Plant Disease and Insect Advisory

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Alfalfa weevil egg populations in 2004

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On January 8-9, 2004, alfalfa samples were taken at 10 sites across the state to ascertain egg populations of alfalfa weevils. In light of the type of winter we have experienced thus far, we may continue to see numbers remain pretty steady. Numbers presented in the attached table reflect weevil eggs per square foot. These numbers may not indicate the severity of the upcoming alfalfa weevil larval infestation, since most of the egg-laying by adult weevils typically occurs during the warm periods of January and February. Early numbers obtained during this first sampling date indicate the amount of oviposition that has taken place so far, including that from October and November of last year. If you recall conditions during this time, most of the state saw a relatively warm, dry fall. These conditions are conducive to mating and oviposition by adult alfalfa weevils. The viability of these eggs will not be known for approximately one week. Egg populations and viabilities will be assessed again in February after the typical oviposition period but before hatch (150 degree days). Presently, most of the locations in the attached table have degree day totals below 50 (thru 01-09-04). Remember the magic number for egg hatch is 150 degree days and it appears we could be in store for some additional winter weather. Alfalfa weevil larval populations were high initially in 2002 but dropped dramatically after several days of freezing temperatures in late February. This resulted in some egg mortality and definitely larval mortality. In comparison, populations were relatively light and very late in 2003, if cold weather conditions take over then we could experience a similar pattern.

Army cutworms were seen during our sampling for weevil eggs, and these are at treatable levels (2-3 larvae/ft^2) In addition, small neonate alfalfa weevil larvae were common in all samples taken; however, any cold snaps (< 20° F) in the next month should eliminate these insects before they become large enough to create significant amounts of

damage. We'll keep you posted on what we're finding around the state as information becomes available.

County	January 8-9 2004	January 6-7 2003	January 2002	January 2001	January 2000	DD thru 1-9-2004
Grady	206.0	110.0	396.8	58.8	184.0	38.0
Kay	94.8	96.8	---	---	---	21.3
Kingfisher	207.2	48.0	190.0	8.4	122.4	25.2
Osage	---	57.2	---	---	---	
Payne	241.2	366.8	57.4	37.6	241.0	37.3
Pittsburg	---	389.8	802.8	---	---	
Pottawatomie	118.4	48.8	170.0	21.6	---	46.3
Stephens	---	62.4	1487.2	80.8	32.0	
Tillman	26.8	65.2	95.2	95.6	174.0	50.1
Washita	486.0	79.2	139.2	26.4	188.0	34.7
Woods	496.0	56.4	65.2	74.8	37.2	22.4
Tulsa	115.2					50.7
Garvin	38.0					52.2
***Mean**	202.96	125.4	348.0	45.6	114.5	

*Means derived from all areas sampled, each year, not simply those depicted in table.

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