



“What’s Growing On...”

Volume 13 Number 4 Winter 2010 Edition Published Quarterly

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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.

Thank you to the Cumberland County Master Gardeners for volunteering on the helpline and on their county-wide projects this year.

FROM THE DESK OF VIOLA CARSON

As I write this, it is 50° and we have not celebrated Thanksgiving yet. Many people are preparing for traditional seasonal dinners, with that a big thank you goes out to our farmers for sweet potatoes, pumpkin, cranberries, white potatoes, grains, apples, celery, onions, herbs, corn, beans, carrots, and the list goes on.

This year I hope you are thankful for what you have been blessed with. Some have had hours cut or have lost their jobs completely, some are battling cancer, while others have to let go as a child becomes independent. We all have things in life we have no control over. Gardeners through the years have gone to the garden or cared for some houseplants or took a walk for some horticulture therapy. Everyone needs to find little spot in the world where we can unwind and heal with nature.

As always we thank you for your calls and we hope you like the fact that you can talk to a person who will listen and try to help. Some of you I know by the sound of your voice. Its good to hear from you through the seasons.

I challenge you in 2011 to continue to reduce, reuse and recycle. Fifty years ago storage containers were made of glass. Pyrex and Glasbake were used again and again. They are back in the kitchen again or for some they never left. Try to find another use for an item that was about to be taken to the trash or see if someone could use it or donate to groups that help others.

Anthracnose on tomatoes

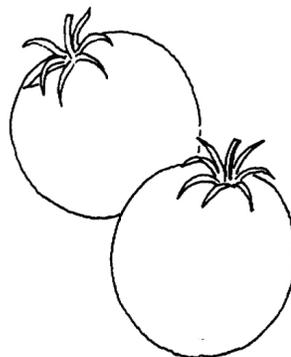
Anthracnose is a common, but serious disease of ripe and overripe tomato fruit. This disease can occasionally cause severe damage to tomatoes, especially when red fruit is allowed to develop. Anthracnose can reduce a bountiful harvest into rotted fruit in a few days when the weather is warm and moist.

Small, water soaked, circular lesions develop under the skin of fruit as it ripens. These become sunken and dark. Numerous dark specks, the fruiting bodies of the fungus, develop in the lesions in concentric rings. In moist, warm weather, these black bodies ooze gelatinous pink spore masses. In warm weather the fungus and soft rot bacteria, which enter the split skin over the lesions, spread internally forming a semi-soft decay, which renders the fruit worthless.

The fungus survives between crops on infested plant debris in the soil. Early in the growing season, spores from the soil splash onto lower leaves of the tomato plant. Few symptoms develop on infected leaves, but rain splashing onto developing green fruit can carry the spores produced on foliage. Infected green fruit will not develop symptoms of anthracnose until they begin to ripen. Ripe fruit is very susceptible to this fungus.

Rotate 3 years between pepper and tomato crops. Weed control is very important, since the pathogen has a broad host range that includes many common weeds.

- Plant tomatoes and peppers in well-drained fields to avoid excess soil moisture as the fruit ripens.
- Apply overhead irrigation during the early part of the day so that plants dry before sundown. Staking plants and mulching with straw or plastic help to reduce losses to anthracnose.
- Remove fruit from the garden that shows disease. Destruction of infected fruit helps to prevent buildup of inoculums in the soil.
- If conditions favor development of anthracnose, a preventative spray program may be required to give adequate control of this disease. Apply registered fungicides according to product instructions when weather conditions are above 65°F and the foliage is likely to remain wet longer than 6 hours. Applications to tomatoes should begin when the first fruit is larger than a walnut. Applications to peppers should be started as soon as fruit is present.



Hybrid Lily's Beauty is Twice as Nice

If you're looking for a unique gift for the holidays, there's a new lily that keeps on giving -- with beautiful blooms. Richard Merritt, professor of the School of Environmental and Biological Sciences at Rutgers University, began work on this hybrid series at the New Jersey Agricultural Experiment Station in 1996. Since then, he has worked with colleagues Nick Vorsa and Tom Gianfagna, "using conventional breeding with crosses between *L. longiflorum* and asiatics, orientals and trumpet lilies," Merritt says.

Four years ago, they noticed something special about these cultivars. "These new lines produced magnificent flowers from small to moderate size bulbs, the stems were extra thick and did not require staking, and the bulbs were tolerant of our cold winter temperatures," Merritt says. "They can be grown in pots indoors for the holidays, producing one or more flowers per bulb that each last nine days or more," he says. Plants will stay healthy in pots and can be moved to the outdoor flower garden in March or April. You can expect another flush of blooms in June of the same year.

