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Leavenworth County

K-State Research and Extension News

Knowledge for Life

3rd Quarter 2016

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K-STATE
Research and Extension

K-State Research and Extension is an equal opportunity provider and employer.

www.ksre.ksu.edu

YOUR Cooperative Extension Service

As the Extension agents go around the county, we like to ask people “what do you know about the local Extension office?” Depending on who is being asked, the answers vary from *‘that’s where I take my dying plant to find out what’s killing it’* to *‘that’s where I call if I have canning questions’* to *‘oh...you mean the 4-H office?’* We often say the answer depends on which ‘silo’ has been most visible to people. We have also learned that individual silos might not be the most effective method of information storage.

We like to help people understand that the Cooperative Extension Service is a partnership between the federal, state and local entities. Federal funds from USDA travel to Kansas State University, our state land grant university, which in turn works cooperatively with county government officials to provide the local Extension program. The following vision and mission is defined in the K-State 2025 strategic plan.

Our Vision:

K-State Research & Extension - Cooperative Extension (KSRE-CE) will be the valued and trusted provider of *Knowledge for Life* and educational solutions needed by the people of Kansas, the nation, and the world.

Our Mission:

We are dedicated to a safe, sustainable, competitive food and fiber system and to strong, healthy communities, family and youth through integrated research, analysis and education.

Our Purpose:

With a presence in every county, KSRE-CE develops and delivers engaged educational programs in partnership with the people of Kansas that provide solutions for the Grand Challenges of *water, health, global food systems, community vitality* and *developing tomorrow’s leaders*.



Grand Challenges

Does this sound like the Cooperative Extension Service you are familiar with? Has YOUR Extension service helped in solving some grand challenges of your own? We would love to hear how the Extension Service has impacted your life! Please call, write or email any staff member to share your story.

If you would like to receive this newsletter via email, call our office at 913-364-5700 or send an email to: smontg@ksu.edu



When: August 29-31, 2016
Price: \$225 per person*
Pick up locations: Paola, Olathe,
 & Bonner Springs

*Price includes bus cost, hotel (double occupancy), admission fees, and most meals. Single occupancy rate: \$365

Find a detailed agenda and more information on our website in the Crops and Livestock section.
www.leavenworth.ksu.edu

Registration & non-refundable deposit of \$125/person must be received by July 22nd to reserve your spot. Remaining balance is due by August 15th. Please send registration form & payment to the Marais des Cygnes Extension District - Paola Office at 104 S. Brayman St., Paola, KS 66071.

ns due

Registration packets can be picked up from your local Extension Office or online at www.maraisdescygn.es.ksu.edu

SPONSORED BY:



For more information call:
 Douglas County: 785-843-7058
 Johnson County: 913-715-7000
 Leavenworth County: 913-364-5700
 Marais des Cygnes District: 913-294-4306

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 the Marais des Cygnes Extension District at 913-294-4306 or 913-795-2829. Kansas State University Agricultural Experiment Station and Cooperative Extension Service K-State Research and Extension is an equal opportunity provider and employer.

Grub Control in Lawns

If you plan on using a grub preventative on your lawn, the first half of July is a good target date for most products. Preventatives are normally used on areas that have had a history of grub problems.

Traditional grub insecticides such as Dylox or carbar-yl (Sevin) are normally applied in late July after grubs are present or as a rescue treatment once damage is seen. Products that contain Merit (imidacloprid) are considered grub preventers. Actually, these products do not prevent grubs, but rather kill grubs when they are quite small, and long before they cause damage. Merit is safer to use around pets and humans than traditional grub killers. Merit can be found in Bayer's Season-Long Grub Control, Grub No-More and Grub Free Zone.

Another grub preventer with the trade name GrubEx contains chlorantraniliprole. Though this product is very effective, it is less water soluble than imidacloprid. It should be applied earlier, preferably April or May, but applications through June should still be effective. Remember, all grub products should be watered in soon after application.

