



PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

FRIDAY, MARCH 25, 2016

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

GROWING DEGREE DAY TOTALS, 3/24/16:

LOCATION	GDD TOTAL
Indiana, Indiana Co.	59
Montoursville, Lycoming Co.	53.5
Elizabethtown, Lancaster Co.	75
New Cumberland, York Co.	70.5
New Ringgold, Schuylkill Co.	42.5

* Figures courtesy of www.weather.com.

WHITE PINE WEEVIL

Trapping activity has been slow in Central PA this week. In the emergence traps monitored by the IPM Program team, only one white pine weevil was found in a trap in York County. Because GGD



accumulations are already well within the typical 7-58 GGD range for white pine weevils and because weevils had already been found in Schuylkill County a few weeks ago, growers may have already made an insecticide application to control this pest. These

growers should still be monitoring their traps. If they are catching weevils a week after the insecticide application was made, it may be helpful to make a second application.

The emergence traps attract the brown mottled adult beetles after they have emerged from their overwintering sites. After emergence, they will feed and mate. The hope is that an insecticide application would be made within 7 days of this emergence in order to prevent the adult weevils from laying eggs inside the host tree leaders. Once the eggs are protected within the leader, they will hatch into larvae feed on the leader vascular tissue. It is the larval feeding that eventually kills the leader.

If the opportunity is missed to kill the adults with an insecticide application, the infested leaders can be cut out and burned/removed from the fields before the developing weevils have a chance to emerge mid- to late July. The cutting should be made down in the green, healthy tissue to insure that all the developing weevils are removed.

SPRUCE GALL ADELGIDS

On Norway spruce in northern Dauphin County, eastern spruce gall adelgids were observed this week. These adelgids were already covered over

with a white, cottony wax, where two weeks ago, the small black adelgids were still somewhat exposed. The significance of this covering is that with it, the adelgids are well protected from any insecticide applications that would be made from this point on. Insecticide applications



intending to prevent adelgid damage should have been made a few weeks ago. The protected adelgids will lay dozens of eggs underneath their coverings, which will hatch shortly after that and begin feeding on the new Norway spruce buds. This feeding causes a pineapple-shaped gall to develop at the base of the new growth, which will be unsightly and could affect the growth of the tree. This process is similar to what the Cooley spruce gall adelgid will do to the Colorado blue spruce. The difference with the Cooley spruce gall adelgid is that it also has an alternate host, Douglas-fir, on which the wax covered adelgids cause the needles to kink instead of forming a gall.

The best time for controlling these spruce gall adelgids is actually in the fall. That is the time



when adelgids have settled into their overwintering sites at the base of next season's buds and when they are exposed to the elements. The small black adelgids do not have their protective white, waxy covering. When scouting for

this pest, look for the adelgids on branches that are located adjacent to branches damaged by galls.

ERIOPHYID MITES

This week, hatched rust mites, a type of Eriophyid mites, were found on Concolor fir foliage in Lancaster County, on blue spruce in York County and on Hemlocks in Schuylkill County. In these locations, the majority of eggs had hatched out already.

In addition to attacking firs, hemlocks and spruce, these tiny mites can also be found on pines. When scouting for this pest, the very tiny 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 moving along 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. On any host, eggs that have hatched are clear.

Growers may want to consider treating with a horticultural oil or insecticide if 80% of the twigs that are sampled have mites. Since I've had questions about horticultural oils and dormant oil (an oil application made during the spring or fall when pests are dormant), I wanted to list some of the options for horticultural oil in PA: SuffOil-X, Damoil, Omni Supreme Spray, and RTSA Horticultural Oil. See the link at the end of the sheet for a more complete product list. (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.

LOOKING AHEAD

In Schuylkill County this week, some spruce spider mite eggs were found to be darkening and swelling. This is a sign that the normally red-orange eggs are getting ready to hatch. The GDD range for egg hatch of this tiny pest of spruces and firs is 50-121, so many places in central PA have entered this range and could be seeing mites soon. Next week's report will have more on this pest.



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, March 31, 2016.