



“What’s Growing On...”

Volume 13 Number 3 Fall 2010 Edition Published Quarterly

Inside this issue:

| | |
|-----------------------------------|-----|
| Rutgers on the Radio | 1 |
| From the Desk of.. | 1 |
| Asiatic Garden Beetle | 2 |
| Assassin Bugs | 2 |
| Caladiums | 3 |
| Terrariums | 3 |
| Chiggers | 4-5 |
| Catalpa Hornworms | 6 |
| Hickory Horned Devil | 7 |
| Canning Class Questions | 7 |
| Common Hackberry Tree | 8 |
| Improving Lawns Organically | 9 |
| Things to Do in September | 10 |
| Gardener’s Checklist for October | 11 |
| Gardener’s Checklist for November | 12 |
| Available Fact Sheets | 13 |

Attachments

South Jersey Nursery Meeting



RUTGERS COOPERATIVE EXTENSION ON THE RADIO

For agriculture news and horticultural tips, listen to me, Viola Carson, on the RCE Agricultural Program on Monday, Wednesday & Friday on WSNJ AM 1440 & 1240 at 12:15 pm announcing local workshops, seminars, and horticultural tips.

The Master Gardeners are available at the Extension Office Tuesdays through Fridays to answer your gardening questions. They will be answering questions from 9:00 a.m.—12:00 noon at 856-451-2800 x4 through October

FROM THE DESK OF VIOLA CARSON

We had the last of the Evening Garden Series August 12 with retired Family and Consumer Science Educator Emeritis, Sharon Blasé on Preserving Your Harvest.

The July evening class with Master Gardener Kim Conner on Attracting Butterflies was a great class and well attended. Butterfly host plants were given out at the end so attendees could have a place for the butterflies in their yard to lay their eggs, raise their young and complete their life cycle.

I have heard more gardeners say, “This is the last year I’m going to have a garden”. The heat effected pollination of tomatoes, yellow squash and zucchini. With the long stretches of dry, hot weather pole limas have not produced like other years. Keep watering. On the bright side, fungus problems have been low because we have had very little leaf wetness. Turkeys have been bothering homeowners by nesting on plants and leaving their droppings close to the house. Skunks have taken up residence under several people’s sheds, so calls into our office have been higher than usual. Voles seeking moisture have eaten their way across South Jersey. But gardeners have adapted by making wire cages to plant in and we will have all winter to think of ways to protect our gardens.

The master gardeners planted caladiums in pots at the Extension Center and they are beautiful. They joined the 4H Garden Club in caring for the Butterfly Garden, a big Thank You to all.

We may have to postpone the Master Gardener Classes for 2011. The good news is we are not losing Tammy Commander, but Helen Elwell will be retiring at the end of the year. There will be some readjusting in our office. To be truthful, there will be more layoffs in October and we have to see who it is. If you have been waiting to sign up for 2011 MG class call or e-mail me and we will add you to the waiting list. We will just prepare for the worst and hope for the best.

Asiatic Garden Beetle



Several calls have come in about something eating chrysanthemums and other ornamentals. The leaves look like they have been shot with bird shot. Eaten leaves have been brought in, but as of this date, the samples contain no insects. Pinch off the riddled leaves. Flower buds should remain as the last pinching was done in July.

The culprit is the Asiatic Garden Beetle (*Maladera castanea*) which feeds late at night. This beetle is brick-red in color. Most commonly they are injurious to roots of flowers and vegetables; but also develop on roots of many weeds, however they do not damage lawns. Adults emerge in late June and may be abundant in early summer, at which time they feed on the leaves of more than 100 kinds of trees, shrubs, flowers and vegetables.

Joe Mahar, our entomologist, noted a greasy smear may also be present on the chewed leaves. He has seen the Asiatic garden beetle on the last dog walk of the night at 11pm. Try going in the garden at night with a flashlight to catch this elusive beetle. They can be dropped in soapy water or kerosene, however, they are fast. I only just caught a couple as they were mating. After mating the females return to the soil to lay eggs in several batches over the next 2-4 weeks; typically at 1-4 inches deep.

Control is done at the grub stage which is now. The beetle's egg stage, the 1st larval stage, and 2nd larval stage each last 2-3 weeks. Late summer or early fall plowing will kill many grubs or expose them to predators such as birds. Adults prefer to deposit eggs in soil that is well covered with vegetation, so a clean, weed free garden is important. Also, grub populations increase when rainfall is above normal, so well-drained soils may be less conducive to grubs. Two Fact Sheets on grubs available at the Extension Center are: FS293 on white grubs and FS1009 on an integrated approach to insect management in turfgrass: white grubs.

Assassin Bug

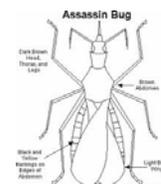
An immature assassin bug was brought in for identifying in July. A little girl was bitten and mom wanted the insect identified.

Most members of the family Reduviidae are predators. The nymphs and adults capture insects and other arthropods in their prey-grabbing front legs. They use their sharp beaks to suck fluids from their victim and they inject a small amount of poison that paralyzes their prey, making it easier to handle. Their dinner menu consists of beetles to caterpillars.

