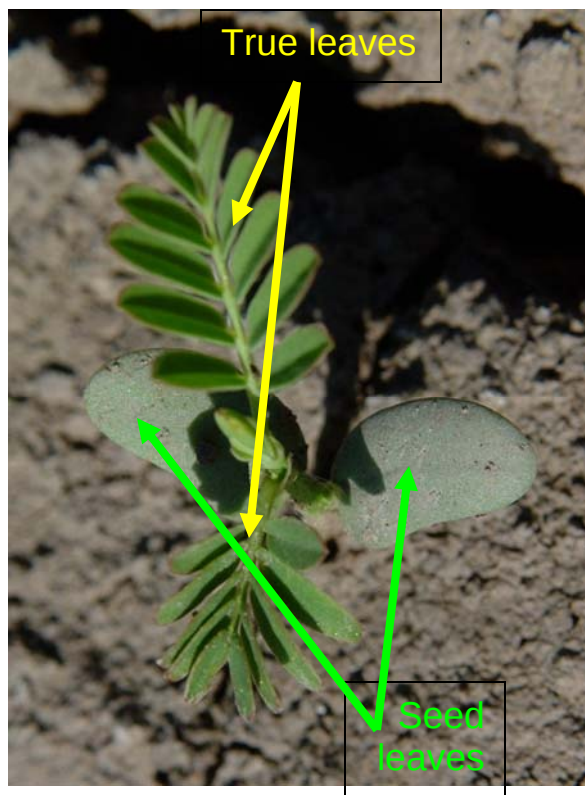


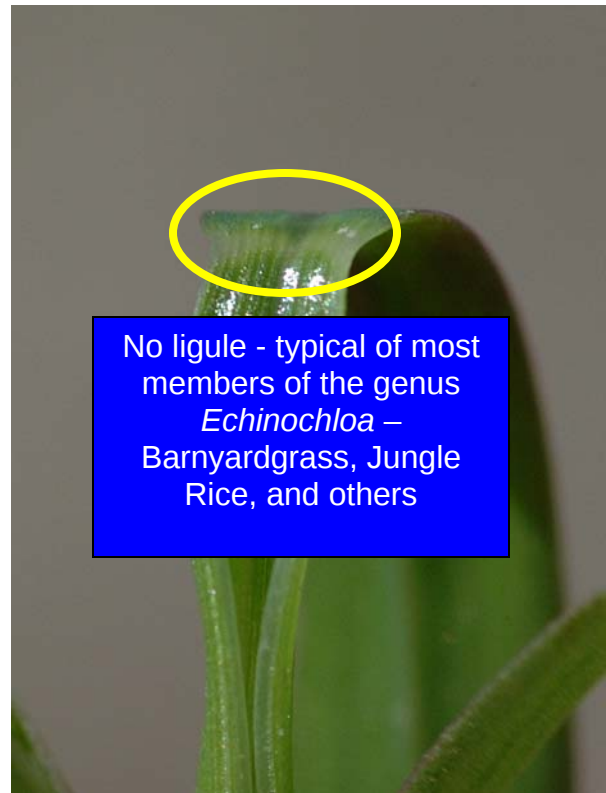
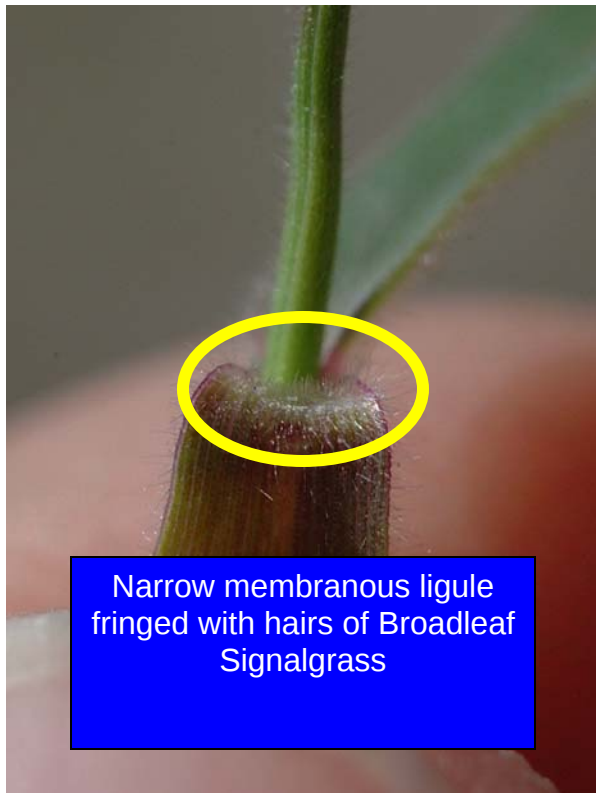
Field Notes
April 19, 2010
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Even though the subject has already received a lot of attention and has gone away I thought it interesting enough to show you the photograph at right. I did not have the best lens with me in the field so the photo is not as sharp as I would have liked it to be. At left center is a tiny wasp. I had a visitor riding with me last week and he saw the thing without magnification. I had to use my hand lens. As a size reference the two brown, somewhat spherical objects are aphids. The wasp is one that parasitizes the aphids by laying its eggs in the aphid. The brownish color of the aphids indicates they have already been parasitized. The leaf blade they are on is of two leaf rice so you can see we are talking about a really small wasp.