Plants grown from these bulbs produced a high degree of hybrid vigor and were extremely prolific. The first two cultivars being offered are 'Ramapo Red Passion,' which grows 12 inches to 14 inches tall, and 'Ramapo Wine Passion,' which grows 22 inches tall. The first exhibits a brilliant scarlet red flower and the second produces a unique palette of maroon to purplish hues.

Use and care: These dwarf cultivars can be used to provide a splash of color to border plantings. They can be planted alone or in masses to make a bold statement.

Water indoor plants once the soil is dry, but avoid overwatering. These lily cultivars are drought tolerant, but avoid withholding water during flowering to prevent early flower drop. Place potted houseplants near a window that provides maximum light. In many cases, this may be a window with unshaded southern or eastern exposure.

Plant outdoors in March or April in well-drained soil and water as needed. For garden and bedding plants, place in areas with full to moderate sunlight. Plants perform best in well-drained, fertile soils that are slightly acidic, but can tolerate a wide range of conditions. The dwarf Ramapo cultivars do not require staking and are quite hardy. Plants can be mulched with 2 inches of compost or other organic materials for extra winter protection. Very light applications of fertilizer are all the plants require. Add well-rotted compost to garden soils or use very minimal applications of dried manure.

The first two cultivars are available through Jersey Flora Inc. at jerseyflora.com. At this site, you will find detailed information and images of the new releases. Jersey Flora is a joint venture between Jersey Flora Inc. and Rutgers University. "To my knowledge, no other lily blooms multiple times in one season," Merritt says. There are at least two dozen more cultivars in the pipeline for future release. One will grow as a low groundcover and produce abundant white flowers.

Learn more: Visit njaes.rutgers.edu or ifplantscouldtalk.rutgers.edu for gardening information and fact sheets. You can go to njaes.rutgers.edu/county/ for a listing of local County Cooperative Extension garden help-line contacts.





Camellia Scale

The leaves or bark of camellias frequently become encrusted with scale insects. The insects feed on plant juices and cause injury or death to the plant. The most common species of scales found on camellias is tea scale, peony scale, and wax scale.

When the scales are in the crawler stage, spray leaves and twigs with malathion, Ortho Iso-tox Insect Killer or Ortho Orthene Systemic Insect Control. Early the following spring, before new growth begins, spray with dormant oil spray to control overwintering insects.

The Virginia Camelia Society recommends the following:

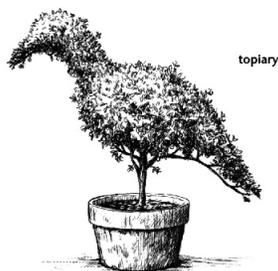
Control of Scale: Scale infestations are more difficult to control when populations are heavy. Homeowners should make spray applications when the first sign of scale is seen. Oil emulsion sprays will give effective control if applied properly. This is a contact insecticide. For it to be effective, the plants must be thoroughly covered. Oil emulsion sprays should be applied only during the spring and fall when the temperature is 40 - 85°F. Spraying in the heat of the day may result in burning the leaves. As a general rule, apply no more than three times per year with at least 60 days in between sprays. Oils are compatible with other insecticides.

English Ivy as a Houseplant

There are about 10 species of ivy from Europe, temperate Asia, North Africa, the Canary Islands and the Azores, but the most familiar and the only one to thrive indoors is *Hedera helix*, which is available in many named varieties. Ivy can be used as a trailing plant or to make a topiary plant indoors. A simple wreath ring set on edge in a large pot or an obelisk with ivy trailing up it can start the project. English Ivy is one of the plants NASA tested and lists as good for improving air quality. They recommend having 15 to 18 good sized houseplants in 6-8- inch containers for a 1,800 square foot house.

Outdoors this non native vine quickly becomes a mono culture plant snuffing out native plants and climbing trees and damaging them to the point of death. It can be cut back in April to keep it from getting too rampant. The Philadelphia Flower Show has been a section of topiary English Ivy dogs in action. This is a great use for English ivy.

Ivy needs medium to bright light found from a north or east facing window, but avoid direct sunlight because Ivy likes to be cool. Water when the top inch of soil becomes dry and feed once a month with a liquid fertilizer and take to the shower to remove dust and help with hydration. The shower may also help wash away spidermites if they begin taking up residency. Also check regularly for scale insects.



