



PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

THURSDAY, APRIL 2, 2015

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

GROWING DEGREE DAY TOTALS, 4/1/15:

LOCATION	GDD TOTAL
Indiana, Indiana Co.*	0
Montoursville, Lycoming Co.*	0
Mount Joy Twp, Elizabethtown (NE), Lancaster Co.	4
New Cumberland, York Co.	1.5
New Ringgold, Schuylkill Co.	0

* Figure courtesy of www.weather.com.

WHITE PINE WEEVIL MONITORING

White pine weevils were found in two traps this week. Last Friday, a weevil was found in a trap in western Lancaster County and yesterday, two were found in a trap in northern York County. There were no weevils found in western or southern York County, northern Dauphin County and Schuylkill County. Although the weevil catches were a little outside the typical GDD range of 7-58 GDD, many areas should be falling within this range after today's predicted warm temperatures. As for soil temperatures, in Schuylkill County, they were still only ranging from 37°-41° F, but these should also begin to rise and approach the necessary 50° F for weevil emergence. Growers can expect to be finding weevils in their traps as this week's temperatures continue to warm up.

For growers who are using the pyramidal traps (Whalon Modified Tedder's traps available at www.greatlakesipm.com) to monitor for white pine weevil, it is important to remember to keep the bait vials filled with ethanol and turpentine. These attractants are essential drawing the weevils into the traps, but the ethanol will eventually evaporate if not regularly refilled.

Growers who are not trapping for this pest may still be able to see weevils in their fields. On warm, sunny days like today, weevils may be found on leaders of host trees feeding on sap or mating. Those trees are pines, especially eastern white pine, spruces, especially Serbian and occasionally Douglas-fir. These weevils are approximately ¼ inch in size and are brown in color, with white and rust colored spots on the lower portions of their wing covers (or elytra).



Figure 1: White pine weevil adult on spruce leader [S. Gardosik, PDA]

After emerging and moving to the leaders of the trees, the weevils will feed and mate for a while, but after about a week, they can begin to lay eggs in the leader. After this happens, the damage will be inevitable, so it is important to make any pesticide applications before egg laying begins, or in less than a week after weevil emergence on your farm. Insecticides can be applied to the top third of the trees. If weevils continue to be found in traps several days after the first application, growers may want to consider making a second application 7-10 days after the first.

ERIOPHYID MITES

Another pest that is commonly found emerging at this time is the Eriophyid mite, also known as rust mite or sheath mite, depending on which host they are found on. Rust mites are found on spruce, fir and hemlocks. Sheath mites are found on pines. Sheath mites cause the needles to be stunted and discolored. Rust mites are named as such because the damage they cause is a dull or rusted color to the needles. When severe, Eriophyid mites can also hinder the overall health of the tree.

So far, IPM program scouts have only seen eggs, not active mites. These mites typically hatch within



Figure 2: Rust mite eggs (above) and adult (below) [S. Pickel, PDA]

a range of 7-22 GDD. The challenge with scouting for this pest is its size. Both the eggs and the mites are very tiny and only visible with a hand lens, but a microscope is best. The round eggs will be found in clusters on the lower portion of the needles, closest to the twig. Narrow, triangular shaped mites will be found roaming the needles. On spruce, both the eggs and mites are peach or salmon colored. On firs and hemlocks, the eggs and mites are white/translucent. Eggs that have hatched are clear.

If mites are found on 80% of twigs samples, growers may want to consider treating with horticultural oil or an insecticide to control the mites. (Warning: using horticultural oil on Colorado blue spruce will cause the blue color to fade.) Make a first application when the majority of the eggs have hatched. If mites are still present after 1-2 weeks, consider making a second application.

ADDITIONAL RESOURCE

For a list of control options for insect and mite pests, the most recently updated list of Insecticides & Miticides for PA Christmas Tree Pests can be found at the following link:
<http://ento.psu.edu/extension/christmas-trees/publications/2013%20Christmas%20Tree%20Insecticides-Miticides.pdf>.

The next scouting report will be available Thursday, April 9, 2015.