

Newsletter

January 2023
 Email: mcampbel@uky.edu



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

Cooperative
 Extension Service
 Mason County
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 Maysville, KY 41056
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www.ca.uky.edu/ces

What's in the Newsletter for January
(bold indicates new or updated)

Upcoming Meetings
Cost-share Application Window
Detailed List of Upcoming Meetings

Nuisance Weed Program– KDA

Frost Seeding Clover

Farm Family Night

Beef Updates

January Forage Tips

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KY Alfalfa and Stored Forage Conference

Mid-South Stocker Conference

**Risk Factors for Sclerotinia Crown & Stem Rot in
 Fall-seeded Alfalfa**

Mycotoxin FAQs

Online Certification Available

Soil Testing

Slow Cooker Venison Enchiladas

Upcoming Events
(Please call to sign up)

COST-SHARE UPDATE:

The Mason County Cost-share program for CAIP will begin January 17 for applications. Two kickoff meetings are scheduled for January 17 at 10 am and 6 pm at the Mason County Extension Office. Applications will be taken until the close of business day on February 6. Attendance to the kickoff meetings is not required. The meetings will offer updates to the programs and discuss the application. The Mason County Soil Conservation District is the new administrator for the cost-share programs. Applications can be picked up at the Mason County Extension Office or the Mason County Conservation Office during the application window.

**Carbon Market Considerations for KY Farmers &
 Woodland Owners**

January 31 @ 6 PM

Meeting via Zoom– contact the office to register by Jan 30 to get link for meeting

Agronomy Day

Feb 1 registration begins at 9– program at 9:30
 Clover Frost Seeding, Forage Renovations– Dr. Smith
 Grain Storage, Does it Pay– Dr. McNeill
 Optimizing the Use of Existing Forage Resources–
 Dr. Teutsch
 Importance of Lime and pH– Dr. Ritchey
 Strategies to Reduce Fertilizer Costs on Cattle Farms–
 Dr. Halich
 Pesticide Safety– Dr. Bessin
 Private Applicator Certification

(see detailed listing on next page)



Upcoming Events

(Please call to sign up)

Jan 12 @ 6PM Weed Control Soybeans– Tollesboro
Volunteer Fire Department
Jan 17-Feb 6 CAIP Cost-share Applications
Jan 31 @ 6 PM Carbon Mkt Consideration– Zoom
Feb 1 @ 9 AM (registration)- Agronomy Day
Feb 14 @ 6 PM Pesticide Certification
Feb 15 @ 9 AM BQCA Certification
Feb 20 @ 6 PM BQCA Certification
Feb 21 KY Alfalfa/Store Forage Conf– Cave City
Feb 21-22 Mid-South Stocker Conf– WKU Ag Expo
Feb 23 @ 9 AM Pesticide Certification
Mar 1 @ 6 PM Tobacco GAP Training
Mar 7 @ 5 PM Farm Family Night– MCTC
Mar 14 @ 9 AM Pesticide Certification
Mar 14 @ 6 PM Pesticide Certification
Mar 21 @ 9 AM BQCA Certification
Mar 21 @ 6 PM BQCA Certification
Mar 23 @ 9 AM Pesticide Certification

All meetings are at the Mason County Extension Office unless noted

Nuisance Weed Spraying Program

The Nuisance Weed Spray Program is an opportunity for producers to apply for a select acreage of spraying to help control unwanted weeds. The Kentucky Department of Agriculture offers the program and provides equipment to be used to spray for the unwanted weeds. To apply visit the Kentucky Department of Agriculture website nuisance weed program. Application window will open in February.

The KDA Division of Environmental Services
502-573-0282

Frost Seeding Clover

It's the time of year to begin planning to frost seed clover for the upcoming year around February. Frost seeding should be completed in most cases by mid February to get the desired affect of the seed making soil contact through freeze and thawing process. Clover seed responds well to frost seeding and can provide added nutritional quality and pasture improve-

ments to forages for livestock grazing. To achieve a great potential for success the field must be thinning and have some soil exposed for seed contact. Short vegetation allows for best results when frost seeding. Fields that have dense cover, tall vegetation, and little soil exposure can prevent the seed from making soil contact and giving it little chance to survive. Scout fields that are intended for frost seeding to help insure the best chance for positive results. Graze fields now leaving vegetation short if frost seeding is planned in that field. Other seeds such as grass seeds and alfalfa don't respond well to frost seeding and should not be seeded in that fashion.

