For Agribusinesses, Applicators, Consultants and Extension Personnel



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June 21, 2013 No 12

Hugh Wasps With Long "Stingers"

I am always happy to receive inquires that provide me a launch pad for a Kansas Insect Newsletter article. The most recent was, "What can I use to kill wasps that are stinging my tree?" The caller then went on to describe these wasps with long tails, and then asked if they were dangerous? The wasps-in-question belong to the taxonomic family Ichneumonidae which is comprised of more than 3300 species. Ichneumon wasps range widely in size, the largest being the "spectacular" wasps in the genus *Megarhyssa*.

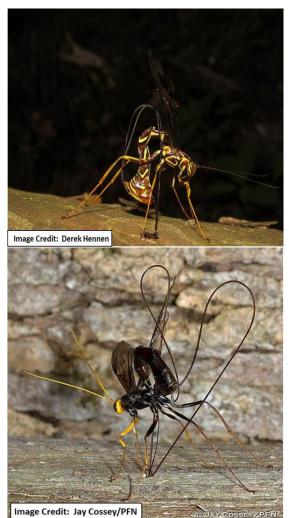
The most common species in Kansas is *Megarhyssa macrurus* (upper image). Larger in size (but less commonly reported) is *Megarhyssa atrata* with its prominent yellow head, antennae and front legs vividly contrasted to her black body.

The "long tails" (approaching 5 inches for *M. atrata*) actually are 2 filaments and the ovipositor. In tandem, the sheath-like filaments are vibrated and able to penetrate the bark. The ovipositor is then guided (with the aid of the filaments) beneath the bark, enabling an egg to be deposited beneath the bark.

Should people be concerned that this "stinging/egg deposition" is

harming the tree? **NO!** In fact, the wasps are actually beneficial. The soon-to-hatch legless wasp larva will feed on the larva of the pigeon tremix (another wasp species). Pigeon tremix larvae are detrimental to trees due to their boring habits.

Should people be fearful of being stung by these large spectacular wasps? **NO!** The delicate "long tails" are quite soft and flexible ---- really not capable of stinging. Rather, marvel at the beauty of these insects as they slowly fly/hover. And, appreciate their positive role as natural biological control entities.



Get Them While They Are Small

Hippity hop. Could it be Peter Cottontail hopping down the bunny trail? No Easter 2013 is long gone. So what's hopping now? Grasshoppers! People may wonder, "Why bring up grasshoppers now?" They usually are "big" pests later in the season. But controlling grasshoppers now (or at least attempting to minimize "local" populations) may stave off grasshopper woes later on.

While doing a little hand weeding around *Datura* spp. plants, I noted some foliar damage --- for the most part, small holes. And there sunning itself was a small grasshopper nymph (a second instar nymph of either a differential or twostriped grasshopper ---- really only of academic interest or importance). With a little further looking, there actually were quite a few little "hoppers". I then went to a couple other nearby flower beds and saw more nymph activity. As I proceeded to apply an insecticide treatment, even more previously unseen nymphs appeared ----- I assume that they were disturbed (coaxed from their hiding places) by the spray.

The important message here is that if people have grasshopper concerns, now is a good time to initiate a grasshopper control program. Look closely for signs of their presence --- small holes in foliage and the presence of nymphs. Because they are of local origin/small/incapable of flight, their populations are confined to their hatching beds areas. They have little ability to escape treatments.

One should not rest on their laurels. Having eliminated the current nymphs does not mean that there might not be additional hatchlings. On a frequent (once-a-week)



basis, consider inspecting plants in flower beds and garden areas for their presence. Apply treatments if necessary.

Do these proactive steps mean that (come fall) large grasshoppers will not be a problem? Not necessarily. While localized populations on an individual property have been kept "in check", populations from adjacent untreated areas/properties will have attained maturity and flight capabilities. Thus being highly mobile, they may invade your yard.

