



Dr. Chuck Wilson, Dr. Gus Lorenz, Dr. Bob Scott, and Dr. Rick Cartwright

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**INTRODUCTION** – If you know of someone who would like to be added to the e-mail list to receive this newsletter, please send an e-mail to: [cwilson@uaex.edu](mailto:cwilson@uaex.edu).

**CROP CONDITION AND STATUS** – As of June 22, rice planting is essentially complete as 100% has reportedly been planted and 99% emerged. The crop condition is reported as 45% good or excellent, 40% fair, 14% poor, and 1% very poor.

Average temperatures were 3 to 7 degrees above normal for the week ending June 22 with highs approaching 100 degrees at several locations. Two straight weeks of above normal temperatures has allowed the crop to develop at a pretty fast pace. Rainfall for the week ending June 14 ranged from none at several locations to a high of 2.3 inches at Jonesboro. Overall, soil moisture supplies were 22% short, 70% adequate, and 8% surplus.

The USDA planting intentions report that was released at the end of March shows that rice acreage is expected to increase by 13% from 2008. The anticipated acreage of 1.581 million acres is the largest acreage since 2005, when we planted an estimated 1.635 million acres. The amount of medium grain acres in Arkansas is estimated at 160,000 acres, an increase of 60,000 acres from 2008. However, feedback I have received from growers, seed dealers, and consultants suggest that this number is likely to be on the low side.

Because of the extensive rainfall and flooding, my estimate is that approximately 150,000 acres of intended rice did not get planted. This reduces the total acreage to approximately 1.43

million acres, which is still a slight increase over 2008. However, with an increase in medium grain acreage, the long grain acreage is most likely less than 2008.

Based on preliminary estimates, it appears that the top five varieties planted in the state include Wells (18%), Jupiter (16%), Rice Tec CL XL 729 (15%), Francis (11%), and CL 151 (9%). Clearfield rice is planted on just over 40% of the acreage and hybrid rice makes up approximately 30% of the acreage for 2009.

**RICE DD50 PROGRAM**—The DD50 program has been updated for the 2009 growing season and is available at <http://dd50.uaex.edu>. If you choose to not use the internet, enrollment cards can be submitted to your local county Extension agent and they will send you a report as has been done since the program originated. This program can be very helpful in time and labor management for your rice crop. It predicts the timing of 30 critical stages and management practices throughout the growing season. These predictions include timing for nitrogen fertilizer application, herbicide timings and cutoffs, midseason growth stages, scouting periods for insects and diseases, irrigation termination, and harvest. New varieties for 2009 include Bowman, Catahoula, CL 151, JES, Neptune, Taggart, and Templeton.

To enroll, the field size, variety, and emergence date are needed. Farmers are encouraged to enroll all fields, or at least all acres, even if several fields have the same variety and emergence date. The information generated from this program is useful to farmers but also helps the industry in preparation for harvest. It provides an estimate of harvest dates and variety

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distribution by county that the mills can use to “gear up” as the harvest season begins.

I have had a few questions about the need for updates on DD50, considering the spring weather we have experienced. Data from the DD50 study located at Stuttgart is showing that the predicted date for half-inch internode is within 2 days of the actual date. Feedback from fields enrolled in the Rice Research Verification Fields also indicate the predicted date for half-inch internode elongation is within two days of the actual dates.

For more information contact your local County Extension office. (Chuck Wilson)

### **NITROGEN MANAGEMENT**

The early-seeded fields are approaching (or have already reached) half-inch internode while some fields have just been planted. Some growers have had trouble getting pre-flood nitrogen applied onto dry soil in a timely manner. Frequent rainfall throughout the month of May and into June for several fields have resulted in difficulty drying out to apply the nitrogen. We recommend urea be applied onto dry soil prior to establishing the permanent flood. If more than 2 days are required to establish the permanent flood, Agrotain should be used with the urea to reduce volatilization losses.