With the excessive wet conditions we have had this fall and as they continue into the winter, developing a plan now to renovate pasture and hay fields can help repair those stressed fields. With animal traffic on saturated fields.

With fields needing more renovation than just clover by frost seeding, develop a plan to drill new seeds in the spring. AGR 18– Grain and Forage Crop Guide for Kentucky is a great tool that will discuss each forage seed, depth to plant, time to plant, amount to plant and several other aspects. The last two years have taken tolls on forage fields from one extreme to the other. Planning now can help be ready with the time and weather permit re-seeding.

Farm Family Night

The annual Farm Family Night is scheduled for March 7 at the Maysville Community and Technical College. Dave Maples, Kentucky Cattlemen Association Executive Vice President, will be the keynote speaker for the evening. Many vendors and educational programs will be available for the evening. Over 30 educational classes are scheduled to be offered in two concurrent sessions. Tickets for the meal will be available in February and can be picked up at local Extension Offices.



Beef Updates

Timely Tips

Dr. Les Anderson, Beef Extension Professor, University of Kentucky

Spring-Calving Cow Herd

- Study the performance of last year's calf crop and plan for improvement. Plan your breeding program and consider a better herd sire(s). Select herd sires which will allow you to meet your goals and be willing to pay for superior animals.
- Consider vaccinating the cows to help prevent calf scours.
- Keep replacement heifer calves gaining to increase the probability of puberty occurring before the start of the spring breeding season.
- Start cows on the high magnesium mineral supplement soon. Consider protein supplementation if hay is less than 10% crude protein. If cows are thin, begin energy (grain) supplementation now. Cows must reach a body condition score of 5 before calving to maximize their opportunity for reproductive success. Supplementation now allows adequate time for cows to calving in adequate body condition score.
- Get ready for calving season! See that all equipment and materials are ready, including obstetrical equipment, record forms or booklets, ear tags, scales for obtaining birthweights, etc. Prepare a calving area where assistance can be provided easily if needed. Purchase ear tags for calves and number them ahead of time if possible. Plan for enough labor to watch/assist during the calving period.
- Move early-calving heifers and cows to pastures that are relatively small and easily accessible to facilities in case calving assistance is needed. Keep them in good condition but don't overfeed them at this time. Increase their nutrient intake after they calve. Cooperative Extension Service University of Kentucky Beef IRM Team Published Monthly by UK Beef IRM Team and edited by Dr. Les Anderson, Beef Extension Specialist, Department of Animal & Food Science, University of Kentucky

Fall Calving Cow Herd

- Provide clean windbreaks and shelter for young calves.
- Breeding season continues. Keep fall calving cows on accumulated pasture as long as possible, then start feeding hay/grain. Don't let these cows lose body condition!
- Catch up on castrating, dehorning and implanting.

General

- Feed hay in areas where mud is less of a problem. Consider preparing a feeding area with gravel over geotextile fabric or maybe a concrete feeding pad.
- Increase feed as the temperature drops, especially when the weather is extremely cold and damp. When temperature drops to 15°F, cattle need access to windbreaks.
- Provide water at all times. Cattle need 5 to 11 gallons per head daily even in the coldest weather. Be aware of frozen pond hazards. Keep ice "broken" so that cattle won't walk out on the pond trying to get water. Automatic waterers, even the "frost-free" or "energy-free" waterers can freeze up in extremely cold weather. Watch closely.

Consider renovating and improving pastures with legumes, especially if they have poor stands of grass or if they contain high levels of the fescue endophyte. Purchase seed and get equipment ready this month.

