

PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

MAY 30, 2012

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

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GDD TOTALS AS OF TUESDAY, 5/29/12:

LOCATION	GDD TOTAL
Elizabethtown, Lancaster County	790
Hallstead, Susquehanna County	484
New Cumberland, York County	846
New Ringgold, Schuylkill County	757.5

CRYPTOMERIA SCALE

In Lancaster and York Counties this week, first generation crawlers of Cryptomeria scale were

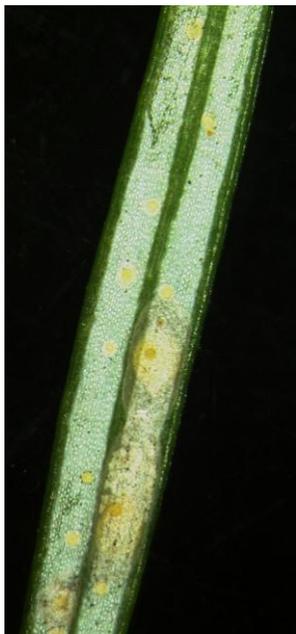


Figure 1: Settled crawlers and two adult female scales.
[S. Gardosik, PDA]

After finding an open space, crawlers "settle," meaning they select a permanent feeding location

seen moving on the foliage of Canaan and Fraser firs. This emergence is occurring approximately one week ahead of last season's emergence. The mobile, bright yellow crawlers, or nymphs, are the most vulnerable stage of this hard scale pest. They have hatched from eggs located underneath the adult female scale coverings. When the small oval crawlers hatch, they move out from under the female scales and spread out to open spaces on both old and new season's needles.

from which they will not move. They insert their stylets (tube-like mouthparts) into the needles and begin to form a protective waxy covering.

Growers should be scouting preferred host trees (Canaan, Fraser and other true firs) to find scale populations, concentrating on the lowest branches. Scales will be found on the underside of foliage which has yellow speckling on the upper surface. When crawlers are seen, growers should make an insecticide application, focusing on penetrating foliage on the lower half of the trees (unless the infestation is severe and found on the upper halves of the trees as well). Timing is important with the control of this pest - crawlers are most vulnerable to insecticides before they begin to form their protective coverings, however, the chemicals can still penetrate the early coverings. A second insecticide application should be made 7-10 days after the first. A third application (7-10 days after the 2nd) may also be necessary if crawlers continue to be seen after the 2nd spray.

As of last Thursday in northern Dauphin County and yesterday in New Ringgold, Schuylkill County and the northern side of Elizabethtown, Lancaster County, only eggs were found underneath the females - crawlers were not seen. With warm temperatures continuing throughout this week, growers in these areas could expect to see crawlers next week. For more information on Cryptomeria scale, visit: <http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/cryptomeria-scale.pdf>.

CONTINUING PESTS

Crawlers of elongate hemlock scale continue to emerge this week, as they will through most of the growing season. In Schuylkill County, growers have made their first insecticide application for this pest. After monitoring these treated populations, it seems as though the insecticides have been effective on the early crawlers. Growers should continue to make two

more applications (4 weeks between sprays) or three more applications (3 weeks between sprays). For more information on elongate hemlock scale, visit:

<http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/elongate-hemlock-scale.pdf/view>.

Across the mid-state, young bagworm larvae continue to feed on the foliage of a number of conifer hosts. In northern Dauphin County, the larvae were still small and were only damaging part of the needles. As the larvae grow, they will begin to consume whole needles. When the larvae are still small, a single application of an insecticide should be sufficient for controlling bagworm. For more information on this pest visit:



Figure 2: Young bagworms feeding on Douglas-fir [S. Gardosik, PDA]

<http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/bagworm.pdf/view>.

OTHER PESTS

At this time, growers of Scotch pine may be seeing crawlers of **striped pine scale** emerging on the new growth. These small, peach-colored nymphs will be found along twigs and needles moving away from the adult female scales. These adult scales are helmet-shaped and brown with cream-colored markings. This scale is considered a minor pest in many cases, but in heavy infestations, the health of the tree may be



Figure 3: Striped pine scales and crawlers [B. Schildt, PDA]

compromised when black sooty mold develops on the foliage as a result of scale feeding. (The mold forms on the honeydew excrement the scales produce.) A single application of horticultural oil or insecticide made at the time of crawler emergence should adequately control this pest. Dormant oil applied after the growing season can also be used to control striped pine scale. For more information on this soft scale pest, visit:

<http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/shoot-and-branch-injury/striped-pine-scale.pdf/view>.

One pest of concern for many ornamental conifer growers is the soft scale pest, **Fletcher scale**.



Figure 4: Fletcher scale [Steven Katovich, USDA Forest Service, Bugwood.org]

Although not a pest of Christmas trees, this pest of arborvitae, cedar, juniper and yew generally emerges around the same time other scale pests are emerging on the farms. Growers who raise these landscape trees should be looking for crawlers to emerge around this time. The adult scales are

amber-colored and dome-shaped. Crawlers will be small, oval-shaped and peach-colored. These can be controlled with a single application of horticultural oil or insecticide. For more information on this pest, visit:

<http://ento.psu.edu/extension/factsheets/fletcher-scale>.

A list of Pennsylvania's registered miticides and insecticides, entitled *2011 Insecticides and Miticides for Christmas Tree Pests*, can be found at the Penn State Christmas tree Website, <http://ento.psu.edu/extension/christmas-trees>.

The next scouting report will be available June 6, 2012.