**Ds Notes 041821**

## Tractor Safety Course to Be Offered

Teenagers who are now turning their attention to securing employment for the summer can make themselves more marketable for jobs in agriculture by participating in the National Safe Tractor and Machinery Operation Program offered by local K-State Research and Extension Offices. This annual course will be offered on *Saturday, May 1, 2021 on the campus of Dodge City Community College.*

The purpose of this course is to provide teenagers with an appreciation and awareness of the needed safety practices around tractors and farm machinery. The law requires any young person, ages 14 to 16 who will be employed by someone other than his or her mother or father on the farm to complete a certification course.

Registration will begin at 8:00 a.m. The course runs from 8:30 a.m. to 5:00 p.m. Topics to be covered include: tractor safety operation, working with anhydrous ammonia, ATV safety, fire safety, grain safety and working with livestock. A minimal registration fee covers the noon meal, breaks and handouts. K-State Research and Extension COVID-19 protocols will be followed.

Pre-registration is required by April 23rd, 2021. A flyer and registration form can be found online at www.hodgeman.k-state.edu. You can pre-register by contacting the Hodgeman County Extension Office at 620.357.8337, or by e-mailing hg@listserv.ksu.edu. A virtual option is also available by contacting the Hodgeman County Extension Office.

## REMINDERS

Do not remove foliage from spring-flowering bulbs until the foliage dies. You need to give time for the foliage to transfer energy to the bulbs.

Repot houseplants as needed. Go up 1 inch to 2 inches in size of pot.

Keep newly planted trees & shrubs watered as needed. Keep soil moist but not waterlogged.

## Keep Mower Blades Sharp

Lawn-mowing season is here. Remember that dull blades give the lawn a whitish cast. A dull blade does not cut cleanly but rather shreds the ends of the leaf blades. The shredded ends dry out, giving the lawn that whitish look. A sharp mower blade is even more important when the turf starts putting up seed heads next month. The seed head stems are much tougher than the grass blades and more likely to shred. Under normal use, mower blades should be sharpened about every 10 hours of use. Video of the Week: How to Sharpen a Mower Blade
https://kansashealthyyards.org/component/allvideoshare/video/how-to-sharpen-a-mower-blade?Itemid=101 (Ward Upham)

## Orchardgrass in Tall Fescue Lawns

Orchardgrass often infests tall fescue lawns. Unfortunately, orchardgrass is lighter green and faster growing than tall fescue, so it is very visible. Homeowners complain of the

light green tufts of grass wherever this weed has become established. Even worse, there are no herbicides that will kill the orchard grass without also killing the turf. About the only good thing about orchardgrass is that it is a bunch grass and does not spread.

Orchardgrass often comes in as a contaminant in grass seed, especially K-31 tall fescue. Buying good grass seed is the first line of defense against this weed. Orchardgrass is a pasture grass and therefore is not found in the "weed seed" portion of the seed label. Rather, orchardgrass will be listed as "other crop seed." Try to buy grass seed that has 0.0% "other crop seed."

Control options are few and painful. Use glyphosate (Roundup, Killzall Weed and Grass Killer, Kleeraway Systemic Weed and Grass Killer and others) to spot spray orchardgrass clumps. Any lawn grasses you hit will be killed, so keep the spots sprayed as small as possible. Wait until the spots have turned brown and then cut out the clumps and replace with a small piece of sod. Large numbers of orchardgrass clumps may mean it is more practical to kill the entire lawn and start over. This should be done in the fall rather than now.

For information on identification of orchardgrass, including images, go to: http://kswildflower.org/grass_details.php?grassID=15 (Ward Upham)

**Fertilizing Strawberries**

Most garden soils in Kansas have adequate levels of all nutrients other than nitrogen IF the area has been fertilized in the past. However, it is recommended that a soil test be done to be sure of the nutrient needs of your fruit planting. If the soil test recommends phosphorus and potassium, use a 10-10-10 fertilizer or 12-12-12 instead of what we recommend below but triple the rate. For example, instead of ½ cup per 10 feet of row, use 1.5 cups per 10 feet of row.

