

# Missouri Ag News

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## Considering Warm Season Annual Grasses

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With the drought of 2012, many pasture and hay fields suffered significant stand loss. However, with the loss of fescue stands there are some opportunities to eliminate remaining fescue and plant a warm season annual grass such as pearl millet or sorghum-sudangrass. Pastures of tall fescue in Missouri are infected with a fungus known as the "endophyte." The tall fescue endophyte causes fescue toxicosis, a serious disorder that costs the Missouri beef industry \$160 million each year and is harmful to dairy cattle, horses and sheep. Fescue toxicosis is characterized by poor health and production, including low rate of gain, poor milk production, and poor reproduction.

If you are considering a warm season grass annual, consider the spray-smother-spray program. Before planting your warm season grass, spray remaining fescue and weeds with glyphosate, sold under various trade names, at the highest labeled rate. Spray coverage is essential, so be sure to apply a minimum of 15 gallons of solution per acre. The initial spray should be applied about 10 to 14 days prior to planting.

The smother crop would be the warm season annual grass planted during the month of May. Warm season grass can be drilled or broadcast on a prepared seedbed. No-till establishment works well if weed and sod competition are controlled and preferably a no-till drill used.

Pearlmillet is an excellent choice for pasture because it tolerates acidic soils and drought and does not contain prussic acid. Sorghum-sudangrass does not tolerate acidic soils (pH below 5.5) and does contain prussic acid. Both warm season grasses can accumulate toxic levels of nitrate if we encounter similar conditions to last year's drought along with heavy nitrogen fertilization.

The final spray comes in late August, again about 10 to 14 days before establishing your cool season pasture. The new grass to be planted in the fall should be one that has a long growing season, is tolerant to severe climate stresses, and is nutritional to livestock. The grass that best meets these criteria is another type of tall fescue—a nontoxic one. These new varieties are infected with endophyte, but the "novel" endophyte provide the positive qualities without the negative. In Missouri, the newly established pasture is sometimes a blend of orchardgrass and novel-endophyte tall fescue.

For more information on warm season grass annuals contact your MU Extension center and ask for MU guide 4661: "Warm-Season Annual Forage Crops" or find it on the web: <http://extension.missouri.edu/p/G4661>.

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

# ACRE for 2013

Because the 2008 Farm Bill was extended for one more year, all farmers have the option to sign up for the ACRE (**A**verage **C**rop **R**evenue **E**lection) program at your county FSA office. Previous ACRE elections do not matter. The deadline for ACRE is June 3, 2013; however, the deadline to sign up for the regular DCP program is August 2, 2013. Therefore, you have only a few weeks to decide if you want to choose the ACRE option.

Briefly, the ACRE program was initiated in the 2008 Farm Bill as a possible replacement of the traditional DCP programs of direct, counter-cyclical, and LDPs. Those who enroll in ACRE will have their loan rate and direct payments cut 30% and 20%, respectively.

The objective of ACRE is to issue program payments when both state and farm revenues for each crop planted on the farm are less than state and farm revenue guarantees. This differs from the traditional DCP program, which only issues program payments (counter-cyclical) when the national average seasonal cash price falls below a predetermined price. Therefore, ACRE can make program payments even in high revenue years.

Two revenue triggers must be met before an ACRE payment can be made, one on the state level and one on the farm level. First, the actual state revenue (state yield X national average price) must be less than the state revenue guarantee. This calculation is (the average of the past 5 year's crop yields, excluding the high and low yields X the average of the national average seasonal cash price for the past 2 years). In addition, the state revenue guarantee is multiplied by 90%. If the state revenue trigger is met, the farm's actual revenue for the crop must be less than the ACRE benchmark revenue for that crop, which triggers a payment. In most cases, but not all, if the state triggers an ACRE payment, the

farm revenue will trigger a payment too.

The enrollment into ACRE is based on the FSA farm serial number. This gives the farmer and landowner flexibility in deciding which farms if any to enroll into ACRE.

