

# Missouri Ag News

A Publication of University of Missouri Extension - Southeast Region

Volume 4, Issue 9

September 1, 2014

## Protect, Drain, Harvest, Missouri Rice 2014

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Crops	Horticulture
Engineering	Livestock
Forestry	Other



Finally, (almost) all rice in the state is headed. Early rice is approaching maturity and ready to drain. Late rice still has a long way to go. Prepare early rice for harvest and give the late rice protection from stink bugs and disease, giving it plenty of time to mature. The point at which fields are projected to reach 20% grain moisture for harvest is spread out. The first fields are there but the last fields won't get there until late September or early October.

Be on the alert for rice stink bug infestations and sheath blight. Blast continues to be very low.

**Rice Stink Bug:** Early planted rice has headed and some is ready to drain. Continue to scout for stink bugs as they can damage grain. Rice stink bug numbers have dropped but some fields have spray threshold levels. In Missouri



Rice Stinkbug, *Oebalus pugnax* - Bugguide.net K. Harrelson

we follow the UAR insect spray program for rice. With a threshold of 5 stink bugs per 10 sweeps, the question isn't whether or not you're at threshold but rather do you really need to count how many are in the net? It may sound silly but the answer is, yes, you need to count. After application you will see how much control you were able to get.

Remember at threshold numbers it may require 2 applications to achieve control. If one application does it, that's great, but you need to be prepared if it doesn't. Remember, the threshold is 5 stink bugs per 10 sweeps the first two weeks of heading then 10 stink bugs per 10 sweeps the second two weeks of heading. Choices on insecticides are Declare, Karate (lambda-cyhalothrin), Mustang Max, and Tenchu. These should be available. UAR tested all of these and found them to be effective. I don't see any advantages of one over the other, so shop and get the best price.

One question I've received this past week is on fields that have threshold level stink bugs but are not heading: Should I go ahead

## Missouri Rice continued.....

and spray? **NO**. If you spray before heading there is no guarantee that you won't have to spray again once the rice begins to head, because there is usually a big influx of stink bugs into the field at heading. You may cost yourself an application.

**The first two weeks of heading continue to scout to protecting yield potential.**

**Sheath blight** has been low but recent spotty rainfall favors disease development. Humidity and temperature are also high and there is a possibility for vertical movement of the disease. Continue scouting late rice until a few days before heading and make sure the top three leaves are free from the disease. Research has indicated Stratego at 16 oz/A will give ~14 days of protection, at 19 oz/A will give ~21 days of protection. Quadris at 6.4 oz/A will give ~14 days of protection, 8.5-9.2 oz/A will give ~21 days of protection, and the full 12.5 oz/A will give ~28 days of protection. These are average figures and may change depending on field factors that affect the activity of the fungicide used.

**Blast:** So far, no problem in Missouri.

**Drain:** Don't drain too soon. 95°+ days and 70° nights are perfect for fast maturity but causes quick water loss. Remember loam soils with a little sand dry very fast, clay soils dry slower.

**Draining Guidelines:** Long-grain – 25 days after 50% heading. Medium-grain – 30 days after 50% heading.

Sam Atwell, Agronomy Specialist, University of Missouri, New Madrid, MO.



Sheath blight lesions (top) on rice stems versus rice blast lesions (below). - LSU Ag Center

## 2014 Pecan Pre-Harvest Meeting

### MNGA Pre-harvest meeting scheduled for Friday, September 5th southeast corner of Missouri

Our first stop will be the Rich and Cindy Falconer Farm near New Madrid (Exit 52 off I-55). Their pecan orchard has 15 different cultivars including some of the more southern cultivars we normally do not see.

We selected Lambert's Café in Sikeston for lunch because it offers a unique experience and we will likely be able to sit together as group to continue the field discussions.

After lunch, we will drive to Joe Jacob's Corgi Hills Pecan Orchard at 26133 County Road 249 just outside of Leora (Puxico on a GPS unit). His young orchard of 1000 grafted pecans is about an hour northwest of Sikeston (that means an hour closer to home at the end of the meeting maybe?). His plantings of 'Kanza', 'Peruque', and 'Pawnee' is coming into production and he is looking for advice...anything and everything from how to manage the orchard for nut production and what to do with the pecans when harvested. We should have a good exchange between new growers like Joe and our more experienced members.

