

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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Wheat Update: Armyworm and Wheat Head Armyworm

As wheat starts drying down around the state there are a couple of insect pests to be on the lookout for. The first one may be the most visible and has the potential of causing the most in-field problems. That is the armyworm. Have received a few reports from southeast and south central KS about these worms which are still relatively small. They will feed on the leaves, moving up the plant decimating the leaves as they go. The lower leaves are probably past their usefulness to the plant but the flag leaf will still be critical up until about the soft dough stage. If these worms eat all the leaves (or even just the flag leaf) they can go on to feed on the beards and stems, causing grain loss. They may then move from the wheat, once it has dried down past the point where it is attractive to armyworms, and attack any nearby corn or sorghum seedlings. If 4-5 larvae are found/sq. ft., an insecticide application would probably be justified. Scouting at the base of the plants, in leaf litter, may be necessary to find these worms where they spend the day in a c-shaped or curled up position. Remember to check the pre-harvest interval (PHI) for any insecticide you select.

The second insect of concern is the wheat head armyworm (see Dr. Stu Duncan's excellent photos from DK Co., on 29 May). These insects are present every year around the state but usually at levels which do not cause an impact on grain yield. They typically are seen feeding on the beards and, infrequently, on enough grain to actually cause a problem. However, occasionally, and if it does happen it is more often in the western 1/3 of the state, they may feed on the grain itself and that feeding damage is noticed at the elevator where it may be considered as IDK (insect damaged kernels) and cause some lesser value for the grain. There is really no treatment threshold or economic injury level for this insect.



Jeff Whitworth

Jeff Whitworth

Holly Davis

Red Dots ---- But Not The Potato Chips

As often times occur, I am off on a tangent.

Waaaaay back in time (1938), Red Dot potato chips rolled off the production line in Madison, Wisconsin. Known to Midwesterners residing within its market area, empty Red Dot Potato Chip containers (at right, adorned with the company mascot, Ta-to The Clown) were a common household “fixture” used to store this and that. After merging with H.W. Lay and Company in 1961 (who at the same time merged with Frito Company thus becoming Frito Lay, Inc.), the production and marketing of Red Dot Potato Chips continued. In 1970, Frito Lay sold the Red Dot product line to another firm which discontinued the production of Red Dot Potato Chips and shut down the original production plant in Madison.

To this day, Lays Potato Chips are sold in yellow packaging akin to the yellow containers which once held Red Dot Potato Chips. Coincidental???????



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So what is the connection to an insect newsletter? When dining out (on Memorial Day), I passed planter box sitting on a rock wall and noted numerous tiny red dots moving about. Having seen this many times in the past, I recognized the red dots as red velvet mites.



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The word “mites” congers up “Oh no!” responses from many people. However, red velvet mites (RVMs) are beneficial.

They are a type of predatory mite that both parasitize and prey upon on various smaller organisms including insects, as well as other mite species which are economically deleterious to field and vegetable crops, flowers and other ornamentals, and trees and shrubs.

RVMs are found in various moist habitats including soil, litter and debris. They are aptly named for their velvety appearance due the dense covering/coat of hairs. RVMs belong to the taxonomic family Trombidiidae. In size, they are relatively large (easily seen) in comparison to the various species of spider mites (Family: Tetranychidae) which are notorious for causing damage to the abovementioned commodities.



Image Credit: Ted C. MacRae - Senior Entomologist, Montsano Co.

Unlike spider mite development which is rapid (egg to adult from 1 to 3 weeks depending on temperatures, and thus resulting in overlapping generations and rapid population buildups), RVMs usually produce but a single generation per year. Being very sensitive to desiccation, populations are dependent on adequate “friendly” moisture availability.

There is an interesting account of a mating ritual: after a male RVM places a sperm droplet on an elevated surface (grass blade, twig), he creates a silken trail as an invitation to a female, who (if interested) will move

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forward and sit on the sperm. If a rival male enters the picture, he will destroy the sperm droplet and replace it with his, but using the previous male's silken trail.

Fertilized eggs are deposited in the soil. Newly-emerged "larvae" will attach to (and parasitize) an available insect/arthropod host. Eventually molting into nymphs and transitioning through various stages thereof, as well as molting into the adult stage, RVM's become predatory in habit, feeding on insect eggs as well as other small invertebrates.

The take-home message is that, should you observe red dots scurrying about in and around your property, be assured that they **ARE NOT** itty-bitty nuisance mites such as clover mites, red mites, spider mites, chiggers or anything "bad". But rather, they are red velvet mites which should be appreciated for their beneficial role.

Bob Bauernfeind

Insect Diagnostic Lab Report from May 24 - May 30, 2013

Brown cockroach (*Periplaneta brunnea*) in a bedroom area – Norton county

English grain aphid (*Macrosiphum avenae*) in wheat – Jackson county

Dark-winged fungus gnat larvae (*Bradysia* spp.) in alfalfa crown roots – Howell county, MO

Parasitic mite on a bed sheet – Johnson county



English grain aphid in the wheat



Dark-winged fungus gnat larva

Eva Zurek

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