In general, assassin bugs hunt on various types of vegetation such as trees, weeds, and bushes. Assassin bugs are able to fly, but they are poor fliers. Although assassin bugs are fierce predators, they are sometimes eaten by birds, rodents, and large predatory arthropods, such as spiders, praying mantis, and even other assassin bugs. These bugs are especially vulnerable to predation when they are in the nymph stage.

Insects in the family Reduviidae are considered pests when they bite humans. Common predatory assassin bugs, like the Wheel Bug, will occasionally inflict painful bites. For the most part, however, assassin bugs have reputations as beneficial insects because they feed on other arthropods. Only the parasitic reduviids, such as the conenose bugs, are true pests. The Wheel bug at 1½", is the largest assassin bug. It gets its name from the structure on its thorax which resembles a gear or saw blade. The wheel bug is notorious for its painful bite, but it only bites on accident or if handled carelessly.

In conclusion, don't act like a pest or you may get bitten by the assassin bug.





Caladiums

Caladiums are grown for their beautiful foliage. Most like shade or partial shade, but some varieties can be grown in full sun. They like warm weather, so plant in the late spring after soil is 70° or warmer. Plant the tuber 1½ to 2 inches below the soil with the eyes up and 8-12 inches apart. Mulch and keep moist. Fertilize every 6 weeks with a 6-6-6 fertilizer or use a slow release fertilizer measuring a teaspoon per tuber.

Dig up tubers when foliage turns yellow or after affected by frost. Cure for storage by air-drying with remaining foliage for a week and store in sphagnum peat or vermiculite. Soak tubers in a fungicide solution before final storage and remove any decayed tubers. Store at 50-55°F.

Caladiums are tubers. A tuber differs from the true bulb and the corm by not having a basal plate from which roots develop and not having a protective tunic covering. The caladium tuber has buds scattered over the tuber surface from which shoots and roots develop. Other tubers are oxalis, anemones, and potatoes.

To make more caladiums, divide clumps in the spring. Using 80° bottom heat helps the tubers to form roots. You can divide offsets any time, and pot in a loose mixture with plenty of sand.

Caladiums can also be enjoyed indoors. Adequate humidity must be provided. The leaves are thin and it doesn't take much dry air to brown them. A large terrarium, daily misting or a tray of pebbles with water would be great ways to provide humidity.

Terrarium

What is a terrarium? It is a small indoor landscape that can be made of desert or tropical plants. Back in 1829 Dr. Nathaniel Bagshaw Ward found that plants could survive in a closed container. At the Worlds Fair, he displayed exotic plants from distant lands in his glass container called a Wardian Case.

What is needed to make a terrarium: a glass container (a jar, bottle or aquarium with a lid to allow light in and will act as a small greenhouse), small amounts of gravel stones and charcoal and some potting soil.

How to assemble your terrarium: First, lay ½ inch layer of small gravel stones, next sprinkle a 1-2 inch layer of charcoal to keep the terrarium sweet and thirdly, add good potting soil with good drainage. Some books say to use a mix containing bark.

Plants should be small with a nice assortment requiring the same amount of light and water. Keep at a temperature of 65°-85°. Leave enough space between the plants so each can shine on its own. Small violets, baby tears, artillery plants, aluminum plants, creeping fig, coleus, small Chinese evergreen, English ivy, fittonia, little ferns, mosses, peperomias, and wax plants are a few selections that will do well in a terrarium.

Check moisture level every two weeks. This is not a project that needs to be fussed over or it will drown. Water only once a month with distilled water or plants will have spots and fungus may start to grow. If this happens, remove the lid for a short time to help it dry out a little.

Light requirement is bright but not direct sunlight. Too much light and plants will burn. Too little and plants will stretch and be leggy. Prune to keep the plants full yet small. No fertilizer is needed.

It has been a mitey, hot summer

Chiggers can be a problem when time is spent outdoors. They are most numerous in summer when grass, weeds and other vegetation are heaviest. They are found in berry patches, tall grass and weeds and along the woodland edges.

Also known as Velvet Mites, Harvest mites or the Red mite, the adults live in or on the soil. The young stages of Trombiculidae are parasites of other animals and are what is known as chiggers.

How small are they? Chiggers are so small that most cannot be seen without a magnifying glass. Chiggers feed on a wide variety of snakes, turtles, birds, and small mammals as well as humans.

Where they attach to you: The preferred feeding locations on people are parts of the body where clothing fits tightly over the skin such as the waistline, under socks, around the ankles, in the armpits, back of the knees, in front of the elbow, or in the groin.

How they do it? Chigger larvae do not burrow into the skin, nor suck blood. They pierce the skin and inject a salivary secretion containing powerful, digestive enzymes that break down skin cells that they ingest. Also, this digestive fluid causes surrounding tissues to harden, forming a straw-like feeding tube of hardened flesh (stylostome) from which further, partially-digested skin cells may be sucked out. After a larva is fully fed in four days, it drops from the host, leaving a red welt with a white, hard central area on the skin that itches severely and may later develop into dermatitis. Any welts, swelling, itching, or fever will usually develop three to six hours after exposure and may continue a week or longer. If nothing is done to relieve itching, symptoms may continue for a week or more. Scratching a bite may break the skin, resulting in secondary infections. However, chiggers are not known to transmit any disease in this country.

