RICE

U of A Rice Expo Planned for Family

The 3rd annual Arkansas Rice Expo is scheduled for Friday, August 2nd at the Grand Prairie Center in Stuttgart. Many U of A, Division of Agriculture researchers and Extension professionals have worked hard to plan a fun and educational day for the whole family. See the enclosed insert for more details.

We want to encourage you to take a day away from the farm or agribusiness to attend the expo for an update on the latest U of A rice research findings and recommendations. Your spouse and children will also have an opportunity to choose from several presentations and activities planned just for them. Give the Extension office a call if you have questions or need directions. Everyone is invited to attend.***

Stinkbug Thresholds in Heading Rice

Once rice begins heading is should be checked weekly for the rice stink bug. They will feed on developing kernels resulting in blanks during the milk stage of development. As stink bugs continue to feed during the dough stage of development they weaken kernels resulting in lower milling and head rice yields.

Scouting during early morning or late evening gives the most reliable estimate of stink bug levels. A 15 inch diameter sweep net should be used to assess stink bug populations. The threshold to trigger an insecticide application the first 2 weeks after 75% heading is when an average of 5 or more stink bugs are found per 10 sweeps, or when 2 or more stinkbugs per square yard are present. Once rice is entering the dough stage the threshold goes up to 10 stink bugs per 10 sweeps, or when 3 or more stinkbugs per square yard are present. Several locations should be checked for each field.

Insecticides listed for control of the rice stink bug in the MP 144 include Seven, Malathion, Prolex, Proaxis, Declare, Karate Z, and Mustang Max. Sevin is rated a 7 on control. Malathion gets a 5 ranking while the other labeled products are each given a 6 rating. Repeat treatment may be needed if stinkbug numbers are high.***

Monitor for Blast

According to Dr. Yeshi Wamishe, Extension Plant Pathologist for the U of A, Division of AG, if you are growing hybrid rice, it is not as likely that blast will reduce your crops yield potential. Most of the commercially available hybrids are rated resistant to moderately resistant to blast. A couple of conventional varieties also rated resistant are Catahoula and Templeton. Wamishe does recommend regularly scouting all your rice fields for blast and other diseases since resistance can break down over time. Please let us know if you find blast on the farms so we can submit samples to Dr. Wamishe for testing of resistance for known races of blast in Arkansas.

If you are growing a variety like Roy J or CL 151, rated susceptible and very susceptible to blast, respectively, monitor them closely for blast. If leaf blast symptoms are found, these fields will need two fungicide applications. The first shot needs to go out at 10% heading (when 50 % of the main tillers are cracking the boot), followed by the second application 5-7 days later.

Some varieties like Taggart and CL 161 are rated moderately susceptible to blast and fall somewhere in the middle of the two extremes just mentioned. Blast development on these cultivars can sometimes be managed by running the flood water a little deeper (4+ inches) as heading approaches or may be only one fungicide application will suffice just as the rice is beginning to head. Quadris, GEM, Stratego, and Quilt are the fungicides listed for blast control in the MP-154.

Wamishe notes that Blast is more likely to be a problem on fields with a history of the disease, on fields with lighter textured soils, were high nitrogen rates have been used, and were flood management has been difficult. ***
SOYBEANS

ETgages Being Evaluated for Irrigation Management

Thankfully most growers were able to catch a good rain with the showers that passed through the last few days. Most early planted soybeans are setting pods and will require significantly more moisture from now until maturity. One tool currently being evaluated by U of A Extension Specialists and County Agents, to better time irrigation, is the atmometer (ETgage).

Three ETgages are being monitored in Greene County. They are located on the Da-Vault Farm (Cotton Verification field) south of Mounds, the Threlkeld farm (Soybean Verification field) south of Paragould, and the Norwood farm north of Stanford.

ETgages are designed to provide a visual reading of the water being lost from a cotton, corn, or soybean field through evapotranspiration (ET). They are based on monitoring the water deficit building in a field to determine when irrigation is needed. Site markers on the ETgage can be reset after a rain or irrigation to reflect the up to date soil water balance (0 if the field receives a saturating rain or is surface irrigated). University personnel hope the ETgages may be a practical, more user friendly tool for farmers to help time irrigation as compared to the Irrigation Scheduling computer program some have used in the past.***

Soybean Insect & Disease Update

Make sure to regularly check soybeans for foliage and pod feeders. According to Dr. Glenn Studebaker, Arkansas Extension Entomologist, foliage feeding worms you may find in soybeans include the corn earworm, soybean looper, green cloverworm, velvetbean caterpillar, garden webworm, yellow striped armyworm, beet armyworm, and fall armyworm. Before bloom, treat for any of these worms if they cause over 40% defoliation. After bloom, treat for over 25% defoliation.

When soybeans start setting pods they should be watched very closely for corn earworms. They prefer to feed on pods rather than foliage and can at high levels of infestation cause significant yield losses. Fields with plants not covering the row middles are the most often infested. This is often the case on late planted and doublecrop beans which are abundant this year along with a large acreage of corn.

