

PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

SPECIAL UPDATE: AUGUST 9, 2013

Newsletter compiled by Sarah Pickel, PA Department of Agriculture. This week's scouting data contributors are Sarah Pickel and Brian Schildt (PDA).

GDD TOTALS AS OF TUESDAY, 8/7/13:

LOCATION	GDD TOTAL
Indiana, Indiana Co.*	1891.5
Mount Joy Twp., Elizabethtown (NE), Lancaster Co.	2288
New Cumberland, York Co.	2188
State College, Centre Co.*	1931.5

* Figure courtesy of www.weather.com.

CRYPTOMERIA SCALE 2ND GENERATION

This week, when monitoring Cryptomeria scale populations on true firs in Lancaster and York Counties, only eggs were found underneath the off-white, waxy coverings of adult female scales, and no crawlers were seen moving on the needles. Eggs



Figure 1: Adult female scale with covering removed and eggs surrounding. [S. Gardosik, PDA]

had also been found the previous week in the York location, so it should soon be time for the eggs to hatch into crawlers. Cryptomeria eggs will typically hatch in a time frame of about 2 weeks. In order to properly scout for this tiny, armored scale insect, it is necessary to use a hand lens. The oval-shaped scale coverings can be lifted with a finger nail or pin to

view the scale life stages underneath. The female scale under the covering will be bright yellow, round and plump. The eggs are also bright yellow and jelly bean shaped. When these eggs hatch into crawlers, there will be crawlers moving underneath the scales, but more importantly, there will be crawlers moving around the scales on the surface of the needles. The crawlers will look like little yellow ovals. These unprotected crawlers are the life stage that is most susceptible to insecticide applications.

Cryptomeria scales will be found on the lower, interior branches of host trees, which are true firs (Fraser, Canaan, Concolor) and occasionally spruces and Douglas-fir. Look for them on the underside of twigs with needles showing a yellow speckling on the upper surface. Typically, the growing degree day range for the 2nd generation crawler emergence is 1,750 – 2,130 GDD (based on observations in PA), although in the last two seasons, the GDD total at the time of

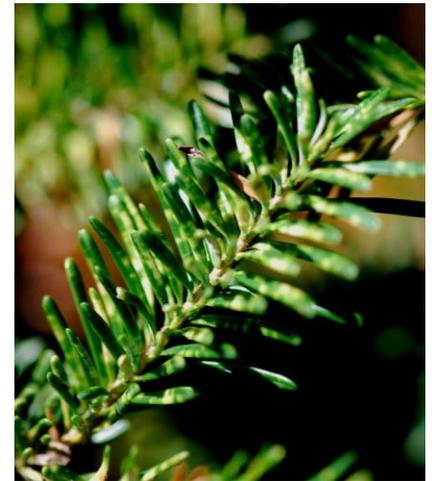


Figure 2: Cryptomeria scale damage [C. Thomas, PDA]

crawler emergence has been at the upper end of this range and even gone beyond it. This just shows that it's also important to closely monitor your pest populations for the timing of life stages, in addition to tracking the growing degree days.

As for controlling this second generation of the scale, growers can make an insecticide application when they first notice the crawlers moving about on the needles. A second application can be made 7 to 10 days after the first. Some growers have found, however, that one application of the insecticide Movento[®] (Bayer) was effective enough for good control. Growers should continue to monitor their scale population after the first application to determine if the population is being effectively controlled. Dead crawlers will turn brown. For more information on Cryptomeria scale, visit: <http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/cryptomeria-scale.pdf>.

For a listing of insecticides and miticides registered for use on Christmas trees in PA, visit the Penn State Christmas tree Website at <http://ento.psu.edu/extension/christmas-trees>.