

Agriculture & Natural Resources Newsletter June 2023



University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

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It's that time again for mowing hay, planting corn, setting tobacco, and getting gardens planted! I am sure everyone is very busy right now, but I wanted to ask a favor. I have created a very short survey about these newsletters. I want to know the things you all are interested in reading about and what may be missing! I also am going to start an ANR E-Mail list, so for those of you who would rather receive the newsletter via e-mail, please take a couple minutes to complete this survey!



How to scan a QR code:

- Open the camera on your smart phone
- Hold the camera over the QR code and a link should appear
- Click on the link to access the survey

Thank you!

Samantha Saunders

Samantha Saunders
Robertson County Agriculture & Natural Resources/
4-H Youth Development Agent

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We Will Be
CLOSED

The Robertson County Extension Office will be closed on the following days:

June 19th (Juneteenth Holiday)

July 4th (Independence Day).

Be sure to put the Farmer's Market Days on your Calendar!

Blue Licks Market—By the Museum:

Friday's @ 3-7 pm

Saturday's @ 9 am - 1 pm

Farmer's Market Building by the Robertson Co. Senior Citizen's Building:

Friday, July 14th @ 9 am -1 pm

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

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LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.

Bacterial Canker of Tomato (PPFS-VG-06)

Cheryl Kaiser, Plant Pathology Extension Support, and Nicole Gauthier, Plant Pathology Extension Specialist for Vegetable Crops

Bacterial Canker of Tomato

Importance
Bacterial canker is a common disease of tomato plants in commercial plantings and residential gardens. This infectious disease is capable of spreading rapidly, resulting in devastating losses. In addition, the pathogen can be difficult to eradicate once it has been introduced into a greenhouse, garden, or field.



Symptoms
Bacterial canker of tomato is characterized by wilting and necrotic lesions on the leaves and stems. The lesions are often irregular in shape and may be accompanied by a watery exudate. The disease is most common in commercial plantings and residential gardens.



Figure 1. Bacterial canker of tomato. Figure 2. Bacterial canker of tomato stem.

Bacterial canker is a potentially serious disease of tomato that can occur in commercial plantings and residential gardens. This infectious disease is capable of spreading rapidly, resulting in devastating losses. In addition, the pathogen can be difficult to eradicate once it has been introduced into a greenhouse, garden, or field.

This publication discusses how bacterial canker affects seedlings, established plants, and tomato fruit. Information on cause, disease development, and management strategies for various production methods is also included.

Bacterial Canker of Tomato (PPFS-VG-06) is available online.

For additional publications on vegetable diseases, visit the UK Plant Pathology Extension Publications webpage.

Soil Samples

First 10 Soil Samples are free!

\$10 deposit on soil probe

Refund upon return

Hay Samples

\$10 (Check) /sample

For more information call the
Extension Office at (606)-724-5796

**We do free samples for the East KY Hay
Contest in the fall. If you would like to be
added to the list for sampling, please
call the office.

Equipment Rental

Robertson Conservation

⇒ No-till Drill
\$50/day, 1-10 acres

\$50 + \$5.50/acre, 11 acres and up

⇒ No-till Drill (Hay Buster)
\$65/day, 1-10 acres

\$65 + \$6.50/acre, 11 acres and up

⇒ *New Lime Spreader
\$60/day

⇒ Old Lime Spreader
\$50/day

Contact
Grant Paynter
to
schedule:
(606)-842-0320



Summer Garden Lasagna

- | | | | |
|---|--------------------------------------|--|--|
| 5 medium zucchini | 8 ounces plain Greek yogurt | 1 medium yellow onion, diced ¼ inch | 10 ounces fresh spinach |
| 2 yellow summer squash | 2 cups low fat cottage cheese | ¼ cup fresh chives, chopped | 1 (24 ounce) jar spaghetti sauce |
| 3 tablespoons olive oil | ½ cup chopped fresh basil | 2 garlic cloves, pressed | 8 ounces shredded mozzarella cheese |
| 2 large eggplants, sliced ½ inch | 2 teaspoons salt | | Garnish with fresh basil leaves |

