CARTER COUNTY AGRICULTURE & NATURAL RESOURCES NEWSLETTER

October 2024

Cooperative Extension Service Carter County 94 Fairground Drive Grayson, KY 41143 Phone: (606) 474-6686 Fax: (606) 474-8542 extension.ca.uky.edu facebook.com/CCESAG Rebecca.k@uky.edu

What's Inside **Upcoming Events** 2-7 Corn Smut 8 **Eden Shale Events** 9 Preventing Postharvest Losses in 9-11 Fruit Crops The PRIMER 12-13 Method **Disease Prevention** 14 Grass Seed 15

Enjoy your newsletter,

Rebecca Konopla

Rebecca Konopka, Carter County Extension Agent for Agriculture & Natural Resources Education

Highlights:

Northeast Area Livestock meetings start back this month. The Association is open to all livestock producers. Membership in the local or state association is encouraged, but not required to attend the meetings. A meal is provided at all meetings. All meetings count for CAIP credit.

⇒ Thanks to Rick & Sherri Rayburn for hosting our annual Farm & Family Field Day. We appreciate everyone who made the day a success!



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, verterant status, physical or mental disability or reprisal or retuilation for prior civil rights activity. Reasonable accommodation of disability may be available with prior norice. 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.



Disabilities accommodated with prior notification.

Family and Consumer Sciences 4-H Youth Development Community and Economic Development

Cooperative

Extension Service

Agriculture and Natural Resources

Lexington, KY 40506

Upcoming Events

Denotes events where preregistration is required. Call 474-6686 or email <u>Rebecca.k@uky.edu</u> to register.

10/1 @ 6:30 PM	Little Sandy Beekeepers	Extension Office
10/4 @ 1:00 PM	Hike & Learn	Greenbo Lake State Resort Park
10/8 @ 10:00 AM	Extension District Board Meeting	Extension Office
10/11 @ 4:30 PM	Deadline to Request Hay Samples	Extension Office
10/15 @ 10:00 AM	*Fall Crop Protection Webinar*	Online
10/19 @ 9:00 AM	*Annual Sheep & Goat Pro- ducer Conference*	Fleming County Extension Office
10/19 @ 10:00 AM	*Eden Shale Open House*	Eden Shale Farm
10/29 @ 10:00 AM	*Fall Crop Protection Webinar*	Online
10/29 @ 6:00 PM	Northeast Area Livestock Association Meeting	Extension Office
11/1 @ 10:00 AM	*Beginning & Small Farmer School*	Morehead State Uni- versity Farm Classroom
11/5 @ 6:30 PM	Little Sandy Beekeepers	Extension Office
11/12 @ 10:00 AM	*Fall Crop Protection Webinar*	Online
11/12 @ 10:00 AM	Extension District Board Meeting	Extension Office
11/19 @ 6:00 PM	Northeast Area Livestock Association Meeting	Extension Office

Free Soybean Nematode Testing

The Kentucky Soybean Board is continuing to fund free soybean cyst nematode (SCN) testing. Fall and Spring (before planting) are the best times to collect soil samples from fields for SCN testing. UK is also offering free testing for other (non-cyst) nematodes. To have samples collected contact the Extension Office.

LITTLE SANDY BEEKEEPERS ASSOCIATION

Meets the first Tuesday of the month 6:30 PM

Carter County Extension Office 94 Fairground Drive Grayson, KY

Upcoming Meetings:

October 1st Activity: Protein Patties

November 5th

Topic: Baking with Honey

December 9th

Торіс ТВА





Northeast Area Livestock Assoc.

October 29th Dr. Steve Higgins, UK Director of Environmental Compliance Livestock Drinking Water

November 19th Dr. Jimmy Henning, UK Extension Forages Specialist Understanding Seed Tags





Fern Valley Nature Trail Meet at the trailhead to the left of the lodge.

Trail Length: 1.1 miles Difficulty: Easy Please wear closed toe shoes & bring your own drinks & snacks.

Visit carter.ca.uky.edu/anr for more info.

