Our rice crop is all over the board. Scout early and often and plan ahead for effective disease control.

1. Rice blast is one of the earliest known foliar diseases. The blast fungus survives in various ways but often is seedborne. To reduce seedborne blast, research suggests Dynasty fungicide (azoxystrobin) at a rate above 0.75 fl oz per cwt as adequate. However, note that this seed treatment will not guarantee protection later in the season. We encourage field scouting, deep flood management, and foliar fungicides as needed. In blast-prone fields (lighter soils, tree-lined, low-lying, etc.), plant a hybrid or resistant variety. This takes care of the disease for the most part. Where susceptible varieties are planted in the wrong field, keep a deep flood of 4 inches on them at all times after initial flood. Fungicides work best if applied twice for blast. The first application should be made at late boot to beginning panicle tip emergence and the second when panicles are 50-75% out of the boot on most of the main tillers. Higher rates are best. If the field is very uniform and disease potential is low to moderate the best timing would be when panicles are emerging with about 35% of the length out of the boot on most of the main tillers. In uneven maturing fields, it is better to spray based on the earlier maturing parts of the field if disease pressure is substantial, and these types of fields would be almost automatic for two applications. Again, proper flood management will really help with blast management and improve performance of the fungicides.

2. For many years now, strobilurin fungicides have been used to manage sheath blight disease of rice and they have been the backbone for managing fungal diseases of rice in Southern rice producing states. There have been reports of Strobi resistant Sheath Blight in LA, so check behind your fungicide sprays for control. Current fungicides are most effective under low or moderate disease pressure. The challenge comes when varieties are highly...
susceptible and environmental conditions are very favorable for disease development. When we have sheath blight we recommend our producers use strobilurin+propiconazole fungicide mixtures to combat sheath blight and the smuts. It is important to note that the sheath blight fungus can be moved from field to field in soil and water and by equipment.

3. Smuts have not been bad since 2011. Fields sprayed properly with propiconazole-containing fungicides worked to minimize these diseases. In some cases, too much nitrogen was applied to affected fields and in other cases the fungicide was applied too late in the booting stage for maximum effect. The rice smuts cannot be scouted for, so preventive treatment with propiconazole containing fungicides is the only chemical control option. Fields with a strong history of the smuts, or those that have been knowingly over-fertilized with nitrogen are most at risk. Hybrid and medium grains are very unlikely to benefit from fungicide applications. Fungicides should be applied if your effective scouting indicates more than 35% positive stops in susceptible varieties and more than 50% positive stops in moderately susceptible varieties. Timing and rate of the fungicides to prevent the smuts are critical. The fungicides need to be applied at early to late boot but before heading begins on any plants in the field. Earlier is usually better in the booting stage, especially for false smut. The minimum rate of 6 fl oz tilt or tilt equivalent is now required for most effective results under current conditions, but no application will provide 100% control. In the past, we achieved up to 95% reduction in kernel smutted kernels using propiconazole with exact timing and rate but only about 65% for false smut (at best). Where false smut is moderate, 65% reduction is noticeable, but where it is heavy, control is difficult.

4. The annual Missouri Rice Research and Demonstration Field Day is set for Tuesday, August 21, at the MRRMC Rice Farm on HWY J near Glennonville, MO. Come to see lots of new high tech equipment.

5. A Row Rice Production meeting sponsored by Southeast Missouri State University will be held at the SEMO University Campus Malden on Monday, August 4.

6. The annual University of Missouri Delta Center Field Day will be on Tuesday Sept 2 at the MU Lee Farm east of Portageville.

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

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.
The wet conditions this spring are favorable for Nitrogen (N) loss from N applied pre-plant. Extensive rain after N application to corn fields has the potential to cause loss via denitrification and leaching. It is important to monitor corn fields for signs of N loss, looking for symptoms which appear on the older leaves (bottom to top of plant) as a V-shape yellowing starting from the tip of the leaf. To supply adequate N for crop needs this season, side-dressing of N may be required closer to when the crop needs it. Below are a few things to consider in side-dress management of N in corn this season.

