

PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

2011, Report 8: May 11, 2011

Weekly newsletter compiled by Sarah Pickel, PA
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This week's report includes data from Jim Fogarty (Halabura Tree Farm), Brian Schildt (PDA), and Cathy Thomas (PDA). The links included in several paragraphs lead to fact sheets from the new PA IPM Program publication, *Integrated Pest Management for Christmas Tree Production*.

As of Tuesday, May 3rd, there were 296 growing degree days (GDD) in Elizabethtown, Lancaster County, 288.5 GDD in New Cumberland, Cumberland County, and 224 GDD in New Ringgold, Schuylkill County. Ground temperatures in New Ringgold, Schuylkill County have risen this week to 59° F.

In eastern PA this week, Spruce needle rust continued to sporulate. Needles infected with this fungal disease will be cast at the end of the spring sporulation period. If left untreated, the disease can cause heavy needle



Figure 1: Spruce needle rust sporulating [Paul E. Hennon, USDA Forest Service, Bugwood.org]

losses. Infected needles can be found by looking at last season's needles on Colorado Blue and Serbian spruces for yellow-orange bands running around the needles. When sporulating, the bands will be split or cracked open. At this time in Schuylkill County, Blue and Serbian spruces are at about 5% bud break, so growers are making their first fungicide applications.

They will continue to make 2-3 more applications, with a week between each, until the sporulating needles are cast, or the new needles are hardened off. More information on this disease can be found at: <http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/spruce-needle-rust.pdf/view>

Fungicide applications should also be continuing for needle casts of Douglas-fir. In Schuylkill County this week, growers were making their 2nd application. If growers were late with or missed a first application, it is still recommended that you continue or begin making applications. The fungicide protects the new growth against infection and even late protection is better than none. Remember that if Swiss needle cast is present, a fourth application is needed. For more information on Rhabdocline and Swiss needle casts, visit: <http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury>

In Elizabethtown, Lancaster County crawlers of Pine needle scale were found underneath the white, cottony scale covers, but had not yet emerged along the needles of Eastern white pine. In New Cumberland, York County, the majority of the purple-red eggs had not hatched yet, but there were a few scale crawlers that had hatched and were still underneath the scale cover. One brick red scale crawler was seen out along the needle. It's expected that we will see more crawler activity next week here in southern



Figure 2: Pine needle scale cover and eggs [S. Gardosik, PDA]

PA. While not typically a major problem on Eastern white pine, it can be a bigger issue on the hard needled pines. If populations are high and it is necessary to take control action, an insecticide can be applied when the majority of crawlers have hatched and emerged on the needles.

For more information on this scale, visit: <http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/pine-needle-scale.pdf/view>

For those who also grow Arborvitae on their farms, a common pest of these trees was seen yesterday in New Ringgold, Schuylkill County. The overwintering, immature females of Fletcher scale are active and maturing. At this time, the round, amber-colored soft

scales produce a lot of honeydew, or clear, sticky excrement. With heavy infestations, black sooty mold



Figure 3: Fletcher scale mature females [Steven Katovich, USDA Forest Service, Bugwood.org]

can develop and the foliage can become yellowed, which leads to a weakened tree. A super-fine summer oil can be applied at this time to control the immature females. After scales are mature, and begin producing egg in mid – late may, wait until the flattened yellow colored crawlers emerge in June to apply an insecticide.

The next scouting report will be available May 18, 2011.

Lastly, in the 2010 growing season, it was this 2nd week of May that overwintering crawlers of Elongate Hemlock Scale had become active. In elongate hemlock scale populations checked yesterday in Dillsburg, York County, there was no crawler activity, but it would be a good idea to keep an eye on those scale populations from this point on. This armored scale pest of hemlocks, true firs and Douglas-fir (occasionally other conifers, as well) causes a yellow speckling and sometime gray flocking of needle surfaces beginning near the bottom of the trees. It can over winter as both adults and nymphs.



Figure 4: Elongate Hemlock Scale females and crawlers [B. Schildt, PDA]

When the flat yellow crawlers (1st instar, or 1st stage, nymphs) begin to move around on the undersides of foliage, growers can begin their insecticide programs. Look for more information on this pest in upcoming reports.

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>).