

Field Notes

I have had lots of questions regarding the DD50 program, an indicator of the need for the program and its use by producers. That is encouraging, however the questions for the most part center around the 10 day error between emergence and first tiller that causes the program to remain 10 days off for the rest of the predictions. Sam Razi has been made aware of the problem so that it will be resolved soon I hope.

The primary reason for the questions is the need to anticipate green ring (internode elongation) especially if the grower intends to drain the field for straighthead or rice water weevil control. Around 1992 we started using split stems to do the same thing. I don't remember where I learned this or if anyone used it before and I do know it was never published. When the crown of the young plant is split lengthwise and three septae (we have referred to them as crown nodes) are visible, green ring is usually about 10 days away. The first internode to accumulate chlorophyll, the green ring we look for, is most often between the fourth and fifth nodes in the crown. The photographs inserted below illustrate the three node stage and green ring for your reference.



Three “crown nodes” or septae visible.



Green ring, accumulation of chlorophyll indicating internode elongation has begun.

None of this is absolute as all growth stages are dependent to some degree on environmental by genetic interaction. This means that each variety is influenced by the field conditions and weather within limits of its genetic base. The bottom line is what the plant shows you in the field which is why I always keep a sharp knife with me and split plants whenever they have passed

two tillers in growth. Even when I am called to look at a complaint of some sort I try to gauge the health of the plant by the growth stage it has reached in comparison to what I think it should have reached by that point. I hope it helps you too.

Below are four photographs of two weeds seen recently in rice fields. The first I think is *Echinodorus* sp., Bur Head or Water Plantain that was sprayed with Basagran. The application burned the leaves, but it is coming back as I would have expected. Ron Strahan and I tried everything labeled and then some on this weed without good results from any of them. It is increasing in crawfish ponds and in fields flooded for ducks which is one reason I recommend following these fields every two or three years. The second weed looks like *Sesbania*, but we think it is *Glottidium* sp., Bladder Pod or Bag Pod. In some texts the genera *Sesbania*, *Daubentonia* and *Glottidium* are treated as one, but in the books I have they are separate so I treat them separately too. The fruits are dramatically different, but the seedlings are remarkably similar, as you can see.



Echinodorus inflorescence and leaf. The flowers of *Echinodorus* are perfect whereas those of *Sagittaria* are staminate at the top and perfect below.



Two photographs of what we think is *Glottidium* rather than *Sesbania*. The seedling on the left shows the first true leaf to be simple separating this from *Aeschynomeneae* (Joint Vetch). The older seedling reveals the similarity to *Sesbania* and the rapid growth of which this plant is capable. The difference is one week from left seedling to right seedling.