



PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

THURSDAY, MARCH 17, 2016

Weekly newsletter compiled by Sarah Pickel, PA Department of Agriculture. This week's scouting data contributors: Andy Alpaugh (Evergreen Valley Tree Farm [NJ]), Jim Fogarty (Halabura Tree Farm), Karen Najda (PDA), Sarah Pickel and Cathy Thomas (PDA).

GROWING DEGREE DAY TOTALS, 3/17/16:

LOCATION	GDD TOTAL
Indiana, Indiana Co.	31.5
Montoursville, Lycoming Co.	30
Elizabethtown, Lancaster Co.	48
New Cumberland, York Co.	55.5
New Ringgold, Schuylkill Co.	24.5

* Figures courtesy of www.weather.com.

WHITE PINE WEEVILS

As noted in last week's report, these weevils were found in traps in Schuylkill County. This week, the only additional catch of white pine weevils noted was in northwestern New Jersey. Because the growing degree day totals are well within the point



Figure 1: White pine weevil adult [Steven Katovich, USDA Forest Service, Bugwood.org]

of emergence, white pine weevils could be active and just not showing up in the traps. Because of this, I'd recommend that growers be actively looking for symptoms of white pine weevil feeding on the leaders in host tree blocks. The

preferred hosts of this small, brown beetle pest are Eastern white pine and Serbian spruce, however they will also attack Scotch pine and other pines, Colorado blue spruce, Norway spruce, and other spruces, Douglas-fir and even occasionally true firs. The feeding damage shows up as small ($\approx 1/8$ in) round holes with bubbles of sap covering them. For the quiet observer, the weevils themselves may be found on the leaders. White pine weevils are about

1/4 in length and are mottled brown with a pair of rust colored and white colored spots at the rear of the abdomen.

When weevils are found, insecticide applications should be made very soon after. Egg laying can occur within a week of emergence. Once eggs are inserted into the leader, they are protected. The larvae will hatch and begin feeding on the vascular tissue of the leader and will eventually girdle and kill the leader. The leaders will take on a wilted or "shepherd's crook" appearance. When these dead leaders are seen, they can be cut down to the healthy wood (to where interior bark is green) and removed from the field and burned. This removes the weevils from the field.

If weevils are still being caught in traps a week after the first insecticide application was made, growers may want to consider making a second application. For more information on this pest visit: <http://extension.psu.edu/pests/ipm/agriculture/christmas-tree/pest-fact-sheets/shoot-and-branch-injury/white-pine-weevil.jpg>.

PALES WEEVILS

This week another type of weevil was found in one of the emergence traps being monitored by the IPM Program team: the Pales weevil. Pales weevils are larger weevils, at 1/2 inch, and are dark mottled brown all over. The symptom of Pales weevil feeding is easy to distinguish. They cause flagging of the lateral branches of Eastern white pine and Scotch pine. Looking further back along the branches will show a gnawing of the bark, which is typical to Pales weevil damage. Pales weevils need to lay their eggs in the fresh stumps of Scotch



Figure 2: Pales weevil adult [S. Pickel, PDA]

pinus, so removal of the Scotch pine stumps or treatment of stumps with an insecticide before the weevils can lay their eggs (7-21 GDD) will prevent further damage.

<http://ento.psu.edu/extension/christmas-trees/publications/2013%20Christmas%20Tree%20Insecticides-Miticides.pdf>.

The next scouting report will be available Thursday, March 24, 2016.

ERIOPHYID MITES

On Colorado blue spruce in northern York County,



Figure 3: Rust mites on Norway spruce (Top); Rust mite eggs on blue spruce (Bottom) [S. Pickel, PDA]

a few rust mites, a type of Eriophyid mites, were found moving around, although most of the eggs were still not hatched yet. In addition to attacking spruce, these tiny mites can also be found on firs, pines and hemlocks. Eriophyid mites typically hatch within a range of 7-22 GDD. 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 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. On any host, eggs that have hatched are clear.

If 80% of the twigs that are sampled have mites, 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: