Cooperative Extension Service



Hickman County Agriculture and Natural Resources Newsletter

June/July 2024

Cooperative **Extension Service** MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, physical or mental disability or reprisal or retaliation for prior civil rights activity. Reasonable accommodation of disability may be available with prior notice. Program information may be made available in languages other than English. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating. Agriculture and Natural Resources mmunity and Economic Development





Preparing Western Kentucky for Southern Rust in Corn

Dr. Kiersten Wise, UK Extension Plant Pathologist

estern Kentucky will receive rainfall from tropical storm Beryl this week and there are concerns that this storm will bring with it an unwanted disease, southern rust of corn, caused by the fungus Puccinia polysora. This fungus does not overwinter in Kentucky and spores blow north each year on wind and storms.

The disease has developed slowly in southern states this year, but has been confirmed in Texas, Louisiana and southern Arkansas, as well as Georgia so far in 2024. Confirmed disease can be observed on the cornipmpipe website. On the map, red counties/parishes indicate that southern rust has been confirmed by university/Extension personnel. The track of the tropical storm skirts most areas with confirmed disease, so it is not expected that large amounts of spores will move north on the storm. We also would need favorable conditions for disease to develop if spores are deposited in western Kentucky. We typically confirm southern rust in Kentucky in mid-July each year, depending on weather conditions, so if southern rust is observed in the coming weeks, it would not be abnormal. If southern rust is suspected, the fastest way to get a diagnosis through the Plant Disease Diagnostic Laboratory (PDDL) is to submit samples through County Agents.



It will be important to scout and monitor fields over the next few weeks and submit samples to the PDDL through local County Extension Agents if you suspect you have southern rust in a field. Tips on identifying southern rust can be read in a <u>previous article</u>. The potential impact of southern rust in Kentucky will depend on the crop growth stage of a field once southern rust is confirmed in an area.

Previous research from southern states indicates that fungicides may be needed to protect yield while corn is in the tasseling through milk (VT-R3) growth stages. Once corn is past milk (R3), fungicides are likely not needed to manage the disease. If fields have already received or will soon receive a fungicide application this year at tasseling/silking (VT/R1), they are not likely to need a second application of fungicide once corn reaches the blister (R2) growth stage. For areas where planting was significantly delayed, careful scouting and monitoring for disease presence is key to determining if or when a fungicide will be needed for southern rust management.

More information on timing of fungicide applications for southern rust can be found in Table 2 of the Crop Protection Network publication on Southern Rust. The efficacy of specific fungicide products for southern rust are described in the updated fungicide efficacy table for management of corn diseases, which is developed by the national Corn Disease Working Group.

Optional Citation: Wise K. 2024. Preparing western Kentucky for southern rust in corn. Corn & Soybean News, Vol 6, Issue 7. University of Kentucky, July 12, 2024











JOIN US FOR WAVE AG DAY! AUGUST 1st, 2024

COLUMBUS BELMONT STATE PARK BREAKFAST AND BROWSING -7:30 - 9:00 a.m. SPEAKERS AND PROGRAM -9:00 a.m.

★Support Agriculture in the 4 River Counties ★Recognize Award Winners ★Networking with Vendors and Partners ★Hear from Guest Speakers



Emcee-Mark Wilson



Guest Speaker-Commissioner Jonathan Shell



Keynote Speaker-Wayne Hunt

Foliar Fungicide Considerations for Soybean

Dr. Carl Bradley, UK Extension Plant Pathologist

As full-season soybean fields in Kentucky approach the R3 (beginning pod) developmental stage, it generally is a time to consider an application of a foliar fungicide to protect against foliar diseases. Rainfall is an important factor to consider when making a foliar fungicide application decision, as high rainfall accumulation is one of the main drivers that can increase the risk of foliar dis-

eases. Besides rainfall, the risk of foliar diseases also is affected by other factors such as the soybean variety planted, and the cropping history in a field.

The primary foliar diseases of concern that have shown the ability to cause economic yield losses in Kentucky recently are frogeye leaf spot (Fig. 1) and target spot (Fig. 2). Both diseases are influenced greatly by the soybean variety being grown. Some varieties are highly resistant to frogeye leaf spot, while others may be susceptible; therefore, it is important to be aware of the disease ratings of the varieties planted in your fields. Target spot is a relatively new disease to Kentucky and did have a large impact on soybean yields on a few limited fields on very susceptible varieties a few years ago. More recently, it appears that fewer varieties have high susceptibility to this disease, which helps reduce the risk of target spot. Regardless, it is still important to continue scouting for this disease, as information on specific varieties' susceptibility to target spot is limited.

Other foliar diseases that generally do not have an economic impact on soybean but can in certain years are Septoria brown spot (Fig. 3) and Cercospora leaf blight (Fig. 4). In general, symptoms of



Figure 1. Symptoms of frogeye leaf spot on soybean leaves (Photo by C. Bradley).



Figure 2. Symptoms of target spot affecting a soybean leaflet (Photo by C. Bradley).



Figure 3. Brown lesions and yellowing on the leaf edges caused by the Septoria brown spot pathogen of soybean (Photo by C. Bradley).



Figure 4. "Purpling" of soybean leaf caused by the Cercospora leaf blight pathogen (Photo by C. Bradley).

