



“What’s Growing On...”

Volume 14 Number 1 Spring 2011 Edition Published Quarterly

Inside this issue:

Rutgers on the Radio	1
From the Desk of...	1
Invasive Species	2
Home Horticulture Classes	3
CC Master Gardener classes	3
Rutgers 35th Annual Home Gardeners School	4
Build a Rain Barrel Class	4
Brown Marmorated Stink Bugs	5-6
Integrated Pest Management	7
Build a Rain Barrel	8
Eco Fair	9
Things to Do in March	10
Things to Do in April	11
Things to Do in May	11-12
Rutgers Fact Sheets	13

Attachments:

Quick Facts: 2011 NJ
Fertilizer Law A2290



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 will be available at the Extension Office Tuesday through Friday to answer your gardening questions. They will be answering questions from 9:00 a.m.—12:00 noon at 856-451-2800 x4 starting April 15th through October 15th.



FROM THE DESK OF VIOLA CARSON

March, April and May are the months when gardeners welcome spring and finally go outside without a coat and get to plant. We hide peas, lettuce, mixed greens and beet seeds in the soil during March, place tiny Ramapo Tomato seeds and other special favorite seeds in flats indoors the beginning of April, and purchase six packs of vegetables, herbs and flowers in May.

This year the Eco fair at WheatonArts and Cultural Center is Saturday, May 7th. The Cumberland County Master Gardeners will be selling Ramapo and Moreton tomato plants again along with assorted herbs and flowers. We are very grateful to the Cumberland County College for allowing us to start our seeds in their greenhouse for this once a year fund raiser.

Master Gardeners are trained to volunteer in horticultural projects in Cumberland County. This year they have gone to Senior Centers and presented Horticulture Therapy classes. The eight classes include propagating a violet, planting a bulb, making stem cuttings, creating a dried lavender craft, planting a small terrarium, dividing a fern, starting a sweet potato, white potato or carrot in water, making and drying a fragrant pomander.

This Spring we will be battling the Brown Marmorated Stink Bug out doors. Integrated Pest Management will still apply. This is a newer pest and we are learning together what will work to keep its populations and the damage it causes down. The most effective and important of all practices is to observe what is going on in the garden. Many serious pest problems can be halted or slowed if the gardener visits the garden regularly for the purpose of inspecting plants.

Invasive Species

In January I went to an Invasive Species First Detector Training in New Brunswick. Many ports receive cargo daily with the possibility of new pests entering constantly. 11 million ship containers arrive at US Sea Ports each year. In 2010, the US imported 3.3 million metric tons of agricultural products each month, of that only 1- 2% is inspected.

Dogs are often used to find plant products, pests, or pathogens illegally brought into the country. A dog can find a hidden product, pest or pathogen 95% of the time.

85% of the plants imported into the US come in through the Port of Miami, Florida. 43,943 invasive species and 2,723 exotic pests were intercepted at the Port of Miami last year. All of these findings were a result of 1-2% of inspected products. One new exotic pest is detected every 8-12 days.

The National Plant and Diagnostic Network was created after Sept. 11, 2001 when our vulnerabilities were exposed. The need for trained plant disease and pest diagnosticians has grown in recent years. This is where home gardeners come in; when you find something odd, whether insect or disease, bring it in to be identified.

A high risk or exotic pest is one not currently known to exist here in the US and one with limited distribution, but economically important if it spreads. It can be spread accidentally or deliberately as an introduction or bioterrorism. There are eight plant pathogens on the select list now, but that can change. In the Northeast we have 4 pathogens that are significant: Soybean Rust, Plum Pox Virus, Sudden Oak Death and Chrysanthemum White Rust. We have four insects that are significant: Emerald Ash Borer, Asian Longhorn Beetle, Hemlock Woolly Adelgid and Sirex Woodwasp and there are three weeds, Phragmites, Giant Hogweed and Purple Loosestrife.

The Emerald Ash Borer was discovered in Michigan in 2002. The beetle attacks ash trees and has killed over 6 million in the southeastern part of Michigan.

The Asian Longhorn Beetle (ALB) was found by a homeowner in NYC in 1996 and then in Chicago in 1998 and is currently contained through quarantines. Plant materials had to be destroyed and it cost millions of dollars. ALB prefers maples but will infest other trees. This pest could change the populations and age structure of hardwood forests, especially those populated with maple and poplars.

Plum Pox Virus was first reported in Bulgaria in 1915. Since then it has spread throughout Europe, Asia, Africa and most recently to Chile in 1992, to the US in 1999 and to Canada in 2000. Plum Pox Virus is one of the most serious diseases of plums, apricots and peaches and is of great economic importance.