## Is ACRE a viable option for 2013?

With the outlook for increases in ending stocks and lower prices for corn and soybeans in the 2013-14 marketing year, an ACRE payment could be triggered. On May 10, USDA will issue their first supply and demand estimate for 2013-14 marketing year and will include their projections on prices. Some industry estimates for average prices for this marketing year include \$4.50 for corn, \$11.50 for soybeans, \$6.50 for wheat, and 75 cents for cotton.

In Missouri for corn, the state ACRE revenue guarantee for 2013 is projected at \$630/acre. If the state corn yield for 2013 equals the average yield from 2004 – 2011 of 134 bushels/acre, an ACRE payment would be triggered if the national average corn price is \$4.70 or less.

Using the same yield criteria as in corn, the soybean yield would be of 39.1 bushels/acre and a state ACRE revenue guarantee of \$438/acre. The ACRE payment would be triggered if the average soybean price is \$11.20 or less.

For wheat with a \$283/acre state ACRE revenue guarantee and average yield of 47 bushels/acre, an ACRE payment would be triggered at \$6.02 or less.

The ACRE price trigger for grain sorghum is \$4.15 or less, based on the state ACRE revenue guarantee of \$361/acre and a yield of 87 bushels/acre. The ACRE cotton trigger price is 64 cents or less, based on a 989 pound yield and \$631 state ACRE revenue guarantee. Rice would trigger an ACRE payment at 12.2 cents/pound (\$5.49/bushel) or less based on a state ACRE revenue guarantee

of \$791 and yield of 6,488 pounds/acre (144 bushels/acre).

At this time, an ACRE payment could be triggered in corn and slightly less probabilities for soybeans and wheat. If you are thinking about signing up for ACRE, I would suggest waiting until after May 10, to get USDA's price and yield projections. By waiting, you will also get a better idea on the acres planted, planting progress and conditions, and other updates on supply and demand.

In summary, it is important to remember, that by signing up for ACRE you will be forfeiting 20% of your direct payments for 2013. For corn, soybeans and wheat it will be in the \$3 - \$6/acre range. The prices and yields to calculate ACRE payments are based on the marketing year and not an individual month as in crop insurance. Therefore, you may not

know if an ACRE payment will be made for over a year.

The final authority will be FSA. Therefore, contact your county FSA office, if you have any specific questions.

Below are links to resources that give more in-depth details on ACRE. In addition, University of Illinois has an excellent spreadsheet to estimate ACRE payments in 2013 for corn, soybeans, and wheat. If you would like assistance in evaluating the ACRE program for your farm, please let me know.

University of Illinois ACRE spreadsheet - [http://farmdoc.illinois.edu/pubs/FASTtool\\_special\\_acrepay.asp](http://farmdoc.illinois.edu/pubs/FASTtool_special_acrepay.asp)

David Reinbott, Agriculture Business Specialist, University of Missouri, Benton, MO

## Corn Planting Decisions

When wet, cold weather persists as it has well into April, one concern that might arise is when can the latest corn be planted. The yield penalty for delayed planting is variable from year to year, variety to variety, even location to location. Studies out of the Delta Center have shown that late planted corn has a gradual reduction in yield potential as planting progresses further into May. On average, corn planted

on May 10 has a potential yield decrease of 10%.

After that date yield potential continues to decline at a more rapid pace. University of Kentucky data would agree with this and indicate an average decline of 1% to 2% following an early May planting.

On average Southeast Missouri accumulates



enough growing degree days for full season varieties to reach maturity before a frost, therefore concerns about switching varieties based on maturity date should not be a worry going into May.

Late planting generally opens the crop up to more insect pressure, such as corn borer and/or disease such as gray leaf spot. Consider varieties that have resistance traits or increase the level of scouting in susceptible fields. The decision to continue planting is ultimately up to the producer.

