http://www.oznet.ksu.edu/entomology/extension/extensio.htm

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants, and Extension Personnel

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Soybean Aphid:

One wingless soybean aphid was picked up during sweep net sampling soybeans in Riley County on 19 July. No other aphids were detected in that field or several other fields sampled in North Central Kansas. Soybean aphids were first detected in Kansas on 20 August, 2002 and on 8 August, 2003. Thus, the first aphids, or at least their discovery are ca. 3-4 weeks earlier then the past two years. Please monitor soybean fields carefully for the presence of these aphids especially after a few days of cooler-than-normal temperatures with north breezes. If aphids are detected please let us know so we can monitor the populations. For more information, visit http://www.oznet.ksu.edu/entomology/extension/insectinfo/soybeanaphid.htm.

Jeff Whitworth

WEBWORMS, WEBWORMS AND MORE WEBWORMS:

The larvae of several species of moths are responsible for creating web masses which (to many people) are unsightly. In Issue 17 of the Kansas Insect Newsletter, information was presented on the webbing associated with the larvae of the **walnut trunk web moth/black walnut shoot moth**. Images which were not available at the time of Issue 17 are presented now (Figures 1-3). The webbing is not detrimental to the walnut trees — rather, just a curiosity.

Figure 1

Figure 2

Figure 3

Eastern tent caterpillars were discussed in Issue #5. Their feeding activities are initiated in early spring and completed by mid-spring. Eastern tent caterpillar web masses are compact, and constructed in the forks of tree branches (Figure 4). Currently, egg masses [deposited by moths (Figure 5) at the end of May into mid-June] entwine twigs (Figure 6), but are hidden by tree foliage. The eggs are the overwintering stage for eastern tent caterpillar.

Figure 4

Figure 5

Figure 6

Fall webworms — Within the last week, web masses have become especially evident on the outer peripheries of walnut and pecan tree (and to a lesser extent, sweet gum) canopies (Figure 7). This webbing is attributable to fall webworms — more precisely, the first generation of the redheaded form of fall webworm. A second generation will result in even more extensive webbing that will appear later in the fall (Figures 8 and 9).

Figure 7

Figure 8

Figure 9

A second type of fall webworm is the blackheaded form. The first generation of blackheaded fall webworm actually begins a month earlier (mid-May) than the redheaded form. Thus far in 2004, blackheaded fall webworm do not seem as prevalent as their redheaded counterpart. Blackheaded web masses are thicker and more compact -- thus less noticeable (Figure 10). Elm and mulberry are more targeted by the blackheaded form of fall webworm.

Figure 10

Unlike eastern tent caterpillars which forage on leaves outside of their web masses, fall webworms feed on leaves within their web masses. As leaves are consumed, webworms merely expand their webbing to include more foliage (Figure 11).

Figure 11

Other than the unsightliness of webbing, or the (to some) disturbing presence of webworm masses (Figure 12), webworms are not detrimental to established trees. On the other hand, sapling trees require protection against fall webworms. Root reserves in young trees will be seriously depleted when tapped to compensate for lack of photosynthates due to the absence of functional foliage (Figure 13) .

Figure 12

Figure 13

While there is no real need to kill webworms, some people may be bound and determined to do so. There are difficulties to be overcome. Most obvious is that many web masses may be out-of-reach (revisit Figure 7). Where web masses are within reach, merely applying a spray to the outer portions of the web mass will do little to control the larvae inside of the web masses (revisit Figure 12). Sprayer nozzles need to be inserted into the webbing to ensure direct contact of the larvae to the insecticide.

Another tactic taken by some people is the removal of webbing. Pruning out the webbed branches seems extreme. This amounts to causing more damage than do the webworms. Picture (for instance) a bad haircut ---- i.e. Figures 7 and 8 if all branches with webs were removed.

Consider removing webbing (within reach) by hand. Recall that the worms are within the web mass. Thus many larvae will be removed when removing the webbing. Use a broom or longer pole to remove webbing beyond arm's reach.

The presence of first generation **mimosa webworm** has become readily evident. Scattered "brown patches" are appearing in the canopies of honey locust (Figure 13). Upon closer examination, dead/browned leaves can be seen to be webbed together (Figures 14 and 15).

Figure 13

Figure 14

Figure 15

By gently prying these leaves apart, webbing becomes apparent (Figure 16). Under magnification, many fecal pellets can be seen (Figure 17). Different life stages of the mimosa webworm may be found within the same mass of webbed leaves. The larvae responsible for the webbing (Figure 18) are small and move quickly when disturbed.

Figure 16

Figure 17

Figure 18

Pupae are encased in a silken cocoon (Figure 19). Small moths (not pictured) remain within the webbing where they mate and deposit eggs (Figure 20) for the second generation.

Figure 19

Figure 20

(Figures 16 - 20 Courtesy of Bobby Brown, Entomology Department Diagnostician)

By late August and September, entire trees may take on a brown appearance due to overwhelming numbers of second generation mimosa webworms (Figure 21). However, there should be no cause for alarm. At this time of year, trees are close to shutting down with the approach of late fall and winter. And come spring, trees will put out a new flush of leaves (Figure 22), none the worse for wear by the previous year's mimosa webworm activities.

Figure 21

Figure 22

A final entry in the "webworm" bailiwick is the **genista webworm**. There have been two recent reports of *Uresiphita reversalis*. Genista webworms are associated with various leguminous shrubs and trees. Genista webworms were defoliating wild indigo plants at the Dillon Outdoor Nature Center in Hutchinson. In neighboring Sedgwick County, genistra webworms were feeding on *Maackia amurensis* trees at the John C. Pair Horticultural Research Station near Derby. It did not appear that the larvae were creating noticeable web masses per se. Rather, from a distance, trees displayed some defoliation (Figure 23). Upon closer examination, some very loose and sparse webbing was can be detected. The larvae themselves appeared to be solitary, feeding on the undersides of leaves (Figure 24).

Figure 22

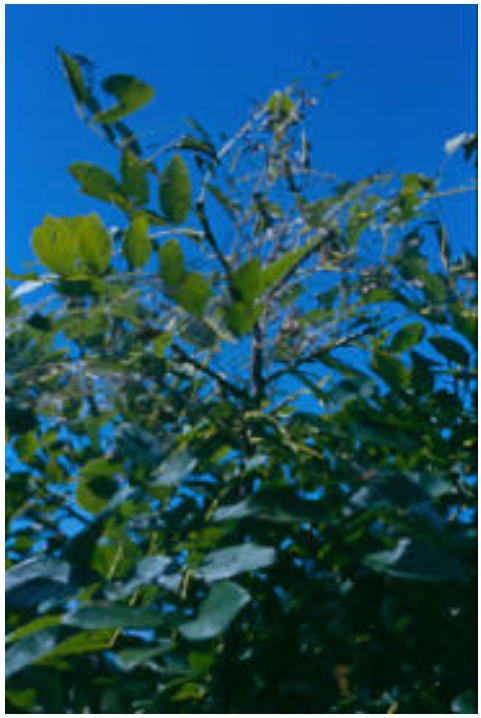

Figure 23

Figure 24

Bob Bauernfeind

Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from July 16 through July 21, 2004:

7-16-2004, Coffey County: Camel Crickets in yard.
7-16-2004, Harvey County: Indian Meal Moth in home.
7-19-2004, Seward County: Pine Tip Moth damage to trees.
7-20-2004, Lyon County: Harlequin Bug in garden.
7-20-2004, Graham County: Stink Bug Nymphs on plant.
7-21-2004, Lyon County: Plume Moth in home.

If there 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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