Forage Timely Tips: January

- Continue strip-grazing of stockpiled tall fescue for maximum utilization.
- Remove animals from very wet pastures to limit pugging and soil compaction.
- Feed your best hay to animals with highest nutritional needs.
- Supplement poor quality hay as indicated by forage testing.
- Feed hay in areas where mud is less of a problem.
- Feed hay in poor pastures to increase soil fertility and enhance organic matter.
- Consider "bale grazing" – set out hay when the ground is dry or frozen. Use temporary fencing to allocate bales as needed.
- Use variety trial results to select seed for spring renovation.
- Prepare for pasture renovation by purchasing seeds, inoculant, etc. and getting equipment ready



Poison Hemlock and Buttercup Management

Late winter is one of the best times of the year to assess fields and fencerows for presence of cool-season weeds. Further, the preferred time to implement control tactics can often be in March as daytime air temperatures begin to rise and are maintained above 55F.

This is when cool-season weeds are younger and begin their active vegetative growth before initiating flowers later in the spring. Winter annual and biennial weeds typically germinate from seed in the fall and produce flowers during the spring.

Poison hemlock is easily recognized throughout the winter and early spring. Classified as a biennial, it often grows as a winter annual in Kentucky, particularly plants that germinate during the previous fall.

Poison hemlock plants form rosettes that remain green throughout the winter in a somewhat semi-dormant stage. These young rosettes are often found in areas where poison hemlock was present the previous year, particularly along fence rows and other isolated areas. Younger plants can be identified by their fern-like leaves with leaf petioles that have purple spotting and no hairs. After resuming active growth in late winter, they form larger rosettes. Later flower stalks elongate during the spring producing clusters of white flowers in June. Mature plants can grow up to 6 to 9 feet tall.

The best time for control using herbicides is generally when plants are in the younger rosette stages of growth in late February and early March. Herbicide products containing 2,4-D, dicamba+2,4-D (eg. Weedmaster, Brash, Rifle-D, etc.), and aminopyralid (i.e. GrazonNext, DuraCor) are the preferred choices for obtaining effective control. Effectiveness of chemical control can decrease as plants begin to elongate and become more mature. Poison hemlock plants can be toxic to animals; therefore, when using herbicidal control methods on larger plants it is important to remove animals from treated areas. Animals are more likely to graze poison hemlock plants following herbicide treatment than before. On mature plants mechanical methods such as mowing can be an alternative control method if infested areas are accessible. Mowing and other mechanical control efforts should be done after flower stalks elongate but before plants begin to flower.

Another common weed we observe during the spring in grazed pasture fields are the buttercups. Various species of buttercup (*Ranunculus* spp.) are likely to be found in Kentucky. These include Bulbous, Creeping, Hispid, Tall, and Smallflower buttercup. Although their leaf shape, flowers, and other characteristics may vary, many buttercup plants can be noticed by their yellow flowers, commonly with five waxy-like petals. Like other winter annual weeds, buttercup often emerge in the fall, but they can also germinate in late winter and early spring. The peak of the flowering period usually occurs in April, but may persist into May. When flowers are observed, new seed may already be in development on the flower stalks.

Buttercup is more frequently found in fields or field areas that are utilized or heavily grazed in the fall and winter months. This results in thin, bare areas throughout the field creating an environment whereby buttercup seed can readily germinate and seedling plants can thrive. Therefore, one long-term control strategy involves utilizing management practices which help promote growth of desirable forage species and minimize bare areas. Interseeding more desirable forage species may be another practice to consider. This is not always practical in some fields that are essential for winter feeding.

In the short-term, herbicide treatment in early spring is an option. Herbicide products that contain 2,4-D, or other broadleaf type pasture herbicides are generally effective on most buttercup species. To be most effective, herbicide treatment should be completed when plants are in the vegetative stages of growth before flowers develop and produce new seed. Hence, herbicide applications should normally occur by late March. Treatments after flowering offer little benefit since buttercup plants are already producing new seed and plants die back naturally by late spring and will not be present the remainder of the year.

If you do see developing cool-season weed problems as we transition from late winter into early spring you may need to take action soon to begin to correct these problems. In general, herbicide products that contain 2,4-D are usually effective on younger rosettes of poison hemlock, biennial thistles, and buttercups. Another course of action in the spring is a “wait and see” approach before implementing a control tactic. Yet, keep in mind that smaller weeds are easier to control using herbicide treatments than after they increase in size and become more mature.

