

PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

2010, Report 7: May 5, 2010

Weekly newsletter compiled by Sarah Pickel, PA Department of Agriculture.

This week's report includes scouting information from: Jim Fogarty (Halabura Tree Farm), Rick Malak (PDA), Karen Najda (PDA), Susan Newhart (Arcadia Trees) Linda Signarovitz (scouting consultant), Brian Schildt (PDA), and Cathy Thomas (PDA).

Growing degree day totals as of Tuesday, May 4 were 228 in New Ringgold, Schuylkill County, 335.5 in Elizabethtown, Lancaster County, and 334 in New Cumberland, Cumberland County. As of Monday, May 3, there were 175 GDD in Montrose, Susquehanna County. Other regional GDD totals, as of April 28, were 194 in Clarion County, 158 in Crawford County, 181 in Erie County's Millcreek area, 149 in Erie County's Waterford area, 238 in Mercer County and 151 in Warren County. [Data courtesy of Ruth Benner, Extension Educator – Penn State Cooperative Extension, Erie County]

In Schuylkill and York Counties, larvae of Bagworm were found inside some of last season's bags. [Fig. 1] Other bags contained eggs with no sign of larvae. The larvae have not yet left the bags, but growers could expect to see larvae on tree foliage by the beginning of next week. Like many of the pest events this year, this is earlier than we would normally expect to find bagworm larvae. Bagworms overwinter as cream-colored eggs inside the bags of the female bagworms. The bags are constructed of needle debris and silk. The larvae typically hatch from the eggs in late May to early June, and will then exit the bags on silk threads. After larvae exit the bags, they will begin to feed on and damage the new foliage. Control should be applied very soon after the larvae are found on the new growth, as larvae will become less susceptible to insecticides as they mature and increase in size.



Figure 1: Bagworm casing (L) [PA DCNR - Forestry Archive, Bugwood.org], bagworm larvae inside female casing (R) [Sandy Gardosik, PDA]

Crawlers of elongate hemlock scale were found on Fraser fir and Douglas-fir foliage in Schuylkill County this week, but the crawler emergence was still fairly light. The majority of female scales observed still had eggs, not crawlers inside their coverings. [Fig. 2] In Luzerne County, there were no crawlers found among the adult scales. Growers should wait until they see a heavier flush of crawlers on the needles before applying their first insecticide spray. This will insure that the insecticide will contact a larger number of crawlers, making it more effective.



Figure 2: Elongate hemlock scale on Fraser fir (L), Eggs inside female elongate hemlock scale casing (R) [Sandy Gardosik, PDA]

Spruce needle rust was still sporulating on Blue and Serbian spruces in Bradford, Luzerne and Schuylkill Counties. Though, as of April 29 in Bradford and Luzerne Counties, these spruces were still not breaking bud. Growers in these and other northern counties should not apply fungicides for the prevention of spruce needle rust until bud break begins.

In Bradford, Luzerne, Schuylkill and Susquehanna Counties, Rhabdocline needle cast of Douglas-fir is still sporulating.

[Fig. 3] Some growers in Schuylkill County have already applied their third fungicide spray for Rhabdocline prevention. A fourth fungicide application applied 3 weeks after the third may be necessary if Rhabdocline is still sporulating at that time, or if Swiss Needle Cast is also present.



Figure 3: Rhabdocline fruiting bodies still sporulating when split open and orange-brown in color. [Tracey Olson, PDA]

The control period for pine bark adelgid was coming to an end in Lancaster and Schuylkill Counties this week, as the nymphs were maturing and covering themselves with white woolly wax. This pest of Eastern white pine (and sometimes Scotch pine) is often not a major concern and populations may be kept in check by natural predators. If an infestation is severe, dormant oil may be applied in the fall. It is important that this application thoroughly covers the trunk and twigs.



Figure 4: Hemlock Woolly Adelgid [Michael Montgomery, USDA Forest Service, Bugwood.org]

Crawlers of the landscape pest hemlock woolly adelgid were found this week in Schuylkill County. While the only host of this pest, Hemlock, is not grown as a Christmas tree, many Christmas tree growers grow hemlocks for use in landscapes. This adelgid is a major forest pest throughout the eastern United States. Hemlock woolly adelgid feeding causes needle drop and twig die back. The distinguishing feature of this pest is the white cottony coverings of the mature females and eggs found along the twigs at the bases of the needles. [Fig. 4] Growers can apply an insecticide at the time of crawler

emergence to achieve control. Crawlers are purplish-black and oval shaped and may be found along the twigs.

Lastly, Admes Mites, which are less common than spruce spider mites, were found this week in Schuylkill County on Blue spruce. Populations of this mite can be heavy at times. Its preferred hosts in Pennsylvania are Blue, Norway and White spruces. Larger and rounder than spruce spider mites, Admes mites are reddish-brown with tan legs. [Fig. 5] Damage appears as yellow stippling or bleaching of foliage. Control of this pest is similar to spruce spider mites with two miticide applications made 7 – 10 days apart.



Figure 5: Admes mite on Blue spruce [Sandy Gardosik, PDA]

The 2010 *Insecticides and Miticides Update for PA Christmas Tree Pests* can be found at the site: <http://ento.psu.edu/extension/christmas-trees/scouting-reports>.

The next scouting report will be available May 12, 2010.