Welcome to our new newsletter for current issues in the landscape and garden. This newsletter is aimed at the home horticulture/master gardener audience. We will try to get it out twice monthly during the growing season. Mary Kay Malinoski and Dave Clement are coordinating it and please send any contributions to us. Jon Traunfeld will be contributing fruit and vegetable tips. The newsletter will be posted on the HGIC web site under resources.

**Current Observations in the Landscape:**

**Insects and Other Pests** by Mary Kay Malinoski, Extension Specialist, Home and Garden Information Center (unless otherwise noted).

Keep an eye out for gypsy moth caterpillars. The Maryland Department of Agriculture will begin treating for this pest the first week of May. Here is the MDA web page on Gypsy Moth: [http://mda.maryland.gov/plants-pests/Pages/gypsy_moth_program.aspx](http://mda.maryland.gov/plants-pests/Pages/gypsy_moth_program.aspx)

Gypsy moth is the most serious pest of oak trees. Gypsy moth prefers oak but will also feed on sweet gum, linden, willow, birch, apple, alder, boxelder, hawthorn and blue spruce. Adult female moths are white with black spots and cannot fly. They lay feltlike tan egg masses on trees, rocks or wherever they can crawl to. Eggs are laid in the early summer. There is one generation a year and winter is spent in the egg stage. Egg hatch begins in late April or early May depending on the temperature. Young caterpillars are black and chew small holes in the leaves. Feeding begins in early May, which is the best time to control the caterpillars. B.t. sprays are very effective on the small caterpillars. Large caterpillars (see above photo) may consume leaves to the midrib. Caterpillars grow up to 2 inches in length and have 5 pairs of blue dots and 6 pairs of red dots. They are more difficult to control than the young caterpillars.
Management:

- Plant resistant trees such as Red Cedar, Sycamore, Red Spruce, ash, American Holly, Tulip Poplar and Catalpa.
- Destroy egg masses before April when egg hatching begins.
- Use sticky barrier bands to trap young caterpillars before they enter treetops.
- Use hiding bands to provide a refuge for migrating caterpillars that can then be removed and destroyed.

Use B.t. (*Bacillus thuringiensis*) products to control young caterpillars. If you are unable to spray your treetops, hire a professional arborist.

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**Boxwood mites hatch – from Stanton Gill, Extension Specialist in IPM and Entomology**

Boxwood mites are an early season pest on boxwoods. Their feeding injury causes a stippling of the foliage that will become very apparent on the new foliage that is expanding at this time of year. The damage is present on old foliage at this point but will be apparent on the new foliage sometime in June. Boxwood mites have hatched in Baltimore city. Monitor boxwoods growing in sunny spots. Use a 10-16X hands lens to examine the foliage for the presence of the mite.

**Control:** Horticultural oil (1-2 % rate) or insecticidal soap directed to the undersides of the foliage will reduce mite populations. Boxwoods growing in hot dry, sunny spots are more susceptible to boxwood mite injury.

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**Eastern tent caterpillar webs and caterpillars are very visible now.** Look for webs in crabapples, and cherry trees. Eastern tent caterpillar is a common pest of wild cherry trees in the spring. The caterpillars enlarge the tents as they grow. Mature caterpillars have a white stripe down the back. Most feeding damage is done in May. The caterpillars are a food source for birds.

**Management:** Prune out egg masses during the fall, winter or early spring, and destroy them. Mechanically destroy the webs and caterpillars in the evening during April. If an insecticide application is needed, use B.t. (*Bacillus thuringiensis*) when the caterpillars are small and be sure to penetrate the tents with the spray. If possible, remove wild cherry hosts on your property.
Emerald Ash Borer Control – Stanton Gill, Extension Specialist, Commercial Horticulture

With Emerald ash borer infestations continuing to be found in counties on the western shore of Maryland there are some homeowners who are requesting information on control options. If the ash is not a specimen tree in good condition, control may not be warranted. Consider replacing it with a tree other than ash.

If the ash is growing in an area where it will be costly to remove the dead tree and EAB has been reported in your area then you can decide whether you should have a certified arborist treat the tree preventatively with an insecticide treatment. Arborists have materials available to them that can provide protection either 1 or 2 years, depending on which material they inject or soil drench the ground below the tree.

If homeowners want to protect the tree with a treatment themselves then there is one product labeled for this application. The table lists the material and timing of application. This would provide one year of protection. This material is applied as soil drench at the flair of the tree.