*Strawberries (June-Bearing):* June-bearing strawberries are not fertilized in early spring as this can make the berries soft and more prone to rot. Fertilize at renovation and again in late August to early September. In most cases, strawberries need primarily nitrogen, so the recommendations are for a high nitrogen fertilizer such as a 27-3-3, 29-5-4, 30-3-3 or something similar. Though recommended for lawns, these fertilizers will also work well for strawberries as long as they do not contain weed killers or crabgrass preventers. Apply ½ cup for every 10 feet of row. Note: For more information on renovating strawberries, see page two at http://www.bookstore.ksre.ksu.edu/pubs/mf598.pdf

*Strawberries (Everbearing or Day-Neutral):* Fertilize in the spring as growth starts and again in early August. Use the rates recommended for June-bearing strawberries. Everbearing (dayneutral) strawberries are not renovated. (Ward Upham)

**Asparagus Beetles**

Asparagus should be doing well now that it isn't being frozen back all the time. That won't hurt the plant, by the way. You will lose the spears that were frozen but the plant is fine. However, be on the lookout for asparagus beetles. Both the adult and larvae of asparagus beetles feed on asparagus spears by chewing the tips and spear surfaces, leading to scarring and staining of the spear tips. Asparagus beetles overwinter as adults in trash

near the garden. The adults are a blue/black beetle with a red prothorax with yellow spots. The larvae are a soft, greenish grub. Small, elongated, black eggs — sticking out long ways from the side of asparagus spears — are laid on developing spears.

Early control of beetles is important to reduce feeding damage later. Permethrin will provide control but requires a 3-day waiting period between spraying and harvest. Permethrin is found in Garden and Farm Insect Control and Eight Vegetable, Fruit & Flower Concentrate. (Ward Upham)

**Rhubarb Harvest and Seedstalks**

Rhubarb, like asparagus, is a perennial vegetable. It is harvested for the leaf stem, which is also called a petiole. Some years rhubarb will produce large, hollow-stemmed seedstalks that arise from the center of the plant. These should be broken or cut out as they appear so that energy will go into plant vigor rather than seed production. It will take several weeks for all the seedstalks to appear so be vigilant in removing them. Newer varieties of rhubarb are selected for vigor, bright red-colored stalks and less of a tendency to produce seedstalks than the older types. (Ward Upham)

**Fertilizing Cole Crops**

If you planted cole crops such as cabbage, broccoli and cauliflower earlier this spring and made it through our earlier cold snaps, they will need a little fertilizer boost. These plants need to mature before summer heat arrives, so they must grow quickly while the weather is cool. A sidedressing of fertilizer about 3 weeks after transplanting helps plants continue to grow rapidly.

Use fertilizers high in nitrogen for sidedressing such as nitrate of soda or blood meal at the rate of 1/3 cup per 10 feet of row. You may also use lawn fertilizers that have close to 30 percent nitrogen such as a 30-3-4 or 29-5-4 but the rate should be cut in half to 3 tablespoons per 10 feet of row. Do not use lawn fertilizers that have weed killers or preventers. Fertilizer must be watered in if timely rains don't do that job for you.

We have a sheet available that gives recommendations on how to sidedress specific vegetable crops. It can be found at: https://tinyurl.com/j2ggaa6 http://www.hfrr.ksu.edu/doc1991.ashx (Ward Upham)

**Red Plastic Mulch and Tomatoes**

Plastic mulches have long been known to provide advantages for the vegetable grower including earlier fruiting, increased yields and weed control. More recently advantages have been noted for colored mulches over the more traditional black plastic mulch. With tomatoes, the color of choice has been red. Though normally there is an increase in production of marketable fruit with red mulch over black mulch, the amount of the increase varies with the type of year we have. There may be no increase during years of near-perfect weather or up to a 20% increase with less favorable growing conditions. A good average expected increase is about 12%.

