Food safety is a major topic in the news today. Food-borne illness outbreaks in fruits and vegetables have caused many to start growing produce in their backyards. This is a wonderful idea, but people need to understand that just because it is grown at home does not make it safe. There are three stages in the production of fruits and vegetables; pre-plant, growing, and harvesting. All three stages are susceptible to pathogen introduction.

Before a garden is planted some preparation must take place. Select a site that receives 6 or more hours of sunlight every day. Grow plants that are suitable for this area to reduce unnecessary stress on the plants. Gardens do better if the soil is amended with compost, soil conditioner, topsoil, mulch, or other media before planting. Make sure that any manure used is fully composted, to reduce the chance of pathogens being introduced to the soil.

Remember, gardens are grown outside where animals run wild. As humans continue to encroach on forested lands, deer, rabbits, and other wildlife will continue to adapt to a more urban atmosphere. They are looking for food in our asphalt-driven societies, which drive them to backyard gardens. Home gardeners need to look for tracks, damage, and droppings made by local wildlife. Deer can carry E. coli and easily transmit it to produce by depositing manure near fruits and vegetables. Try to keep animals out of the garden as much
as possible, this also includes family pets.

Chemical applications need to be made in advance of production. Not many chemicals are listed for spraying directly on strawberries, cucumbers, tomatoes, and other fruits as they are maturing. Monitoring plants during the growing season will provide a better guideline for how problematic a pest infestation maybe. Only spray when needed, otherwise it is just a waste of time, money, and even produce.

Harvesting is an area where many home gardeners may not recognize potential problems. “Wash everything” should be the motto for the home gardener. Washing hands before going to harvest is always a good plan. Sanitation is a major key when preventing food-borne illnesses. Make sure that all cutting tools are sharp and have been cleaned before venturing outside.

When in the garden don’t place containers holding the produce on the ground. Baskets, bags, or even buckets used to carry produce from the garden to the house need to be placed on something other than the ground. Use a wagon or another container flipped upside down to place harvested produce on. Food borne illnesses can be transmitted from the soil. Also gardeners tend to take the harvested produce and place it on a table when inside the home. If the container was on the ground, then the counter may now infected with possible soil borne pathogens. Harvesting can be a dirty job, so wash hands again when returning inside from the garden.

Wash all produce with warm water before eating or preparing to cook or store. Don’t cut produce until you are ready to prepare it for storage, cooking, or eating. Make sure to handle produce and uncooked meat products separately.

By changing some small details on how food is treated in the garden before planting, during the growing season, and after harvesting, the chances of potential food-borne illness outbreaks can be reduced. Think sanitation, observation, and responsibility when growing a home garden. Food safety affects everyone growing produce; from large corporations to small home gardens they are all alike.

FEATURE PLANT

Southern Lupine

Thermopsis caroliniana

Here’s a plant surrounded by a little bit of controversy. It can be found in some texts as Thermopsis caroliniana and in other texts as Thermopsis villosa. Evidently there are two scientific names for this plant. The one authorities seem to be leaning toward is T. villosa. The common name is up for debate as well with Aaron’s Rod, Southern Lupine, Carolina Lupine, and Carolina False Lupine all being common for this plant.

The southern lupine has a beautiful spike of yellow flowers in spring. Usually it would make a big show in April and May in our area,
but this year, as with everything else, it bloomed early. It is native to this area and people who have lived in the area for several years tell me it used to be a sight to see when driving down the roadside this time of the year.

The plant can reach heights of 30 to 48 inches. It grows best in well-drained soils and partial shade in USDA hardiness zones 3 – 9. Unlike the regular blue/purple lupine, this plant will tolerate the heat of our summers.

References:

USDA Plants Profile: Thermopsis villosa
http://plants.usda.gov/java/profile?symbol=THVI

NCSU Plant Facts: Thermopsis caroliniana
http://www.ces.ncsu.edu/depts/hort/consumer/factsheets/perennials/Thermca.htm

***UPCOMING EVENTS***

Saturday, May 12 - 9:00am - 1:00pm
Master Gardeners will be having a clinic at Hudson’s Hardware in Clayton on Amelia Church Road. They will be there to answer gardening questions and help identify problems from the landscape, while providing solutions.

Saturday, May 19 - 9:00am - 1:00pm
Master Gardeners will be having a clinic at Lowe’s Home Improvement on Cleveland Crossing Drive. They will be there to answer gardening questions and help identify problems from the landscape, while providing solutions.

For any of the above events presented by Cooperative Extension: For accommodations for persons with disabilities, contact Bryant Spivey at 919-5380 no later than five business days before the event.

Events at the Arboretum at JCC These events have a $15 fee, and people interested in attending these events should pre-register on their website or by calling 919 209-2052.

Wednesday, May 16 - 8:00am - 4:00pm tour to SEEDS and Witherspoon Rose Culture - $15.00 and lunch on your own. Project SEEDS encourages respect for life, for earth & for each other, helping individuals, neighborhoods & communities grow together through gardening, gathering & education.

