Fall armyworm moths making an appearance in Kansas

Fall armyworm can damage several important Kansas crops as well as pasture, turf, and home landscaping. According to Anthony Zukoff, K-State Research and Extension Entomology Associate, this insect does NOT overwinter in Kansas. Rather, it is native to the tropical regions of the western hemisphere and is active year-round along the gulf coast and southern Florida, migrating in from these locations each year. Two full generations are possible in Kansas with defoliation and grain damage being the biggest concerns.

Zukoff pointed out that the first detected fall armyworm moth for the season was on June 16 in the Central Kansas district. Moths were also captured in southwest Kansas in the final week of June where the numbers were very low. The total number of moths caught so far in July has been low as well and restricted to the southwest.

The number of moths entering Kansas will likely increase through July and at-risk crops should be scouted regularly for the remainder of the growing season. Zukoff further points out that the adult moths are all laying eggs in plants at this time when they arrive. There is almost a continuous flow of adult moths arriving and coming up from the south, so also continual laying of eggs is also happening. Once the eggs are laid, they hatch in about 5-7 days depending on factors such as air temperature. Caterpillars increase in size at an exponential rate and a majority of feeding occurs during the later stage of development. It is critical to scout thoroughly and treat if needed before the caterpillars are over ½ inch long. Larger caterpillars are harder to control and do the most damage.

This is considered the first generation of the fall armyworm and usually doesn’t pose as much threat to the crops. The first generation is usually small, and crops are in vegetative stages. Caterpillar feeding will make plants look bad, but yield is not at risk with the first generation.

Zukoff stresses that the second generation will come later in the season and poses the greatest risk, especially for heading sorghum. Additionally, use caution when making control decisions in alfalfa as flaring aphids are possible. Recommended thresholds can be found below.

Fall Armyworm Thresholds

Alfalfa
- 1-2 caterpillars per square foot can destroy seedling alfalfa
- 10-15 per square foot can destroy 12-inch-tall plants.
Corn
- damage to whorl stage in early summer
- treatment may be needed if 75% of plants are damaged
- Bt corn may prevent ear damage.

Sorghum
- damage to whorl stage in early summer
- treatment may be needed if 75% of plants are damaged
- 1-2 larvae/head during flowering to soft dough reduces yield 5-10%

Wheat
- Larval “window-paning” in early planted wheat can be a concern
- If 25-30% of plants show damage, examine the field frequently
- Treat at 2-3 active larvae/ft.

K-State Research and Extension has several Insect Management Guides for each crop that explains the management of the fall armyworm and can be found ONLINE or at any of our District Offices. If you have further questions on insect management with the Fall armyworm, contact me at any of our Post Rock Extension District Offices in Beloit, Lincoln, Mankato, Osborne or Smith Center.

*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 for our weekly “The Ag Roundup” by simply emailing me and getting on our weekly ag listserv. Also remember our website is www.postrock.ksu.edu and my twitter account is @PRDcrops.*