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Be on the lookout for Fall Armyworm in Alfalfa

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I have gotten reports from county educators and field scouts in the southern part of the state regarding infestations of fall armyworm in alfalfa. Reports have indicated increasing numbers resulting in significant damage to existing stands requiring insecticide application. Although grass pastures and alfalfa are common host crops of this pest, it can feed on a wide range of plants. Infestations of fall armyworm (*Spodoptera frugiperda*) are most likely to occur in late summer to early fall before frost (September – October). These outbreaks often follow periods of rain, like we have seen over many parts of the state in the past month or so, which create favorable conditions for egg and small larvae to survive. However, depending on weather conditions, fall armyworm can remain later in the season. We won't get relief from this pest until we get a killing frost. One to two worms per square foot can destroy seedling alfalfa, and populations of 10 to 15 per square



foot have been observed to destroy 12- to 14-inch alfalfa. Fall armyworm larvae tend to feed on all tender green plant tissues which give infested pastures the appearance of drought. If heavy feeding occurs, grass plants may become severely defoliated, stunted or killed. Established alfalfa may be stripped of all leaf tissue, whereas newly seeded alfalfa stands are often completely destroyed when larval numbers are high. Since we are now into the timeframe when growers may be in the process of planting new stands it is very important to continue monitoring for insect pest such as fall armyworm and spotted alfalfa aphid as these pest can devastate newly seeded stands quickly.

The fall armyworm does not overwinter in Oklahoma. Re-infestations occur each year by moths that migrate northward from Texas or Mexico. They usually reach the state by late June. Each female lays about 1000 eggs in masses of 50 to several hundred. Larvae are present by early July. After feeding for 2 to 3 weeks, the larvae dig into the soil to pupate. A new generation of moths emerges about 2 weeks later. There are multiple overlapping generations extending into October or even November in some years. Mature larvae may be green, brown, or almost black and are about 1 1/2 inches long. Identifying characteristics of the larvae include an inverted Y on the face of the insect, four black spots or bumps found on the top of each segment with those on the last segment arranged in a square pattern. The key to management is early detection before economic damage has occurred. Best control is when larvae are ¾ inch or less in size.



Further information can be found in: CR-7150, Alfalfa Forage Insect Control, which can be obtained online at: http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-2364/EPP7150web.pdf

Disease and Insect Diagnostic Laboratory

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