

ORNAMENTALS

• H O T L I N E •

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Issue 17

INSECTS

Brian Kunkel
Ornamental IPM Specialist

HIBISCUS SAWFLIES have become more common at various nurseries in the area over the past few years. This pest is a wasp that feeds on rose mallow, *Hibiscus moscheutos* and hybrids of *H. palustris*, *H. militaris*, and *H. lasiocarpus*. Some of the more severely damaged varieties include “Lord Baltimore”, “Lady Baltimore”, “Luna” and “Belle”. Little is known regarding this pest's life cycle, but it emerges sometime in May and has multiple generations during the growing season until frost.

Adult sawflies appear as small (3/16”) fat-waisted entirely black wasps with an orange spot on the thorax above the wings. Females lay eggs in older foliage near the margins, which may cause browning. Larval feeding causes window-pane style injury initially but eventually they chew holes into leaves leaving only main veins to a leaf. They have six prolegs, are yellowish-green, have a dark head, and six to eight dark glands on each segment. Larvae may pupate in straw colored cocoons on lower stems or in the soil and possibly in groups.

Hand removal is an option when populations are small. A number of predatory insects attack these pests and help keep their populations tolerable. There are resistant varieties of *Hibiscus* available. Chemical control options include horticultural oil, insecticidal soap, azadirachtin, spinosad, acephate, carbaryl, neonicotinoids (i.e., imidacloprid), or one of the pyrethroids such as cyfluthrin or deltamethrin. Caution should be used with neonicotinoids and limited when plants are close to flowering in order to help conserve bee populations.

DISEASES

Nancy Gregory
Plant Diagnostician

BOTRYOSPHAERIA CANKER is resulting in dieback and browning of branches on redbud trees. The fungus *Botryosphaeria* can be difficult to identify, and can affect over 150 genera of plants, mostly woody ornamentals. These fungi cause severe disease on plants stressed by environmental conditions such as drought or freezing, mechanical damage, or insects. Symptoms can range from small spots on twigs, to larger sunken cankered areas on larger branches. Affected twigs often die, but larger branches can restrict the pathogen to an area by growing around the canker. Leaves on affected branches may noticeably wilt and turn brown in mid-summer drought and heat. Wood under the cankered area will be discolored. Cankers on redbud, dogwood, and fringe tree

(Continued)

What's Hot!

Hollyhock rust is visible now. As with most rusts, the fungus is very host specific (plants in the Malvaceae), but this one does not have an alternate host. The upper leaf surface appears yellow, and rust pustules can be observed on the lower leaf surface. Fungicides can be applied to protect new growth. Prune and discard affected material after bloom.



Hibiscus sawfly larvae. 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/>

UNIVERSITY OF DELAWARE

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Diseases (Continued) are often more severe in shaded areas where these under-story trees usually thrive. For control, reduce stress on trees and trim out affected branches. There is no need to disinfect pruners between cuts if you are pruning one main lead back to the branch collar.



Botryosphaeria on red bud - foliage damage. Photo credit: N. Gregory



Botryosphaeria on red bud - close up. Photo credit: N. Gregory

Editor: Susan Barton
Extension Horticulturist

GROWING DEGREE DAYS
AS OF June 12, 2016

- Swarthmore College (Delaware County, PA) = 1553 ('15 = 1695)
- Fischer Greenhouse (New Castle County) = 1535 ('15 = 1705)
- Research & Educ. Center, Georgetown (Sussex County) = 1618 ('15 = 1793)