So, how do you apply plastic mulch? Commercial growers have a mulch-laying machine that applies the trickle (drip) irrigation line and the mulch in one operation. Home

gardeners must do this by hand. The first step after soil preparation is to place a trickle line near the center of where the mulch will lay as the plastic will prevent rainwater or overhead irrigation from reaching the plants. Then construct trenches for the outer 6 inches of the plastic mulch. This allows the center of the bed to be undisturbed with the edges of the mulch draping down into the trench. Fill the trenches to cover the edges of the mulch. This will prevent wind from catching and blowing the mulch. If the soil has been tilled, a hoe is all that is needed to prepare the trenches. (Ward Upham)

**Eastern Tent Caterpillar**

The larvae (caterpillars) of the Eastern tent caterpillar, Malacosoma americanum, are emerging (eclosing) from their eggs and feeding on the leaves of trees and shrubs. After caterpillar's emerge from the eggs, they create a distinct white, silken nest (or tent) in the branch crotches of trees and shrubs including: birch, crabapple, hawthorn, mountain ash, poplar, willow, and flowering cherry, peach, and plum. The nest protects caterpillars from cold temperatures and natural predators.

Caterpillars are black and have a white stripe extending the length of the body along with blue markings on both sides of the body. There are five larval instars (stages between each molt). Eastern tent caterpillar is one of our earliest caterpillar defoliators in the season, feeding on newly emerged leaves, which can reduce the ability of trees and shrubs to produce food by means of photosynthesis.

Although feeding damage may not directly kill a tree or shrub, a decrease in photosynthesis can predispose plants to secondary pests such as wood-boring insects. Leaf quality can influence tree and shrub susceptibility. For instance, black cherry, Prunus serotina, trees grown in the shade are fed upon less by Eastern tent caterpillars due to lower leaf nutritional quality. The young or early instar (1st through 3rd) caterpillars are active during the daytime and reside in the silken nest at night. During the day caterpillars emerge from the silken nest and feed on plant leaves. On over-cast or cloudy days caterpillars will remain inside the silken nest. The final instar (5th) caterpillar only feeds at night. The length time of time that caterpillars spend feeding increases 4-fold between the 1st and 5th instars.

Feeding activity depends on temperature with caterpillars feeding for a longer period of time when exposed to warmer temperatures than cooler temperatures. Eastern tent caterpillar overwinters as an egg mass attached to the branches or small twigs. There is one generation per year in Kansas.

The silken nests can be physically removed or disrupted by hand. You can destroy, disrupt, or open-up the silken nest using a rake or a high-pressure water spray. The young exposed caterpillars are susceptible to consumption by birds. However, the later instars are fed upon less because the hairs on the body deter birds from feeding on them. Spray applications of the bacterium, Bacillus thuringiensis subsp. kurstaki, or spinosad are effective in killing small (young) caterpillars and suppressing minor infestations of Eastern tent caterpillar. These insecticides are stomach poisons so caterpillars must ingest the material to be negatively affected. When caterpillars are mature and approximately 2 inches long, then pyrethroid-based insecticides, such as bifenthrin, cyfluthrin, and lambda-cyhalothrin should be applied. It is important to apply insecticides when caterpillars are

active during the daytime to increase exposure to the insecticide. However, pyrethroid-based insecticides are harmful to pollinators (e.g. honey bees) and beneficial insects. Therefore, do not apply pyrethroid-based insecticides when pollinators are active. For more information on managing Eastern tent caterpillar populations contact your county or state extension specialist. (Raymond Cloyd)

**Termites or Ants**

Both termites and ants are able to swarm and may have wings during part of their lives. Since these insects are close to the same size, people often misidentify flying ants as termites. Since flying ants do not attack wooden structures like termites, it is helpful to be able to tell the difference.

Fortunately, there are several differences that can easily distinguish the two. For example, ants have a thin waist; the waist of a termite is thick. Also, ants' antennae are elbowed, while termites' are curved. Thirdly, termites have two pairs of wings that are of equal length. Ants also have two pairs of wings, but theirs are of unequal length. Homeowners who find signs of termite activity should shop for a reputable pest control firm. (Ward Upham)

**Time to start scouting wheat for stripe rust: First reports in southeast Kansas**

A few reports have come in this week from southeastern Kansas of stripe rust at very low incidence (Figure 1). Reports in Kansas are expected to increase in the coming weeks. There were a few more reports of stripe rust (Figure 2) in counties in Oklahoma. Reports from extension agents, crop consultants, and growers are indicating that stripe rust is not active yet in many parts of Kansas.

