Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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May 9, 2013 No. 6

Alfalfa Update

Alfalfa weevils are still present in all alfalfa fields in NC KS, however they are mostly mature larvae and will pupate before doing any more damage, at least in all fields we have checked in the last week. All of these fields were sprayed one time and seemed to get very acceptable control with no more treatments necessary. We have not detected any significant aphid infestations or potato leafhoppers in any alfalfa fields yet. Thus, at least in NC KS, no more insecticide applications should be needed until after the first cutting.

Wheat Update

We have checked several wheat fields also throughout NC KS, but have noted very little insect activity. Really not enough aphids or "worms" found to create any significant yield problems. However, there are a few chinch bugs in some of these wheat fields so if you do plan on planting corn or sorghum adjacent to wheat, please check the wheat field as it starts to turn golden to determine the chinch bug risk to those crops as they germinate.

Jeff Whitworth Holly Davis

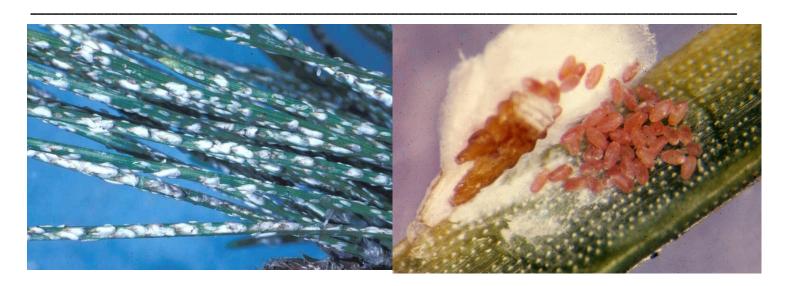
Pine Needle Scale...Don't Get "Stung" By This Insect Pest

Although there may be a delay in egg hatching due to the cooler weather we have experienced in the last several weeks it is still important to be cognizant of the pine needle scale (*Chionaspis pinifoliae*). The time to typically treat for this scale pest is when Vanhoutte spirea (*Spiraea* x vanhouttei) or bridal wreath spirea is blooming. When plants are in bloom, eggs have hatched into young crawlers that move about on plants in search of a suitable place to insert their mouthparts and initiate feeding. The crawler stage is the most susceptible to foliar applications of insecticides and forceful water sprays. Mugo, Austrian, Scotch/Scots, and red pines are the primary host plants of pine needle scale. However, they may also attack fir and spruce trees.

When mature, pine needle scales are elongated, white in color, and 2 to 3 mm long. They overwinter as eggs, which are red in color, and are located underneath the dead female scale cover. During their lifetime, pine needle scale females can lay up to 100 eggs, which hatch into crawlers (nymphs) from early May through June; however, this depends on environmental conditions such as temperature. Therefore, egg hatch is likely to be delayed; possibly up to two weeks, due to cooler temperatures. Crawlers, which are distinctly red in color, actively move around on pine needles before finding a location to settle down and start the feeding process. The crawlers use their piercing-sucking mouthparts to withdraw plant fluids from the mesophyll layer of the needles. This causes the needles to turn yellow, then brown. In situations where excessive populations of the pine needle scale are present, entire branches may be killed. In fact, entire trees may be killed, especially pine trees that are "stressed." Furthermore, young crawlers may be blown onto other plants via wind currents, or carried by birds and/or animals, which can initiate a new infestation. Pine needle scale is a hard scale so no honeydew is produced. There may be two generations per year.

Well...how do you manage pine needle scale? Similar to most insect and mite pests this involves a combination of maintaining plant health and avoiding undue "stress" and treating infested plants with insecticides accordingly. Cultural practices including watering, fertility (if necessary), mulching, and pruning when properly implemented will avoid "stress" and decrease susceptibility to pine needle scale. Regular forceful water sprays will quickly remove the crawlers from infested plants. Insecticides commonly recommended for regulating pine needle scale populations include those with the following active ingredients: acephate, bifenthrin, carbaryl, cyfluthrin, potassium salts of fatty acids (insecticidal soap), and petroleum, mineral, or neem-based oils (horticultural oils). These are primarily contact insecticides and applications are most effective when crawlers are the predominant life stage present. Thorough coverage of all plant parts is important and repeat applications will be required every seven to 10 days because second-generation pine needle scale eggs tend to hatch over an extended period of time. Many of these insecticides are directly harmful to natural enemies including parasitoids and predators (e.g., ladybird beetles) so caution should be exercised to minimize applications—if possible—in order to prevent a pine needle scale outbreak from occurring.





