

The Green Thumb

Lawn and Garden News You Can Use

September 2008

Fall is the Time for Lawn Improvement

David Robson, horticulture educator

Early September is a good time to renovate the lawn. A well-established turf area this fall means a better chance that it will survive next summer's heat, humidity, and potential drought.

Warm days, cool nights, and fall rains favor turf establishment. Also, fewer weed seeds germinate in the fall, which means less competition for new grass seedlings.

Although soil preparation is time consuming and sometimes expensive, it is crucial. Properly preparing the soil is the first step toward having a beautiful lawn. If there is one aspect NOT to overlook, this is it.

For existing areas where a decent stand of grass is present and weeds are few, it may be acceptable to overseed the lawn with little preparation. Before seeding, mow the grass to a 3/4-inch height to allow germinating seedlings enough light to support their growth.

Drop spreaders or slit seeders can be used to distribute seed over the area. Then water thoroughly, and the seeds will start to grow and fill in the turf. Slit seeders are often used by lawn care companies, but homeowners can sometimes rent them at equipment rental stores. These seeders create a groove in the soil and deposit the seed into the groove. This method insures good seed-to-soil contact, which is necessary for rapid germination and establishment. If a drop seeder or spreader is used, lightly rake the area to work the seed into the soil.

For areas with more weeds than grass, it would be wise to start from scratch. You can cover the area with black plastic to kill the plants, though this usually takes four to six weeks. Sod cutters can be rented to remove the top inch of roots and grass crowns. Another option is to apply glyphosate (Round-Up, Kleen-Up) to the entire area.

Glyphosate will kill any non-woody plant it touches, but only what it touches. The entire plant, including the root system, is usually killed. Death generally occurs within days, although the visual symptoms may take a week to appear.

After spraying, wait 7 to 14 days and then remove the dead sod and weeds. A mechanical sod cutter can be rented. It's possible to lightly rototill the area and rake out the clods. Just make sure you do not till the dead material into the ground because some of it may not actually be dead, or the dead sod could contain weed seeds. It's best to place the dead plant material in the compost pile.



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Continued on page 3

Cedar-Apple Rust

Elizabeth Wahle, horticulture specialist

If your apple leaves have developed orange spots with black specks in the center, you most likely have cedar-apple rust, a fungal disease.



Pycnia on the upper side of a leaf

Cedar-apple rust initially develops on the upper leaf surfaces shortly after bloom. Lesions are pale yellow; but as they expand, they turn orange, which distinguishes them from other types of leaf spots. Later, small black dots (fungal fruiting structures called pycnia) appear in the orange rust spots. By late summer, tiny fungal tubes (aecia) emerge from the lower leaf surfaces.



Aecia on the under side of a leaf

Extensive leaf infection may cause early defoliation, which in turn weakens the tree. Fruit may also be affected. Fruit infection by cedar-apple rust is most common near the blossom end and can severely mar the fruit. Yellowish orange lesions, which are similar to, but much larger than, those on leaves develop on the infected fruit. The lesions have a dark green border and are up to 1/16 inch deep; the tissue beneath the lesions is unaffected.

The disease cycle of cedar-apple rust is relatively complex. Cedar-apple rust involves two hosts, three types of fungal fruiting structures, and requires two years to complete its disease cycle. The fungus overwinters in reddish-brown galls on cedar trees. When wet in the spring, orange gelatinous tendrils, or “horns,” containing resting spores (teliospores) emerge. The resting spores germinate to form reproductive spores (basidiospores) which are carried by wind to apple trees. Fruit are most susceptible for two to three weeks starting at bloom; leaves are most susceptible when four to eight days old.

Once release of reproductive spores from cedar trees has ceased (generally by second- or third-cover spray), there is no further infection of apple tissues. Unlike apple scab, cedar-apple rust lesions on apple leaves will not produce spores that re-infect apple leaves and fruit. Instead, fungal mating occurs in rust lesions (pycnia), which result in the formation of tiny fungal tubes on the lower leaf surfaces (aecia). The fungal tubes release spores (aeciospores) which are carried by wind to cedar trees where they infect and complete the disease cycle. Galls start to develop on cedar shortly after infection but do not exude gelatinous tendrils containing resting spores (teliospores) until the second spring after infection.

Some apple cultivars are resistant to cedar-apple rust. Those considered very susceptible include cultivars ‘Golden Delicious,’ ‘Goldrush,’ ‘Jonathan,’ and ‘Rome Beauty.’