What does it look like? Chigger bites first show up as annoying red bumps. An itch begins. It grows. More hard red welts surface. They start at your feet and ankles and move upward. Chiggers are not bugs or insects; they are the juvenile form of a specific family of mites, the Trombiculidae. Mites are arachnids, like spiders and scorpions, and are closely related to ticks.

One of the greatest misconceptions about chiggers is that they burrow under the skin and eventually die within the tissues, thus causing the persistent itch. Chiggers are not equipped to burrow, and they are much too large to enter through the pores. The chigger's piercing mouth parts are short and delicate, and can penetrate only thin skin areas such as wrinkles and folds.

The time required for a chigger to complete its meal varies with the location of the bite, the host and the species. If undisturbed, chiggers commonly take three or four days, to eat their dinner. This is not surprising when you consider that this is the first and last meal of the young chigger's life.

The Last Supper: On human hosts, however, chiggers seldom get the chance to finish a meal. The unlucky chigger that depends on a human for its once-in-a-lifetime dinner is almost sure to be brushed away or scratched off by the victim long before the meal is complete. It may give you some consolation to know that when a chigger is removed before it has fully engorged, it cannot bite again and will eventually die.

It was an accident, I meant to order the chicken: It is of little comfort to learn that North American chiggers only bite humans by accident. Although our chiggers can feed on most animals, they are really looking for reptiles and birds, their preferred hosts. The itching reaction human skin has to chigger bites occurs because we are not their correct hosts. Chiggers that specifically prey on humans in Asia and Pacific Islands cause no itching!

Prevention: Mowing of briars, weeds, thick vegetation and close clipping of lawns will reduce chigger populations by eliminating their shade and moisture as well as permitting sunlight and air to circulate freely.

King of the Mountain: Unlike ticks, which quietly wait for hosts, chiggers run about almost constantly. Chiggers tend to move towards and onto any new object placed in their environment. You can test your lawn for

the presence of chiggers by placing a black piece of cardboard or a white saucer vertically on the ground. If chiggers are present they will move rapidly over the object and accumulate on the upper edge where you can see them with a magnifying glass.

Maybe they can a career in fashion modeling: The chiggers that annoy people have long legs and can move rapidly. They are capable of getting all over a person's body in just a few minutes. The long trek from a victim's shoe to the belt line (a favorite point of attack) is a climb that takes about 15 minutes but is more than 5000 times the chigger's tiny length.

Chiggers are affected by temperature: They are most active in afternoons, and when the ground temperature is between 77° and 86°. Chiggers become completely inactive when temperatures fall below 60° and temperatures below 42° will kill the species of chigger that bites us.

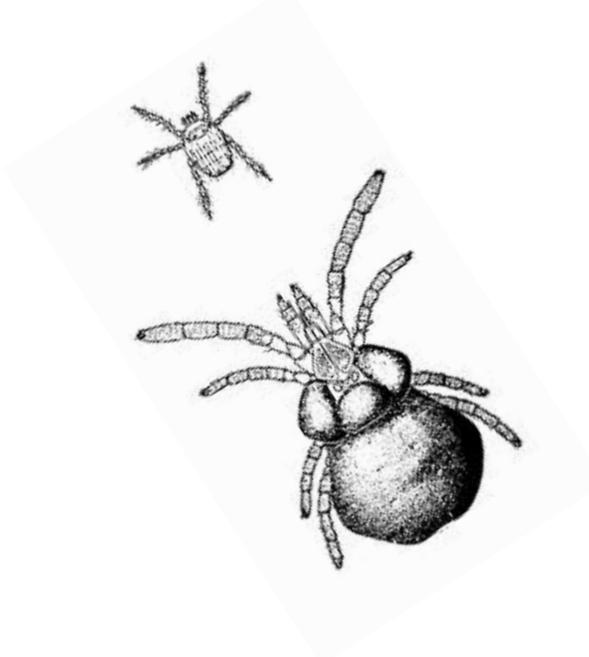
I'll have mine on the rocks: If you can, plan your outdoor activities around your thermometer reading to keep chigger bites to a minimum. Researchers have also found that chiggers actively avoid objects hotter than 99 degrees. Rocks that have been baking in the sun are almost always free of chiggers, and make a safe place to sit when you are in a chigger-infested area.

The first line of defense: Wear the right clothing. Shorts, sleeveless shirts and sandals are nearly suicidal in chigger infested areas. **Dress like a super hero!** Wear tightly woven socks and clothes, long pants long sleeved shirts, and high shoes or boots. Tucking pant legs inside boots and buttoning cuffs and collars as tightly as possible also helps keep the wandering chiggers on the outside of your clothes. When you get home, change clothes as soon as possible, and wash them before you wear them again. If you don't, the chiggers will get you the next time you put them on.

