

St. Francis County Rice News

May 19, 2008



Because of the extensive rain and flooding, St. Francis County rice planting is a couple of weeks behind normal. Several fields that are intended to be planted in rice are still too wet. But, the frequent rainfall has helped the activity of the residual herbicides.

RICE DD50 Program – The program has been updated for the 2008 growing season and is available at <http://dd50.uaex.edu>. If you choose not to use the Internet enrollment, you may submit cards by mail to the St. Francis County Extension office or call our office with emergence date, variety name and number of acres in your field. We will mail your report to you. This program is very helpful in time and labor management because it predicts the timing of 30 critical stages and management practices throughout the growing season.

Planting Dates – With 30% of our crop left to plant and the calendar approaching May 20, we are reaching decision time. Drastic conditions require drastic measures. Hopefully, we won't get into that condition, but **Table 1** shows estimated yield in a given planting window. You can expect about 10% yield loss when planting in late May. The yield loss drops to 20 to 30% in June.

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Table1. Predicted relative yield potential for drill seeded rice in central Arkansas by seeding date.

Relative Yield Potential	Actual Yield Potential	Seeding Date Range	
%	bu/A	Begin	Cut-off
95.0 - 100.0	166 - 175	March 23	May 20
90.0- 94.9	158 - 165	May 21	June 1
85.0 - 89.9	149 - 157	June 2	June 11
80.0 - 84.9	140 - 148	June 11	June 18
70.0 - 79.9	123 - 139	June 19	June 30

† Actual yield potential is based on a 100% relative grain yield of 175 bu/A at 12% moisture.

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In the past, we have provided cut-off dates for specific varieties. We have moved away from those types of recommendations and now provide more general guidelines for late planted rice. In general, late planted rice is anything planted beyond May 15 in central Arkansas.

Specific variety recommendations for late seeded rice (June seeding dates) should be made on yield performance in seeding date studies, disease ratings, seed availability and planned seeding date. Here are some general recommendations. Of the current available varieties that have been tested in seeding date studies, Bengal, Jupiter, Wells and the hybrids are recommended for late planting. Francis can be added to this list for some growers because it yields very well planted late. But, if you have difficulty maintaining a good flood, do not plant Francis because it is very susceptible to blast. If you can find some Cheniere seed, it may not be bad planted late. Historically, varieties that do not perform well are CL 161, CL 171 AR, Cybonnet, Cocodrie and all very early season varieties, such as Spring. In general, "our best varieties are our best varieties planted late."

When is the absolute last day to plant rice? Well, it depends. For most varieties, rice planted after June 20 is very unlikely to mature in the fall.

Water-seeded Rice – Some producers are considering this option. There are a couple of things to think about if this is something you are considering. First, presoaked seed works best. It is easier now than in the past since rice is packaged in the super bags. The seed should be soaked for 24 – 48 hours and drained for 24 – 48 hours prior to flying onto the field. This gives the rice a head start and allows it to germinate in warmer temperatures than in the cold field water. After the rice gets a leaf about 1" long and is beginning to put out roots, the flood should be removed (if possible) to allow the rice to peg down. If the rice is water-seeded for stand establishment, it is possible to allow the field to drain down and treat the field as a dry-seeded field from this point on. This makes weed and fertilizer management much easier and more effective.

One of the problems with some of these is that they are flooded and have no levees. That's okay for zero-grade fields but not for contoured fields. Without levees in place it will be difficult to manage the water and may result in significant seedling drift. So, while it may be tempting to water-seed these fields, caution should be used.

Nitrogen Management – What about cutting nitrogen (N) fertilizer rates since the cost is so high? There are ways to potentially cut N fertilizer, but it will be much easier in the near future when a Nitrogen Soil Test is unveiled.

Remember that nitrogen is the fuel. It is the most important fertilizer nutrient and will have a major impact on yield if not managed properly. Our rate recommendations are based on variety response to nitrogen fertilizer at different locations and different years. The recommendation is the average of the lowest fertilizer rate that gives the highest yield. For example, some years it may require 120 lbs N/acre for CL 171 AR, and some years it may require 150 lb N/acre to achieve the best yield. The recommendation is 135 lbs/acre (the average of 120 and 150). This should demonstrate the variability and flexibility in nitrogen fertilizer. We also tend to be conservative because we do not want to recommend too much and cause a lot of lodged rice.

Many of you likely adjust our recommendations based on your experience on your farm. That is the way it should be. However, if you are interested in cutting fertilizer rates, two things should be considered.

First, use Agrotain. This product has had a major impact on N efficiency for Arkansas rice production. Without this product, nitrogen losses were significant, and you were always behind when the rice reached midseason.

Second, look at midseason N. If you are interested in cutting fertilizer rates, then cut the midseason N. It should only have but a little impact on yield if you cut back on midseason N. But it will have a major impact on rice yield if you cut pre-flood N. The pre-flood N sets the yield and must be done right. Apply to dry soil, with Agrotain, flood as quick as possible, hold the flood for three weeks, etc. If any of these conditions cannot be met, then the dependency of midseason N will remain high.

If you have your mind made up to reduce nitrogen fertilizer rates, you would probably increase your pre-flood N rate by about 20 lbs N/acre and cut out the midseason. However, do this only on fields that you have good management capabilities (see previous paragraph).