

# Agriculture Newsletter

Woodruff County Cooperative Extension Service

## Crop Condition

**By Eugene Terhune, County Extension Staff Chair**

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Because of the extensive rain and flooding, rice planting is a couple of weeks behind normal.

As of May 11, Arkansas farmers had planted an estimated 68% of the rice acreage. This compares to only 55% last week. We had planted 86% by this time in 2007, and 5-year average of 90%.

An estimated 42% of the crop has emerged. This compares to 21% last week, 69% in 2007, and 5-year average of 74%. Several fields that are intended to be planted in rice are still flooded.

Rainfall continues to keep some fields too wet to plant.

Rainfall for the month of May has varied across the state. Searcy has reported 1.42

inches for the month. Stuttgart reported 1.99 inches, and Batesville reported 3.39 inches.

We have a recording weather station in the Hunter area at our Rice Research Verification Field that has recorded 3.79 inches of rainfall since May 1. I got the weather station up and running on March 19. Since that day, I have recorded a total of 11.04 inches of rainfall.

As I write this, we have rain forecast for our county today (May 13) with most of our fields too wet to get into to plant.

Below is the information from our weather station.



Date	-----Temperature-----				Rainfall
	High	Time	Low	Time	
May 1, 2008	78.1	03:33p	62.8	05:33a	0
May 2, 2008	76.0	09:03a	64.2	11:33p	1.90
May 3, 2008	67.0	05:33p	53.1	11:33p	0
May 4, 2008	73.2	03:03p	49.6	04:33a	0
May 5, 2008	80.9	04:33p	51.0	06:03a	0
May 6, 2008	76.7	12:33p	57.3	06:03a	0.07
May 7, 2008	81.6	02:30p	61.5	01:03a	0.44
May 8, 2008	76.7	05:30p	61.5	04:30a	0.40
May 9, 2008	82.3	06:00p	58.7	06:30a	0.02
May 10, 2008	76.7	04:30p	60.1	08:00a	0.96
May 11, 2008	71.1	05:30p	55.2	12:00a	0
May 12, 2008	64.2	10:30a	45.9	06:00a	0
<b>Total</b>					3.79

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## Residual Herbicide Options for Rice

By: Bob Scott, Extension Weed Specialist

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I did not learn rice weed control back when the program was propanil every Monday until it is clean then flood. By the time I came along, most program weed control approaches in rice included some kind of residual component. These included Bolero, Prowl and Facet for the most part. Today, we have more options and still have these too.

I believe in starting off with a residual grass material first and foremost for most Arkansas fields. For the money, Command applied PRE provides the widest spectrum of grass control available in one product. However, it is primarily a grass herbicide at the rates used in rice. You need to know the rate for your soil type, typically 0.8 pt/A on a silt loam and 1.6 pt/A on heavy clay. Do not use Command on cut fields. Command will miss most broadleaf weeds, including hemp sesbania (Coffee bean) and northern jointvetch (Indigo), it will release sedges and smartweed, so be ready to come back for those in a Command program. If your field has a heavy infestation of these broadleaf weeds, then another option might suit your field that includes some early broadleaf material. This could be a tank mix with Facet or even Permit (there is a possibility that Arkansas will get a 24C label for Permit applied PRE-plant and PRE in rice for 2008).

At our location near Lonoke, Ark., my primary weeds are barnyardgrass, broadleaf signalgrass, hemp sesbania, northern jointvetch and nutsedge. When we have a trial that we want to keep weed free, my program is 0.5 lb of Facet + 1.0 lb of Prowl per acre applied as early delayed-PRE as possible, just after the rice swells. We typically will follow that with 1.0 oz/A of Permit for sedges and any escaped broadleaf weeds that we might have. This is a pretty good program. You can also tank-mix Command with Facet, although this increases the cost.

Last year, the price of Facet went down a bit; there is now a generic formulation in the marketplace called Quinstar. If the price comes down anymore, I think there will be a large increase in Facet or Quinstar use as a PRE. Advantages to using Facet PRE include fewer problems with Facet-resistant barnyardgrass, broadleaf control (sesbania, jointvetch and others), and keeping fields weed free rather than cleaning them up.

Like all residual programs, a disadvantage of using Facet PRE is that you must have rainfall or a flush for activation. If you cannot or will not flush, then it is hard for me to recommend that you start off with a residual herbicide. The difference is night and day. If you are in this situation, then you are probably better off to go with an early-POST tank-mix of one of these residual products with propanil or RiceStar and take a different approach.

The Clearfield system with Newpath herbicide continues to stand out. These are really the only fields that are truly "clean" at harvest. Last year, the cheapest Facet you could find was in the pre-mix product ClearPath (Newpath + Facet). It is just plain hard to go wrong with one ClearPath and one Newpath application in Clearfield rice. We have tried PRE followed by POST, POST followed by POST and switched up the ClearPath and Newpath timings, and plots were clean either way. Some growers prefer to use Command up front PRE in Clearfield rice and then come back with Newpath, these fields look good too, and the Command lets you focus the Newpath on the proper timing for red rice. If you go with any PRE application in Clearfield rice, a flush is absolutely critical. If you cannot flush it in case of dry weather, then go with the sequential POST.

