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Foliage Feeding Caterpillars in Alfalfa

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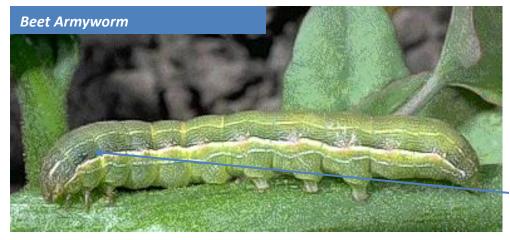
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Field scouting and grower reports of increased caterpillar activity has been observed throughout many areas of the state.

Summer months bring additional challenges. As the season progresses not only do growers have to deal with environmental factors related to lack of moisture and increased temperatures, summer months can also be a prime time for foliage feeding caterpillars and other warm season pest to occur. While the presence of these pest does not always mean levels will become problematic, in severe cases, even established stands can be affected. As reported previously, (*Update on Alfalfa Insect and Crop Conditions, Summer 2018*, Vol. 17, No. 18) even moderate insect populations accompanied by drought can lead to increased plant defoliation and stand loss if allowed to persist.

In scouting fields throughout the state I have previously observed some caterpillar activity; however, in most cases even with moisture restricted situations, the levels weren't of significant concern. Scouting in Garfield County last week I saw that scenario change. In Oklahoma, several species of foliage feeding caterpillars are common in alfalfa from May through October. While scouting last week, I found almost all of these species, with varying populations, within fields in this area. In addition to common caterpillar pest to alfalfa such as corn earworm, armyworm, alfalfa caterpillar, and clover worm, beet armyworm was also identified. The beet armyworm has a wide host range, occurring as a potential pest of vegetable, field, and flower crops. Field crops damaged include alfalfa, corn, cotton, peanut, safflower, sorghum, soybean, sugarbeet, and tobacco. Adults frequently invade from surrounding crops or weeds. As it migrates north from more temperate areas of the southern United States, it is more often a pest during dry years.



segment behind the head.

Caterpillars are overall green or marked in shades of green with stripes, grows up to about 1 1/4 inches long, and can best be identified by a characteristic small black spot on each side of the second body (thoracic)



The most predominant species present was alfalfa webworm. Alfalfa webworms feed on leaves within the webbing the larvae produce. As the webworms grow larger, they may venture out more and consume foliage beyond the webs. The damage is economic if the larvae occur in large numbers or 25 percent or more defoliation is occurring. I am seeing close to or in some areas above 25% defoliation with (> 6 larvae/sq/ft). Also important is the contamination of the hay with webbing and fecal material

in the webbing. Alfalfa webworm larvae are distinctly marked with six black spots per body segment. Young webworm larvae are yellow-green, whereas fully grown (1-inch-long) larvae are darker green. The webs surrounding alfalfa leaves are characteristic of these pests.



All of these caterpillar species completes several generations during summer into fall, with each one lasting 4-5 weeks. The most effective sampling approach for these caterpillars is sweeping with a standard 15-inch diameter net. A set of 20 sweeps should be made in each 5-10 acre field area. If numbers exceed six larvae per sweep, insecticide should be applied or, if the time for

harvest is near, alfalfa may be cut to remove the caterpillars' habitat. Insecticide applications for defoliators are most effective when larvae are small. Additional information on control of foliage-feeding caterpillars 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/EPP-7150web.pdf

Disease and Insect Diagnostic Laboratory

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