**BENEFITS vs. RISK**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Risk</th>
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<tbody>
<tr>
<td>Side-dress offers more efficient use of N fertilizer, thus reducing input cost.</td>
<td>Common risk with side-dress is shortage of labor or adverse weather condition that delay application.</td>
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<tr>
<td>N can be applied based on early indication of yield potential. If the stand is good with high yield potential, N rates can be increased to maximize yield. Conversely, if stand is poor N rates may be reduced.</td>
<td>Side dress has potential for crop injury- solution UAN applied broadcast has the potential to cause foliar plant burning, leaf loss, and reduced early growth. Recommended not to exceed 90lb of N per acre when corn is at V3-V4, 60lbs N at the V7 stage and not to apply UAN to foliage beyond V7.</td>
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**Timing of side-dress**

If no pre-plant N was applied the best time for side-dress application is at the V3 stage. At the V3 growth stage, seedlings have used up the nutrients stored in the seed and are now dependent on soil supplied nutrients. Side dressing to supplement previous application of N can be done through VT. Figure 1 shows that the best time to apply N is as close as possible to the period of rapid growth which is roughly between vegetative growth stage V9 and V18. See MU guide sheet IPM1027 (Best management practices for nitrogen fertilizer in Missouri) for more detail.

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

**Figure 1** - Maximum nitrogen uptake occurs in periods of maximum growth (in corn roughly between vegetative growth stages V9 and V18, or from hip-high to just before tasseling). Risk of N loss is low during this period. Credit: Iowa State University Extension.
A new risk management option will be available for fruit and vegetable growers / producers with diversified farms. The Whole-Farm Revenue Protection policy will provide flexible coverage options for specialty crop, organic, and diversified crop producers. The program will be implemented in counties across the country, with availability expanding over the next several years.

Whole-Farm insurance allows farmers greater flexibility by insuring all crops on the farm at once, rather than insuring commodity by commodity. Traditionally, many fruit and vegetable crops have not had crop insurance programs - making it less attractive for a farmer that primarily planted a commodity crop like wheat or corn to use another part of his or her land for growing fruits and vegetables or other specialty crops.

"Crop insurance has been the linchpin of the farm safety net for years and continues to grow as the single most important factor in protecting producers of all sizes from the effects of unpredictable weather," said Vilsack. "Providing farmers the option to insure their whole farm at once gives farmers more flexibility, promotes crop diversity, and helps support the production of healthy fruits and vegetables. More flexibility also empowers farmers and ranchers to make a broader range of decisions with their land, helping them succeed and strengthening our agriculture economy."

The 2014 Farm Bill requires a whole-farm crop insurance policy option, paving the way for the Risk Management Agency (RMA) to make it broadly available to specialty crop, organic, and diversified growers. The Federal Crop Insurance Corporation Board of Directors (FCIC Board) approved the pilot Whole-Farm Revenue Protection policy to be offered through the federal crop insurance program in 2015.

The whole-farm crop insurance policy provides flexibility to meet the needs of specialty crop growers, organic producers and those with diversified farms, and who have farm production and revenue history, including five years of historic farm tax records.

USDA has been strengthening crop insurance by providing more risk management options for farmers and ranchers. The policy offers coverage levels from 50 to 85 percent; recognizes farm diversification through qualification for the highest coverage levels along with premium rate discounts for multiple crop diversification. The Market Readiness Feature, as outlined in the Farm Bill, simplifies insurance coverage for producers under the Whole-Farm Revenue Protection policy by allowing the costs such as washing, trimming, and packaging to be left in the insured revenue instead of having to adjust those amounts out of the insured amount.

The new Whole-Farm Revenue Protection policy combines Adjusted Gross Revenue (AGR) and AGR-Lite along with several improvements to target diversified farms and farms selling two to five commodities, including specialty crops to wholesale markets. The new policy is also designed to meet the risk management needs of diversified crop or livestock producers including those growing specialty crops and/or selling to local and regional markets, farm identity preserved markets, or direct markets.

As part of the pilot, Whole-Farm Revenue Protection will be available where AGR and AGR-Lite are currently offered, and will expand to other counties as data are available for underwriting and actuarial ratemaking. RMA will release information on the policy later this summer when it becomes available. This information will be announced on the RMA website at www.rma.usda.gov.
over the past seasons, have had a very small overlap window. Threshold for corn is an average of 3 beetles per ear during active pollination with silks clipped to \( \frac{3}{4} \) inch above husk. Pollen shed begins a couple of days before silk emergence and continues a couple days after pollination. Silks emerge on an ear over a 2 to 3 day period, but will continue to be receptive to pollen for up to 10 days. A uniform field will generally complete pollination in less than a week. Once pollen lands on a silk, the corn ovule is pollinated within 24 hours. Therefore the silk clipping window to cause yield loss is relatively short. However, with delayed planting this season that window could be extended. If you have threshold numbers in a field or even a portion of a field, that area can experience yield loss. Scouting is critical since in many of the cases I have looked at over the seasons, the highest concentrations of beetles are on ends and only extend a few rows into the field or clipping has occurred after pollination. Both cases would not warrant treatment. You can determine pollination by carefully peeling back corn husks, so as not to pull unpollinated silks off the ear. Once husk is removed, gently shake ear. If pollination is complete silks will fall freely from pollinated ovules. In general, silk rate of emergence and pollen shed is much more likely to be influenced and yield compromised by drought stress.

