Plant Disease and Insect Advisory

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February Samples on Alfalfa Weevil and Other Insect Problems for 2003

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Alfalfa weevil egg populations and viabilities for January and egg numbers for the latest sampling in February are located in the attached table. In addition, the degree days through February 27, 2003 are presented in the last column. This has been another strange year for alfalfa weevil. Egg populations in January were down in most locations over the previous year; however, viabilities remained up throughout the state. On February 19 and 20, 2003 we sampled the same sites across the state for alfalfa weevil eggs and found that numbers had decreased from the January counts in six of the 11 counties sampled. We also noticed a dramatic increase in the number of aphids, particularly cowpea aphids. Some spotted aphids were also seen, however, numbers were not alarming. Populations of cowpea aphids, however, were quite alarming with numbers approaching several hundred per stem in Grady County. These high populations have also been noted in Garvin county. With the recent snows, rain and colder temperatures I would suspect that these populations will decrease somewhat and the alfalfa will be strengthened by the added moisture. Spotted aphids are yellow in color, with a series of spots located on their upper surface. They typically prefer to feed on leaves in the lower portion of the plant canopy, but will move onto leaves in the middle and upper parts of plants as populations grow. The cowpea aphid has a shiny black body with white bands on the legs. They are somewhat pear-shaped and have antennae shorter than their body. On established alfalfa less than 10 inches in height, only 10 spotted aphids per stem can justify treatment, while up to 40 cowpea aphids per stem may be tolerated. On taller alfalfa (> 10 inches tall), 30 and 75 spotted and cowpea aphids per stem, respectively constitute a treatment threshold.

In regards to alfalfa weevil populations, we may not have reached our peak and/or optimum time for egg laying, because of the delay from colder temperature. We have, however, reached the point when hatch is supposed to begin (150 degree days) in three of the 11 sites sampled. This level of degree days should serve as an indicator for growers and consultants to begin scouting for larvae which have already been seen in some of these southern locations. Most of these

young larvae are too small and the numbers are too light to justify treatment; however, weekly scouting will help growers anticipate the best treatment timing. Viability of the eggs sampled in February will be available toward the end of next week and we will continue to keep you posted.

Table 1. Alfalfa weevil egg populations and viabilities for 2003 across Oklahoma. The last column depicts the current degree days for 2003 in each of the counties sampled (Through February 27, 2003)

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COUNTY	January 2003	% Viable	February 2003	Degree days (2003)
Grady	110.0	91.1	40.4	139
Kay	96.8	76.3	78.8	94
Kingfisher	48.0	----	65.2	119
Osage	57.2	----	99.2	115
Payne	366.8	77.6	435.2	136
Pittsburg	389.8	73.9	144.0	152
Pottawatomie	48.8	----	18.8	139
Stephens	62.4	84.3	112.0	172
Tillman	65.2	----	4.0	194
Washita	79.2	86.4	16.4	137
Woods	56.4	----	114.0	118
Means	125.4	81.6	102.5	137.7

* If no viability is provided for a specific county, then numbers of eggs recovered were insufficient to conduct an assessment. Viabilities for February egg counts will be available the first week of March.

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