

Webster County

AG News

Fall 2022



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

Cooperative Extension Service

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Cost-Share Program Applications

Now Available

The Webster County Agricultural Development Board appropriated a portion of the 2022 Ag Development Board Funds to the Green River Beef Improvement Group, Inc. to administer County Agricultural Investment Program (CAIP) and our Youth Agricultural Investment Program. Applications are available by contacting the Webster County Extension Office to request an application and GRABIG, Inc. will mail you the application. Projects must be completed and applications postmarked by November 30th. For more information please call our office. The funding categories and eligible items can be found online at <https://www.kyagr.com/agpolicy/2022-Program-Guidelines-and-Applications.html>

Annual Complaint Statement

To initiate a complaint at the college level, contact Tim West in the Business Office at 859-257-3879. At the University level, Terry Allen and Patty Bender in the UK Office of Institutional Equity and Equal Opportunity (859-257-8927) may be contacted. Additionally, employee or clientele complaints involving any research or extension sponsored program or activity may be directed to the USDA, Director Office of Civil Rights, Room 326-W Whitten Bldg., 14th & Independence Ave. SW, Washington DC 20250-9410 (202-720-5964).

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Free Soybean Cyst Nematode Testing

The soybean cyst nematode, a microscopic roundworm that feeds on soybean roots, is responsible for more yield and monetary losses each year than any other pathogen in Kentucky. It is also a pathogen that hides in fields, with growers possibly never seeing the signs of its existence.

Preliminary findings from an ongoing survey that began in 2019 show that the soybean cyst nematode is present in 84% of Kentucky soybean fields. While some producers will see signs of yellowing or stunted growth in their soybeans, most do not. Soybeans that appear healthy but are in a soybean cyst nematode-infested field will have as much as a 30% yield loss. Management of the nematode has become more complicated recently, because the worms are developing resistance against the most commonly used form of genetic resistance that is present in at least 90% of resistant varieties available to Kentucky farmers. However, you can take steps to better manage the pathogen.

Since it is hard to predict whether your field is infested with the nematode, you need to sample your fields anytime between the end of harvest until spring. However, fall is the ideal time for sampling, because nematode field populations will be higher from feeding on the recently harvested soybean crop. It also gives you more time to make adjustments to your production plan if nematodes are found. Prioritize sampling fields where you plan to put soybeans in 2021. When sampling, make sure to include areas of the field that had poor growth and/or lower yields in the past.

Kentucky does not have a soybean cyst nematode diagnostic lab, but producers can submit samples to the University of Illinois Plant Clinic or the University of Missouri SCN Diagnostic Lab. The Kentucky Soybean Promotion Board sponsors a limited number of free soybean cyst nematode tests in each Kentucky county. Contact your local extension office for more information about the limited free testing.

If soybean cyst nematodes are found in your fields, you can take measures to lower the populations. Rotate resistant varieties. While many Kentucky varieties use the same form of resistance, rotating those varieties will help control nematode populations. Since soybean cyst nematodes mainly feed on soybeans, you can rotate away from soybeans to lower their numbers. Corn, grain sorghum or wheat are all good options. You also may consider using a variety with a nematode-protectant seed treatment. While their effectiveness is spotty, it can help reduce populations along with rotation and resistant varieties.

The Soybean Cyst Nematode Coalition is a group of scientists, extension specialists and industry representatives working to develop ways to protect soybeans against the nematode. The group is funded by the United Soybean Board. For more information about the group or the nematode, visit <https://www.thescncoalition.com/> or contact the Webster County Extension office of the University of Kentucky Cooperative Extension Service

Expected Changes to the 2023 Private Pesticide Applicator Program

On December of 2016, the Environmental Protection Agency (EPA) published the final rule to improve pesticide applicator certification and training standards. Implementation of this plan has been plagued by delays, but a new plan for Kentucky has been reviewed and approved, and its use is set to begin at the start of 2023. This is the most significant change to the program since 1978. There are some substantial changes in how Kentucky operates the program that I will outline in this article.

Only persons 18 and older are qualified to become private applicators. The EPA requires that applicators present a government issued photo ID in order for county agents to verify age and identify. County agents must use this to verify age and identity, but do not need to record this information. For those who do not have a government issued photo ID due to some specific reasons, there are some alternative methods of verification that can be used.