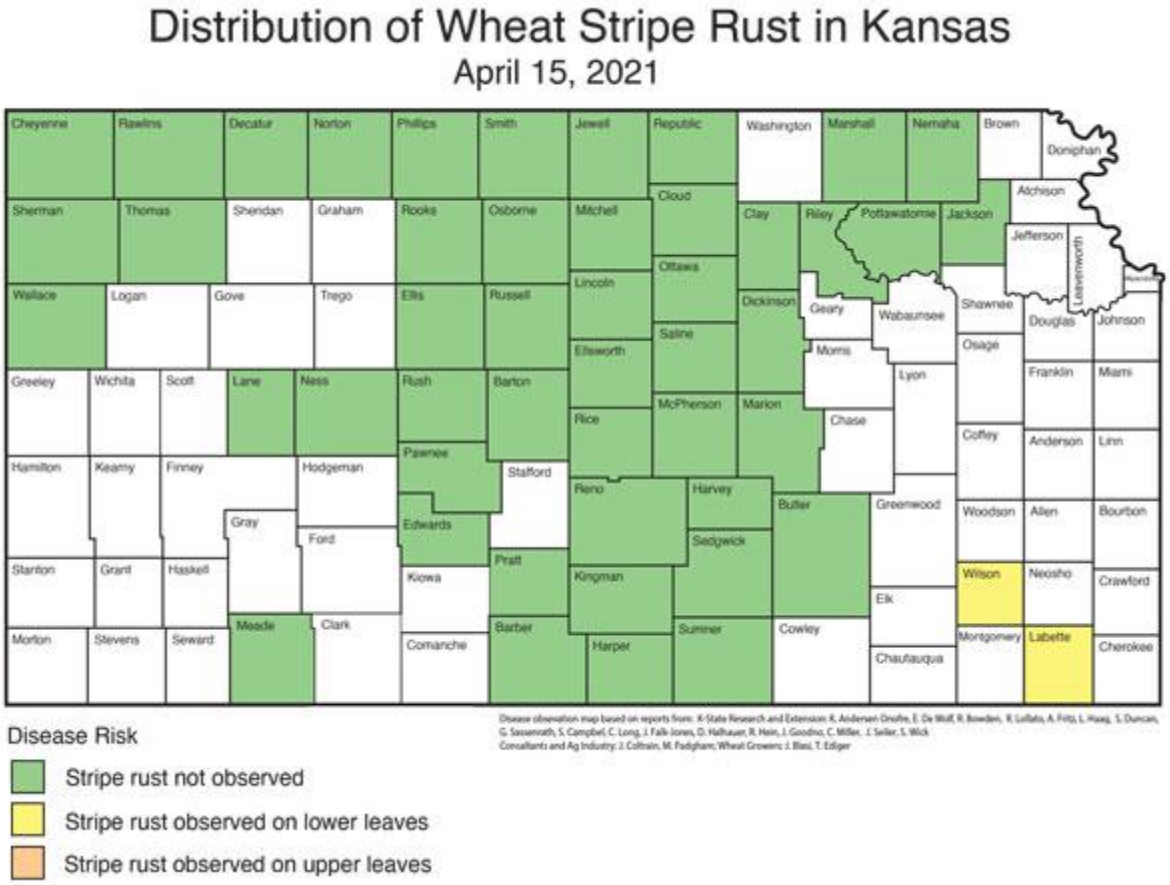


**Figure 1. Distribution of stripe rust in Kansas as of April 15, 2021. Map is based on observations of K-State Research and Extension, crop consultants, and wheat producers in the state. Map created by Kelsey Andersen Onofre, K-State Research and Extension.**

**Figure 2. Classic symptoms of stripe rust. Photo by Kelsey Andersen Onofre, K-State Research and Extension.**

With the wheat crop in south central and southeast Kansas approaching or already at the flag leaf emergence stages of growth, growers are encouraged to be on the lookout for stripe rust and other diseases, such as tan spot. When people think of stripe rust, they often visualize the characteristic bright yellowish-orange lesions on adult plants (Figure 2). Symptoms of stripe rust on younger leaves are often less rectangular because the fungal growth within the plant is not limited by the veins of younger leaves (Figure 3).