Removing cedars within a 2-mile radius of an orchard will disrupt the disease cycle, but this method is usually not practical in most settings. The spores that infect apples are produced and released from cedar galls starting at about the pink stage of flower bud development through first- (7 to 10 days after petal fall) or second-cover spray (7 to 10 days later); this is the most critical time for control with fungicides.

In the home setting, fungicides such as captan (common component of Tree Fruit Spray) directed at scab will not control rust. Spectracide Immunox Multi-Purpose Fungicide (active ingredient myclobutanil) is labeled for control of rust on apple.

Question Corner

Answer provided by Martha Smith, U of I Extension horticulture educator

Q. I have mushrooms popping up in my yard. Is there any way to prevent them from growing in the lawn?

A. High humidity and excess moisture can cause mushrooms to pop up, almost overnight it seems.

Mushrooms, sometimes called toadstools, are the reproductive or fruiting stage of fungi. They are quite common following prolonged wet weather and often disappear as soon as soils start to dry.

The majority of mushrooms are nuisance problems, appearing repeatedly if conditions are right. They may have an odor, but they cause no damage to the grass or to our landscape plants. Most fungi in lawns are beneficial because they decompose organic matter buried in the soil, releasing nutrients that are then available for plant growth.

The mushroom is the reproductive stage. At that stage, it can produce and release tiny spores that are carried by the wind to new sites. The mushrooms growing in your lawn could have blown in from your neighbor down the street or across town.

When spores reach a favorable place to grow, they germinate and send out long, thin filaments called hyphae.

Hyphae decompose wood such as an old stump or the roots left behind from a tree cut down several years ago or construction debris buried after the house was built or the sunroom was added on.

A single hyphae is too small to be seen by the naked eye, but groups of hyphae can be visible as a mass of thread-like growth known as mycelium. When mycelium has developed sufficiently, mushrooms pop up. These nuisance fungi can survive in soil for years and will only produce fruiting structures when conditions are favorable.

There is nothing you can do to prevent mushrooms from coming up. Merely removing the mushrooms doesn't remove the underground portion from which they are growing.

But, removing them will prevent them from spreading more spores that can lead to future pop-ups. Simply mow them off or take them up and discard them. They may continue to appear periodically over the next several years during favorable environmental conditions until the organic matter they are feeding on is gone.

Never eat mushrooms that are growing in your lawn or garden. The majority are poisonous. Remove them to eliminate any potential attraction for curious children and pets.



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From Page 1

Rototill the area to a depth of 8 inches. Incorporate up to 6 inches of organic matter such as compost or leaf mold. Rototill several more times until the organic matter is distributed and the seedbed is loose and fine. Rake out any large clumps or clods. Establish a soil grade lower in the middle of the yard.

Also, make sure the soil is dry before tilling. If you try to work the soil while it is wet, you may destroy the soil structure. A hardpan layer usually develops on the surface several weeks later, limiting water and air movement.

For more lawn care tips, get the *Fall Lawn Care Guide* from your local U of I Extension office. Or download it at <http://web.extension.uiuc.edu/regions/FallLawnCare.pdf>.

Picklers and Slicers

Ed Billingsley, guest columnist



There are two basic groupings of cucumbers: picklers and slicers. Picklers are usually shorter and are often harvested immature. They tend to be super producers. Slicers are about 8 inches or more in length and are picked well developed. A pickling variety called 'Bush Pickle' is a good container choice. 'Carolina' is another pickler variety. 'Straight 8' is a slicer with great flavor. 'Burpless' is a hybrid that has gained wide acceptance and is considered a slicer.

Sometimes confused with the 'Burpless' is a cucumber sold as Japanese or Armenian cucumber. The fruit is pale to dark green, very long, and the fruit has ridges along its surface. These plants have a mild cucumber flavor. Many gardeners think the plant should be grown as a novelty.

Cucumbers are one of our most productive home garden vegetables. This vegetable should continue to produce all summer unless infected by the destructive bacterial wilt, a disease that is primarily introduced to the plant by cucumber beetles.

Good control of beetles is necessary throughout the summer to keep plants healthy. Insecticides need to be applied on a regular basis to protect the plant. Once the plant is infected, the vine will wilt and die. There is no cure for infected plants.

Flavor is best when cucumbers grow fast. They require abundant water and adequate fertilizer throughout the season. Cucumbers should be harvested while still green. Yellow cucumbers are mature and are of poor quality at this stage, provided they are not a new novelty variety.



Inside this Issue

Fall is the Time for
Lawn Improvement

Cedar-Apple Rust

Question Corner

Picklers and Slicers

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