

OCTOBER 9th AGRONOMY FIELD DAY TO FEATURE SORGHUM PRODUCTION RESEARCH

Exciting advances in sorghum research will be featured at the 2015 Agronomy Field Day on October 9 at the Agronomy North Farm, 2200 Kimball Ave. in Manhattan. Topics will range from increases in yield potential to the sugarcane aphid, cover crops, and more.

Higher yield potential remains the No. 1 priority for producers, and it's the top priority for K-State sorghum breeders as well. In theory, grain sorghum should yield just as much as corn in Kansas, given the same amount of fertilizer and with substantially less water, according to Tesfaye Tesso, K-State sorghum breeder in Manhattan and one of the featured speakers at the field day.

In practice, this has not yet happened consistently. New experimental lines in advanced testing at K-State are about to change that, however, Tesso said. These advancements are thanks in large part to funding from the Kansas Grain Sorghum Commission.

“Sorghum has high yield potential, much higher than what we're getting now. We know that,” Tesso said. “We have been working to find new compatible parental lines that will be able to produce hybrids that can come closer to realizing sorghum's yield potential. At the same time, we need to make sure any new line has an acceptable maturity range, good standability, drought tolerance, good head exertion, and other necessary agronomic traits.”

Tesso will talk about the most recent results of this research into higher-yielding sorghum lines at the field day. The full list of topics and K-State speakers:

- Sorghum genetics and breeding – Tesfaye Tesso, Sorghum Breeder, and Geoffrey Morris, Sorghum Geneticist
- Inzen sorghum, a tool for postemergence grass control in sorghum– Curtis Thompson, Weed Management Specialist
- Heat and water stress sorghum physiology – Vara Prasad and Krishna Jagadish, Crop Physiologists
- Sorghum in Kansas cropping systems – Ignacio Ciampitti, Crop Production Specialist
- Sorghum response to cover crops in no-till systems – Kraig Roozeboom, Cropping Systems Agronomist
- Update on sugarcane aphid in Kansas – Brian McCornack, Entomologist

The field day will begin with registration at 9 a.m. and wrap up at 1 p.m. Sessions include two concurrent one-hour tours in the morning, starting at 9:30, followed by a poster session during and after lunch. In addition, there will be displays from commercial companies and K-State researchers in the shed near the registration area, along with the crop garden, forage garden, and weed garden for browsing. Extension specialists will be available to answer questions.

There is no charge to attend, and a complimentary lunch will be available. Preregistration is requested by October 6 so that a lunch count can be made. Those interested in attending can preregister by calling Troy Lynn Eckart at 785-532-5776.

To preregister online at: <https://kstateagron2015.eventbrite.com>

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Now, to follow me via text, respond with FOLLOW @RVDcrops. My updates will come directly to your phone on that text conversation. If you text back, it will show up as a tweet on your page.

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Follow response prompts. Since you do not have an account set up, reply with your first and last name. It will respond with your new username (ex. @lastname).

Then reply FOLLOW @RVDcrops. You're done!

Kim Larson, Crops Agent-Concordia Office

due and 30 pounds credit for residual nitrate N present in the soil profile. This would result in a N fertilizer recommendation of 70 pounds of fertilizer N to be applied to a field with a yield potential of 50 bushels per acre.

By using a soil test to provide local values for soil organic matter and residual nitrate at the eight sites in 2015, the N recommendation was reduced to 54 pounds of N per acre, a savings of 14 pounds of N per acre.

By using a relatively inexpensive handheld crop sensor to guide N recommendations for a single topdress N application shortly after spring green-up, at Feekes 4/5 growth stage, the N recommendation was further reduced to 34 pounds per acre, a savings of 20 pounds of N per acre compared to the soil test based recommendation and 36 pounds N per acre when no soil test was used.