Oak Leaf Gall

**Lee Townsend, Extension Entomologist, and Eileen Eliason
University of Kentucky College of Agriculture**

Galls are irregular plant growths which are stimulated by the reaction between the plant's hormones and powerful growth regulating chemicals produced by some insects or mites. Galls may occur on leaves, bark, flowers, buds, acorns, or roots. Leaf and twig galls are most noticeable. The inhabitant gains its nutrients from the inner gall tissue. Galls also provide some protection from natural enemies and insecticide sprays. Important details of the life cycles of many gall-makers are not known so specific recommendations to time control measures most effectively are not available.

Gall makers must attack at a particular time in the year to be successful. Otherwise, they may not be able to stimulate the plant to produce the tissue which forms the gall. Generally, initiation of leaf galls occur around "bud break" or as new leaves begin to unfold in the spring.

Leaf galls rarely affect tree health so control is rarely justified. However, an application of carbaryl (Sevin) at bud break may reduce infestations of some galls. It is difficult to spray moderate to large trees without special equipment and the necessary protective clothing to protect the applicator from spray drift.



Accidental Poisoning Cases

We recently received two calls in our office concerning accidental poisoning:

1. A child ate inkberries. Inkberry-roots, shoots, leaves and berries are poisonous when eaten in quantity.
2. A dog ate mushrooms. Mushroom-Amanita phalloides is the most commonly reported severely toxic species of mushroom.

If you have similar events of accidental poisoning, call 1-800-222-1222 for assistance.

Holly Trees



Joe from Vineland was concerned that his holly trees had no berries this year, as it had a heavy berry crop last year. There are several reasons for low fruiting and a multi-seasonal observation may be needed.

First, hollies are dioecious; this means the male (staminate) and female (pistillate) flowers, similar in appearance, with four to six small white petals, are produced on separate plants on the current season's growth.

Flowering begins in May. Pollination is done by insects, including bees, wasps, ants, yellow-jackets, and night-flying moths. Staminate trees, the males, should be planted close to fruit-producing trees. Although there are some female hollies isolated by distance from pollen-bearing trees, good fruit crops are produced regularly. The berries or drupes ripen from September through December and remain on the tree through most of the winter unless eaten by birds or other wildlife.

Seed production may be low in years of heavy spring rain, as rain can diminish the wide dissemination of pollen. Pollen is powdery and clumps when wet. A late frost can kill the spring flowers, eliminating a fruit crop. Seeds are dispersed mainly by birds and small mammals.

Holly grows best in full sun but it can tolerate shade. Holly prefers a moist, acid soil with organic matter like found in the woods. Their roots grow close to the surface, so don't cultivate around them. Mulch will keep down weeds and keep roots cool. Evergreen hollies need to be protected from the winter's wind.

Have you noticed that some holly berries remain green all winter and never turn the color they are suppose to? The problem is caused by a holly berry gall midge called *Asphondylia ilicicola*. This insect belongs to the gall midge family of which several hundred are known to attack various trees and shrubs. The larvae of most of them cause the formation of galls (growths or swellings on leaves or twigs) by their feeding. The adult gall midges are small, mosquito-like flies. The midge larvae feed inside the holly berries preventing them from turning red or yellow in the fall. Seeds of infested berries are aborted and the green fruits don't attract birds. The larvae live and complete their life cycle inside the undisturbed berries. In the spring when the hollies are in flower, the berry midges emerge, mate and lay their eggs in the new, developing holly berries.



Local Botanical Illustrator Comes to RCE

- WHAT:** Local Botanical Illustrator, Beverly Hughes
- DATE:** Tuesday, December 14, 2010
- TIME:** 1:00 p.m.
- PLACE:** Rutgers Cooperative Extension
291 Morton Avenue
Millville, NJ 08332 (between Rosenhayn & Carmel)



Botanical Illustrator, Beverly Hughes, will show her work on Tuesday, December 14th at 1:00 p.m. at the Rutgers Cooperative Extension & Education Center, 291 Morton Avenue, Millville. The showing will be hosted by the Cumberland County Master Gardener's Association. Beverly will have her botanical cubes for sale, as well as her illustrations.

A \$3.00 donation is suggested. Light refreshments will be served. If you have any questions, please call Viola Carson at Rutgers Cooperative Extension 856-451-2800 ext. 4. The office is open Monday-Friday, 8:30 a.m. to 4:30 p.m.

