### **Content:**

1: Garden Gab 2: Salt Damage 3: Composting 4: Garden Invaders 5: Deer Resistant Landscape Plants 6: Rain Barrels and Mosquitos 7: Diseases In The Home Garden 8: Seasonal Checklist

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New Jersey Agricultural Experiment Station COOPERATIVE EXTENSION CUMBERLAND COUNTY

# What's Growing On?

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### GARDEN GAB

Spring is the season for new growth. If you haven't already now is the time to pick your varieties. You will soon begin sowing some seed indoors, and transplanting outside. If you run into any problems in your home garden our webiste has a webpage titled "Resources for Homeowners". Each topic will direct you to scientific resources. If you have any additonal questions or issues stop into the office during the week or give us a call. Our office is open to the public Monday through Friday 8:30am-4:30pm for soil testing, insect and disease identification, or any gardening and lawn care advice.

### Resources for homeowners located on our website:

Lawns & Alternatives Plant Problems Weeds & Toxic Plants Small Space & Urban Gardening Insect & Wildlife Pests Native Plants Trees & Shrubs Vegetable Gardens Rain Barrels & Gardens

## SALT DAMAGE



Plants bordering roadways and driveways can suffer significant salt damage throughout the winter. This damage is caused by rock salt, or sodium chloride, used to melt ice and snow. Salt spray can be deposited on plants by passing cars or salt can be absorbed in runoff water. Plant damage symptoms include discoloration, reduced plant vigor, bud damage, nutrient deficiancy, early leaf drop, marginal leaf burns and more. To protect your plants that are close to roadways and driveways you can provide physical barriers using burlap, plastic, or wood. On personal property you can decrease salt use by combining salt with sawdust, sand, or cinders. Planting salt tolerant varieties may also help decrease damage.

Moderately tolerant to tolerant trees and shrubs:

Acer platanoides (Norway maple) Aesculus hippocastanum (Horse-chestnut) Ailanthus altissima (Tree of heaven) Baccharis halimifolia (Eastern baccharis) Betula sp. (, Gray birch, Paper birch, Yellow birch, Sweet birch) Cryptomeria japonica (Japanese cryptomeria) Cupressocyparis leylandii (Leyland cypress) Elaeagnus angustifolia (Russian olive) Euonymus japonicus (Japanese spindle) Fraxinus americana (White ash) Gleditsia triacanthos (Honeylocust) Ilex sp. (American holly, Inkberry, Yaupon holly) Juniperus sp. (Chinese juniper, Common juniper) Lonicera tatarica (Tatarian honeysuckle) Picea pungens (Colorado blue spruce) Pinus sp. (Austrian pine, Japanese black pine, Mugo pine)

## **C**OMPOSTING

Benifits of Composting:

- Reduces fertilizer use
- Reduces water use
- Stimulates healthy root developement
- Reduces chemical inputs
- Avoids garbage collection
- Benefits the enviroment
- Improves soil texture
- Increases water holding ability

Composting is used to speed up decomposition using semi-controlled conditions. You can start your compost pile with leaves, rotten food, manure, and a variety of other items that would typically be waste. Composting can be done in a loose pile; it is ideal to have compost contained in a bin with sides that allow air movement. Keeping compost moist is necessary for microbial activity, the pile will also need to be turned periodically. In just a few weeks after starting your pile you should notice the center of the pile is becoming hot, heat is an indicator that things are decomposing effectively.

Composting can be done in both slow and fast harvest. Slow harvest takes 12-28 months and is done by adding yard waste gradually over several months. Fast harvest is done in 5-15 weeks, it is done by adding both green and brown material at once while adding water and turning with a pitch fork twice a week. Green materials include grass clippings or vegtable scraps. Leaves can be used as brown material for your compost pile.





Homemade Compost Bin:

Store Bought Compost Bin:

## Garden Invaders

**Voles:** Voles are small ground dwelling rodents. Most damage they cause occurs between fall and winter because other food sources are scares. The winter months are when voles cause the most damage as snow cover provides them protection and they can venture into wide open areas of your lawn. Though they will usually become less of a problem in the spring and summer, there are several ways you can get rid of them in your yard. Since they are most active in the winter, that is the best time to set traps for them. You can place live traps or snap traps along tunnels baited with peanut butter or apples. Beware you may catch other small mammals like chipmunks. Repellents, fumigants, and toxic baits are often not advised as they are usually ineffective.

**Aphids:** Aphids are a common pest to both houseplants and garden crops. As the weather warms up, aphid eggs that overwintered on plant material will begin to hatch. Check your plants regularly for these small, pear-shaped insects that can range in color from green, red, black, or yellow. They feed on the sap of plants and you will often find them on new growth, flower buds, and the underside of leaves. When infestations occur it causes curled leaves, yellow foliage, and stunted plant growth. Aphids are capable of transmitting plant viruses and can reproduce quickly, so it is important to frequently check for them and control them rapidly. When populations are small, you can easily get rid of them by rinsing affected leaves off with water or manually picking or smushing them. Using pesticides is often not necessary for aphid problems in home gardens.

