UofA UNIVERSITY OF ARKANSAS DIVISION OF AGRICULTURE

Arkansas County Extension Service

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Note: For producers who missed our Pesticide Applicator Trainings but need re-certification for their 2008 license, contact the Extension Office for a list of trainings being offered in surrounding counties.

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Dear Crop Producers and Industry Representatives,

The **2007 Edition of the Soybean Performance Results for Full-Season & Double-Crop Roundup Ready Production Systems in Arkansas** is enclosed for your information. The information presented in the Soybean Update is the result of test plots in seven locations in Arkansas.

Proper variety selection involves knowledge of yield history, maturity, disease reaction, and many other factors. Many important characteristics are listed in this update for varieties, which, based primarily on yield potential, are considered adapted to Arkansas conditions. The location, soil description, and cultural information for each of the soybean performance trials conducted in 2007 are found in **Table 1**.

Since variety performance varies from year to year, two-year yield averages are better predictors of performance than data from a single year. Superior performance across several locations suggests that a variety has wide adaptability; thus two-year and multi-location yields are also useful in variety selection. Producers are encouraged to closely evaluate variety trial results from locations that best typify their farming conditions.

Soybean Rust Forum

You are invited to attend the Soybean Rust Forum in Brinkley, Arkansas on March 4, 2008 from 8:30 a.m. to 12:00 noon, with lunch being provided. It will be held at the Brinkley Convention Center. This forum is opened to all who are interested in knowing what is in store for Soybean Rust in 2008; this includes producers, consultants, and county agents. **Producers and consultants should register through their County Agent by February 20th.**

Ag Publications Now Available

Crop Budgets are available at the Extension Office or at the following website: http://www.uaex.edu/depts/ag_economics/crop_budgets.htm
MP44 "Recommended Chemicals for Weed and Brush Control," MP144 - "Insecticide Recommendations for Arkansas" and MP154 - "Plant Disease Control Products Guide" are also available at the Extension Office.

Spring Wheat Fertility Management

Nitrogen: Spring nitrogen topdressing time is now upon us. The following table contains current spring nitrogen recommendations for wheat. It is preferable to split apply the spring nitrogen with the first application applied in early to mid-February and the second application 3 to 4 weeks later. The first application should contain half or slightly more than half of the total spring nitrogen that is going to be applied.

SOIL TYPE	FOLLOWING RICE	ALL OTHER CROPS
	Lbs Spring Nitrogen/Acre	
Sandy Loam	90 – 100	90
Sandy Loam, > 70 bu/a Yield Potential	110 – 130	110 – 120
Silt Loam, Silty Clay Loam, Clay Loam	100 – 110	90
Silt Loam, Silty Clay Loam, Clay Loam > 70 bu/a Yield Potential	120 – 140	110 – 120
Clay	140 – 150	140
Clay > 70 bu/A Yield Potential	160 – 180	160 -170

With the high price of fertilizer this year, some producers may want to cut fertilizer rates to save money. However in light of the current grain prices, cutting back on fertilizer would be the wrong thing to do. With high grain prices, it does not take much of a yield response to get your fertilizer money back, so DON'T CUT BACK ON FERTILIZER!!

On many fields this year with good stands, adequate plant tillering, and good drainage, 70 bu/acre + yields are achievable. When looking at nitrogen recommendations keep this in mind. Example; a typical silt loam soil following soybean with a yield potential of 70 bu/acre or greater would call for 110-120 units of spring nitrogen. When following rice, more spring nitrogen is generally going to be needed for optimum yields regardless of soil type.

Sulfur: If sulfur deficiency has been a problem in the past or you suspect that it may be a problem, the addition of 50 to 100 lbs/acre of ammonium sulfate with the first spring nitrogen application should be sufficient to correct any sulfur problems. Every year there are a few more fields that show up with sulfur deficiency that have never before had problems. Typically, sulfur deficiency occurs in fields with sandy soils, but it has been observed on heavier soils on occasion. Sulfur deficiency will cause yellow leaves in the top of the plant. Nitrogen deficiency will cause the bottom leaves to generally be yellow.

