

ORNAMENTALS



• H O T L I N E •

June 26, 2020

Issue 14

INSECTS

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Ornamental IPM Specialist

JAPANESE BEETLES are flying and feeding on various host plants-over 300 different types of broad-leaved plants. Some Japanese beetles' preferred plants include roses, cannas, flowering crabapple, lindens, Norway and Japanese maples, and elms. Last year had enough rainfall for decent populations of Japanese beetles this year and they began to emerge in New Castle county about a week ago. Historically, adult activity typically occurs between 1094 - 2410 GDD50. The copper and green beetle skeletonizes plant foliage by feeding in between the leaf veins.

Many natural enemies attack the various life stages such as: assassin bugs, parasitoids, ants, ground beetles, rove beetles, birds, skunks, and raccoons. Cultural options for management include hand removal, removing beetle-damaged leaves, or shaking beetles into buckets of soapy water. Research conducted by Stanton Gill and I found that Mainspring and Acelepryn provide excellent control of Japanese beetles as a foliar spray. 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; applications should be 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

Jill Pollok

Plant Diagnostician

COMMON ROOT ROT DISEASES in herbaceous plants are black root rot, caused by the fungus *Thielaviopsis basicola*, and Pythium root rot, caused by a number of *Pythium* species, which is an oomycete, or fungal-like organism. These pathogens are favored by wet soils, can spread to nearby susceptible plants, and can become a severe problem in greenhouse production. Symptoms are similar: poor growth, chlorotic foliage, wilting, lack of roots, root tissue is limp and brown or black. When the plant is pulled, much of the root system may remain in the soil or easily break off. Management of root rots starts with an accurate identification of which pathogen you have.

(continued)

What's Hot!

Sycamore trees are still struggling to leaf out. Fungal anthracnose is currently affecting leaves, causing leaf drop, and stress will continue if drought occurs.

Swallowtail caterpillars are active. No treatments needed.

Waxy covering on stems of Echinacea, hosta, hydrangea and others is most likely due to flatids - no treatments.

Assassin bug nymphs (beneficial generalist predator) are active.

Indian wax scale crawlers are probably still active, but its getting late for control.

The Food and Drug Administration (FDA) warned consumers not to use hand sanitizer manufactured by Eskbiochem SA de CV in Mexico, due to the potential presence of methanol (wood alcohol). Methanol is not an acceptable Active Ingredient for use in hand sanitizers due to potential toxicity through skin adsorption. In FDA testing one of Eskbiochem's products, Lavar 70 Gel Hand Sanitizer (NDC: 74589-006-01), showed 81 percent (v/v) methanol and no ethyl alcohol.

For more information

on pests and practices covered in this newsletter, call your County Extension Office

Helpful numbers to know:



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

View more photos at <http://extension.udel.edu.ornamentals/>

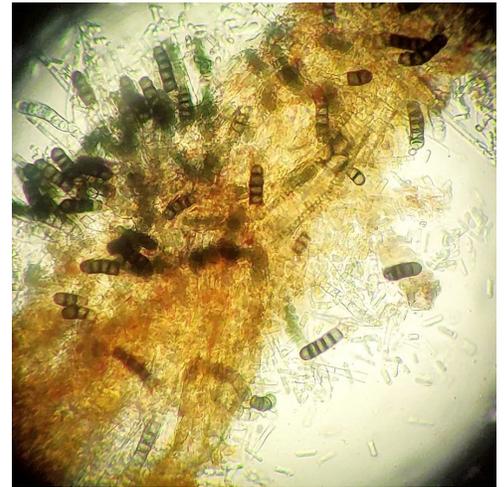
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COOPERATIVE EXTENSION

Diseases (continued)

BLACK ROOT ROT is favored by cool, wet soils, and spores can persist in soil for years. Fungal spores proliferate on root tissue and roots appear black, hence the name. Common susceptible plants are pansy, Calibrachoa, petunia, and vinca, but this pathogen has a wide host range including some woody ornamentals. Thielaviopsis is favored by high soil pH and can be managed by maintaining a soil pH below 5.6. If diagnosed in greenhouse production, remove plants and sterilize equipment.

Pythium root rot can be a major problem in wet, poorly-drained soils, and is associated with excessive nutrient levels in greenhouse production. Almost all annuals are susceptible to Pythium root rot in the right conditions, but especially geranium, poinsettia, and snapdragons. Prevention is key for this disease. The pathogen is easily spread on infested tools, pots, and flats, and can also persist in soil for years. Disinfect all bench surfaces, tools, and equipment that comes in contact with potting mix. If Pythium root rot has been a problem in production systems before, apply a preventative fungicide early in the growing season. Some Pythium species have been found to be resistant to metalaxyl and/or mefenoxam.



Dark spores of *Thielaviopsis basicola* (black root rot) viewed under a microscope. Photo credit: J Pollok

Editor: Susan Barton
Extension Horticulturist

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EXTENSION

**GROWING
DEGREE DAYS**
AS OF June 23, 2020

- Swarthmore College (Delaware County, PA) = 960 ('19 = 1267)
- Fischer Greenhouse (New Castle County, DE) = 923 ('19 = 1306)
- Research & Education Center - Georgetown (Sussex County, DE) = 1071 ('19 = 1445)



Hibiscus sawfly damage. Photo credit: T. Wootten



Japanese beetle feeding and skeletonization. Photo credit: B. Kunkel



Bald cypress twig gall midge. Photo credit: T. Wootten