The Sirex Woodwasp is a highly significant, regulated pest that has the potential to cause widespread mortality to pine trees. The first detection of Sirex Woodwasp was a single female found at the Otis Elevator Co. in Bloomington, Indiana in 2002 and a second time in New York (NY) State in 2004. Although this was the second detection in the US, it was the first in a landscape setting. Currently, Sirex Woodwasp has been identified in 25 counties in NY State. The female Sirex Woodwasps are attracted to stressed, weakened trees. Females carry a fungus that is deposited into the trees along with a toxic mucus when laying their eggs.

Giant Hogweed is a large and showy plant native to Asia. It was introduced here early in the twentieth century. Although once cultivated as an unusual ornamental, giant hogweed is now regarded as an undesirable weed that poses a serious health threat because the sap of the plant causes a painful and acute skin irritation to many people. When this plant escaped, it naturalized along roadsides and stream banks.

Cumberland County gardeners should be commended for being so observant. As always, if something unusual is found, put it in a container and bring it in for identification. Keep up the good work.

Cooperative Extension Pesticide and Home Horticulture Classes.....

March 22	Basic Entomology	9-noon \$20	Pesticide credits: 3-7A & 7B
April 5	Pesticide Safety	9-noon \$20	Pesticide credits: 6 CORE
May 3	Weed Management	9-noon \$20	Pesticide credits: 6-3A & PP2
June 7	Turf Pest Problems	9-noon \$20	Pesticide credits: 6-3B & PP2

All class will be held at the Rutgers Cooperative Extension, 291 Morton Avenue (between Rosenhayn and Carmel), Millville. The building is handicap accessible.

Pre-registration for all classes is required. To register call 856-451-2800 x4 and speak to Viola or Tammy.

Cumberland County Master Gardeners Sponsor Upcoming Classes

Mark your calendars for the upcoming talks being sponsored by the Cumberland County Master Gardeners:

March 8	General Landscaping	Viola Carson Ken Taft
April 12	"Green" Turf Management	Sal Mangiafico, Rutgers
May 10	Mushrooms	Jim Barg, Mycologist
June 7	Fleas, Ticks & Mosquitoes	Heather Lomberk

All classes are 11:00 a.m.-11:45 a.m. at the Rutgers Cooperative Extension, 291 Morton Avenue, Millville (between Carmel and Rosenhayn). There is a \$3.00 donation requested for all non-master gardeners, includes light refreshments. Classes are held prior to the regular master gardener monthly meeting. If you are interested in joining the group, come see what we are doing throughout Cumberland County.

To inquire or register, call 856-451-2800 x4.



Rutgers Continuing Education 35th Annual Home Gardeners School

The Home Gardeners School offers you expert instruction in the most innovative gardening and landscaping subject available. Rutgers is proud to offer you a wide variety of classes, over different sessions, so you may participate in diverse class offerings throughout the day.

All sessions will be Saturday, March 19th from 8:00 a.m. to 4:00 p.m. The fee schedule is as follows:

- By March 5th - \$55.00; after \$69.00
- Master Gardeners by March 5th - \$49.00
- Session #1 has an additional fee of \$45 and Session #27 has an additional fee of \$35
- \$10.00 Box lunch option (vegetarian available)

The following classes are available this year:

9:00-10:30:

1. How to Make A Rain Barrel (9:00-11:45)
2. Perennials & Grasses for Specific Sites
3. Canning fruit and vegetables
4. Spring and Summer Turf Management
5. Composting
6. Amazing Annuals
7. Sensational Garden Containers
8. Planning a Vegetable Garden
9. Trees and their care

1:15-2:15

18. Vines and Espaliers
19. Common Plant Diseases of Ornamentals
20. How to Become a Master Gardener
21. Interesting & Edible Plants for your garden
22. History of NJ Cranberries & Harvest
23. Landscape Weed ID & control
24. Succulents and Cacti for the home garden
25. Pondless Water features
26. Growing Hardy Tropicals

10:45-11:45

10. Creative Approaches to Brewing Coffee
11. Plant Problems and Solutions
12. "Uh-Oh!" Plants
13. Flowering Shrubs for Your Garden
14. Gardening on a Shoestring
15. Herbs: Planting, growing, harvesting
16. Growing Tomatoes Successfully
17. The Organic Approach to Butterfly gardening

2:30-4:00

27. Fresh Flower Arranging (additional fee)
28. Hostas for Garden Texture
29. Organic landcare for the homeowner
30. East Care Roses
31. Mixed Border
32. Beekeeping 101
33. Healthy Garden Soil
34. Arranging Plants in the landscape
35. Best Management Practices: Proper Pruning

There are four convenient ways to register:

- Call 732-932-9271
- Fax 732-932-8726. Include credit card info or a copy of your check, money order or purchase order
- Mail to: Registration Desk, NJAES Office of Cont. Professional Ed., Rutgers University, 102 Ryders Lane, New Brunswick, NJ 08901-8519. Enclose check payable to: **Rutgers University**
- Web: www.cpe.rutgers.edu

Brown Marmorated Sink Bugs

The Brown Marmorated Stink Bug (BMSB) overwintered in my house , how about yours? I know they did because many of you called and told me so. Here are some commonly asked questions and answers:

What damage do they do? Adults and nymphs are sucking insects that use their proboscis (mouth parts) to pierce the host plant to feed. Most of our stink bug damage occurs in late summer or early fall. BMSB feed on ornamental plants, peppers, tomatoes, apples, peaches, Asian pears, soybeans, field and sweet corn, grapes, and late blueberries.

What should homeowners do this spring? Be on the lookout for eggs that are elliptical and light green in color. They are deposited in a cluster of 20-30 eggs on the under-side of leaves. Know what they look like. Destroy them.

Do brown marmorated stink bugs sting and/or bite? No. The brown marmorated stink bug does not have the physical capacity to sting or bite. Their only means of defense is their characteristic "stink".

Why does the brown marmorated stink bug collect in large clusters? When a brown marmorated stink bug finds a site that is suitable for overwintering it releases a chemical called an aggregation pheromone. The aggregation pheromone is a scent that attracts other brown marmorated stink bugs to the area. The aggregation pheromone is not the same chemical that causes them to stink.

Will killing the brown marmorated stink bug attract more? No. While this is true for some types of insects it does not occur with the brown marmorated stink bug.

Are all stink bugs invasive or foreign to the United States? No. All stink bugs belong to the order *Hemiptera*, family Pentatomidae with different species occurring throughout the world. We have several native stink bugs in the United States. One example would be the common green stink bug, *Acrosternum hi-lare*.

How long does the brown marmorated stink bug live? Adult brown marmorated stink bugs tend to live between six to eight months.

Do brown marmorated stink bugs have any natural enemies (predators and parasitoids) in the United States? Yes. Since the brown marmorated stink bug is not native to the United States it is unlikely that its natural enemies came with it when it was introduced into the country. However, there are various native natural enemies that do feed on brown marmorated stink bugs including predatory stink bugs, assassin bugs, and two egg parasitoids. Unfortunately, they attack many species of insects thus only helping to reduce the population of the brown marmorated stink bug.

Are brown marmorated stink bugs a problem in their native range in Asia (China, Japan and Korea)? Yes. The brown marmorated stink bug is an agricultural pest of fruit crops and soybeans in Asia. They are also a household nuisance pest in Japan and exhibit the same overwintering behavior that they do in the United States.

If the brown marmorated stink bug cannot harm people or homes, why are they a problem? Aside from being a nuisance to homeowners and tenants of apartments, townhouses, condominiums and office buildings the potential exists for the brown marmorated stink bug to become a significant agricultural pest in the East. In fact, severe damage to apples and pears has already been seen in parts of Maryland, New Jersey, Pennsylvania and West Virginia.

Are the brown marmorated stink bugs breeding in my home? Are they making some kind of "nest"? No. During the winter months the brown marmorated stink bug enters a type of hibernation called diapause. During this time they do not feed and do not reproduce. In fact, females are incapable of reproducing until early spring.

Will the brown marmorated stink bug damage my home? No. They are a nuisance to homeown-

ers, and tenants of apartments, townhouses, condominiums and office buildings because they are large, can occur in large numbers and fly; however, they cannot cause any significant structural or cosmetic damage to your home.

Your website says to remove any brown marmorated stink bug in my home manually, why can't I just use a "bug bomb" or something similar? The use of aerosol-type foggers "bug bombs" or other insecticides may kill brown marmorated stink bugs present indoors, but will not prevent more from entering a structure. These materials are also not labeled for this purpose and therefore not legally allowed. Their use may also create a hazard to people using the structure. Moreover, leaving large numbers of dead brown marmorated stink bugs in hard to reach places like attics may attract other pests such as carpet beetles and mice.

How to Control the Brown Marmorated Stink Bug

Brown Marmorated Stink Bug (BMSB) adults primarily overwinter inside protected shelters, such as homes and not in the leaf litter as many other species of stink bugs. The adults begin moving to their overwintering locations in early-mid September and continue until the first frost. During the winter, they do not reproduce or feed, if any occurs, it is minimal. They are plant feeders and will not bite people or pets.

Placement of screens over windows, doors and vents, removal of window air conditioners and caulking cracks in windows and doorframes will deter the adults from entering. Removal of window air conditioners is important, as numerous BMSB will enter this way. If small numbers occur indoors, they can be removed either by hand or by using a shop-vacuum.