Rhubarb Curculio

One would think rhubarb to be soooooo sour that, "What insect would find it food-worthy?" Well one that does is the rhubarb curculio. Curculionid beetles are broadly referred to as weevils. Another (possibly) more descriptive name would be snout beetles. While one might think that their elongated snouts are equivalent to the piercing sucking mouthparts of "sap-feeding" insect species, the tips of weevil snouts are equipped with tiny chewing mouthparts.

The rhubarb curculio (*Lixus concavus*) is a giant amongst most other curculionids, reaching up to ½-inch in length. Newly emerged beetles are covered with a fine yellowish to orangish dust. As beetles actively move about, the dust may be lost, and the "de-dusted" beetles take on a darker grayish-to-black appearance.

Beetles overwinter under leaves and other protective cover. By mid-Spring, beetles seek out rhubarb plants. They insert eggs through feeding punctures on rhubarb stalks which reduces the marketability of the produce. Ironically, eggs are destroyed as rhubarb tissues develop/expand.

How then does rhubarb curculio propagate their species? Alternate host plants such as curly dock, sunflower and thistle favor the development of eggs and larvae. When I clear dock and sunflowers in the fall of the year, I see that most all have been tunneled by (I assume) rhubarb curculio. Not growing rhubarb, I live and let live. But for individuals who grow rhubarb, a method of reducing rhubarb curculio populations is to eliminate nearby dock and sunflower plants <u>as they appear</u> to deprive the beetles of those ovipositional sites, or to remove and dispose of large plants that may house larvae in midseason before larvae pupate and beetles emerge.



Due to the infrequency of their appearance, and because rhubarb curculio tend to occur in but small numbers, insecticide applications are impractical. Rather, when seen, hand-picking and disposal of beetles is a control tactic to be used in combination with the elimination of the above- mentioned alternate host plants.

Bagworms Are Active

While not having been monitoring bagworm activities, I could not help but notice a juniper hedge with a stop-in-yourtracks burnt appearance. Most of the hedge appeared lush green except for a definite pocket-of-activity at the far end of the line.

Many of the bagworms in this instance currently are small (of recent hatch). Judging by the size of some larger bags, I would estimate them to be 3-weeks old. This suggests that initial bagworm activities (at least at this location) were initiated the last week of May-first week of June. This was pretty much in accord with the usual hatching period ---- possibly a 10-14 days lag behind the usual mid-May



benchmark. But with the increased summer heat, bagworm development will rapidly escalate.

With this situation comes the question as to whether to treat the entire hedge or just the problem area. Because the bagworms are very confined, treatment can be concentrated to that area, although a little overlap to the immediately adjacent "green" portion would not hurt. Being that there currently is an adequate food supply, bagworms will be content to remain in that portion of the hedge. Being low to the ground, passive dispersal of bagworms via air currents should be inconsequential. Thus a **timely** and **thorough** initial insecticide application should minimize the necessity of additional treatments. That need can be determined by periodic follow-up inspections for the continued presence (or reappearance) of bagworms. Currently (according to the NPIRS State Pesticide Information Retrieval System) in Kansas, there are 509 products registered for use against bagworms. Visit/shop local retail outlets for product availability.

Good News and Bad News

More than a month has passed since defoliations by several species of sawfly larvae were being reported. A typical "scare" (shown at right) had people worrying about the health and vigor of targeted trees. Actually the



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defoliations are more of an aesthetic concern than really threatening to tree health/vigor.

<u>The good news</u> is that especially early in the season, trees are in the process of producing foliage. And within a month's time, these ash trees have produced sufficient amounts of additional foliage, thus restoring a lush and full appearance.





The bad news is that these trees are in for some tough times. More than any consumption of foliage by sawfly larvae, these trees are being hammered by the borer larvae of ash/lilac borer moths. A clue to this would have been the production of "water sprouts" --- a response of stressed trees. Dormant epicormic buds (beneath the bark) become activated in response to hormonal changes in stressed trees. All 3 trees had varying degrees of "water sprout" production with trees 1, 2 and 3 in that ranked order from most to least. This is visible when looking at the canopies of the afflicted trees.





