Kentucky Nursery Update #91
To: Kentucky Nursery Growers
(The Kentucky Nursery Update welcomes all readers but is compiled specifically for wholesale nursery producers. Pesticides mentioned may not be legal to use in the landscape or other non-production sites.)
From:
Amy Fulcher, UK Extension Associate - Nursery Crops, Lexington
Win Dunwell, UK Extension Specialist - Nursery Crops, Princeton
Carey Grable, UK Extension Associate - Nursery Crops, Princeton
Taylor Cavanaugh, UK Nursery Crops Scout, Lexington

Topics:
Scout Cat Says - Degree Days and Phenology Facts
Hello from Taylor Cavanaugh
Scale Pests of Nursery Crops: White Peach Scale

Scout Cat Says
Amy Fulcher, UK Extension Associate - Nursery Crops

Degree Days (base 50)

Lexington
June 4, 2010: 977 degree days
June 4, 2009: 896 degree days

Princeton
June 4, 2010: 1128 degree days
June 4, 2009: 1100 degree days

Phenology Facts
Oakleaf hydrangea, kousa dogwood, golden raintree, and tree lilac are in varying stages of bloom, which means twolined chestnut borer, peachtree borer, flatheaded appletree borer and bronze birch borer have or are hatching/emerging. Also Japanese maple scale crawlers hatched approximately one week ago as did calico scale crawlers. European fruit lecanium scale is likely near crawler hatch based.
http://www.ca.uky.edu/entomology/entfacts/entfactpdf/ent66.pdf

This newsletter is possible due to funding from the KY Agricultural Development Board to the Kentucky Horticulture Council and due to funding by the Integrated Pest Management (IPM) Program.
Hello from Taylor Cavanaugh

Hello Nursery Professionals of Kentucky,

My name is Taylor Cavanaugh and I am currently working at the University of Kentucky as a nursery scout under Amy Fulcher. A little about me, I was born and raised in Louisville and graduated from Saint Xavier High School in 2006. Currently I am a senior at the University of Kentucky and expect to graduate in May of 2011 with a Bachelor of Science in Plant Science with an emphasis in Horticulture. After graduating I would be interested in getting on with a landscape crew or possibly help assist a nursery manager. Throughout the summer I will be writing newsletter articles about relevant scale pest that you might encounter in a series titled “Scale Pests of Nursery Crops”. Below is a tentative calendar of when crawlers hatch and the approximate date that the corresponding newsletter article will be released.

Taylor Cavanaugh
University of Kentucky Nursery Crops Scout

6/11 Japanese maple scale: First emergence of crawlers late May to Early June, but have also been seen into late summer
6/18 Cottony maple scale: From mid June through July, crawlers settle on the underside of leaves
6/25 Oak lecanium scale: June and July
7/16 European fruit lecanium scale: Crawlers move out in mid-summer (late June-early July) for several weeks during favorable weather
7/23 Obscure scale: Peaks in July, declines then again in August
7/30 Tuliptree scale: Late August into September
8/6 Magnolia scale: Common from mid-July to early September

Scale Pests of Nursery Crops
White Peach Scale (*Pseudaulacaspis pentagona*)
Taylor Cavanaugh – UK Nursery Crops Scout

White peach scale is an armored scale that produces three generations per year. In general, the first generation of crawlers can be seen in early May, the second in late July/early August and the third in early September. As the name indicates it affects peach trees (*Prunus*) and other stone fruit trees, it also attacks dogwood (*Cornus*), golden raintree (*Koelreuteria*), and redbud (*Cercis*), lilac (*Syringa*), persimmon (*Diospyros*), and others. Females have a round, white body with an orange to yellow hue in the center and can lay between 80 – 100+ eggs depending on the host plant. Males are solid white and are more elongated. Crawlers are pink. An infested plant might show symptoms of yellowing of leaves, leaf die back, and leaf drop. A substantial amount of natural mortality occurs in the first two generations; infestation spread is largely due to the third generation. Physical control involves simply pruning out the infected limbs and branches. Two applications of dormant oil has had some success. Applications of

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contact insecticides at crawler emergence should be effective. Recently, a grower achieved excellent control of crawlers of a similar armored scale with an application of Kontos and also achieved excellent control with bifenthrin plus 1% oil.

The following information is similar to the approach we take with scale in the UK Nursery Crops Scouting Program. The information is an excerpt from:

Scale Insects
By:
Greg Hodges
Florida Department of Agriculture and Consumer Services
Division of Plant Industry

Crawlers are unarmored and susceptible to insecticides for only seven to nine days, so identifying the periods of egg hatch and crawler activity is critical to the proper timing of crawler sprays. These periods vary with season and location. To pinpoint crawler activity, identify infested trees and check scale development twice a week. To monitor crawler emergence, find a limb heavily infested with scale. Be sure you have a vigorous infestation with mostly live scale. Check by carefully picking the scale covers off of adults with a pocketknife. Use a hand lens to examine the scale you uncover. Live scale are moist, creamy white to reddish-orange in color, whereas dead scale are shriveled and either black or gray. Live eggs are plump and round and have no discoloration. Once you locate a vigorous infestation, wrap the limb with double-sided sticky tape or black electrical tape coated with petroleum jelly. When crawler emergence begins, the tiny crawlers will be caught crossing the tape. Monitor tapes twice weekly. With a hand lens, crawlers are easily seen against the tape. With most scale, spray as soon as feasible after you find crawlers.
More information can be found in the IPM Calendar for Deciduous Tree Production:
http://www.ca.uky.edu/HLA/Dunwell/2009IPMDeciduousTreeProduction.pdf

Resources:
http://pubs.ext.vt.edu/2808/2808-1012/2808-1012.pdf
http://entnemdept.ufl.edu/creatures/orn/scales/white_peach_scale.htm
www.entomology.umn.edu/cues/4015/ppts/scales.ppt

Images:
http://www.insectimages.org/browse/subimages.cfm?SUB=8352
Pennsylvania Department of Conservation and Natural Resources - Forestry Archive Jeffrey W. Lotz

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