If large numbers are observed or have been observed in previous years, you may wish to contact your local pest control company who can do a perimeter pesticide spray. This must be done at the appropriate time (when the insects first appear) and control may be difficult to achieve. It is important to consider the effects of pesticides in your home before any pesticide applications occur. You may also purchase and apply insecticides yourself. Please follow label instructions, as well as proper safety and application procedures.

Eggs of the Brown Marmorated Stink Bug



Nymphs of the Brown Marmorated Stink Bug



Adult Brown Marmorated Stink Bug



Integrated Pest Management

Integrated Pest Management (IPM) is a method of pest control that aims to minimize plant damage as well as environmental hazard. It is often called a common sense approach to pest control. IPM is the integration of various strategies to keep pest populations at tolerable levels in a cost effective and environmentally sound manner. When we utilize this decision-making process regarding the pest, host, environmental conditions, and control options we are working with nature instead of trying to annihilate it.

The first step to IPM is to strive for healthy plant growth. Be sure to select the right plant for the right place based on hardiness, sun or shade requirements, and soil preference. What kind of moisture does this plant need? Is the pH correct? How is the soil fertility? Check the care tag on the plant or look it up. Plants placed in the wrong location will not thrive and will be susceptible to problems. Once plants are established, meet their needs by watering, weeding, and fertilizing.

Secondly be a watch dog. Look for holes in leaves, discoloration, wilting, or leaf drop. Look for anything that is not normal. Bring it in to us at that time. Trying to remember six months ago what a disease or leaf damage looked like is not helpful. The earlier a plant problem is observed, the better chance you'll have of getting the problem under control. Know where to look for the insect damage and their life cycle and habits.

Next, identify the cause of the plant problem. What are the symptoms and what is most likely the cause? Scout for insects under leaves. Identify using a garden reference or bring it in to the Extension Center. Know what pests are found on your garden plants. Never use a pesticide without identifying the pest and researching an alternative control measure first. At this time, scout for beneficial insects that may be present. Learn to recognize beneficial insects in their various life stages. An application of a nonselective insecticide could kill the natural predators and halt this fortunate situation.

Once the pest is identified, it is important to know more about the pest in order to choose an effective control measure. It is necessary to know the life cycle. Some adults are harmless, such as adult moths, but the larval stage, caterpillars, can cause extensive damage. Adult scale insects are hard to kill, but the crawler stage is very vulnerable to insecticides.

Another factor to think about is threshold level. This is population density at which control measures are needed to prevent unacceptable levels of damage. Is there cause for worry? A few grubs in the lawn are tolerable but 10-20 per square foot may be over the limit for some grass species. Damage thresholds vary with grass species, management type and climatic conditions. The better maintained the turf and the more extensive the root system, the higher are the damage thresholds.

IPM is a philosophy of management that may involve several different methods of controlling a pest that is environmentally safe and will keep the pest from causing economic damage. These methods may include the use of cultural practices, mechanical control, biological controls and chemical controls.

Build-a-Rain Barrel Workshop

Rain barrels are a great way to capture and recycle rain water for gardening. Join us for a hands-on workshop designed to educate participants on the benefits of rainwater harvesting. Workshop participants will build a rain barrel to take home.