A new category of applicator has been created to work under the supervision of certified private applicators on farms. This is the “Non-certified Applicator under the Direct Supervision of a Certified Applicator.” These applicators must be trained annually and be supervised while applying general use pesticides. They cannot apply restricted use pesticides. There are a number of responsibilities for the supervising certified applicator beyond training and supervision. While any certified applicator can conduct the annual training of non-certified applicators, there is specific content that must be covered in each annual training. A Non-Certified Applicator card is being developed that can be issued from the county office for NCAs to carry to verify their training.

The EPA now requires specialized training and certification for fumigation and aerial applications. As such, applicators using fumigation or applying pesticides aerially, either manned aircraft or drone applications, will need to be certified in the appropriate commercial category. Through Kentucky statutes, farmers applying general use pesticides to their own land or land they rent using ground equipment are exempt from needing to become certified private applicators, but this exemption does not apply to aerial applications. So, drone applications of any type of pesticide must be done by category 11 applicators. Persons using fumigation will need to certify in one of the commercial categories for fumigation depending on what they are treating: soil, non-soil, or structures.

The KDA has brought the length of the certification for private applicators in line with commercial applicators. Both of these groups will be certified for up to three years, which includes the year they were trained. Previously, private applicators were given three years plus the year they were trained. There is no fee charged to those certified as private applicators.

Feed Price Implications for Fall Feeder Cattle Markets

Dr. Kenny Burdine, Extension Professor, Livestock Marketing, University of Kentucky

As we move into fall, we have a pretty good feel for the size of the 2022 corn crop. Acreage is down significantly from last year and yield projections were reduced almost 3 bushels this month to 172.5 per acre. After spending some time below \$6 per bushel this summer, CME[®] December corn futures are in the upper \$6 per bushel range. Barring a major shock on the demand side, feed prices are going to be a challenge for cattle operations this winter. So, I wanted to briefly talk through some implications of high feed prices on feeder cattle markets.

Perhaps the most important thing to remember is that cost of gain and value of gain are correlated. Feedlots prefer to place heavier feeder cattle when feed prices are high, so the price discount on higher weights gets smaller. This narrowing of price slides increases the value of additional pounds when feeder cattle are sold. I hear a lot more discussion of feed prices than value of gain when producers discuss cattle feeding programs. In truth, opportunities can still exist in high feed price markets depending on cattle price dynamics. So, producers need to push the pencil on post-weaning feeding programs to determine if opportunities exist this fall and winter. Generally speaking, there is more feed flexibility for growing programs than finishing programs. Producers may find that opportunities to grow feeders still exist, especially if they can efficiently make use of alternative feeds.

Along those same lines, producers need to make sure they distinguish between cost of feed and cost of gain. Cost per ton of feed really does not tell me much unless I know something about that feed's (or ration's) ability to put weight on cattle. There are lots of ways to lower feed cost per ton, but I must make certain that I am not losing more value of gain than I am saving in cost per ton. This is why I tend to lean towards cost of gain when comparing programs and prefer to run multiple programs through a full backgrounding budget to compare expected profit.

Finally, there are also implications for fall grazing. A quick glance at the drought monitor reveals how much variation exists across the county. But, if you are in an area that has had good moisture conditions and is getting solid pasture growth, make certain to utilize that to the extent possible. While grazing costs have increased recently as well, they have certainly not increased as much as purchased feed. So, fall pasture is likely the most attractive feed that you have to utilize to add pounds. The current market also increases incentives to incorporate rotational grazing or strip grazing to increase the utilization of those forages



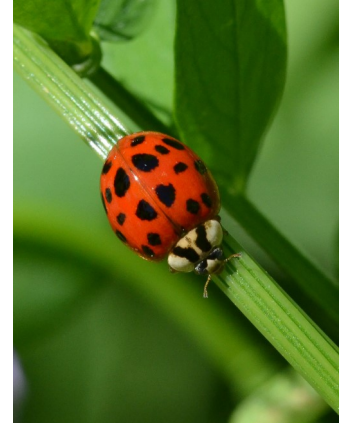
Webster County Extension Agent for
Agriculture & Natural Resources

Preventing and Managing Fall Pests In Your Home

Source: Jonathan Larson, UK entomology assistant professor of extension

As temperatures go down this fall, you may notice more insects around your home. Insects often retreat indoors to escape the cooler temperatures as a part of their overwintering strategy.

