

PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

Special Report: August 12, 2011

*Weekly newsletter compiled by Sarah Pickel, PA
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This week in both southern and northern York County, crawlers of Cryptomeria Scale were found moving and settling on Fraser fir. This is the second generation of this armored scale pest. The crawler emergence was still light, as the majority of scales still had eggs underneath. In Schuylkill County, eggs were found underneath adult female scale coverings, but no crawlers were seen yet.

The accepted growing degree day (GDD) range for the second generation Cryptomeria crawler emergence is 1,750 – 2,130 GDD. This year, however, the actual GDD totals are much higher at the time of emergence than this accepted range. As of Tuesday, August 9th, there were 2519.5 GDD in northern York County, 2572.5 GDD in Elizabethtown, Lancaster County, and 2387 GDD in New Ringgold, Schuylkill County.

Crawlers are the mobile, first stage nymphs that hatch from the eggs. They are oval-shaped and bright yellow and may be seen with the use of a hand lens. [Fig. 1] They will be found on the undersides of the needles of their hosts,



Figure 1: Cryptomeria scale moving crawler (top), settled crawler (center), and adult (bottom) [S. Pickel/PDA]

and will appear as pale or creamy yellow circles on the needles. The hosts may be a wide variety of Christmas tree species, although they prefer firs. Fraser and Canaan firs are very popular hosts. A scale infestation will begin at the base of a tree, near the trunk. On branches

infested with Cryptomeria scale, the upper surface of the needles will be speckled yellow. This chlorosis is caused by the scale feeding on the plant fluids.



Figure 2: Cryptomeria scale speckled damage [C. Thomas/PDA]

Control may be achieved at this time when the crawlers have no covering or a very light covering. Growers who have a problem with Cryptomeria and did not get good control of the first generation in June may want to consider making 1 or 2 insecticide or horticultural oil applications. Before making another application, it would be best to scout to see if there are still live crawlers remaining. For more information on Cryptomeria scale, visit the online fact sheet at:

<http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/cryptomeria-scale.pdf/view>

Fact sheets on this and other Christmas tree pests can be found in Pennsylvania's new manual, *Integrated Pest Management for Christmas Tree Production*. To purchase or view the PDF, visit Penn State's College of Agriculture's Publications website at: <http://pubs.cas.psu.edu>.

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>).