PLANT DISEASE AND INSECT ADVISORY



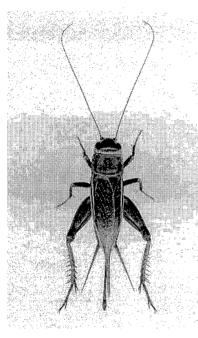
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Crickets Invade Oklahoma Towns Tom A. Royer, Extension Entomologist

We are beginning to receive reports of field cricket "invasions" occurring in some municipalities. This phenomenon occurs occasionally in the southern plains states of Oklahoma, Texas, Arkansas, and Kansas. There was a noticeable swarm of field crickets at Lewis Field here in Stillwater in 2000. While rare, other swarms have been reported. During the early 1950's, D.E. Howell of Oklahoma State University wrote, "during warm nights in the streets beneath bright lights were black with crickets, sides of buildings were completely covered with tremendous numbers of the pests and some streets were hazardous for driving due to the slipperiness caused by the crushed crickets."

These crickets are mature and are in the throes of courtship and mating which will produce next year's batch. These "outbreaks" typically occur when rainfall occurs following a period of drought. Unfortunately, there are very few options for controlling these invaders. They are attracted to bright lights, and can migrate from several miles to an area, so

insecticide treatments are less effective than they would be if they were applied to the source of the infestations. Outdoor lighting is the "magnet" that draws them in, so the first step for controlling them is to change the quality and quantity of light that is being used.

The first step for reducing cricket numbers is to turn off the outdoor lighting as early in the evening as possible. For those lights that must be left on, consider changing light bulbs to yellow "bug lights" or low-pressure sodium vapor lights. For municipalities, consider lighting an area that could "distract" them from the areas that you really don't want them to visit. For example, if there is a baseball diamond or sports field that won't be used, perhaps they could serve as a diversion by lighting up the field while turning down the lights in the downtown areas.

All potential points of entry into a house or building should be sealed. Points of entry include weep holes, soffits along rain eaves, windows, garage doors and door jams. Create temporary barriers by stuffing steel or brass wool into weep holes which will allow continued air circulation.

Crickets can be managed with a number of insecticides that are formulated as baits or sprays. Baits are products designed to be tasty to the insect, but are laced with a poison that will kill them. Baits work best when applied to areas where they are congregating next to buildings. Some bait materials that are registered for crickets include Maxforce® and Combat® granular ant and cricket baits, metaldehyde, Green Light Bug and Snail bait, and Larva-LurTM.

Liquid insecticide sprays may be applied to outdoor sites around weep holes, doorways, windows and other cricket entryways, but indoor sprays are not very effective for field crickets and are not recommended. Effective liquid insecticides for homeowners include carbaryl (Sevin®), permethrin (Spectracide BugStop® and others), cyfluthrin (Bayer Advanced HomeTM), and bifenthrin (Ortho Bug B Gon®). Keep a large powerful shop vacuum available to sweep and remove any dead crickets.

Cricket control with insecticides should be thought of as a <u>component</u> for managing cricket problems and should be used in <u>combination</u> with reductions in outdoor lighting and establishment of barriers around entry points for best control. When crickets are attracted to lighted buildings at night, they will continue to cause problems, despite the use of insecticides. While the heaviest cricket mating flights will probably last only 1-2 weeks, they will continue to remain active until cold weather arrives.

This article was adapted from "Cricket Control in the Fall", F@stSheet Ent-1008, written by Dr. Mike Merchant, Extension Entomologist at the Texas A&M Dallas Research and Extension Center.

Fall Armyworm Problem in Turf Tom A. Royer, Extension Entomologist Dennis Martin, Extension Turf Specialist

Dennis Martin, Turf Specialist at OSU reported finding severe fall armyworm infestations and damage in his tall fescue trials this past weekend at Stillwater, OK. I alerted readers of the Plant Disease and Insect Advisory <u>http://plants.okstate.edu/Pddl/advisory.htm</u> several weeks ago of the potential for fall armyworm outbreaks in pasture and lawns, and it appears that those suspicions were warranted.



Fall armyworms are surface dwelling "climbing

cutworm" caterpillars. They get their name because they generally occur in greater numbers in the fall, and they have a tendency to move in large numbers and "march" to their next meal. Fall armyworms prefer to feed on grasses, and often go unnoticed until they become large, at which point, they literally destroy all green tissue seemingly "overnight". Tall fescue seems to be a preferred food, but they will also feed on Bermudagrass and other turf or forage grasses.

Fall armyworms can be detected through close examination of the lawn, or by using a "soap flush." This simply involves mixing about 2 tablespoons of dishwashing soap into a gallon of water. Pour the water over several small areas in your lawn and wait for 30 seconds to one minute. Any larvae that are hidden in the thatch will become irritated by the soap, and come to the surface of the lawn.



Mature fall armyworms measure 1½ inches long when fully grown. Their body color can range from green, to brown to black. When looking for them, pay particular attention to their head capsule and the presence of a prominent inverted white "y" on their head. You may need a hand-held magnifying glass to see that feature on smaller larvae. Small larvae do not eat through the leaf tissue, but instead, scrape off all of the green tissue and leave a clear membrane that gives the leaf a "window pane" appearance. Once they reach the 4th instar, they can chew through the entire leaf. When scouting, look for both types of chewing damage.

There are a number of insecticides that are registered for control of fall armyworms that can provide excellent control. For turf farms, golf courses and athletic fields, the pyrethroid insecticides, which include Astro®, DeltaGard®, Demand®, Scimitar®, Talstar®, or Tempo® are registered and should be quite effective. ConserveTM, which is derived from a naturally-occurring bacterium, is also an excellent product. Diazinon and Sevin® (carbaryl) are also labeled for commercial use to control fall armyworms. Carefully read the label for use patterns, some products may be registered for all turf uses, while others may not.

For homeowners, carefully consider the need to control fall armyworms. Some cool-season lawns may be able to recover from a fall armyworm infestation this late in the year without treatment, and damage to many warm-season lawns may be so slight as to not warrant treatment. Products registered for homeowner use include Bayer Advanced Home® Power Force or Lawn and Garden insecticide, which contain the active ingredient cyfluthrin, or Ortho's Home Defense® Products that are registered for use in turf. Diazinon and Sevin are also labeled for homeowner use; however diazinon registrations will be phased out by December 2003.

If choosing between granular and liquid applications, keep in mind that granular products are a bit slower acting, and require watering for activation. Carefully read and follow all label restrictions for application and use patterns.

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