## PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

2011, Report 15: June 29, 2011

Weekly newsletter compiled by Sarah Pickel, PA Department of Agriculture.

This will be the last regular report for the 2011 Christmas tree scouting season. Look for a special update in August to highlight 2<sup>nd</sup> generation activity for Cryptomeria scale.

This week's report includes data from Jim Fogarty (Halabura Tree Farm), Brian Schildt (PDA), and Cathy Thomas (PDA). The links included in several paragraphs lead to fact sheets from the new PA IPM Program publication, *Integrated Pest Management for Christmas Tree Production*.

As of Tuesday, June 28<sup>th</sup>, there were 1364.5 growing degree days (GDD) in Elizabethtown, Lancaster County and 1319.5 GDD in New Cumberland, Cumberland County. As of Monday, June 27<sup>th</sup>, there were 1056 GDD in New Ringgold, Schuylkill County. Ground temperatures in New Ringgold, Schuylkill County have fluctuated between 68 & 72° F.

Last week in Adams County, crawlers of Striped pine scale were moving and settling on the needles of



Scotch pine. [Fig. 1] There were also active crawlers still under the female scale covers. This soft scale is a pest of hard pines, especially Scotch pine. Adults of this scale are approximately ¼" in size and helmet shaped. They are brown with white markings. The

Figure 1: Pine needle scale crawlers and adults [B. Schildt, PDA]

crawlers, or nymphs, of this scale pest are peach in color and oval shaped. One common symptom of a pine needle scale infestation is the presence of black sooty mold on shoots. Control can be achieved at this time with the application of an insecticide. Also, dormant oil may be applied during the fall or spring when temperatures are above freezing. For more information, visit: <u>http://extension.psu.edu/ipm/program/christmas-</u> <u>tree/pest-fact-sheets/shoot-and-branch-injury/striped-</u> pine-scale.pdf/view

Populations of Cryptomeria scale being monitored this week in York and Schuylkill Counties still had eggs and



Figure 2: Cryptomeria female scale with eggs (uncovered) [S. Gardosik, PDA]

crawlers located underneath the female scale covering. [Fig. 2] Growers could expect to see continued crawler activity on the foliage this week. Depending on how heavy this activity is, another control application may be necessary. If growers are not finding crawlers on the needles, they can hold off on any

further control applications until August when the 2<sup>nd</sup> generation of Cryptomeria will be produced. Crawlers of the 2<sup>nd</sup> generation of Cryptomeria should be seen during the range of 1750 – 2130 GDD. If good control was achieved during this first generation, then it may not be necessary to make any control applications for the 2<sup>nd</sup> generation. For more on this scale, visit: <u>http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/cryptomeria-scale.pdf/view</u>

The crawlers of Elongate Hemlock Scale can still be found on the foliage of Fraser and Canaan firs and Douglas-fir in Schuylkill and York Counties. Growers who began an application series for this pest should remember to continue through the full three month period. For more information on this scale, visit: http://extension.psu.edu/ipm/program/christmastree/pest-fact-sheets/needle-discoloration-andinjury/elongate-hemlock-scale.pdf/view

On farms where Pine needle scale has been an issue, growers should be monitoring pines, especially Scotch

pines, about mid-July through the beginning of August to look for the second generation crawlers of Pine needle scale. Adults of this pest are white and oblong. The crawlers are burgundy colored and oval shaped. Like the first generation, these could possibly require 1 – 2 insecticide applications to achieve control. If good control was achieved with the first generation, however, growers may not need to be concerned about the second generation. For more information on Pine needle scale, visit:

http://extension.psu.edu/ipm/program/christmastree/pest-fact-sheets/needle-discoloration-andinjury/pine-needle-scale.pdf/view

On farms that have had damage from white pine weevil this season, one step to preventing further damage from occurring next season, would be to cut off and burn (or



bag) the curled, wilted leaders at this time. Removing these "shepherd's crook" leaders, will remove developing white pine weevil pupae from the field. [Fig. 3] When cutting out the damaged leaders, it is important that growers cut down to the good wood, which is below the point where the brown dead tissue caused by the weevil feeding is found.

Figure 3: "Shepherd's crook" leader, resulting from white pine weevil [S. Gardosik, PDA]

Growers who had damage this season, may want to consider setting up weevil traps next spring so that they can find the exact time of weevil emergence on their farms. This helps to time insecticide applications so that they target the vulnerable adult stage. For more information on trapping white pine weevil, visit: <u>http://extension.psu.edu/ipm/program/christmas-</u> <u>tree/appendixes/insect-traps.pdf/view</u>

Lastly, I'd like to remind growers about the control applications that can be made in the fall for spruce gall adelgids. Overwintering nymphs of both Cooley spruce gall adelgids (Hosts: Douglas-fir, Colorado spruce) and eastern spruce gall adelgid (Host: Norway spruce) will be settled and exposed as fall temperatures set in. This is the perfect time to achieve control of these pests. Applying a registered insecticide or dormant oil (Not to be used on Colorado spruce!) at that time should mean that growers will achieve control and will have fewer applications to be made in the spring.

http://extension.psu.edu/ipm/program/christmastree/pest-fact-sheets/needle-discoloration-andinjury/adelgid.pdf/view

A list of insecticides and miticides registered for use Pennsylvania, prepared by PA IPM Program scouting consultant, Brian Schildt, can be found on the Penn State Christmas tree website:

(http://ento.psu.edu/extension/christmas-trees).