Saturday, May 26 - 8:00am - 3:00pm a Stress Relief Retreat - $60.00 lunch included. This all-day immersion into stress relief, healthy eating, exercise, and relaxation is just the thing to reenergize, renew, and reward yourself or a loved one! Participants will leave with several products to continue their experiences at home. Rain Date – June 2.

**YARD VILLAIN**

**Sugarcane Beetle**

_Euetheola humilis_

It may seem odd that a beetle with the common name of sugarcane beetle would be featured as a yard villain, but there is a reason for this choice. When this beetle was first discovered it was listed as a pest in sugarcane fields. It then became a pest in corn, sweet potatoes, and rice. Over the last ten to twelve years it has been noted as a pest in turfgrass. Not a lot is known
about this particular beetle. Research is ongoing to find out more about the sugarcane beetle.

Current speculation states that the adult beetle feeds on the roots and crowns of grass plants, mostly Bermudagrass, but also in Zoysiagrass. The larva feeds on decaying organic matter in the soil. The adult is a black beetle about ½ inch long with small punctures along the abdomen that make vertical lines. The front legs of are made for digging through the soil.

The current recommendation to control the sugarcane beetle is to target the adult, which is active from April through June and again in August through October. Lawn insect control products that contain active ingredients such as bifenthrin, cyfluthrin, lambda-cyhalothrin, and deltamethrin are effective against the sugarcane beetle adult. These work best when applied in the evening when the adults are active. Read the label directions on how to apply these products for safe and effective use.

Reference:
Sugarcane Beetle, Rick Brandenburg, http://wwwlturffiles.ncsu.edu/Files/TFoo4921.aspx

WHAT'S IN SEASON

Blackberry Time!

No, not the PDA but the fruit! You know, the kind that you pick from a cane that has thorns or sometimes not. Blackberries are brambles that grow on biennial canes emanating from perennial roots. That means the canes grow well the first year, bear fruit the second year, and then die. Blackberries aren’t as hardy as raspberries, and the thorn-less variety of blackberry is even less hardy. Blackberries come in two types – upright that you can plant as a hedge or trailing that you need to support to keep the fruit off the ground. Blackberries grown in your home garden are a wonderful way to enjoy them because they are not usually grown for selling in markets.

Plan to plant your blackberry plants after the first frost in the fall or in early spring. The plants prefer full sun (8 to 10 hours daily). They are susceptible to verticillium wilt, a fungus disease that infects the soil. Do not plant where potatoes, tomatoes, or peppers have been grown in the past five years.

Pick only certified disease free plants from reliable nurseries to go in your garden. After selecting your plants, dig a planting hole at least the diameter of the root spread. Set the bare root or container grown plant at the same depth it grew in the nursery. Carefully cover and firm the soil. Water the plant to firm the soil and force out any air pockets. Cut newly planted blackberry plants to about one foot tall. Dispose or burn any prunings to prevent diseases. Mulch well to help with moisture retention and weed control.
Blackberries are very drought resistant but for the best berry size, plan to water as fruit is ripening. Fertilize for the first two years with 2 pounds of 10-10-10 fertilizer per 100 feet of row or ¼ pound per plant in spring and again after harvest. After the first two years, use 4 pounds or ½ pound respectively, each time.

Caring for trailing blackberries includes removing all weak canes and thinning remaining canes in early spring. Save only the largest canes. These canes need to be tied to trellises as they grow. As soon as fruiting is complete, remove all canes that bore fruit and dispose of all trimmings to prevent diseases.

Upright blackberries are similar. All weak canes need to be removed in early spring. Leave four or five of the most vigorous canes (1/2 inch or more in diameter) per plant. Cut back and thin lateral canes, leaving them about fifteen (15) inches long with 15 buds each. In summer, pinch back all new vertical canes to attain the desired height. Unsupported erect plants can be pinched back to 36 inches. Remove all canes that bore fruit after harvest as with the trailing blackberries and dispose of all trimmings.

Suckering in blackberries is profuse so till or hoe the perimeter of the plantings to eliminate all suckers that “overstepped” their boundaries.

Most healthy plants will produce for 10 or more years if managed well. If they begin to develop misshapen leaves, get rid of them immediately as this is a sign of a virus disease. Replace if berry size starts to diminish.

If you have any questions, please contact your local Extension office. They can provide you with identification of problems and help formulate a treatment plan.

Once you get your blackberries producing, here is a simple dessert for you to try! It suggests whipped cream but homemade or store bought vanilla ice cream would work too. Enjoy!

**EASY BLACKBERRY COBBLER**

**Ingredients**

- 4 cups fresh blackberries
- 1 tablespoon of lemon juice
- 1 large egg
- 1 cup sugar
- 1 cup all-purpose flour
- 6 tablespoons butter,melted

**Garnish:** fresh mint sprig(optional)

**Preparation**

Preheat oven to 375 degrees. Place blackberries in a lightly greased 8-inch square baking dish; sprinkle with lemon juice. Stir together egg, sugar, and flour in a medium bowl until mixture resembles coarse meal. Sprinkle over fruit. Drizzle melted butter over topping. Bake at 375 degrees for 35 minutes or until lightly browned and bubbly. Let stand 10 minutes. Serve warm with whipped cream or mint, if desired.