If the fields are wet when the pre-flood urea needs to be applied, the best option is to wait until the soil dries. A delay of up to 10 days after the last DD50 recommended date is better than applying the urea into muddy soil or directly into the floodwater. If it becomes necessary to apply the urea to muddy soil, apply Agrotain-treated urea to the muddy soil. The

least effective method of applying pre-flood nitrogen is directly into the flood, even if Agrotain is used. When urea is applied into the flood during tillering, as much as 50-60% loss of the nitrogen is possible and 30-40% loss is common.

The most important nitrogen application for setting yield potential is the pre-flood nitrogen. Midseason nitrogen however, is important for maintaining yield potential. This is particularly true for fields where pre-flood nitrogen was applied in less-than-ideal conditions. In most situations, one application is sufficient at midseason. For standard varieties, this can be applied anytime between panicle initiation (green ring) and half-inch internode elongation (panicle differentiation). If the efficiency of the pre-flood nitrogen appears to be reduced and the crop shows signs of nitrogen deficiency prior to midseason, it is better to apply now rather than later. Don't wait on midseason for the midseason fertilizer if the crop begins to yellow beforehand.

The second application of urea to hybrid rice is recommended at the late boot stage rather than midseason. University of Arkansas research suggests no grain yield or milling yield differences when the second application is made at half-inch internode or late boot. However, we have observed reduced lodging when the application was made at the late boot stage rather than at the normal midseason timing.

Over the years, growers have had a tendency to apply the second application earlier than the late boot stage because the rice appears to “yellow up” or “run out” of nitrogen. If the crop is in fact deficient in nitrogen, I think this is the best thing to do. However, I do not advocate fertilizing strictly based on color. Some

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varieties, particularly the hybrids, tend to be more pale green than some of the conventional varieties. These varieties are genetically paler green and will not turn “dark green” regardless of how much nitrogen is applied.

If a situation is suspected that may suggest nitrogen deficiency, look at the canopy density in addition to color. If the rice is nitrogen deficient, the canopy closure will be less than desired in addition to abnormally yellow discoloration.

### **HERBICIDE DRIFT**

As our rice crop moves into the reproductive stages across the state it was worth a reminder to all of you about just how sensitive rice (after PI stage) is to glyphosate drift. Most of our soybeans are now in the ground, however, many are just now or still yet to be sprayed for weed control. This has set up a potentially dangerous situation for drift onto rice. In our studies, rates as low as 0.1 lb ai per acre of glyphosate can blank rice seedheads and causes irreversible yield loss. Please take all possible precautions when spraying glyphosate next to rice in the reproductive stages (image below).

We are also at or near the time when it is OK to use 2, 4-D in rice. Remember to make 2,4-D applications at the correct DD50 threshold or when the first elongating internode begins movement to ½ inch long. Do not apply 2, 4-D when internode exceeds ½ inch. 2, 4-D amine applied at 2 to 3 pints per acre (of a 4 lb/gallon concentration) will provide good control of broadleaf and aquatic weeds including small flatsedges, dayflower, ducksalad, hemp sesbania, and water hyssop. Add propanil for improved control of northern jointvetch and eclipta.



### **RICE RESEARCH VERIFICATION PROGRAM** (Stewart Runsick & Ralph Mazzanti)

**Clay County** – The rice emerged on 31 May. Stand counts taken last week indicated 8 plants/ft<sup>2</sup>. The rice is 3 leaf stage. Weeds present are barnyardgrass, broadleaf signalgrass, sprangletop, yellow nutsedge and coffeebean. Recommendation: 4 oz/acre of Newpath 0.33 oz/acre of Permit with surfactant. The field was scheduled to be sprayed this week, but the wind was not right and 3 inches of rainfall was received.

**Crittenden County** – The field was sprayed last week with SuperWham. It rained the next day. Urea was applied this week. Barnyardgrass has emerged since the herbicide was applied. Recommendation: 17 oz/acre RiceStar HT and flood.

**Cross County** – The field has been flooded for three weeks. The rice began to yellow up this

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week and plane streaks are noticeable. Green ring is predicted for 6/19. Recommendation: 100 lb/acre of urea.