In soybeans, Japanese beetles feed on leaf tissue and are lumped into the insect complex of leaf defoliators. Threshold, pre-bloom defoliation for the insect complex, is 25% or more. Threshold, at-bloom through pod fill is 15% or more defoliation.

Anthony Ohmes, Agronomy Specialist, University of Missouri, Cape Girardeau, MO.
**Fusarium Head and Blight of Wheat**

If you receive my eNewsletter, you have read about the potential for Fusarium head blight (scab) on susceptible wheat varieties during the rainy week, which coincided with flowering (Feekes 10.51) wheat in much of the area. We saw some bleached portions of wheat heads which is a symptom of scab. In addition to potential yield loss, the fungus that causes scab can produce mycotoxins known as DON (dioxynivalenol) or vomitoxin. Visibly scabby wheat seed or tombstones will in generally be shriveled and lighter than healthy wheat. Seed can also have a white to pink discoloration. In addition, Fusarium infected wheat seed can cause seedling blight problems. Current management of scab fields includes properly setting combine to blow out lighter seeds and chaff. If keeping wheat for seed, then thoroughly clean seed and treat seed wheat with a fungicide seed treatment.

University of Kentucky has a guide on harvesting wheat found online: [http://www2.ca.uky.edu/agc/pubs/id/id125/10.pdf](http://www2.ca.uky.edu/agc/pubs/id/id125/10.pdf).

South Dakota State University has a guide on feeding scabby wheat to livestock: [http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx2047.pdf](http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx2047.pdf).

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

**Soybean Weed Management**

We are approaching double crop planting, so keep in mind that residual herbicides are just as important in this instance as for full season soybeans. However, keep an eye on the calendar to make sure you are keeping within plant back restrictions for herbicides for various fall and spring crops. A list of these rotational intervals can be found in the Pest Management Guide. Continue to scout soybean fields for emerging pigweeds. The two common reasons for postemergence herbicide failures: timing and coverage. Pigweed growth rate is 1 or more inches per day and the most effective window of control is 1 to 3 inch tall pigweed. A minimum of 15 gallons per acre spray volume should be used to cover as much leaf area as possible. Information on pigweed in soybeans is available in the following guides, “Waterhemp Management in Soybean” and “Palmer Amaranth Management in Soybean.”

The Pest Management Guide link: [http://weedscience.missouri.edu/publications/m00171.pdf](http://weedscience.missouri.edu/publications/m00171.pdf)

Weed Science publications: [http://weedscience.missouri.edu/extension/extension.cfm](http://weedscience.missouri.edu/extension/extension.cfm).

Anthony Ohmes, Agronomy Specialist, University of Missouri, Cape Girardeau, MO.
SHOW-ME MARKET SHOWDOWN

Farmers, ag professionals, and other interested parties: MU Extension’s Show-Me Market Showdown is an online grain marketing game where players learn by experimenting with different marketing tools & strategies in a low-risk, fun, and friendly competition. Players in the Show-Me Market Showdown are given a virtual grain production scenario and are asked to market their grain using real-time cash, futures and options quotes. Each player’s virtual sales and trades are processed and monitored by a website called, "CommodityChallenge.com," which serves as the hosting platform for the game. CommodityChallenge.com tracks players' sales, trades and marketing account balances, which allows players to assess their personal marketing performance as well as provide the foundation for the competitive aspect of the game. In addition, throughout the game, players will receive marketing guidance and instruction from MU Extension agricultural business specialists through a blog and email correspondence. The guidance and information provided by Extension will help players make the connection between grain marketing knowledge and the application of marketing tools and strategies.

Rewards and benefits

- Enhance your knowledge of grain marketing tools and concepts
- Improve your market planning and decision-making skills
- Experiment with different marketing strategies without the risk of financial loss
- Flexible participation: participate when and where it is most convenient for you
- Engage in friendly competition with your friends and colleagues
- Compete as yourself or anonymously
- Participation is FREE!

