

Christmas Tree Scouting

Report #12 – 6/10/09

Weekly newsletter compiled by Sarah Pickel,
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This week's report includes scouting information from: Jim Fogarty (Halabura Tree Farm), Karen Najda (PDA), Brian Schildt (PSU), Linda Signarovitz and Cathy Thomas (PDA).

The growing degree day totals as of Tuesday, June 9th are 747.5 in Elizabethtown, Lancaster County and 566.5 in New Ringgold, Schuylkill County.

In Schuylkill County, bagworm larvae have emerged from the adult cases this week.

These larvae are tan with dark heads when they emerge on silk threads from the cases, but quickly, they will begin feeding on the new needles of Douglas fir, white pine, spruce or true firs and their bodies will be covered with the brown bags they form from plant material and silk. Growers can also look for feeding damage on the new needles. While they are young, the larvae are too small to eat the whole needle, so growers will see partially eaten needles with browning. An application of a *Bacillus thuringiensis* (Bt) or insecticide product can be made when the larvae are found feeding on the needles. See the the *2009 Insecticides and Miticides for Christmas Tree Pests* (found at <http://ctrees.cas.psu.edu>) for acceptable treatments.



Figure 1: Bagworm early damage (Above), Young Bagworm (Below) [Sandy Gardosik, PDA]



In Lehigh, Schuylkill and York Counties, elongate hemlock scale crawler activity has been observed on Fraser fir. Growers should be using a hand lens to find the flat, oval, bright yellow crawlers on the undersides of the needles. The infested branches tend to be at the bottom of the tree, close to the trunk. Because this is an armored or hard scale,



Figure 2: Elongate Hemlock Scale with crawlers [Sandy Gardosik, PDA]

meaning it has tough waxy covering developed from the shed outer coats of the scales, control can be challenging, especially since all of its life stages may be present at anytime of the season.

Crawlers are the vulnerable stage, so now that they are

active, growers can begin their spray programs. Using one of the insecticides listed on the *2009 Insecticide and Miticides for PA Christmas Tree Pests*, growers can either make 4 sprays, 3 weeks apart or 3 sprays, 4 weeks apart.

Cryptomeria scale crawlers have not been found yet in Schuylkill or Lancaster Counties. The eggs can be expected to hatch this week

or next. The crawlers are similar in appearance to elongate hemlock scale crawlers (oval, bright yellow) and are also the life stage most vulnerable to insecticide sprays. When growers see the scale crawlers on the undersides of the needles on the lower branches of the trees (requires a hand lens!), they can make their first



Figure 3: Cryptomeria scale adult with eggs and early settled crawlers [Sandy Gardosik, PDA]

insecticide application. A second spray, 7-10 days later is recommended and a third spray

may be needed in heavier cases. This third spray can be made 7-10 days after the second. This pest has two generations, so growers will need to scout again for crawler emergence in early August.



Figure 4: Spruce Spider Mites
[Sandy Gardosik, PDA]

Spruce spider mites are still active in Dauphin, Lehigh, Schuylkill, and York Counties. Growers who find mites in their new growth may want to consider applying a second round of miticides to prevent further mite feeding damage to the new growth. Two sprays about 10 apart should be effective.

Growers should be sure to check labels before applying a second round of miticides, as some products are only to be used once per season.