There are some weeds that current residual herbicides, with the exception of Newpath, just are not that good on, such as smartweed, nutsedge and ducksalad. I will discuss POST herbicide options for rice next time.

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## Rice DD 50 Program

By: Eugene Terhune, County Extension Staff Chair

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The Rice DD50 program was developed to help rice farmers precisely time their production practices. The ability to predict growth stages, specifically internode elongation, reduces physical labor required to sample fields to determine accurate timing for the mid-season application.

The program not only predicts growth stages but will also help with timing of herbicide applications, when to scout for diseases and insects and when to time draining.

Growers can now enter their information via the intranet. Simply go to Extension Web page at:

<http://dd50.uaex.edu/dd50Logon.asp>

Then just follow the instructions.

If you want to send the information to the county office for us to enter the information, you can still do so with the enclosed card and instructions below.

The factors that affect the accuracy of the DD50 program are as follows:

- Incorrect emergence date
- Deviation from normal management (i.e., early or late flooding)
- Water seeded vs. dry seeded culture
- Differences in local weather from the four weather stations used to collect DD50 temperatures
- Wrong variety
- Nutrient or herbicide stress
- Uneven emergence

Enclosed you will find a DD-50 enrollment sheet After completing the form, **simply mail it to the Woodruff County Extension Office, 502 N. 3<sup>rd</sup> Street Rm. 122, Augusta, AR, 72006.** The following are instructions on how to complete your DD50 sheet:

### How to fill out the DD50 sheet:

- Please **print** your name and mailing address.
- Please fill in the I.D. number with your phone number.
- Fill in **the name of the County where the rice acreage is located.** This is to insure that the correct weather data is used.
- If you wish someone else to receive an extra copy, fill in the space provided.

There is space on the card to fill in information for six fields. List the field name or number that will allow you to identify the field and the variety. Fill in the emergence date.

## Pay particular attention to emergence date.

Emergence date as defined for the DD50 program is when 8 to 10 germinated seedlings per square foot are barely visible above the soil surface and are less than 1 inch high. The shoot will have a white tip before photosynthesis begins.

**For water seeded rice**, emergence is when the shoots (not roots) reach 1/2 to 3/4 inch.

Remember that predictions of the DD50 program are only as accurate as you are at getting the correct emergence date. **Be sure to include the acreage of the field.**

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## Rice Planting Dates and Seeding Rates

By: Eugene Terhune, County Extension Staff Chair

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**PLANTING DATES** - Our recommended seeding dates for Arkansas begin as early as March 25 for south Arkansas and April 1 for central and north Arkansas. The optimum planting date window is April 1 to May 20 for South Arkansas, April 15 to May 10 for North Arkansas and April 10 to May 15 for Central Arkansas

We will soon be out of the optimum window for planting rice. We still have time to get the crop planted in the optimum window, but each rainfall seems to push us later and later.

The following table from the Rice Handbook gives you an idea of what percentage of yield you may be giving up, if you have to plant after the last day for optimum yield.

Predicted Relative Yield for Drill Seeded Rice in Central Arkansas by Seeding Date			
Relative Yield Potential	Actual Yield Potential	Seeding Date Range	
%	Bushels/Acre	Begin	Cut-off
95.0-100	143-150	March 23	May 20
90.0-94.9	135-142	May 21	June 1
85.0-89.9	128-134	June 2	June 11
80.0-84.9	120-127	June 11	June 18
70.0-79.9	105-119	June 19	June 30

**RICE SEEDING RATES** – After variety selection and pre-plant fertilizer, the next decision that should be made is seeding rate.

The recommended seeding rate for drill-seeding most varieties is 30 seeds per square foot to achieve a stand of 15 to 20 plants per square foot. Since the seed size differs among varieties, the actual seeding rate in pounds per acre varies by variety.

An Extension publication, “RICESEED” (Rice Information Sheet No. 163), is available to help calculate seeding rates for specific varieties and is also available in a computer program available on the Cooperative Extension Service Web site.

In addition to calculating seeding rates for specific varieties, these resources also assist in making adjustments for soil types, planting dates, planting systems, seedbed condition, etc.

The computer version can be found at: <http://riceseed.uaex.edu>

It also can assist in calibrating drills by giving the number of seed required per row foot, depending on row spacing, to achieve a given seeding rate. For example, seeding rates of 30 seeds per square foot translate to 73 lbs/acre for Wells. Reduced seeding rates have been on the radar screen lately across the Mid-South.

We have conducted research at several locations in Arkansas on both silt loam and clay soils to evaluate optimum seeding rates for rice.

Our long-standing recommendation has been to plant 40 seeds per square foot hoping to achieve a plant population of 15 to 20 plants per square foot. However, we have been able to achieve this stand density and optimum yields while reducing the seeding rate by about 25%.

This relates to approximately 65–70 lbs per acre of seed for most long grain varieties and 80 lbs/acre for most medium grain varieties. Economic analysis also confirms that 65 to 70 lbs per acre is the optimum seeding rate for most long grains.