VEGETABLES

Mulching Tomatoes

Soils are warm enough now that tomatoes can benefit from mulching. Tomatoes prefer even levels of soil moisture and mulches provide such by preventing excessive evaporation. Other benefits of mulching include weed suppression, moderating soil temperatures and preventing the formation of a hard crust on the soil. Crusted soils restrict air movement into and out of the soil and slow the water infiltration rate. Hay and straw mulches are very popular for tomatoes but may contain weed or volunteer grain seeds. Grass clippings can also be used but should be applied as a relatively thin layer – only 2 to 3 inches thick. Clippings should also be dry as wet clipping can mold and become so hard that water can’t pass through. Also, do not use clippings from lawns that have been treated with a weed killer until some time has passed. With most types of weed killers, clippings from the fourth mowing after treatment may be used. If the lawn was treated with a product containing quinclorac (Drive), the clippings should not be used as mulch. If the weed killer used has a crabgrass killer, it likely contains quinclorac. (Ward Upham)

TURFGRASS

Controlling Yellow Nutsedge in Lawns

Yellow nutsedge is a relatively common problem in lawns, especially in wet years or in lawns with irrigation. Although sedges look much like a grass, they are different.

Unlike grasses, sedges have triangular stems, and the leaves are three-ranked instead of two-ranked, which means the leaves come off the stems in three different directions. Yellow nutsedge is pale green to yellow and grows rapidly in the spring and early summer. Because of this rapid shoot growth, it sticks up above the rest of the lawn only a few days after mowing.
This weed is a good indicator of poor drainage, but it can be introduced into well-drained sites through contaminated topsoil or nursery stock. As with many weeds, nutsedge is less competitive in a dense, healthy lawn than in an open, poor lawn.

Nutsedge is difficult to control culturally because it produces numerous tubers that give rise to new plants. Pulling nutsedge will increase the number of plants because dormant tubers are activated. However, it is possible to control nutsedge by pulling, but you must be persistent. If you are, eventually the nutsedge will die out though this will likely take more than one season.

If you were going to treat with an herbicide, it would be better to leave the nutsedge plants undisturbed so the herbicide can be maximally translocated to the roots, rhizomes, and tubers. Several herbicides are available for nutsedge control.

SedgeHammer and Hi-Yield Nutsedge & Horsetail Control contain halosulfuron and are effective and safe products. The SedgeHammer label says to apply after the nutsedge has reached the three- to eight-leaf stage. Waiting until this growth stage apparently results in improved translocation of the active ingredient to the underground tubers and rhizomes.

Products with sulfentrazone such as Bonide Sedge Ender, Ortho Nutsedge Killer and Spectracide Weed Stop for Lawns Plus Crabgrass Killer are also effective.

Research has shown that the first application should go down by June 21. If the initial spray is after June 21, mature daughter tubers may be stimulated to grow. (Ward Upham)

**ORNAMENTALS**

**Rust on Hollyhock**

Watch for rust on hollyhock. This is the most common disease on hollyhock and can cause serious injury as leaves are progressively killed through the summer. Look for yellow spots on the surface of the leaves and orangish to brown pustules on the underside. Infections can also take place on stems and green flower parts. The first line of defense is to remove all hollyhock stalks, leaves and other debris in the fall and destroy them. Remove any infected foliage you see now. Just be sure the foliage is dry so you don’t spread the disease. Continue to remove diseased leaves as soon as they show spots. Try using a fungicide such as sulfur or myclobutanil (Immunox, Immunox Plus, F-Stop Lawn & Garden Fungicide) to protect healthy foliage. Note that sulfur may burn leaves if the air temperature is over 85 degrees within 24 hours of application. Follow label directions for timing and rate. (Ward Upham)
**Anthracnose on Sycamore and other Shade Trees**

We are starting to see anthracnose on sycamore. Anthracnose is a fungal disease favored by cool, wet weather. Young leaves may wither and turn black. On older leaves, look for brown areas that follow the major veins of the leaves. In some cases, the petiole (leaf stem) is infected, which causes leaf drop. The leaf may look perfectly fine, so look for browned areas on the petiole.

In severe cases, the tree drops heavily infected leaves and may be completely defoliated. Healthy trees will leaf out again in a few weeks. Defoliation this early in the year does not affect overall tree health. Trees have plenty of time to produce new leaves and make the energy reserves needed to survive the winter.

Other types of trees that are affected by anthracnose include birch, elm, walnut, oak and especially ash. Anthracnose seldom causes significant damage to trees in Kansas, so chemical controls are usually unnecessary. Also, fungicides do not cure infected leaves. Applying fungicides now will not help. (Ward Upham)

**PESTS**

**Ants and Peonies**

This time of year we often receive questions about ants crawling on peony buds. The ants are feeding on an exudate from the bud; they do not feed on the flowers themselves. The exudates is high in sugar and therefore a good energy source for the ants. The ants also seem to help protect the buds from other insects that would like to feed on the buds. This is a symbiotic relationship one in which a relationship between two organisms works to the benefit of both. The ant gains a high value food source, and the peony receives flower-bud protection. So if you see ants on your peonies, leave them be. They are not harming the peonies. (Ward Upham)