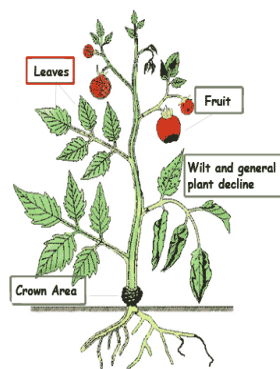
Tomato Leaf-Spot

Diseases

This time of year, two common leaf-spot diseases appear on tomato plants. Septoria leaf spot and early blight are both characterized by brown spots on the leaves.

Septoria leaf spot usually appears earlier in the season than early blight and produces small dark spots. Spots made by early blight are much larger and often have a distorted "target" pattern of concentric circles. Heavily infected leaves eventually turn yellow and drop. Older leaves are more susceptible than younger ones, so these diseases often start at the bottom of the plant and work up.

Mulching, caging, or staking keeps plants off the ground, making them less vulnerable. Better air circulation allows foliage to dry quicker than in plants



allowed to sprawl. Mulching also helps prevent water from splashing and carrying disease spores to the plant.

In situations where these diseases have been a problem in the past, rotation is a good strategy. It is too late for that now, but keep it in mind for next year. Actually, rotation is a good idea even if you have not had problems in the past. But many gardens are too small to make it practical. If you have room, rotate the location of the tomatoes each year to an area that has not had tomatoes or related crops (peppers, potatoes, eggplant) for several years. If rotation is not feasible, fungicides are often helpful. Be sure to cover both upper and lower leaf surfaces, and reapply fungicide if rainfall removes it. Plants usually become susceptible when the tomato fruit is about the size of a walnut. Chlorothalonil is a good choice for fruiting plants because it has a 0-day waiting period, meaning that fruit can be harvested once the spray is dry. Chlorothalonil can be found in numerous products including Fertilome Broad-Spectrum Landscape and Garden Fungicide, Ortho Garden Disease Control, GardenTech Daconil and others. Be sure to start protecting plants when the disease is first seen. It is virtually impossible to control this disease on heavily infected plants.

If chlorothalonil doesn't seem to be effective, try mancozeb (Bonide Mancozeb Flowable). Note that there is a five-day waiting period between application and when the fruit can be harvested. You may wish to pick some tomatoes green just before you spray if you use Mancozeb as the tomato fruit will ripen inside.

PESTS

Squash Bugs

Squash bugs are the grey, shield-shaped bugs that feed on squash and pumpkin plants. If you have had problems with these insects in the past, you know that they are almost impossible to control when mature. This is because the squash bugs have a hard body that an insecticide has difficulty penetrating. Thus, spraying when the insects are small is important. We are now seeing the nymphs of the first generation. These nymphs will eventually become



continued from page 3...



These nymphs will eventually become adults, which will lay eggs that will become the second generation.

The second generation is often huge and devastating. Because squash bugs feed by sucking juice from the

plant, only insecticides that directly contact the insect will work. General use insecticides such as permethrin (Bug-B-Gon Multi-Purpose Garden Dust, Green Thumb Multipurpose Garden and Pet Dust, Bug-No-More Yard and Garden Insect Spray, Eight Vegetable, Fruit and Flower Concentrate, Garden, Pet and Livestock Insect Control, Lawn & Garden Insect Killer), malathion, and methoxychlor provide control if a direct application is made to young, soft-bodied squash bugs. This means that you **MUST** spray or dust the underside of the leaves because this is where the insects live.

Leaf Scorch on Trees

Leaf scorch is starting to show up primarily on maples around the state. This is not a disease but rather a physiological problem associated with damaged roots, storm damage, limited soil area, or hot, dry winds. This year, the wet spring may have compromised root systems so that they are now struggling to provide the moisture needed by the leaves. Moisture is lost so quickly from the leaves that roots can't absorb and transfer water quickly enough to replace what is lost. Though scorch is usually associated with droughty periods, it can appear even when the soil is moist. If severe, the leaf may drop. Leaves may be affected over the entire tree or may be affected only on one side. White pines are also prone to this condition due to the delicacy of the needles.