By planning on potentially two topdress applications, both guided by a crop sensor, the sensor based system resulted in substantial additional savings of N, since this allowed for the capture of late season mineralized N used by the crop, which rate decisions made in the fall or early in the spring were not able to account for. Spring mineralization of N from the decomposition of crop residue is not uncommon in Kansas and occurs frequently in wet springs following dry fall and winter conditions.

WEED CONTROL IN SOYBEANS

USING HAND-HELD CROP SENSORS TO ENHANCE YIELD AND NITROGEN USE EFFICIENCY OF WHEAT

The following summary reviews the KSU state-wide on-farm crop sensor research results in wheat. Lenhart Farms and the Clifton-Clyde FFA hosted one of the study locations near Clifton this year. For the complete report, or for information on on-farm research opportunities, contact Kim Larson.

A series of 10 field studies were established across Kansas during the 2014 - 2015 wheat growing season to evaluate the effectiveness of handheld active crop sensors for determining the appropriate N rate for hard red winter wheat production in Kansas. Eight of those sites were carried to completion and provided useful data. The results of these studies clearly indicate that by utilizing the current recommended N management technologies of preplant soil testing, farmers can maintain yield and lower the amount of N fertilizer used. Unfortunately, farmers have chosen not to utilize soil testing. Less than 10% of the fields planted to wheat each fall are tested to the recommended depth of 24 inches to measure residual nitrogen present in the soil. Sensor technology provides an alternative to soil testing and can potentially provide additional improvement in N recommendations.

Normal N recommendations used by many farmers in Kansas are made without the benefit of soil tests, and utilize assumed "default" values of 20 pounds N credit for mineralization of soil organic matter, no credit for previous crop resi-

Weed control in soybeans was a huge challenge for most producers this past season. Driving by some fields it is hard to discern if there are soybeans beneath those pigweeds. These examples do not indicate a bad farmer, but rather drive home the fact that all farmers must be extremely attentive to weed conditions in their fields and respond in a timely manner. Weed control no longer has glyphosate as the simple go-to solution to solve every weed problem in our fields. A more integrated approach is required to achieve our old standard level of control.

Fall harvest is a good time for producers to assess the weed problems they had in soybean fields this year, and plan a good weed control program for next year. Before deciding what herbicide program to implement, it is necessary to identify the problem weeds in each field, and what kind of herbicide resistance issues might be present. Some good options for seven of the most common broadleaf weed and grass problems include:

1. Pigweeds (including waterhemp and Palmer amaranth). Glyphosate-resistant waterhemp is now fairly common in eastern Kansas and glyphosate-resistant Palmer amaranth increased dramatically in central Kansas this past summer. For preemergence pigweed control, the Valor-based herbicides (Valor SX, Valor XLT, Fierce, Fierce XLT, Gangster, Surveil, Envive, Enlite, and Trivence) and Authority-based herbicides (Authority Maxx, Authority Elite, Authority XL, Authority First, Sonic, Authority Assist, Authority MTZ, and Spartan) can all provide very good to excellent control to supplement a postemergence program. Prefix is another excellent "foundation" herbicide for residual pigweed control in soybeans and can be applied early postemergence as well as

prior to emergence. Metribuzin, Intro, Dual, Outlook, and Prowl products can also provide some early-season pigweed control, but generally are not as effective as those previously mentioned products. Zidua and Anthem contain the active ingredient pyroxasulfone (also a component of Fierce). Pyroxasulfone has a similar mode of action to Intro, Dual, and Outlook, but may provide longer residual control of pigweeds.

Although some of these herbicides can be applied in the fall or early spring, those treatments generally will not persist long enough to give good pigweed control into the soybean growing season. If pigweed is the primary target, treatments will be most effective if applied no more than two weeks prior to planting. If glyphosate-resistant pigweeds escape preemergence control, the primary postemergence tank-mix options would be Cobra, Flexstar, Ultra Blazer, or Marvel. However, timing is critical for good control. These products should be applied before pigweeds exceed 4 inches tall for optimum control.

