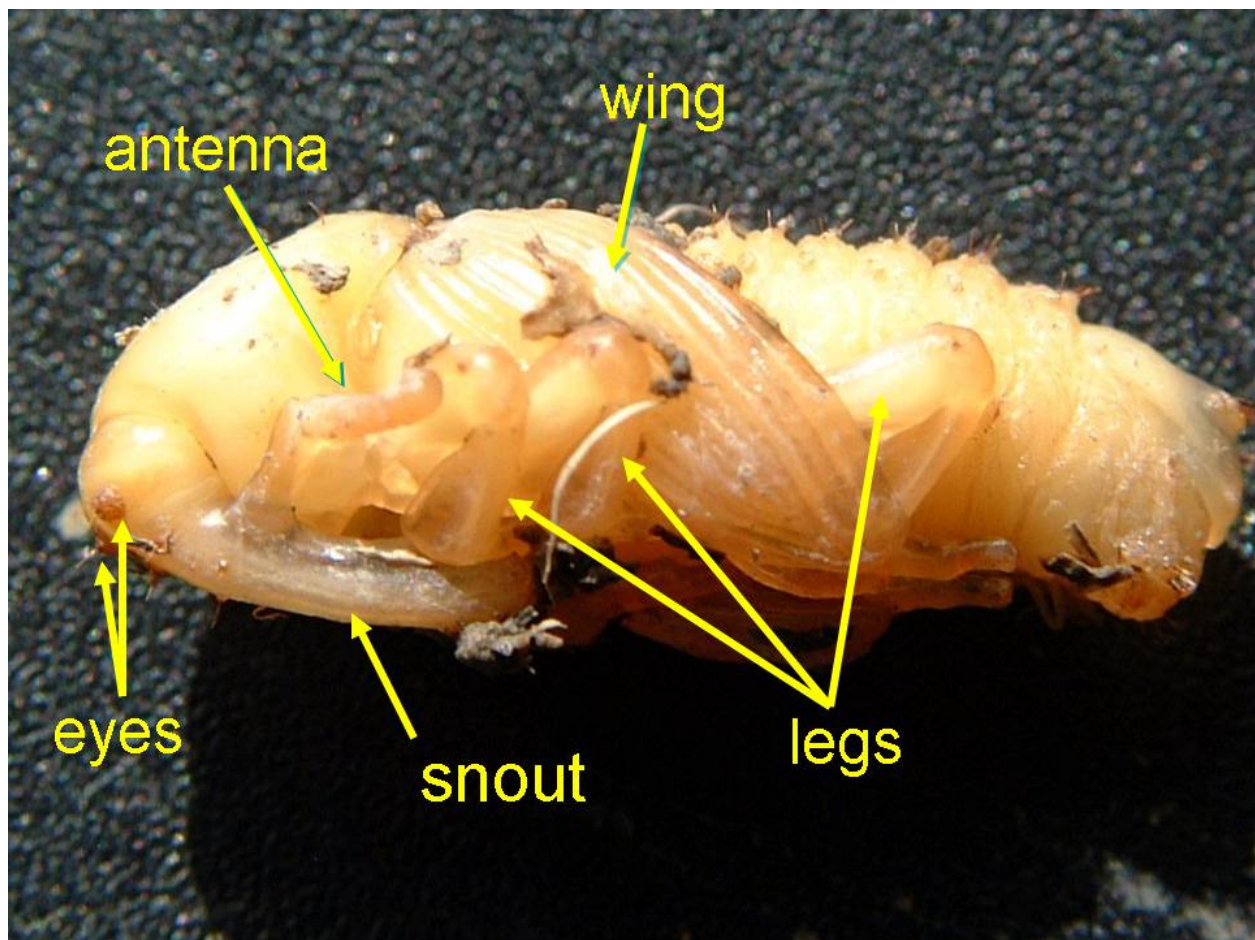
After getting past that point the next question is "What will be the effect on the second crop?" This is even more difficult to answer. All I have is the communication mentioned above.

None of the fungicide labels I checked indicate they can be used on second crop and few are labeled for control of this disease. One theory of why this disease is so prevalent this year is that the strobilurins do not control it and may have served to release it by removing competition. One farmer lent credence to this when he observed the disease was worse where fungicide could **not** be applied because of power lines or other obstructions.

The next 5 photographs are of the Rice Levee Billbug. I mentioned this insect in an issue last year more in passing than to report a problem. In two fields, one in East Carroll and one in West Carroll it was prevalent enough to cause visible injury in localized areas of each field we examined. I was actually surprised at the numbers present in both cases. I neglected to take pictures of the symptomatic plants.

Usually the problem is isolated to levees or edges of fields where water is transitory. The insect needs lots of moisture, but apparently does not tolerate constant or deep flooding. In one field the affected areas must have been high spots that had dried out at some time. The symptoms are similar to stem borer symptoms if the infestation is just before or after heading. Panicles are blanked out and the stem can be pulled from the leaf sheath. Earlier infestations result in drying out of leaves above the site of infestation.

To find these critters you must examine the crown of the plant. The larvae will bore into the stem, but at or near the soil line not high up like stem borers. In a couple of instances when we pulled up plants the larvae were found in the root system. Immediately below is a photograph of the pupa stage of this insect. The adult is about $\frac{1}{2}$ inch long as is the pupa. On the next page starting from the upper left and going clockwise is a pupa in a rice stem, a ventral (belly) view of a pupa, a dorsal (back) view of a pupa, and an adult.





Below are a couple of photographs of one of the most disgusting looking creatures I have ever seen. The photograph does not do justice to the ugliness visible under a microscope. A rice consultant found these in the stems of rice plants damaged by either borers or the rice lewee billbug. Because I was able to find carcasses of other insects in the vicinity of them I thought they might be larval stages of some predator. After sending photos to Drs. Dale Pollet, MO Way, and Boris Castro I was told they are the larvae of a fly. They are called rat-tailed maggots. They feed on dead organic matter and were feeding on the dead tissue created by the other insects. They were just an oddity I thought I would pass along.

