

# Agriculture & Natural Resources Newsletter July 2023

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

**Cooperative Extension Service**  
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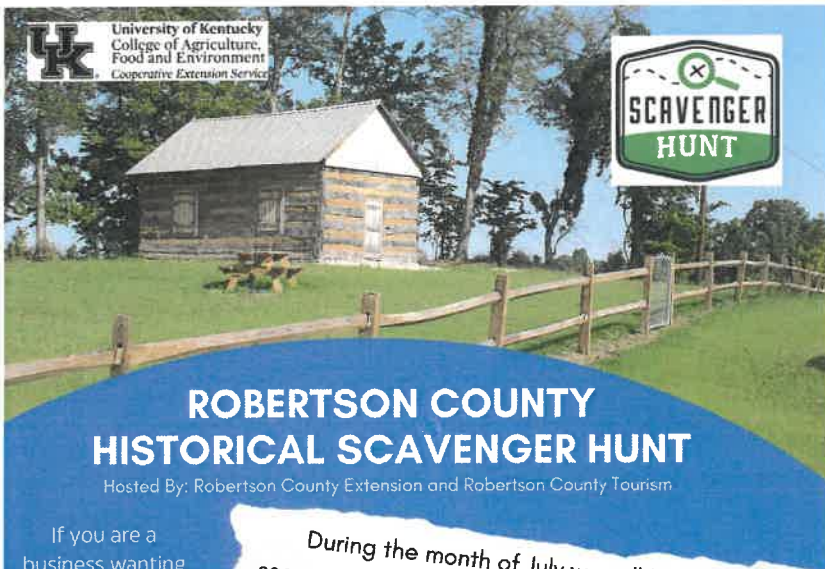
I hope this newsletter finds everyone well. I think we are all glad we finally got some rain, so hopefully you will see your crops starting to take off. We are in the planning process of fall programs, so if there is anything you want us to offer please let me know!

*Samantha Saunders*

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

## Inside this edition:

- Robertson County Historical Scavenger Hunt
- Cucurbit Powdery Mildew
- Potentially Emerging Alfalfa Pest
- Horse Hoof Care 101
- Farmer's Market Locations & Times
- Pub of the Month: Forage-related Disorders in Cattle: Nitrate Poisoning (ID-217)
- Zucchini Rosemary Pizza
- Forage Timely Tips—July



## ROBERTSON COUNTY HISTORICAL SCAVENGER HUNT

Hosted By: Robertson County Extension and Robertson County Tourism

If you are a business wanting to donate, please contact Samantha at (606)-724-5796

Everyone in the community is invited to participate!

During the month of July we will be hosting a scavenger hunt that showcases historical locations in Robertson County.

Clues will be posted on the **Robertson County Extension Facebook Page** each Monday. Community members are to solve the clues, visit the location, take a picture, and submit it by Sunday of that week.

There will be a weekly drawing for participants and then a grand prize drawing at the end of the month.

**The GRAND PRIZE is \$200.00!!**  
Be sure to share and spread the word!

Cooperative Extension Service  
Agriculture and Natural Resources  
Family and Consumer Sciences  
4-H Youth Development  
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Disabilities accommodated with prior notification.



OLD RELIABLE

## GERMANTOWN FAIR

July 29, July 31 - August 5



IT'S SUMMER  
SUMMED UP

THE KY STATE FAIR  
AUG. 17TH - 27TH



Disabilities accommodated with prior notification.

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LEXINGTON, KY 40546

# Cucurbit Powdery Mildew

*Kim Leonberger, Plant Pathology Extension Associate and Nicole Gauthier, Extension Plant Pathology Specialist*

Powdery mildew is a common disease of all cucurbits, including cucumbers, squashes, pumpkins, and watermelons. This disease can occur in greenhouses, high tunnels, commercial fields, and home gardens. Cultural management practices can reduce losses from this disease, but fungicides may be required for susceptible cultivars.

## Cucurbit Powdery Mildew Facts

- Leaf symptoms first appear as spots with a white, powdery appearance on upper or lower leaf surfaces (Figure 1). Over time, spots expand to cover large portions or entire leaf surfaces. Severely infected leaves may become yellow or necrotic. As the disease progresses, affected leaves may die, and defoliation can occur. Note that some cucurbit cultivars may have an appearance that can be easily confused with powdery mildew.
- Stems and leaf petioles can also be infected. Specifically, the stem where pumpkins attach to plants (“handles”) can become infected, resulting in reduced marketability as carving pumpkins.
- Cucurbit powdery mildew does not infect fruit. However, fruit quality and yield may be impacted as a result of insufficient leaf material.
- Disease is favored by high humidity but does not require high levels of moisture for infection.
- The powdery mildew pathogen infects during the reproductive stage of plant growth. Thus, flowering plants are at the greatest risk of disease.
- Caused by the fungus *Podosphaera xanthii*.
- The pathogen survives winter on infected plant debris.