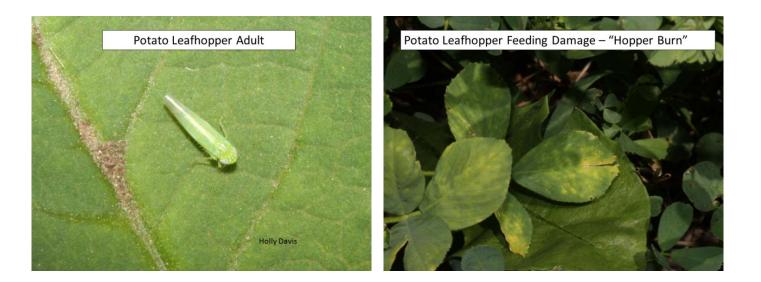
The underlying MAJOR PROBLEM in these trees can be attributed accumulated damage caused (over years) by the aforementioned ash/lilac borer larvae. Strips of bark have been detached and dropped off on trees 1 and 2, respectively. Ash/lilac borer damage extends up to the lower branches and beyond. These two trees are on borrowed time – recovery is quite unlikely. The third tree (which has some moth exit holes) has not been severely damaged, and does stand a chance of surviving if control measures against ash/lilac borers are initiated in 2014 (2013 moth activities currently waning). I will be revisiting these trees periodically to

check on their progress (or lack thereof). Time will tell their fate.



Alfalfa Update - Potato Leafhoppers

Potato leafhoppers (see photo) are quite common throughout eastern and central Kansas in alfalfa. Potato leafhoppers feeding on alfalfa can be problematic. Fields that are within 7-10 days of swathing should be swathed a little early rather than sprayed. This will remove all life stages of the potato leafhopper. However, fields should be monitored for these and other pests as the regrowth occurs, as these populations can build up again quickly. Fields sampled this week in north central KS had an average of a half a leafhopper/sweep. All were adults, which mean the potato leafhoppers have probably just started arriving in Kansas. Treatment thresholds are very low for this pest as they can remove plant juices and transmit a toxin during feeding, which may lead to 'hopper burn' (see photo), plant wilting, and even plant death, especially under hot, dry conditions. Continued monitoring is highly recommended for the next 2 months. For more information on leafhopper management please see the Alfalfa Insect Management Guide: http://www.ksre.ksu.edu/bookstore/pubs/mf809.pdf



Jeff Whitworth

Holly Davis

Insect Diagnostic Lab Report for June 14 - 20, 2013

Flying male ants in an office cubicle \ Wyandotte County

Brown recluse spider (Loxosceles reclusa) in a bed $\$ Riley County

Mealworm darkling beetle in a horse feed $\$ Jackson County

Slender springtails in large numbers \ Stafford County

Aphids on a maple tree \ Cherokee County

Wood cockroach (Parcoblatta sp.) in a liquid coffee creamer $\ Riley$ County

Bat bug (Cimicidae) in a bathtub \ Riley County



Slender springtails in large numbers in a basement $\$ Ellsworth County



From the gotbugs:

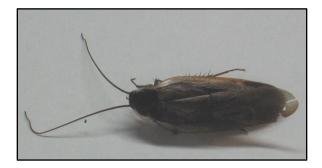
Black carpet beetle (Attagenus unicolor) brought to an office $\$ Sedgwick County



Argus tortoise beetle larvae (Chrysomelidae) in bindweed \ Harvey County



Wood cockroach (Parcoblatta sp.) in a house \ Jewell County



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Triangulate Cobweb spider (False widow spider) \ Johnson County



Wood cockroach (Parcoblatta sp.) on a porch \backslash Logan County



Burrowing bug (Cydnidae sp/spp.) in soybean fields near Westmorland



Eva Zurek

Sincerely,

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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