2. Velvetleaf. Glyphosate is not always entirely effective on velvetleaf. To assist in velvetleaf control, the Valor-based and FirstRate-based herbicides (Valor SX, Valor XLT, Fierce, Fierce XLT, Gangster, Surveil, Authority First, and Sonic) are some of the most effective preplant and preemergence herbicides you can use. Postemergence tank-mixes to enhance velvetleaf control would include FirstRate, Cadet, and Resource.

3. Cocklebur. The most effective preplant and preemergence herbicides to aid in cocklebur control are those that contain FirstRate, Classic, or Scepter. Such products would include Authority First, Sonic, Gangster, Surveil, Envive, Trivence, Valor XLT, and Fierce XLT. Extreme, which is a premix of glyphosate and Pursuit, can also be used as a preplant or postemergence treatment in Roundup Ready soybeans to provide residual cocklebur control. However, all of these herbicides are ALS-inhibiting herbicides, and ALS-resistant cocklebur may be present in some fields.

4. Marestalk. Marestalk is probably the most widespread glyphosate-resistant weed in Kansas. Marestalk control in fields going to soybeans should begin with fall or early spring herbicide treatments that include dicamba, 2,4-D, or an ALS-inhibiting herbicide such as Canopy EX or Autumn Super. Unfortunately, ALS resistant marestalk may also be present in some fields, so a tank-mix with dicamba or 2,4-D is still recommended. Dicamba has provided better marestalk control than 2,4-D in K-State research the last several years. Fall treatments should be delayed until November when most of the fall-germinating marestalk has emerged. With spring applications, be aware of the intervals required between application of these herbicides and planting soybeans.

A couple of relatively new options for marestalk control in soybeans without a preplant waiting interval (except on coarse soils with 2% organic matter or less) are the Kixor-containing products, Sharpen and OpTill. Sharpen is Kixor alone, while OpTill is a premix of Kixor and Pursuit. Both products can be used for burndown control of marestalk anytime before soybean emergence (cracking). To optimize marestalk control with Sharpen and OpTill, spray before marestalk gets too big, use an adequate spray volume to insure

good spray coverage, and apply in combination with a methylated seed oil. The Kixor rates that can be used in soybeans will not provide very much residual control of marestalk. Other residual preplant herbicides that can help with burndown and residual marestalk control include Valor and FirstRate-based herbicides, such as Valor XLT, Fierce, Fierce XLT, Envive, Trivence, Enlite, Authority First, Sonic, Gangster, or Surveil.

Marestalk is best controlled before soybean planting and before the marestalk begins to bolt. FirstRate or Synchrony would probably be the most effective tank-mix partner with glyphosate for postemergence marestalk control in Roundup Ready soybeans. However, if ALS-resistant marestalk are present, these treatments will not be very effective. Liberty is one of the better herbicides to control marestalk that has started to bolt in the spring. Liberty can be used as a burndown treatment prior to emergence of any soybeans, or as a postemergence treatment in Liberty Link soybeans.

5. Morningglory. Glyphosate sometimes has trouble controlling morningglory. To help get better control, you can use either Authority-based or Valor-based herbicides preplant or preemergence. Liberty can also provide good morningglory control in Liberty Link soybeans.

6. Kochia. Kochia is a major weed problem in western areas and has often been difficult to control with glyphosate, especially as it gets bigger. In addition, glyphosate-resistant kochia is now common across much of western Kansas. Since much of the kochia emerges well before soybean planting, one of the keys to managing kochia in soybeans is to control it early in the spring before soybean planting. Research by K-State in recent years indicates that several preemergence herbicides can help provide control of glyphosate-resistant kochia, especially the Authority-based products listed above. Early applications of dicamba can also provide effective control of kochia, but the appropriate precipitation and preplant waiting intervals need to be followed to avoid potential soybean injury and stand loss. The Kixor-containing products Sharpen and OpTill may help with kochia burndown, but the Kixor rates that can be used in soybeans will not provide very much residual control. ALS-inhibiting herbicides may or may not provide kochia control because of the occurrence of ALS-resistant kochia.

