



HORTICULTURE TIPS



Division of Agricultural Sciences & Natural Resources * Oklahoma State University

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GARDEN TIPS FOR JUNE

David Hillock

General Landscape

- Find someone to water plants in the house and garden while on vacation. Harvesting vegetables and mowing the lawn are a must and imply that someone is home.
- Mulch ornamentals, vegetables, and annuals to reduce soil crusting, and to regulate temperatures and moisture during hot summer months. Mulching will reduce about 70 percent of the summer yard maintenance.
- Remain alert for insect damage. Add spider mite to the list. Foliage of most plants becomes pale and speckled; juniper foliage turns a pale yellowish color. Shake a branch over white paper and watch for tiny specks that crawl. Watch for first generation fall webworm. ([EPP-7306](#))

Turfgrass

- Fertilize warm-season grasses at 1 lb. N per 1,000 square feet. Don't fertilize fescue and other cool-season grasses during the summer.
- Dollar spot disease of lawns can first become visible in mid-May. Make certain fertilizer applications have been adequate before applying a fungicide. ([EPP-7658](#))
- Seeding of warm-season grasses should be completed by the end of June (through July for improved varieties such as Riviera and Yukon) to reduce winterkill losses. ([HLA-6419](#))
- Brown patch disease of cool-season grasses can be a problem. ([HLA-6420](#))
- White grubs will soon be emerging as adult June Beetles. Watch for high populations that can indicate potential damage from later life cycle stages as grubs in the summer.

Fruit and Nut

- Renovate overgrown strawberry beds after the last harvest. Start by setting your lawnmower on its highest setting and mow off the foliage. Next thin crowns 12-24 inches apart. Apply recommended fertilizer, preemergence herbicide if needed and keep watered. ([HLA-6214](#))

Trees and Shrubs

- Vigorous, unwanted limbs should be removed or shortened on new trees. Watch for forks in the main trunk and remove the least desirable trunk as soon as it is noticed. ([HLA-6415](#))
- Pine needle disease treatments are needed again in mid-June.
- Remove tree wraps during the summer to avoid potential disease and insect buildup.
- Softwood cuttings from new growth of many shrubs will root if propagated in a moist shady spot.
- Protect trees from lawnmowers and weed eaters by mulching or using protective aerated covers.

Flowers

- Pinch back leggy annuals to encourage new growth. Fertilize and water appropriately.
- Feed established mums and other perennials.

- When picking fresh roses or removing faded ones, cut back to a leaflet facing the outside of the bush to encourage open growth and air circulation.
- Stake tall perennials before toppling winds arise.

Weed Control in Vegetable Gardens

David Hillock

Weeds rob vegetables of valuable water, light, and nutrients. Weeds often harbor insects, diseases, and nematodes that can damage vegetables and greatly reduce yields.

Mulching, hoeing, and hand-weeding are methods that can be used to control most of the weeds in the garden and to eliminate the problems of applying a herbicide and the possibility of herbicide injury to the garden crop. Good soil preparation, adequate control of weeds before planting, and planting crops when the soil is warm enough to get them up rapidly are all good practices that will help maintain a minimum amount of labor for weed control. Many Oklahoma gardeners in rural areas have ample space for gardening. If this is the case, be sure to leave enough space between rows to allow room for cultivating equipment.

Cultivation and hoeing should be done when weeds are small because weeds compete with the crops for light, water, and nutrients. Also, when weeds are large, they are much more difficult to remove without damaging the crops. Cultivation and hoeing should be done shallowly so that injury to the root system of the crop plants will not occur. Hand-weeding in the crop row is usually necessary.

Weeds may also be controlled with herbicides. However, chemical weed control in the home garden is difficult because of the diversity of the crops grown in the garden. It is hard to find an herbicide that is selective enough to remove a specific weed without the potential or probability that it will also kill or damage some of the crops in the garden. With several types of plants located close together in a small area, some may be seriously damaged by any herbicide that you might select. However, there are a few formulations available now which make them safer and easier to use. For example, glyphosate foam is easier to use and poses less risk to desirable plants. Some preemergence herbicides can also be used successfully in the garden when transplants are used or after seeds sown have emerged and matured. Visit your local garden center or county extension office for information on current preemergence herbicide products.

The best weed control in the home garden is a sharp hoe and good mulch.

Weed Control Important in Fruit Crops

Becky Carroll

When establishing new plantings, weed control is extremely important in fruit crops. Weed control is more important than even nutrition and irrigation.

Weeds compete with fruit trees, vines and bushes for water, nutrients and space. Some weeds can even shade out small new plants. But weeds also exude alleopathic compounds from their root systems. These compounds harm plant roots, reduce plant growth and eventually reduce fruit yields.

The Current Reports below detail several techniques for managing weeds both in Tree Fruits and Pecans (CR-6242) and Small Fruit Crops (CR-6243). Mulches, cover crops and herbicides are discussed with updated options for herbicide choices.