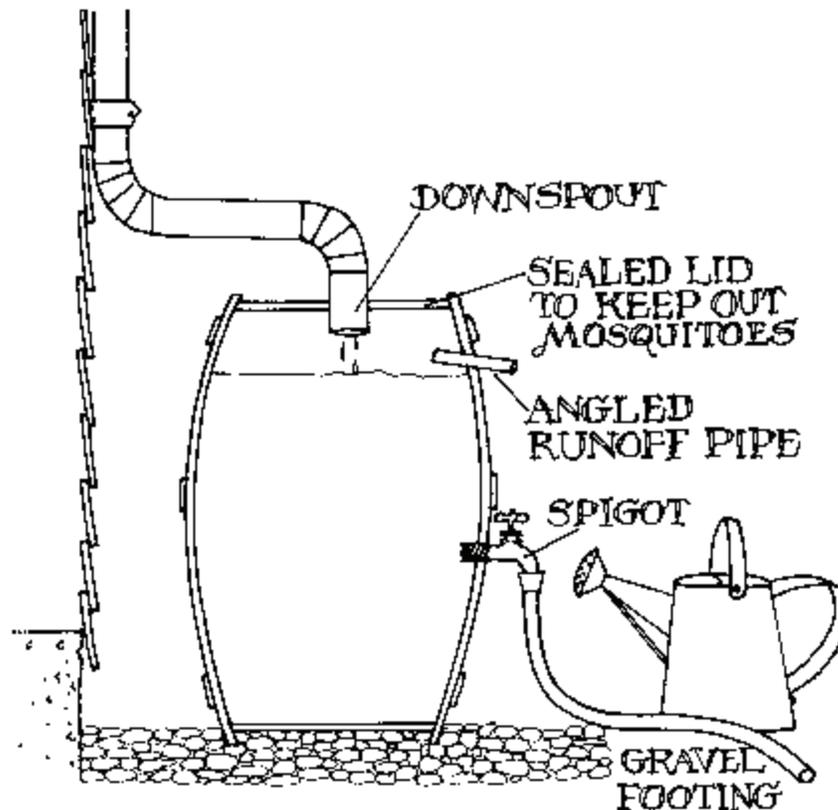
When: April 13, 2011

Where: Rutgers Cooperative Extension, 291 Morton Avenue (between Rosenhayn and Carmel), Millville, NJ

Time: 6:00-9:00 p.m.

Cost: \$35.00 registration fee includes instruction and materials for building one rain barrel.

Register: Call 856-451-2800 x4 or send a check payable to **Extension Service Programs Account** to the above address (Att: Viola Carson) to reserve your space.



Eco Fair



I hope to see you at the Eco Fair on May 7th at the Wheaton Arts and Cultural Center.

You will receive information, ideas, resources, products and motivation to live more sustainably. There will be eco-friendly crafts for children, and instructions on building a rain garden. A sustainable life-style fits with the cycles of nature, has a sound economic base and respects human, animal and plant life. Sustain means to hold up, to give support, to supply with sustenance and nourishment. Backyard composting is the very essence of this.

Reducing, reusing, and recycling all take thought. If we think sustainable and live sustainable, we will leave the world a better place for future generations.

"Living Green" is another term which simply means making daily choices that enhance, rather than just reduce the impact on our environment. The Environmental Protection Agency estimates that nearly 16% of the waste in landfills is made up of yard waste. Yard waste is second only to paper products in the landfill. Over 6.7% of municipal solid waste that is taken to landfills is food waste. These yard clippings and food waste can easily be composted. Every year, each person throws away 1200 pounds of organic garbage. This can all be composted to improve our soil and make humus. More than half of the trash a family throws away every year is organic. Visit the CC Improvement Authority's sponsored Compost Demonstration Site at the Eco Fair this year. Several different composters are on display all year.

Master Gardeners Come to the ECO Fair

What: ECO Fair

Where: WheatonArts, 1501 Glasstown Road, Millville

When: Saturday, May 7th

Time: 10:00 a.m. - 5:00 p.m.

Admission: Free

This is an exciting event for the beginning gardener to the expert gardener! Can't find an answer to that nagging garden question from last season, this is the place to get your answers.

Come visit the Master Gardeners for an exciting self-guided tree tour, a composting demonstration and how to make a rain garden. They will also have many wonderful items for sale. There will be many different herbs, Rutgers Ramapo and Moreton tomatoes.

There will be Master Gardeners on hand throughout the day to answer your many gardening questions.

Things to do in March



Spring is almost here! After this dreary winter, I'm ready for some nice weather. Here's a list of tasks for the month:

