

Christmas Tree Scouting

Report #9 – 5/20/09

Weekly newsletter compiled by Sarah Pickel,
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This week's report includes scouting information from: Jim Fogarty (Halabura Tree Farm), Karen Najda (PDA), Brian Schildt (PSU), Linda Signarovitz and Cathy Thomas (PDA).

Growing degree day totals as of May 19th are 265 in New Ringgold, Schuylkill County and 396 in Elizabethtown, Lancaster County.

In Schuylkill County this week, adult males of *Cryptomeria* scale were seen on Fraser fir. [Figure 1] These yellow winged insects are out fertilizing the female scales, which means eggs



Figure 1: Adult Male *Cryptomeria* Scale [Sandy Gardosik, PDA]

should be showing up underneath the scale coverings within the next week or so. When eggs are present, growers can be ready to scout for crawlers within two weeks following that. It is

important that growers treat this first generation of exposed crawlers to control this pest which has great damage potential.

Eriophyid Mites and Spruce Spider Mites were still active in York and Adams Counties this week. These mites are cool season pests, so they will become inactive as late spring temperatures heat up, but may still cause damage before that point. When scouting for spider mites, place a white paper, or clipboard, underneath a bough showing the stippling damage toward the centers of the twigs and tap a few times. Use a hand lens to look at the moving specks. The spider mites will be dark red to brown. Looking for Eriophyid mites is a little harder. Select trees with a rusty

discoloration and use the lens to look at the needles for peach-colored, wedge-shaped mites. Control is still possible for both mites.

The time for treating Balsam twig aphid has passed for most areas of Pennsylvania. As soon as bud break happens, the aphids move into the protection of the opening buds and begin feeding on the new needles and causing them to twist. Next season in early spring, growers should begin scouting for the hatch of overwintering eggs. The white paper technique mentioned above for spider mites can also be used for aphid monitoring.

Growers who grow Scotch and White pines will also want to be on the watch for nymphs or crawlers of the Pine needle scale to emerge.

[Figure 2] This armored scale, which can be found on the needles of pines and several other conifer species, feeds on the juices from the needles and causes a chlorotic spotting on the opposite side of the needles. While this is not always a major pest, it can be more serious on Scotch pine. The red/brown crawlers which will emerge are



Figure 2: Pine Needle Scale [PDA]

the stage that is most vulnerable to insecticides. Crawlers have not yet hatched in Adams, Cumberland and York Counties. When these crawlers are spotted moving on the needles, growers may want to make two control applications one week apart. The second generation of crawlers will emerge sometime in July. If populations are heavy, growers may want to consider treating for the scale at that time as well.

In Northampton County this week, bands of Spruce Needle Rust were sporulating on Colorado blue spruce. [Figure 3] Two other common spruces can be infected by this disease: Serbian and White spruces. The yellow, orange bands which circle the needles

rupture and release microscopic spores when weather conditions are wet. These spores will infect the tender new needles. Much of the



Figure 3: Spruce Needle Rust [Tracey Olson, PDA]

state had rainfall last week, so sporulation should be in full swing for most areas in PA.

Growers should continue with their fungicide spray program. This is the same as the spray schedule for Rhabdocline needle cast on Douglas fir. That is one spray made at the start of bud break, followed by a spray one week later, and another spray two weeks after that.

For growers who have Swiss Needle cast on their Douglas fir, a disease which causes

needles to brown from the tips down toward the twigs and showcases tiny black fruiting bodies lined up



Figure 4: Swiss Needle Cast [Tracey Olson, PDA]

on the underside of the needle, [Figure 4] they will need to add a fourth spray to the above mentioned schedule for Rhabdocline. This fourth spray should be applied 3 weeks after the third.

Two less significant pests of Christmas trees were found this week in Adams County. Cinara aphids were found on Scotch pine and Admes world on Blue Spruce.

Cinara aphids [Figure 5] are large and brown to black in color. Because of their larger size in

the aphid world, they may be confused with ticks or spiders. Found on spruces and pines, they feed on the stems of new growth. Heavier



Figure 5: Cinara Aphids on White Pine [Sandy Gardosik, PDA]

feeding can cause black sooty mold to form and may brown the needles of terminal growth. Most populations can be controlled with natural predators such as lady beetles.

Admes mites [Figure 6] are a type of spider mite found on Colorado blue spruce, white spruce



Figure 6: Admes Mite [Sandy Gardosik, PDA]

and Norway spruce in PA. It's larger than the Spruce spider mite and has a dark red/brown body with light tan legs. Their feeding can cause discoloration of the

foliage. If populations are reaching damaging levels, the treatment for this pest is similar to that of spruce spider mite.

The next scouting report will be available on May 27, 2009.