Wreath Decorating Workshop

- WHAT:** Wreath Decorating Class
- DATE:** Thursday, December 9, 2010
- TIME:** 10:00 a.m. - 12:00 noon
- PLACE:** Rutgers Cooperative Extension
291 Morton Avenue
Millville, NJ 08332 (between Rosenhayn & Carmel)



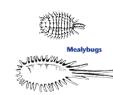
A Wreath decorating class using natural plant materials will be hosted by the Cumberland County Master Gardener's Association. Join us as we make a wreath to take home using the ring and wire wrapping technique.

The workshop will be held at the Rutgers Cooperative Extension & Education Center, 291 Morton Avenue, Millville, NJ (between Rosenhayn & Carmel). Participants are asked to bring an armful of evergreens, wire cutters, gloves and clippers to use in the preparation of the wreath.

The Cost of the class is \$20.00 per person (checks should be made payable to Extension Service Programs Account). Pre-registration is required as the class size is limited. For questions or to register, call Viola Carson or Tammy Commander at 856-451-2800 ext. 4. The office is open Monday-Friday, 8:30 a.m. to 4:30 p.m. The Extension Office is handicapped accessible.



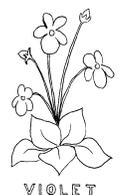
- Salt on sidewalks and driveways can injure nearby lawns and plants. Try sawdust or sand instead. Cat litter works well if you haven't obtained the less expensive materials.
- Make plans for your spring and summer gardens.
- Checks out the new offerings from mail order companies. Make sure plants are hardy for this area before ordering.
- Mealy bugs on house plants can be killed by touching them with cotton dipped in alcohol.
- Economical "sticky stakes" for trapping whiteflies and aphids can be made by cutting bright-yellow cardboard or plastic, such as recycled detergent bottles or margarine tubs, into strips. Coat with petroleum jelly. Insert into pots or hang near problem areas.
- Inspect perennial beds for heaved plants during warm periods. Mulch around heaved plants. Don't push them into the soil! Dig and replant them in the spring.
- Your local delicatessen or fast food restaurant often has surplus 5-gallon plastic pickle buckets. This is a good size for growing containerized plants and for general use in the garden.
- Start forcing shrubs indoors.
- Limit traffic over dormant lawns. Grass is easily broken now and the crown of the plant may be severely damaged or killed.
- Check germination of leftover seeds.
- As you look through seed catalogs, choose disease-resistant varieties. They make gardening easier and they reduce the expense of pesticides.
- Some mail order seed companies offer pelletized seeds of lettuce, carrot, and a few other small-seeded crops. Pelletizes seeds have a special coating to make them larger and easier to handle.
- One way to file seeds as they come in the mail is to use index card tabs to divide a cardboard file box into categories for each vegetable or flower. As new seeds arrive, place them alphabetically into the proper slot. Drop notes into the file to remind yourself what is on order to avoid duplication.
- Remove bagworms from evergreens.
- Buy yourself a new house plant. The English Ivy is a foliage plant that will survive even in a dark basement apartment. Its silver-splashed leaves will grow well at very low light levels and it takes a minimum of care, as long as night temperatures don't drop much below 65°.
- Consider using ferns in shady areas of your landscape this year.
- How energy efficient is your landscape? Do you have evergreen trees or shrubs blocking a window where the sun's warmth would be welcome now? Consider replacing them with a deciduous plant that would let sun in during the winter but cast cooling shade in the summer.
- When dusting the furniture, consider washing the dust from your houseplants.
- Paint the handles of garden tools red or orange. This will preserve the wood and make the tools easier to locate in the garden.
- Have the lawn mower and tiller serviced.
- Perform a soil test. The pH scale ranges from 1 to 14 with 7 being the point at which soil has a neutral reaction. The majority of plants, including vegetables, grow in soils which have a slightly acid reaction, with a pH of 6.0 to 6.5. Once exception is the ericaceous plants which include azaleas, rhododendrons, andromedas and blueberries. They require a more acid soil with a pH of 4.5 to 5.5.
- Wood ashes will raise soil pH. Use them only if the pH is less than 7.0 based on a soil test. The safe rate of wood ash application to lawn or gardens is 15 to 20 lbs. per 1000 square feet per year. Remember, a little wood ash is beneficial, but a lot is not.
- The flower for January is the carnation.
- *Have a Happy and Healthy New Year!*