As pests mistake your home for a heated pile of rocks, you may see hundreds, even thousands, of insects around your home this fall and winter. The most common autumn home invaders you may see are multicolored Asian ladybeetles and the brown marmorated stink bug. Brown marmorated stink bugs tend to be the first invader with the multicolored Asian lady beetle following about a month later. The lady beetle is sometimes called the Halloween beetle for its coloration and the fact that people usually start to notice them in October.



Asian Ladybeetle

While cooler temperatures have begun, you still have ways to pest-proof your home before pests make their mass exodus to warmer hideaways.

Inspect the exterior of the property and look for gaps in windows and doors, holes in screens, openings in caulk or other sealants and fix them. Without these easy entry points, insects have a tougher time coming inside.

Pesticide applications on the outside of the home may also provide some relief but timing is crucial. When using pesticides, focus on doors, windows, utility openings and banding around the foundation. Make sure to check the label of the pesticide to make sure you can apply it to the necessary areas.

Since the primetime for pesticide application has passed, if you see clusters of pests on the exterior of your home, you may also spray them with soapy water to kill them before they start squeezing their way inside.

Once the pests have come into your home, it is best to manage them simply by vacuuming or sweeping them up for disposal. Interior pesticide applications are usually unnecessary, especially “bug bomb” type applications which usually don’t reach the hiding spots of overwintering pests.



Brown Marmorated Stink Bug

Ueki Shadick

Webster County Extension Agent for
Agriculture & Natural Resources

Why Leaves Change Colors In The Fall

Source: Sharon Flynt, UK Extension Horticulture Agent

Fall is one of the most beautiful seasons of the year, as tree leaves change colors to bright oranges, vibrant reds and eye-popping yellows. Trees that change color in the fall are deciduous trees. They go dormant in the winter to protect the tree from freezing temperatures and will generate new leaves in the spring.

Three factors cause the tree leaves to change color at this time of year: length of night, leaf pigments and weather. Length of night is the only constant of the three. Following the summer solstice in June, the daylight shortens in the Northern Hemisphere and nights become longer. It is the increasing length of night that triggers certain reactions in trees and leaves.

Chlorophyll, which produces the green color in leaves, and carotenoids, which gives us the orange, yellows, and browns, in conjunction with sunlight, are working all summer to produce food for the tree. After the solstice, night length steadily increases, causing excess plant sugars to build up, chlorophyll production to slow down and eventually stop in the leaf. When chlorophyll production ceases, the carotenoids pigments are unmasked and any anthocyanins in the leaf start producing the reddish, purple colors in response to bright light, giving the leaves their fall colors.

As time passes, a cell layer between the leaf petiole, where it connects to the stem of the tree, begins to close. Once that cell layer completely closes, the leaf drops, closing off any openings into the tree and protecting it from winter's freezing temperatures and harsh winds.

Fall color vividness depends on temperature and moisture. Sunny, warm days, cool nights and soil moisture in early fall produce the most color. This combination of moisture and temperature produce a vast array of color and that's why no two autumns are ever alike.

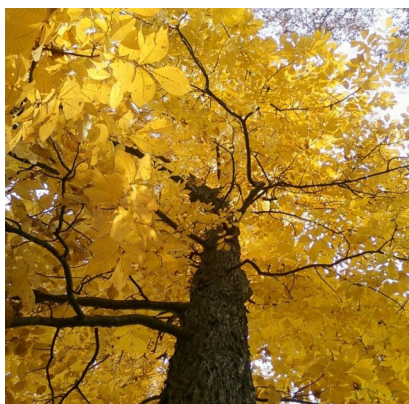


Black Gum



Dogwood

Oak, maple, black-gum, sassafras, and dogwood trees produce various shades of red in the fall.



Hickory

In Kentucky, orange and yellow colors are shown on yellow-poplar, birch, hickory, white oak, and sugar maples.



Tulip Poplar