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Spotted Alfalfa Aphids in Alfalfa

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Reports of spotted alfalfa aphids in seedling stands have been reported lately. In a year like 2010, monitoring for this pest may be extremely important in seedling stands. Spotted alfalfa aphid populations as low as 1-2 per plant, under these drought conditions, can quickly thin a good stand. This tiny insect is relatively easy to scout for in alfalfa, since its appearance is quite unique. Of the four primary aphids occurring in Oklahoma alfalfa, this species is the only aphid that is yellow in color. Pea aphids and blue alfalfa aphids are mostly green in color, while cowpea aphids are nearly black. These latter three species also lack the longitudinal rows of dark spots that run along the dorsal surface of the body.

Mild, dry conditions typically favor spotted alfalfa aphid build-up. Cold weather does not necessarily deter populations of spotted alfalfa aphids; therefore, this insect can remain a significant pest throughout the winter months. The effect of feeding by this insect can be devastating to seedling stands. Individual plants may quickly go from healthy looking to yellow and stunted and may eventually turn white in color.

Treatment considerations should be based on the number of aphids per stem in seedling stands. Healthy, well-watered, fall-planted alfalfa may be able to tolerate up to five aphids per stem, while stressed plants that have struggled to grow and establish a viable root system cannot tolerate more than one aphid per stem. If insecticide use becomes necessary, particularly in a dry year, then adequate coverage is a crucial issue. In these conditions, we recommend 3-5 gallons/acre by air or 15-20 gallons/acre by ground application methods. Cutting back on liquid when conditions are dry and winds are even moderate can result in poor

control. We have seen this repeatedly in previous years when conditions were similar. In relation to chemical choices, Lorsban continues to be the preferred choice for aphid control in alfalfa. Some of the newer synthetic pyrethroids (Proaxis, Warrior, Silencer) will also do an effective job; however, certain chemicals within this group will not perform well on aphids. Although it may be slightly more expensive to use Lorsban, lower rates (1 pint/A) have shown excellent activity against this pest and these rates should be quite competitive with lower rates of any of the synthetic pyrethroids. If making applications by ground, remember to slow down to be certain that the liquid is reaching the plant surface. When dry conditions persist for a long period of time, soil particles in the air can create problems with atmospheric tie- up of chemicals. Driving ground equipment quickly over dusty fields can further compound this problem. This makes coverage with adequate liquids an even bigger issue for controlling pest problems.

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