September 30, 2016

INSECTS

Brian Kunkel Ornamental IPM Specialist

BEE HEALTH has become an important topic for pest management concerns due to the frequency of neonicotinoid use in agriculture. There are many studies underway that will contribute to the understanding of the effects of these products on the health of bees and other pollinators. Current research has shown that neonicotinoids are not solely responsible for the decline of pollinator health or colony collapse.

Contributors to the decline of bee health are thought to include: diseases, loss of forage and habitat, parasites, some fungicides, climate change, and insecticides. Neonicotinoids are systemic insecticides with relatively long residues, and they are translocated throughout plants. These insecticides are frequently used to control whiteflies, armored or soft scales, aphids and sometimes white grubs in ornamental or landscape settings.

Various large companies (e.g., Home Depot, Loews) are phasing out the sale of neonicotinoids to homeowners, or refusing to sell plants that have been treated with neonicotinoids. There are a number of public groups interested in banning neonicotinoids from use in the U.S. because of concerns regarding pollinators. A county in Maryland has disallowed neonicotinoid use in landscapes.

As always, use these products in landscape situations with careful adherence to the labels. Use neonicotinoids when other products will not provide the control needed. Luckily, there are a

DISEASES

Nancy Gregory Plant Diagnostician

BOXWOOD BLIGHT caused by the fungus Calonectria pseudonaviculata has not become established in landscapes in Delaware, but a few detections have been made in nursery stock from suppliers in other states, prior to sale. Delaware Department of Ag inspections help to avoid a larger problem with boxwood blight as well as other plant diseases, in order to "Start Clean and Stay Clean". Boxwood cultivar reactions and chemical recommendations can be found in a publication by M. Ganci, K. Ivors, and D.M. Benson from NCSU at the following web site: https://plantpathology.ces.ncsu.edu/pp-ornamentals/_Boxwoods are susceptible to other pathogens such as Volutella and Macrophoma, as well as winter injury, insect pests, and general decline. An updated Delaware fact sheet can be found at: http://extension.udel.edu/blog/boxwood-blight-fact-sheet-updatedsept-2016/. (Continued) Issue 26

What's Hot!

Diseases seen in the landscape recently include aster yellows on Echinacea. Remove plants to avoid spread for next year. Virus symptoms have been seen on dahlias, which are susceptible to several viruses including CMV and TSWV. Rogue out and discard affected plants.

Insects (Continued)

number of other products available that target the same pests targeted by neonicotinoids. Only use neonicotinoids when other options have failed. Some studies have shown little to no risk to pollinators in landscapes from neonicotinoid use; however, that does not mean they are not harmful to bees and pollinators if they come in contact with these insecticides. Consequently, responsible use and close adherence to label directions is required in all instances.



Boxwood blight leaf spot. Photo credit: N. Gregory

For more information

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

Helpful numbers to know:

831-8862

Garden Line
(for home gardeners only)
New Castle County Extension
Kent County Extension
Sussex County Extension

831-2506 730-4000 856-7303

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

UNIVERSITY OF DELAWARE

COOPERATIVE EXTENSION

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Diseases (Continued)

THE 2016 GROWING SEASON WRAP-UP is a good time for a reminder to keep records of landscape sites and cultural practices for certain locations, as well as insect pests and disease issues noted for locations. It has been a challenging year for establishment of new trees and shrubs, due to environmental stress. Pruning and removal of diseased or infested plants can reduce inoculum for next year, and serve to rejuvenate some shrubs. We have found that impatiens can be successfully planted if you haven't seen impatiens downy mildew for three years. Downy mildew on basil has been widespread, but should not over-winter. Don't treat with pesticides if a pest or disease has not been accurately identified, as beneficial insects could be affected by chemicals. Fungicide treatments are preventative, and should be applied next season to high value shrubs or perennials that suffer from specific disease.



Dahlia leaf with TSWV symptoms. Photo credit: N. Gregory

Editor's note: Have a great fall and winter. Come to our educational events (Ornamentals and Turf Workshop on November 16 and Delaware Hort Industry Expo on January 18 and 19). See you in Hotline next spring!

Editor: Susan Barton Extension Horticulturist

Swarthmore College
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