7. Crabgrass and small-seeded broadleaf weeds. Glyphosate usually gives good control of most grasses, but producers may want to apply a foundation herbicide to control grasses early, followed by a postemergence glyphosate application to clean up any escapes. Prefix, Fierce, Intro, Dual II Magnum, Outlook, and Prowl H2O can all provide good early-season grass and pigweed control ahead of Roundup Ready soybeans. Of these, Prefix and Fierce generally provide the best pigweed control, and Prowl H2O the least. Several residual herbicides, such as Warrant, Outlook, and metolachlor products can be applied as a postemergence tank-mix with glyphosate, depending on soybean growth stage, to provide extended residual control of grasses and broadleaves later in the season. However, it is important to understand that these products do not have postemergence activity, so they will not control emerged glyphosate-resistant pigweed

3 Liberty Link soybeans are an alternative technology to

Roundup Ready, especially in the presence of glyphosate-resistant weeds. Liberty can provide effective postemergence control on a broad spectrum of weeds, but good performance is very dependent on several application factors, such as weed size, spray coverage, and humidity. The most successful Liberty Link weed control programs will utilize a good preemergence herbicide treatment at planting, followed by a timely application of Liberty when the weeds are relatively small using a minimum spray volume of 15 gallons per acre to ensure good spray coverage.



**Women in
Agriculture**

Ladies
Night Out!

What: A free educational event for all women involved in agriculture

When: Date in November to be determined, beginning at 6:00 p.m.

Speaker: To be announced!

Food? Of course! Cupcakes from Wendy's Party Treats!

Bottom line: Ladies, be watching for updates. This event is one you don't want to miss!

River Valley Extension District Women in Agriculture
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QUANTITY VS QUALITY...YOU DECIDE!

Here lately, I have had quite a bit of windshield time. One day it might be traveling to meetings, the next it might be doing a producer visit, or it might even be a trip home to see my new nephew. No matter where I am in Kansas there is one thing that seems pretty consistent. We have more hay than we have had in years. The abundance of rainfall that occurred during the month of May sure hasn't hurt the quantity of hay that was baled, but I do question the quality of hay in some of our fields. I know that my dad and I are very satisfied with our abundance of hay this year. For the first time in a while, we might have enough hay to get us through the winter and that is definitely a good feeling. A conversation that my dad and I are going to encounter soon is that quantity and quality of hay are two independent characteristics. You can have quantity without quality and vice versa. So, the question is how we determine the quality of our hay.

Forage analysis can be a great tool in taking out some of the mystery concerning hay quality. Testing the grass hays this year for protein and energy content will help producers design winter supplementation programs most appropriate for the forage supply that is available. Any of the potential nitrate accumulating hays should be tested for nitrate concentration.

Forage quality has two important benefits for cows or heifers. First, higher quality forages contain more of the core nutrients needed to meet the animal's nutrient requirements. Secondly, animals can consume a larger quantity of higher quality forages. When animals consume higher quality forages, it is more rapidly fermented in the rumen leaving a void that the animal can fill with additional forage. To every positive always comes a negative. When cattle have the capacity to increase fill, they will increase their intake of forages. For example, low quality forages (below 6% Crude Protein) will be consumed at about 1.5% of body weight (on a dry matter basis) per day. On the other hand, higher quality forages (above 8% crude protein) may be consumed at about 2% of body weight. Those forages considered "excellent" such as good alfalfa, silages, or green pasture may be consumed at the rate of 2.5% of body weight per day. The combination of increased nutrient content AND increased forage intake makes high quality forage very important to both the animal and the producer's pocket book.

