

Field Notes  
April 11, 2008  
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To say I was worried about the recommendation on the field infested with *Juncus* is an understatement. It was a good feeling to drive up the field and see a yellowish cast across the area. The herbicides were working. The effects are visible to some degree in the photographs below. The first photograph was taken prior to herbicide application; the second was taken afterward. We are not out of the woods yet, but we bought some time. The real problem was the need to treat when rice was barely 1 leaf and not injure the crop. The mixture we used was 0.5 ounce of Londax plus 1.0 ounce of Permit plus 1% crop oil. One gallon of zinc per acre was included in the concoction. The hope was that the known sedge activity of Permit and to a lesser degree Londax, would translate into efficacy on *Juncus* a rush. Rushes and sedges are close relatives. Londax was added for a greater weed spectrum. Crop oil is always part of my recommendation with these herbicides if weeds are exposed either above the water or in this case on a drained field and it is cool. We'll see if the gamble paid off when we return next week.

There are some other herbicides which list *Juncus* as a suppressed weed. Grasp just amended its label to include this statement. However, we could not apply Grasp that early. Regiment is a similar herbicide thus similar activity would be expected though *Juncus* is not listed, but again we would have had to wait to apply it too.

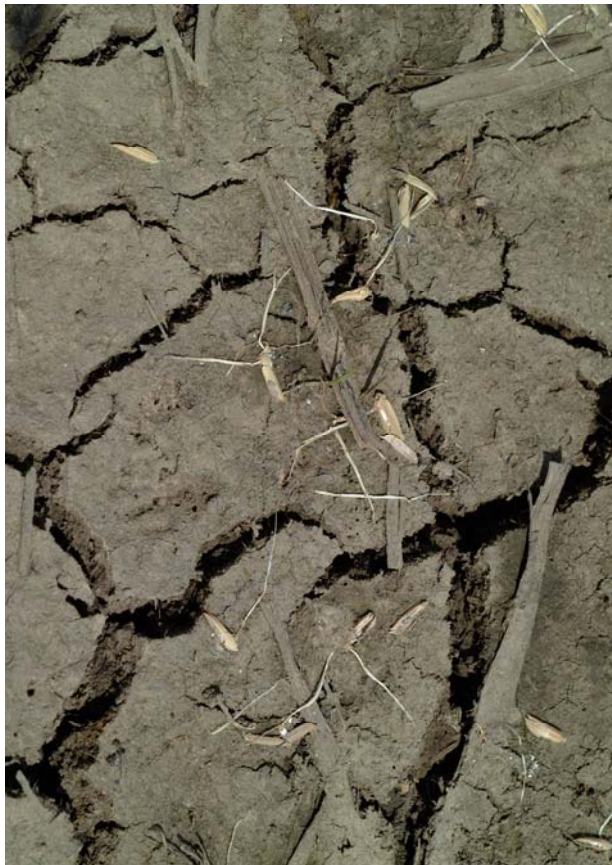




In addition to evaluating our herbicide recommendation in the Jeff Davis parish verification field we started looking for rice water weevils. Within a few steps of entering the field we found the typical feeding signs shown in the left most photograph and in a few minutes had no trouble finding the adults. Most of them were mating so we feel like we did not miss the egg lay. We really did not expect them to come into the field that quickly. The week before the rice was barely 1 leaf, the field had been drained following planting and it was still fairly cool. After the herbicide was applied, fertilizer was applied and the field was flooded. By the time we arrived it had only been flooded a few days. We got lucky. Had we been a week later we would have missed the egg lay and had no recourse available to us other than to drain later.