Regular mosquito repellents will repel chiggers. All brands are equally effective. Follow label directions since some repellents may damage different surfaces. Applying these products to exposed skin and around the edge of openings in your clothes, such as cuffs, waistbands, shirt fronts and boot tops, will force chiggers to cross the treated line to get inside your clothing. Unfortunately these repellents are only potent for two to three hours and must be reapplied frequently.

The best precautions: Simply taking a warm soapy bath with plenty of scrubbing as soon as possible after exposure. If you bathe at once, while the chiggers are still running over your body, you can wash them off before they bite. A bath will also remove any attached and feeding chiggers before you start to feel the itch. If symptoms persist, anti-itch lotions will relieve the itching somewhat, but no substance is completely effective.

The following is taken from articles by William F. Lyon from The Ohio State University and the Missouri Dept of Conservation



Catalpa Hornworms

AgriLIFE Extension, Texas A&M System

The Catalpa hornworm, and its adult, the Catalpa Sphinx, can be locally abundant during the summer months in the eastern United States. They will gather wherever its two host trees, Southern Catalpa and Northern Catalpa, are found. These caterpillars are well known to anglers, who esteem them for fish bait (catfish, sunfish), and to homeowners, when they call to tell me their tree was completely defoliated in three days. Catalpa is its only host plant, and all species of catalpa are apparently subject to attack. It is a medium-sized tree with broad crown, large leaves, and show white, purple-tinted flowers.

Hornworms have a prominent posterior dorsal tail spine, or horn, on the eighth abdominal segment. The spine is not a stinger and the caterpillars do not sting. The body is smooth and the tail spine is black. The sides are blue-green. The final larvae leave their tree and pupate in the ground. There are five larval instars. Metamorphosis takes about 2 weeks in the summer but fall pupae overwinter and emerge in the spring.

There are four life stages: egg, larva, pupa, and adult. Eggs, are small, oval, and whitish, greenish, to cream-yellow in color. They are deposited in mound-like masses on the undersurface of leaves.

Larvae, or caterpillars, are white to pale yellow when first hatched, and each has a conspicuous black spine or horn on the back at the rear. As larvae grow, coloration changes; the head is black, the body whitish to pale yellow with black markings. Full-grown caterpillars are 2-3 inches long.

The pupa is bare (no cocoon), reddish brown. The adult, is a large, stout-bodied moth. The body is gray, spindle-shaped. Wings are mostly mottled gray-brown. Adults are strong fliers, but fly mostly at dusk or night and are not commonly seen.

The catalpa sphinx overwinters as a pupa in the soil under or near trees infested the previous season. In spring, pupae work their way to the soil surface and moths begin to emerge shortly after host trees have leafed out. Time of moth emergence varies considerably by locality and even from year to year in the same locality, depending on temperature and general weather conditions. Moths mate and females lay eggs in masses on the undersurface of leaves. Masses may contain 100-1000 eggs. Eggs usually hatch in five to seven days. Newly hatched caterpillars feed as a group skeletonizing areas of leaf. New adults of summer generations emerge in about two weeks, but pupae of the last brood of the season overwinter in the soil and moths do not emerge until the following spring.

Infestations of the catalpa sphinx occur sporadically; they come and go and often seem to be highly localized. Certain trees appear to be preferred and are attacked regularly while others of the same catalpa species seem to escape attack; the reason for this is unknown. Caterpillars may be abundant for one, two, or three years, then scarce for several. Natural enemies such as parasites and predators, take a heavy toll of eggs and larvae, and are largely responsible for maintaining populations at low levels. One of the most common and important parasites is a small wasp that attacks the larva. The female wasp deposits eggs through the skin of the caterpillar. Wasp larvae feed and develop inside, then emerge to the outside and spin conspicuous white, silken cocoons on the caterpillar skin. Parasitized catalpa worms do not survive to adulthood.

When caterpillars are numerous, infested trees may be completely defoliated. Defoliated catalpas produce new leaves readily and trees usually re-leaf promptly. However, with multiple generations occurring, new foliage may be consumed by subsequent broods. Most trees survive but some dieback may occur. Severe defoliation over several consecutive years can cause trees to die.

Hickory Horned Devil

A Hickory Horned Devil came into the office for ID on Aug. 20, 2010. This is a showy (could be in the Mummer's Parade) caterpillar. It is Robin's egg blue, has four sets of orange horns with black tips coming out of the head and, did I mention, it is a large 5-6 inches long and as thick as your thumb. They feed on (whatever they want) hickory, walnut, butternut, ash and sumac leaves. Then the horned devil pupates without a cocoon in an earthen cell. It turns into the Regal Moth. Some people know it as the "Royal Walnut Moth". I took it home in the shoe box it had come in. The next morning it had chewed a hole in the bottom of the box. I released it under my hickory tree.

Canning Class Questions

Question 1: If my recipe doesn't call for processing, do I need to do it? This answer is from the So Easy to Preserve book

Answer: Many recipes passed down through the years or found in older cookbooks do not include instructions for processing. The foods are usually canned by the open kettle method, sealed and stored. Foods prepared in this manner present a serious health risk particularly with low acid foods. To minimize the risk of food spoilage, all high acid foods (2 examples are peaches and tomatoes) should be processed in a water bath canner or pressure canner and all low acid foods in a pressure canner. Times are given in the above mentioned book.

