

UK Cooperative
Extension Service

Hickman County Agriculture and Natural Resources Newsletter



October/November 2024

**Cooperative
Extension Service**

Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.
Lexington, KY 40506



Disabilities
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with prior notification.

OFF THE HOOF

KENTUCKY BEEF CATTLE NEWSLETTER NOVEMBER 1, 2024

Each article is peer-reviewed by UK Beef IRM Team and edited by Dr. Les Anderson, Beef Extension Specialist, Department of Animal & Food Science, University of Kentucky

Coping with Low Precipitation

Dr. Jeff Lehmkuhler, University of Kentucky, Extension Professor

As the fall continues to provide us with extremely dry conditions, fall growth of forages will be limited this year. Cow-calf producers should be developing a drought plan as we move through the fall and winter. Below are a few tips to consider when navigating these dry fall conditions.

Things to consider during these dry conditions include:

- 1) Monitor body condition and record – Be sure to record body condition scores of cattle and monitor condition every month. Excessive losses in body stores reflect insufficient nutrient intake and should be corrected. Excessive body tissue loss can reduce milk production, lengthen anestrus and reduce herd productivity.
- 2) Feed hay early – Total dry matter intake is negatively impacted when forage availability is limiting. Providing stored forages such as hay early in the fall when pastures are not growing from lack of precipitation will help reduce body condition loss.
- 3) Cull – As market prices remain strong, now may be a time to consider culling opens, cows with structural issues, cows at the bottom of list production-wise, or those with poor disposition.
- 4) Early-wean – Lactation increases nutrient needs of cows significantly. Weaning calves can be done with confidence as early as 90 days with success but waiting until calves are 120 days will reduce post-weaning management needs. Weaning will lower the nutrient demand for cows and aid in maintaining body condition.
- 5) Substitute forage with grain – Using low-starch, highly digestible fibrous coproduct feedstuffs such as soybean hulls, wheat middlings, beet pulp and others can be used as means to increase energy intake. When providing coproduct or grain supplements, forage intake is not reduced on a 1:1 ratio. The actual forage intake may only be decreased by about 0.5 lb of dry matter for each pound of supplement dry matter offered.
- 6) Consider feeding an ionophore – Research has shown providing beef cows with 200 milligrams of an ionophore such as monensin reduces gaseous energy losses associated with rumen fermentation. Research from Kentucky found that feeding an ionophore to beef cows maintained similar body condition and weights when cows were offered 15% less hay compared to cows that were not provided monensin. Ionophores must be mixed in with at least 1 pound of grain for beef cows but can be offered free choice in mineral mixtures or tubs to feeders and replacement heifers.
- 7) Have municipal water as a back-up – As limited precipitation continues to linger, ponds, streams, creeks, and springs dry up. Cows need 10-20 gallons of water daily. Limiting water intake will result in reduced dry matter intake and production. Having a waterer that is connected to a municipal water supply will ensure that cattle will have access to clean water. Don't forget to ensure the water supply is turned on, tank floats are working, and the tanks have been cleaned.
- 8) Consider creep for fall-born calves – Nursing calves will have a fully functional rumen around 6-10 weeks of age. Reduced forage availability and quality will reduce milk production by the dam, but also limit nutrient intake of the calves. Limited forage nutrient intake and reduced milk consumption will reduce weaning weights and prevent calves from meeting their genetic potential for gain. Creep feeding can provide access to additional feed and increase the nutritional plane of calves. Creep feeding may be in the form of higher quality forages or grain supplementation.
- 9) Control internal parasites – Young cattle are most susceptible to internal parasites. Work with your veterinarian to monitor fecal egg counts and develop a protocol to control internal parasites in cattle.
- 10) Liquidate – In the event that forage and/or water resources are not available, the best option may be to sell the herd. Starving cattle is unacceptable and not an option. As an owner of livestock, it is your responsibility to ensure cattle are provided access to forage and water. Selling cattle during a high market and waiting for to buy back when prices fall can be a viable option.

I am hoping that we receive some much-needed precipitation before frost to improve pasture conditions. However, the shortened day lengths and lingering frost will limit forage production. Develop your plans and be ready to act rather than hoping for rain next week.