## Management Options

### Cultural disease management

- Utilize powdery mildew resistant cultivars.
- Plant in sunny areas with good airflow.
- Use recommended plant spacing to facilitate air movement and leaf drying.
- Remove weeds that may serve as hosts.
- Remove and destroy infected plants.
- Clean-up plant debris at the end of the growing season.

### Fungicides

Application of fungicides before disease develops (preventative fungicide) provides the greatest level of disease protection. When applying fungicides, it is important to always read and follow all label instructions.

- Commercial growers should consult the publication *Vegetable Production Guide for Commercial Growers* (ID-36) or the *Southeastern US Vegetable Crop Handbook* (SEVEW). Contact a county Extension agent regarding specific recommendations for cucurbit downy mildew management. Growers should take steps, such as fungicide rotations or tank mixing, to reduce the risk of fungicide resistance. When selecting fungicides, be sure to note pre-harvest interval restrictions.
- Home gardeners should consult the publication *Home Vegetable Gardening* (ID-128) for fungicide information. Contact a county Extension agent for additional information and recommendations regarding fungicides.



# Potentially Emerging Alfalfa Pest

*Ric Bessin, UK Entomology Extension Specialist*

This past week, there were reports of increasing problems with clover root curculio infecting alfalfa in a couple of central Kentucky counties. Clover root curculio is an overlooked invasive pest from Europe that has been in the United States since the 1800s. This pest is often overlooked because the damage caused by the larvae occurs below ground and goes unnoticed until the damage becomes evident during droughty periods. The injury caused by the larvae can result in substantial stand reduction. Fortunately in the past, problems have been localized and usually not at economic levels.

Clover root curculio larvae are white legless grubs with brown heads. (Photo: Bob Hammon, Colorado State University, Bugwood.org)

Clover root curculio emerges in early summer to feed on foliage for a few weeks before becoming inactive until fall. During warm periods in fall through spring, root curculio lays eggs around the crown of its hosts plants. These eggs begin to hatch in April, and the larvae feed initially on nodules. As larvae get larger, they feed on fibrous roots, then tap roots. Clover root curculio will feed on a wide range of legume species.

Unfortunately, there are no effective insecticides that can be used to control the larvae, either as a preventive measure or as a rescue treatment. While there are insecticides for managing the adults, this stage does not cause economic damage, and controlling adults has not been shown to reduce subsequent larval infestation. Where insecticides have been used to control the adults, these pesticides have not been shown to provide economic returns as the adults emerge over an extended period during the summer. Management of clover root curculio relies on practices to reduce infestation and susceptibility of new plantings.

It is important to use a non-legume rotational crop following alfalfa, such as corn or grasses. Avoid new seedings immediately adjacent to older stands since adults can readily move to the new seeding. Particularly, avoid seeding fields near fields that are known to be infested. If practical, eliminate clovers and other legumes around field margins. Use spring seeding for new fields as these early plantings will be older and more tolerant of damage the following spring. Fall seedings will be less mature the following spring when larval feeding would begin and may suffer more damage.

If you suspect damage from the clover root curculio in new or existing alfalfa stands, contact your county agent and they can advise you on taking root samples and submitting them to the UK Disease Diagnostic Lab.



## 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**

# Horse Hoof Care 101

*Dr. Bob Coleman, UK equine extension specialist*

Hoof care is important to keeping your horses comfortable and healthy. Proper hoof care can help ensure that you enjoy your horse for a long time.

Farriers and veterinarians are the experts when it comes to horse hoof care. It is important for you to have a good working relationship with both. They can help you maintain a regular maintenance schedule and quickly address any hoof-related problems.



As a responsible horse owner, you should clean your horse's feet daily. This practice gets them comfortable with having their feet handled and helps ensure they will stand for the farrier. This will make the experience safer for both the horse and the farrier. Have your horse's hooves trim or shod as needed to protect your horse from developing hoof infections and lameness.

Horses' hooves grow at different rates, depending on the horse and its intended purpose. For example, hooves of performance horses may grow quicker than those used for pleasure riding. Generally, hooves grow quicker during the summertime compared to the winter. In the summer, trim or shod horses every six to eight weeks. In the winter, you might be able to stretch maintenance to every six to 12 weeks, but again, it depends on the horse.

Horses should have balanced hooves. They put less strain on the horse's bones, tendons and ligaments and allow for easier and more fluid movements. When hooves are balanced, they have the following characteristics:

- A straight line from the pastern through the front of the hoof wall.
- Toes that are not too long, square trimmed or rounded and rolled.
- The shoe reaches to the back of the hoof wall and supports the entire leg.

If you wait too long between trimmings, a horse's hooves can crack. This can lead to serious health problems including lameness. Their hooves can also become dry and crack during dry weather, wintertime or frequent changes between dry and wet conditions. If your horse's hooves become dry, brittle or start developing cracks, apply a hoof moisturizer to the hoof wall and sole.

Wintertime calls for specific hoof care. Horses should be left barefoot if they are not normally shod. Bare feet can help them grip surfaces and prevent slipping. However, you may need keep shoes on your horse during the winter if it is prone to bruising.

Keep areas where horses frequent clean and dry. Wet, dirty conditions can cause thrush, which is a smelly, black fluid that leaks from the hooves. It can invade the horse's tissues and cause lameness.