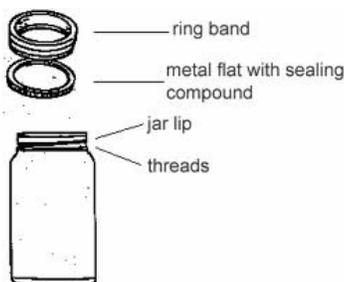


Question 2: Why is open kettle canning not recommended?

Answer: In open kettle canning, food is cooked in an ordinary kettle, then packed into hot jars and sealed without processing. The temperatures obtained in open kettle canning are not high enough to destroy all spoilage and food poisoning organism that may be in food. Also, microorganisms can enter the food when it is transferred from the kettle to jar and cause spoilage.

Clostridium botulinum bacteria are the main reason why low acid foods must be pressure canned to be safe. When conditions are favorable, spores can germinate or change into vegetative cells. The conditions which favor this germination are low acidity and absence of air (such as a sealed canning jar). When this germination occurs, deadly botulinum toxin can be produced.

The spores can be destroyed by canning the food at a temperature of 240° F or above for a specific period of time. Since this is above the boiling point of water, it can only be reached in a pressure canner.



***Celtis occidentalis*, Common hackberry**

From the Butterfly Site under Gardening and the North America Butterfly Association

Plant hackberry trees to attract the Hackberry Butterfly. If this tree is chosen, do it for the wildlife. The fruit will stain clothing, it gets nipple gall and powdery mildew and has little fall color. However, it is one tough tree. Hackberry prefers full sun but can adapt to a wide variety of sites, including soils that are wet or dry, clay or rocky, rich or poor. It is also very pollution tolerant. Hackberry is a useful shade tree for difficult situations, but not a good landscape choice. It has a rounded head, bright green leaves that are 5 inches long and turn a light yellow in the fall. The orange-red to purple fruit attracts the wildlife.

Cedar waxwings, robins and other birds like the fruit. Several Butterflies live in it. The Hackberry Emperor butterfly, *Asterocampa celtis* dines on the decaying fruit. In late fall, caterpillars make a nest by sewing hackberry leaves together and to the tree. They move into the nest and slowly over weeks, turn from green to brown just like the leaves. As the trees drop their leaves for winter, the hibernaculums (winter nests) stay on the tree. The caterpillars stay in their hibernaculums until fresh leaves grow in the spring. At that time, they crawl out of their nests and continue to eat and grow.

A relative of the Elm tree, hackberry trees are adaptable to a wide range of light and moisture levels. Often planted for its purple-red fruit that attracts a wide variety of birds, hackberry can be used as a native alternative for Chinese and Siberian Elms.

Importance as a caterpillar food source: Hackberry trees provide many butterfly species with caterpillar food. Although the activity is usually high above easy viewing levels, some guidelines for caterpillar identification are:

- Tawny Emperor caterpillars eggs are laid in large groups of 200 to 500 on Hackberry bark or leaves. The young caterpillars feed in large groups.
- Hackberry Emperor caterpillar eggs are laid in small groups ranging from one to twenty.
- American Snout caterpillar eggs are laid in small groups.
- Caterpillars of the Question Mark butterfly live alone on hackberry leaves. Mourning Cloak caterpillars live together in a web while eating Hackberry

Butterfly Host Plants are important when you create your butterfly garden to provide a site for the butterfly to lay eggs and also as a food source for the emerging caterpillar. **Be prepared for heavy munching on your host plants!** Because tiny caterpillars cannot travel far to find their own food, the female butterfly locates and lays her eggs on only the type of plant that the caterpillar can use as food. Most species of caterpillars are particular about the type of plants they can eat. If the egg was not placed on the correct plant, the caterpillar hatching from that egg will not survive. Many gardeners do not like to see plants in their gardens that have been chewed on by bugs. To avoid this, you may want to locate your butterfly host plants in areas that are not highly visible, but still a short distance from the butterfly nectar plants. If you do not provide host plants, you will have fewer butterflies.

Many native trees and other plants found in and around our yards are host plants for caterpillars. There are a variety of plants that can be included in a butterfly garden that are excellent host plants. The [Native Plants Database](#) is a great resource for folks interested in selecting native plants for their yard.

Dead Grass: Opportunity for Improving Lawns Organically

James Murphy

The long, hot summer has taken its toll on many plants, including lawns. Many areas of desirable turfgrass lawns have died, and lawns infested with crabgrass and other annual weeds will die as autumn approaches. Dead lawns mean a loss in ground cover and greater risk of storm water runoff. Ground cover is needed to prevent rains from washing bare soil into streams, lakes, rivers, and bays. Eroding soil contains sediment and nutrients (N and P) which are a severe risk for water pollution. Therefore, lawns with 60% or more loss of ground cover need to be repaired to prevent soil erosion and protect water quality.

What to do? Dead lawns need to have the soil re-covered. Now is the best time to reseed a lawn. The cooler air, warm soils, and more frequent rain of August and September present ideal conditions to seed lawns and ensure establishment.