To help us anticipate beverage and parking needs at the various sites, please RSVP to Sara Jean Peters no later than Wednesday, September 3<sup>rd</sup> at 417-275-4422 or email her at [sara069@centurytel.net](mailto:sara069@centurytel.net). To the extent possible, we will try to work off the following agenda:

- 8:30 Car pool from the Drury Inn in Sikeston to the Falconer Farm.
- 9:00 Registration, coffee, and conversation at Falconer Farm
- 9:30 Discussion in Falconer Farm pecan orchard
- 11:00 Depart for Lambert's in Sikeston (lunch on your own).
- 1:00 Depart for Joe Jacob's farm
- 2:00 Planned arrival at Jacob's pecan orchard
- 3:00 Return to the farm building for additional discussions/presentations
- 4:00 Adjourn meeting before a short MNGA board meeting

## Late Season Pests

Calls have come in about armyworm in pasture and lawns. The armyworm complex of insects are primarily grass feeding caterpillars. Fall armyworm is distinguished from yellow-stripe and true armyworm by the presence of an inverted Y on the head. Fall armyworm, unlike true armyworm, will feed in morning and during the day. Threshold for grass crops is 4 larvae per square foot. Treatments containing pyrethroid chemistry provide control of these larvae. For more information on the armyworm complex contact University of Missouri Extension and ask for MU guide 7115, "Management of the Armyworm Complex in Missouri Field Crops," or find it on the web: <http://extension.missouri.edu/p/G7115>

I have also received some calls about stink bug building up in soybean fields. Some of the insects I am seeing include: stink bug, bean leaf beetle, and grass hoppers. Continue to monitor soybeans for late season pests in soybean fields that are blooming to early pod fill (R6). Insect scouting should continue through R6.5 (7 days after soybeans begin touching in pods). After this point, soybean yield loss from insects is no longer an economic threat. Mississippi State had an article on terminating soybean insecticide applications <http://www.mississippi-crops.com/2014/08/15/terminating-insect-sprays-in-mississippi-soybeans/>.

Anthony Ohmes, Agronomy Specialist,  
University of Missouri, Cape Girardeau, MO.



True armyworm larva (left - B. Potter, UMN) versus fall armyworm with the characteristic Y-shaped marking between the eyes (right - J. Obermeyer).



Stinkbugs commonly encountered in soybean: green stink bug, *Acrosternum hilare* (adult and nymph are first two from left). Brown stink bug, *Euschistus servus* (adult and nymph third and fourth from left). Spined soldier bug, *Podisus maculiventris* (adult at far right). Not to scale. - Photos Marlin E. Rice.

## Liming for Soybean Production - Economic Boost

Rotating rice with soybean is a common practice in southeast Missouri. Current University of Missouri soil test lime recommendation treats rice and soybeans as separate crops due to different soil pH requirements of each crop. In 2010 -2012, University of Missouri conducted a study to evaluate the proper fertility management for rice/soybean rotation to determine the correct lime rates and application timings for a rice/soybean rotation. The result of the study reveals that rice yields were largely unaffected by liming, while soybean yields were strongly affected. This finding confirms early results reported from a 1997-1998 University of Arkansas study that also found no effect of liming on rice yield, but significant increase in soybean yield.

Why does liming not affect the rice yield? Soil pH in anaerobic condition has a tendency to increase close to or above neutral. During my graduate studies I worked on reclaiming a lignite mine soil in Mississippi. Soils in Mississippi are mostly formed from alluvial or loess deposition. Thus, sub-soils are most often buried top-soils. We measured soil pH of the excavated sub-soil in the range of 7- 8.5. But, once the soil was exposed to the elements the soil pH dropped to 5.0-5.5 in the range similar to the surface soils around the area. Similarly, in rice production, flooding the soil creates an anaerobic soil environment that increases the soil pH towards neutral (pH 6.5-7.5). The increase in pH typically occurs about two weeks after flooding. Conversely, in soybean production under aerobic condition, the soil returns to its original pH which if lower than that required for soybean production, yield will be affected.

The question is what does this mean to fertility management in rice/ soybean rotation. Based on the results of these studies, lime rates should be determined using soybeans as the crop to be grown in this rotation. In other words, soil sample to determine lime application rate for the soybean and lime before the soybean crop.

For information on soil testing and recommendation for crop rotation systems contact your local extension agronomy specialist.

AJ Foster, Agronomy Specialist, University of Missouri, Bloomfield, MO

## New Grant Opportunity

The Missouri Agricultural and Small Business Development Authority offers the Value Added "Farm to School" Grant Program. This is a competitive grant program which may be used by small Missouri businesses to purchase equipment and/or resources needed to access or process locally grown agricultural products for use in Missouri schools. Eligible equipment might include coolers, freezers, washing or packing equipment, and professional services for GAP/GHP and HACCP plan development.