Thinly slice zucchini and summer squash ¼ inch thick and toss with 1 tablespoon olive oil and 1 teaspoon salt. Roast in oven at 400 degrees F for 20 minutes, turn slices after 10 minutes. Slice eggplants, toss with 1 tablespoon olive oil; place on baking sheet. Roast in oven at 400 degrees F for 20 minutes, turn slices after 10 minutes. If needed, place under boiler for 5 minutes to reduce excess moisture. Mix together yogurt, cottage cheese, fresh basil, 1 teaspoon salt, diced onion and chives. Sauté garlic in remaining olive oil until golden. Add spinach to pan and cook until wilted. Spoon half of roasted zucchini,

and sautéed garlic into a greased 9-by-11 inch baking dish. Coat evenly with half of the cottage cheese and yogurt mixture. Place an even layer of eggplants on cottage cheese mixture. Spread a layer of spaghetti sauce on eggplants and sprinkle with mozzarella cheese. Repeat process for one more layer. Bake at 425 degrees F for 40 to 45 minutes. Sprinkle with chopped basil and cheese for garnish. Yield: 10, 1 cup servings.

Nutritional Analysis: 240 calories, 10 g fat, 4 g saturated fat, 20 mg cholesterol, 840 mg sodium, 20 g carbohydrate, 6 g fiber, 7 g sugars, 17 g protein.

USDA Announces Signup for Pandemic Assistance Revenue Program

DEADLINE EXTENTDED

The Pandemic Assistance Revenue Program (PARP) will assist eligible producers of agricultural commodities who experienced revenue decreases in calendar year 2020 compared to 2018 or 2019 due to the COVID-19 pandemic. PARP will help address gaps in previous pandemic assistance, which was targeted at price loss or lack of market access, rather than overall revenue losses.

USDA's Farm Service Agency will accept PARP applications from **January 23, 2023, through July 14, 2023.**

Eligible and Ineligible Commodities

For PARP, eligible agricultural commodities include crops, aquaculture, livestock, livestock byproducts, or other animals or animal byproducts that are produced as part of a farming operation and are intended to be commercially marketed. This includes only commodities produced in the United States or those produced outside the United States by a producer located in the United States and marketed inside the United States.

The following commodities are not eligible for PARP:

- Wild free-roaming animals.
- Horses and other animals used or intended to be used for racing or wagering.
- Aquatic species that do not meet the definition of aquaculture.
- Cannabis sativa L. and any part of that plant that does not meet the definition of hemp.
- Timber.

Program Eligibility

PARP payments will be made on a whole-farm basis, not commodity-by-commodity. To be eligible for PARP, an agricultural producer must have been in the business of farming during at least part of the 2020 calendar year and must have experienced a 15 percent decrease in allowable gross revenue in 2020, as compared to either:

- The 2018 or 2019 calendar year, as elected by the producer, if they received allowable gross revenue during the 2018 or 2019 calendar years, or
- The producer's expected 2020 calendar year allowable gross revenue, if the producer had no allowable gross revenue in 2018 or 2019.

PARP payments will be issued after the application period ends on July 14, 2023.

For more information on determining allowable gross revenue visit farmers.gov/coronavirus/pandemic-assistance/parp or review the PARP fact sheet.

More Information:

To apply for PARP or if you have questions, contact Maysville Service Center, Farm Service Agency 1925 Old Main Street, Maysville, KY 41056 or call 606-759-5763 ext 2.



Dry Weather Effects on Corn at Early Growth Stages (Sent on 6/6/2023)

Chad Lee, Extension Professor, Grain Crops

The dry weather across the state is putting stress on the corn crop. The lack of water to corn before the V12 growth stage usually results in minimal yield losses if adequate water occurs at V12 and beyond. Nearly all of corn in Kentucky ranges from just planted to about V9 as of June 5, 2023.

While yield losses might be minimal, some other issues can or will occur with a lack of water. Each of these scenarios assume that the water stress lasts for a 10 to 14 days and plants will recover on the other side. For now, we are not going to think any worse than these scenarios.