Seed blends and mixtures containing a grass called perennial ryegrass will provide the quickest and easiest repair of lawns. It is also wise to include other grasses in the seed mixture. Interested in developing a lawn with lower maintenance requirements? Look on the seed label for grasses called tall fescue, hard fescue, Chewings fescue, or creeping red fescue. If you use seed mixes containing them, these grasses become established in the lawn over time. These grasses can survive with less water and fertilizer. Tall fescue is a very good choice if you can seed before September 15th while perennial ryegrass, fine fescues, Kentucky bluegrass can continue to be used later in the fall when the soil cools.

Test the soil to determine what nutrients, if any, are needed. Amending the soil during lawn renovation provides the opportunity to treat the whole root zone, rather than just the soil surface. Consult your county extension office for information on soil testing or search for soil testing labs on the internet.

Aerating and dethatching the lawn before seeding is very beneficial. Seed falling into the openings created by aeration and dethatching is more likely to establish because the seed and soil contact is improved. You can also spread a light layer of compost over the lawn after aerating and seeding. Compost acts like a mulch, retaining moisture for the seed. Compost also adds nutrients and organic matter to the soil, both of which are beneficial to the survival of your lawn.



Things to do in September

- Purchase spring-flowering bulbs while the selection is good. Plant single varieties in groups.
- Fertilize most houseplants for the last time until next spring.
- Sow a new lawn. FS 108 & 684
- Core aerate your lawn when the soil is moist but not wet.
- Fall is a good time to test the soil in your lawn, vegetable garden, perennial bed or around trees and shrubs. Call your local Extension office for a soil test packet.
- Clean off the vegetable garden and annual beds as plants die.
- Remove spent flowers from perennials.
- Start a compost pile with fallen leaves and garden debris. FS 74
- Plant some lilies.
- Plant chrysanthemums, pansies and ornamental cabbages and kales early in the month.
- Lift and divide iris rhizomes and overgrown peonies.
- Bring fibrous begonias, coleus and impatiens indoors for potted houseplants.
- Store surplus seeds in a cool, dry location.
- Fall is a great time to plant most trees and shrubs. FS 786
- Don't fertilize established woody plants until they are dormant.
- Allow winter squashes, pumpkins and gourds to mature completely on the vine. Harvest them before the first frost. FS 988
- Wait at least two weeks after the tops die to harvest white potatoes. FS 679
- Dig sweet potatoes before the first frost. FS 560
- Move perennial plants within the next month or wait until next spring.
- Make a map of your perennial gardens to record the location of your plants.
- Continue to weed the gardens. The best place for these plants is the compost pile.



Gardener's Checklist for October



- Consider dwarf fall asters, to brighten the flower garden.
- Fall is a good time to apply lime to the lawn and garden if a soil test recommends it.
- Harvest gourds and squashes when they mature and before they are exposed to frost.
- Weed and edge your gardens. FS 20 & 119
- Plant tulip, daffodil and hyacinth bulbs and crocus corms. If voles are a problem, plant in wire.
- Fertilize bulbs already in the ground with a bulb fertilizer.
- Plant garlic, rhubarb and shallots.
- Plant hardy spring-blooming perennials and biennials in the garden early in the month.
- Store leftover flower and vegetable seeds in a cool, dry place.
- Provide food and water for the birds. FS 1022
- Repair garden fences, trellises and accessories.
- Call a certified arborist for a serious tree problem. FS 19
- Continue to mow the lawn at a height of 2½ to 3 inches until the grass stops growing.
- Start a wish list of plants and tools for next year's gardening season.
- Spread humus (composted organic matter) two inches deep and work it into your garden soil.
- FS 117
- Note where fall color is needed in the landscape and plan to add an appropriate plant next year.
- Clean and store lawn furniture.
- Wash your windows, do it for the plants, so they get as much sunshine as possible.
- Rake fallen leaves to prevent them from smothering the lawn.
- Form a compost pile of leaves and other garden debris. FS 811
- Wait until the ground freezes to apply mulch around perennials.
- Plant and transplant deciduous trees and shrubs after leaf fall.
- Fertilize woody plants after they go dormant (after several hard freezes).
- Prune trees and shrubs after they go dormant.
- Keep mulch away from the trunks of trees and shrubs.
- Store garden stakes, hoses and tools before winter sets in.
- Remove dead chrysanthemum tops from the garden.
- Dig root crops before the ground freezes. Carrots, beets, leeks, turnips and parsnips can be harvested from the garden all winter long.
- Be sure to harvest your tomatoes, peppers, sweet potatoes and other tender crops before the first frost.
- Plant a cover crop of winter rye or hairy vetch on your vegetable garden. FS 849
- Transplant strawberries.
- Harvest pears before they are fully ripe. Harvest apples when the stem separates from the branch with a slight pull.
- Make a jack-o'-lantern and roast the seeds for a snack.