After testing your forage quality, it is time to compare the supplement needed to meet the nutrient needs of cows in the winter. For example, if you are feeding hay to a 1200 pound spring-calving cow in late gestation, she will need 1.9 pounds of crude protein to meet her needs with a growing fetus. If she consumes 2% of her body weight in a low quality forage (4% Crude Protein) she will receive 0.96 pounds of protein. This calculation leaves a deficiency of 0.94 pounds of protein that will be needed from supplementation. In order to meet her protein requirements, she will need a 30% protein supplement which would require 3.13 pounds of supplement a day. This supplementation cost will add up rather quickly. On the other hand, if she was consuming a higher quality forage (7% Crude Protein), then she receives 1.68 pounds of protein from the hay and must be given enough supplement to meet the 0.22 pounds that she is lacking. Lastly, she would only need 0.73 pounds of supplement per day. As you can see, hay quality can change the amount of supplement needed by 4 fold! Imagine the money you could save by being more efficient by testing your hay.

The preferred method of sampling hay is by using a forage coring probe. The best way to sample your hay is not by literally "coring" the bale. If you only enter the probe into the middle of the bale, it will not be an accurate representation of the quality of forage in that bale. Instead of only getting the "core" of the bale, approach the bale from the side. This way the "core" sample is being taken through all of the layers of the bale not just the "core". This is very important to note as you could get a false read as the forage quality in the middle of the bale does not accurately represent the forage quality throughout the bale. It is also recommended that you mix samples from approximately 10% of your total bales for an accurate reading across the entire field that was baled.

With that said, I bet producers are just itching to get outside in this beautiful Kansas weather and get a forage sample. Feel free to bring those samples into your local extension office, and they will be more than happy to send off your samples. Normal turnaround time is two weeks. If you have any additional questions or comments feel free to contact me at the Washington office (785) 325-2121, kbrockus@ksu.edu, or just stop by for a cup of coffee.

SIMILARITIES IN TODDLERS AND PRECONDITIONING CATTLE

When writing an article, I always try to make a conscious effort to relate to my readers. For this particular article, I am going to relate preconditioning cattle to our families, more specifically the little babies of our families. On August 23rd, I became an aunt for the seventh time to a little boy named Bentley. When Bentley was born, he got his nourishment from his mother and will continue this until he is able to transition into solid foods. When a child is able to no longer depend upon its mother for nourishment and can eat solid foods, the child is commonly referred to as a toddler. I look at this human transition as being similar to the transition which cattle go through following the weaning phase. This time period is frequently referred to as the preconditioning phase.

Research shows cattle that undergo stress during and after weaning in route to the feedlot will have morbidity of upwards of 30% and first treatment success is often 30-50%. The number one cause of death in cattle is respiratory disease. With this said, calves which get mild respiratory disease will gain 0.2-0.4 lbs less average daily gain and those calves which require multiple treatments will gain 0.6 lbs less for the ENTIRE feeding period. So, what impact does this have on our preconditioning programs? It is evident to see that we must vaccinate our cattle upon arrival. It is an economically



sound decision to provide cattle with vaccination protocols when necessary. It might seem as though this negative consequence only occurs during the

preconditioning phase, but unfortunately this consequence carries over into the calf's carcass merit. This loss in average daily gain during the preconditioning phase translates into roughly 15 pounds less carcass weight and 10-15% fewer choice carcasses.

Various preconditioning protocols can be used on different operations. For example, Producer Joe's preconditioning program consists of one vaccination prior to weaning and minimal feedbunk experience. On the other hand, Producer Sam that lives down the road has a very different vaccination protocol that includes vaccinations pre and post weaning, weaning from their dams for 45 to 60 days, and are transitioned onto a total mixed ration, feedbunks, and waterers. If you are a feedlot producer, which producer would you be more interested in purchasing cattle from? A hot topic in the cattle industry is how to add value to our cattle. This is an excellent way to make your group of cattle stand out compared to other producers. The marketing options are greater with Producer Sam's set of cattle and introduce a source of leverage that can be utilized when it comes time to sell that set of calves.

