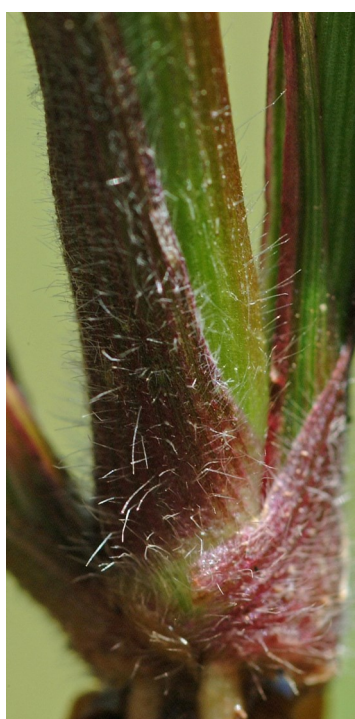




At left are views of the leaf sheaths of three grass seedlings. The left most plant has the densest pubescence, the middle one has long hairs, and the last is in between in both density and length. Looking at the pubescence only and without comparison makes identification difficult in the field.



Comparing the leaf surfaces of the same three seedlings provides a little more information. At far left and center the leaves lack an obvious mid-vein and both have some degree of pubescence on the margins. The leaf at far right has a fairly conspicuous mid-vein located off-center in the leaf and lacks the pubescence found in the other two. The seedlings are in the same order at top and bottom of the page.

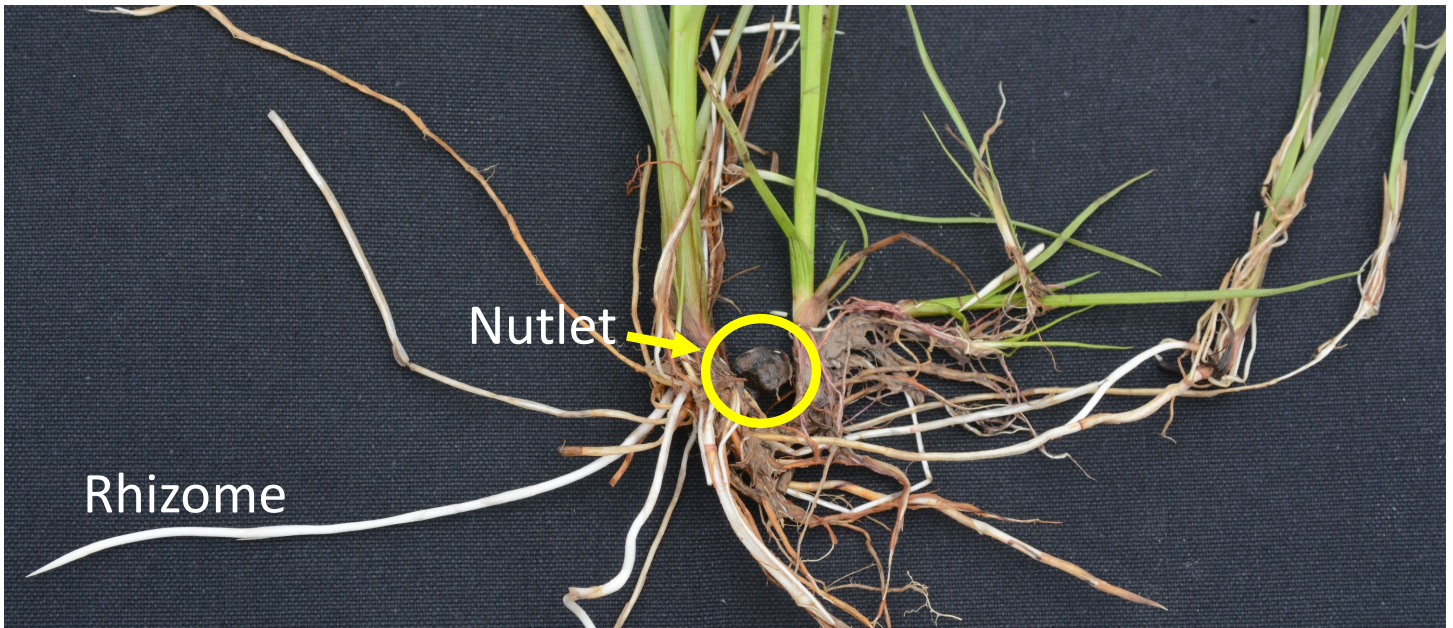


These three photographs provide the final clues necessary to separate these three grass seedlings. The middle photograph shows a membranous ligule. It is flanked by similar ligules, both are membranous fringed with hairs. The far right photo shows a wider membrane and longer hairs than the far left photograph.

Following the leads in the Schematic Diagram for Seedling Weed Identification in Rice published by Dr. Webster will provide the identities. I'll eliminate the first choices; these are annual grasses with ligules. The next couplet offers the choices: ligule narrow membrane, fringed with hair or ligule long membrane. The middle one has the long membrane. The next couplet for this one is: mid-vein prominent or mid-vein inconspicuous. It is inconspicuous. The next choices are not quite a couplet; one choice asks about auricles and the second asks if the leaf and leaf blade margins are hairy. This leaf has no auricles and the margins are hairy—Large Crabgrass.

After determining these have ligules that are membranes fringed with hair the next couplet asks if the mid-vein is prominent and off-center or inconspicuous with a pubescent underside. The far right leaf has a prominent, off-center mid-vein—Fall Panicum. The left-most leaf has an inconspicuous mid-vein and pubescence on the underside—Broadleaf Signalgrass.

On the next page is a photograph of yellow nutsedge. The dealer rep who called knew the plant was a sedge, but some characteristics did not look quite right to him. According to the literature I have there are only two perennial sedges in rice fields; yellow and purple nutsedge. The nutlet here is smooth and when cut it has no distinctive odor and has a nutty taste. Leaf tips taper gradually. Purple nutsedge has a hairy nutlet that smells like turpentine when cut and tastes bitter. Its leaf tips are more abrupt than yellow nutsedge.



Last week I showed photographs of an orange spotted field. Those images led to a visit to the field depicted below. It too was distinctly orange, but for a different reason. In this case it appeared to be heavy iron deposits on the surface of the soil. While nearly all of the wells in Louisiana have high iron content this one must be especially high or something caused a slug of iron rice water to be pumped from the well. I have seen iron toxicity many times, but do not think this will cause problems.





Last week we got our first calls about this problem that is becoming more common in parts of Acadia and Evangeline parishes. The yellow rice plants show up about a week or two after establishing permanent flood and the condition persists for at least two weeks. However, one farmer has reported that even though the chlorosis disappears affected plants remain stunted and the yield monitors reflect the locations of the problem at harvest. Dr. Harrell is aware of and is working on the problem. We suspect manganese deficiency, but have been unable to confirm it.