Gardener's Checklist for November

Here's a list for your monthly job jar:

- Sow seeds of hardy flowers, such as calendula, larkspur.
- Plant bare-root plants when they're dormant and the air temperature is cool.
- Rake fallen leaves from the lawn.
- All trees and shrubs should be deeply watered before winter.
- Stake newly planted trees to protect them from winter winds.
- Wrap arborvitae and other upright evergreens that could be split by heavy snow.
- Resist the temptation to pile mulch up around the trunks of your trees and shrubs. Keep the base of the plant free from mulch while keeping the area under the canopy covered with 2-4 inches of mulch. FS 122
- Turn your houseplants regularly for even growth.
- Winterize roses and mulch perennials and strawberries after the ground freezes. FS 944
- Continue to remove weeds from the garden.
- Place all weeds, leaves and dead, annual and perennial foliage in the compost pile.
- Turn and water the compost pile to keep it working.
- Dig up and store tender bulbs, corms or tubers. For dahlias, wait until frost has blacken foliage.
- Have you planted your spring-flowering bulbs? If not, do this before the ground freezes.
- Continue mowing the lawn at 2½ -3 inches until the grass stops growing.
- The late fall fertilization of the lawn should be done after the grass stops growing. Extension has details on the type and amount of fertilizer to apply. FS 829, 839 & 633
- Turn over or rough till your vegetable garden if soil erosion is not a problem. A cover crop of winter rye still can be planted if it's done as early in the month as possible.
- Place hardware cloth or plastic guards around fruit trees.
- Pot paper white narcissus for forcing indoors. FS 128
- Don't over water your houseplants.
- Have your lawn mower and other power equipment serviced.
- Clean and Repair garden tools.
- Drain and bring in all of your garden hoses.
- Replace spent annuals in window boxes with heath, conifers, small broad-leaved evergreens, and dwarf winter flowering shrubs.
- Feed the birds.



Rutgers Cooperative Extensions Fact Sheets

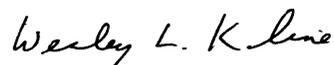
| FS # | Fact Sheet Name |
|----------------|---|
| Fact Sheet 22 | IPM Tool Box |
| Fact Sheet 58 | Mulches for Vegetables |
| Fact Sheet 74 | Backyard Leaf Composting |
| Fact Sheet 77 | Aphids |
| Fact Sheet 108 | Renovating Your Lawn |
| Fact Sheet 117 | Using Leaf Compost |
| Fact Sheet 119 | Weed Control in Home Lawns |
| Fact Sheet 120 | Weed Control in Pebble Lawns, Driveways and Patios |
| E 272 | Weed Management in Ornamental Plantings |
| Fact Sheet 293 | White Grubs |
| Fact Sheet 355 | Poison Ivy and its Control |
| Fact Sheet 399 | Vole Ecology |
| Fact Sheet 450 | Using water wisely in the garden |
| Fact Sheet 547 | Diagnosing and controlling fungal diseases of tomatoes |
| Fact Sheet 633 | Fertilizing the Home Lawn |
| Fact Sheet 678 | Growing Tomatoes in the Home Garden |
| Fact Sheet 688 | Fine Fescues: Low maintenance Species for Turf |
| Fact Sheet 797 | Soil Testing for Home Lawns and Gardens |
| Fact Sheet 809 | Pine Wilt Disease |
| Fact Sheet 829 | How to Protect Water Quality & Have a Beautiful Lawn: Ten Steps to Proper Fertilization |
| Fact Sheet 866 | Using Horticultural Oils |
| Fact Sheet 887 | Who to Call Regarding Wildlife Damage |
| Fact Sheet 888 | Portable Electric Fencing for Preventing Wildlife Damage |
| Fact Sheet 889 | High-Tensile Woven Wire Fences for Reducing Wildlife Damage |
| Fact Sheet 990 | Tall Fescue Varieties in NJ |
| Fact Sheet 905 | Agricultural Liming Materials |
| Fact Sheet 930 | Natural Pest Control |
| Fact Sheet 944 | Roses and Their Care |
| Fact Sheet 988 | Picking Vegetables in the Home Garden |
| Fact Sheet 989 | Perennial Ryegrass Varieties for NJ |

Call 856/451-2800 ask for Viola Carson. When calling to request a fact sheet refer to the Fact Sheet by FS# or by name. All fact sheets are free unless otherwise noted.

What's Growing On is prepared by Viola Carson, Horticultural Assistant, Rutgers Cooperative Extension of Cumberland County.



Sincerely,



James R. Johnson
Agricultural Agent
Nursery Management Commercial
Internet: jjohnson@NJAES.rutgers.edu

Wesley L. Kline, Ph.D.
Agricultural Agent
Vegetable & Herb Production
Internet: wkline@NJAES.rutgers.edu

For important announcements concerning the Cumberland County Extension Center visit:
<http://Cumberland.njaes.rutgers.edu>

Visit the newly activated website to see what activities are happening in the
Home Horticulture and Agriculture Departments.

