# **Kansas Insect Newsletter**

For Agribusinesses, Applicators, Consultants and Extension Personnel



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April 13, 2012 No. 6

## **Aphids on Roses**

Aphids are "out-and-about" on a variety of plants including chrysanthemum, oak, and rose. Although roses are one of the most beautiful plants grown in landscapes and gardens they are susceptible to attack from a multitude of arthropod (insect and mite) pests. In fact, roses may be attacked by different aphid species such as the potato aphid (*Macrosiphum euphorbiae*) and the cotton aphid (*Aphis gossypii*); however, the predominant species that feeds on cultivated roses is the rose aphid (*Macrosiphum rosae*).

Rose aphids are soft-bodied, pear-shaped insects approximately 1/4 inches long. They may vary in color from green to pink to red. There are two tubes, called cornicles that protrude out from the end of the abdomen. Rose aphids overwinter as eggs on rose canes. Rose aphids typically start feeding on roses in early spring (RIGHT NOW!) as the new flush of growth emerges. They cluster on leaves, stems, and developing buds. Rose aphids feed on plant fluids (e.g., phloem) with their piercing-sucking mouthparts, and tend to congregate in large numbers, feeding on terminal growth such as leaves and developing flower buds, and on leaf undersides. Their feeding causes leaves to curl upward and deforms flower buds. Flower buds may abort or fall prematurely before opening. In addition, rose aphids produce copious amounts of honeydew, which is a clear, sticky liquid exudate produced during feeding. Honeydew attracts ants, wasps, and hornets and serves as a growing medium for black sooty mold fungi. In general, rose aphids do not normally cause direct harm to roses unless they are present in excessive numbers, in which case, they may kill buds or reduce flower size. Rose aphids, like many aphid species, have a very high reproductive capacity (produce LOTS of young), which may result in populations increasing to abundant numbers during the season.

Rose aphids are susceptible to many natural enemies such as parasitic wasps (parasitoids) and predators (e.g., ladybird beetles, green lacewings, and syrphid flies) that may provide some level of regulation depending on the number of rose aphids present. Routine (twice per week) forceful water sprays will remove aphids quickly from rose plants without harming natural enemies. This technique is effective as long as it doesn't promote diseases such as black spot. Contact and/or systemic insecticides may be effective in controlling/regulating rose aphid populations. Contact insecticides [e.g., insecticidal soaps, horticultural oils, malathion, orthene, and pyrethroids (bifenthrin and cyfluthrin)] may need to be applied multiple times and thorough coverage of all plant parts is essential in order to prevent outbreaks of rose aphids from occurring. When using systemic insecticides (e.g., imidacloprid), it is important that applications be made early to ensure that the active ingredient is present in new growth just as rose aphids start feeding.

If you have any questions regarding rose aphid management be sure to contact your regional or state extension specialist.







Raymond Cloyd

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### Wheat

There has been considerable concern recently relative to aphids in wheat. Ten to 14 days ago, aphid populations were increasing around the state due to immigration and local reproduction. However, in the last 7-10 days most of these populations have, or are, decreasing due to the increase in parasitoid wasps and lady beetles. There are still aphids in most fields but not at treatment thresholds, for the most part. Insecticide treatments therefore need to be carefully evaluated before application, especially because aphids have the ability to reproduce parthenogenetically. Thus, if there are a few resistant aphids they will rapidly produce more resistant individuals, especially since all the beneficials will be decimated by the insecticide application. So, applying an insecticide with a fungicide "just in case" could cause more problems in the future.

Jeff Whitworth

# The Kentucky Derby? Not for another 23 days!

We can thank Dr. Fermi for the strange introduction. As I sat down to write some newsletter copy, one of my "Grandson Cats" decided to stroll across my key pad. And I thought it offered a <u>cat</u>chy way (groan) to open this newsletter item.

The allusion to the Kentucky Derby is just another way of addressing the unusually "early season" as related to the onset on 2012 insect activities. In previous years after the Kentucky Derby has been run (and with a winner have been decided and thus speculation as to whether there will be a Triple Crown Winner), I would use that event to ask whether it would be European pine sawflies or eastern tent caterpillars to first cross the finish line (finish = complete their feeding stages).

We are 23 days away from the May 5, 2012 Run-For-The-Roses, and EPS already have crossed the finish line (as of April 7). This is (in the Manhattan area) a month ahead of their average finish. And the sawfly larvae did a thorough job on the Mugo pine in this instance (Figures 1 – Front view & 2 – Side view).



Figure 1



Figure 2

Taking a closer look (Figure 3), one can see how thoroughly the sawfly larvae "consumed/clipped" needles.



Figure 3

The needles which were consumed were those produced the 2 previous years (Figure 4).



Figure 4

Despite its sparse appearance, this Mugo is not dead. Looking back at Figure 4, the new terminal candles will produce the 2012 flush of needles. These needles will remain intact because (as previously stated) the pine sawfly larvae have completed their feeding. The larvae are currently constructing cocoons in which they will spend the summer in resting stage. They will pupate in late August to early September. Adult sawflies will begin emerging in mid- to late September. After mating, females will use their saw-like ovipositor to insert the overwintering eggs in this year's needles. In this situation, the Mugo's 2013 outlook is grim unless action is taken to control the larval populations which will (with certainty) exceed that of this year.

Bob Bauernfeind

# Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from March 30<sup>th</sup> to April 12<sup>th</sup>.

March 30 – Atchison County – Assassin bug, Family Reduviidae in home

April 2 – Anderson County – Hackberry nipplegall makers (Psyllids) on side of home

April 3 – Riley County – Hacklemesh spider in home

April 3 – Jefferson County – Subterranean termite swarmers around building

April 10 – Neosho County – Phorid flies in garage

April 11 – Lyon County – Cecidomyiidae (gall making fly) larvae under Elm tree

April 11 – Trego County – Lasius sp. ants in lawn

April 11 – Douglas County – Bagworms in red cedar

April 12 – Johnson County – Boxwood spider mite damage on boxwoods

April 12 – Douglas County – Western flower thrips

April 12 – Smith County – Larder beetles in home

April 12 – Bourbon County – Termite swarmers in home

April 12 – Labette County – Human lice

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 <a href="mailto:GotBugs@ksu.edu">GotBugs@ksu.edu</a>.

Holly Davis

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### Sincerely,

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