

Last week I got several calls regarding purplish grains especially in the variety Trenasse. The following paragraph is from the July 13, 2005, issue of Field Notes which addresses the same problem. The exception to last year's discussion is the acknowledgement of quite a bit of blank grains associated with the appearance of the discolored grains. Not all are sterile, but more than should be. Again, the problem is weather related. The fact that most of the calls indicated Trenasse was the favorite variety does not reflect on the variety, rather it points to the time of stress. In some fields most of the discolored kernels were in the middle part of each panicle. This is another indicator of a specific event since each panicle flowers from the top downward so the stress occurred when that part of the panicle was flowering. If dates were recorded for flowering in the fields in which damage is noted there will probably be some weather factor that can be identified as the possible culprit.

The most common call I have had in the past several days has regarded the purplish discoloration of grains in rice nearing maturity. Anthocyanin pigments are the pigments in plants responsible for most of the red or red related colors like the purplish grains folks are asking about. These pigments often show up whenever a plant is under stress or maturing and dying such as the leaves of trees in the fall. In rice we see these purplish tinted grains every year, sometimes with greater frequency than others.



The photograph above and to the right is of roots affected by hydrogen sulfide or at least that is what we think. The roots are of Trenasse planted in lower Vermilion parish in a field where we pulled soil samples last fall to determine the amount of salt. According to the grower the field had been in soybeans last year and had already been covered by water from rainfall before the storm surge came in. He said the analysis reported around 200 ppm total soluble salts so he felt safe in planting. However since then he has had to apply water from surface supplies ranging from 1700 to 2700 ppm total soluble salts. Because sea water contains lots of sulfur some of this injury could be related, but of that I am not certain.



Above are two photographs of blast symptoms in plots on the Rice Research Station. At left is a photograph of leaf blast on the California variety M201. Some of that plot was melting away from the severe blast. To the right is a close-up of a panicle blast lesion also from plots that had been inoculated. That plot had so much panicle blast there were whiteheads that resembled a major borer infestation.



The photograph at left is of a sugarcane borer collected in Vermilion parish last Friday. This borer is quickly becoming the most common borer in rice in Louisiana. Seldom do we even find the rice stalk borer and so far we have not encountered the Mexican rice borer and hope we never do. The large opening is not an entrance wound. The initial entrance would have been made by a borer about 1mm or less in diameter. Once these borers are inside the stalk there is nothing we can do about them. While we do not yet have a published threshold value we do know the pyrethroid insecticides will control them when applied **prior to** their entrance into the stalks. This requires very careful scouting and some luck. So far this year we have had very few reports of problems with borers.

We are seeing quite a few rice stink bugs out there and are just beginning to scout. We recommended treating one of our verification fields this week.

In a review of the DD50 data from this year we have a total of 46,886 acres enrolled which represents only 13% of our acres. Part of this is probably a consequence of the problems we had early on. I hope the numbers come up next year. The breakdown by variety is as follows: Cheniere 24%, Cocodrie 22%, CL131 16%, CL161 14%, Trenasse 7%, Cypress 5%, and CLXL8 4%, Bengal 3%, Jupiter 1% and XL8 1%. Other varieties grown, but representing less than 1% are: Jasmine 85, Pirogue, Saber, Wells, and XL7. It will be interesting to compare this data to our annual acreage by variety survey. Last year the numbers were very close.

Please remember and make an effort to attend the annual Rice Research Station field day on this Thursday, June 29th.