Cooperative Extension Service

Agriculture and Natural Resources Family and Consumer Sciences 4-H Youth Development Community and Economic Developme 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, erbnic origin, national origin, creat, religion, political bellef, sec, secular ofenational gender identity gender expression, pergranaly natural status, genetic information, age, veteran status, physical or mental disability or reprisad or realization for prior civil rights activity. Reasonable accommodation of disability may be available with prior notice requirements and prior civil rights activity. Reasonable accommodation of disability University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT





2024 KY ANNUAL PRODUCER CONFERENCE

• Fleming County Extension Office • 1384 Elizaville Rd., Flemingsburg, KY 41041

Morning Session 8:30 am - 12:30 pm Guest Speakers:





Kentucky Farm Bureau

Comissioner Johnathon Shell

Association Business Meetings: Board of Director and Officer Elections





Afternoon Session Field Day Forage Management, Reproduction, Lambing/ Kidding & Morel 1:00 pm - 3:30 pm

- •Schwartz Show Stock & Meat Co. - Sheep producers
- Hickory Hollow Acres
 - Goat Producers

Cost: \$35/single; \$50/couple – Includes Lunch! (ADDITIONAL LUNCHES \$10)

Registration 8:30 a.m. (EST) • Program starts at 9:00a.m.

FOR MORE INFORMATION & REGISTRATION VISIT

www.kysheepandgoat.org/annual-producer-conference





2024 Fall Crop Protection Webinar Series scheduled for October and November

Sign up now for a popular webinar series that addresses timely topics regarding integrated pest management for field crops. University of Kentucky Martin-Gatton College of Agriculture, Food and Environment extension specialists have once again organized the Fall Crop Protection Webinar Series, hosted through the Southern Integrated Pest Management Center. Each webinar will begin at 10 a.m. ET/9 a.m. CT, and will be one hour in length. Continuing education credits for Certified Crop Advisors and Kentucky pesticide applicators will be available.



2024 Fall Crop Protection Webinar Series

This year the webinars will be held Oct. 15, Oct. 29, Nov. 12, and Nov. 26. Pre-registration is required to attend each webinar. The webinars are open to agriculture and natural resource county extension agents, crop consultants, farmers, industry professionals, and others, whether they reside or work in Kentucky or outside the state. Pre-registration links and schedules follow:



Webinar #1: Oct. 15 — Dr. Raul Villanueva, Extension Entomologist Title: Dealing with stink bugs and other insect pests in 2023-24 Webinar link: https://zoom.us/webinar/register/WN_MAppWNeZR5yCSoTGMGUj_Q



Webinar #2: Oct. 29 — Dr. Kiersten A. Wise, Extension Plant Pathologist Title: Maximizing disease control AND return on investment for corn fungicides Webinar link: https://zoom.us/webinar/register/WN_irdgz-OATPy3hCKsOVxyGQ



Webinar #3: Nov. 12 — Dr. Travis Legleiter, Extension Weeds Specialist Title: Spray Application Parameters – The Offensive Line of Herbicide Applications Webinar link: https://zoom.us/webinar/register/WN rxH9T0W4T4a3HZRFAgGA1w



Webinar #4: Nov. 26 — Dr. Carl Bradley, Extension Plant Pathologist Title: Management of important wheat diseases in Kentucky Webinar link: https://zoom.us/webinar/register/WN_NUrPmPdgQICwWGHR-qOCEw

Register for all four webinars at

https://wkrec.ca.uky.edu/events/fall-crop-protection-webinar-series



BEGINNING & SMALL FARMER SCHOOL

FRIDAY, NOVEMBER 1





To register, use the QR code or call your local Extension Office at: (606) 845-4641

Registration required by 10/25/24

TOPICS

- First Steps
- Farm Design & Layout
- Taxes & Record Keeping
- Enterprises to Consider
- Info from Partnering Groups



Cooperative Extension Service

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

Notaciana granes of Enerody Cooperative Extension are not people reperform of economic or social states and an advertismic on the basis of next, object scheduler, object specification, patient lichter, and consult of restating, patient generative repeations, programmy, market information, patient lichter, patient and states and the state of the people of the state of the people of the state of the people of the state of the States of the states of the state of the States of the states of the state of the state of the state of the states of the states



Should you be Concerned about Smut in your Corn?