Proper nutrition goes a long way to reducing hoof cracks and ensuring optimum horse health. Generally, horses need high quality hay, the appropriate amount of vitamin and mineral supplements and fresh, clean water. You can also purchase a supplement containing biotin, zinc or methionine to improve hoof health.



**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:**

Opens Friday, July 14th @ 9 am -1 pm

## Pub of the Month: Forage-related Disorders in Cattle: Nitrate Poisoning (ID-217)

With extended dry weather in many parts of the state there is increased risk of nitrate toxicity in forage stands. Nitrates are natural constituents of all plants. Under normal conditions, plants take up nitrate through their roots and transport it to the leaves for use in photosynthesis. However, photosynthesis decreases under adverse conditions (e.g., drought; hail, frost, insect damage, or herbicides) and potentially toxic nitrate concentrations can remain in the lower stalks and stems. In addition, heavy nitrogen fertilization provides large amounts of available nitrate for uptake.



Matt Barton / UK College of Agriculture

Several strategies are available to reduce the risk of nitrate poisoning:

1. Animals should be provided with ample salt/mineral supplementation to prevent salt-deprived animals from seeking out nitrate fertilizers.
2. Avoid grazing warm season grasses fertilized with high amounts of nitrogen when growth ceases due to drought, cold damage, hail, or herbicide exposure. Warm-season grass stands that have received multiple sources of nitrogen (such as nitrogen fertilizer, manure, previous legume crops) can occasionally show elevated nitrate levels without environmental stress.
3. Corn silage should be properly ensiled at least three weeks and tested for nitrates before feeding. Do not green chop forages suspected to be high in nitrates.
4. All suspected forages including silage and hay should be tested for nitrate levels. Consult your county Extension agent for information concerning sampling, sample preparation, the quick field test, and location of a testing laboratory.
5. Delay harvest of high-nitrate forages until nitrate levels are safe. If not feasible to delay harvest, raise the cutter bar to 18" to avoid the base of plants.

Common crops in Kentucky that may accumulate nitrates include corn, wheat, sorghum-sudan hybrids, sudangrass, rye, pearl millet, soybeans, beets, Brassica s (rape, kale, turnips, swedes), and oats, although any heavily fertilized plant can have high nitrates. Common nitrate-accumulating weeds include ragweed, pigweed, thistle, bindweed, dock, nightshades, jimsonweed, and johnsongrass. Note that these are not complete lists, but rather the weeds and forages that most often cause problems in Kentucky.



## Zucchini Rosemary Pizza

<b>4 cups</b> shredded zucchini, (about 4 medium zucchini)	<b>½ teaspoon</b> salt	<b>2 tablespoons</b> olive oil
<b>½ cup</b> mozzarella cheese	<b>¼ teaspoon</b> pepper	<b>1 tablespoon</b> fresh rosemary, minced (or 1 teaspoon dried rosemary)
<b>1 teaspoon</b> oregano	<b>½ small</b> red onion	<b>¼ cup</b> grated parmesan cheese
<b>1 egg</b>	<b>2 small</b> tomatoes	
	<b>2 garlic</b> cloves, minced	

**Preheat** the oven to 450 degrees F. **Shred** the zucchini with a cheese grater. **Squeeze** out as much water as possible. In a large bowl, **measure** 4 cups of shredded zucchini. **Stir** in mozzarella cheese, oregano, egg, salt and pepper. Lightly **spray** a 12-inch pizza pan with cooking spray. **Spoon** mixture onto pan to form a ½ inch high crust. **Bake** 15 to 20 minutes, until mixture is set and slightly browned, being careful not to burn. **Chop** half of a red onion and the tomatoes into small diced pieces. In a small bowl, **mix**

together the olive oil, minced garlic and fresh rosemary. **Spread** the mixed topping evenly over the baked crust. **Spoon** onion and tomatoes over the pizza. **Bake** an additional 10 minutes or until crust is crisp or becomes slightly brown. **Remove** from oven; **sprinkle** parmesan cheese over the top and **serve**.

**Yield:** 8 slices

**Nutritional Analysis:** 90 calories, 7 g fat, 2 g saturated fat, 35 mg cholesterol, 300 mg sodium, 3 g carbohydrate, 1 g fiber, 1 g sugar, 4 g protein.



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



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# Robertson County Agriculture & Natural Resources Newsletter— July 2023

## Forage Timely Tips: July

- Continue grazing available summer annuals (millets, sorghum/sudangrass, crabgrass, etc.).
- Apply 40-60 lb N/A to stimulate summer annual regrowth.
- Clip pastures late June/early July as needed to maintain vegetative growth and to reduce weed seeds, but don't clip lower than 4".
- Identify tall fescue pastures for stockpiling. Choose pastures that are well drained, have a strong sod, and have not been overgrazed.
- Soil test pastures to determine fertility needs.
- Using UK variety trial results, select varieties to plant in the fall and order seed now.
- Use a designated sacrifice lot to feed hay and supplements during drought periods to avoid damaging pastures.