- Till or turn the vegetable garden soil when it's at the proper moisture level. FS129
- Add lime to lawns and gardens only when a soil test recommends it. FS797
- Sow seeds of dahlia, snapdragon, verbena and leaf lettuce indoors.
- Use dormant oils to combat scale insects and mites when the temperature is above 40°F and when freezing temperatures are not predicted for a few days and before the buds begin to open. FS866
- For a full-sun border, try mixing colors of perennial coneflower and Shasta daisy with annual globe amaranth. Place the taller coneflower toward the rear of the bed and Shasta daisy toward the front with the globe amaranth mixed in between.
- Rake and remove debris from the lawn when it's dry, have lawn mower serviced and blades sharpened.
- Fertilize your lawn. Call the Extension office at 451-2800 x4 for a fact sheet. FS633
- Remove dead asparagus shoots from last year's growth. NE221
- If you want to raise fruit in your garden, try grapes, raspberries, or strawberries. It is much less difficult to succeed with them than with tree fruits, and you'll get much faster results. FS214 , 97 & 98
- Submit a soil sample for testing to determine how much lime and fertilizer your lawn and garden areas will need. Soil sampling packets with instructions are available at the Extension Office for \$20.00 for full analysis or \$3.00 for pH level testing. FS797
- Prune grapes, raspberries, blueberries, fruit trees and summer-flowering shrubs early in the month when the temperature is above freezing.
- Remove black knot fungus 18" below the growth on cherry, peach and plum trees.
- If the soil dries out against a house under the eaves where rain rarely reaches, water well during a thaw to prevent loss of plants.
- Pinch off early buds from developing pansies to encourage plants to branch and form more buds.
- Watch for sale prices on fertilizers and pre-emergent crabgrass killer.
- Cut back the dried foliage of ornamental grasses.
- Sow grass seed as soon as possible. FS584
- Particularly good choices for your cutting garden are phlox, daisy, dahlia, cosmos, aster, gladiolus and lily.
- Start broccoli, cabbage and other cabbage family crops indoors by the middle of the month. They should be planted outdoors between the middle and end of April.
- Check stored bulbs, tubers and corms. Discard any that are soft or diseased.
- Many herbs including chives, parsley and thyme are also well-suited to baskets.
- Plant pea and spinach seeds and onion, shallot and garlic sets on St. Patrick's day, weather permitting.
- Branches of forsythia, spirea and dogwood can be forced for indoor bloom. Make long, slanted cuts when collecting the branches and place the stems in a vase of water. Change the water every four days. They should bloom in about three weeks.
- Mulch heaved perennials; replant them when the weather is more settled.
- Late winter is the time to prune many deciduous trees. Look over your plants now and remove dead, dying, unsightly parts of the tree, sprouts growing at or near the base of the tree trunk, crossed branches and V-shaped crotches.
- Repot and begin fertilizing houseplants, woody plants and fruit trees.
- Purchase new 40 watt, cool white fluorescent bulbs for starting your seedlings. Check seedling requirements. Tomatoes need 16 hours of light.

Gardener's Checklist for April



This is the first month for serious outdoor gardening! Check out the tasks below:

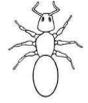
- Seed bare spots in the lawn early in the month. FS584 and 108
- Prune ornamental grasses.
- Prune your roses, except for the climbing varieties. FS944
- Remove the winter mulch from roses after the middle of the month. FS 944
- Follow Extension's fruit spray schedules. FS 101, 112, 113, 114, 115 and 116
- Divide summer and fall-blooming perennials.
- Rake winter debris from your lawn before mowing.
- Apply dormant oil sprays for insect control when the temperature will be above freezing for 24 hours.
- Start celosia, cosmos, marigold, annual phlox and zinnia seeds indoors at mid month.
- Are those swarming insects termites or ants? Can you tell the difference? FS338
- Apply pre-emergent crabgrass killer when forsythia is in full bloom.
- Fertilize established trees and shrubs. FS31
- Harden-off or condition transplants prior to moving them to the garden. Plant cabbage, broccoli and collards the third week.
- Direct seed beets, carrots, leaf lettuce, mustard greens, bok choy and radishes around the middle of the month. FS562
- Plant strawberries, rhubarb, asparagus and small fruit plants as early in the month as possible.
- Plant gladiolus corms.
- Plant daylilies, delphiniums, painted daises and phlox.
- Remove spent flowers from spring flowering bulbs. Fertilize with 5-10-10 at 2 lbs. per 100 square feet.
- Sharpen the lawn mower blade. Mow the lawn no shorter than 2 1/2". FS119
- Sow hardy annual flowers like calendula, clarkia, larkspur and sweet pea.
- Turn the compost pile and keep it moist. FS74 and 117
- Protect well-developed strawberry buds from frost injury by applying straw mulch when freezing temperatures are forecasted.
- Start eggplant, pepper and tomato seeds indoors. FS787
- Do not fertilizer newly planted trees or shrubs.
- Prune early Spring flowering shrubs immediately after flowering and before new growth begins.
- *Have a great April!*

Gardener's Checklist for May

Gardening gets into full swing this month! Here's a list for your monthly job jar:

- Eco Fair, May 7th at WheatonArts, 10-5:00. Free Admission. Food, music, green vendors and info.
- Mow the lawn at a height of 2½ to 3 inches while never removing more than 1/3 of the leaf blade. Leave clippings on the ground.
- Your lawn needs one inch of water per week. FS829
- Apply broad-leaf herbicides to control weeds in the lawn. FS119
- Check your lawn insect pests and apply the correct control according to label directions. FS814
- Remove seed stalks from rhubarb as soon as you see them. Harvest rhubarb through early June.
- Harvest mature asparagus beds for 6 to 8 weeks only.
- Lift and divide old chrysanthemum plants or set out new plants purchased or grown from cuttings. Pinch back mums when they are about six inches tall for bushier plants.

