## PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

2010, Report 8: May 12, 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) Brian Schildt (PDA), Linda Signarovitz (scouting consultant) and Cathy Thomas (PDA).

Growing Degree Day totals as of Tuesday, May 11th, were 388.5 in Elizabethtown, Lancaster County and 265 in New Ringgold, Schuylkill County. These accumulations are now about 1 week ahead of last year's totals. As of Monday, May 10th, there were 213 GDD in Montrose, Susquehanna County. Regional GDD totals collected last Thursday, May 5th in Northwest PA were as follows: 285 GDD in Clarion County, 235 in Crawford County, 277 GDD in the Millcreek area of Erie County, 225 GDD in the Waterford area of Erie County, 327 GDD in Mercer County and 226 GDD in Warren County. [Northwest data courtesy of Ruth Benner, Extension Educator – Penn State Cooperative Extension, Erie County.]



Figure 1: Balsam twig aphid needle damage [Sandy Gardosik, PDA]

This week, the light graygreen nymphs of Balsam Twig Aphid were active in the new growth of Concolor fir in Berks County, Fraser fir in Lehigh County and Canaan fir in York County. As the new growth of these firs expands, the twisting damage of the needles caused by the aphid feeding will become more obvious. [Fig. 1] Unfortunately, at this point in the season, it's not possible to achieve control or prevent

damage, because the aphids are protected at the bases of new needles. The time to achieve control will be next spring before bud break, after the stem mothers first hatch from the silvery-black eggs. An insecticide application made at that time will prevent the needle damage.

Elongate Hemlock Scale crawlers continued to emerge in Adams, Lehigh and Schuylkill Counties this week. When

growers begin to see the bright yellow, oval crawlers moving on the needles [Fig. 2], they should start their insecticide series. The recommendations from Penn State are to make 3-4 sprays spread out over 12 weeks.



Figure 2: Elongate hemlock scale crawlers moving on the needles [Sandy Gardosik, PDA]

As of Friday in Adams County, eggs of Pine Needle Scale had still not hatched, and today in Cumberland County, only eggs were found under the adult scale covers. Growers should be looking for crawlers to hatch from these eggs soon, though, as the typical crawler

emergence range for this pest is 298 - 448 GDD. This armored scale has a white oblong covering. When crawlers emerge, they will be oval-shaped and reddish brown. [Fig. 3] While the scales may be found on many conifer varieties, their preferred hosts are Eastern white pine, Scotch pine and Mugo pine. There are two generations per season of this pest and as with most scales, the life



Figure 3: Mature pine needle scale (Top) [Rayanne Lehman, PDA]; pine needle scale crawlers (Bottom) [Sandy Gardosik, PDA]

stage which is easiest to control is the crawler stage. When the crawlers emerge, growers can apply a horticultural oil or insecticide, making two applications a week apart.

In Schuylkill and York Counties this week, Bagworm

larvae were still not emerging from the adult bags. Growers should be watching for the emergence to happen soon because larvae had begun to hatch inside some bags in these counties last week. The bags were constructed by last season's larvae using the host tree's needles. Control



Figure 4: Bagworm casing [Cathy Thomas, PDA]

actions should be taken soon after the young larvae are found on the needles because the larvae become less susceptible to insecticides as they mature and increase in size.

Rhabdocline Needle Cast was still sporulating this week in Schuylkill County. As Douglas-fir bud break has occurred in most areas of the state, growers should be in the midst applying their series of fungicid sprays. PA state nursery inspectors have reported seeing high



Figure 5: Swiss Needle Cast fruiting bodies [Tracey Olson, PDA]

numbers of Swiss
needle cast this year,
that other needle cast
disease of Douglas-fir,
so growers may need to
add a fourth application
to the three fungicide
applications they would
make for Rhabdocline. If
Swiss needle cast is
present, there will be
rows of black, powdery
fruiting bodies on the

undersides of last year's needles. [Fig. 4] The tips of these needles will be brown.

Lastly, Spruce needle rust continues to sporulate in Schuylkill County. As long as the new needles of Blue, Serbian and White spruce continue to push, they should be protected with fungicide applications.

The 2010 Insecticides and Miticides for Christmas Tree Pests is available on the Scouting Report Page on the Penn State Christmas tree Website, found at <a href="http://ento.psu.edu/extension/christmas-trees/scouting-reports">http://ento.psu.edu/extension/christmas-trees/scouting-reports</a>.

The next scouting report will be available May 19, 2010.