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July 19, 2018 No 13

Elm Leaf Beetle Adults, Larvae and Damage...Unbelievable!
Chinch Bugs and Ragworms in Sorghum
Soybean Update

Elm Leaf Beetle Adults, Larvae and Damage...Unbelievable!

If you want to see the destructive ability of an extensive population of elm leaf beetle,

Pyrrhalta luteola, larvae; there are three large Siberian elm (*Ulmus pumila*) trees located on the south-side of Old Claflin Road on the campus of Kansas State University (Manhattan, KS) that have been heavily fed upon by the larval stage to the point that nearly all the green content of the leaves has been removed (Figure 1). In fact, the populations are so extensive that adults and larvae are present simultaneously (Figure 2). In addition, larvae are accumulating and pupating on the trunk (Figure 3) and at the base of the trees (Figures 4 and 5). As of this



Fig 1. Feeding damage caused by elm leaf beetle larvae
(Author--Raymond Cloyd, KSU)

past weekend (July 14-15), adults were migrating upward to feed (on what is left). The infestation is almost 'biblical' in proportion...it is absolutely AWESOME (from an entomological stand-point).



Fig 2. Elm leaf beetle adult and larvae on tree trunk (Author--Raymond Cloyd, KSU)



Fig 3. Elm leaf beetle pupae in the crevices of the tree trunk (Author--Raymond Cloyd, KS)



Fig 4. Elm leaf beetle larvae and pupae at the base of a tree (Author--Raymond Cloyd)



Fig 5. Close-up of elm leaf beetle larvae and pupae at the base of a tree (Author--Raymond Cloyd, KSU)

Elm leaf beetle adults are 1/4 inches in length, yellow to dull-green, with a black stripe on each wing cover extending the entire length of the abdomen. The head and thorax have distinct black spots (Figure 6). Adults feed between the major veins resulting in leaves having a 'shot hole' (similar to 'buckshot') appearance. The larvae are 1/2 inch long and yellow, with two lines of black spots on the back (Figure 7). They feed on the underside of leaves causing the leaves to appear skeletonized, and eventually turning brown (Figure 8). The larvae normally migrate down the trunk of trees and tunnel into or reside on the soil surface to pupate, with adults emerging later on that will migrate upward on the tree trunk. There are two generations per year in Kansas. A contact insecticide can be applied when adults and larvae are feeding on leaves. However, thorough coverage of leaf undersides is important as this is where the adults and larvae tend to feed.

Figure 6. Adult elm leaf beetle (Author--Raymond Cloyd, KSU)



Fig 7. Elm leaf beetle larvae on tree trunk (Author--Raymond Cloyd, KSU)

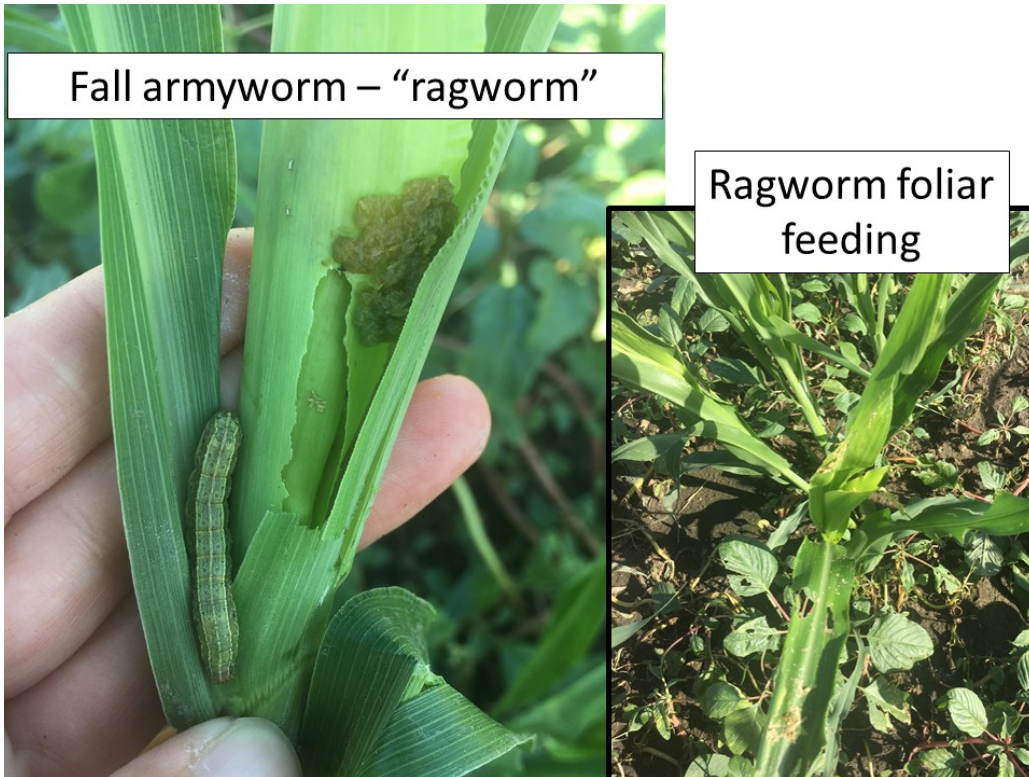


Fig 8. Feeding damage to elm leaf caused by elm leaf beetle larvae (Raymond Cloyd, KSU)

