



PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

TUESDAY, AUGUST 16, 2016

Weekly newsletter compiled by Sarah Pickel, PA Department of Agriculture. This week's scouting data contributors: Jim Fogarty (Halabura Tree Farm), Sam Lovenwirth (PDA) and Sarah Pickel.

GROWING DEGREE DAY TOTALS:

LOCATION	GDD TOTAL	DATE
Indiana, Indiana Co.	2146.5	8/14/16
Montoursville, Lycoming Co.	2307	8/14/16
Elizabethtown, Lancaster Co.	2635	8/14/16
New Cumberland, York Co.	2665.5	8/14/16
New Ringgold, Schuylkill Co.	2591.5	8/14/16

* Figures courtesy of www.accuweather.com.

This is a special addition of the PA Christmas Tree Scouting Report, written to highlight important information about the Cryptomeria scale.

CRYPTOMERIA SCALE

For armored scales like Cryptomeria scale, which spend most of their life cycle under a tough, waxy covering, there is only a small window of time in each generation when the scales are vulnerable to contact insecticides. For south central Pennsylvania, we have reached that window for the 2nd generation of this scale. Last week, Cryptomeria scale crawlers were found settling along the needles of Fraser fir in Adams and York Counties. At that time, there were still mostly eggs with very few crawlers



Cryptomeria scale crawlers moving from underneath an adult female scale. [S. Pickel, PDA]

underneath the adult scale coverings, so it would seem that the crawler hatch was just beginning. Scale populations in Schuylkill County are not as far along as the Adams and York scale populations. As of yesterday in Schuylkill County, there were eggs found under only about 50% of adult scale covers that were checked. It may be another week to two before scale crawlers emerge in that region of the state.

Cryptomeria scale can affect many species of conifers, however true firs seem to be the preferred host on Christmas tree farms. They can also be found on spruces, Douglas-fir and hemlocks. As an infestation begins on a tree, the scales (found

on the underside of the needles) and the resulting yellow speckled damage will be located on the lower, interior foliage. The infestation can spread upward and outward, if left unchecked. Also, needles with a heavy scale infestation can



Chlorotic damage from Cryptomeria scale. [S. Pickel, PDA]

turn brown and cast off. Growers should use a hand lens of at least 10X magnification to scout for eggs and crawlers of this scale, both of which are about 0.25mm in size. Eggs, crawlers and adult female scales are all bright lemon yellow in color, but the pale gray and yellow oval-shaped scale covers need to be scraped back with a finger nail in order to see eggs and adults.

If scale crawlers have been found moving along the foliage on your farm, an insecticide application should be made. After the initial application, growers should make a point to scout again 7 days

later. If there are crawlers being found underneath the scales, it may be worthwhile to make a second insecticide application 10-14 days after the first. Some years this crawler emergence can last beyond 3 or 4 weeks, so in very heavy infestations, a 3rd spray may be necessary.

ADDITIONAL RESOURCE

For a list of control options for insect and mite pests, the most recently updated list of Insecticides & Miticides for PA Christmas Tree Pests can be found at the following link:

<http://ento.psu.edu/extension/christmas-trees/publications/2013%20Christmas%20Tree%20Insecticides-Miticides.pdf>.