Though scorch can be due solely to the weather, the condition of the roots of plants can make them much more susceptible to this condition. Shallow soils such as those over hardpan or rock lead to a limited root system that may not be able to absorb all the water needed. Trees may be more sensitive to scorch this year because of the heavy rains many areas received this spring. In many cases so much rain was received that oxygen was driven from the soil resulting in root damage. That root damage is now making it more

difficult for trees to provide all the water needed for the leaves. Also, root damage due to disease, insects, poor drainage or construction can cause poor water uptake.

To help alleviate damage due to dry soils or limited root systems, water once per week for recently transplanted trees of every two weeks for large trees if there is no rainfall. Mulching small trees or shrubs will help conserve moisture.

Inexpensive Method of Watering Trees

Soaker hoses are notorious for non-uniform watering. In other words, you often receive too much water from one part of the hose and not enough from another. Hooking both the beginning and the end of the soaker hose to a Y-adapter helps equalize the pressure and therefore provide a more uniform watering. The specific parts you need are shown in the photo above and include the soaker hose, Y-adapter and female to female connector.

It is also helpful if the Y-adapter has shut off valves so the volume of flow can be controlled. Too high a flow rate can allow water to run off rather than soak in. On larger trees, the soaker hose can circle the trunk at a distance within the dripline of the tree but at least $\frac{1}{2}$ the distance to the dripline. The dripline of the tree is outermost reach of the branches. On smaller trees, you may circle the tree several times so that only soil which has tree roots will be watered.

Summer Water Gardens & Trees

Our area of Kansas went through an extremely wet spring. Gardeners may assume that little watering may be needed this summer as the soils were completely recharged. However, many will likely need to do more watering than they expect.

Rain saturated soils can damage root systems. Excess water drives oxygen out of the soil as pore spaces are filled with water. Every living cell in a plant must have oxygen to live. Therefore, many of our plants may need to be babied through the summer, especially since it has turned so hot so quickly.

Newly planted trees are especially vulnerable as they have not established the extensive root system needed to absorb enough water during hot summers.

NEW Nutrition Facts Label

The Food and Drug Administration recently announced the final approved changes for the Nutrition Facts label. The new label is designed to make it easier for consumers to make more informed choices when selecting foods. The changes are based on nutrition science evidence, including the link between diet and chronic diseases.

Upon first glance, one of the first changes to notice is a larger font size of the serving size and calorie content of the food product. The serving reference values also have been changed to better reflect what people are actually consuming, rather than what they 'should' be consuming. For example, the reference amount used to set a serving of soda is changing from 8 ounces to 12 ounces. However, a 20 ounce soda, which according to the above reference, is between one and two servings, will be required to be labeled as one serving because people typically consume it in one sitting.

Another big change that is helpful for consumers is the 'Added Sugars' line under the 'Total Sugars' portion of Total Carbohydrate information. This differentiates between sugars that are naturally occurring, such as lactose in milk or fructose in fruits, and sugars added during processing, such as syrups that fruits are canned in. This is a similar action as the addition of 'trans fats' to the total fat content, also a sign of processed foods. While continuing to require 'Total Fat,' 'Saturated Fat,' and 'Trans Fat' on the label, 'Calories from Fat' is being removed because research shows the type of fat is more important than the amount.

The list of nutrients that are required to be declared is being updated. Vitamin D and potassium will be required on the label. Calcium and iron will continue to be required. Vitamins A and C will no longer be required but can be included on a voluntary basis.

Manufacturers have two years to comply with the new label regulations, however, manufacturers with less than \$10 million in annual sales will have an additional year to comply.