**Jackson County** – 240 lb/acre of urea was applied Monday and the field is flooded.

**Lawrence County** – The field was re-planted on 20 May. Command and Glyphosate was applied. The emergence date was 31 May. Stand counts taken last week indicated 8 plants/ft<sup>2</sup>. The first Newpath application was applied this week.

County	Seeding Date	Variety/Hybrid	Emergence Date	Stand Plants /ft <sup>2</sup>
<b>North Arkansas</b>				
Clay	5/22	CL XL 745	5/31	8
Crittenden	4/27	Wells	5/13	12
Cross	4/7	Jupiter	4/26	20
Jackson	4/7	CL XL 745	4/27	5
Lawrence	4/25	CL XL 729	5/31	8
Lonoke	4/10	CL XL 729	4/26	12.6
Mississippi	4/27	CL XL 745	5/12	9
Poinsett (North)	4/26	Wells	5/13	9
Poinsett (South)	4/25	Jupiter	5/10	16
Prairie (North)	4/26	Jupiter	5/4	11
Randolph	4/27	CL 151	5/12	19
White	5/22	CL XL 729	5/30	8.5
<b>South Arkansas</b>				
Arkansas (North)	4/23	XL 723	5/1	14
Arkansas (South)				
Ashley	5/1	CL XL 729	5/14	10
Chicot	4/23	CL XL 729	5/7	9
Clark	4/26	CL XL 729	5/11	8
Desha	4/22	Wells	5/14	18
Drew	5/22	CL XL 729	6/4	8
Jefferson	4/26	CL XL 746	5/10	12
Lee	4/9	Jupiter	4/17	34
Lincoln	4/24	CL XL 729	5/1	9
Prairie (South)	4/25	Cheniere	5/8	22

**Lonoke County** – The field has been flooded for 3 weeks and the rice looks excellent. Some grass has emerged in the bottom of the field

where it took a while to get flooded. We will keep an eye on it.

**Mississippi County** – The field got sprayed 31 May with Newpath + RiceStar HT. It rained a couple of days after the application. The herbicide appears to be working on the sprangletop and other grasses. The levees were pulled this week. The final Newpath application with Permit is on the books. Urea will be applied at a rate of 300 lb/acre.

**Poinsett County (North)** – The field has been ready to fertilize and flood for a couple of weeks. Rainfall and made it difficult to get everything done. Barnyardgrass, ducksalad, and red stem are present. Recommendation: Regiment 0.5 oz/acre with Triple Play and 260 lb/acre of urea.

**Poinsett County (South)** – Wind and rain has caused problems getting applications made in this field also. Barnyardgrass is present now. The levees will be sprayed with Facet and Aim. Recommendation: Regiment 0.6 oz/acre with Triple Play, 230 lb/acre of urea.

**Prairie County** – Barnyardgrass and coffeebean is scattered across the field. Recommendation: Regiment 0.6 oz/acre with Phase II, 300 lb/acre of urea.

**Randolph County** – The field was sprayed with the second Newpath application and was fertilized last week. The field is now flooded. There was a lot of red rice in the field, but the Newpath appears to be working.

**White County** – The rice was 3 leaf this week. 2-3 leaf red rice was also present. Stand counts taken indicated 8 plants/ft<sup>2</sup>. Newpath was applied last week.

**Lee County** - This field of Jupiter is clean. Urea (250 lb/acre) was applied and field has been flooded for over two weeks. The field has stacked levees and multiple inlet irrigation is being used. Rainfall amount 2.3 inches.

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**Prairie County** - This field of Cheniere is growing off well. The burn from the RiceBeau herbicide was short lived. The field is now flooded and stand is very thick. The field received 0.8 inches of rainfall last week.

**Arkansas County** - This field of XL 723 looks excellent. RicePro and permit did a good job on the signalgrass and nutsedge. Urea (200 lb/acre) was applied and field is now flooded. Rainfall for the week totaled 1.5 inches.

**Jefferson County** - This is a furrow-irrigated field of CL XL 729. The rice is at the 5-leaf to early tillering stage. Nutsedge, smartweed, signalgrass and morninglory were present. To clean up the field, we recommended 4 oz/acre Newpath, 0.8 pt/acre Command, 0.33 oz/acre Aim, and 1 qt/acre crop oil. One application of urea (100 lbs/acre) has been applied. Poly pipe has been laid. Recent weekly rain has delayed furrow irrigation. Rainfall for the week totaled 1 inch.

