

Section VIII
Mites & Sap-Sucking Pests

Winter Grain Mite Control in Grass Pasture, Central Oregon

Glenn Fisher & Mylen Bohle
OSU Dept of Crop and Soil Science

Crop: Timothy, “Aurora”

Pest: Winter Grain Mite, *Penthaleus major* (Duges)

Location & Grower: Culver, Jefferson Co., OR. Mike & Joe Ally **Stand Age:** at least 3 years

Field Condition: Breaking winter dormancy, beginning spring re-growth

Plot Design: RCB 4 reps; 21’x21’ (.01acre plots)

Application Eqpt.: CO2 powered backpack sprayer, 4 nozzle boom, 8002 flat fan nozzles, 61/2 ft swath 40psi, **gallonage:** 30GPA;

Spray date: 2/24/04, **Weather:** 40F, windy

Data Collected:

On post treatment sampling dates 3, 2 ¼” diameter plugs were cored from each plot. About 1 inch of sod below crown was taken. Cores were placed in zip-lock bags and taken to Round Butte Seed office to count mites under magnification. Total number of live mites/3 plugs was recorded. At 17, 30, 45 & 58 DAT samples were removed from plots with 2inch “plunger” to ease core extraction.

Summary: Populations of mites generally increased in the UTC through 30 DAT. Mustang® and dimethoate were comparable in control, providing the best suppression of WGM in this trial. Other products did not give appreciable mortality/ control of winter grain mite.

Populations began to decline in this trial at 45 DAT, continuing through 58 DAT at which time trial was terminated.

Results:

TABLE I. Total Live WGM in 3, 2 inch diameter core samples removed from crowns of Timothy within Interior of each Plot, MAR 4, 12, 25, APR 9 & 22 2004.

Treatment	Rep					T
	I	II	III	IV	T	
1) Mustang MAX 2oz/A						
9 DAT	0	1	0	0	1	
17 DAT	0	1	1	1	3	
30 DAT	0	1	0	0	1	
45 DAT	0	0	0	0	0	
58 DAT	0	1	0	2	3	8

2) “	4oz/A	2	3	2	0	7	32
		1	2	3	0	6	
		0	0	0	0	0	
		0	0	0	0	0	
		7	8	0	4	19	
3) Kumulus DF 80% Sulfur	20lbs/A	20	0	1	8	29	233
		61	4	2	10	77	
		22	18	4	0	44	
		17	1	63	0	81	
		2	0	0	0	2	
4) “	30lbs/A	0	1	7	7	15	249
		58	9	8	25	100	
		17	24	38	11	90	
		3	0	37	1	41	
		0	0	3	0	3	
5) Acaritouch	12 oz/A3	12	14	18	47		364
		6	46	105	0	157	
		4	40	57	13	114	
		2	0	27	2	31	
		4	4	7	0	15	
6) “	25 oz/A	0	6	16	5	27	197
		8	24	42	27	101	
		1	10	21	8	40	
		11	4	1	4	20	
		5	1	3	0	9	
7) dimethoate	2/3 pt/A	0	1	0	0	1	12
		3	0	1	0	4	
		2	0	2	0	4	
		0	0	1	0	1	
		0	1	1	0	2	
8) Vendex 50 WP	2 lbs/A	4	2	7	9	22	266
		13	6	65	18	102	
		6	2	31	24	63	
		4	2	48	17	71	
		6	1	1	0	8	
9) Acramite	4F 24 oz/A	6	3	1	2	12	
		11	27	44	1	83	
		12	34	5	4	55	

	3	7	39	4	53	
	6	6	2	1	15	218
10) UTC	11	6	5	5	27	
	22	18	13	31	84	
	30	26	4	31	91	
	15	0	27	2	44	
	5	2	0	1	8	254
