

Christmas Tree Scouting

Report #7 – 5/6/09

Weekly newsletter compiled by Sarah Pickel,
PA Department of Agriculture

This week's report includes scouting information from: Jim Fogarty (Halabura Tree Farm), Karen Najda (PDA), Susan Newhart (Arcadia Trees), Brian Schildt (PSU), Linda Signarovitz and Cathy Thomas (PDA).

Last Friday in New Ringgold, Schuylkill County, Douglas fir needle midge were seen to be flying around the newly opened buds of Douglas fir. This small, orange, fly-like insect [Figure 1] will begin laying eggs within one week. The suggested control for this pest is to apply a pesticide just as buds begin to open. If the midge are still seen flying a few days after emergence, a second spray may be applied 5-7 days after the start of emergence. Growers who wait to make a first spray until this time may still see damage this fall.



Figure 1: Douglas Fir Needle Midge Adult [Sandy Gardosik, PDA]

It's been a rainy week for much of the East Coast, and in Adams, Cumberland and Schuylkill Counties, the wet weather has triggered the sporulation of Rhabdocline needle cast on Douglas fir. This is when the fruiting bodies break open on the undersides of the needles to release the spores. This occurs around the



Figure 2: Rhabdocline Needle Cast fruiting bodies [Tracey Olson, PDA]

time of bud break, so that the spores will be released and infect the new growth. Rhabdocline-infected needles appear mottled, as though they've been splattered with an orange-rust colored paint. [Figure 2] When sporulation occurs, these spotted areas on the underside of the needles will swell and split. The new growth should be protected with a fungicide before this happens. Growers in Schuylkill County made their first application last week. The recommended schedule is to make one spray at bud break, a second one week later and then a third two weeks after the second. For those growers who also have Swiss needle cast on Douglas fir, which is characterized by two rows of tiny black fruiting bodies on the undersides of the needles [Figure 3] and a browning from the tip of the needle down, they should follow the same spray schedule with the addition of a fourth spray. This fourth spray should be applied three weeks after the third spray.



Figure 3: Swiss Needle Cast fruiting bodies [Tracey Olson, PDA]

Spruce needle rust is a disease that will also sporulate around the time of bud break. Colorado blue spruce is a host for this disease, along with Serbian and White spruce. This appears as yellowed to rust colored bands on the needles. Sporulation, which causes the bands to visibly rupture, has not been observed yet in Schuylkill County, so growers still may have time to treat.

Both Eriophyid and Spruce spider mites are still active in York and Schuylkill Counties. These mites are both considered cool season mites, but they can continue to stay active and cause damage to foliage as the late spring/early summer temperatures remain mild. Horticultural oil can be used to treat both mites, but if using a miticide, check the label carefully before use. Not all miticides will kill Eriophyid mites. For a list of pesticide

products labeled for Pennsylvania Christmas trees, go to the Penn State Christmas Tree Website at <http://ctrees.cas.psu.edu>.

White pine weevil activity in the traps is greatly reduced at this time. There was one white pine weevil caught in Schuylkill County this week and no white pine weevils caught in traps in Adams and York Counties this week. By this time, the weevils should have laid eggs in the tree leaders, so the time for chemical control has actually passed. The next control option is to wait for evidence of weevil feeding to appear in late June or July. The typical shepherd's crook symptom will develop in trees infested with weevils. At that time, growers can trim the tops down to the healthy wood, remove them completely from the field and then train new leaders for the trees.

This would be a good time for growers to start looking for populations of Pine needle scale. This armored scale prefers pine species for hosts, but will infect spruces, Douglas fir and true firs. Growers should be scouting their pines for this white, oblong-shaped scale.

[Figure 4]

Within the next week or so, the eggs of this scale will begin to hatch and emerge from underneath the waxy white coat of the mother.



Figure 4: Pine Needle Scale [Cathy Thomas, PDA]

While the nymphs, or crawlers are exposed and haven't yet developed a waxy coating of their own, they will be vulnerable to horticultural oil, insecticidal soaps or insecticides. Two applications, one week apart should be effective in controlling this pest.

The next scouting report will be available on May 13, 2009.