



PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

MONDAY, AUGUST 8, 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. | 1947.5 | 8/7/16 |
| Montoursville, Lycoming Co. | 2100.5 | 8/7/16 |
| Elizabethtown, Lancaster Co. | 2409 | 8/7/16 |
| New Cumberland, York Co. | 2439.5 | 8/7/16 |
| New Ringgold, Schuylkill Co. | 2254.5 | 8/4/16 |

* 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

The start of the second generation of Cryptomeria scale has begun in York County. Last Wednesday in York County, Cryptomeria scales were found with



Cryptomeria scale with eggs (scale cover peeled back) [S. Pickel, PDA]

eggs underneath the majority of mature female scales. In another York location the previous week, there were eggs found under just a few scales. This indicates that some of these scales may have had eggs for two weeks. As Cryptomeria eggs can begin to hatch in

approximately 2 weeks, eggs should be hatching soon in York County. As of last Thursday in Schuylkill County, however, there were no eggs found underneath Cryptomeria scale covers. The female scales were appearing plump (a sign eggs would soon be laid), but the egg laying had not yet

begun. Life stages of Cryptomeria scale are very small (0.25mm-1.5mm), so scouting for this activity will require a hand lens.

This second generation, which is also the final generation occurring for the growing season, gives growers a chance to get control of the scale population if they didn't get good control of the first generation. This oval-shaped, yellow and cream-colored, armored scale pest can be found on true fir hosts (preferred), as well as Douglas-fir, hemlock and spruce. The symptom of this scale is a chlorotic, or yellowed, speckling on the upper surface of needles. Infestations tend to begin on lower, interior branches and can spread up and out as the population increases. Damage from this scale can be covered up with new foliage, but the yellowing will not really go away, so it is especially important to manage this pest as the trees get closer to being sold. When crawlers are found moving along the foliage, an insecticide application should be made

GYPSY MOTH

Last month, plant inspectors in PDA's Region 7 (PA's southeastern counties) were receiving calls about some heavy

feeding damage from gypsy moth caterpillars on Colorado blue spruce. Gypsy moth egg cases were also being found on the trunks of these blue spruce. This was also seen on a few blue spruce in York County. While hardwood tree species (oaks especially) are considered to be the preferred hosts of gypsy moths, conifers are included in the list of 300+ species that the caterpillars will feed on. While damage has been noticed on spruce species and Douglas-fir in the past, heavy feeding damage



Feeding damage by gypsy moth [S. Pickel, PDA]

is not typically seen. At this point in the season, the



Gypsy moth egg cases on blue spruce trunk [S. Pickel, PDA]

hairy caterpillars have already pupated and turned into moths, so there will be no further feeding. (There is only one generation of this pest and the moths do not feed.) There can be an issue for spruce trees on which egg cases have been laid. Growers who ship trees out of state (B&B or cut) cannot ship trees from counties/states inside the gypsy moth

quarantine area to states outside of the quarantine area without a compliance agreement. To view the USDA's gypsy moth quarantine map, visit: https://www.aphis.usda.gov/plant_health/plant_pest_info/gypsy_moth/downloads/gypmoth.pdf. For information on compliance agreements, growers can contact their PDA inspectors: <http://www.agriculture.pa.gov/regional-offices/Pages/default.aspx>.

HAVE YOU SEEN THIS DAMAGE?

This summer, PDA's Plant Industry staff had received/collected some Fraser and Nordmann fir samples with unusual damage to this year's growth. A species of thrips has been collected from these samples and could be associated with the



Damage to Fraser fir, 8/2/16 [Sven-Erik Spichiger, PDA]

damage. We are interested in visiting some other locations where this damage may be found to further investigate the issue. The damage that has been found [see pictures] is a stunting and curling of new growth (not entirely unlike Balsam twig aphid damage), with browning in some cases. Have you seen this damage on your farms?



Damage to Fraser fir, 6/10/16 [S. Pickel, PDA]

If you believe you have, we would be interested in seeing pictures of this damage. It is believed that the damage occurs in April and May as the new growth is emerging, so PDA staff would be making field visits at that time next spring. The Department appreciates your help in this matter. Emails can be sent to c-sapickel@pa.gov.

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>.