**Lincoln County** - This field of CL XL 729 is ready for second postemergence herbicide application. Smartweeds, eclipta, and morninglory were present. To clean up the field, we recommended 4 oz/acre Newpath, 2 oz/acre Strata, 1 oz/acre Aim, and 1 qt/acre crop oil. We recommended 270 lb/acre of urea followed by the permanent flood. The field received 1.6 inches of rainfall for the week.

**Ashley County** - This field is now at early tillering stage. The levees have finally been established. Nutsedge, morninglory, groundcherry, and broadleaf signalgrass are present. To clean up the field, we recommended 4 oz/acre Newpath, 0.5 oz/acre Aim, and 1 qt/acre crop oil. After the herbicide application, we recommended 270 lb/acre of urea followed by the permanent flood.

**Chicot County** - This field is at the 4-5 leaf stage. The levees have now been seeded. Broadleaf signalgrass and coffeebean is

scattered across field. To clean up the field, we recommended 0.5 lb/acre Facet, 1 oz/acre Aim, and 1 qt/acre crop oil. After the herbicide application, we recommended 270 lb/acre of urea followed by the permanent flood.

**Drew County** - This field was planted on 22 May with CL XL 729 variety. Rice is now at 2-3 leaf stage and ready for first herbicide application. Northern jointvetch, crabgrass, signalgrass and barnyardgrass are present. To clean up the field, we recommended Newpath (4 oz/acre), Strata (2 oz/acre), and crop oil (1 qt/acre). Stand counts taken indicated 8-9 plants/ft<sup>2</sup>.

**Desha County** - This field of Wells is at early tillering stage. The field is split with a road through the middle. Broadleaf signalgrass and morninglory are present. To clean up the field, we recommended 3 qt/acre propanil, 0.5 oz/acre Aim, and 1 qt/acre crop oil. On the north field, we recommended 260 lb/acre urea plus 50 lb/acre DAP. On the southern field, we recommended 260 lb/acre urea plus 100 lb/acre DAP.

**Clark County** - The field was sprayed 11 June with Newpath plus crop oil. Urea was applied at 270 lb/acre. The field is now being flooded. If you have questions, feel free to contact us or your County Extension Agent.

#### UPCOMING EVENTS

Delta Classic Scholarship Golf Tournament - Helena Country Club - July 24, 2009. **Contact:** Dr. Robert Bacon (479-575-2354)

Lawrence/Randolph County Field Tour - August 4, 2009. **Contact:** Herb Ginn (870-886-3741) or Mike Andrews (870-892-4504)

NEREC Field Day - Northeast Research and Extension Center - Keiser, AR - August 5,

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2009. **Contact:** Dr. Fred Bourland (870-526-2199)

The authors greatly appreciate the feedback and contributions of all growers, county agents, consultants, and other rice industry people.

Northeast Arkansas Field Day – Wiener, AR – August 7, 2009. **Contact:** Rick Thompson (870-570-4490)

Rice Field Day – Rice Research and Extension Center - Stuttgart, AR - August 12, 2009. **Contact:** Dr. Chris Deren (870-673-2661)

Pine Tree Field Day – Pine Tree Branch Experiment Station - Pine Tree, AR – August 20, 2009. **Contact:** Roger Eason

**County Rice IPM Meetings:**

Lee County – Moro – June 25, 2009 – 11:00 am. **Contact:** Lazaro English 870-295-7720

Woodruff County – Hunter – June 30, 2009 – 11:00 am. **Contact:** Eugene Terhune 870-347-2556

Woodruff County – Hunter – July 28, 2009 – 11:30 am. **Contact:** Eugene Terhune 870-347-2556

**Other Field Days:**

Progeny Field Day – Wynne – July 23, 2009

Cache River Valley Seed Field Day – Cash – August 19, 2009

If you know of other events that should be listed, please let me know. .

**ACKNOWLEDGMENTS:**

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