Dr. Jeff Lehmkuhler, PhD, PAS, Extension Professor University of Kentucky

As the silage harvest season has started some concerns about smut have come in from the counties. Corn infected with Ustilago maydis or common smut can be unsightly for certain. The level of infection varies dramatically both on individual ears as well as across fields. It has been reported that smut may affect 5-40% of the ear, reducing grain yields. Timing of infection can influence the severity of infection and development of the ears on a plant. Therefore, the combination of a high plant infection rate combined with a large degree of grain loss on ears can result in significant grain reductions.

The smut or galls themselves are not known to produce toxins harmful to cattle. However, the development of the galls on the ears may loosen or open the husks allowing the growth of other mycotoxin forming organisms. A 4-year study reported that corn kernels from ears infected with smut, on average, had 45-fold higher aflatoxin levels than kernels from ears not having smut. When looking at the galls from smut infected ears, the kernels had a 99-fold higher aflatoxin level than the gall itself suggesting that the gall itself was relatively free of aflatoxin. The study also found a 5.2-fold higher level of fumonisin in kernels from smutted ears compared to kernels from ears with no smut. Thus, smut itself poses little concern directly towards animal health, but the fact that infection can result in secondary infections by mycotoxin forming organisms poses increased risk and testing for mycotoxins in silage is recommended.

Nutritionally, smut infection will reduce the grain component of corn silage. The loss of grain will reduce the digestibility, starch content and overall energy available to cattle.

The reduced grain content will result in reduced passage rates potentially reducing intakes and performance. Be sure to adjust the diets for the reduced grain content by testing silage for starch content and adding corn or other energy sources back into the diet to maintain target performance.



8

MANAGEMENT BASICS

• WEANING • Facilities • Bqca training



October 8, 2024 Eden Shale Farm 400 Eden Shale Road Owenton, Kentucky 40359



Registration starts at 9am. There will be a 45 minute presentation at each station.

- Feeding Considerations for Weaned Calves
- Facility Design for Animal Welfare, Producer Efficiency, and the Environment
- Chuteside BQCA Training

Lunch will be provided with the BQCA test at noon. Register by calling 859-278-0899 or scan the QR code to register online.

EDEN SHALE OPEN HOUSE

WINTER FEEDING STRATEGIES Rainwater Collection Concepts Cattle Facilities



Call 859-278-0899 to register or scan QR above to register online.



400 Eden Shale Road, Owenton Kentucky

Preventing Postharvest Disease Losses in Fruit Crops

By: Kim Leonberger, Plant Pathology Extension Associate and Nicole Gauthier, Extension Plant Pathologist

Fruits are often soft, perishable, and particularly susceptible to a range of damage during harvest and storage. Growers can experience postharvest crop losses between 25% and 50%. A significant percentage of postharvest losses are caused by plant diseases. Infection by disease-causing pathogens can occur in the field and/or through wounds during harvest. Under moist conditions or high humidity, these infections can develop into molds, rots, or other decay. Even produce destined for fresh market can develop postharvest diseases during short-term storage.

Infection in the Field

Plant diseases such as fruit rots, leaf spots, and root rots can occur while plants are growing or while fruit are maturing (Figure 1). Infections can remain latent (dormant) until produce reaches a particular stage of maturity or until certain environmental conditions are reached.

Management

- Maintain a disease management program all season.
- Discard diseased and damaged produce as soon as it is visible.
- Avoid mixing diseased (Phot produce with healthy produce (e.g., in storage bins).



