



**TPM/IPM Weekly Report for Arborists,
Landscape Managers & Nursery Managers
University of Maryland Cooperative Extension**

July 17, 2009

Coordinator of the electronic weekly IPM report:

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Pest and Beneficial Insect Information: Stanton Gill and Paula Shrewsbury (Extension Specialists) and Brian Clark (Extension Educator, Prince George's County)

Disease Information: Karen Rane (Plant Pathologist) and David Clement (Extension Specialist)

Weed of the Week: Chuck Schuster (Extension Educator, Montgomery County)

Cultural Information: Ginny Rosenkranz (Extension Educator, Wicomico/Worcester/Somerset Counties)

Fertility Management: Andrew Ristvey (Regional Specialist, Wye Research & Education Ctr)

Design, layout and editing: Suzanne Klick (Technician, CMREC)

Please call us if you are a commercial horticultural business finding insect, disease, weed or cultural plant problems in the landscape or nursery. Send submissions to Sklick@umd.edu or call Stanton Gill at 301-596-9413.

Cut Flower Farm Tour, July 27, 2009

Location: Farmhouse Flowers and Plants (Brookeville) and Plantmasters (Laytonsville)

Contact: Suzanne Klick, 301-596-9413

Japanese Beetles

We are seeing increased activity from adult Japanese beetles this week on highly susceptible species of trees including purple leaf plums and little leaf linden. Populations are lower than 2005 and 2006 but beware if you let them build up this year we will see a lot of Japanese beetles in 2010 since the soil is still fairly moist from the rains in June. The high moisture soils result in higher survival of the larvae in the soil.

Control: Adult beetles are controlled for about 10 -14 days when applying carbaryl (Sevin). For Acephate (Orthene) give about 7 days of control. Permethrin (Astro) also gives about 7 days of control. Neem products give 3 -5 days of control of adults.



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Euonymus Scale

We examined euonymus this week from Rockville that was heavily infested with euonymus scale. Crawlers were present on the sample as well as settled 1st instars.

Control: Distance or Talus applied with 0.5 – 1.0% oil is the best control at this time of year.



Damaged caused by Euonymus scale



Euonymus scale on stems

Chrysanthemum Lace Bug

Carol Allen reports finding lace bugs on chrysanthemums this week. This is the chrysanthemum lace bug. The larvae are very active in July.

Control: TriStar, Merit, Orthene, Safari

Flea Beetles

Flea beetles are damaging hibiscus this week in Ellicott City. Adults are chewing shot holes in leaves.

Monitoring: Look for adult flea beetles on the upper sides of foliage and shothole damage to foliage.

Control: Mature plants should recover from damage and control is not usually warranted. Applications of Azatin can be used to reduce flea beetle populations.



Twolined Spittlebug

We found the twolined spittlebug adult here at the research center this week. The larvae are more commonly found which produce spittle to protect themselves from predators and drying out. Control is usually not necessary.



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Bagworms

Bagworms continue to feed this week. The bags are finally to a size that most people can see them. Look for bagworms on Leyland cypress, arborvitae, junipers, and white pines.

Control: Conserve, Orthene, AceLpyn, and Astro all provide good control of bagworms.

Tortoise Beetle

We are receiving reports of tortoise beetle (also called the goldbug) feeding on sweet potato vine this week. The damage can look similar to slug feeding, but the holes are more rounded in shape and slime trails are absent.

Control: Control is usually not necessary.

Rose Rosette Disease, Penny Wilkow

The disease Rose Rosette is relatively new to Maryland. It was first recorded on multiflora rose in central Maryland in 1996. By 1997, it had spread to western Maryland, and was reported on ornamental roses in Maryland in 1998. It has continued to move east and north throughout the state.

Rose rosette is endemic and eventually lethal to multiflora roses, and for that reason it has been considered for use as a biocontrol. All cultivated roses are considered to be potentially susceptible, though tolerance is variable, depending on species and cultivar.

Rose rosette is caused by a virus or a virus-like organism, according to the most recent information available. It is spread by the eriophyid mite, *Phyllocoptes fructiphilus*, also known as the wooly mite. Eriophyid mites are unable to fly, but they are so small they are easily blown by wind. Therefore, to help control their spread, ornamental roses should not be planted downwind of existing areas of multiflora roses. The disease can also be spread by grafting. Transmission is most likely in late spring and early summer.

