Cooperative Extension

ORNAMENTALS

• H O T L I N E •

June 24, 2016

Issue 14

INSECTS

Brian Kunkel
Ornamental IPM Specialist

JAPANESE BEETLES are flying and feeding on various host plants, including over 300 different types of broad-leaved plants. Some preferred plants include roses, cannas, flowering crabapple, lindens, Norway and Japanese maples, and elms. Last year had sufficient rainfall for decent populations of Japanese beetles this year; however, they are only beginning to emerge in New Castle County. Populations started to emerge about a week ago in Maryland at some nurseries. Adult activity typically occurs between 1094 – 2410 GDD_{50}. The copper and green beetle skeletonizes plant foliage by feeding in between the leaf veins.

Many natural enemies attack the various life stages of Japanese beetles such as: assassin bugs, parasitoids, ants, ground beetles, rove beetles, birds, skunks, and raccoons. Cultural options for management include hand removal, removing previously beetle-damaged leaves, or shaking beetles into buckets of soapy water. This summer, the Universities of Delaware and Maryland are continuing a project to evaluate efficacy of Acelepryn and other insecticides against adults. Chemicals available for controlling adult beetles using insecticides include, Orthene, Sevin, Acelepryn (landscape uses) or one of the pyrethroids (e.g., cyfluthrin, deltamethrin, etc.). Insecticide applications may need to be made every 1–2 weeks when adult activity is high. Neem based products typically deter feeding for 3–4 days; apply before damage occurs. Imidacloprid can be applied for adult Japanese beetle control, but tolerance of some feeding is necessary. Wettable powder formulations of some pyrethroids (pyrethrins) may be more repellent than the EC formulations. Thorough treatment of target plants is needed for any of the listed products to effectively protect the plants. Insecticidal soaps, plant extracts, and companion plantings are generally ineffective.

DISEASES

Nancy Gregory
Plant Diagnostician

ENVIRONMENTAL STRESS affects plants of all ages and types. However, it affects those plants that are newly establishing the most. The fluctuations in weather this spring have been challenging for newly establishing plants. Newly establishing plants include those that have been planted in the past two to three years. It takes about one year per inch of trunk caliper for trees to become established. Shrubs that were grown in soilless mixes in containers can often be dug up two to three years after establishment and found to have root systems confined to the original container root cylinder. Poor drainage and compromised root systems lead to poor root development. Trees and shrubs

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What's Hot!

Powdery mildew was observed this week on *Monarda*, *Penstemon*, rose, and peony.

Japanese stiltgrass, *Microstegium vimineum*, has become the groundcover of many roadside, forests, disturbed areas, gardens and even lawns. It is too late for preemergents but that is an option for next year with this annual grass. It can be easily pulled from landscape beds and should be removed before it flowers in late August to early September. Acclaim extra and Bayer crabgrass killer can be used on stiltgrass once it has emerged in the lawn. If stiltgrass is routinely mowed it will set seed at a much lower height than in unmowed areas so mowing is no longer a control option. A UD grad student found a single mowing after

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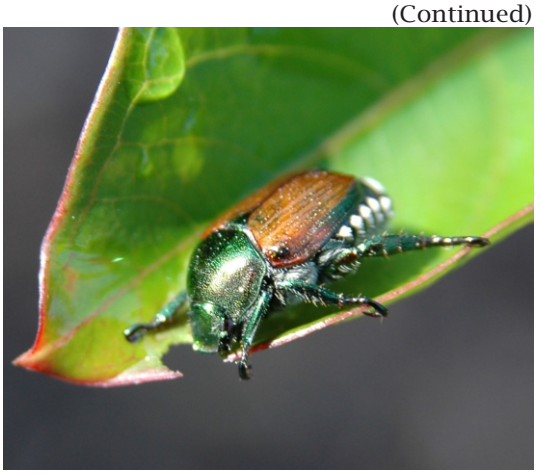


Japanese beetle adult. Photo credit: B. Kunkel

For more information on pests & practices covered in this newsletter, call your County Extension Office

Helpful numbers to know:

Garden Line (for home gardeners only)	831-8862
New Castle County Extension	831-2506
Kent County Extension	730-4000
Sussex County Extension	856-7303

View more pictures at http://sites.udel.edu/ornamentals/

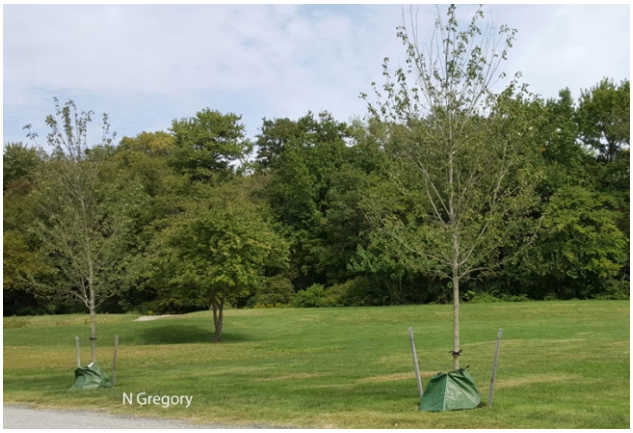
Diseases (Continued)

with poor root systems may have smaller than normal leaves, dieback of branches, as well as weakened trunk and branch structure. We expect to see an increase in root rot on plants due to heavy rains. Stressed root systems and those in saturated soils may be more susceptible to root rot pathogens such as Pythium and Phytophthora. We saw unusually warm temperatures in March and April, followed by freezing weather that burned back newly unfolding leaves and buds. Fruit trees were affected, and fruit yields will be lower for cherries and peaches. Sunscald has been observed on some foliage, happening when sun and heat followed cool and cloudy weather. Shrubs pruned during sunny weather have symptoms of sunscald on the exposed foliage. Leaf spots and rusts have also been more severe, due to conditions that favored spore release and infection.

Editor: Susan Barton
Extension Horticulturist

What's Hot (Continued)

flowering but prior to seed set to effectively reduce seed development for the next year. She also found a three inch layer of leaf mulch reduced germination of stiltgrass in test plots in White Clay Creek, but a one inch layer was not sufficient.



Establishment of trees. Photo credit: N. Gregory

GROWING DEGREE DAYS

AS OF June 21, 2016

- Swarthmore College (Delaware County, PA) = 1034 ('15 = 1214)
- Fischer Greenhouse (New Castle County) = 1009 ('15 = 1197)
- Research & Educ. Center, Georgetown (Sussex County) = 1091 ('15 =1267)

Japanese stilt grass flowering in August. Photo credit: S. Barton

Japanese stilt grass mowed closely to prevent seed development. Photo credit: S. Barton