Annette Byrd, Master Gardener Volunteer, Johnston County, NC
MAY GARDEN TASKS

LAWN CARE

• Don't fertilize cool-season turfgrass (fescue, bluegrass). It has been growing actively all winter, and it will begin to go dormant as summer heats up. Let it slow down naturally, and it'll be better able to withstand the heat and drought of summer.
• Call for a Lawn Maintenance Calendar for your type of turf. It tells you how to care for your lawn month by month - such things as fertilization, mowing and watering.
• Most of the weeds you see now are winter annuals. The time to control these was last August. In a couple of weeks, the weather will be too hot for these winter annuals, and they will start dying. For this reason, it is a waste of time and money to spray them with herbicide. The best thing to do is mow them before they produce and spread seed around and put it on your calendar to spray for them in August.
• Warm-season grasses such as Bermuda, Zoysia or Centipede can be planted now.
• Mow cool-season grasses, such as fescues, at a height of 3 - 3 1/2 inches to help them survive hot, dry periods.

TREES, SHRUBS & ORNAMENTALS

• Pinch your plants. Use your index finger and thumbnail to break out the lead growth at tips of branches. Pinched plants have shorter, sturdier stems, more lateral branching and more blooms. Pinch back mums, zinnia, salvia, cockscomb (celosia), petunias, marigolds, snapdragons, and garden phlox.
• It's time to plant summer beauties such as gladiolus, dahlias, caladiums and cannas and all those colorful bedding plants.
• Dead or diseased limbs on woody ornamentals should be apparent by now. Prune them out.
• Stake floppy plants, such as peonies, dahlias, and Boltonia (Michaelmas daisy), while they're small, so they'll have support when they need it. After plants have grown large, they can be injured by staking.
• Cut roses properly. Removing too much wood and foliage when cutting flowers can seriously weaken your rosebushes, especially during the first year. Leave 2-3 well developed leaves (groups of five leaflets, not three) between the cut and the main stem.
• Grow great bearded iris by giving them excellent drainage, fertile soil, sunshine, and beds free of competing weeds and grass. Divide frequently (in August) for larger and finer blooms.
• Prune spring-flowering shrubs after they bloom. The best time to prune azalea, rhododendron,
• forsythia, spirea, flowering quince, kerria, pieris, and weigela is just as flowers begin to fade. Don't wait till summer; or you'll cut off next year's flower buds. To keep your shrubs ever young, prune one-third of the oldest canes back to the ground each year.
• Prune wisteria frequently throughout the summer, to control vegetative growth and get better blooms next spring.
• Keep dogwoods healthy. Spot anthracnose and powdery mildew are two major disease problems that show up on dogwood trees in late spring and summer. To help dogwoods overcome diseases: keep them watered, maintain soil fertility, and clean up fallen leaves to minimize the spread of the disease.
• Mulch! Prepare for dry summer weather and control weeds at the same time by using a layer of mulch 2-3" thick. Read more about the benefits of mulch in this Horticulture Information Leaflet from NC State University.
• Banish bermudagrass (Wiregrass) from your planting beds. Keep it pulled to prevent it from overrunning your garden.
• Plant seeds of annual vines such as moonflower, scarlet runner beans or passionflower.
• Mix plants with the same growing requirements in your container gardens. Do not mix sun-loving and shade-loving plants together in the same container.

**VEGETABLES & FRUITS**

• Plant veggies now that the soil is warm and the danger of frost is past. Sow seeds of beans, squash, cucumbers, and corn. Set out transplants of tomatoes, peppers, eggplant and okra. [http://www.ces.ncsu.edu/depts/hort/hil/ag-06.html](http://www.ces.ncsu.edu/depts/hort/hil/ag-06.html)
• Pinching also works well for many vegetable plants, including tomatoes and peppers.
• Watch for slugs. These soft, slimy, slender pests have a special taste for tender young pests. Holes in leaves or on the leaf margins and a silvery slime trail in the morning indicate a slug feast the previous night. Slugs hide under boards, stones or debris during the day. Call for a bulletin on control of slugs.
• Train and support tomatoes, pole beans, peppers and eggplants.
• Side dress sweet corn when it is knee-high
• Make consecutive plantings of beans over a few weeks to extend your harvest.

**LANDSCAPE IDEAS**

• Plant vegetables in your flowerbeds! Eggplant, pepper varieties, and cherry tomatoes make colorful additions to the garden. Bush beans and climbing beans have attractive foliage and charming small flowers. Vegetables can also mingle with flowers in pots on a patio or deck.
• Welcome back hummingbirds! Females will be in the area first; the males will follow soon. Salvia, honeysuckles, penstemons, and other tube-shaped flowers, especially red ones, will attract hummingbirds to your garden. Fill feeders with a solution of 1 part sugar in 4 parts water. Wash feeders and replace the food at least twice a week.