Symptoms of rose rosette are variable, and may begin as a red mosaic pattern on new leaves, followed by a growth spurt resulting in red pigmented vegetative shoots producing stunted leaves and short, densely-packed red shoots in a witches' broom. Especially on ornamental roses, many more thorns develop, and the new shoots are thicker and more succulent than normal, leaving them prone to frost damage. These plants are also more susceptible to powdery mildew. The original shoot infections will spread to roots, and then to the remaining canes. Symptoms continue with distorted flowers with fewer petals and abnormal flower color and possible mottling. Buds may abort, deform, or develop into leaf tissue. All this may resemble effects of herbicide injury, especially glyphosphate and 2,4 D, but the plant can outgrow the herbicide injury.

Management: Remove and destroy roses with symptoms, including the rootstock. Space cultivated roses so they do not contact each other. It is considered safe to replant roses in the same area as long as all roots have been removed. Chemical control consists of miticides effective against eriophyid mites. Recommendations are to apply these weekly in June and July. Miticides for spider mites may not be effective against eriophyid mites, so check the labels carefully. Control materials include Avid, bifenthrin, horticultural oils, and insecticidal soap. Use only pesticides registered for your crop and follow all label instructions.

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Beneficial Insects

Assassin Bugs - Here at the research center this week we found an assassin bug on landscape plants. Assassin bugs are general predators that feed on various insects including small caterpillars, aphids and leafhoppers. Assassin bugs use their front legs to capture prey. With their piercing-sucking mouthpart they inject a toxin into their prey to paralyze it before feeding. Assassin bugs are usually not a problem for humans, but if handled they can sometimes inflict a painful 'bite' with their piercing mouthpart.



Syrphid Flies – We are also seeing a lot of syrphid fly (also called hover flies) adults on plants in the landscape. The larval stage is a predator that is commonly found feeding on aphids especially early in the season. Adults are iridescent and colors tend to range from green, orange to red.



Weed of the Week, Chuck Schuster

White clover, *Trifolium repens*, is a perennial plant with trifoliate leaves found throughout the United States in lawns, landscapes and nursery settings as a weed, but is often used in pastures and forages for livestock. This form of clover has stems which are low growing, prostrate, usually without hairs, ranging from four to six inches in height. The root system is fibrous, with stems that will root at the nodes.

The leaves will display a lighter green “V” shaped marking near the base, and have a lightly toothed margin. The leaves will also have a notch near the apex. Flowers will occur on flower stalks that originate from the leaf axis, forming a head that is round in shape and which contains 20 or more individual white flowers. A similar form of clover is red clover but it will have much larger leaves, be more upright and taller with red to pink flowers.

With cooler than normal temperatures, it seems to be flourishing this year. Control can be obtained using of many of the post emergent broadleaf herbicides will provide successful control. These would include simazine (Princep), 2,4- D, dicamba, and triclopyr, turfyon and Garlon. Treflan can be used as a pre emergent product.



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Plant of the Week, Ginny Rosenkranz

Finding a plant that does well in shade and is drought tolerant can be tough, but *Ilex cornuta* (Chinese holly) thrives in both areas. Along with being very drought and shade tolerant, Chinese holly is very heat tolerant and will do well in many soil and pH types. Growing to a height of 8-15 feet tall, Chinese holly can be pruned to create a hedge that nothing will willingly go through. The leaves on Chinese holly are dark green and very shiny with 5 to 9 very sharp spines at the ends of the nodes. Chinese holly can also be pruned to create a small tree with a single trunk or multiple trunks to show off the grey, smooth bark. The female Chinese holly has bright red berries that persist until the end of winter while the male holly's flowers are extremely sweet smelling in the early spring. Scale is the most common insect problem with the Chinese Holly. Disease problems include root rots, leaf spots and cankers.



What's in Bloom

Plant	Plant Stage (Bud with color, first bloom, full bloom, first leaf)	Location
<i>Astilbe myriantha</i>	Full Bloom (July 14)	Silver Run
<i>Buddleia hemsleyana</i>	Full Bloom (July 14)	Silver Run
<i>Clethra acuminata</i>	Full Bloom (July 14)	Silver Run
<i>Diervilla sessilifolia</i>	Full Bloom (July 14)	Silver Run
<i>Elliottia racemosa</i>	Full Bloom (July 14)	Silver Run
<i>Oxydendrum arboretum</i>	Full Bloom (July 14)	Silver Run
<i>Rhododendron prunifolium</i>	Full Bloom (July 14)	Silver Run

*This list may include weeds and other invasive plants.

Degree Day Information (as of July 16):

Baltimore, MD (BWI)	1678	Dulles Airport	1790
Frostburg, MD	1012	Martinsburg, WV	1593
Mechanicsville, MD	1652	National Arboretum	2222
Reagan National	1873	Salisbury	1788



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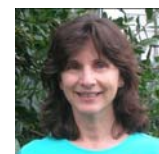
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