1. **Leaf rolling:** The corn leaves will roll during the heat of the day to try to conserve as much water as possible. When this leaf rolling occurs, the plant conducts less photosynthesis, which means that plant is producing less biomass during the drought stress.
2. **Potassium Deficiency:** Potassium deficiency is a very common indicator for drought stress on young corn plants. Plant tissue samples taken on V3 to V6 corn right now will likely show K deficiency and that K deficiency may be from the drought and nothing else. The corn plant needs water to take up K, so adding more potassium will have no effect on the corn crop if the crop does not have water.
3. **Other Nutrient Deficiencies:** Water is needed for corn to take up several nutrients, not just potassium. Potassium might be the most obvious, but a tissue test will reveal several others as being deficient as well. A soaking rain is the best remedy for these transient deficiencies.
4. **Compaction Becomes Evident:** Both seed furrow sidewall compaction and subsurface tillage compaction become more obvious in dry soils. If corn in a single row or a section shows twisting and curling before other corn, sidewall compaction could be a problem. "Vertical tillage" implements and discs often cause soil compaction at the depth they are set. In dry soils, these compacted areas become impossible for roots to break through. Stunted reduce cannot take up as many nutrients and stunted corn plants often follow. Timely rains are about the only in-season remedy for these soils. With the dry weather right, it may be too late for the rains to help.
5. **"Floppy" corn syndrome.** (Someone needs to write a "Floppy Corn" song to the tune of Adam Sandler's "Sloppy Joe".) The dry weather and hot temperatures can cause all roots from one or more nodes to desiccate or dry out and die. A strong wind at this point will knock the plants over. Corn plants from about V2 to V3 will be most susceptible this week. Corn in shallow plantings are more susceptible. Soaking rains to allow new root growth before any strong winds occur is the best remedy. For more on Floppy corn, see this article. As for that song: "Floppy corn, flop-floppy corn..." It's in your head now isn't it?
6. **Loss of Row Number or Kernel Number:** Once corn reaches V6 growth stage, the dominant ear and tassel formation are starting. However, water stress starts affecting row number and kernel number closer to the V12 growth stage. At the V6 growth stage, the corn plants have switched to the nodal root system. This is the final stage before exponential growth. A lack of water from V7 to about V12 could reduce total biomass of the stem and leaves. A lack of water around V12 will reduce kernel rows and then kernel numbers per row on the ears.
7. **Less Disease Risk:** So, we are looking for a silver lining with this one. A lack of water means foliar disease pressure is very low right now. We should not be applying fungicides to V5 or V6 corn anyhow. We certainly do not need a fungicide in a drought. Kiersten Wise will have more on this issue.
8. **A Lack of Residual Herbicide Activity:** Most soil residual herbicides need rainfall to activate. Scout fields to identify which weeds are escaping and plan to spray once a rain event occurs. The weeds are not growing well now, either. They need the rain event to be receptive to the herbicides. When applying the herbicides, be sure to use the full adjuvant slates recommended on the labels. Travis Legleiter will have more on this issue.
9. **Watch the Roots this Week:** Soils usually dry from the surface downward. This movement of water can affect root development. The V9 corn should have well developed roots that are deeper into the soil. While the V9 corn demands more water than V1 corn, the V9 roots are more likely to interact with plant available water longer than the V1 corn this week. Emerging corn (VE) and V1 corn demands very little water, and most soils still have enough for those plants at the start this week. Corn at the V2 to V3 growth stage this week may be at soil depths with very little water and could lose nodal roots to the lack of water.

The weather forecast this week provides low chances of rain. More corn in more fields will roll this week. Some of it will look bad. But all of it still has a chance to make good to excellent yields. We will all be monitoring the crop closely and will provide updates in the coming weeks.

Land Rental Agreements

Rogers, J. "Land Rental Agreements." *Economic and Policy Update* (23):5, Department of Agricultural Economics, University of Kentucky, May 30th, 2023.



Land rental agreements can come in many shapes, sizes, parameters, and stipulations. Typically, we see three basic land rent types: cash rent, share rent, and the increasingly popular, flex rent. Each rental agreement is likely to be different. This article will just touch on the basics, realizing that each landlord and renter can develop their own individual agreement.