The game will be hosted online from July 14, 2014, midnight to Friday, Sept. 19, 2014, 11:59 p.m. at www.CommodityChallenge.com

Players compete with one another based on the financial outcome of their sales and trades relative to other players' marketing transactions. Although the game is competitive, the main focus of the game is for players to learn the risks and rewards of alternative marketing strategies and to learn the mechanics of various marketing tools, such as futures contracts, options on futures, and forward contracts.

In addition to being fun and educational, participation in the Show-Me Market Showdown is extremely flexible and risk-free. Since the game is hosted online, players can access the game whenever and wherever they have time and access to the Internet.

Funding for this project was provided by the North Central Risk Management Education Center and the USDA National Institute of Food and Agriculture. As a result, participation in the game is completely free.

Register by July 14, 2014 to participate using the link. https://docs.google.com/forms/d/1Ohm1Tv741WG5ID3RLvVdKEZLanZEyERdisr049EEsk/viewform

Facilitator: Whitney Wiegel, WiegelW@missouri.edu; phone: 660/584-3658
Ag Technology Fair
See the future of agriculture

July 17, 2014
8:30am – 5:00pm
Registration begins at 8:00am

Bradford Research Center
4968 Rangeline Road
Columbia, MO

$25 registration fee includes lunch

To pre-register contact:
Thresa Chism, 573-884-7945

For more information:
http://bradford.cafnr.org
wieboldw@Missouri.edu

Planter technologies: Brent Myers will discuss planter prescription maps. Implement dealers available for demonstration

Remote measuring of forage parameters: Rob Kallenbach will discuss sensors that monitor forage growth and cattle activity

On the go nutrient status sensors: Peter Scharf will discuss nitrogen management using in-field sensors and aerial photographs

Unmanned Aerial Vehicles: Bill Wieboldt will discuss the role of UAVs in crop assessment and management

Touch Use Learn
PASTURE AND GRAZING MANAGEMENT
SHORT COURSE

USDA Building, 18450 Ridgeview Lane,
Dexter, MO 63841
Thursday Evenings, Sept 4-25, 2014
6:30 pm-8:00pm

Sept 4: Pasture soil and nutrient management
Session will equip participants with fundamental knowledge of soil chemical, physical and biological properties and how management can maximize fertilizer use efficiency. – Dr. AJ Foster.

Sept 11: Pasture species selection and establishment
Session will equip participants with an understanding of selecting and matching suitable species with land resource and the best practices to improve stand establishment. – Dr. Anthony Ohmes.

Sept 18: Pasture renovation, weed control and new innovations in pasture management
Session will expose participants to several management approaches for pasture renovation, practices for controlling weeds and new innovative technologies currently used for improving pasture productivity. – Dr. Anthony Ohmes.

Sept 25: Grazing management strategies
This session will put it all together and explore the concept of animal/pasture interaction. – NRCS Grazing Specialist.

Prior registration is required by Monday, August 25, 2014
Educational materials and light refreshments will be provided each night.

Pasture and Grazing Management Short Course Registration Form

Name (s):___________________________________________________________________________________________
Address: __________________________________________________________________________________________
Phone: __________________________ Email: __________________________________________________________________________

Please circle dates attending: 
Entire Course
Sept 4: Pasture soil and nutrient management
Sept 11: Pasture species selection and establishment
Sept 18: Pasture renovation, weed control and innovations
Sept 25: Grazing management strategies

Course Fee: $10 per night or $35 for the entire course
Please include check payable to MU Extension Stoddard County along with your registration form by Monday, August 25, 2014.
Registration: Call 573-568-3344, Mail registration form to MU Extension Stoddard County, 316 S. Prairie, P.O. Box 169, Bloomfield, MO 63825, or fax to 573-568-2261.

Please check: I am attending the course because: __ I graze horses  __ I graze cattle  __ I graze sheep/goats  __ I graze other livestock  __I am new to pasture management and would like to learn more

1.0 CEU credit for each session
If you have special needs that need accommodated, please contact the office two weeks in advance.
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If you are interested in receiving this publication via e-mail or being removed from the email list please send a request to denklers@missouri.edu.

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**Future Meetings & Events** -


**Missouri Young Farm/Young Farm Wives Tour July 31-August 2, 2014.** Dexter High School, Dexter, MO. Contact Gary Wyman for more information gwyman@dexter.k12.mo.us.

**Pasture and Grazing Management Short Course Thursday evenings in September 2014.** USDA Building in Dexter, MO. Register by August 15 at the Stoddard County Extension Center. 573-568-2261.

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


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