

PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

2011, Report 3: April 6, 2011

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

This week's report includes data from Jim Fogarty (Halabura Tree Farm), Karen Najda (PDA), Susan Newhart (Acadia Tree Farm), Tracey Olson (PDA), 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*. Those interested in purchasing this publication can call the PSU College of Ag Publications office at 814-865-6713, fax them at 814-863-5560 or send an e-mail to AgPubsDist@psu.edu and ask about publication item # AGRS-117.

As of April 5th, growing degree day (GDD) accumulations were 25.5 in Elizabethtown, Lancaster County, 25 in New Cumberland, Cumberland County, 15 in New Ringgold, Schuylkill County, and 0 in Montrose, Susquehanna County.



Figure 1: Balsam twig aphid with honeydew droplet [PDA]

Today, stem mothers of Balsam twig aphid were found feeding on foliage of Canaan fir in western York County. The pale gray-green, wingless nymphs [Fig. 1] recently hatched from the silvery, football-shaped overwintering eggs and moved to the undersides of the needles to begin extracting plant juices. This feeding does little harm to the needles, but the second generation of nymphs, which the stem mothers will give birth to around the first sign of bud break, will cause the new needles to curl and be stunted. To prevent damage, controls (horticultural oil or insecticide) should be made after the overwintering eggs have hatched, but before the buds break. Overwintering eggs will be found tucked at the base of the needles on the undersides of the twigs. When scouting for the nymphs, it is helpful to look for a common distinguishing feature: the aphid will often be

found with a shiny, clear bubble of honeydew being excreted from its abdomen. This honeydew is easy to see with a hand lens and may even be visible to the naked eye. Find more on balsam twig aphid at: <http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/balsam-twig-aphid.pdf/view>.

In Schuylkill County, arborvitae spider mites were becoming active on arborvitae this week. When the red overwintering females start to become active and emerge from the protection of the arborvitae scales in early spring, they will begin to lay eggs, which will hatch into the next generation of mites. These will be lighter and more slender than the overwintering females. Horticultural oil can be used at this time to control this mite.

Spruce spider mites are also commonly found on arborvitae and may also be seen at this time.

The red-brown spruce spider mites [Fig. 2] typically hatch from red overwintering eggs in mid-April at a GDD range of 50-121. This species may be found on a wide range of conifers, but spruce species and true fir species are preferred. Mite feeding will cause a yellow stippling of foliage, often at the base of the needles. After egg hatch, a miticide product may be applied. For more info on spruce spider mite, see: <http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/spruce-spider-mite.pdf/view>.



Figure 2: Newly hatched spruce spider mites [PDA]

Despite cooler temperatures and poor weather conditions this week, white pine weevil continued to be active in Lancaster and York Counties this week. In both counties, specimens were found in traps. If growers have found specimens in their traps, an insecticide application would be recommended (when weather conditions permit) to prevent the adults from

laying eggs in tree leaders. Once eggs are deposited in the leaders, damage to the leaders will occur.

Lastly, in Susquehanna County this week, Cooley spruce gall adelgids have begun to wax over on Douglas fir. When the adelgids develop their wool-like wax coverings, the control window has ended for the spring season. The adelgids will lay eggs and spread to new foliage during the summer season. The best time to achieve control is in the fall, after the last generation of nymphs has settled on the foliage of Douglas-fir or in bark crevices of Colorado blue spruce. The same is true for eastern spruce gall adelgid on Norway spruce.

A list of insecticides and miticides registered for use in 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>).

The next scouting report will be available April 13, 2011