Cash rent is typically the easiest and most straightforward rental type. The landlord has a set number of acres to rent. An agreement is made with the renter to pay a set amount per acre for the use of that land. In the agreement, there may be other stipulations such as fertilizer management, crop rotation, and waterway and crossing management included in the agreement. Cash rent gives the landlord a set revenue per year and the renter a set cost per year. The landlord gives up any upside due to prices and yields. Likewise, the renter bears the full risk in a down year, no matter the revenue generated from the land, the same rent is due. Determining the cash rental rate is a science in and of itself. Rental rates are dependent upon the soil productivity level, size of the tract of land being rented, location, competition among potential renters, and many other factors. It helps the negotiation process if both parties are somewhat familiar with current cash rents in the area. Sometimes the landlord has a particular renter in mind that they want to rent their ground to. This requires the two parties to come to an agreement. Other times, a closed or open bid process is used to rent the ground to the highest bidder.

Crop share rent can be equally as popular as cash rent. One of the attractive qualities of crop share is that it helps to spread the risk and reward between the landlord and the renter. Again, crop share agreements vary among areas, producers, and individual land tracts. Crop share agreements can also vary based on the crop planted. A crop share rent works just like it sounds. An agreement is made between the parties that the landlord will receive a certain percentage of the crop. This percentage can be anything but are typically somewhere between 20% and 50% of the crop. Sometimes the landlord receives a percentage of the crop "clear of expenses", meaning that the landlord pays none of the costs of production. Other times landlord may receive a higher percentage of the crop in exchange for paying a portion of the expenses. Under a crop share agreement, the landlord owns a portion of the crop. This requires an agreement on how and when the landlord will be paid for their crop. The landlord could market their own crop. Sometimes an agreement is made for the producer to haul the crop at the time of harvest and sell the landlord share at the current market price on the day of harvest. Again, these agreements can vary from one rental agreement to another. Under a crop share agreement, the landlord now bears part of the revenue risk associated with crop production and market prices. In many situations, the landlord in a crop share agreement may find it wise to purchase crop insurance for their pair of the crop. Likewise, the landlord may have the opportunity to experience the upside of revenue increases due to crop production and market rallies. The renter in a crop share agreement gets to share the risk of a down year with the landlord. Crop share rental agreements typically require the landlord to be slightly more involved and knowledgeable about crop production levels and crop markets.

In recent years, a hybrid rental agreement seems to have gained popularity. This is referred to as a Flex Lease. The flex lease combines some attributes from the cash rent and crop share agreements. Like all rental agreements, the flex lease can vary widely. Typically, a flex lease sets a minimum cash rent. This cash rent might be lower than a traditional cash rent, this helps to protect the renter in the case of decreased revenues, but locks in a minimum for the landlord. A flex lease also has a component to allow the landlord to gain in the case of increased revenues. This might be through a percentage of the crop when revenue hits or exceeds a predetermined threshold. Flex leases require more communication and knowledge of both the landlord and the renter. Many details must be worked out to determine the parameters that trigger increased rental payments. One of the most difficult parameters is what price to use and where and when to obtain that price to calculate revenue. It is important that both parties have a full understanding of the agreements and how increased payments are triggered and calculated.

As mentioned many times in the article, rental agreements can be different in a variety of ways. One of the most important points around rental agreements is that all parties fully understand what has been agreed upon. While many rental agreements are made verbally and over a handshake, it is highly recommended that any rental agreement be put in writing. A written rental agreement allows both parties or their representatives to refer back to the parameters of the lease. A written rental agreement also helps protect both parties in the case of death or other unexpected tragedy. Written agreements allow outside parties to know what the agreement was and how long it is in effect. Sample rental agreements to get you started can be found through a quick online search. If desired, an attorney can be contacted to review your rental agreement to be sure that your interests are protected.



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Forage Timely Tips: June

- Continue hay harvests. Minimize storage losses by storing hay under cover.
- Clip pastures for weeds and seedheads as needed.
- Use slower grazing rotations allowing for a longer recovery periods.
- Use portable fencing to decrease paddock size and increase paddock number.
- Do NOT graze below the minimum desired residual height (4 in for most forages).
- When present, johnsongrass can provide high quality summer forage when managed.
- Crabgrass, a warm-season annual grass, can provide high quality summer grazing. It is a annual grass highly preferred by livestock. If desired, remember crabgrass needs some annual soil disturbance to keep coming back.
- Begin grazing native warm-season grasses. Start at 20-24” and stop at 8-10 inches.