**Spotted Lanternflies:** This sap-sucking leafhopper is now established across New Jersey. They begin to lay their eggs in the fall and continue to do so into December. Spotted Lanternflies undergo several stages of growth where it transforms from a small black and white nymph to a red and black nymph to a winged adult. Though these insects have the potential to cause damage to certain plants and crops, they are primarily a nuisance pest in the home landscape. If you have maples, willows, birches, roses, grapes, tree of heaven, or black walnut plants on your property, you should monitor them closely for spotted lanternfly as these are some of their favorite plants to feed on. However, pesticides are unnecessary in most situations and the use of homemade pesticides with dish soap, vinegar, or gasoline are not recommended at all. Sticky band traps and circle traps are effective ways to manage them on vulnerable trees. If you come across Lanternfly eggs, you should scrape them off into a bag or container and smush them.

If you come across any of these species or others that you are unsure of, bring a sample into the Rutgers Cooperative Extension office in Millville. Specimen can be placed in a bag and put in the freezer or submerged in alcohol.

### Deer Resistant Landscape Plants

If the appearance of your yard is something your passionate about it is best to consider pest damage before planting. Landscape design can add new purpose to your yard however pest damage can quickly undo all your hard work. Deer are herbivores therefore landscape plants can be a direct target of deer in the area. Although no plant is deer proof the lists on the right provides examples of annual plants and ornamental grasses that are rarely victim to deer related damages.

If you do choose plants more susceptible to damage, it may be beneficial to add additional protection methods, such as fencing or physical barriers. Individual plants can be protected with flexible netting or wire caging, and tree seedlings can be covered with plastic tubes. The risk of deer invading your landscape design varies on the population in your area as well as weather conditions, in addition to the plants grown.

White Tailed deer are over populated in the state of New Jersey and a previous study found the animals responsible for 79% of wildlife related agricultural damage. Deer damage occurs in the form of feeding, rubbing against plants, or trampling of crops and plant. It is characterized by a torn or jagged appearance on vegetation or a ragged break on woody material such as shrubs.

### RARELY DAMAGED ANNUALS

Ageratum houstonianum	Ageratum
Antirrhinum majus	SnapDragon
Brugmansia sp.	Angels Trumpet
Calendula sp.	Pot Marigold
Cleome sp.	Spider Flower
Helichrysum	Strawflower
Heliotropium arborescens	Heliotrope
Lobularia martimia	Sweet Alyssum
Matricaria sp.	False Camomile
Myosotis sylvatica	Forget-Me-Not
Nicotiana sp.	Flowering Tobacco
Papaver sp.	Рорру

### RARELY DAMAGED ORNAMENTAL GRASSES

Acorus sp.	Japanese Sweet Flag
Andropogon sp.	Big Bluestem
Arrhenatherum elatius	Varigated Oat grass
Arundo donax	Giant Reed
Calamagrostis sp.	Feather Reed Grass
Carex sp.	Japanese Sedge
Eragrostus curvula	Weeping Love Grass
Fargesia sp.	Clump Bamboo
Festuca glauca	Blue Fescue
Hakonechloa macra	Hakonechloa
Imperata cylindrica	Japanese Blood Grass
Koeleria glauca	Large Blue June Grass
Sorghastrum nutans	Indian Grass

### **RARELY DAMAGED BIENNIALS**

Digitalis purpurea	Common Foxglove
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## Rain Barrels and Mosquitos

Storage of rainwater is a sustainable practice to conserve water as well as prevent runoff. Water can be stored in rain barrels that are inexpensive and easy to install, however, they can become a mosquito breeding ground. There are 3,500 mosquito species worldwide, 63 of those are found in New Jersey. Mosquitos pose a threat because they harbor disease such as West Nile, Eastern Equine Encephalitis, and Malaria in humans as well as heartworm in dogs. Mosquitos bite to obtain blood that they convert to energy to produce eggs. Mosquito control in New Jersey is based on integrated pest management.

Mosquitos undergo complete metamorphosis. The basis of this life cycle is standing water. After water has been collected for 72 hours it should be inspected for larvae. They may not be visible at first. However, as they grow vertical larvae can be seen wiggling at the water's surface. C shaped pupae tumble just under the surface. Mosquitos require air, so if you have larvae in you barrel you can suffocate them using cooking oil, which will float to the surface.

Rain barrel construction should attempt to prevent mosquitos from entering to lay eggs. Attempt to use your collected water as soon as possible after a rain event as mosquitos are attracted to the water. Rain events in New Jersey are typically less than .5 inches, to handle this volume of water multiple rain barrels can be linked together with hose and runoff can be directed towards a nearby garden. Hoses should be 8-10 feet to discourage mosquitos from traveling up in search of water. Barrels can be periodically disinfected with a bleach solution to reduce microbial activity. You can cover the top of the rain barrel with window screen material. Remove barrels in the winter and store them upside down to prevent standing water.