Further information and the full program guidelines and application format can be found at <http://agriculture.mo.gov/abd/financial/farmtoschool.php>

## Pasture and Grazing Management Short Course

University of Missouri Extension and the Stoddard County Soil and Water District offer a pasture grazing management short course.

**Thursday evenings - September 4 - 25, 2014**  
**USDA building in Dexter from 6:30pm – 8:00pm**

The course is designed for experienced producers as well as beginners who want to learn more about developing pasture-grazing management systems for their livestock.

Each participant in the course will be introduced to a systematic approach to pasture and grazing management that will equip producers with knowledge to get the most of their forage and land resources to support their livestock. Participants will learn about soil properties and how management can maximize fertilizer use efficiency, best management practices to improve stand establishment, pasture renovation and weed control.

Topics to be covered are:

**Sept 4: Pasture soil and nutrient management – *Dr. AJ Foster.***

**Sept 11: Pasture species selection and establishment – *Dr. Anthony Ohmes.***

**Sept 18: Pasture renovation, weed control and new innovations in pasture management – *Dr. Anthony Ohmes.***

**Sept 25: Grazing management strategies – *NRCS Grazing Specialist.***

The cost of the course is \$35 for all four sessions or \$10 per session. Prior registration is required. Space is limited, so those who wish to participate are encouraged to register as soon as possible by contacting the Stoddard County Extension Office at 573-568-3344.

## Free Climate Data

Farmers have a new set of free tools to help them make crop decisions. The websites are important because access to historical climate data helps farm operations that depend on favorable temperatures and precipitation patterns, Massey says. To explore several weather data links go to <http://extension.missouri.edu/news/DisplayStory.aspx?N=2084>.

# Midwest Winter Vegetable Production Conference

**Monday & Tuesday, November 10 and 11, 2014 \***

Continental Banquet Center 2728 North Rangeline, Joplin, MO 64801

*To register go to [webbcityfarmersmarket.com](http://webbcityfarmersmarket.com)*

## **Monday, November 10 (8:00 a.m.)**

For beginners (high tunnel siting, choices of equipment, costs and returns) *or* for experienced high tunnel growers (high tunnel maintenance and rehabbing equipment and long term soil management); winter production crop choices and planning for our region; maximizing high tunnel production; high tunnel heating alternatives; low tunnel production; and high tunnel mesclun and greens production or high tunnel strawberry production

## **Tuesday, November 11 (9:00 a.m.)**

Managing and record keeping for maximum production; food safety update; post harvest handling; panel – marketing opportunities (schools, restaurants and grocery stores.) A farm tour will follow. Location will be determined closer to conference time.

# Management Intensive Grazing School

The purpose is to help farmers better utilize their forage, improve their livestock operation, and to promote plant and soil health.

***September 22-24, 2014***

*Ellington City Hall*

*8:00 a.m.*

Introduction to Management Intensive Grazing; Plant Growth & Landscape Ecology; Forage Quality & Livestock Nutrition on Pastures; Soil Fertility; Overview & Tour Jimmy & Joyce Pyles Farm; Pasture Condition Scoring; Overview & Tour Lonnie Barton Farm; Grazing Stick; Resource Inventory; Designing Fencing Systems; Designing Water Systems; 30 Economic Considerations; Matching Livestock & Forages; Grazing System Layout & Design; On-site Farm Planning; Work on Farm Plans  
Extending the Grazing Season; Tying it all together

To register call: 573-648-1035

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 Extension

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## Future Meetings & Events -

**MNGA Pre-harvest Meeting - September 5, 2014.** Southeast, MO. RSVP to Sara Jean Peters 417-275-4422 or email her at [sara069@centurytel.net](mailto:sara069@centurytel.net).

**Pasture and Grazing Management Short Course Thursday evenings in September 4 to 25, 2014.** USDA Building in Dexter, MO. Register at the Stoddard County Extension Center. 573-568-2261.

**Grazing School September 22 to 24, 2014** at Ellington City Hall beginning at 8:00 a.m. To register call 573-648-1035.

**Midwest Winter Vegetable Production Conference - November 10 to 11, 2014.** Continental Banquet Center in Joplin, MO. Register at [webbcityfarmersmarket.com](http://webbcityfarmersmarket.com).

Commodities and markets - <http://extension.missouri.edu/scott/crop-budgets.aspx>

2014 Farm Bill - <http://extension.missouri.edu/scott/Farm-bill.aspx>