

PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

MAY 23, 2012

Weekly newsletter compiled by Sarah Pickel, PA
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GDD TOTALS AS OF TUESDAY, 5/22/12:

LOCATION	GDD TOTAL
Elizabethtown, Lancaster County	606.5
Hallstead, Susquehanna County	369
New Cumberland, York County	642.5
New Ringgold, Schuylkill County	546

BAGWORMS

This week in northern York County, bagworm larvae were beginning to damage the new foliage



Figure 1: Young bagworm damage [PDA]

of Douglas-fir trees. The young caterpillars can be seen hanging down from needles or twigs of new growth and have begun forming protective casings out of needle debris. Bagworms can be found on any species of conifer.

To scout for this pest, growers should observe the new growth of trees with brown, cone shaped casings on last season's growth. Control treatments should be made soon after emergence is observed. Young larvae are the most vulnerable to insecticide. For more information on the life cycle of bagworms:

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

CRYPTOMERIA SCALE

In Lancaster, Schuylkill and York Counties this week, there were no crawlers found on needles infested with Cryptomeria scale. Since this is the 2nd week that eggs have been observed in Lancaster and York Counties, however, growers could expect to see crawlers emerging next week in these areas.



Figure 2: Adult female Cryptomeria scale with crawler [S. Pickel, PDA]

Crawlers will be bright yellow, flat and oval shaped and will be moving on the needles around the white and yellow adult scales. Growers should be scouting for scales on the undersides of yellow speckled needles found on the lower branches of host trees. True firs, such as Fraser, Canaan, and Concolor, seem to be the preferred hosts, but if the pressure is high, Cryptomeria can be found on both Douglas-fir and spruce trees. When the scale crawlers do emerge, growers should be prepared to make at least two applications of an insecticide, 7-10 days apart, to get control of this pest. 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/view>.

ELONGATE HEMLOCK SCALE

Elongate hemlock scale crawlers continued to emerge this week in Schuylkill & York Counties. Since there are staggered generations of this armored scale pest, crawler emergence may continue throughout the course of the summer. This is the reason that the control applications are recommended to be spread out over a period of 8-9 weeks. The spray schedule should be 3

sprays with 4 weeks between each spray, or 4 sprays with 3 weeks between each spray. 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>.

PINE SPITTLEBUG

For the past few weeks, growers may have noticed the presence of white, frothy masses at the bases of new shoots on a number of their conifers. These masses are produced by the feeding nymphs of the Pine spittlebug. This true bug pest of many conifer species feeds on tree sap, then excretes a clear liquid which it fills with air bubbles, forming a protective mound of "spittle". Pine spittlebug is generally considered a minor pest of conifers and not requiring control action, however, on pines weakened by drought, excess water or other issues, the pest may be more of a concern. On these weakened pines, spittlebug feeding wounds could be a



Figure 3 & 4: Above: Pine spittlebug spittle mass [S. Pickel, PDA]; Below: Pine spittlebug nymph [S. Pickel, PDA]



gateway for the pine disease *Diplodia*. If growers notice a heavy presence of spittle masses in blocks of pines that had *Diplodia* infections last season, they may want to treat for pine spittlebug this season. The time to treat for this pest is in mid-summer (typically early July) when the adults

emerge from spittle masses. At the end of June, growers can scrape away spittle masses to see if nymphs have gone. When the majority of masses are empty, a single application of an insecticide should be efficient for control.

NOTICEABLE DAMAGE

At this time in the season, damage from a few common pests may be noticeable as growers are mowing, removing cones or conducting other tree maintenance tasks. It's a good idea to keep a small notebook close at hand while conducting these tasks, so that these issues can be recorded and fall or spring control actions can be scheduled.

One such pest is the Balsam twig aphid. The familiar twisting of new growth as a result of this



Figure 5: Balsam twig aphid damage [S. Pickel, PDA]

pest was seen in York County last week. While the damage is irreversible at this time of year, growers can plan on making an insecticide application early next Spring before new growth opens up. (North Carolina

researchers have also found a fall insecticide application to be effective against this pest.)

Damage from Cooley spruce gall adelgids is also evident at this time. On Douglas-fir in southern

York County, kinked needles with yellow spotting on the upper surface and white, cottony masses on the undersides were seen. The cottony masses protect the adelgids from the effects of insecticide



Figure 6: Cooley spruce gall adelgid on Douglas-fir [S. Pickel, PDA]

treatments, but by mid-October, the uncovered, overwintering nymphs should be settled on the

foliage. The adelgids will be the most vulnerable to dormant oil or insecticides at that time. This pest may also be found on Colorado blue spruce. At this time on blue spruce, Cooley nymphs have begun forming swollen, pine cone shaped galls. In light cases, these galls can be clipped off in mid-summer before they've opened up to release the flying adult adelgids. For heavier cases, a fall insecticide treatment at the same time of the Douglas-fir treatment will be effective.

Lastly, galls formed by Douglas-fir needle midge may be noticeable on the new Douglas-fir foliage. This damage can resemble Cooley damage, in that the foliage shows yellow spotting and kinking. However, with this pest, the white, wooly tufts (or black nymphs) will be absent on the underside of the needles. The time to treat for this pest will be next spring at the very beginning of bud break.

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 May 30, 2012.