Septoria brown spot often are only on leaves in the lower canopy, which has little impact on yield. However, in years with frequent rainfall throughout the season, spores of the Septoria brown spot pathogen may splash up to the upper canopy and cause some upper leaves to prematurely defoliate. When this happens, some yield loss can be attributed to Septoria brown spot. Although Cercospora leaf blight may occur in Kentucky, the appearance of this disease generally has been later in the season, which often has been too late to cause yield reductions.

A soybean disease "score card" is available in the resources section of the Take Action website (https://iwilltakeaction.com/), that is titled, "Know Your Disease Risk in Soybeans: What's Your Score?". This score card can be used on a field-by-field basis to help determine what the risk is for foliar disease development and can help make fungicide application decisions.

If the decision is made to apply a foliar fungicide, it is important to choose a product that has efficacy against the spectrum of diseases that might affect your field. It is also important to choose a product that contains multiple modes of action to help manage the potential of fungicide resistance. Isolates of the frogeye leaf spot, Septoria brown spot, target spot, and Cercospora leaf blight pathogens that are resistant to strobilurin (quinone outside inhibitors, "QoI", FRAC Group 11) fungicides are present in Kentucky, so fungicide resistance is an important consideration. To help make a decision on which fungicide products might work best for the diseases you intend to manage, the "Fungicide Efficacy for Control of Soybean Foliar Disease" publication on the Crop Protection Network (https://cropprotectionnetwork.org/) can provide information that will help with that decision.

Optional Citation: Bradley C. 2024. Foliar Fungicide Considerations for Soybean. *Corn & Soybean News,* Vol 6, Issue 7. University of Kentucky, July 12, 2024



July 23, 2024

Corn, Soybean & Tobacco Field Day

UKREC, Princeton KY 42445

Wagons roll: 8:00am CT

Topics include:

Corn Disease Concerns For 2024

Familiar and New Soybean Diseases to Look Out for in 2024

Insect Update

Corn and Soybean Variety Trials

Weed Control in 2024 And Beyond

"Weather Alert"

Maximizing Corn Yields Following a Cover Crop

Soybean yield and economic response to irrigation

Corn and Soybean Outlook

The Fundamentals of Soil pH Management for Production Agriculture

Changes To Agr-1 Fertilizer Rate Recommendations for Kentucky Grain Crops

UKREC Dark Tobacco Infrastructure and Research Update

Tobacco Research Update from University of Tennessee

Sulfur Fertility in Tobacco

Registration: http://tiny.cc/m9jlyz Or scan the QR Code



Thanks to our lunch sponsors!







Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability.



Blackberry Peach Crumble

2 cups fresh blackberries

2 cups peeled and sliced fresh peaches or 1 (16 ounce) bag frozen peach slices,

1 teaspoon grated lemon peel 2 tablespoons cornstarch

1/3 cup, plus 1/2 cup packed brown sugar

1/2 cup all-purpose flour

1/2 cup chopped blanched almonds, (optional)

1/4 teaspoon salt

6 tablespoons butter, cut into pieces

Bake in a pre-heated 400° F oven for 30

Combine blackberries, peaches, lemon peel, cornstarch and 1/3 cup brown sugar in a large bowl.

Pour ingredients into a lightly greased 8 inch baking dish.

Mix together flour, almonds, salt, and remaining ½ cup brown sugar. With pastry blender or two knives, cut in the butter until the mixture resembles coarse meal.

Sprinkle flour mixture over fruit.

minutes.

Cool 10 minutes prior to serving.

Yield: 8, 1/2 cup servings

Nutritional Analysis: 270 calories, 14 g fat, 25 mg cholesterol, 135 mg sodium, 35 g carbohydrate, 2 g protein, 3 g fiber. Without almonds: 220 calories, 9 g fat, 25 mg cholesterol, 135 mg sodium, 35 g carbohydrate, 2 g protein, 3 g fiber.

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

Kentucky Blackberries

SEASON: June to September

NUTRITION FACTS: A one-half cup serving of raw berries contains 35 calories, has zero fat, and is a good source of potassium, vitamin C, and fiber.

SELECTION: Look for plump fruit that is uniform in color and appears fresh. Berries should be free of stems or leaves. Avoid fruit that is moldy, crushed, bruised, or contains extra moisture.

STORAGE: Store unwashed and covered berries in the refrigerator. Use within two days.

PREPARATION: Handle all berries gently. Wash berries by covering them with water and gently lifting the berries out. Remove any stems and drain on a single layer of paper

Source: www.fruitandveggiesmatter.gov

towels. Blackberries are delicious cooked, which intensifies the flavor, or eaten fresh as a snack or in a salad.

PRESERVING: Berries may be preserved by canning or freezing, or made into jellies or jam. For more information, contact your local County Extension Office.

BLACKBERRIES

Kentucky Proud Project

County Extension Agents for Family and Consumer Sciences University of Kentucky, Nutrition and Food Science students

June 2010

Educational programs of Kentucky Cooperative Extension serve all people regardless of race color, age, sex, religion, disability, or national origin. For more information, contact your county's Extension agent for Family and Consumer Sciences or visit www.ca.uky.edu/fcs. COOPERATIVE EXTENSION





For more information follow us at https://hickman.ca.uky.edu/

Hickman County Cooperative Extension Service on Facebook

Agent for Agriculture and **Natural Resources**



Martin-Gatton

College of Agriculture, Food and Environment Cooperative Extension Service

RETURN SERVICE REQUESTED

Cooperative Extension Service

University of Kentucky Hickman County 329 James H. Phillips Drive Clinton, KY 42031