

Weekly newsletter compiled by Sarah Pickel, PA Department of Agriculture.

GROWING DEGREE DAY TOTALS FROM 8/9/17:

LOCATION	GDD TOTAL
Elizabethtown, Lancaster Co.	2449
Indiana, Indiana Co.	1948
Montoursville, Lycoming Co.	2124.5
New Cumberland, York Co.	2526

CRYPTOMERIA SCALE

It is the point in the season to be looking for the second generation of Cryptomeria scale, the



armored scale pest of true firs and occasionally other conifer species. Typically, the second generation of this scale occurs in a GDD range of approximately 1,750-2,130. Last week in Lebanon and York Counties, there were eggs found under female Cryptomeria scales on

Fraser firs, with only one round, lemon-colored crawler (hatched, first-stage nymph) found in Lebanon County on Friday. Yesterday in northern York County a few more crawlers were seen on Fraser fir foliage, but there were still many eggs found under female scale covers.

This scale has the potential to be very damaging. Each female scale can lay approximately 40 eggs, each or which after hatching have the potential to spread out to new areas of foliage to mature and feed. The feeding damage causes a bright vellow speckling on the upper surface of the



needles. Once made, his yellow damage will not go away, however, with the help of a good control program, it can be covered up healthy foliage growth in future seasons.

Because most of the life stages of armored scale pests are spent underneath the protective, waxy scale covering, the stage which is most susceptible to insecticide controls are the mobile, uncovered crawler stage. The crawler emergence, which can be expected two weeks after eggs are first laid, may be staggered over a period of approximately 3 weeks (or longer). If growers find that they need to make an insecticide application to treat for this generation, they will want scout for crawler activity a week later to see if a second application would be necessary. To observe this pest, growers should use a hand lens to look at the undersides of scale damaged branches to see if the tiny, bright yellow crawlers are still active. For more information on Cryptomeria scale, visit:

http://extension.psu.edu/ipm/program/christmastree/pest-fact-sheets/needle-discoloration-andinjury/cryptomeria-scale.pdf/view

Scouting For Other Pest Damage

At this point in the season, when many growers are shearing their trees, it is a good time to be making note of areas where they may observe pest

damage. One type of pest damage that may stand out on Douglas-fir is the damage caused by Douglas-fir needle midge. This year's needles which were infested earlier in the season will now clearly show yellowed swollen and kinked areas. These needles were infested back in April, when needle midge adults emerged from



the soil to mate and lay eggs inside the opening Douglas-fir buds. The larvae that hatched from the eggs borrowed inside the needles and are growing and feeding inside the needle now. When they exit the needles in December, those needles will shed. While there is nothing to be done about this damage at this time, it would be beneficial to make notes about which fields such damage was found in. Next spring, before bud break, emergence traps could be set in those fields, or at least plans made for insecticide applications in those applications at the very start of bud break. For more information on Douglas-fir needle midge, visit:

http://extension.psu.edu/pests/ipm/agriculture/chri stmas-tree/pest-fact-sheets/needle-discolorationand-injury/Douglas-fir.pdf

Additional Resource

More information on Christmas tree pests and production is available at the PSU Department of Entomology's Christmas tree site: <u>http://ento.psu.edu/extension/christmas-trees</u>.