~ Dr. J.D. Green, UK Extension Weed Specialist.



KY Alfalfa and Stored Forage Conference

If you produce hay for sale or for your own livestock, make plans to attend the KY Alfalfa and Stored Forage Conference in Cave City, KY Feb. 21, 2022. Simply go to the Forage Website under events to register or call 513-470-8171. The theme of this year's conference is Hay Production, Marketing and Mechanization. The topics and speakers include:

- National Producer and Consumer Survey: Increasing Alfalfa Hay Sales to Horse Owners-Krista Lea, UK
- Hay Production in the Deep South: Bermudagrass and Alfalfa-A Perfect Combination! – Dr. Jennifer Tucker, University of Georgia
- Options for Hay Mechanization: Producer Perspective-Dennis Wright
- Hay Mechanization: Industry Overview – Noah Pendry, CNH Industrial (New Holland)
- Fall Armyworm Research -Dr. Raul Villanueva, UK
- Attacking the Yield Plateau: Assessing the Nutrient Status of Kentucky Alfalfa Stands – Will Fleming, UK
- One Big Idea that has Helped Improve My Haying Operation-Winners of the KDA Hay Contest
- Update on Options for managing thinning alfalfa stands-Dr. Jimmy Henning, UK

2023 Mid-South Stocker Conference **Back in Person**

Dr. Jeff Lehmkuhler, Extension Professor, University of Kentucky

The Mid-South Stocker conference planning committee is hosting this year's conference in person at Western Kentucky University. The event will be held at the WKU L.D. Brown Ag Expo Center, Bowling Green, KY. The program will start on the evening of February 21 at 5:30 with registration followed a meal and vendor product reviews. Dr. Michelle Arnold, UK Extension Veterinarian, will wrap up the evening with a review of necropsy findings.

The program resumes the next day on February 22nd

with registration at 8:30 and tradeshow. Given high feed costs, everyone is asking how to get more from their forage program. Dr. Kim Mullenix, Auburn University, will share forage-livestock considerations under changing environmental conditions. Following her presentation, Dr. Brittany Harlow, USDA Food Animal Production Research Unit, will discuss recent findings on the benefits of red clover to cattle on tall fescue.

Market outlook and economic risk management should be top of mind as well moving through 2023. Dr. James Mitchell, University of Arkansas, will provide a market outlook for the southeast for 2023. Our own, Dr. Kenny Burdine will then share considerations for using the Livestock Risk Protection program. Given the importance of keeping stocker cattle healthy to be profitable, Dr. Arnold will join us again to give a health update. Finally, the virtual tours of stocker operations in the region will once again be a part of the program.

To register, use the Eventbrite link <https://www.eventbrite.com/e/483761211807> or use the qr code below. The cost is \$70 for both days or \$50 for a single day. College and high school student registration is \$15.

We look forward to hosting you this year in person for the Mid-South Stocker Conference on February 21-22, 2023. Be sure to register and mark your calendars.



Risk Factors for Sclerotinia Crown & Stem Rot in Fall-seeded Alfalfa

by Paul Vincelli, Extension Professor

Introduction

Alfalfa seeded during late summer or fall is susceptible to the destructive disease Sclerotinia crown and stem rot. Fall-seeded stands are particularly vulnerable to this disease because the young seedlings have not had sufficient time to develop adequate resistance before infectious spores of the pathogen are produced in late October. In contrast, spring-seeded stands are able to develop larger, more resistant crowns prior to this infectious period. Thus, spring plantings are better able to withstand an attack, should these air-borne spores be present in the field.

Cause

Sclerotinia crown and stem rot (SCSR) is caused by the fungus *Sclerotinia trifoliorum*. This pathogen only infects alfalfa, clover, and related forage legumes.

This is not the same *Sclerotinia* species that attacks tobacco in float beds, canola, or vegetable crops—that species is *Sclerotinia sclerotiorum*.