For more information on corn planting decisions contact your local MU Extension office and ask for the Corn Facts publication by Dr. Bill Wiebold "Growing Degree Days and Corn Maturity" or find this publication at the following link: [http://plantsci.missouri.edu/grains/corn/cornfacts/corn\\_heat\\_units.pdf](http://plantsci.missouri.edu/grains/corn/cornfacts/corn_heat_units.pdf) and <http://ipm.missouri.edu/ipcm/2013/4/Planting-Date-2013/>.

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

## Herbicide Management in Soybeans

When selecting herbicides, the mindset must be one of willingness to change or fix or adjust your weed management strategies even if your current program is not broken. The driver weed behind herbicide management is pigweed - waterhemp or Palmer pigweed or perhaps both in some areas. We also must remember when this management is most critical. The first 3 weeks after soybean emergence is the most vulnerable period due to yield loss from weed competition. Therefore, the temptation of simplicity of total postemergence programs must be avoided even with the Liberty – Link technology or any other new technology scheduled to come out in the future. Weed management must include and utilize an overlapping residual program. Choosing residuals from the numerous products available and receiving the required rainfall or tilling for “activation” in the soil-weed zone can be overwhelming and seemingly complicated. Hence, the reason for rapid and widespread adoption of total post programs, especially in the Roundup-Ready crops.

However, currently the best management strategy is to use residuals at least at two of the three timings: 7-Day PrePlant, Preemergence, and Postemergence. I cannot list all the available options for the residuals in the article. However, know the modes of action of the products you are using. The current three residual modes of action that effectively target pigweed in soybean include: herbicides containing PPO inhibitors (Group 14); LCFA inhibitors (Group 15); and PSII inhibitors (Group 5). In addition to these three groups, two other groups which may provide some residual, however resistance or tolerance is highly prevalent in pigweed populations, include: ALS inhibitors (Group 2) and Mitotic inhibitors (Group 3).

For more information on herbicide management in soybeans contact your MU Extension center and ask for MU Manual M171: “Pest Management Guide” or find it on the web: <http://extension.missouri.edu/p/M171>.

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



available produce. Edible produce, including seconds, should be in a crate or box.

Contact James Landewee, Operations Director at 573-651-0400 several days ahead of time if possible and specify if a refrigerated truck is needed. He will provide you with a tax receipt for anything you donate to use as a tax right-off.

The Southeast Missouri Food Bank is eager for donations of specialty crops. The food bank will bring a 24 foot box truck to pick up



# Spotted Winged Drosophila

A new pest moving through the United States is a relative of the commonly found vinegar flies from the *Drosophila* genus. The spotted winged drosophila (SWD) differs from these common pests in that it attacks soft fruit when it is young instead of after the fruit becomes overripe.



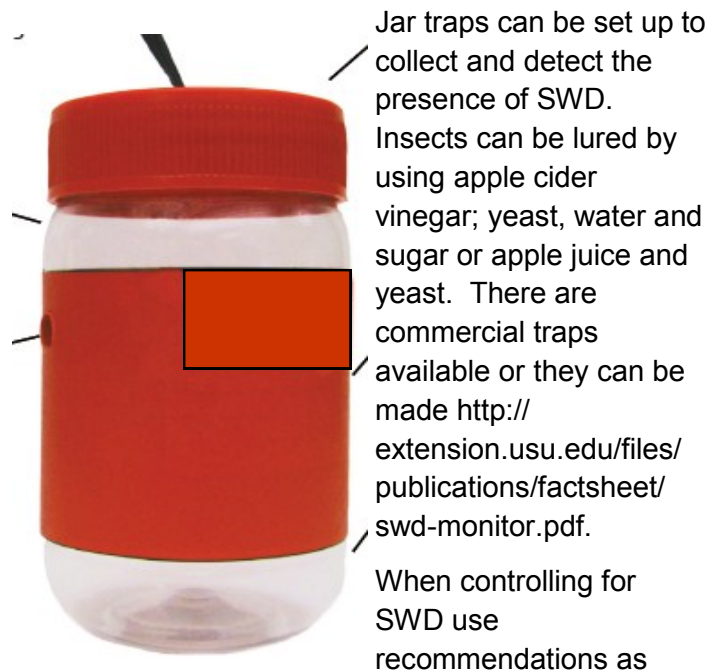
The small fly, *Drosophila suzukii*, is 2 to 3 mm in size with bright red eyes and a pale-brown thorax much like the 175 other species of fruit flies that are

commonly found. The adult male of the species differs in that it has a dark spot along the front edge of each of the wings. The female does not have these spots. The abdomen also has continuous black horizontal lines. Due to the resemblance of the species to other fruit flies, any suspected capture of a vinegar fly must be properly identified by a state entomologist to determine if it is truly *Drosophila suzukii*.

