

# Christmas Tree Scouting

## Special Update – 8/20/09

Compiled by Sarah Pickel, PA Department of Agriculture

*Subject: 2<sup>nd</sup> Generation of Cryptomeria Scale*

For growers who have a problem with Cryptomeria scale, now is the time to consider treating for this insect pest for the second time this season. This yellow and white armored scale, which resembles a fried egg, is primarily a pest of true firs, but may be found on other conifer species to a lesser degree. The scale has two generations per growing season and the first few second generation nymphs, or crawlers, were spotted last Friday in York County and on Tuesday of this week in Schuylkill County.

The second generation Cryptomeria scale crawlers typically emerge during a range of 1750 – 2130 Growing Degree Days (GDD). In New Ringgold, Schuylkill County, one grower reported 1997 GDD on Tuesday, 8/18 when crawlers were beginning to emerge. In the New Cumberland, York County, when crawlers emerged on Friday, the GDD total was 2223. In Elizabethtown, Lancaster County, the GDD total 2391.5 as of Tuesday.

To scout for this pest, look for yellowed speckling on the top sides of the needles (Figure 1) on boughs at the base of the tree near the trunk. On the underside of these twigs that show speckling, there will be oval shaped scales on the needles. These scales will be best viewed with a hand lens. The adult scales will have a yellow center and white outside (Figure 2). Cryptomeria is an armored scale, so the white, waxy coating protects them from insecticide sprays.

The crawlers are the life stage that will be most susceptible to horticultural oil or insecticide applications, because they have not yet formed the protective covering. The crawlers will be much smaller in size than the adult scales. They will be oval and bright yellow and may be moving (Figure 3). If growers are only seeing a

few crawlers, they may want to wait a few days for a larger number of crawlers to emerge before making their first control application.

The control recommendation for Cryptomeria scale is to make an application with an insecticide (Find the list of insecticides registered for use in Pennsylvania Christmas trees at <http://ctrees.cas.psu.edu>.) or horticultural oil. A second spray, 7-10 days later is recommended and a third spray may be needed in heavier cases. This third spray can be made 7-10 days after the second.

*This week's report includes scouting information from: Jim Fogarty (Halabura Tree Farm), Karen Najda (PDA), Brian Schildt (PSU), and Cathy Thomas (PDA).*



Figure 1: Cryptomeria Scale Damage [Sandy Gardosik]



Figure 2: Adult Cryptomeria Scale [Sandy Gardosik]



Figure 3: Settled Cryptomeria Crawlers [Sandy Gardosik]