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Increasing Alfalfa Weevil Larval Numbers in Alfalfa as First Harvest Approaches

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We have received several reports from Extension Educators and producers from around the state indicating that they are seeing increasing numbers of alfalfa weevil larvae in their fields requiring a second, in some cases a potential third application and are curious about their options as harvest time nears. It is not uncommon to see increasing numbers before first harvest since many of the insecticides are starting to lose their efficacy two to three weeks after application. However, this year's mild winter prompted an earlier than normal start to the season. The majority of threshold applications were applied in early March with very little in the way of cold weather events to aid in control. In many instances, with proper timing, insecticide applications will provide enough residual to last until first harvest; however, if weevil populations reach threshold early enough in the season and populations continue to increase the residual effects of the chemical may not last until first harvest prompting management decisions. Historically, peak populations in Oklahoma occur in mid to late March to early April. Depending on the circumstances, if applications were made without knowing threshold levels or had to be made earlier than normal as in this year's case, weevil populations were likely on the increase as early spray residuals were wearing off.

The good news is typically we don't see much of a problem with alfalfa weevil after first harvest since there is only one generation per year and they become inactive (summer estivation) in the warmer summer months. At this point, the concern is what can be done before first harvest?

Evaluating plant vigor is a factor that may help in determining the need to

treat for this insect. Closely monitor fields, especially new stands, during periods of slow growth. Hopefully any recent or upcoming rains will help to alleviate some of the problems allowing for more plant growth and by association more tolerance to weevil feeding that may occur before harvest.

Control decisions should be based on maturity of the alfalfa, size of the larval population by field scouting, and days remaining until expected harvest. Alfalfa can tolerate low numbers of small larvae with good crop growth. However, high numbers of larvae, especially larger 3rd and 4th instars can cause significant defoliation of plants reducing yield, quality, and stand health. At this point in the season, one larvae or more per stem on <10-inch-tall alfalfa would definitely be cause for a management decision. Producers might want to consider early cutting as an option when heavy infestations develop close to harvest time.

If conditions warrant, another insecticide application may be needed. Keep in mind the decision to make another application of insecticide must be carefully considered due to availability of registered products for that commodity, maximum rates allowed per cutting and harvest restrictions even at the lower rates. It is a violation of Federal Law to use products in a manner that is inconsistent with its labeling. For example: Depending on the rate, Lorsban® (Chlorpyrifos) at 8oz/A has a 7-day pre-harvest restriction (PHI) and up to 21 days PHI when applied at 1 pint or more per acre. In addition, Lorsban® can only be applied once per cutting (at any rate). Likewise, many of the products that can be used on alfalfa for weevil control, may contain mixtures of different active ingredients, and one of those ingredients may be a product already used. Do not assume that because the product has a label for use on alfalfa, but a different commercial name, that the active ingredient is different. There are many generic products in the marketplace today, but all are required to list the percentage of each active ingredient in their product. Using multiple applications of the same active ingredient back to back is generally not a good strategy for effective control. In addition, it may seriously challenge compliance issues with pesticide label requirements

Producers must carefully look at their own circumstances, examine the associated cost, adhere to all compliance issues, and determine the best management strategy for their operation.

Dr. Richard Grantham - Director, Plant Disease and Insect Diagnostic Laboratory

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