More information on the new label can be found at: <http://1.usa.gov/1obiyXp>

SIDE-BY-SIDE COMPARISON

Original Label	New Label																								
<div style="border: 1px solid black; padding: 5px;"> <p>Nutrition Facts Serving Size 2/3 cup (55g) Servings Per Container About 8</p> <hr/> <p>Amount Per Serving</p> <p>Calories 230 Calories from Fat 72</p> <hr/> <p style="text-align: right;">% Daily Value*</p> <p>Total Fat 8g 12%</p> <p> Saturated Fat 1g 5%</p> <p> Trans Fat 0g</p> <p>Cholesterol 0mg 0%</p> <p>Sodium 160mg 7%</p> <p>Total Carbohydrate 37g 12%</p> <p> Dietary Fiber 4g 16%</p> <p> Sugars 1g</p> <p>Protein 3g</p> <hr/> <p>Vitamin A 10%</p> <p>Vitamin C 8%</p> <p>Calcium 20%</p> <p>Iron 45%</p> <p><small>* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.</small></p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Total Fat</td> <td style="border: none;">Less than</td> <td style="border: none;">65g</td> <td style="border: none;">80g</td> </tr> <tr> <td style="border: none;">Sat Fat</td> <td style="border: none;">Less than</td> <td style="border: none;">20g</td> <td style="border: none;">25g</td> </tr> <tr> <td style="border: none;">Cholesterol</td> <td style="border: none;">Less than</td> <td style="border: none;">300mg</td> <td style="border: none;">300mg</td> </tr> <tr> <td style="border: none;">Sodium</td> <td style="border: none;">Less than</td> <td style="border: none;">2,400mg</td> <td style="border: none;">2,400mg</td> </tr> <tr> <td style="border: none;">Total Carbohydrate</td> <td style="border: none;">Less than</td> <td style="border: none;">300g</td> <td style="border: none;">375g</td> </tr> <tr> <td style="border: none;">Dietary Fiber</td> <td style="border: none;">Less than</td> <td style="border: none;">5g</td> <td style="border: none;">30g</td> </tr> </table> </div>	Total Fat	Less than	65g	80g	Sat Fat	Less than	20g	25g	Cholesterol	Less than	300mg	300mg	Sodium	Less than	2,400mg	2,400mg	Total Carbohydrate	Less than	300g	375g	Dietary Fiber	Less than	5g	30g	<div style="border: 1px solid black; padding: 5px;"> <p>Nutrition Facts 8 servings per container Serving size 2/3 cup (55g)</p> <hr/> <p>Amount per serving</p> <p>Calories 230</p> <hr/> <p style="text-align: right;">% Daily Value*</p> <p>Total Fat 8g 10%</p> <p> Saturated Fat 1g 5%</p> <p> Trans Fat 0g</p> <p>Cholesterol 0mg 0%</p> <p>Sodium 160mg 7%</p> <p>Total Carbohydrate 37g 13%</p> <p> Dietary Fiber 4g 14%</p> <p> Total Sugars 12g</p> <p> Includes 10g Added Sugars 20%</p> <p>Protein 3g</p> <hr/> <p>Vitamin D 2mcg 10%</p> <p>Calcium 260mg 20%</p> <p>Iron 8mg 45%</p> <p>Potassium 235mg 6%</p> <p><small>* 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.</small></p> </div>
Total Fat	Less than	65g	80g																						
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<p>Note: The images above are meant for illustrative purposes to show how the new Nutrition Facts label might look compared to the old label. Both labels represent fictional products. When the original hypothetical label was developed in 2014 (the image on the left-hand side), added sugars was not yet proposed so the "original" label shows 1g of sugar as an example. The image created for the "new" label (shown on the right-hand side) lists 12g total sugar and 10g added sugar to give an example of how added sugars would be broken out with a % Daily Value.</p>																									

Knowledge @ Noon

Held from 12-1 pm at the Leavenworth Public Library

July 8, 2016

One Dish Delights

Whether it's in a casserole, crockpot or skillet, single pot cooking saves time and energy. Join us as we examine creative ways to serve up tasty meals without creating a lot of dishes to clean up.

August 5, 2016

Quick n Tasty Snacks

Who doesn't love a good snack? Do you find yourself reaching for the same old thing though? Get some new and different ideas that are great for after school, your lunchbox, or even your next card game or watch party

September 2, 2016 ***Tastes of the World: German***

Join us on the third stop in our 2016 Knowledge @ Noon international food tour! Sauerkraut, German potato salad and other favorites will be highlighted at this session.

Summer Preparedness

Tornados

Since the summer storms have started rolling through, it is a good time to re-assess how prepared we are for the various emergencies that we might encounter. As I saw the pictures and videos from the tornados in late May, I was shocked and saddened to learn that a colleague lost her entire home and farm buildings in the tornado that hit Chapman. I found myself thinking ‘how prepared am I?’