Phosphorus: Wheat often turns purple this time of year due to wet and cool soil conditions, even though soil tests show adequate phosphorus levels in the soil or that recommended phosphorus levels were applied at planting. Some varieties also turn more purple than others, as noted in several variety trials over the years. The first instinct is to apply more phosphorus with the first nitrogen application. However, this is not necessary if adequate phosphorus was applied at planting. If no phosphorus was applied at planting and soil levels are low, applying phosphorus with the first spring nitrogen has been shown to be beneficial.

Wheat Weed Control

It is not too late to take care of some troublesome weeds in wheat. One problem with spraying this time of year is related to temperature. When it gets cold, many enzyme inhibiting herbicides, like Osprey are less effective than usual. It's like that statement on many herbicide labels that reads "spray to actively growing weeds." Below 45 or 50 degrees, even winter wheat weeds are not actively growing for the most part, so control may not be as effective as it would be if temperatures were above 55 degrees for two or three days before and after application. In some cases, it may be better to delay applications.

In the case of Osprey, this can be difficult because of a statement on the label that says that injury may occur if nitrogen fertilizer is applied too close to an Osprey. Just try and make sure that fertilizer activation with rainfall does not fall at the exact time of an Osprey application and you should be okay. Also, you do need to use an MSO at 1% v/v with Osprey. Crop oils have been shown to not work as well. Osprey at the full rate is still very active on larger ryegrass and does a fair job on bluegrass, many broadleaves and vetch in late January and early February. It can be tank-mixed with Harmony Extra for garlic, but stay away from tank-mixes with 2,4-D, dicamba or Sencor.

If you do not feel that you have Hoelon resistant ryegrass, then Axial or Hoelon is also a good option also for spring ryegrass control. You will need the full labeled rate of either herbicide for best results. Do not tank-mix broadleaf stuff with Hoelon. As for the Axial, some broadleaf tank-mixes are allowed, but since we have not had a good look at these, the best advice on that is to follow the label.

If you are planning to grow soybeans behind, do not miss a chance to kill horseweed in the wheat crop prior to joint elongation. Harmony Extra (0.5 oz/A) plus 1.0 to 1.5 pints per acre of 2,4-D is great. For really heavy infestations add 4 oz/A of dicamba to the mix. This will typically kill young horseweed. There can be some slight damage to wheat with this or any 2,4-D application to wheat, but as long as it is prior to joint movement, the wheat should be fine. This treatment will also control mayweed, vetch, mustards, garlic and many other broadleaf weeds. Again, do this for your soybean crop, as much as your wheat. It will be much easier to treat the horseweed in wheat than to deal with glyphosate resistant horseweed in-season or pre-plant in soybeans, where options are limited.

Many broadleaf weeds are not that damaging to wheat yields at the end of the year, unless they are just haired over thick. Chickweed, henbit, shepherd's purse, and many types of mustard simply do not compete well with an annual grass crop like wheat. Mayweed, plains coreopsis and buttercup are slightly more competitive and should most always be controlled. Wild buckwheat and vetch are vines and will cause major harvest problems. The garlic and onion complex causes contamination of harvested grain and should be controlled. Harmony Extra at 0.5 oz/A is the industry standard for garlic and onion and many of these other broadleaves. 2,4-D is cheap and will do a fair job on garlic/onion. Peak is also an excellent late spring garlic control herbicide; however, it has crop rotational issues with soybeans.

Annual bluegrass is usually not that competitive with wheat. Simply adding 5 or 10 extra units of nitrogen will do about what controlling bluegrass will in terms of yield. Osprey is the best thing we can recommend this time of year for bluegrass control, if you are mad at it and want to get rid of as much of it as possible. Earlier in the season, Sencor would have been recommended. However, some varieties are not tolerant to Sencor. Sencor tolerance screening is being conducted, and more data on this should be available in time for next fall.

Please contact our office in DeWitt or Stuttgart, if you have questions regarding the management of your wheat crop.

Sincerely,

Grant Beckwith	Carly Prislovsky	Ken Adams
County Extension Agent - Agriculture	County Extension Agent - Agriculture	County Extension Agent – Agriculture

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Enclosure