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Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants, and Extension Personnel

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Too Late To Spray For Bagworms ???:

As often happens, people have been caught off-guard by bagworms (Figure 1). Ideally, spray treatments should have been applied the last week of June through the first week of July (See Kansas Insect Newsletter, Issue #12, May 20, 2004) when bagworm larvae were smaller and less damaging.

Figure 1

Currently, evergreens such as eastern red cedar and junipers may have been especially hard hit, and have taken on a yellowish and brownish cast (Figures 2 and 3). Upon close inspection, bags are readily evident due to their numbers and size (Figure 4).

Figure 2

Figure 3

Figure 4

It is not too late to apply insecticide spray treatments to actively feeding bagworms. Evidence of active feeding can be based on the presence of newly applied green foliar adornment on bags (Figure 5). Killing bagworms now would prevent their pupating and the eventual production of overwintering eggs.

Figure 5

If, however, a majority of the bags display a strong silken “tie” of the bag to the twig (Figure 6), sprays will do little to thwart egg production. Simply, the larvae (shielded against the spray treatment within the protective confines of their tough silken bag) will proceed to pupate, with the production of overwintering eggs to follow.

Figure 6

Once larval feeding ceases (whether because they have been killed or they have reached the end of their feeding cycle), cedar and junipers will put out new growth — the resultant being the return of green and lush foliage (Figures 7 and 8). The continued production of **new growth** throughout the remainder of the year and during the spring of the following year may lull people into forgetting previous ravages of bagworms. It is recommended that people make a note (on their new calendar) to be alert for the beginning of bagworm activities in mid-May of 2005.

Figure 7

Figure 8

Bob Bauernfeind

Treatments For Annual White Grubs In Lawns:

Now is the time to apply preventative treatments against annual white grubs in situations where there is little tolerance for grub damage including golf courses, athletic fields and high visibility areas such as municipal parks, apartment complexes, estates and other lawn sites “under-contract”. Whereas the systemically active ingredients imidacloprid and halofenozide were likely applied at the end of June/beginning of July, they still

have efficacy if (according to label statements) applied by mid-August. However, the less costly active ingredients carbaryl and trichlorfon might be considered for use at this time.

Currently (now, 30-40 days past peak chafer flights), it is estimated that 90% of the grubs are small, nondamaging 1st and 2nd instar individuals (Figure 9). Small grubs are especially susceptible to carbaryl and trichlorfon **IF in direct contact**! Because grubs actively feed underground on roots and organic matter, a post-treatment watering is essential for washing the insecticide into the soil.

Figure 9

A barrier to moving the insecticide into the zone of grub activity is “thatch” — a tight intermingled layer of dead and living stems and roots (Figure 10) separating green vegetation and the soil surface (Figures 11-13). In addition to being an impediment to insecticide movement, thatch also ties up a portion of the insecticide which, then, lessens the effectiveness of grubicide treatments. It is recommended that prior to insecticide applications, a power rake, vertislicer or core aerator be used to break up, lessen and “open” the thatch to facilitate the movement of watered-in surface applied insecticides through the thatch into the soil zone where they can effect grub control.

Figure 10

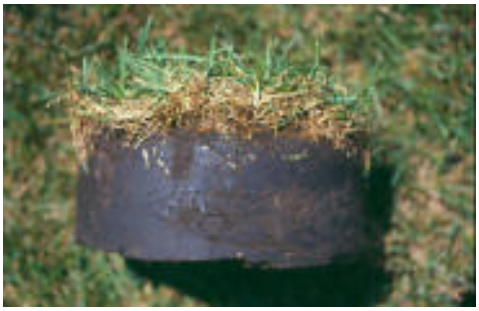

Figure 11

Figure 12

Figure 13

Bob Bauernfeind

Control your volunteer wheat now!

Volunteer wheat

The rainfall this summer has been great for many things, but it has also sprouted a bunch of volunteer wheat. Much of it came up early, meaning that it is probably now serving as a host for many wheat pests that had to abandon last years wheat crop as it matured. Volunteer wheat can serve as a host for insects such as wheat curl mite, Hessian fly, greenbug and bird cherry-oat aphid and for diseases such as wheat streak and barley yellow dwarf. Now is the time to get this volunteer under control so that there will be a several day period between the destruction of the volunteer wheat and the emergence of the fall planted wheat crop. If the volunteer is still alive, or worse yet, dying when new wheat is emerging, pests and diseases will likely move from the volunteer wheat to the new wheat. Last year some of our worst cases of wheat streak were in fields were volunteer was sprayed soon after the wheat crop was planted. As the volunteer slowly died from the herbicide the wheat curl mites moved into the emerging wheat and spread the wheat streak virus to the plants. Destroying the volunteer wheat now will greatly reduce the chances of many pests and diseases moving from the volunteer into the wheat crop later this fall.

Phil Sloderbeck

Sunflower Pests:

Sunflower fields are alive with insects at this time of year. Many are not really considered a problem and some (such as many bees and wasps) may even be beneficial. But a few deserve close observation. Once flowers begin to bloom head moth and seed weevils should become the primary focus of sunflower

producers. The head moth is usually considered the primary pest on sunflowers. Sprays for this pest often also control seed weevils.

Start scouting for moths as sunflowers reach the R3 stage (late bud stage). Scouting must be done frequently because migratory moths can appear in large numbers virtually overnight. Moths are more active in early morning and evening, but walking through the field will cause them to fly up at any time of the day. Moths can probably best be scouted using a flashlight to check heads at dusk. The treatment threshold is estimated to be around 1-2 moths per five plants.

Sunflower moth activity can also be monitored with commercially available pheromone traps that attract and capture male moths. These traps should be placed on T-posts above canopy level at least 10 rows into the field on north and south sides. Use at least 4 traps per field. Trapping should begin at the initiation of the R-3 stage and be monitored daily through the R-5.9 stage. Insecticide applications should be considered when pheromone traps average four moths per trap per day from the R-3 to R-5.9 growth stages. Economic implications are not well established for trap catches of less than four moths per day. If trap catches average less than four per day, it justifies field scouting to determine the action threshold. Trap catches averaging less than one per day usually have resulted in non-economic infestations.

A preventive insecticide treatment is best applied as blooms begin to open. If moths are well above the threshold treatments should be applied as 20 to 40 percent of the plants beginning to show yellow ray petals (stage R-4). When populations are low treatments can often be delayed until 90 to 100 percent of the plants have reached stage R-4. Most failures to obtain control are thought to result from delaying treatment (however some recent data would seem to indicate that in some cases later moth flights can produce significant egg laying several days after flowers begin to bloom emphasizing the need for continued scouting). The adults and small larvae are the target of the application and the objective is to kill the females before eggs are laid in the flowers, or kill young larvae before they begin feeding deep in the head. No other life stages can be controlled with foliar insecticides. Additional applications, applied at 5 – 7 day intervals, may be required if moth pressure is heavy.

Head Moth

Seed Weevil

Phil Sloderbeck

Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from July 29 through August 4, 2004:

7-29-2004, Coffey County: Possible Garden Webworms (adults) in Alfalfa.
7-30-2004, Wabaunsee County: Euonymus Scale on plants.
8-4-2004, Johnson County: Lace Bug on person.
8-4-2004, Dickinson County: Green June Beetle in yard.

If there are any questions regarding these samples or about the identification of any arthropod please contact the Insect Diagnostician at 785-532-4739 or at bbrown@oznet.ksu.edu

Bobby Brown

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Sincerely,

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