Remember the basics of using herbicides –

- ✓ Identify the weed
- ✓ Read the label for proper usage
- ✓ If new herbicide, use in test area
- ✓ Use at proper timing – crop stage, weed growth, and pre-harvest intervals
- ✓ Make sure to annually calibrate sprayer

<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1017/CR-6242web.pdf>
<http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-9473/CR-6243web2015.pdf>

Deadheading!

David Hillock

“Deadheading” is a term often heard amidst the conversations of gardeners across the country. One not familiar with the term may be somewhat startled by such a word. However, it simply means to remove old, faded, spent blooms from your plants by pinching or cutting them off. By deadheading your flowers, new blooms are encouraged and the blooming period of many plants can often be extended.

Remove old blossoms by cutting or pinching back to just above a leaf node on the stem below the flower. If the stem of the plant is somewhat woody and tough, then pruners or a pair of sharp scissors may be used. Soft herbaceous plants can be pinched by hand. When I was working as a gardener in Utah, we used a good old pair of sheep sheers to cut back the hundreds of petunias and other annual flowers we were growing. Petunias respond well to a good haircut about the first to mid-July. Just cut them back about half way, give them a shot of fertilizer and watch them bloom like crazy the rest of the summer. Other plants that respond well to deadheading include ageratum, geranium, marigold, and zinnia.

Scouting a Lawn Problem

David Hillock

As County Educators turf related problems are guaranteed to occur on a regular basis. Like any other plant in the landscape there are a number of situations and issues that will arise. Determining what the real cause of a problem is can be tricky and will take some investigative work. Outlined below are some steps that should be followed to help diagnose a turfgrass problem. Sending in samples or images of damaged turfgrass without knowing the answers to most of these questions may slow down the diagnosis process. Following these steps will help you be more successful solving your client’s turfgrass challenges.

1. What is the desirable turfgrass species present on the site? Are you absolutely certain of its identity?
2. What varieties or cultivars are present; may not be possible or necessary to know this in some situations?
3. Maturity level of lawn, age of lawn, time of establishment, source of propagation material?
4. Describe the symptoms and advance of the symptoms. Turf color, density, random occurrence or organized pattern?
5. Mechanical (human involved) patterns of damage?
6. Are the same symptoms present in surrounding lawns or in other lawns in the community/area?
7. Soil types? Consistent type or variable types?
8. Note shade patterns, slope, aspect, exposure.
9. Maintenance program, recent applications of both pesticides and fertilizers, professionally managed or cared for by the consumer?
10. When did problem first begin to appear? Multi-year problem or strictly this year?

11. What do you as the educator feel the problem is? Do you feel the information from the client is accurate?
12. What diagnostic methods have already been undertaken?
13. Samples to Plant Insect & Disease Diagnostic lab?
14. Soil testing (basic, secondary or micro?)? Differential soil testing of healthy vs. problematic?
15. Digital images shipped to specialist for review? Large scale view, medium scale view, close ups. Make sure they are clear images. If they are fuzzy to you then they will be fuzzy to us.
16. Samples of representative plants sent to specialist for ID and review?
17. Soil penetration differences via soil probe from healthy to problematic?
18. Insect monitoring using disclosing solution (2 tablespoons of lemon scented Dawn per gallon spread over 1 to 2 square foot of area).
19. Flotation test, open ended coffee can inserted as restriction ring, no soap or wetting agent added. Float insects out of turf canopy and identify.
20. Insect scouting for sign (insects or frass)?
21. Lifting turf to determine if root or stem damage has occurred?
22. Other tests performed or comments?

Powdery Mildew of Ornamentals

David Hillock

Powdery mildew is a fungal disease that affects many host plants, including ornamentals, shrubs, and trees. On some ornamental plants, such as rose, lilac, crape myrtle, oak and zinnia the disease can be very destructive. Severity of the disease depends upon many factors—variety of the host plant, age and condition of the plant, time of infection, and weather conditions during the growing season.

Although there are several different types of powdery mildew fungi, a lot of them produce similar symptoms on plant parts. Plant damage may range from an unsightly whitish powdery coverage of the foliage to drying out and browning of infected leaves. In some plants, buds may be infected and production of flowers, fruits, or nuts may be affected. If diagnosed early, powdery mildew can be effectively controlled to prevent severe damage to plants.

Symptoms – The first sign of the disease is the development of a white to gray or slightly brownish growth of mycelium over the surface of leaves or other parts. Powdery mildew fungi may also attack stems, buds, and flower petals of various ornamental plants. Powdery mildew infection of broadleaf plants may cause distortion (curling and twisting) and a reduction in size of infected leaves. When older leaves become infected, they usually show only the white patches of the fungus. Infected leaves may become distorted, turn yellow, and fall prematurely. Infected buds may fail to open and infections can spread to mature flowers, causing a flower blight. Also, nuts of the pecan can be infected, causing a reduction in quality.

Hosts (Susceptible Plant Species) – Powdery mildews are known to occur on almost all ornamental plants. Certain plant species and/or varieties are more susceptible to the disease than others. In Oklahoma, powdery mildews are common on ash, crape myrtle, lilac, oak, photinia, roses, and zinnia.