Figure 1: Bitter rot can begin in the field or greenhouse and advance in storage. (Photo: Nicole Gauthier, UKY)

Infection During Harvest & Handling

Wounds, bruising, desiccation, and exposure to temperature extremes can weaken produce and allow pathogen entry, resulting in disease. Many of the same plant pathogens that infect crops in the field can also infect wounded or damaged produce during harvest. Disease may appear soon after produce is moved to the cooler or storage, or there may be a delay in disease development.

Management

- Minimize wounds and bruises during harvest, handling, and packaging.
- * Raise bins and buckets off the ground during harvest.
- * Cool produce as soon as possible.
- * Avoid leaving harvested produce in the heat or sun.
- * Wash dirty or muddy produce and dry thoroughly before storage.
- * Wash and sanitize bins and equipment before each harvest.

Disease in Storage

Improper storage conditions can provide ideal environments for disease

causing organisms to infect (Figure 2). Healthy produce can become diseased in storage when moisture is too high, temperatures are too warm, and pathogens are present.

Management

- Separate produce by type, harvest date, and field origin.
- Cool produce as soon as possible while remaining within the safe range for the specific produce.
- * Monitor storage temperature and humidity.
- * Increase ventilation.
- * Raise produce off the floor.
- * Reduce surface wetness by maintaining equipment and keeping produce dry.
- * Follow a strict sanitation program, which is critical.
- * If fruits and vegetables must be washed before storage, they should be completely dry before storage.
- * Keep all surfaces clean; sanitize regularly.
- Wash and sanitize all bins, tools, and harvest materials before bringing them into coolers or storage units.
- * Inspect stored produce regularly and discard damaged and diseased material immediately.

Additional Resources

Postharvest Disease Losses in Fruit & Vegetable Crops (PPFS-GEN24)

Midwest Commercial Fruit Pest Management Guide (ID-232)



Figure 2: Conditions such as excess moisture and improper storage may allow for disease development. (Photo: Nicole Gauthier, UKY)

The PRIMER Method

Steve Issacs, UK Extension Professor

The calls or emails start with, "I'm thinking about trying...." and end sometime later with, "What do you think?" For three decades I've fielded many of these inquiries. Extension agents get them with incredible frequency. It's certainly a credit to the Land Grant System and the Cooperative Extension Service that most farm magazine articles about some new topic end with, "For more information, contact your local Extension office."

Rather than trying to be an expert on every topic, it has proved useful to provide a structure for answering the questions and conducting some analysis. Early in my career I started using a simple acronym, PRIMER, to guide the discussion. In 2000, my colleague in Ag Economics, Tim Woods, and I published the "<u>PRIMER for Selecting New Enterprises for Your Farm</u> (available at <u>https://agecon.ca.uky.edu/files/ext2000-13.pdf</u>)." In publishing parlance this publication has "shelf life." The principles from 2000 are just as applicable in 2023.

In no particular order of importance, but it makes the acronym easier to remember, the letters represent:

Profitability

Resources

Information

Marketing

Enthusiasm

Risk

Profitability is definitely important unless you want to subsidize the enterprise or call it a hobby. Those are clearly options, but it's best to know if revenues exceed costs. The publication has two worksheets to help address Profitability.

Resources may be the limiting factor. Or, they may be the reason for considering the enterprise in the first place if there are underutilized resources available. The second statement on the call is often, "I've bought this land..." There's one worksheet to help address the Resource question. Information is the element that may have changed the most in twentysome years. The internet has proliferated into the source of all knowledge, it seems. Quantity and quality are different things. There's another worksheet that inquires about several types of Information, the sources, and the costs.

Marketing is often the most daunting task for many new endeavors and an area for which many are woefully equipped or inclined. There are lots of questions to ask (and answer). There are four worksheets for this important task.

Enthusiasm is the E because Entrepreneurship was too hard to spell, but either way it's important for a new enterprise. This single worksheet really gets at the Why... why would you start this, and just as important, why would you stop. But, why would've messed up the spelling of PRIMER, for sure.

Risk is what you have when you're not sure, and that's what initiated the call in the first place. Risk can take a lot of forms. The final worksheet asks how certain you really are and anticipates what might go wrong.