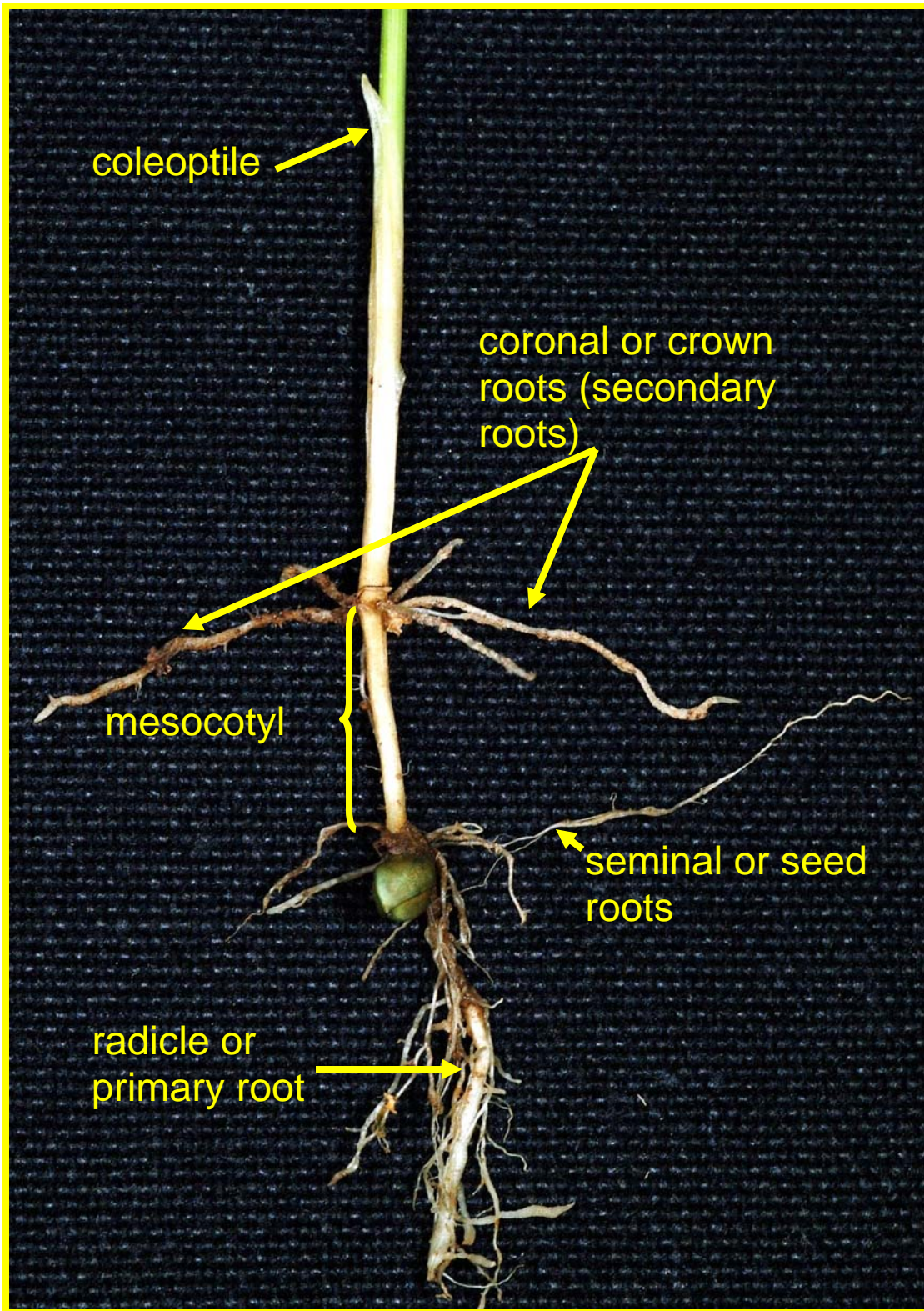


When we started checking our field in Calcasieu we found what you can see in the two photographs on the preceding page. On the left is a subtle whitish area not as visible in the photograph as in the field where you could look at it from several angles. This is evidence of water mold that attacked a seed below the soil surface. The seed on the right is much more typical of what we see when water mold is a problem. The tiny hair-like growth spreading from the seed is the mycelium of the fungus. In a nearby field we did stand counts walking into the sun. When we turned around and headed back to the trucks we could clearly see heavy water mold damage. The farmer was considering applying glyphosate and replanting with a drill. We suggested he first drill the field (hybrid), then apply glyphosate. In that way he could at least be assured he had seed to replant with and if something interfered with the process he had more options. Obviously he must spray before emergence.



Above left is a photograph of blackbird damage we found in our field in St. Landry parish. It had been drilled and flushed. We called emergence on April 6. The birds managed to find the field and were busy pulling up seedlings to get to the seed. I can't print what I think about blackbirds here.