Preparedness experts from the Federal Emergency Management Agency offer these hints for being storm ready.

Practice

—moving quickly to the protective location in the places where you spend a lot of time. You will have greater success in getting to a shelter or other protective location quickly if you have identified this area beforehand and if you practice getting there.

—how you will stay in communication with other family members. It is sometimes easier to reach people outside your local area during an emergency, so choose an out-of-town contact for all family members to call or use social media.

—first aid skills and emergency response actions through training classes. Learn and practice response skills now so you will know what to do.

Store

—necessary items in a “Go Bag” or other container to bring with you. For a full list of supplies for your emergency supply kit, visit www.ready.gov/build-a-kit

—the supplies you may need after the tornado passes. Identify the things you would need most when you emerge from your protective location to find severe damage, no power, and no water.

—the important documents you will need to start your recovery. Review your homeowners/renters insurance policy and update a list of your home’s contents. Go room by room through your house to take pictures or videotape of contents.

Discuss

—what you have done to prepare with your family, friends, neighbors, and colleagues. Talking about preparedness with others will help you think through your plans and make everyone feel safer and better prepared for disaster.

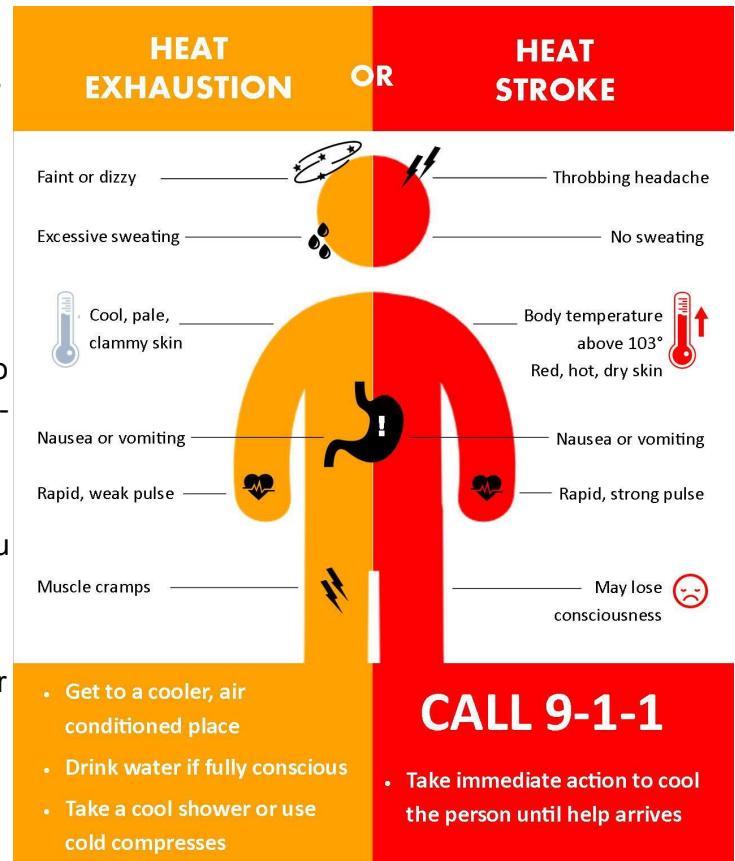
—with community leaders how your community can reduce risk. Get involved with the Emergency Management office as a volunteer.

More preparedness tips can be found at the Prepare Kansas at:

<https://blogs.k-state.edu/preparekansas/>

Heat Emergencies

Weather experts tell us that the extreme temperatures we have been experiencing will likely be with us for the rest of the summer with few breaks of relief. Proper hydration—with good old water—is one of the best defenses against heat related illness. The diagram below explains the symptoms and differences between the most common heat related conditions.



Busy Time for 4-H Youth

June Brings Camps

For 4-H members summer is just a vacation from schoolwork. For Leavenworth county youth, the first week of June teens attended Discovery Days on K-State campus in Manhattan. They had the opportunity to take classes to improve their leadership skills, explore potential careers that interest them and meet hundreds of other youth from across the state. They stayed in the college dorms and ate in the dining hall to get a taste of what college life will be like.