Varietal Susceptibility

Recognize that almost all commercial alfalfa varieties are highly susceptible to SCSR for the first few months of growth. The disease pressure from SCSR is higher here than just about anywhere else in the nation. Varieties found to exhibit partial resistance in other states can often be severely damaged by SCSR under Kentucky conditions. Therefore, only varieties that have been successfully tested against SCSR under Kentucky conditions should be considered for fall seeding in the Commonwealth. Contact your County Extension agent for more information on variety performance against SCSR in Kentucky.

Fall Seeding & the Disease Triangle

SCSR can be so destructive that growers who have had wipeouts in fall-seeded fields often forsake fall seeding in the future. On the other hand, many growers successfully seed alfalfa this time of year and don't understand all the fuss about Sclerotinia. What accounts for the divergence of experience? It should be understood that plant diseases only develop when all three components of the disease triangle are present: a susceptible plant, a virulent pathogen, and a favorable environment. Producers who successfully seed alfalfa in the fall are able to do so because one of

these components is missing in their fields. Often it is because *S. trifoliorum* is absent or present at levels that are too low to cause damage. If one has a history of successfully fall-seeding in a particular field, there is probably minimal risk in doing so again. This presumes that the same cultural practices are being followed and the disease has not developed to high levels in neighboring fields. However, even a history of previous success is no guarantee because the farmer may be planting alfalfa into a highly infested pasture for the first time. Furthermore, season-to-season variation in disease severity is quite high—the disease can be severe in a field one year and mild the next.

Risk Factors

If the farmer has little experience with fall seeding, he/she should consider the following risk factors relative to this disease.

• Cropping history of site

This fungus only attacks forage legumes, so sites with a long history of row cropping are likely to have low levels of the fungus. However, I emphasize the word “long”. This fungus can survive in the soil at high levels for 5 to 6 years in the absence of any forage legumes. Also recognize that the fungus can maintain itself indefinitely on volunteer clovers in a pasture.

• Time of seeding

Seeding by mid-August is preferable to seeding in late August or September because this gives plants more time to develop some natural resistance. As explained above, spring seedings have very little risk of the disease.

• Tillage

I don't recommend plowing as a disease control practice, since soil conservation is important to us and to future generations. However, where the fungus is present, moldboard-plowed fields have the least risk of an outbreak, with reduced tillage next in terms of risk. No-till fields have the highest risk of Sclerotinia infections. Tillage practices are important because plowing buries the survival structures (sclerotia), reducing spore levels in the fall.

• History of adjacent fields

Even if SCSR has not been observed in the field being sown, the field may still be at risk if the disease has been detected in adjacent fields. Neighboring fields can be a source of



Risk Factors for Sclerotinia Crown & Stem Rot in Fall-seeded Alfalfa (cont.)

airborne spores for the newly seeded fields. Also, the detection of SCSR in adjacent fields suggests that local conditions have allowed SCSR outbreaks in the past and may allow them in the future.

- Field size/shape

Let's assume, for example, that you are going to seed a 2-acre field surrounded by pasture. The field has been planted to tobacco for the past 10 years, and was plowed and disked to create a good seedbed. What is the risk of Sclerotinia disease? Keep in mind that this is an airborne fungus. The pasture surrounding the field could easily provide enough inoculum to cause a serious outbreak. The larger the field, and the less border it shares with possible sources of inoculum, the less the risk.

Mycotoxin FAQs

1. What are mycotoxins?

Mycotoxins are natural chemicals produced by certain fungi, some of which cause ear rots in corn. CPN-2002 Mycotoxins are nonliving compounds that are byproducts that the fungi produce. Mycotoxins can have detrimental health effects to both humans and animals if they eat contaminated food or feed.

2. What mycotoxins occur in corn?

There are five major mycotoxins associated with ear rot diseases of corn.

Aflatoxins are found in corn with *Aspergillus* ear rot. **Deoxynivalenol (DON)**, sometimes called vomitoxin) and **zearalenone** are found in corn with *Gibberella* ear rot.

Fumonisins are found in corn with *Fusarium* ear rot.

