

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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RUSSIAN WHEAT APHID ALERT

I received a report of Russian Wheat Aphids from Beaver County Oklahoma this week.

This is quite a bit further east than I would have expected to be reporting heavy infestations of Russian wheat aphids.

The plants were showing the typical purple striping and rolled up leaves. Wheat was in the early jointing stage.

These were heavily infested plants, not just an individual tiller here and there, and were reportedly not limited to isolated plants, but fairly widespread within the field.

Since this was the first report we don't have a good feeling if this is an isolated field or whether the infestation may be more widespread.

In addition I have had some reports of Russian wheat aphids from Hamilton and Stanton Counties over the last few days, which is not too unusual, but taken together with this report from Oklahoma they could signal a potential for greater problems than usual.

More information on the Russian wheat aphid can be found on our website at:
<http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=191&tabid=490>

And in the publication: MF 2666 -- Russian Wheat Aphid --
<http://www.oznet.ksu.edu/library/entml2/mf2666.pdf>

If you get any reports of Russian wheat aphid injury please let me know so we can determine if these are isolated reports or a more serious outbreak.

Phil Sloderbeck

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Alfalfa Weevil Larvae

As of 1 April, alfalfa weevil larvae in north central Kansas were still in the first instar, having shown little or no growth from last week and no additional leaf feeding was observed. Larvae were found down in the crowns of plants where cold temperatures and snow will not kill them, but will slow or halt feeding and development until temperatures reach 48 °F.

Jeff Whitworth

Holly Davis

Early-Spring Insect Pests In The Garden.....

Once again, unpredictable “early spring” weather has played havoc with early-springtime gardening activities (Figure 1).



Rollercoaster high and low March temperatures had people: cultivating and planting/transplanting in early March; forced back into the snug of their warm homes when temperatures dipped; out again for a few nice days; experiencing/coping with hard rains followed by “nice weather” which ended with last week’s driving snows and cold weather. But hopefully from now on, temperatures will be more consistently “normal” which will encourage gardening activities getting into full swing.

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Questions always arise regarding the weather/temperature swings and the impact on “insect pests”. Of course, insect pests is a **BROAD UMBRELLA TERM** which begs the question (more specifically), “Which particular insect pest are you asking about?” Cutting with a broadsword, it is safe to state that insects (pests/beneficials/“neutrals”) which are native to Kansas are adapted to our climate and trends thereof, and thus the aforementioned “recent weather swings” have minimal impact on insect population trends. Thus the same pest species regularly occur on a yearly basis.

Favorite early-season vegetables traditionally include peas, cole crops, radish, spinach, leaf lettuce and potatoes. The following is a quick overview of some potential early-season insect pests.

When gardeners initially work the ground in their garden plots, they may turn up wireworms and white grubs, (the larvae of click beetles and May/June beetles, respectively) (Figures 2 and 3).



Upon seeing these larvae, gardeners may recall previous potato harvests when they observed tubers bearing scars and blemishes caused by these pests. Thus their first thought is, “What can I do to control wireworms and grubs? What insecticide can I use to kill these soil inhabitants?” The standard answer used to be on every gardener’s lips: Diazinon granules as a planting time soil-incorporation treatment against wireworms and grubs. However, with the demise of Diazinon products, there are no alternatives. While some current granular products containing the active ingredient bifenthrin may have registered uses on vegetable crops against wireworms and grubs, **potatoes are not a listed vegetable crop** and therefore cannot be recommended for use.

However, there is a bright side. In continuous garden ground, it is unlikely that gardeners will encounter many wireworms or grubs. And the few that they find can be hand-picked and disposed of: give them long-distance heave-ho and allow them to resume/complete their development outside of the garden, or, destroy them. People also should keep in mind that the mere presence of wireworms and/or grubs does not necessarily mean that even a single tuber will be “attacked”. And yet, even if attacked, in most instances tubers will suberize/cork-over/wall-off the damage resulting in nothing more than a blemish which can be cut out when preparing for a meal.

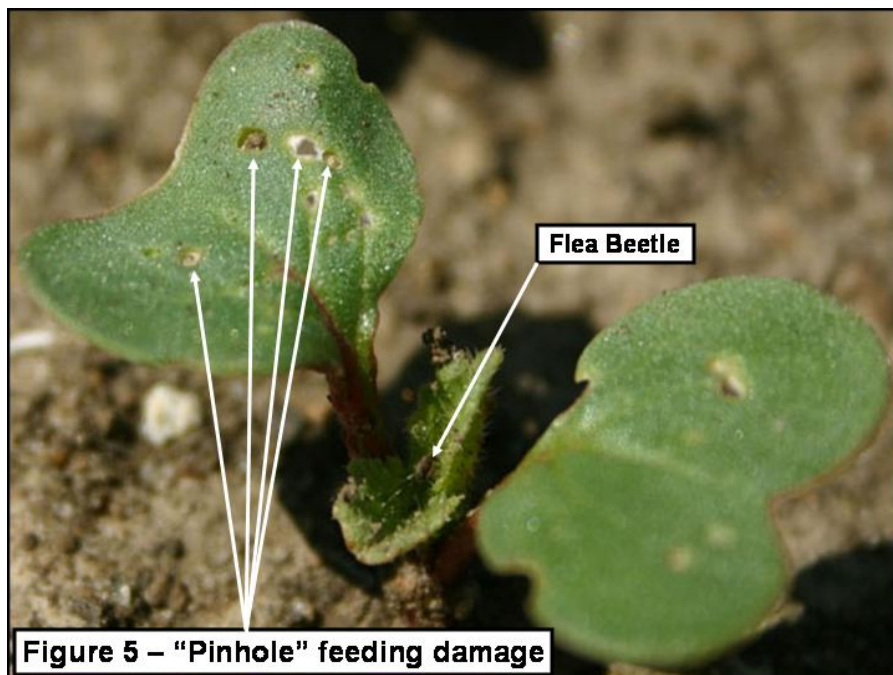
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Traditionally, early-season **seeded crops** such as peas, radish, spinach and leaf lettuce do well in cool soils. With proper moisture combined with their shallow planting depth, seeds rapidly germinate. Seedling emergence is enhanced when moderately warm air temperatures prevail and direct sunlight warms the soil. However, gardeners should not automatically assume that all-is-well once plants have broken surface (Figure 4).