Gardener's Checklist for February

Here's a list for your monthly job jar:

- Have your lawn mower and rototiller serviced.
- Take stock of leftover seeds. Get them organized and do some germination testing if they're more than a few years old or if storage conditions have not been cool and dry. Even under ideal storage conditions, some vegetable seeds have a fairly short life and probably will not be good one or two years after purchase. These include sweet corn, onion, and parsnip.
- Purchase new cool-white fluorescent bulbs for your indoor grow lights.
- 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. Remember that plants require water during the winter to replace water lost due to wind desiccation and lack of rain or snow.
- Make final plans for the annual and vegetable gardens and get the seeds ordered soon. A frequently overlooked factor in vegetable garden planning is the date of the family vacation. Choose planting dates and varieties carefully, so your garden won't be ready for a full harvest when you are out of town.
- Look for sales on fertilizer, seed starting supplies, tools and organic mulches.
- Get your hand tools organized and sharpened. Check the handles on shovels and hoes to make sure they're firmly attached.
- Branches of forsythia, pussy willow, 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. For something unique to force for winter flower arrangements, consider red maple, buckeye, birch, hickory, larch or oak branches.
- Repot your houseplants. Check them closely for insects.
- Plan a perennial border. Particularly good choices for a cutting garden are daisy, dahlia, aster, gladiolus and lily.
- Mulch perennials that have been heaved from the soil. Replant them in the spring.
- Miniature roses can be a colorful addition to your landscape. They range from pure white to golden yellow to dark red. They grow well on containers and planters, or they can be used as a low-growing border or mixed in beds/borders with other perennials.
- Make labels for your spring garden. Plastic milk jugs or bleach bottles cut in strips 1" by 6 to 7" work well. Use permanent ink markers to write on them.
- Continue to feed the birds.
- Have you had a soil sample analyzed within the past few years? Soil sampling packets are available at your local Extension office.
- Give a living plant as a present for Valentine's Day.
- If you're anxious to get some seeds started, plant onion and leek seeds indoors anytime this month.
- The flower of the month is the violet.
- *Get ready for spring! It will be here next month.*



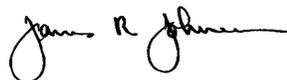
VIOLET

Rutgers Cooperative Extensions Fact Sheets

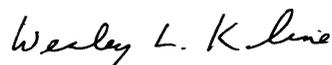
FS #	Fact Sheet Name
Fact Sheet 2	Brown Marmorated Stink Bugs
Fact Sheet 13	Rain Gardens
Fact Sheet 47	Diagnosing & Controlling Fungal Diseases of Tomatoes
Fact Sheet E60	Indoor Care of Christmas Trees
Fact Sheet 74	Backyard Leaf Composting
Fact Sheet 129	Planning your Vegetable Garden
Fact Sheet 245	Stink Bugs
Fact Sheet 329	Rain barrel #1: How to Build a Rain Barrel
Fact Sheet 399	Vole Ecology
Fact Sheet 449	Caring for your Poinsettia
Fact Sheet 797	Soil Testing for Home Lawns and Gardens
Fact Sheet 805	Vermicomposting
Fact Sheet 1118	Rain Barrels #2: Installation & Use
Fact Sheet 1127	Rain Barrels #3: Build a Rain Barrel from a Plastic Trash Can

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
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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

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VINELAND, NJ

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Cooperative Extension of Cumberland County

291 Morton Avenue

Millville, NJ 08332-9791

RUTGERS
New Jersey Agricultural
Experiment Station

Tree Seedling Catalog 2011



- Seedlings available in conifer and hardwood species
- All public and private landowners are eligible
- Minimum order is 100 seedlings per species, or one packet
- Orders accepted from December to April 1
- Delivery/Pickup between March 15 and April 30