Immediately following this adventure members and their friends went to Rock Springs 4-H Center for 4-H camp. Teens served as counselors and campers were grades 1st-7th. Along with traditional camp activities, new this year were experiences in wildlife and environmental studies, robotics, rockets and flying UAVs.

The last week of June is Campference, a camp/conference for tweens-ages 12-14. The event gives youth an opportunity to have both modified camping experiences along with more leadership activities to prepare them for older teen activities.

July Brings Fair

From June through July youth participating in 4-H Programs all over Kansas will be putting the final touches on their 4-H projects they plan on entering in their local fair.

The fair is the opportunity for members to showcase what they have learned over the last year. It is a very important time of the 4-H year for most members. Family's take vacation time just to be at the fair where they can watch over their animals, catch up with friends from other clubs and share a rich history of traditions.

The 2016 Leavenworth County Fair will be held July 26-30 at Tonganoxie Fairgrounds. For information about 4-H activities see our website at:

<http://www.leavenworth.k-state.edu/4-h/>

If you are interested in other activities at the fair or Open class information go to the Leavenworth County Fair webpage:

<http://www.leavenworthcountyfair.com/Fair/>

August is Reflection

After all the excitement of the fair has settled, members begin the task of completing their record books. While entering information into their permanent records can/should be done throughout the year, most members rely on their calendars to complete their information. This gives them a chance to reflect about all the accomplishments they have made during the past year.

Specific project records they show what they have learned, leadership they have provided and community service related to that project. Record books are particularly valuable when it comes time for filling out scholarship forms or college/job applications. When the books are done it's time to start the new year.

In September 4-H Community Clubs elect their Senior Officers and begin making plans for the new 4-H year which starts on October 1. During this time 4-H members can think about what new activities and projects they would like to try. With the new school year beginning it's also a great time to invite friends to join 4-H.

Interested new members can find descriptions and sample activities for the projects on the National 4-H Curriculum website:

<http://www.4-h.org/resource-library/curriculum/>

4-H enrollment for Kansas is completed through 4-H Online at <https://ks.4honline.com>

Families go to the website and set up a family account. All youth in the family then enroll individually and select the projects they wish to participate in for the coming year. They have until Feb. 1 to add or make changes to these projects.

Members select project areas they are interested in learning more about, possibly leading to a career choice. 4-H places a strong emphasis on STEM areas. Many of the projects have a STEM aspect. Since members "Learn by Doing" 4-H is a great way to gain knowledge and skills without sitting in class.

If you are interested in joining 4-H or becoming a volunteer leader please visit our website in box to the left or contact Brenda Taxeras, 4-H Agent at btaxeras@ksu.edu for more information.

Check out our website at
www.leavenworth.ksu.edu



Leavenworth County Extension Office Leavenworth Master Gardeners Kansas 4-H

July 2016

- 04 **Extension Office Closed** in observance of Independence Day
- 05 LV CO Extension Executive Board Meeting 6:00pm
- 08 Knowledge @ Noon, Leavenworth Public Library 12-1:00pm
- 21 LV CO Master Gardener Talk. Leavenworth Public Library 7:00pm
- 25-29 **Extension Office Closed** and relocated at the LV CO Fairgrounds

August 2016

- 05 Knowledge @ Noon, Leavenworth Public Library 12-1:00pm
- 08 LV CO Extension Executive Board Meeting 6:00pm
- 10 State Fair Volunteer Entries Due Online
- 18 LV CO Master Gardener Talk. Leavenworth Public Library 7:00pm
- 29-31 Farm Progress Tour to Iowa

September 2016

- 02 Knowledge @ Noon, Leavenworth Public Library 12-1:00pm
- 05 **Extension Office Closed** in observance of Labor Day
- 06 LV CO Extension Executive Board Meeting 6:00pm
- 09-18 Kansas State Fair, Hutchison KS
- 15 LV CO Master Gardener Talk. Leavenworth Public Library 7:00pm

2016 LV CO Fair is July 26-30, come see us at the LV CO Fairgrounds!

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