- Remove daffodil and tulip flowers as they fade. Leave the foliage in place until it turns brown and dies.
- Plant dahlia and canna tubers mid to late May.
- Control euonymus scale now before their hard shells form.
- Prune spring-flowering shrubs after the flowers fade.
- It is not too late to sow directly into the soil seeds of sunflower, zinnia, morning glory, portulaca, marigold, cosmos, periwinkles and gourds. Achimenes and other summer-flowering bulbs can also be planted in May.
- Pinch back the terminal growth on newly planted annual and perennial plants. This will result in shorter, more compact, well branched plants with more flowers.
- Time to plant caladium tubers, impatiens, coleus, begonias and pentas in shady areas.
- Replace mulch materials in flower beds and borders to conserve moisture and reduce weed growth.
- Prune climbing roses as they complete their spring bloom season. Remove dead or weak wood as needed.
- Take a critical look at your landscape while at the height of summer development. Make notes of how you think it can be better arranged, plants that need replacement, overgrown plants that need to be removed and possible activity areas that can be enjoyed by family members.
- Use the right tool for the job and make sure each is in top working condition. A sharp edger makes short work of edging walkways and borders, whereas a dull one can double your time and make it look like a bad haircut.
- Transplant on cloudy days and make sure you keep the delicate exposed roots of your seedlings and plants protected from drying out.
- Harvest some of your well rotted compost to make high grade soil for your transplants. Make compost teas and give a good drink to your young plants after transplanting. Use it immediately. It doesn't keep.
- If you see pests on shrubs or plants, eliminate now. If you aren't familiar with the bug you see, bring it to the Extension Office.
- Geraniums that weathered the winter indoors need to be cut back and repotted with new soil or have some good compost worked in.
- Put markers out for your plants. Often late maturing plants are forgotten and dug up inadvertently which can sometimes destroy them.
- Remove and destroy bagworms from trees and shrubs.
- Stay on top of the weeds by pulling them as soon as you see them, once a week, or after a rain.
- Once there is no threat of frost, usually by mid-May, tender plants such as tomatoes, corn, peppers, egg-plant and vine crops can be planted outdoors.
- Make successive plantings of beans and sweet corn to extend the harvest.
- Thin seedlings of early planted crops to spacing specified on seed packet or plant tag.
- Harvest early plantings of radishes, spinach and lettuce.
- Scope out a spot in the yard to start a compost pile.
- Research rain barrels to help save on water bills and protect plants during periods of drought.
- *Have a magnificent May!*



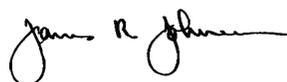
Rutgers Cooperative Extensions Fact Sheets

FS #	Fact Sheet Name
Fact Sheet 002	Brown Marmorated Stink Bugs (new)
Fact Sheet 13	Rain Garden
Fact Sheet 31	How to fertilize shade trees
Fact Sheet 58	Mulches for vegetables
Fact Sheet 74	Backyard leaf Composting
Fact Sheet 108	Renovating your lawn
Fact Sheet 117	Using leaf compost
Fact Sheet 119	Weed control in home lawns
Fact Sheet 129	Planning a vegetable garden
Fact Sheet 221	Asparagus Beetles
Fact Sheet 316	IPM
Fact Sheet 329	Rain Barrel Part I
Fact Sheet 338	Subterranean termites
Fact Sheet 399	Vole ecology
Fact Sheet 584	Seeding your lawn
Fact Sheet 678	Growing tomatoes in the home garden
Fact Sheet 797	Soil testing for home lawns and gardens
Fact Sheet 814	Managing diseases of landscape turf
Fact Sheet 866	Using horticultural oils
Fact Sheet 944	Roses and their care
Fact Sheet 1118	Rain Barrel Part II
Fact Sheet 1127	Rain Barrel Part III
Fact Sheet 1139	Fresh Fruit & Vegetable Handling Guidelines for Food Pantries
Fact Sheet 1144	Bagworm <i>Thyridopteryx Ephemeraeformis</i> (Haworth) (new)
Fact Sheet 1146	Rhododendrons & Azaleas: Injuries, Diseases and Insect Damage (new)
Fact Sheet 1147	Lilacs (new)
Fact Sheet 1148	Western Conifer Seed Bug (new)
Fact Sheet 1149	Pantry Pests (new)
Fact Sheet 1150	African Violet Care (new)
Fact Sheet 1151	Hollies for New Jersey (new)
Fact Sheet 1152	Hydrangeas in The Garden (new)
Fact Sheet 1153	Growing Dahlias (new)
Fact Sheet 1154	Orchids on the Windowsill (new)
Fact Sheet 1155	Cannas (new)
Fact Sheet 1156	Keeping Geraniums Over Winter (new)
Fact Sheet 1157	Petunias in the Garden (new)

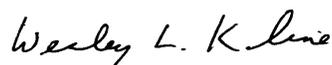
Call 856/451-2800 x4 ask for Viola Carson. When calling to request a fact sheet refer to the Fact Sheet by FS# or by name. All fact sheets are free unless otherwise noted.