Ochratoxin is found in corn infected with *Penicillium verrucosum*, but some *Aspergillus* species also produce this mycotoxin.

3. What are the effects of mycotoxins?

The toxic effects of mycotoxins vary by type, dose, and animal species consuming the toxin.

Aflatoxin can affect the liver (hepatotoxicity), lead to cancer, and suppress the immune system.

Fumonisin can affect the liver (hepatotoxicity), lead to cancer, cause pulmonary edema (fluid in the lungs), and cause leukoencephalomalacia

(irreversible, fatal brain damage) in horses and rabbits.

DON affects the gastrointestinal tract (which often makes animals vomit and refuse to feed) and can inflame the central nervous system.

Zearalenone can cause hyperestrogenism (estrogen overload), a condition that is particularly dangerous for female breeding animals.

Ochratoxin can cause cancer and is toxic to the kidneys.

4. What levels of mycotoxins are safe in food and feed?

The United States Food and Drug Administration (FDA) and Health Canada have issued action levels (legally allowed amounts) for aflatoxin and advisory levels (cautionary levels) for fumonisin and DON. The concentrations vary by mycotoxin and the intended use of the final corn products.

If grain or end products contain mycotoxin concentrations that exceed an action level, then the law may require the grain or products to be destroyed. Acceptable mycotoxin concentrations are most often set at the point of sale and in contract specifications.

Corn for export must meet the limits set by each country, which are often more stringent than the United States.

5. When should I test for mycotoxins?

If you have a field that has any ear rot problem, test the grain for mycotoxins. Testing for aflatoxin is recommended for corn that is severely drought stressed.

6. How do I scout for potential problems?

Scout Fields Before Harvest

Scout fields for ear rot diseases at kernel maturity (black layer) and just before harvest. Pay close attention to areas where the crop may have been stressed, damaged, or exposed to extreme environmental conditions. These areas include hillsides where drought stress may be more severe (for *Fusarium* and *Aspergillus* ear rots) and low areas where moisture from fog or high-dew conditions prevail (for *Gibberella* ear rot).

When you scout, randomly select plants and pull back the husks to examine the ears. A quick method is to select 100 plants across the field (20 ears each from five different areas). If you find a diseased ear, examine another 10 ears from adjacent plants.



Mycotoxin FAQs (cont.)

During your examination, ask three questions:

1. What ear rot disease is present?
2. How much of the ear is affected by ear rot (what is the severity of the disease)?
3. What proportion of the crop is affected? Once you answer these questions, determine your next steps (see below).

Know When to Test for Mycotoxins

The risk of mycotoxins in harvested grain increases with the number of infected kernels on an ear. You should assume that diseased kernels contain mycotoxins.

However, mycotoxin levels may vary among diseased ears. Additionally, corn that appears to have a mild ear rot may still have very high mycotoxin levels. This makes the decision to test for mycotoxins difficult.

The threshold for aflatoxin should be very low. If you find any ears with *Aspergillus* ear rot, test the harvested grain for aflatoxin.

For DON and fumonisins, the threshold is flexible. If 30 percent of the ears you examine in a field have *Gibberella* or *Fusarium* ear rots, test for DON and fumonisins. You should also test your corn if you observe severe symptoms (more than 50 percent of the ear covered with mold) of either disease on multiple ears.

7. What are the mycotoxin testing options?

Mycotoxins are complex chemical compounds, which makes them difficult to quantify. However, several technologies can assess mycotoxin concentrations in corn grain.

For this reason, you should never rely solely on visual methods to confirm the presence of mycotoxins. A common visual test — the black light test — can indicate the presence of the fungus *Aspergillus flavus*, but it does not detect the aflatoxin it produces.

For an accurate assessment, send grain samples to a professional laboratory for analysis. Local laboratories and grain inspection services may test individual corn samples for mycotoxins; however, sample testing can be expensive. Check with your local extension personnel for a more complete list of grain testing facilities in your area. The cost and submission procedures will vary by provider.

