

SURVEY OF INSECT PESTS IN KENTUCKY BLUEGRASS SEED PRODUCTION IN CENTRAL OREGON, 2004

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An initial survey of insect pests in Kentucky bluegrass fields was conducted in central Oregon and the Grande Ronde Valley during 2003-2004. Results indicated the presence of sod webworm and cutworms in central Oregon. The winter grain mite is considered the major insect pest in Kentucky bluegrass seed production in central Oregon, but was not the focus of the project. No billbugs were collected in central Oregon, despite being considered a developing new pest in the Grande Ronde Valley. No differences were observed in two fields with multi-acre non-burned and open field burned plots. The objective of this project was to collect a second year of data during 2004-2005.

Seven commercial bluegrass seed production fields were included in the 2004-2005 survey. One of the fields from the previous year was included to compare the effect of non-burn and open-field burn on insect pest populations a year later. Five additional fields with potential for insect problems were chosen for the survey. Sixteen sod samples one-foot in diameter by four inches deep were collected at each location October 12 and November 22, 2004. Six pitfall traps were placed at each location to collect insects moving about the field. Insects were collected from the traps more or less weekly from October 18 to December 15, 2004.

Comparing results from the fall of 2003 with the fall of 2004, it appears that October may be the best time for taking sod samples. September appears to be early, while November may be too late. The number of sod webworms collected was 163 in October and 21 in November. Cutworms were evenly split with 76 in October and 79 in November. Slightly more sod webworms were collected from sod samples than cutworms. The number of winter grain mites increased through the fall. Although billbugs were not collected in the fall of 2003, fourteen were collected in October and another 3 in November 2004. There was significant variability between fields, with insects often in higher numbers in a few fields rather than spread more evenly across sampling locations.

The number of insect pests collected in pitfall traps was significantly lower across all four species compared to sod samples. Use of pit fall traps will be discontinued during the spring of 2005, with the project focusing on sod samples.

Table 1. Insect pests collected from sod samples in Kentucky bluegrass seed fields during the fall of 2004.

Insect pests	Sampling dates		Total
	October 12	November 22	
------(Number of insects/location)-----			
Sod webworm			
Loc 1	132	1	133
Loc 2	26	3	29
Loc 3	3	17	20
Loc 4	0	0	0
Loc 5	0	0	0
Loc 6	1	0	1
Loc 7	1	0	1
Cutworm			
Loc 1	1	0	1
Loc 2	8	3	11
Loc 3	9	16	25
Loc 4	1	4	5
Loc 5	16	7	23
Loc 6	18	24	42
Loc 7	23	25	48
Winter Grain Mite			
Loc 1	0	0	0
Loc 2	0	7	7
Loc 3	0	0	0
Loc 4	0	0	0
Loc 5	0	0	0
Loc 6	2	1	3
Loc 7	1	9	10
Billbug			
Loc 1	4	3	7
Loc 2	9	0	9
Loc 3	0	0	0
Loc 4	0	0	0
Loc 5	1	0	1
Loc 6	0	0	0
Loc 7	0	0	0

Table 2. Insect pests collected from pitfall traps in Kentucky bluegrass seed fields during the fall of 2004.

Insect pests	Sampling dates						Total
	Oct. 18-20	Oct. 25-27	Nov. 4-8	Nov. 15-16	Nov. 24	Dec. 15	
	----- (Number of insects/sample date) -----						
Cutworm	3	5	24	16	4	16	68
Sod webworm	9	0	1	0	1	0	11
Winter Grain Mite	1	2	2	4	2	0	11
Billbug	1	0	0	0	0	0	1