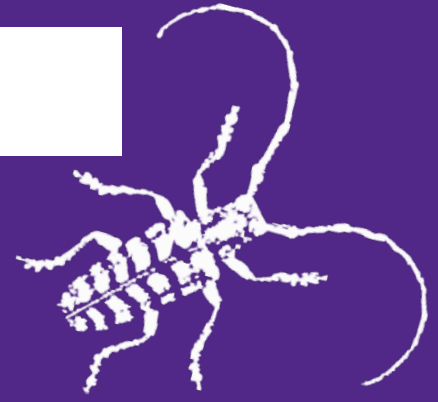


Kansas State University Extension Entomology Newsletter

For Agribusinesses, Applicators, Consultants, Extension Personnel & Homeowners

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Pine Bark Adelgid

Have you noticed your eastern white pine (*Pinus strobus*) trees looking like they are covered with snow? Well, the trees are not covered with snow—they are infested with the pine bark adelgid (*Pineus strobi*). The pine bark adelgid is an insect pest that primarily feeds on eastern white pine, but will also feed on Austrian (*Pinus nigra*), and scots (*Pinus sylvestris*) pines.

Pine bark adelgid adults are approximately 3.0 mm (1/9 inch) in length, black, wingless, and covered by a white, fluffy wax (Figure 1).



Figure 1. White Woolly Tufts Covering Pine Bark Adelgids (Raymond Cloyd, KSU)

Immature females that have been overwintering mature in April and lay eggs on the bark of pine trees. Nymphs that emerge (eclose) from eggs are either winged or wingless. Adelgid nymphs and adults possess very long mouthparts (stylets) that allow them to penetrate wood beneath the bark and feed within the phloem (food-conducting tissues). Nymphs secrete large quantities of wax that solidifies into white woolly tufts that cover the body. The woolly white wax produced by pine bark adelgids can cover large areas of pine trees, including the main trunk, branches, and shoots (Figure 2). In addition, pine bark adelgids



Figure 2. Woolly White Wax Covering A Branch (Raymond Cloyd, KSU)

secrete honeydew, which is a clear, sticky liquid that serves as a growing substrate for black sooty mold.

Nymphs and adults are most prevalent on the trunk, branches, and shoots of older (over 10 years old) eastern white pines. Furthermore, infestations of pine bark adelgid may be more noticeable on the underside of branches. Pine bark adelgid overwinters as an immature female nymph located on the bark that matures into an adult in spring. There may be several generations per year.

A forceful (high-pressure) water spray can be used to dislodge adelgids from pine trees. Contact insecticides such as insecticidal soaps (potassium salts of fatty acids) or horticultural oils (petroleum- or mineral-based) applied from April through May when pine bark adelgids are active may be effective in suppressing populations and mitigating potential damage to pine trees. Dormant oil applications can be made in the fall through spring to kill overwintering nymphs. Thorough coverage of all plant parts is important. Systemic insecticides applied to the soil in early spring may be effective in preventing or minimizing infestations of the pine bark adelgid. There are a number of beneficial insects that feed on pine bark adelgid including ladybird beetles, lacewings, and syrphid fly larvae. However, these beneficial insects may not effectively regulate pine bark adelgid populations to prevent the occurrence of heavy infestations.

Raymond Cloyd

HOME

ID to last week's bug

Carpenter ants – Carpenter ants are dark brown to black in color and range in size from ¼ inch to ¾ inch for a queen. They excavate soft, rotten wood to construct nests. They feed on aphid honeydew, other insects, and household food scraps. Learn more about ants at:

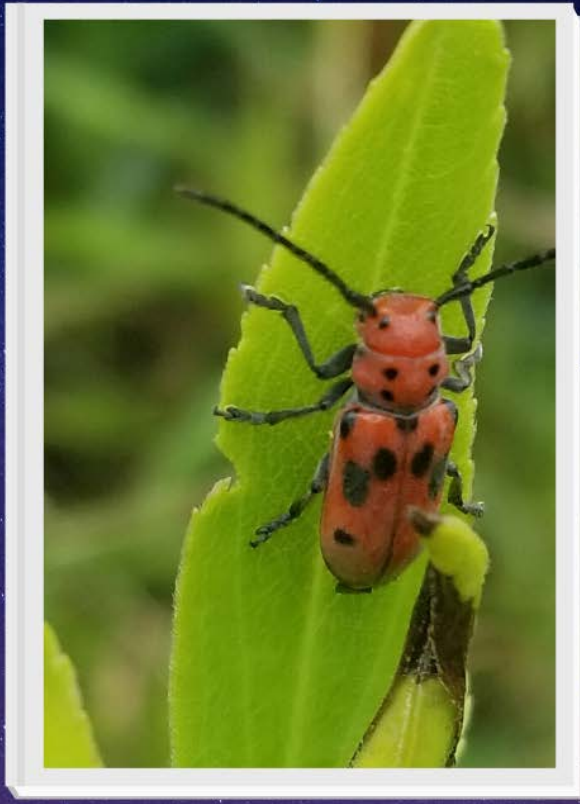
<https://www.bookstore.ksre.ksu.edu/pubs/MF2887.pdf>

Can you identify this insect?



Identify This Insect

Can you identify this insect and tell what is its host plant?