8. Will drying, heating, freezing, or applying chemicals reduce mycotoxins in grain?

No. Mycotoxins are extremely stable and heating, freezing, roasting, or treating with chemicals cannot reliably reduce mycotoxin levels within kernels. In some cases, you can reduce the overall mycotoxin concentration in the grain by removing broken grain (fines), foreign materials, and lightweight moldy kernels.

You can greatly reduce the further accumulation of mycotoxins in harvested grain by properly drying corn to less than 15 percent moisture. Dry grain to 13 percent for long-term storage.

When grain moisture levels are greater than 16 percent, the risk of aflatoxin and ochratoxin accumulation increases. Moisture greater than 18 percent elevates the risk of DON, zearalenone, and fumonisins. Warm conditions will accelerate the rates of spoilage and mycotoxin accumulation. There is no evidence that mycotoxin levels will increase in grain stored at an appropriately low moisture.

It's important to point out that while high-temperature drying will stop mold growth and mycotoxin production, it will not reduce the level of mycotoxins already present. Quick drying is preferred over low-heat drying. Be wary of low-temperature, in-bin dryers for moldy corn, and be sure to meet proper ventilation requirements for dry corn storage.



Online Certifications and Trainings

Mason County ANR Webpage:

<http://mason.ca.uky.edu/content/ag-natural-resources>

BQCA:

http://afs.ca.uky.edu/files/kybqca_online_instructions.pdf

CAIP Online Education

<http://mason.ca.uky.edu/content/caip-education-online-certification>

Each of the links above can be found on the Mason County Agriculture and Natural Resource webpage. Click the links and follow the online instructions.

Sincerely,



Tad Campbell,
CEA for Agriculture/Natural Resources

Soil Testing

Soil Samples can be submitted to the Mason County Extension Office. Soil samples cost \$7.00 per sample and results will be sent to the producer with recommendations for fertility needs.

When collecting samples, some things to do:

- ◇ Collect 15-20 cores about 4 inches deep for each field/sample
- ◇ Mix cores in a plastic container to evenly mix soil and collect about a pint of the sample to submit
- ◇ Name each sample to correlate to the field sampled
- ◇ Provide information– Name, address, phone number
- ◇ List what crop will be planted and what the field was in the prior year.
- ◇ Number of acres

Soil probes are available for check-out from the office.





College of Agriculture,
Food and Environment

RETURN SERVICE REQUESTED

Cooperative Extension Service

University of Kentucky
Mason County
800 US HWY 68
Maysville, KY 41056

Slow Cooker Venison Enchiladas

- 1 pound ground venison (may substitute elk or beef)
- 1/2 cup chopped green pepper
- 1 cup chopped onion
- 1 can (16 ounces) low-sodium pinto or kidney beans, drained and rinsed
- 1 can (15 ounces) low-sodium black beans, drained and rinsed
- 1 can (10 ounces) no-sodium diced tomatoes with green chilies, undrained
- 1/3 cup water
- 1/2 teaspoon cumin
- 3/4 teaspoon chili powder
- 1/4 teaspoon pepper
- 6 corn tortillas
- 1 cup colby jack cheese, shredded

In a large skillet, cook meat, green pepper, and onion until meat is browned. Add the beans, tomatoes, water, cumin, chili powder, and pepper, and bring to a boil. Reduce heat, cover, and simmer for 15 minutes. In a slow cooker, layer 1/3 of meat mixture, 2 tortillas and 1/3 cup cheese. Repeat the layers 3 times. Cover and cook on low for 5 to 7 hours.

Yield: 6 servings

Adapted from: "Fish & Game Cookbook," Bonnie Scott. 2013.

Nutrition Facts

6 servings per recipe

Serving size 1 enchilada (367g)

Amount per serving

Calories 370

% Daily Value*

Total Fat 8g	10%
Saturated Fat 4g	20%
Trans Fat 0g	
Cholesterol 80mg	27%
Sodium 350mg	15%
Total Carbohydrate 39g	14%
Dietary Fiber 10g	36%
Total Sugars 3g	
Includes 0g Added Sugars	0%
Protein 31g	
Vitamin D 0mcg	0%
Calcium 202mg	15%
Iron 6mg	35%
Potassium 603mg	15%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.