

Post Rock Extension District Column

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Crop Production Agent

Be on the lookout for insects in your newly emerged wheat!

Most producers are working on or finishing up drilling their 2025 wheat crop. Especially with the dry conditions, the wheat has been slow to germinate and when it does, there will be limited growth. So, it won't take very many worms to actually damage the wheat. Scouting is the key and producers should take the time, once the wheat germinates, to look for the worms to determine if damage has occurred.

Some insects that could be invading your wheat crop, include **grasshoppers**, **flea beetles** and several different "**worms**". These "worms" are most commonly armyworms, fall armyworms, and/or army cutworms. Identification is important for these "worms" because armyworms and fall armyworms will feed until the temperatures cool into the mid-20's or they pupate, whichever comes first. Army cutworms, however, are and have been hatching from eggs deposited by moths as they return from over-summering, probably in Colorado. These army cutworm larvae will feed a little this fall, overwinter, then start feeding again in early spring. So, if the "worms" causing the defoliation now are relatively large, ½ inch or more, they are probably armyworms and/or fall armyworms. The K-State Research and Extension Insect Diagnostic Lab staff are seeing a mixture of both armyworms and fall armyworms, in the field, along with getting samples in the lab. Below is more specific information on each of the insects mentioned.

Flea beetles are tiny, jumping insects that are dark, shiny and strip off the upper surface of leaves causing whitish streaks. They are typically a problem along field margins, especially in western Kansas in early plantings. Forage sorghum or weedy borders often harbor summer populations that can migrate to wheat fields in the fall. Injury is more severe when beetles are present as plants emerge. A population of three to five beetles per row foot can kill seedling plants. Since damage is often localized along a field border, spot treatment of affected rows may be sufficient to control populations.

There are many species of **grasshoppers** in Kansas, and not all are crop pests, although most have the potential to inflict damage if present in large numbers. Grasshoppers have slowed down, but are still present and could cause some damage if enough are present. Damage can occur in fall or spring. Typically, grasshoppers invade from field margins as fall-planted wheat emerges. Once wheat has been planted, three or more hoppers per square yard within the field can destroy seedling wheat.

The **fall armyworm** generally is all shades of brown and at maturity is about 1 ½ inches in length. The moth from this worm does NOT overwinter in the Great Plains. It lays its' eggs in July in Kansas on

corn, sorghum and other summer crops. Hatching can occur in August, September and October with favorable weather conditions. The first sign of damage is “windowpane” injury caused by the tiny larvae chewing on the seedling leaves. The larvae, which are difficult to find at first, tend to hide in or around the base of seedlings. However, the larvae grow at a very fast rate and can damage wheat in a short amount of time, especially if the wheat is stressed with not much growth. They could move from the sorghum or corn to the newly emerged wheat. Generally, if 25-30% of the leaves are showing the “windowpane” signs, then treatment may be necessary. Without treatment, problems can continue until the larvae reach maturity or until a killing frost. Flocks of birds in wheat fields in the fall are often indicative of a “worm” infestation as the birds are feeding on the worms.

The **armyworm** is different than the fall armyworm especially in color as they are green to black with stripes of various colors. The head capsule is medium brown with dark markings. Most damage to wheat occurs during warm, moist periods in the spring, but can also occur in the fall. When leaf feeding is observed, look for the worms curled up on the ground under litter, especially in patches of lodged plants. Treatment is usually not necessary below levels of four or five larvae per foot, but is probably justified at infestations of five to eight per foot provided most larvae are still small.

The **army cutworm** is a late fall to early spring pest. Adult moths lay eggs in soil in the fall and the brown, faintly striped larvae hatch during the fall and early winter. The larvae begin feeding during the winter whenever temperatures rise a few degrees above freezing and present the same “windowpane” damage as the fall armyworm. Larvae hide in loose soil at the base of plants, emerging to feed in the evening. In most fields, treatment will not be necessary until populations average four to five worms per square foot. It might be a little early to find any of these pests.

K-State Research and Extension has an excellent publication, “**Wheat Insect Management 2024**” available online or in any of the Post Rock Extension District offices in Beloit, Lincoln, Mankato, Osborne or Smith Center. This publication provides guidelines and recommendations for managing insects in your wheat crop.

For further questions on wheat insect management, contact me at any Post Rock Extension District Office.

Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Sandra may be contacted at swick@ksu.edu or by calling Smith Center, 282-6823, Beloit 738-3597, Lincoln 524-4432, Mankato 378-3174, or Osborne 346-2521. Join us on Facebook at “Post Rock Extension” along with our Weekly Ag Newsletter. Also remember our website is www.postrock.ksu.edu and my twitter account is @PRDcrops.