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

Quick Facts: 2011 New Jersey Fertilizer Law, A2290

The New Jersey Fertilizer Law, A2290, was conceived to protect all New Jersey surface and ground waters from impairment by minimizing nitrogen and phosphorus loading that may be derived from lawn fertilizer. Generally, excess nitrogen is a threat to coastal water (estuaries) quality while excess phosphorus is a greater concern for fresh water quality. Both nutrients are also important for plant growth and health.

This law:

- establishes statewide fertilizer standards, pre-empting the multitude of local municipal ordinances.
- requires professional fertilizer applicators to undergo training and become certified.
- limits the time that fertilizer can be used: fertilizer may not be applied during the “blackout dates” of November 15th – March 1st for consumers, and December 1st – March 1st for professionals.
- prohibits fertilizer application during or just before heavy rainfall, onto an impervious surface, or onto frozen ground.
- restricts the amount of nitrogen used per application as well as the total for the year:
 - Professionals: can apply no more than 0.7 pound of water-soluble-nitrogen per 1000 sq. ft. per application, and the total nitrogen applied cannot exceed 1 pound of nitrogen per 1,000 sq. ft. per application. The annual total for all applications should not exceed 4.25 pounds nitrogen per 1,000 sq. ft.
 - Consumers: fertilizers products, when applied according to label directions, will apply no more than 0.7 pound water-soluble-nitrogen per 1000 sq. ft. per application, and the total nitrogen applied cannot exceed 0.9 pound of nitrogen per 1,000 sq. ft. per application. The annual total for all applications should not exceed 3.2 pounds of nitrogen per 1,000 sq. ft.
- restricts fertilizer content.
 - fertilizer sold as consumer/retail products must have at least 20% of its nitrogen content in slow-release form
 - fertilizers that contain phosphorous can not be applied to turf except when:
 - 1) a soil test, no more than three years old, indicates the need for phosphorus;

- 2) establishing turf and vegetation for the first time;
 - 3) repairing or re-establishing turf;
 - 4) applying liquid or granular fertilizer under the soil surface, directly to roots; or
 - 5) the fertilizer consists of manipulated animal or vegetable manure (organic sources). In this case, phosphorus can be included if no more than 0.25 pound of phosphorus per 1,000 sq. ft. is applied, when used according to instructions on the container.
- stipulates that fertilizer bag label language follows AAPCO standard for turf fertilizer label to avoid the issue of a NJ only turf fertilizer label.
 - establishes buffers. Fertilizer containing nitrogen or phosphorus can not be applied to turf within 25 feet of any waterbody, except where a drop spreader, rotary spreader with a deflector, or targeted spray liquid is used, then the buffer may be reduced to 10 feet. A professional applicator may apply one “rescue treatment” annually to turf in a buffer as per rules above.
 - sets fines for noncompliance: \$500 fine for the 1st offense and up to \$1000 for the 2nd and each subsequent offense for professional applicators. No fines for consumers.
 - exempts commercial farms and golf courses, except that no person, other than a certified professional fertilizer applicator or a person trained and supervised by the certified fertilizer applicator, may apply fertilizer to a golf course.

When will specific parts of the law go into effect?

- Effective Immediately: Sections 1: Definitions; Section 2: Prohibited fertilizer applications when: raining, on impervious surfaces, before March 1st or after December 1st or any time ground is frozen, and Section 9: Authorization for DEP in consultation with Department of Agriculture to adopt rules. Effective January 5, 2012 -One (1) year from date of signing, the bill will go into effect requiring: All professionals to be certified; Setting limits of nitrogen content to be used by consumers and professionals and banning the use of phosphorous without soil test.
- January 5, 2013 –Section 11 (label and content requirements) shall take effect two (2) years after the date of signing outlawing fertilizer products that do not meet the new content standards set by the law.

Remember to keep up with all the news! Visit our website for

Present/past issues of “What’s Growing On.....”

<http://Cumberland.njaes.rutgers.edu/>

Public Notification and Non-discrimination Statement

Rutgers New Jersey Agricultural Experiment Station Cooperative Extension educational programs are offered to all without regard to race, religion, color, national origin, ancestry, age, sex, sexual orientation, gender identity and expression, disability, atypical hereditary cellular or blood trait, marital status, civil union status, domestic partnership status, military service, veteran status, and any other category protected by law. Rutgers Cooperative Extension encourages individuals with disabilities to participate in its programs and activities. If you need special accommodations, have questions about physical access, or require alternate means for program information, please contact your local Extension Office. Contact the State Extension Director’s Office if you have concerns related to discrimination, 732-932-5000, ext. 584.

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