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<th>Homeowner Formulation</th>
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<td>Bayer Advanced™ Tree &amp; Shrub Insect Control Imidacloprid Soil drench Mid-fall or mid- to late spring</td>
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It would not be worth treating if EAB has not been found in your neighborhood. Once it found in your area you can decide whether it is wiser to treat to protect the tree or it would be cheaper to let the tree die and just have it removed by an arborist.

![Adult emerald ash borer](image1)

![Emerald ash borer damage on ash](image2)
Cold damage on ornamental plants - Many perennials and bulbs send up shoots when warm weather occurs in early spring. This foliage is very cold tolerant and not usually damaged by frost. When a cold period follows a long period of unseasonably warm temperatures, temporary leaf damage may occur, which appears as white, bleached areas on leaves. Most plants outgrow this type of cold injury.

Frost injury usually occurs on annuals planted outside before the last frost date or after the first hard frost in the fall. Diagnosis is easy because frozen tissue becomes limp, appears water-soaked and quickly turns blackish brown. Leaves may be entirely blighted or portions of the leaf may be spotted. If damage is limited to the top portion of the plant, simply prune off the damage. Severe damage may warrant replacement of the entire plant. After a hard frost in the fall, clean up and removal of dead foliage will help reduce disease and insect problems for the next season.

Severe damage may occur when the temperatures are not freezing, but dip below the minimum temperature preferred by many tender plants. Tender plant roots may be unable to absorb nutrients from cold wet soils, causing a temporary phosphorus deficiency, which causes leaves to turn purple. Flower production is reduced or halted and plant growth may be stunted.

Problems associated with frost damage and cold injury can largely be avoided by waiting until after the last frost date in your area to plant warm season annuals. Plants will become established faster and perform better when planted after the frost-free date, when soil temperatures are warmer. Reduce problems by allowing seedlings or newly purchased plants to become acclimated to your garden before planting. Place the plants outside for two to three hours per day and gradually increase the exposure over a one-week period.
**Botrytis or gray mold Gray Mold – Ornamental Plants**

The blight fungus *Botrytis* species attacks plants in landscapes, especially under cool, wet, overcast or very humid conditions, which cause plant parts to remain wet for extended periods. In all species of *Botrytis*, the first symptom is a small tan spot or spots that may rapidly enlarge. If the stem is infected, girdling the stem, the shoot will wilt. *Botrytis* is easily diagnosed by the fluffy gray mold produced on blighted plant parts under moist conditions. *Botrytis* can rapidly blight flowers. Infected petals that fall onto foliage or stems can cause additional blighting and dieback.

**Management:** Deadhead and dispose of old spent blossoms.

**Red Thread in Tall Fescue**

Red thread is a common disease on turf during cool wet weather in the spring and fall. Turfgrasses affected include tall fescue, fine fescue, rye grass, bentgrass and to a lesser extent Kentucky bluegrass and Bermuda grass.
Primary symptoms: Red thread will produce, under optimum conditions of wet cool weather, a reddish gelatinous fungal growth that can be seen on leaf blades and sheaths. When the leaves dry the fungal growth becomes a paler pink or red and extends from the leaf tips as hard brittle strands. These strands fall into the soil or thatch layer to serve as resting structures for the next infection period. Infected turf has circular to irregularly shaped patches ranging from 2 inches to 3 feet in diameter with a straw-brown or pinkish tan color. Red thread appears most frequently in early spring and fall and occasionally during the summer under prolonged rainy cool periods.

Management: These diseases are more damaging on under fertilized turf. Often an application of fertilizer will alleviate disease severity. However excessive fertilizer use can cause increased disease susceptibility. Follow university fertility guidelines for turfgrass fertilization schedules. Select resistant turfgrass cultivars for establishment of turf.

Grabgrass has germinated:

The first young crabgrass seedlings of the year were found this week near the HGIC office. Crabgrass begins to germinate when the temperature in the upper inch of soil reaches 55 to 58 F for four to five days.

Management: Once crabgrass has germinated look for products with the chemical Quinclorac for control.