Conditions Favoring Powdery Mildews – Humid conditions with widely fluctuating temperatures increase the occurrence of powdery mildew. The disease is common in crowded plantings where air circulation is poor and in damp, shaded areas. Young succulent growth is more severely affected than older tissues. Disease development is enhanced when cool, moist nights are followed by warm daytime temperatures.

Cultural Control of Powdery Mildews – Several practices will reduce or prevent development of powdery mildew. These practices involve reducing populations of the fungus in the vicinity of the host, changing en-

vironmental conditions around the host, and selecting more resistant varieties. Before plants are purchased, it may be to the homeowner's advantage to inquire if the ornamental variety desired has any resistance to powdery mildew. If only susceptible varieties are available, avoid planting in low, shady locations. If powdery mildew becomes a problem, removal and destruction of infected plant parts, should be practiced. Pruning of crowded plant material will also help increase air flow around leaves. This reduces humidity and thus helps prevent infection. Late summer application of nitrogen fertilizer should be avoided to limit production of succulent tissue, which may be susceptible to powdery mildew infection in the fall. Water only in the mornings so that the foliage will be dry by evening.

Chemical Control of Powdery Mildews – If cultural controls fail to prevent disease build-up or if the disease pressure is too great, fungicide spraying may be necessary. The best course of action is to combine both approaches, using cultural methods as well as following a good spray schedule.

When powdery mildew has been a problem in previous years, a recommended fungicide spray schedule should be started in the spring as new growth develops. The fungicide should also be applied during the flowering period to avoid blossom blight. For suggested fungicides refer to the current OSU Extension Agents' Handbook of Insect, Plant, Disease, and Weed Control. Be sure to follow the instructions on the label for use on specific applications.

Anthracnose of Deciduous Shade Trees

David Hillock

Homeowners are justifiably concerned when foliage of their yard trees becomes diseased, especially when these diseases cause defoliation, twig and limb death, and perhaps death of a tree that has been defoliated several years in a row. Concerned homeowners need information on how to prevent or otherwise control leaf diseases.

Anthracnose is very common during wet, mild spring weather and can also occur in the fall when weather again turns wet and mild.

Anthracnose—Irregular dead areas on leaf margins, between and across and/or along veins, often moving onto the shoots and small twigs; sometimes whole leaves are engulfed.

Ash, green, and red (*Fraxinus* spp.)—The common leafspot and scorch on ash leaves is caused by the ash anthracnose fungus, *Glocosporium aridum*. Large areas of infected leaves, especially along the edges, turn brown. Premature leaf drop may occur.

Birch (*Betula* spp.)—Anthracnose of birch leaves is caused by *Glocosporium betularum*. This fungus causes brown spots with dark brown to black margins.

Maple (*Acer* spp.)—Anthracnose, caused by the fungus *Gloeosporium apocryptum*, can be serious on sugar and silver maples and box-elder, during rainy seasons. Indefinite light brown spots appear early; they may enlarge and run together causing death of infected leaves. Partially-killed leaves appear scorched. The sycamore anthracnose fungus, *Gnomonia Veneta*, also infects maple leaves.

Oak (*Quercus* spp.)—Anthracnose, caused by the fungus *Gnomonia quercina*, is a common disease of oaks. Rainy weather favors infection and defoliation may result. Infected areas frequently run together and cause the appearance of a leaf blotch or blight. The dead areas follow smaller veins and are bounded by larger veins.

Sweetgum (*Liquidambar* spp.)—Anthracnose of sweetgum leaves is caused by the fungus *Gloeosporium nervisequum*. Infection by this fungus causes black areas on the leaves.

Sycamore and London plane tree (*Platanus* spp.)— Anthracnose of sycamore and London plane tree is caused by the fungus, *Gnomonia platani* (Figure 1). The London plane tree is more resistant to anthracnose infection than are sycamore trees. Anthracnose is the most serious disease of sycamore. The first symptoms appear in early spring as the leaves begin to unfurl from the leaf buds, and at this stage the disease may be mistaken for frost damage. Infected leaves that do not drop will develop light brown dead areas, usually along the veins. The spots may enlarge to cover entire leaves and cause premature defoliation.

Walnuts and butternut (*Juglans* spp.)—Anthracnose, sometimes called brown leafspot, is caused by the fungus *Gnomonia leptostyla* (Syn. *Marssonina juglandis*). Anthracnose is a common disease of these trees. Leaflets are infected during the summer and irregular brown spots develop. Defoliation may result.

Control – Most leaf diseases of yard trees are controlled by gathering and destroying fallen, infected leaves. Where fallen diseased leaves have not been destroyed, chemical control is the alternative approach. For suggested fungicides, consult the current circular E-832, OSU Extension Agents’ Handbook of Insect, Plant Disease, and Weed Control.

During very rainy springs when leaf diseases become severe, two to three chemical applications, beginning when the leaves are first unfurling from the buds and repeated when the leaves are half grown, and again when the leaves are fully developed, will usually provide good control.

Trees that have been affected by leaf diseases every season should also be well fertilized and watered to maintain vigor. Do not fertilize during early fall. Fertilize only after the trees are dormant.



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