At left is another review photograph. It is especially important when selecting herbicides to be able to distinguish between Hemp Sesbania and Jointvetch without having the two species side-by-side. The seedling shown here has two cotyledons (seed leaves) and two true leaves. Both true leaves are compound, therefore it is Jointvetch. If the first true leaf had been simple it would have been Hemp Sesbania. Remember simple leaf, Sesbania. Some of our rice herbicides will do an excellent job on Sesbania but perform poorly on jointvetch. One of my first calls when I started this job many years ago was a call to a field where Blazer had been applied and they wanted to know why it did not work. It was full of Jointvetch. Blazer controls Sesbania, not Jointvetch.



On the previous page are a set of four photographs. The two on the left side of the page are of broadleaf Signalgrass while those on the right are of Barnyardgrass. Both were about 3 leaf seedlings. If you follow the leads in the Schematic Diagram for Seedling Weed Identification in Rice you will note the presence or absence of a ligule will separate these two weeds. If Fall Panicum was included in the photographs it would have to be separated from Broadleaf Signalgrass on the presence or absence of pubescence. The ligules of these last two can be very similar, but the hairs on the lower surface of the leaves of Signalgrass distinguish it from Fall Panicum.



The field shown above was along our route to another field, not one we had been called to, but it presents an opportunity to discuss a phenomenon called allelopathy. The word describes the ability of one plant to suppress the growth of another. In this instance the allelopathic plant is ryegrass and the plant being suppressed is rice. Several years ago I visited a field where rice had been planted. On one side of the levee the rice was growing well along with an abundance of weeds. On the other side of the levee rice was shorter, yellower and there were very few weeds. The farmer said everything was the same on both sides of the levee. A little later he said, “The only thing different was that on one side had been in ryegrass and the other a crawfish pond.” That is a long way from “everything was the same.” In no-till studies years ago Dr. Pat Bollich discovered a great deal of diversity between cover crops and their allelopathic effects. As best as I can recall the worst was Subterranean Clover. Nothing grew where it had been planted, not even weeds. Ryegrass is strongly allelopathic to rice. As long as it is green and for a few weeks following its death rice growth will be suppressed. The last thing I heard was that the farmer was trying to decide whether to plow this up and start over or try to salvage it with herbicides. By the way, the field had been sprayed with glyphosate prior to planting.



If I had been asked to do stand counts in the field shown in the three photographs above I would have said the stand was too thick. The pocket knife in the photograph is about 4 inches long. At far right even a casual glance indicates a lot of rice. In the center photo lanes created by burning the stubble from last year reveal two things: first, burning stubble does not produce enough heat to really control weeds; second the stand is very uneven.

The real surprise is that this rice was not planted – at least not this year. Last year a non-Clearfield hybrid was planted in this field. It yielded extraordinarily well producing 10,044 pounds (62 bbls or 223 bu) per acre on the first crop followed by 6,156 lbs (38 bbls or 137 bu) per acre on the second crop for a total of 16,200 lbs (100 bbls or 360 bu) per acre. Enough rice shattered from the second crop to produce this crop. Clearly a lot of seed made it to the soil and the dormancy of hybrids helped the seed to survive.

The field had already been drilled for this year and an application of glyphosate was to follow.