**European Elm Flea Weevil**

We are seeing damage on elm (*Ulmus* spp.) trees caused by the larval stage of the European elm flea weevil (*Orchestes alni*). Larvae are cream-colored, legless, and found in the mines of leaves. Adults are 3.0 mm in length, red-brown in color with black spots or markings on the abdomen or wing covers. The mouthpart is shaped-like a snout since they are weevils and the hind legs are
thickened and enlarged, which allows the adults to jump when disturbed. Adults are initially active in May, and after mating, females lay eggs in the large mid-veins of new leaves. Eggs hatch into larvae that tunnel through the leaf as they feed (which is occurring now), creating serpentine-like mines that enlarge as larvae mature. Larvae eventually transition into a pupal stage, and then adults emerge in May and June. Adults primarily feed on leaf undersides creating small holes on young leaves. The feeding damage caused by both the larvae and adults will not kill an elm tree; however, extensive feeding may ruin the aesthetic appearance. Adults overwinter under loose bark and in leaf litter under previously infested trees. There is one generation per year in Kansas. Nearly all elm species are susceptible to feeding by the European elm flea weevil especially Siberian elms (*Ulmus pumila*) and certain elm hybrids with Asian parentage.

Management of European elm flea weevil involves maintaining proper tree health by means of watering, mulching, pruning, and fertilizing. Insecticides may be used to minimize damage; however, insecticides may be difficult to apply to large trees. Insecticides must be applied in May and June in order to suppress adult populations. A number of insecticides may be used including: acephate (Orthene, Bonide Systemic Insect Control), imidacloprid (Merit, Bonide Annual Tree and Shrub Insect Control, Bayer 12 Month Tree & Shrub Insect Control, Fertilome Tree & Shrub Systemic Insect Drench), or carbaryl (Sevin). However, if damage is not extensive, especially on large trees, then there be no rationale for using insecticides. For more information regarding European elm flea weevil management contact your county or state extension specialist. (Raymond Cloyd)

**Euonymus Scale**

Euonymus scales look like small white cottony spots on affected euonymus foliage. Leaves eventually turn yellow and die as feeding continues. Males are white and elongated, and females are brown and oval shaped and about 1/16 inch long. Large numbers congregate on the undersides of leaves, twigs, and stems. About 60 days are required to complete a generation. In Kansas, there are two generations per year. The first generation occurs in the spring and the second in late August to early September.

Overwintering females lay eggs that hatch in mid- to late- May or early June. This period usually occurs when fringetrees, (Chionanthus), cockspur hawthorn (Crataegus crusgalli), Beautybush (Kolkwitzia amabilis) and Late Lilac (Syringa villosa) are in bloom. Crawlers (young scale that have recently hatched) move to leaves and stems and begin to feed by sucking plant juices. Maturing males prefer leaves and females congregate on stems. We have already seen active crawlers in the Wichita area.

The crawler stage is when euonymus scale is most easily controlled. Therefore, check to be sure crawlers are present before treating. Use a magnifying lens to identify the very small crawlers. If nothing is moving, crawlers are not active yet.
Labeled insecticides include malathion and acephate (Hi-Yield Acephate or Ortho Systemic Insect Killer), permethrin (Hi-Yield 38 Plus Turf Termite and Ornamental Insect Control, Hi-Yield Indoor/Outdoor Broad Use Insecticide and Lawn & Garden Insect Killer, Fertilome Indoor/Outdoor Multi-Purpose Insect Spray) or cyhalothrin (Spectracide Triazicide, Bonide Caterpillar Killer).

Control is probably impossible for euonymus that has been heavily attacked and is in very poor health. Therefore, complete removal and destruction of these heavily infested plants (including roots) is suggested. (Ward Upham)

**MISCELLANEOUS**

**Straw Bale Gardening**

There has been growing interest in straw bale gardening. What better place to try this than in Kansas where straw is so abundant. First, some pointers.

- These are the “small” straw bales that are about 2 feet high and 3 feet long.
- Place the bale on edge so the twine doesn’t rot.
- Bales can be placed anywhere including concrete or asphalt. Just make sure there is plenty of sun and watering is convenient.

**Bale Conditioning**

- Water the bales and keep them wet for 3 days. The bale will start to heat up as it breaks down.
- On days 4, 5 and 6, sprinkle fertilizer on the top of each bale with 1 cup of ammonium sulfate (21-0-0) or ½ cup of urea (46-0-0). Water the fertilizer in. This speeds the decomposition process.
- On days 7, 8 and 9, continue to sprinkle fertilizer on each bale but cut the amount in half.
- Stop fertilizing on day 10 but keep the bale moist.
- Check for heat on the top of each bale for each day after day 10. When the temperature drops to below 100, the bale can be planted.

**Planting**

- Pocket Method: Make a hole for each plant several inches deep and fill with growing medium.
- Flat Bed Method: Cover the top of the bale with 3 to 4 inches of growing medium.
- The growing medium can be well-aged manure, compost or potting soil.

**Number of Plants per Bale**

- Cantaloupe: 2
- Cucumber: 3-4
- Peppers: 3-5
- Squash (winter): 2
Watering

Watering will be the most challenging aspect of management. The straw will dry quickly. A drip irrigation system on a timer can work well but may take some time to set up. Gardeners may also use soda bottles or milk jugs to water by poking drip holes in the lid, filling with water and then turning upside down next to the target plant.

This information was taken from an excellent publication from Washington State University that includes much more detail as well as images. See http://cru.cahe.wsu.edu/CEPublications/FS109E/FS109E.pdf. (Ward Upham)

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