**Figure 3. Symptoms of stripe rust on wheat plants that are still at the tillering or jointing stages of growth. Note that the yellowish-orange reproduction of the fungus is more clustered and less rectangular than symptoms on adult leaves. Photos by Erick DeWolf, K-State Research and Extension.**

## Scouting tips

When scouting wheat, it is important to look down within the middle layers of the crop canopy for disease symptoms. Wheat puts out new leaves rapidly during the vegetative growth prior to heading. In some cases, plants may add a new leaf every 7-10 days. These new leaves at the top of the canopy are less likely to express disease symptoms simply because it takes time (10-14 days) for the disease to develop. Focus on leaves that where present over the last 2 weeks. These leaves have a higher probability of infection than the new leaves at the top of the canopy.

More in-field observations will be happening over the next week. Stay tuned for additional detailed reports on the wheat disease status soon.

Please contact us if you detect stripe rust while scouting.

Kelsey Andersen Onofre, Extension Plant Pathology Specialist

## Updated wheat fungicide publication for 2021 now available

With wheat at or approaching flag leaf in southern Kansas, producers are considering the use of fungicides to manage foliar diseases and protect the yield potential of their crop. Susceptible varieties are at highest risk for yield loss when environmental conditions are favorable for disease development. Variety resistance ratings can be checked in this publication: https://bookstore.ksre.ksu.edu/pubs/mf991.pdf. K-State research has found that

a single application can result in a 4-13% yield increase in susceptible varieties relative to wheat that remained untreated.

Wondering about fungicide recommendations for different diseases? The publication *Foliar Fungicide Efficacy for Wheat Disease Management* has been updated for 2021 and can be found at: http://www.bookstore.ksre.ksu.edu/pubs/EP130.pdf. The recommendations in this publication reflect several years of head-to-head comparisons of products in Kansas and many other wheat producing states.

**Considerations for managing foliar diseases**

Timely disease scouting is the first step in assessing the need for foliar fungicide applications. Important foliar diseases for Kansas wheat producers this year include stripe rust, leaf rust, tan spot, and leaf blotch. Producers should scout for symptoms of foliar diseases in the upper canopy, and particularly near the flag leaves of primary tillers. Damage to the flag leaf is most associated with reduced yield. If symptoms are present when scouting, a foliar fungicide application may be considered. There are many fungicides available in Kansas that provide very good to excellent control of foliar diseases and producers should consult the updated *Foliar Fungicide Efficacy for Wheat Disease Management* publication for details.

**Managing tan spot and stripe rust**

Tan spot and other leaf spot diseases (such as Septoria tritici blotch), are starting to show up in the lower canopy in parts of Kansas that have received rainfall over the past several weeks (Figure 1). They may be most problematic in fields with wheat residue, as these pathogens survive through the winter in wheat straw. When it rains, spores will be splashed from residue onto the canopy. This is why we typically see symptoms on the lower leaves first. Tan spot will only be a problem for yield when the upper leaves, particularly the flag leaves of primary tillers, become infected. Fungicide applications should be held until flag leaf emergence (Feekes 8) to fully maximize benefits. Several products in the updated Foliar Fungicide Efficacy ratings document are rated very good to excellent for tan spot control (http://www.bookstore.ksre.ksu.edu/pubs/EP130.pdf).

**Figure 1. Characteristic symptoms of tan spot on the lower leaves. Symptoms start as a small, round or diamond-shaped brown spots. As symptoms progress, a yellow halo will form around spots and spots may coalesce. Photo by Kelsey Andersen Onofre, K-State Research and Extension.**

Stripe rust has recently been reported at very low levels in Southeast Kansas, but there have been no reports of stripe rust moving into the upper canopy yet (Figure 2). Similar to tan spot, stripe rust fungicide applications are most beneficial when made between flag leaf emergence (Feekes 8) and heading (Feekes 10) to a susceptible variety. There are many products that are rated very good or excellent for stripe rust control, but it is important to know that fungicides in the strobilurin family (Group 11) are not as effective when applied after symptoms have already appeared.

It is important to carefully consult fungicide label recommendations prior to product application.

**Figure 2. Characteristic symptoms of stripe rust. Stripe will start as yellow flecking on leaves, but soon orange pustules will erupt on the leaf surface containing classic orange spores. Pustules will typically form in lines, or stripes, on the leaf surface. Photo by Kelsey Andersen Onofre, K-State Research and Extension.**

Kelsey Andersen Onofre, Extension Plant Pathologist