Raymond Cloyd

Bits and Pieces.....

We have lost track of what is "normal"/average. That is, there has been a stark contrast between the Spring of 2012 and 2013. The abnormally warm Spring of 2012 saw some "springtime" insect activities beginning and ending 3-4 weeks early than normal, and this year (due to abnormally cold temperatures) a delay in egg hatch followed by cool temperatures that have put development into "molasses mode". Typically European pine sawfly larvae complete their feeding and construct their cocoons the first week of May. In 2012, they were preparing cocoons April 7. Currently, they are $1\frac{1}{2}$ to 2 weeks behind schedule. Likewise, eastern tent

caterpillar development has been slow.

In visiting the Manhattan Community garden, there is a lot of bare ground due to the inclement conditions preventing gardeners from their springtime planting. As of yesterday, I saw only 1 plot with potatoes breaking ground, and another with beans bursting through. Both the **Colorado potato** beetle and bean leaf beetle overwinter as adults. Neither

have yet to make their appearance. However, they will soon be attracted to their preferred host plants as soon plants attain sufficient size to attract.



The plantings which have done well thus far are asparagus, early-seeded radishes, spinach, leaf lettuce and cabbage/broccoli/cauliflower transplants. Common asparagus beetles were active.

While we hopefully are past any additional springtime snowfall, there was a flurry-of-white in the air: imported cabbageworm butterflies. Eggs most certainly are being deposited which will result in the "fuzzy green" imported cabbageworm caterpillars.





Blacklight traps catches have been slow. But one moth species has been higher than I have seen during my many years of trapping have been <u>celery looper moths</u>.

The larvae of these moths are sort of a generic green caterpillars that "inch" along as it walks (hence their common name "<u>loopers</u>". Celery looper moths and their larvae occur in many habitats including fields, croplands, gardens and wastelands. Larvae are generalist feeders including garden commodities such as beans, lettuce, spinach, beets, carrots and cabbage. Whether the numerous moths being trapped actually will result in attacks on garden vegetables remains to be seen.



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The first <u>ash/lilac borer moth</u> (in Manhattan) was picked up in a pheromone trap on Tuesday (May 6). This is about 2 weeks later than their usual appearance in mid-April. Refer back to Kansas Insect Newsletter Issue #3 for Dr. Cloyd's article on Ash/lilac borer which details their habits, developmental cycle and control recommendations.

Bob Bauernfeind

Insect Diagnostic Lab Report from April 29 - May 8, 2013

Minute Black Scavenger Fly swarming in the backyard (Scatopse sp./spp.)

Northern Black Widow spider (Latrodectus variolus) in the shrubs in backyard

Subterranean Termite, Reticulitermes sp. – swarming outside the house

Varied Carpet Beetle (Anthrenus verbasci) in the bed

Spotted Green Pine Needle Aphid (Eulachnus agilis) on Austrian pine

Argentine Ant (Linepithema humile) in the basement bathroom

Larvae exoskeleton of carpet beetles on the kitchen floor

Cat Flea (Ctenocephalides felis) on the floor

Clothes Moths (Tineidae) flying in the basement

Lone Star Tick (Amblyomma americanum) nymph

Oriental Cockroach (Blatta orientalis) nymph on the kitchen floor

Lone Star Tick (Amblyomma americanum) – engorged female collected from a patient in a hospital



Northern Black Widow (Latrodectus variolus) Eva Zurek



Minute Black Scavenger Fly (Scatopsidea)

Sincerely,

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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