

ORNAMENTALS

• H O T L I N E •

June 22, 2018

Issue 14

INSECTS

Brian Kunkel
Ornamental IPM Specialist

REDHEADED FLEA BEETLE adults began emerging last week and are reaching high densities. This flea beetle has recently become a pest in retail and wholesale nurseries in the eastern U.S. Larvae feed in May and emerge as adults around 575 - 785 GDD₅₀. Adults feed through June and the second generation of eggs start hatching around the end of June with larger larvae active around 1500 GDD₅₀ or when *Cerastigma plumbaginoides* (Blue Leadwort) begins to bloom or *Lagerstroemia indica* x *fauriei* 'Hopi' (Crape myrtle 'Hopi') is in full bloom. Damage appears as either holes chewed into developing leaves or 'divots' chewed into thicker skinned or succulent leaves, which turn brown as the leaf dries out. Their host range is large and includes *Sedum*, *Itea*, asters, *Forsythia*, *Hydrangea*, *Hibiscus*, *Weigela*, *Ilex*, ninebark, buttonbush, Pennsylvania smart weed, Joe pye weed, *Salvia*, blueberries, corn and many others. We are currently conducting experiments evaluating the efficacy of different insecticides, and some of those are reduced risk products. Flagship, Safari and Talstar have provided the most effective control in trials targeting adults so far although residual control does not seem to last more than a week. Mainspring does reduce damage; however applications need to be applied prior to adult activity for best results. Sevin, acetate, and pyrethroids all provide some control, but have impacts on natural enemies. We are conducting experiments in VA and NJ to determine host plant preferences.

DISEASES

Nancy Gregory
Plant Diagnostician
Jen Rushton, Intern

GYMNOSPORANGIUM RUSTS are fungal pathogens that cause disease on a variety of common landscape trees. These fungi are obligate pathogens (cannot live without a host), and are very specific to the hosts they infect. Gymnosporangium fungi have a complicated life cycle and require two hosts to complete the life cycle—the first stage affecting red cedar or other juniper species, and the second or alternate stage affecting Rosaceous hosts such as apple, crab apple, hawthorn, serviceberry, and pear. We are familiar with these diseases known by their common names: Cedar-apple rust, Hawthorn rust, Quince rust, and Japanese apple rust, and symptoms on each species will vary. Gymnosporangium fungi over-winter in infected branches and galls on the juniper hosts. In spring during wet weather, galls on juniper will produce orange gelatinous blobs, or horn like structures in the case of cedar-apple rust, that release spores. Spores are carried by wind to susceptible Rosaceae plants, and can travel up to 3/4 mile. Symptoms on apple include leaf spot, but hawthorn, serviceberry and pear show symptoms and signs on fruits. For management,

(Continued)

What's Hot!

Powdery mildew on bee balm (*Monarda*), Phyllosticta leaf spot on maple, Cercospora leaf spot on hydrangea, and shot hole leaf spot on cherry were seen in the UDBG this week.

Scout for Japanese maple scale if you have host plants, crawlers should be active.



Redheaded flea beetle adult. Photo credit: B. Kunkel



Redheaded flea beetle damage. 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://extension.udel.edu/ornamentals/>

UNIVERSITY OF DELAWARE

COOPERATIVE EXTENSION

Diseases (Continued)

prune and remove galls and twig cankers from red cedar and juniper hosts during the dormant season, and remove old infected fruit from hawthorn and serviceberry. Control leaf spots on apple and crab apple by using labeled fungicide sprays (ex. chlorothalonil, mancozeb, myclobutanil, triadimefon) as buds and leaves expand in the spring, using care with bees at flowering. There are resistant cultivars of apple, crabapple and hawthorn, but little resistance in *Juniperus* species.

Editor: Susan Barton
Extension Horticulturist



Cedar-apple rust telial gall. Photo credit: N. Gregory

GROWING DEGREE DAYS
AS OF June 19, 2018

- Swarthmore College (Delaware County, PA) = 1005 ('17 =1043)
- Fischer Greenhouse (New Castle County) = 1014 ('17 =1066)
- Research & Educ. Center, Georgetown (Sussex County) = 1128 ('17 = 1251)



Rust on fruit Bradford pear. Photo credit: N. Gregory



Japanese apple rust small telial gall. Photo credit: N. Gregory



Leaf rust Bradford pear. Photo credit: N. Gregory