

PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

2010, Report 6: April 28, 2010

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

This week's report includes scouting information from: Jay Bagley (PDA), Jim Fogarty (Halabura Tree Farm), 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, April 27 were 144 in New Ringgold, Schuylkill County, 229.5 in Elizabethtown, Lancaster County, and 230.5 GDD in New Cumberland, Cumberland County. As of Monday, April 26, there were 118 GDD in Montrose, Susquehanna County.

Eriophyid mites were found to be actively feeding this week on Canaan fir, Eastern white pine and Hemlock. These mites are cool season mites and the recent cooler temperatures are favorable to these mites. Their feeding causes a washed out, bronzed or rusty coloring on last season's needles. [Fig. 1] As the new buds begin to break, the mites will be moving to the newly developing needles. Because of their small size, this mite can be very difficult to locate on the needle, even using a hand lens. Look for pale tan or peach long-bodied mites moving along the undersides of the needles of fir, hemlock and spruce or between the sheathed needles of white pine [Fig. 1]. Growers may control these mites with a miticides or insecticide. If using a miticide, growers should make sure that Eriophyids are listed on the label, as not all miticides are effective on Eriophyid mites. 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>.



Figure 1: Eriophyid mites on white pine (L); Eriophyid mite damage on Canaan fir (R) [Sandy Gardosik, PDA]

In Schuylkill County, nymphs of pine bark adelgid were found on the expanding candles of Eastern white pine. As was

mentioned last week, this pest is not commonly a major problem and populations are often kept in check by natural predators. The noticeable sign of this insect is the white cottony wax that builds up on the bark of its host. [Fig. 2] Growers should use a hand lens to view these purple-black, oval shaped nymphs on the new growth of Eastern white pine. In the case of a heavy infestation, now would be the time to control this insect with an insecticide.



Figure 2: Pine bark adelgid on Eastern white pine [Brian Schildt, PSI]

Bright yellow, oval crawlers of elongate hemlock scale were starting to be seen this week on Canaan and Fraser Fir and Douglas-fir in York and Schuylkill Counties this week. This armored scale can be found on the undersides of the needles starting at the bottom and inside of the tree. Damage will be seen as yellow speckling on the top of the needles. [Fig. 3] The crawler emergence was still very light. Growers may see a heavier emergence next week and should consider starting insecticide treatments at that time. See last week's report for an optional spray schedule.



Figure 3: Elongate hemlock damage on Grand fir [Cathy Thomas, PDA]

With the rain storms that took place earlier this week in much of Pennsylvania, diseases continued to sporulate, or release infectious spores. For Rhabdocline needle cast, growers can find the sporulating fruiting bodies by looking on the underside of last season's Douglas-fir needles showing the splotchy, rust-colored lesions. When the lesions appear swollen and split,

they are capable of releasing spores. When the lesions become dry and turn black, sporulation is complete for the season. [Fig. 4] Some growers in Schuylkill County applied their second fungicide spray for Rhabdocline at the end of last week. This second spray, which was approximately 1 week after the first, should be followed by a third spray two weeks later. If Rhabdocline sporulation continues three weeks after this third spray, or if Swiss needle cast is also present, a fourth fungicide spray should be considered.



Figure 1: Rhabdocline fruiting bodies sporulating (L); dead Rhabdocline fruiting bodies (R) [Tracey Olson, PDA]

Douglas-fir needle midge were still active this week in Schuylkill County. The fly-like midge lay their eggs inside the buds of Douglas fir very soon after they emerge. Larvae that hatch from those eggs tunnel into the new needles. Inside the needles, the larvae will feed and mature, causing the needle to kink and turn yellow. At the end of the year, when the larvae exit the needles to pupate in the soil, the needles will be cast. The time to control this pest is before the eggs are laid. For many counties, the peak emergence time has past (emergence usually occurs for 7-10 days). A second spray, made a week to 10 days after the first, may be necessary if midge are still active.

The next scouting report will be available May 5, 2010.