Figure: Mosquito life cycle

## DISEASES IN THE Home Garden

**Powdery Mildew:** Favored by hot and dry weather, powdery mildew can be incredibly destructive in the home garden. Symptoms include the white fuzzy lesions on vegetative parts or the plant including the stem and root. As new foliage develops it becomes infected as disease spreads throughout the plant. When powdery mildew is left uncontrolled it can quickly defoliate and kill the entire plant. Infections cause stems to brittle and weaken decreasing shelf life.

**Downy Mildew:** A foliar disease caused by long periods of cool and wet weather. Symptoms include irregular coloring or yellowing of the leaf surface. Downy mildew only sporulates on the underside of leaves, it produces dark colored spores in

white fuzzy fungal growth. Significant infections cause burning to the plant and will persist as long as cool wet weather does. Premature defoliation caused by Downy Mildew will reduce fruit size and predispose fruit to sunscald injury. Figure: White Mold

White Mold: This can be an issue in home gardens if the same area is used to grow every year and if that same area has susceptible crops, for example beans. Cold wet weather helps the development of white mold, infected fruit develop soft sunken areas. Sclerotia may appear around infected areas to act as survival structure. Long crop rotation is necessary to resolve white mold, as well as disposing of infected fruit.

**Angular Leaf Spot:** A bacterial disease that can originate on seeds. It is important to start with clean seed. Angular leaf spots start as

small spots on the leaf surface, they appear as wet spots and as lesions expand they develop the angular shape appearance. As the lesions dry out they fall out leaving holes on infected leaves. Warm wet weather is beneficial to Angular leaf spots. Plants can outgrow disease if they are healthy enough, still allowing fruit production. During heavy rain disease can be carried in the water to healthy plants which predisposes fruit to other pathogens.

Controlling diseases in the home garden starts with good cultural practices as well as proper crop rotation and the selection of disease resistant varieties. Applying mulch in your garden can also reduce weeds as well as control moisture. Mature fruit should be picked as soon as they are ready to decrease exposure to late season disease.

Figure: Powdery Mildew





## Seasonal Checklist

- Pick you varieties to begin planting.
- Make a time line to transplant outdoors.
- Remove infected plant material from vegetable and flower beds.
- Get your soil tested.
- Look for spotted lanternfly eggs.
- Water your plants deeply.
- Mow grass 3" or taller to help it survive the heat.
- Plant brocolli, brussel sprouts, and kale indoors starting in March.
- Leave seed heads for birds to eat.
- Buy local produce!
- Avoid pruning trees and shrubs.
- Order bulbs.
- Plant trees or shrubs.
- Remove summer annual weeds such as crabgrass before they go to seed.
- Provide birds and pollinators with water.
- Check for scale insects on your trees and shrubs.
- Visit a local botanical garden.

Interested in receiving bi-weekly pest and disease reports for southern NJ? The Rutgers Master Gardeners of Cumberland County will be sending out bi-weekly integrated pest management (IPM) reports to inform gardeners of current and upcoming garden pests, and how to control and prevent them. This free report will be sent right to your email, starting next spring. Call 856-451-2800 x4 if you would like to receive this informative report.

## **R**esources

### Salt Damage:

https://ag.umass.edu/landscape/fact-sheets/impact-of-salts-on-plants-how-to-reduce-plantinjury-from-winter-salt https://plant-pest-advisory.rutgers.edu/impact-of-road-salt-on-adjacent-vegetation// https://extension.umaine.edu/ipm/ipddl/plant-disease-images/pine-salt-damage/

### **Composting:**

https://njaes.rutgers.edu/fs811/ https://njaes.rutgers.edu/FS074/

### Deer Resistant Landscape Plants:

https://njaes.rutgers.edu/deer-resistant-plants/ https://njaes.rutgers.edu/fs1202/

### Garden Invaders:

https://njaes.rutgers.edu/fs1293/ https://extension.psu.edu/voles https://ag.umass.edu/turf/fact-sheets/vole-damage-to-lawns https://extension.umn.edu/yard-and-garden-insects/aphids#using-pesticides-344413 https://ipm.ucanr.edu/PMG/pestnotes/pn7404.html https://www.nj.gov/agriculture/divisions/pi/prog/pests-diseases/spotted-lanternfly/about/ https;//njaes.rutgers.edu/spotted-lanternfly/

Rain Barrels and Mosquitos https://njaes.rutgers.edu/fs1240/

**Diseases In The Home Garden:** https://njaes.rutgers.edu/E310/ https://plant-pest-advisory.rutgers.edu/controlling-white-mold/

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