If you have any questions concerning the website, please call our office at
856-451-2800 x1 for agriculture and
856-451-2800 x4 for Home Horticulture and Master Gardeners

NONPROFIT ORGANIZATION
U.S. POSTAGE PAID
VINELAND, NJ
PERMIT NO. 186

Cooperative Extension of Cumberland County
291 Morton Avenue
Millville, NJ 08332-9791

RUTGERS
New Jersey Agricultural
Experiment Station

Registration Form

South Jersey Nursery Meeting Tuesday, October 19, 2010

Meeting Registration: \$20 per person
(Registration fee covers morning coffee/tea and hot buffet lunch)
\$10.00 per person if no lunch

Names of individuals attending (please print)

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____

Address: _____

Telephone: _____

Amount Enclosed: \$20 X _____ = \$ _____

Amount Enclosed: \$10 X _____ = \$ _____

Make check payable to:

Extension Service Programs Account

Please cut off registration form and mail with payment to:

➔ Jim Johnson
County Agricultural Agent
Extension Education Center
291 Morton Avenue
Millville, NJ 08332

No purchase orders or vouchers.

DIRECTIONS TO

Rutgers Cooperative Extension of Cumberland County

Extension Education Center
291 Morton Avenue (County Road #634)
(between Rosenhayn & Carmel)
856/451-2800

From the North:

1. Take the NJ Turnpike to Exit 4
2. Drive West on Route 73 to Route 295 South
3. Take 295 South to Exit 26 (Route 42 South)
4. Proceed South on Route 42 to Route 55 South
5. Proceed South on Route 55 for approximately 29 miles
6. Take Exit 29 to Route 552 West (left turn)
7. At the second traffic light (approximately 3 miles from the overpass), turn right onto Morton Avenue
8. Drive 1 to 1 ½ miles North on Morton Avenue
9. The Extension Education Center is on the left (brownstone & cedar-shingled building). There are two roadway entrances and a sign on the road in front of the building

From the Northeast:

1. Take Garden State Parkway South to Exit 44
2. Go South on Route 575 to Route 322
3. Turn right (North) onto Route 322 and proceed about 1/4 mile to the Route 40 jug handle at the shopping center (Hamilton Mall)
4. Proceed West on Route 40 approximately 7 miles to Route 552 (left turn)
5. Proceed West on Route 552. After approximately 12 miles, you must take a right turn onto Sherman Avenue. It is still Route 552 West
6. After driving through a Vineland residential area, cross Route 47 (Delsea Drive), and across the overpass of Route 55
7. At the second traffic light (about 3 miles from the overpass), turn right onto Morton Avenue
8. Drive 1 to 1 ½ miles North on Morton Avenue
9. The Extension Education Center is on the left (brownstone & cedar-shingled building). There are two roadway entrances and a sign on the road in front of the building

From the South:

1. Take Route 55 North to Exit 29
2. Turn left onto Route 552 West (Sherman Avenue)
3. At the second traffic light (about 3 miles from the overpass), turn right onto Morton Avenue
4. Drive 1 to 1 ½ miles North on Morton Avenue
5. The Extension Education Center is on the left (brownstone & cedar-shingled building). There are two roadway entrances and a sign on the road in front of the building

Handicapped parking and a ramp are located at the front of the building.

Please do not use the lot directly behind the Extension Education Center. It is for employee and maintenance parking.

Ample parking is located to the side of the building and the lot directly behind the employee parking lot.

RUTGERS

New Jersey Agricultural
Experiment Station

South Jersey Nursery Meeting

*Maximizing Production
While Minimizing
Environmental Impact*

Tuesday, October 19, 2010
8:30 a.m. – 4:15 p.m.

RCE of Cumberland County
Extension Education Center
291 Morton Avenue
Millville, NJ 08302
(between Rosenhayn & Carmel)

Tel: 856/451-2800
FAX 856/451-4206



**Registration Deadline:
Friday, October 15, 2010**

Program Details

Morning Sessions:

- 8:30 Registration
- 9:00 Welcome & Introductions
Jim Johnson, Cumberland County Nursery Crop Agent
- 9:00 Sustainability: the triple bottom line – profit, people, and planet.
Salvatore S. Mangiafico, Environmental and Resource Management Agent
- 9:30 What you need to know about farmworker safety.
Dr. George Hamilton, Rutgers Pesticide/Pest Management Specialist
- 10:00 Break
- 10:15 Management Practices: What do YOU need? (panel discussion)
Ed Overdevest, Don Blew, Dr. Chris Obropta, Rutgers Water Quality Specialist & Sal Mangiafico
- 10:45A Large Scale Dilemma: Effectively Managing Scale Insect Pests
Steve Retke, Rutgers IPM Program Associate
- 11:15 Diseases: how to minimize problems
Dr. Ann Gould, Rutgers Nursery Plant Pathologist
- 11:45 Crop Insurance Update
Laura Gladney, Program Assistant, Risk Management Program
- 12:00 Lunch (downstairs)

Afternoon Sessions:

- 1:00 How to reduce your pesticide usage, while still having a successful pest management program.
Suzanne Wainwright-Evans, Buglady Consulting
- 3:00 Break
- 3:15 Stakeholder input: Tell us how the Rutgers Cooperative Extension nursery management program can be more effective.
- 3:45 Anticipated pesticide recertification credits: 2 Core and 3: category PP2 &3A.
- 4:00 Adjourn

Registrations are confirmed when forms and payments are received by Cumberland County RCE. No confirmation notice will be sent. Registration and refund deadline: Friday, October 15, 2010.

Register by Friday, October 15, 2010