The threshold to treat for earworms in soybeans is 9 per 25 sweeps. Sweep deep into the canopy to get more accurate estimates of worm numbers. You also need to observe plants for presence and degree of pod feeding. If you have row beans, the insecticide threshold trigger is 2 per row foot (28,000/acre) that are 1/2 inch or longer (hopefully beneficials are working on the smaller worms). T

Studebaker notes that several synthetic pyrethroids and carbamates are labeled for control of corn earworm. He also advises using some of the “softer insecticides” in other chemistries like Belt, Steward, and Tracer. They are not as harsh on beneficials in the field. In addition, earworm resistance seems to have increased to pyrethroids the last couple of seasons resulting in them not being as consistent for controlling earworms as they have in years past.

We are monitoring bollworm (corn earworm) moth trap numbers on traps set in Fontaine, Mounds, Paragould, and Stonewall. Last week (July 18) trap numbers were down from the previous 2 weeks.

Stinkbug numbers also generally build up in August. Remember stinkbugs can feed for several weeks making a dent in soybean yield and quality. Make sure to treat them when threshold numbers are reached (9 stinkbugs per 25 sweeps or 1 per row foot (14,000/acre) when using a shake sheet).

Some soybean growers may also be considering applying a fungicide to their crop. The U of A Extension service does not recommend a blanket application of a fungicide unless you have disease present in the field or are in the seed production business. The main two diseases to scout for are Frogeye leaf spot and aerial web blight. Check out the MP 154 which gives more details on the need to use foliar fungicides in soybeans. More details on disease control will be provided in your August newsletter.

A final note on Asian soybean rust. It is not in Arkansas at present. Several university and industry folks track its development. We will promptly let you know what actions to take if it becomes a potential threat.***
8:00 - 9:00  Registration/Exhibits Open
9:00 - 11:00  Field Tours
9:00 – 11:00  Joint Ag Committee Hearing  UAPCC Seminar Room

**Grand Prairie Center Auditorium**

9:00 am  Virtual Field Tour

11:00  Welcome/Introductions  Dr. Chuck Wilson
11:10  Rice Research and Promotion Board Report  Mr. Rich Hillman
11:15  Soybean Promotion Board Report  Mr. Shannon Davis
11:20  Corn & Grain Sorghum Promotion Board Report  Mr. David Gammill
11:25  Wheat Research and Promotion Board Report  Mr. Tim Smith
11:30  USDA-ARS Report  Dr. Anna McClung
11:35  Division of Agriculture Report  Dr. Mark Cochran

11:45  Keynote Address:  The Honorable Senator Mark Pryor

**Grand Prairie Salon A & B**

10:00 am  Raised Bed Gardening – Is It For You?  Janet Carson

12:15  Lunch  (Luncheon Speaker)  Ms. Betsy Ward  - USA Federation

**2013 RREC Field Tour** (3 chances - 8:30, 9:00, and 9:30 buses - approx 2.5 hour trip)

**Stop Number 1**
- Depart GPC for RREC
- Breeding for higher yield and quality  Dr. Xueyan Sha
- Managing Bacterial Panicle Blight and other rice diseases  Dr. Yeshi Wamishe
- Hybrid Rice for Arkansas Rice Farmers  Dr. Greg Berger

**Stop Number 2**
- NST*R implementation in Arkansas  Dr. Trent Roberts
- Nutrient Management for Rice Rotations  Dr. Nathan Slaton
- Optimum Seeding Rates for New Rice Varieties  Dr. Jarrod Hardke

**Stop Number 3**
- Rice Weed Control  Dr. Jason Norsworthy
- Irrigation Management  Dr. Chris Henry
- Soybean Management  Dr. Jeremy Ross
- Depart RREC for GPC
U of A Rice Expo Planned for Family

Rice Recipe Contest - sponsored by Producers and Specialty Rice
UAPCC Room 103 B  8:30-9:00  Check-in  9:00-11:00  Judging

4-H Hands On Science, Technology, Engineering and Math (STEM) Activities
The Mack’s Prairie Wings Meeting Room
8:00-11:00  STEM Activities
  Make & Take Rice Heating Pads
  Project Learning Tree

Family and Consumer Sciences Seminars - Classroom A

9:00  Strength Training with Medicine Balls  Heather Reed & Lana Warfield
9:30  Getting Our Hearts Right  Dr. Wally Goddard
10:00  Strength Training with Medicine Balls  Heather Reed & Lana Warfield
10:30  Gluten Free with Rice  Keith Cleek

Living Well With Rice Cooking Demonstrations - Classroom B

9:15  Spinach Rice Balls  Debbie Baker
10:15  Praline Pumpkin Rice Pudding  Sloane Holzhauer

Agriculture Seminars - Classroom C

9:00  Arkansas Water Plan  Tom Riley
9:30  Farm Bill update  Harrison Pittman
10:00  Market Trends and Update  Dr. Robert Stark
10:30  Yield Mapping Seminar  Jeremy Bullington, Greenway Inc.

