



PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

WEDNESDAY, APRIL 9, 2014

Weekly newsletter compiled by Sarah Pickel, PA Department of Agriculture. This week's scouting data contributors: Jim Fogarty (Halabura Tree Farm), Sarah Pickel and Brian Schildt (PDA).

GROWING DEGREE DAY TOTALS, 4/8/14:

| LOCATION | GDD TOTAL |
|--|-----------|
| Indiana, Indiana Co.* | 7 |
| Montoursville, Lycoming Co.* | 1.5 |
| Mount Joy Twp, Elizabethtown (NE), Lancaster Co. | 15.5 |
| New Cumberland, York Co. | 9 |
| New Ringgold, Schuylkill Co. | 15.5 |

* Figure courtesy of www.weather.com.

WHITE PINE WEEVIL

This past Sunday in Schuylkill County, white pine weevils were found in several traps. These traps



Figure 1: (Top) Weevils in trap; (Bottom) White pine weevil on leader [PDA]

were in blocks of Eastern white pine and Serbian spruce. Soil temperatures collected that day (on the sunny sides of the trees) was exactly 50°F, proving that measuring soil temperature is a very effective method for predicting emergence. One white pine weevil was also found in a trap in York County. Although no white pine weevils have been found thus far in traps being monitored in Figure Dauphin and Lancaster Counties, with the growing degree days that have been accumulated, they could be out in these

areas as well. Growers can also be monitoring leaders of host trees (pines, especially eastern white pine; spruces, especially Serbian spruce; and occasionally Douglas-fir). Feeding spots will be visible as clear sap bubbles.

Where white pine weevils have been found, growers can plan to make an insecticide application to the upper 1/3 of the trees within 2 weeks of when weevils were found. A second application made 7-10 days later if weevils are found in traps following the first application. As mentioned last week, another management strategy is to wait to cut out any damaged leaders after they've begun to wilt in early summer. Leaders should be cut down to point of "good wood," or below the brown, soft vascular tissue where larvae have fed, and remove them from the field. A new leader can be trained for future seasons.

ERIOPHYID (RUST) MITES

Rust mites have now been found on trees in Dauphin, Schuylkill and York County. On foliage in Schuylkill County, about 50% of eggs seem to be hatched. In York County, closer to 75% of eggs were hatched.

Eriophyid mites were observed on Colorado blue spruce and Concolor fir, but these mites can be found on most species of spruce, fir, and hemlock, as well as Eastern white pine and Scotch pine. Look for the wedge-shaped rust mites to be moving along the needles, with eggs found close to the bases of needles. For trees with heavier populations (at least 8 mites on a single needle in

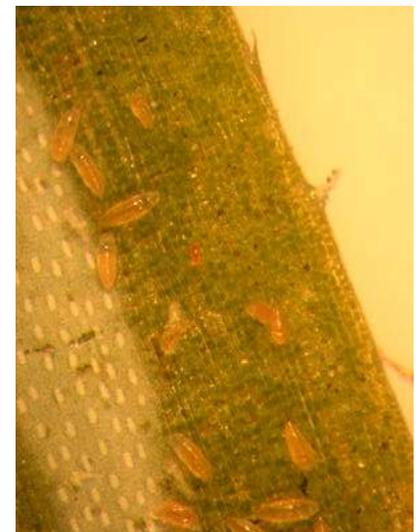


Figure 2: Spruce rust mites [PSU]

the block and 80% of sampled shoots in a block having mites on), treat with a registered miticide which lists Eriophyid or rust mites on the label. <http://extension.psu.edu/ipm/program/christmas-tree/pest-fact-sheets/needle-discoloration-and-injury/eriophyid-rust-sheath-mites.pdf/view>.

SPRUCE GALL ADELGIDS

Two common pests of Christmas trees are Cooley spruce gall adelgid on Colorado blue spruce and Douglas-fir, and Eastern spruce gall adelgid on



Figure 3: Eastern spruce gall adelgid nymphs almost covered with wax; Old ESGA galls [Pickel]

Norway spruce. These aphid-like pests cause galls to form on the shoots of their spruce hosts. On Douglas-fir, the symptom is kinked needles. For growers who've had issues with either Cooley spruce gall or Eastern spruce gall adelgid, the best time to treat for these pests is in the fall. If growers missed the fall treatment, some control can be achieved with a spring application however, the time when a spring spray will be effective is coming to a close in south central PA. Once the overwintering nymphs have had a chance to completely form their covering of white, woolly wax, they will be well protected from insecticide applications. On Norway spruce sample found in York County this week, the overwintering nymphs were mostly covered with this protective coating. Some mid-Atlantic areas could still have time to make an effective insecticide application, though. Scout blocks which have seen damage before to determine what stage the nymphs are in.

For more information on adelgids, visit: <http://extension.psu.edu/pests/ipm/program/christmas-tree/pest-fact-sheets/shoot-and-branch-injury/cooley-spruce-gall.pdf/view>.

HELPFUL RESOURCES

A list of Pennsylvania's registered miticides and insecticides (*2013 Insecticides and Miticides for Christmas Tree Pests*) can be found on Penn State's Christmas Tree Website, <http://ento.psu.edu/extension/christmas-trees>.

The PA IPM Program publication, *Integrated Pest Management for Christmas Tree Production: A Guide for Pennsylvania Growers* is available as a free PDF download at <http://pubs.cas.psu.edu/FreePubs/pdfs/agrs117.pdf>. To purchase this publication (# AGRS-117), 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.

The next scouting report will be available April 16, 2014.