SOYBEAN PESTS

Green cloverworms (fig. 1) are still very common throughout soybean fields in northcentral and southcentral Kansas. Green cloverworms are voracious leaf feeders and can cause considerable defoliation (mostly if/when feeding on smaller plants) and this defoliation is often readily apparent and easily observed and thus can cause some concern. All fields monitored, even double cropped fields, did have green cloverworm populations. However, all fields seem to have great plant stands with substantial canopies. Nevertheless, these larvae still seem to be causing some concern around the area; however, no fields were even close to a treatment threshold.

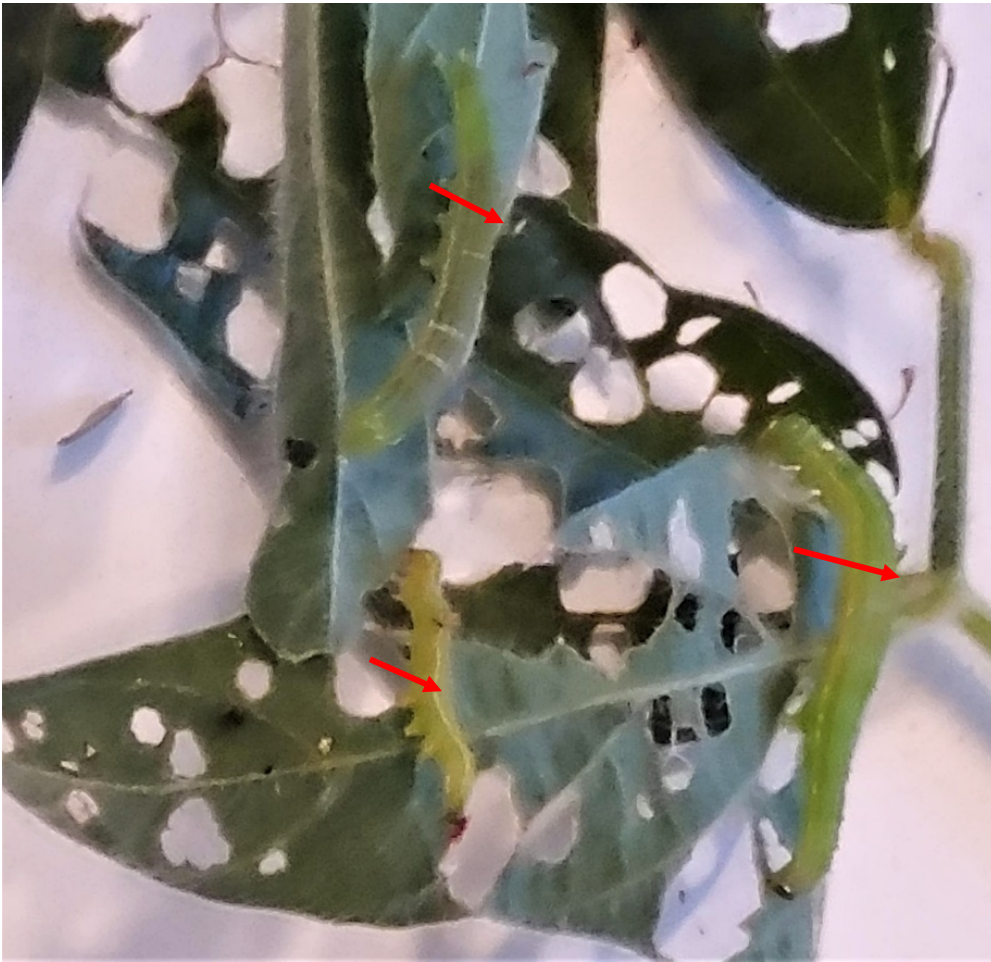


Figure 1 Green cloverworms (Picture by Amy Meysenberg)

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In addition, some fungal-infected green cloverworms were also observed. Figure 2 illustrates the type of defoliation which may be caused by green cloverworms (leaves on the right in the picture) vs. leaf feeding damage caused by adult bean leaf beetles (on the left side of picture).



Figure 2 Defoliation damage to soybeans (Pictures by Amy Meysenberg)

No corn earworms/soybean podworms, or signs of pod feeding were noted--none, yet!

Jeff Whitworth

HOME

SORGHUM HEADWORMS

Sorghum headworm populations have not been as substantial, yet this year, compared to the last few years throughout southcentral and northcentral Kansas. There are still a few larvae (fig. 3), and many fields have not yet developed past the susceptible stage, however, and thus there could still be problems with "headworms". Please remember the "susceptible" timeframe or stage of sorghum is flowering to soft dough. Headworms can cause 5% loss/worm/head.



Figure 3 Sorghum headworm larvae (Picture by Amy Meysenberg)

Jeff Whitworth

SUGARCANE APHIDS

Sugarcane aphids also are present in most fields throughout southcentral and northcentral Kansas, but mostly only in small, scattered colonies (fig. 4). Beneficials are also very common, but it doesn't seem like there are as many as there have been in the last couple of weeks. This could be because there are substantially fewer corn leaf aphids, in most fields, for beneficials to feed on. Sugarcane aphid monitoring should continue.



Figure 4 Sugarcane aphids on the back of a leaf (Picture by Amy Meysenberg)

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Bug Joke of the Week

Q: How did the police get rid of the bugs?

A: They called in the S.W.A.T. team

Raymond Cloyd

HOME

Sincerely,

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