Not only is vaccination of cattle important to a successful preconditioning program but the amount of stress imposed on cattle during this transition is also very important. Research at Kansas State University shows that single-sourced calves shipped 4 hours to a feedlot will benefit from pre-weaning vaccination and weaning and feeding for at least 2 weeks pre shipment. Cattle that are going to be shipped longer than this time period, experience extensive comingling, and may encounter adverse weather conditions post arrival, should be vaccinated and weaned for 6-8 weeks before shipment.

Lastly, feedlots are paying a premium for cattle that are coming out of well-managed preconditioning programs. As I stress in every article I write, what is the economic impact this has for the producer. Why are feedlots paying a premium for these types of cattle? It's simple.

They flat out perform better! As a producer, you should get paid for your time, investment, and good



management practices. By preconditioning your cattle in a way that feedlots will pay a premium for your animals, is just one way to increase profits in your operation. There are numerous handling techniques that can also be implemented to reduce stress and improve gains. Look forward to this being highlighted in a future article.

Next time when you are thinking about preconditioning cattle just relate it back to the transition that occurs from a newborn to a toddler. What can we do as producers to make sure that this transition is low stress, highly marketable, and economically profitable? It can be summed up into three key points which are incorporate preconditioning vaccination protocols, 5 minimal transportation time, and practice low stress handling.

SHOULD WE PLANT TREES IN THE FALL?

The fall season can be an excellent time to plant trees. During the spring, soils are cold and may be so wet that low oxygen levels inhibit root growth. The warm and moist soils associated with fall encourage root growth. Fall root growth means the tree becomes established well before a spring-planted tree and is better able to withstand summer stresses. However, certain trees do not produce significant root growth during the fall and are better planted in the spring. These include beech, birch, redbud, magnolia, tulip poplar, willow oak, scarlet oak, black oak, willows, and dogwood.

Fall-planted trees require some special care. Remember, that roots are actively growing even though the top is dormant. Make sure the soil stays moist but not soggy which may require watering not only in the fall but also during the winter months if we experience warm spells that dry the soil. Mulch also is helpful because it minimizes moisture loss and slows the cooling of the soil so root growth continues as long as possible. Evergreens should be moved earlier in the fall than deciduous plants. They need at least six weeks before the ground freezes for the roots to become established.

The Kansas Forest Service and K-State Research and Extension have recently put out a bulletin entitled "The Ten Tree-Planting Mistakes". This is a great bulletin that covers many of the items that we see when we are called out to look at a tree that is in distress. The bulletin talks about the problem and then covers what should be done at planting to prevent this issue. This is a **MUST READ** before planting trees at any time of year! The bulletin may be picked up at any River Valley office or may be found as MF3238 on the K-State Research and Extension website.

The Top Ten include: poor tree selection, inadequate root system, poor planting site, pot bound or girdling root, planting hole too small, planted too deep, tree improperly mulched or not mulched at all, tree improperly staked, improper watering, and failure to monitor.

RIVER VALLEY DISTRICT TO FILL HORTICULTURE AGENT POSITION

The River Valley Extension District is looking to fill the position of **DISTRICT EXTENSION AGENT, Horticulture**.

The office location is in Washington but the position covers horticulture education across the district which includes Clay, Cloud, Republic, and Washington Counties. The agent will work with the additional District Offices located in Belleville, Clay Center and Concordia and will work with the 4-H program as it relates to horticulture subject matter.

If you are interested, or know of a qualified candidate that might be interested, please refer to the K-State Research and Extension website: www.ksre.ksu.edu/jobs for responsibilities, qualifications, and application procedure. Application Deadline: 10/20/15. K-State Research and Extension is an EOE of individuals with disabilities and protected veterans. Background check required.

PROTECT YOUNG TREES FROM SUNSCALD

Ornamental Landscape Trees and Fruit Trees can be a big investment of money and time and so it is important to do all the little things we can to help protect that investment.