Pick-Up Locations

Date/Time

- | | | |
|---|--|--|
| 1 | New Jersey Forest Service
240 Main St (Route 206 North)
Andover, Sussex County
(973) 786-5035 | 4/14/11 8:30-4 |
| | | 4/15/11 8:30-4 |
| 2 | Round Valley Recreation Area
1220 Lebanon-Stanton Road
Lebanon, Hunterdon County
(908) 236-6355 | 4/2/11 9-2 |
| 3 | Cheesequake State Park Office
300 Gordon Road
Matawan, Middlesex County
(732) 566-2161 | 4/6/11 9-4 |
| 4 | Washington Crossing State Park
Route 546 at 579
Titusville, Mercer County
(609) 737-0623 | 4/8/11 9:30-3 |
| | | 4/9/11 9-3 |
| | | 4/10/11 9-3 |
| 5 | New Jersey Forest Nursery
370 East Veterans Hwy Rt.527-528
Jackson, Ocean County
(732) 928-0029 | Weekdays 7-4
Call 3 days in advance |
| 6 | Brendan T. Byrne State Forest
Route 70 & Route 72
New Lisbon, Burlington County
(609) 726-1621 | 4/7/11 9-4 |
| 7 | Parvin State Park
701 Almond Road
Pittsgrove, Salem County
(856) 358-8616 | 4/1/11 9-4 |
| 8 | NJ Forest Service
5555 Atlantic Avenue
Mays Landing, Atlantic County
(609) 625-1124 | 3/31/11 9-4 |



Oaks

	1-4 packs	5-24 packs	25-75
each pack of 100	\$40	\$35*	\$30*

Oak	size	benefits
Black oak <i>Quercus velutina</i>	12-32"	
Chestnut oak <i>Quercus prinus</i>	16-40"	
Northern red oak <i>Quercus rubra</i>	12-32"	
Pin oak <i>Quercus palustris</i>	12-32"	
Swamp white oak <i>Quercus bicolor</i>	12-28"	
White oak <i>Quercus alba</i>	12-28"	
Willow oak <i>Quercus phellos</i>	8-18"	

* Multiple pack discount only applies when purchasing one species. For instance, 3 Buttonbush + 2 Black gum = \$175 (\$35 per packet) but 5 Buttonbush = \$150 (\$30 per packet).

** Atlantic white-cedar 2 yr - CALL for pricing.

Conifers

	1-4 packs	5-24 packs	25-75 packs
each pack of 100 1yr	\$25	\$20*	\$12*
each pack of 100 2yr	\$35	\$30*	\$20*

Conifer	size	age	benefits
Atlantic white-cedar <i>Chamaecyparis thyoides</i>	6-18"	2	
Eastern redcedar <i>Juniperus virginiana</i>	6-10"	1	
Loblolly pine <i>Pinus taeda</i>	10-14"	1	
Norway spruce <i>Picea abies</i>	8-18"	2	
Pitch-loblolly hybrid <i>Pinus rigida x taeda</i>	8-14"	1	
Pitch pine <i>Pinus rigida</i>	8-14"	1	
Shortleaf pine <i>Pinus echinata</i>	8-14"	1	
White pine <i>Pinus strobus</i>	9-12"	2	

Key to benefits

Aesthetics	Stream Buffer
Forest Products	Watershed Protection
NJ Native Species	Wildlife Habitat
Soil Protection	Windbreak

Hardwoods & Shrubs

	1-4 packs	5-24 packs	25-75
each pack of 100	\$35	\$30*	\$25*

Hardwood/Shrub	size	benefits
Black cherry <i>Prunus serotina</i>	14 - 38"	
Bayberry <i>Myrica pensylvanica</i>	6 - 19"	
Beach plum <i>Prunus maritima</i>	16 - 40"	
Black gum <i>Nyssa sylvatica</i>	16 - 34"	
Black walnut <i>Juglans nigra</i>	16 - 30"	
Buttonbush <i>Cephalanthus occidentalis</i>	12 - 30"	
Eastern redbud <i>Cercis canadensis</i>	10 - 18"	
Elderberry <i>Sambucus canadensis</i>	12 - 24"	
Green ash <i>Fraxinus pensylvanica</i>	14 - 30"	
Hackberry <i>Celtis occidentalis</i>	8 - 22"	
Persimmon <i>Diospyros virginiana</i>	12 - 30"	
Silky dogwood <i>Cornus amomum</i>	12 - 36"	
Silver maple <i>Acer saccharinum</i>	14 - 34"	
Sugar maple <i>Acer saccharum</i>	12 - 28"	
Sweetgum <i>Liquidambar styraciflua</i>	10 - 20"	
Tulip poplar <i>Liriodendron tulipifera</i>	12 - 26"	

* Multiple pack discount only applies when purchasing one species. For instance, 3 Buttonbush + 2 Black gum = \$175 (\$35 per packet) but 5 Buttonbush = \$150 (\$30 per packet).

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NJ Native Species	Wildlife Habitat
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