PRIMER was designed to ask the questions, not answer them. That's often frustrating for those who call wanting easy or simple answers. Sometimes the answer is, "I don't know." Or, "I'm not sure." Both of those responses may be useful. They can tell us something about the difficulty or uncertainty of the new endeavor. The questions that can be answered can serve as the guide to a successful new enterprise.

That's what "I think about it."



PPFS-GEN-25-IG

DISEASE MANAGEMENT ROADMAP FOR SMALL ACREAGE GROWERS

Planning

- Treat saved seed with hot water or chlorine (bleach) to kill disease-causing pathogens.
- Select cultivars with tolerance or resistance to plant diseases.
- Intercrop or succession plant with crops that are not susceptible to the same disease.

Site Preparation

- Rotate crops from different families for 2 to 3 years.
- Fertilize according to soil test results; do not overfertilize.

Planting

- Avoid planting too early; wait until soil and air temperatures are suitable for the crop.
- Space plants to allow for increased air flow and reduced humidity.
- Use mulch to preserve soil moisture and reduce movement of pathogens; cover crops can also serve as a mulch layer.

Identifying Problems

- Scout regularly for abnormal plants or growth patterns.
- Remove dead, dying, and diseased tissue as soon as possible.
- Contact a county Extension agent for disease identification, management recommendations, or assistance submitting samples to the Plant Disease Diagnostic Laboratory.
- Fungicides and biologicals are best used as preventatives, especially when disease was a problem the previous year.

Sanitation

- Avoid tracking soil from infested areas to clean fields.
- Remove infected plant parts throughout the growing season.
- Harvest marketable produce in one container and damaged/diseased produce in another.
- Do NOT compost diseased plants or produce.

End of Season

- Remove all leaves, stems, roots, and produce from fields or structures.
- Clean and sanitize all tools and harvest equipment.
- Save seeds from the best produce.
- Plant a cover crop that provides disease management benefits.

Connect with Plant Pathology <u>Extension</u>

@KYPlantDisease





Authors: Kim Leonberger, Extension Associate Senior; Nicole Gauthier, Extension Specialist; April Lamb, Postdoctoral Scholar - UKY Dept. of Plant Pathology

@NicoleGauthier

How Does Grass Seed Make it to KY Farms

From UK Forage News—September 2024

The following is an excerpt from a longer article that explains the process involved with harvesting and shipping tall fescue seed from Oregon to Kentucky. The process begins on July the 1st when the fescue grass seed fields are mature enough to swath. The fields are swathed at night when there is dew on the grass to prevent seed loss, farmers will often work all night during this time of year. The grass will lay in windrows for approximately a week to 10 days until completely dried before combining. The dried seed will thrash out more easily in the heat of the day. The combining process begins after the dew has dried and will go into the evening at a slow rate of about 2 mph.

The seed is hauled directly from the field to the cleaner for prompt processing. The seed is assigned a lot number that will stay with the seed all the way through planting. The lot number provides information about things like crop year, cleaner and farm where it is produced. A typical lot is 55,000lbs of cleaned seed. Once the seed is cleaned samples are sent to labs for testing. All seeds get a germ and purity test.

As the orders come in from distributors across the fescue belt the seed is finally packaged in 25lb branded bags, palletized and shrink wrapped for retail sale. In one short month from the initial swathing the seed is ready to ship! For the full article with more details on the unique aspects of handling novel endophyte tall fescue varieties like Estancia Ark-

shield go to the August issue of Novel Notes: <u>grass-</u> <u>landrenewal.org/</u> <u>novel-notes/</u>.

We want to thank Mountain View Seeds for supplying this information. This photo shows a tall fescue field in Oregon already swathed and ready to be combined.





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

Carter County 94 Fairground Drive Grayson, KY 41143

RETURN SERVICE REQUESTED

PRESORTED STANDARD US POSTAGE PAID GRAYSON, KY PERMIT #94

CARTER COUNTY AGRICULTURE & NATURAL RESOURCES NEWSLETTER