Technology in Arkansas Agriculture Seminars (9:00 and 10:00 am sessions - 1 hour each) - Classroom D

  iPhone/iPad apps that make Arkansas Agriculture Efficient  Mike Hamilton
  Apps designed for Agriculture by the University of Arkansas  Dr. Dharmendra Saraswat

Exhibits For Whole Family

Agriculture

N-ST*R
Integrated Pest Management
Flag the Technology
Verification Programs
Grain Bin Safety
Sprayer Cleanup Program
Dale Bumpers ARS
Soybean Promotion Board
Community Development

Family

Farm to You
Extension Exercise
Family Life Programs
Preventing Poisoning in your Home
Living Well with Rice Tasting
Health Screening – UAMS East

Youth

Youths will receive a passport to complete as they participate in each of these activities.
Completion of passport guarantees a prize.

  Pedal Tractor Derby
  Arkansas Game and Fish Commission Aquarium
  Mack’s Youth Archery
  Youth BB Shoot
  National Guard Football and Basketball Toss
  Farm Bureau Rice Mill and Combine Simulator
  Ag Pro Train
  Crop/Seed Identification
  4H Youth Opportunities

Horticulture (Outside, West End of Building)

  Plantings for Raised Bed Gardening
  Constructing Raised Beds
  Protecting Storm Run-off With Rain Barrels
  Master Gardener Demonstrations
According to Dr. Travis Faske, Arkansas Extension Plant Pathologist, Southern rust was found July 19th in a corn field near Caraway. This does not mean fields should automatically be protected with a fungicide, but should be scouted (especially your late planted fields) for southern rust since it has been detected in this region.

Southern rust pustules are circular to oval, small, and light cinnamon brown to orange in color. Typically, southern rust sporulates on the upper leaf surface in contrast to common rust that sporulates on upper and lower leaf surfaces. Common rust pustules are elongate, and golden brown to cinnamon brown in color. When scouting a field, look for common rust in the lower canopy (3 ft. to bottom leaf) and southern rust at mid canopy (4 to 5 ft. from ground). Scout for Southern rust by checking along field borders, a few feet into the field, were the canopy gets dense favoring better disease development. Questionable samples should be submitted to the Plant Health Clinic in Fayetteville through the County Extension Office.

Rust spores are windblown from infected corn leaves progressively northward during the growing season. Free moisture as dew or light rain is necessary for spores to germinate and infect. Symptoms appear from 3 to 6 days after infection and by 7 to 10 days, the pustules rupture to expose mature rust spores. Conditions that favor disease consist of high temperatures (80 to 90+ F), high relative humidity, and frequent rainfall. Weather the last few days has been favorable for southern rust pustules to sporulate making them much easier to spot in the field.

Faske advises that fungicides are effective at suppressing southern rust, though there is no economic threshold for a fungicide application. Some fungicide efficacy data on southern rust has been compiled by the corn disease working group. Producers should consider yield potential, hybrid susceptibility, growth stage, and the weather forecast when southern rust threatens. A fungicide application at tasseling or silking when southern rust has been observed on a susceptible hybrid with good yield potential may be the most beneficial at suppressing disease development. Under heavy pressure, an additional application may be needed for season long crop protection.

The majority of corn in Arkansas will mature before rust is an issue and will not likely benefit from a fungicide application. Faske notes that corn within two weeks from physiological maturity (i.e. black layer) that has not yet developed rust, should be able to retain effective leaf tissue long enough to complete kernel fill, essentially out running yield loss form rust that may show up later. ***

Blake McClelland, Cotton Verification Coordinator for the U of A, Division of AG, says that most cotton fields in Northeast Arkansas are expected to reach cutout, or NAWF 5, (5 nodes above first position white flower) during early August. Once NAWF5 is reached, make sure to keep up with heat unit (HU) accumulation for each of your fields.

According to McClelland, you can safely stop applying insecticides for fruit feeding insects once bolls mature enough past cut out, to be too tough for the insects to penetrate. U of A research has shown that plant bugs are not an economical threat to cotton which has reached 250 heat units past NAWF5. Insecticide applications for boll worms/tobacco bud worms can be terminated at 350 heat units past cutout. Applications for stink bugs can be terminated at 450 heat units past cutout.

Long-term historical weather data and University research indicate that August 10th is the latest date a white flower can accumulate enough heat units to develop to maturity most years. Therefore, if a field has not already reached cutout by this date, then August 10th should be your default date to start counting heat units.

Once cutout date has been established, (either by reaching NAWF 5 or by using August 10th) tracking heat units can help producers and crop advisors make better end-of-season management decisions. For more information on end-of-season decision aids based on heat units accumulation, contact the County Extension Office.***
Upcoming meetings & field days.

August 2 - UA Rice Expo, Grand Prairie Center, Stuttgart
August 15 - UA Pine Tree Station Field Day, Pine Tree
TBA - Judd Hill Field Day, Truman

Warmest regards,

Allen Davis  Lance Blythe  Debbie Still  Dave Freeze
CEA-Staff Chair  CEA-4-H  CEA-FCS  CEA-AG

Some local farmers are giving sesame a try this year. Hope is proves to be a good alternative crop.