Winter Grain Meeting

WEDNESDAY
DECEMBER 11, 2024
9:00 AM

AMBERG FARMS
6299 State Route 1128
Hickman, KY 42050



Session Title

Welcome
Grain Market Update
Corn Disease Update
Weed Update
Beaver Mitigation Program

Speakers

Local County Agent
Dr. Grant Gardner
Dr. Kiersten Wise
Dr. Larry Steckel
Micah Seavers



Lunch is sponsored by *Nutrien*
*Ag Solutions**

KY & TN Commercial Applicator Points pending

*****RSVP by calling your local county extension office by Friday, December 6th to ensure your free meal*****

Fulton - 270- 236-2351

Carlisle - 270-628-5458

Hickman - 270-653-2231

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Lexington, KY 40506



Soybean Seed Quality Issues Due to Fungal Infections

Dr. Carl A. Bradley, UK Extension Plant Pathologist

Little rainfall during August and most of September in parts of the state has led to poor soybean pod integrity and earlier than expected maturity. With the rains that the remnants of Hurricane Helene had dropped, along with the warm temperatures, a scenario developed that has led to soybean seeds being infected and contaminated with fungi. Phomopsis seed decay (usually caused by *Diaporthe longicolla*, formerly known as *Phomopsis longicolla*) and purple seed stain (caused by *Cercospora kikuchii* and *Cercospora flagellaris*) generally are the two main culprits of poor-quality seed. Seeds affected by Phomopsis seed decay may appear shriveled, misshapen, and/or chalky white in color (Fig. 1). As the name suggests, seeds affected by purple seed stain will be discolored with purple blotches, or the entire seed may be purple in color (Fig. 2). Purple seed stain may be more prevalent in fields that showed symptoms of *Cercospora* leaf blight (Fig. 3.). Certain varieties in some areas had severe *Cercospora* leaf blight develop late in the season this year. The largest economic losses associated with these seed diseases to farmers occur at the grain elevator, when loads of harvested seed may be docked due to “damaged seed”. Of the two diseases, Phomopsis seed decay generally causes the greatest reduction in seed germination.



Fig. 1. Symptoms of Phomopsis seed decay on soybean seeds (C. Bradley photo)

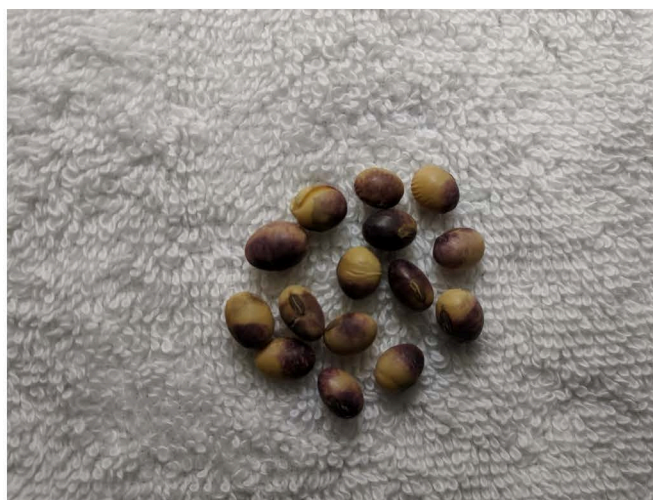


Fig. 2. Symptoms of purple seed stain on soybean seeds (C. Bradley photo)



Fig. 3. Soybean leaves affected by *Cercospora* leaf blight (C. Bradley photo)

The two most common questions that I am receiving about these diseases are: why am I having this problem this year?; and what could I have done to prevent these seed disease issues?

Why am I having this problem this year?

The primary reason why *Phomopsis* seed decay and purple seed stain occur in a field has a lot to do with the weather that has occurred since soybeans have been at physiological maturity. Fields in areas of the state that have received frequent rainfall since soybeans have been mature have been hit the hardest with seed disease problems. Along with wet weather, the very warm temperatures that the state was experiencing up until recently also helped promote infection by these fungi. The *Phomopsis* seed decay pathogen is best able to infect seeds after physiological maturity, and the longer that soybeans sit in the field in wet and warm conditions after they are mature, the greater the likelihood of *Phomopsis* seed decay problems.

What could I have done to prevent these seed disease issues?

Harvesting soybeans as soon as possible after physiological maturity and at optimal seed moisture is the primary way to avoid problems with *Phomopsis* seed decay and purple seed stain; however, when rainy conditions prevail, seeds take longer to dry down, and harvest becomes delayed. Planting soybean varieties with relative maturity ratings that match your region and your farming operation also may help with a timely harvest. Since these seed pathogens survive in soybean debris, rotating fields with a non-legume crop may help reduce inoculum levels in the field. Since these pathogens also survive on seed, planting bin-run seed may help perpetuate the problem in a field

by continually introducing the pathogen back into the field. Although soybean germplasm lines have been identified with resistance to Phomopsis seed decay, no commercial soybean varieties are marketed as having resistance to this disease, and soybean breeding programs may not intentionally screen their lines for resistance to Phomopsis seed decay. When applied at later growth stages, such as R5 (beginning seed stage), foliar fungicides have been shown to inconsistently reduce Phomopsis seed decay in research trials. Unfortunately, even when reductions in Phomopsis seed decay have occurred with late-applied fungicides, often-times the magnitude of the reduction would not have been enough to prevent levels of disease that would still be discounted at the grain elevator. Overall, the wet and warm harvest season that parts of the state experienced was likely so favorable for infection and disease development, that there was little that could have been done to avoid some losses due to these diseases this year.