Flea beetles are a commonly encountered garden pest. They overwinter as adults, and seize upon early opportunities to feed upon any available tender plant tissues. Possessing chewing mouth parts, they create “pinhole” feeding damage. While there are various species of flea beetles, and because some are general feeders, it becomes a moot point as to the actual species is causing tiny holes. In most instances, their presence first becomes known when pinhole-sized feeding damage appears in leafy tissue (Figure 5).



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As mentioned, flea beetles go unnoticed due to their extremely small size plus their blending in with the soil background (Figure 6).

Figure 6 – Flea Beetle



The feeding of an individual flea beetle may seemingly be insignificant. Yet the collective feeding of many beetles can result in the death of newly emerged seedlings. It is therefore important to closely monitor plants for the presence of flea beetles and their feeding damage. As their name implies, they hop/jump, and may appear and disappear in the blink of an eye. Thus patience is required when inspecting for their presence. Most “garden insecticides” list flea beetles on their product labels. Repeated treatments may be required depending on the reoccurring presence of flea beetles, the ability of plants to outgrow the feeding damage, or a combination of both.

While early-season transplants have a head start on flea beetles, they are a tasty morsel for cutworms.

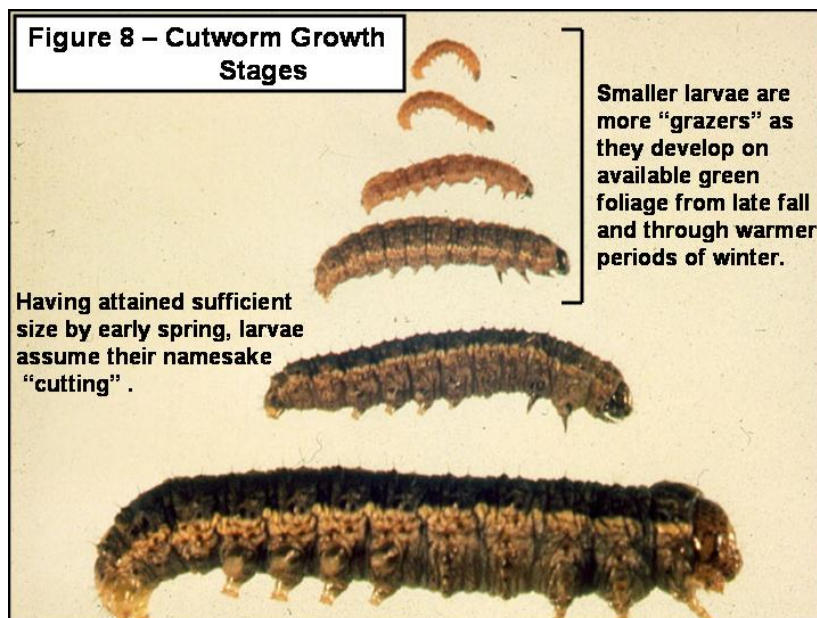


Figure 7 – Cabbage transplants

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Cutworms are the larvae of various species of noctuid moths. Cutworms possess a generic appearance: plump, fleshy, smooth, sparsely-haired and up to 1 ¾ inches in length when fully mature. If disturbed, larvae curl up in a protective posture. The cutworms occurring during the early spring growing season are those which hatch and began development the previous fall (Figure 8).



The 3 overwintered cutworm species commonly encountered in gardens are the army cutworm (Figure 8), claybacked cutworm (Figure 9) and dusky cutworm (Figure 10).



Cutworms “hide” during the day and actively feed at night. Their presence becomes known when (upon checking gardens in the morning/afternoon), “cut plants” (from the previous evening’s foraging) are found lying on the soil surface. While most “garden insecticides” list cutworms on their product labels, the use thereof generally is unnecessary. The usual scenario is that only a single cutworm or two responsible for the cutting activities. Because it would be impractical for them to leave the garden with the impending daylight, they hide

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under surface debris or burrow into the soil adjacent to cut plants. Use your finger to brush the debris or soil aside. In most instances, the cutworm can be found curled up. They can simply be picked up and disposed of.

Bob Bauernfeind

Sincerely,

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