As K-State Research and Extension agents, one of the things we often see as damage on young trees is sunscald. This is especially true on thin-barked trees such as ash, oak, maples, lindens, willows, and fruit trees of all kinds. Although sunscald typically does not kill the tree it can cause significant damage to the bark and sets the tree up for succumbing to other stresses such as disease and insects or drought, freeze, or other environmental issues.

Sunscald normally happens on the south or southwest side of the tree and typically is seen in late winter. On warm, sunny winter days the bark on this side of the tree absorbs heat and may get to relatively high temperatures. Research in Georgia on peach trees has shown that the sunny side of the trunk may be as much as 40 degrees warmer than the shaded side bark. Just as those warm winter days can give us a bout of spring fever, these warmed cells lose their cold hardiness and become active, as if spring had arrived. As the sun sets and the cold winter temperatures return at night, these active cells are damaged by freezing, causing death of the cell.

The damaged inner bark is typically discolored and as the dead cells dry, the area becomes sunken. The outer bark often becomes cracked and begins to slough off as we progress through spring and into summer. By this time, the tree has usually started the healing process and will begin to try and grow new bark over the wounded area. The tree will typically survive, but with the damage to the bark it has a reduced ability to carry water and nutrients to the canopy and will likely need to have supplemental watering and care, especially during dry and hot weather. In more severe cases we may see some branch die-back above the damaged area that requires pruning.

Rather than treat the symptoms of sunscald, it is probably best to help prevent it. To protect the trunk of the young tree, apply a light-colored tree wrap in the fall from mid-October through mid-November. These tree wraps are available at most garden supply centers, in catalogs, or on-line. Remove the wrap in early spring as the trees begin to become active and after the window of extremely cold weather has passed. In north-central Kansas that is typically mid-March. It is extremely important to remove this tree wrap in the spring. I have actually been called out to look at a tree under stress only to find that it has been girdled by the tree wrap as the tree had grown and the wrap was unable to expand with the growth. It is amazing how much trunk girth a young tree with good care can put on in one year. I cannot stress enough the importance of removing the wrap in the spring.

For more information on this topic or read up on other tree planting issues, stop by any K-State Research and Extension office and pick up the new Kansas Forest Service bulletin entitled "The Top Ten Tree Planting Mistakes."

FALL IS A GOOD TIME TO ADD ORGANIC MATTER

As fall brings an end to the gardening season it is a great time to consider adding organic materials directly to the garden soil. Materials such as residue from lawn renovation, grass clippings, compost, rotted hay, rotted silage, or peat moss can be added directly and then tilled in. Coarser materials such as tree leaves or garden residue should be shredded. A lawn mower with a bagging attachment or a leaf blower with shredder and bagging attachment can be used to shred this material and collect it in one operation or a yard and garden shredder/chipper can also be used.

A couple of reminders are always in order when it comes to adding organic matter. Peat Moss is a fantastic source of organic matter, but we must remember that it is a non-sustainable resource which means we are using it up much faster than it is built up in nature in the cold peat bogs of the north. In addition, we must be careful that our rotten hay and our grass clippings have not been treated with herbicides like Tordon®, Quinclorac (Drive®), or others that are not broken down in the composting process.

Organic materials can be spread to a depth of about 3 inches and tilled in. Be sure the soil is not too wet before tilling. During warm weather, the material will decompose quickly and the process can be repeated every two weeks. Later in the fall, it may take longer. This process can be repeated from now until late November to early December, as long as the ground remains unfrozen. Remember that organic matter helps almost any soil. It improves clay soil by improving tilth, aeration, and how quickly the soil takes up water. In sandy soils, it acts as a sponge by holding water and nutrients. Organic matter is truly a gardener's best friend!

2015 CROP INSURANCE WORKSHOPS

Each year K-State cooperates with Colorado, Nebraska, and Oklahoma to conduct Crop Insurance workshops throughout the four-state region. These one-day workshops are designed to help crop insurance agents, agricultural lenders, and other financial consultants provide better risk management information and advice to their clients or to provide farmers/ranchers with a deeper understanding of the crop insurance options that may apply to their farming or ranching operation. The workshop begins with registration from 8:00 to 9:00 a.m. and concludes at 4:00 p.m. Topics typically range from timely crop insurance issues to farm program decision making tools, to grain market outlook and analysis.