When soft crops are damaged the first injury to occur is several very tiny scars on the fruit surface left by the female as she deposits eggs into the fruit. This occurs commonly on blueberry, raspberry, blackberry, strawberry and elderberry but goes unnoticed due to the small size of the scar. The larvae hatch within 1 day and begin to feed. Fruit collapse or dents can occur within two days on the fruit surface where the larvae have fed beneath. Mold will begin to grow as a secondary invader at this time and within five days will have covered the fruit.

In addition to the soft fruit listed above there is potential for this insect to cause damage to tree fruit such as cherries, plums, peaches, apples, pear and peach and ground fruit such as tomato or watermelon.

Although larvae of this pest cannot survive freezing temperatures they do have a high reproductive rate. The pest is present on both the west and east coast up to Michigan. They were found in the southern tip and in locations throughout Illinois in 2009. In 2012 the pest was confirmed in the counties of White, Johnson and Washington, Arkansas.



Jar traps can be set up to collect and detect the presence of SWD. Insects can be lured by using apple cider vinegar; yeast, water and sugar or apple juice and yeast. There are commercial traps available or they can be made <http://extension.usu.edu/files/publications/factsheet/swd-monitor.pdf>. When controlling for SWD use recommendations as outlined in the Midwest Vegetable Production Guide for Commercial Growers (<http://www.btny.purdue.edu/pubs/id/id-56/ID-56.pdf>), the Midwest Tree Fruit Spray Guide (<http://www.extension.iastate.edu/Publications/PM1282.pdf>) or the Midwest Small Fruit and Grape Spray Guide ([http://www.ca.uky.edu/agcollege/plantpathology/ext\\_files/PPFShtml/ID-94.pdf](http://www.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/ID-94.pdf)).

Sarah Denkler, Horticulture Specialist, University of Missouri, Poplar Bluff, MO

## Organic No-Till/ Cover Crops

### Organic No-till/Cover Crop Field Day

As part of the USDA certified organic research grant, the University of Missouri will be hosting two different field days showcasing their organic research which is taking place at the Bradford Research Center and the Littrell Farm near Mexico, MO.

The Littrell Farm Organic Field Day will be held sometime during the last two weeks of May.

- 20 different cover crop mixes will be destroyed with a cover crop roller/crimper and soybean will be planted into the field.
- This will take place at the organic grain crop farm of Terry Littrell, 8 miles northwest of Mexico, MO in Audrain County.
- Participants will be able to examine the cover crop mixes, see a crimper in action and observe planting into a cover mulch.
- This will take place one day during the last two weeks of May. The exact day will be decided based on weather conditions.

To sign up for notification of the event and to get directions call Kerry Clark at 573-884-7945 or email [clarkk@missouri.edu](mailto:clarkk@missouri.edu).

### Bradford Research Farm Organic Field Day

The Bradford Research Center Organic Field Day will be held August 1st from 1-6 pm. More information will be forthcoming. Topics and tours include Organic no-till, Winter cover crop tour, Trap cropping with cucurbits, Summer cover crop tour, Vegetable tour, Equipment, Organic Marketing, Interpreting your soil test, Soil carbon testing and the tasting of the organic harvests! For questions e-mail [clarkk@missouri.edu](mailto:clarkk@missouri.edu) or call 573-884-7945 and ask for Kerry.