Optional Citation: Bradley, C. 2024. Soybean Seed Quality Issues Due to Fungal Infections. *Corn & Soybean News, Vol 6, Issue 11*. University of Kentucky, November 15, 2024.

Dr. Carl Bradley

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UPCOMING EVENTS

2024

Fall Crop Protection Webinar Series

Management of important wheat diseases in Kentucky

November 26, 2024

2025

Kentucky Commodity all Crop Protection Webinar Series

January 16, 2025

Winter Wheat Meeting

February 4, 2025

2025 Kentucky Crop Health Conference

February 6, 2025

Wheat Field Day

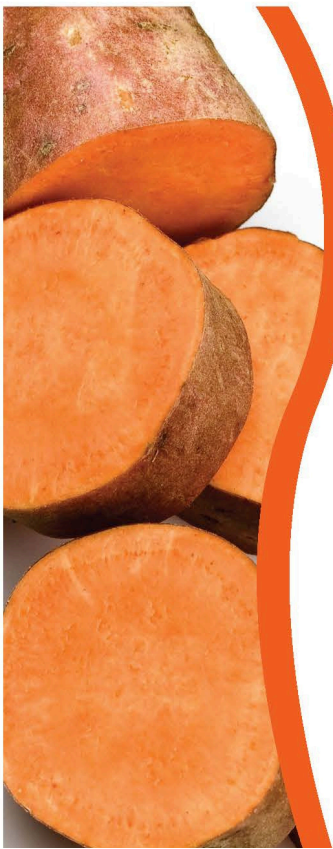
May 13, 2025

Pest Management Field Day

June 26, 2025

Corn, Soybean & Tobacco Field Day

July 22 or July 29, 2025



Nutty Sweet Potato Biscuits

- | | | |
|-----------------------------------|------------------------------------|-----------------------------|
| 1 cup all-purpose flour | ¼ teaspoon ground cinnamon | potatoes |
| ⅓ cup whole wheat flour | ¼ teaspoon ground nutmeg | 6 tablespoons sugar |
| 1½ teaspoons baking powder | ⅓ cup chopped walnuts | ¼ cup butter, melted |
| ½ teaspoon salt | 1 cup mashed sweet potatoes | ½ teaspoon vanilla |
| | | 1 tablespoon milk |

- In a large mixing bowl, **combine** flours, baking powder, salt, cinnamon, nutmeg and walnuts. **Set** aside.
- Combine** sweet potatoes, sugar, butter, vanilla and milk; **add** to flour mixture and mix well.

- Turn out** onto a floured surface; gently **knead** 3 or 4 times. **Roll** dough into ½ inch thickness. **Cut** with a 2 inch biscuit cutter and **place** on a lightly greased baking sheet.
- Bake** at 450°F for 12 minutes or until

golden brown.

Yield: 18 biscuits

Nutritional Analysis: 4 g fat, 2 g saturated fat, 5 mg cholesterol, 210 mg sodium, 14 g carbohydrate, 1 g fiber, 4 g sugar, 2 g protein.



Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers' market, or roadside stand.

Kentucky Sweet Potato

SEASON: All year—peak season is October through March.

NUTRITION FACTS: Sweet Potatoes are a good source of fiber, complex carbohydrates and vitamins A and C.

SELECTION: Two varieties of sweet potatoes are grown in Kentucky. The pale sweet potato has a light yellow skin and pale yellow flesh that is dry and crumbly. The darker variety has a dark skin and orange sweet flesh that cooks up moist. Choose small to medium-sized ones with smooth, unbruised skin.

STORAGE: Store unwrapped in a cool (50 degree) dry, dark place with good ventilation for up to 2 months or at room temperature for 2 weeks.

PREPARATION: Scrub well. Leave whole or peel, then slice, dice or shred.

Baking: Pierce skin in several places and rub with

Source: www.fruitsandveggiesmatter.gov

margarine if desired. Arrange in a single layer and bake uncovered in a 375° F oven until soft when squeezed (45-60 minutes.)

Boiling: In a 3-quart pan, boil 4 whole medium-size potatoes, covered in 2 inches water until tender when pierced. Drain.

Microwaving: Pierce skin, place on a paper towel in microwave. If cooking more than 2 at a time, arrange like spokes. Microwave on high, turning halfway through cooking time. Allow 4-5 minutes for one potato.

SWEET POTATOES

Kentucky Proud Project

County Extension Agents for Family and Consumer Sciences

University of Kentucky, Nutrition and Food Science students

OCTOBER 2012

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Agent for Agriculture and
Natural Resources



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Martin-Gatton

College of Agriculture,
Food and Environment
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