The 2015 Kansas Crop Insurance Workshop will be held on Thursday, November 12 at the Ambassador Hotel in Salina. Other regional meetings are: Tuesday, November 10 in Brush, Co.; Wednesday, November 11 in Grand Island, NE; and Friday, November 13 in Enid, OK.

For complete information and registration contact Dr. Rich Llewelyn at 785-532-1504 or rwl@ksu.edu or go to the website: www.AgManager.info.



COMMERCIAL PESTICIDE APPLICATOR TRAINING

Kansas State University Cooperative Education Service
NOVEMBER 2-3, 2015

SALINA, KS-WEBSTER CONFERENCE CENTER

To get more information or to register go to <http://conferences.k-state.edu/commercialpesticide/>. You may also register by calling 785-532-5569. Registration closes 10/20/15.

67TH ANNUAL KANSAS INCOME TAX INSTITUTE

The Kansas State University Department of Agricultural Economics invites you to attend the 67th annual Kansas Income Tax Institute. The program is intended for tax professionals and is designed to provide up-to-date training on current tax law, regulations, and updates. This year's program will review recent cases and rulings and key legislation, provide an in-depth review and analysis of a number of tax areas, and cover newly enacted regulations and procedures critical to tax practitioners. The program stresses practical information to facilitate the filing of individual, small-business, and farm returns. The institute is approved for continuing education credits with registration of \$275 for two days or \$250 for one day.

The dates and locations for the Kansas Income Tax Institutes are:

-October 28-29	Wichita
-November 2-3	Garden City
-November 3-4	Colby
-November 4-5	Hays
-Nov. 30-Dec. 1	Kansas City
-December 1-2	Topeka
-December 2-3	Salina
-December 9-10	Pittsburg

The Institute runs from 8:00 am to 4:30 pm each day (sign-in at 7:30 am) with lunch and breaks on-site. For more information and registration details go to: www.AgManager.info.

KANSAS TURFGRASS CONFERENCE

The 65th Annual Kansas Turfgrass Conference will be held at the Kansas Expocentre in Topeka on December 1, 2 & 3, 2015. This year the Kansas Nursery & Landscape Association will be joining the conference so there are some great sessions on nursery and landscape management along with the normal turfgrass educational program.

This meeting is for professional lawn care personnel, athletic field managers, golf course superintendents, grounds maintenance managers, park personnel, landscape companies, nurseries and garden centers.

The program and registration information is online at: <http://www.kansasturfgrassfoundation.com/uploads/8/9/7/3/8973595/2015turfconfweb.pdf>

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**RIVER VALLEY DISTRICT
“2015 UP-COMING MEETINGS & EVENTS”**

DATE	TIME	PROGRAM	LOCATION
Oct. 9	9am-1pm	Agronomy Field Day	Manhattan
Oct. 12	10:30am	Extension Fall Fling	Clay Co. Fairgrounds, 4-H Conf. Center
Oct. 15-Dec.7		Medicare Open Enrollment	Schedule appointments at your local office
Oct. 28-29		Income Tax Institute	Wichita
Nov. 4-5		Income Tax Institute	Hays
Nov. 12		Crop Insurance Workshop	Salina
Nov. 19		KSU Swine Day	Manhattan
Dec. 1-3		65th Annual Kansas Turfgrass Conference	Topeka
Dec. 1-2		Income Tax Institute	Topeka
Dec. 2-3		Income Tax Institute	Salina
Dec. 7		Cover Crop Meeting	Belleville

Kansas State University is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, contact John Forshee, Director, River Valley Extension District # 4, 322 Grant Avenue, Clay Center, KS 67432. Phone 785-632-5335.