Chinch Bugs and Ragworms in Sorghum

Chinch bugs continue to develop and increase in numbers throughout north central Kansas. However, recent rains have significantly improved growing conditions. Thus, sorghum seems to be tolerating these chinch bug populations well. However, some fields and field borders have been treated for chinch bugs.

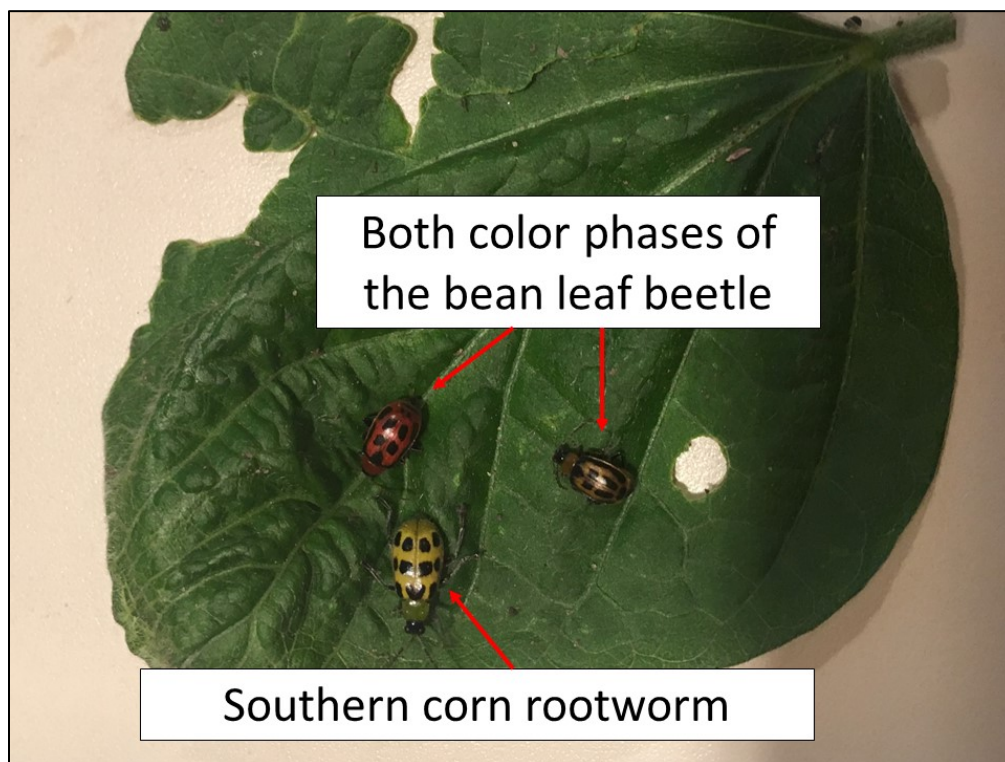
Fall armyworm larvae have been feeding in sorghum whorls and this leaf feeding is starting to unfurl from the whorl and thus become highly visible. That is where the name “ragworms” comes from as they do cause ragged looking leaves, although this foliar feeding does not impact yield.



For more information, please see the 2018 Sorghum Insect Management Guide:
<https://www.bookstore.ksre.ksu.edu/pubs/mf742.pdf>

Soybean Update

Not much defoliation in soybeans in north central Kansas, so far. Bean leaf beetle adults are emerging and feeding on leaves. Photo: Both color phases of the bean leaf beetle and the 12-spotted cucumber beetle or the southern corn rootworm, which is commonly mistaken for a bean leaf beetle.





These adults may start feeding on pods when the plants get to that developmental stage. All the soybeans we examined this week were still in the late vegetative to early R1 stages. But, when plants do start setting pods, bean leaf beetle adults need to be closely monitored.

Potato leafhoppers were also very numerous in soybean fields. They do not seem to be problematic in soybeans yet in KS. However, these increasing populations will also be in alfalfa.



Kansas Insect Newsletter

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Decetes stem borers continue to be active in soybeans throughout north central KS, depositing eggs in stems.



For more information on these and other soybean insects, please see the 2018 Soybean Insect Management Guide: <https://www.bookstore.ksre.ksu.edu/pubs/mf743.pdf>

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