Plant of the Week – Ginny Rosenkranz, Extension Educator, Commercial Horticulture, Wicomico, Worcester & Somerset Counties

*Cercis canadensis* ‘Alba’ is exactly like the normal native Redbud except the pea shaped flowers are completely white. Redbuds bloom in March – April, about the same time as the native Dogwood (*Cornus florida*) and in the wild the Redbuds brighten up the outer fringes of the woods with bright pink to purple flowers that completely cover the tree before the leaves emerge. The tree can grow 20-30 feet tall with a spreading, horizontal branching and flat topped silhouette and the branches grow in a zigzag pattern with the leaves emerging at each turn. The bark is dark brown when young and slightly shaggy as it matures while the leaves are bright.
green and heart shaped. A year old seedling planted in a garden with morning sun and afternoon shade grew from 8 inches tall in the spring when planted to 3 feet tall by fall and thrived due to consistent watering during dry spells throughout the summer. They will have to mature for a few more years before they will burst into bloom with one half inch pink/purple (or in ‘Alba’, pure white) flowers that last in a cool spring for almost a month before the heart shaped leaves begin to emerge.

Cercis canadensis ‘Alba’

Close up of flowers

‘Alba’ leaves are light green without any purple coloring and turn a bright yellow in the fall. ‘Royal White’ is a cultivar with pure white flowers that are slightly larger and open slightly earlier and is more cold tolerant than the straight species. After flowering, the plant produces 2-3 inch pods that start out green then mature to brown which hang on the tree all through the fall and winter. The plants grow in USDA zone 4-9. All Cercis canadensis prefer to be planted into moist, well drained soils, tolerant of both acidic and alkaline conditions, in full sun to partial shade with adequate watering to prevent stress that leads to canker diseases. Leaf spot and Verticillium wilt are the other disease problems and leaf hoppers, tree hoppers, caterpillars and scale are the insect pests.

Vegetable and Fruit Gardening by Jon Traufeld, Extension Specialist, Home and Garden Information Center.

What happened to my corn and beans?

The first time I grew a field of muskmelon I watched about 20% of my transplants mysteriously decline and die within weeks of planting. An Extension Specialist dug up a few of the affected transplants, cut the lower stems open with his pocketknife and showed me the culprit- seedcorn maggot. I was surrounded by fields in continuous corn and had spread manure the previous fall- two conditions favoring this common spring pest.
The maggot burrows in and feeds on large seeds (lots of nutrients), potato pieces, seedlings and transplants. Gardeners will notice spotty germination and stunted or dying plants. Seeds and plants need to be closely examined to determine if seedcorn maggot is at play. I suspect this pest is a more significant garden pest in rural areas. We get more reports during cool, wet springs when bean and corn seeds are slow to germinate.

Diazinon is no longer available to home gardeners for controlling soil-borne insect pests. For more photos and details on preventing problems go to the GIEI website.

https://extension.umd.edu/growit/insects/seedcorn-maggot

Seedcorn maggot (left) and damaged seed.

Photo courtesy of Mariusz Sobieski, Bugwood.org

**Epsom salt: NOT a cure for blossom-end rot**

Magnesium sulphate (known as Epsom salt) is an inorganic chemical compound mined from the earth. Magnesium and sulfur are important plant nutrients and Epsom salt can supply both without significantly changing soil pH. Epsom salt is highly soluble and can be applied as a drench around plants or sprayed on foliage.

Many gardeners add Epsom salt to tomato beds and planting holes because they mistakenly believe it will prevent blossom-end rot. This nutritional disorder is caused by a lack of calcium in tomato plants (also pepper, eggplant, squash, and watermelon) during fruit enlargement.
Typically the root cause is not a lack of calcium in the soil but rather insufficient soil moisture to move adequate amounts of calcium into the plant.

Since Epsom salt does not supply calcium it will not prevent blossom-end rot. In fact it can make it worse. Applying it to the root zone causes the calcium cations (++) in the soil to compete with a flood of magnesium cations (also++), worsening the deficiency and blossom-end rot symptoms. The decision to add Epsom salt should be based on soil test results indicating a magnesium deficiency.

Prevent blossom-end rot with regular, deep irrigation when rain is lacking. Adding a ½ cup of gypsum (calcium sulfate) to each planting hole will supply a form of calcium that is more mobile than calcitic lime and available for plant uptake, without affecting soil pH.

Please send all submissions, including photos to Mary Kay Malinoski, mkmal@umd.edu or to David L. Clement, clement@umd.edu, by Tuesday of each week so that we can get the newsletter out by Thursday. Thanks and please contribute!