### Bradford Research Center Webinars

As part of the USDA certified organic research grant, the University of Missouri is offering 4 webinars. To join any of these webinars go to [univmissouri.adobeconnect.com/debikelly](http://univmissouri.adobeconnect.com/debikelly) and sign in as a guest. These webinars will be archived and can be found on the Bradford Research Center's website.

May 16, 2-3 pm – Soil Health Testing David Hammer, Director of MU Soil Health Lab and Professor Of Soil Science, MU College of Engineering

June 13, 2-3 pm – The Short and Long Term Benefits of Cover Crops Newell Kitchen, Soil Scientist, USDA-ARS

July 18, 2-3 pm – Practical Management of Cover Crops Tim Reinbott, Superintendent of Bradford Research Center

# Rice Preparation and Seed Treatments

2011 started off very wet, 2012 was very dry and already year 2013 is different from both. Research data clearly shows that early planted rice generally yields more. Rice is a DD50 crop; so now that we are finally gaining heat units it is time to plant.

Remember to flush your rice in order to soften the crust and get an adequate stand. Plant as fast as you can to fit the optimum planting window, but make sure you prepare fields to handle rain. Build your levees and put in gates before rain events occur to ensure you'll be able to get a stand if your soil crusts. In other words, finish your fields and don't leave them vulnerable to weather that will keep you from proper management later.

## **New Herbicide Premix**

"Obey" is a new herbicide premix from FMC that contains Facet and Command. Obey is a 2.5 pound per gallon liquid formulation and contains equal parts clomazone and quinclorac (1.25 pounds per gallon of each). The rate range is 26-52 ounces of product per acre depending on soil type. This premix is at a good ratio to provide excellent broadleaf and grass control with applications from pre-emergence through early post-emergence. If you read the label carefully you can increase the yearly amount of clomazone allowed per acre and still apply full rates on medium soil types. This premix should make managing herbicide-resistant barnyard grass more convenient, especially if applied early. In addition, the slightly higher annual allowance for clomazone will help with mid-post residual applications for sprangletop. However, reduced rates of clomazone should be avoided to help prevent the buildup or further

development of clomazone-resistant barnyard grass. There have also been some slight changes in requirements for aerial application of these products, contact FMC for more information.

## **Fungicide Seed Treatments Protect Against Seed Rot and Seedling Diseases**

Cold and wet conditions following rice planting are not favorable for rice seed germination and seedling growth. Seed rotting can be severe when cool temperatures occur at planting or shortly after. This occurrence is more severe in water-seeded rice.

In addition to seedling diseases that can affect rice early in the season, cold temperatures can also greatly impact emerging rice.

It is always important to start with high quality rice seed that has a high germination rate (80% or more). When planting with the possibility of cool and wet weather conditions to follow, a fungicide seed treatment is recommended. If a fungicide seed treatment is not used, then an increased seeding rate may be needed to ensure an adequate stand is formed. This higher seeding rate could help to compensate for any plants lost to seed rot, soil crusting, or seedling diseases. However, we encourage the use of fungicide seed treatments to provide protection against seed rot and seedling diseases. Fungicide seed treatments are the easiest and cheapest chemical means for seed and seedling disease control. Unfortunately, we can't do much about the weather.

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# UNIVERSITY OF MISSOURI Extension

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## Future Meetings & Events -

**Soil and Water Field Day:** Rain or Shine, Friday, May 10 from 8:30 am to 2:00 pm at the Lee Roy Foster Farm on County Road 430 off A highway in Williamsville, MO. Topics include grazing management, pasture recovery after drought and cost share programs. Lunch is provided and there is no admission. Call 573-224-3410 for more information.

**Women in Ag Tour:** Tuesday, June 11 from 8:00 am to 4:30 pm beginning at the NRCS office, 18450 Ridgeview Lane, Dexter, MO. We will eat lunch dutch treat as a group during the tour. Transportation will be provided. Wear walking shoes, a hat and weather appropriate clothing. Pre-registration is required. To register call 573-686-8064.

Commodities and markets - <http://extension.missouri.edu/seregion/fmmkt.htm>