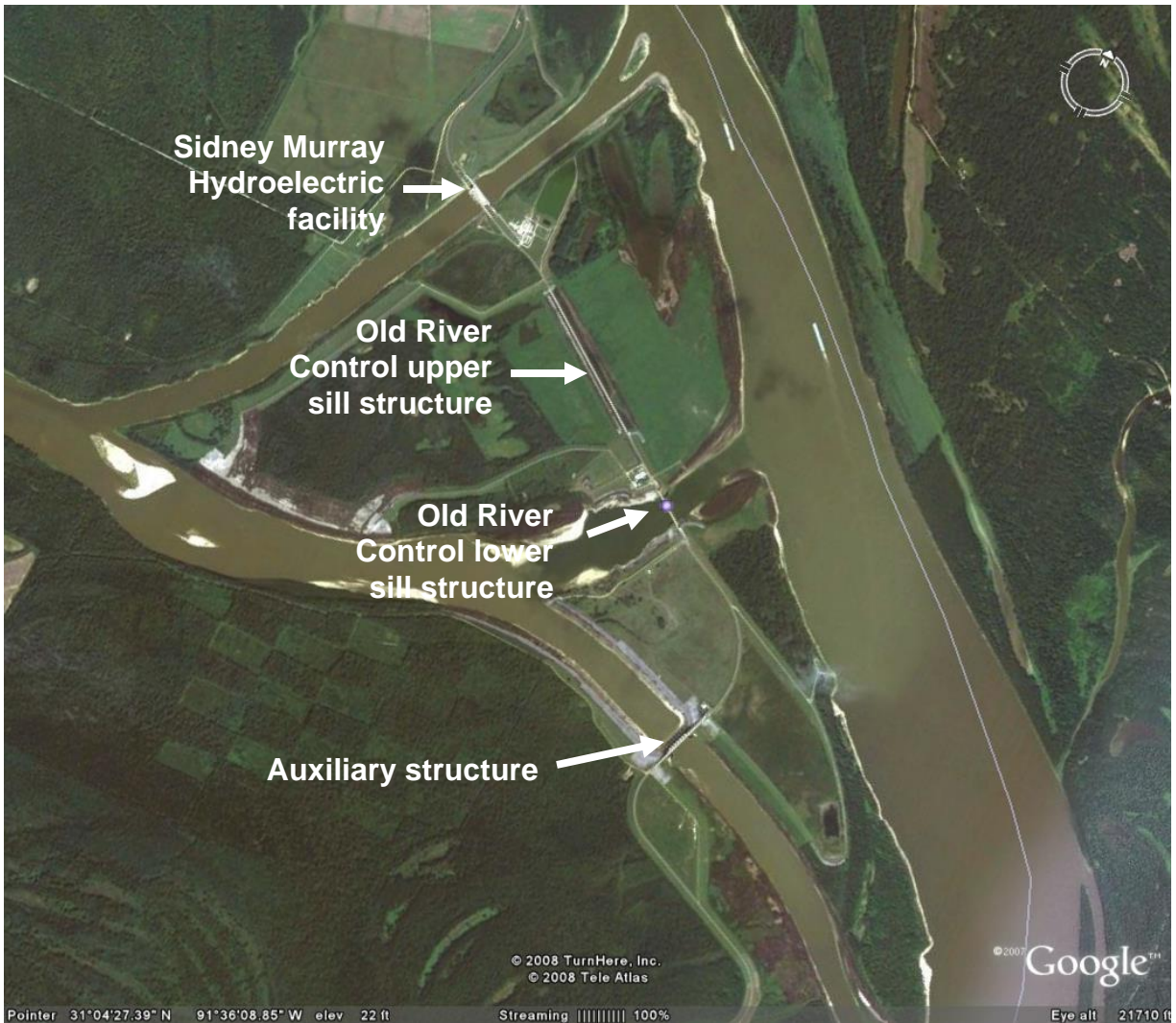
On the right is a good example of one of the problems of water seeding dry seed into a fairly smooth field. Stubble remaining from a 2007 corn crop had clusters of seedlings in the shelter of the old root systems. This year we have one field following grain sorghum and another following corn. I don't think we have ever had this situation in the verification program. We'll see how it plays out.



Last week I made a couple of mistakes, once based on ignorance and the other on carelessness. The labeled photograph above is corrected. The coleoptile is the protective sheath of the young shoot that looks something like a leaf. The coronal roots are roots arising from the tiny stem below the soil line. Sometimes these roots are called secondary roots, but back when I was in college a lifetime ago secondary roots were roots arising from another root. The coronal or crown roots arise from stem tissue; they therefore are technically adventitious roots. This is typical of rice seedlings when rice was covered by soil either in the case of drill seeding or broadcasting and covering with soil. Below that is the mesocotyl, the stem tissue between the coronal roots and the seed. The seminal or seed roots arise from the area where the shoot originates at the seed. They, along with the radicle or primary root will eventually degenerate and the bulk of the root system will develop from the crown roots.



The photograph taken last week was not of the Morganza Spillway; it was of the Old River Control low sill structure. The Morganza Spillway has only been opened once in its existence, in 1973. On highway 15 there are four facilities. Listed from north to south they are: the Sidney Murray hydroelectric plant; the Old River Control upper sill structure; the Old River Control low sill structure; and the Old River Control Auxiliary structure. The Auxiliary structure was built following the near loss of the low sill structure in 1973. If the structure had been lost the Mississippi would have captured the channel of the Atchafalaya leaving Baton Rouge and New Orleans without ports and blowing Morgan City into the Gulf of Mexico in the process. The economic impact of that on all the plants and economies along the Mississippi River would be have dwarfed Katrina's impact. The Morganza spillway is along La 1 just north of the town of Morganza.



The photograph of the gauge shown on the next page was taken while stopped on the Old River Control upper sill structure. The entire area in green above to the east of the structure is under water. The channel running from southeast to northwest connects the Mississippi and Atchafalaya Rivers. The large channel is the Mississippi.

The center photograph on the next page is of the Mississippi River gauge at Vidalia. Those of you familiar with the area can see how high the river is in relation to the hotel in the picture. Using the person standing outside the hotel you can roughly estimate the level.

I know this has nothing to do with rice, but it was interesting to me and the opportunity to take photographs like these may not occur again.

Thanks to Harold Lambert for setting me straight on the control structures.

