

PROJECT TITLE: Achieve Tank Mix Study

PROJECT LEADERS: Bob Stougaard and Todd Keener, NWARC, Kalispell, MT

OBJECTIVE: To evaluate wild oat control and crop tolerance with Achieve in combination with several broadleaf herbicides.

RESULTS: With few exceptions, Achieve provided excellent wild oat control and demonstrated good crop tolerance. However, antagonism was very pronounced when applied with 2,4-D. Wild oat plants were not killed, but the phenological development was delayed by several weeks relative to the nontreated control. This suppression appears to have greatly reduced wild oat competition in that the associated yields were comparable to the other Achieve treatments. A certain level of antagonism was also noted when Achieve was mixed with MCPA and Harmony Extra.

SUMMARY: Achieve demonstrated excellent activity in controlling wild oats. Antagonism problems are similar to that observed with Hoelon.

FUTURE PLANS:

Continue to evaluate Achieve for wild oat control in small grains.

Montana State University
ACHIEVE TANK MIX STUDY

Project Code:94 ATMS
Cooperator :KURT VOLKER ICI

Location :KALISPELL
By:Bob Stougaard

Weed/Crop Code
Rating Data Type
Rating Unit
Rating Date

BARLEY CROP INJ	WILD OAT CONTROL	WILD OAT CONTROL	BARLEY YIELD BU/A
%	%	%	
6-6-94	7-15-94	8-7-94	8-13-94

Trt No	Treatment Name	Form	Fm	Rate	Unit	Grow Stg	Appl Code				
1	ACHIEVE	40	WG	.18	lb ai/A	POST	A	3.3	98.0	97.3	101.9
1	TF8035			.5	% v/v	POST	A				
2	ACHIEVE	40	WG	.18	lb ai/A	POST	A	0.0	99.3	98.0	113.4
2	TF8035			.5	% v/v	POST	A				
2	BRONATE	4	EC	1.5	pt pr/A	POST	A				
3	ACHIEVE	40	WG	.18	lb ai/A	POST	A	0.0	95.7	97.0	114.1
3	TF8035			.5	lb ai/A	POST	A				
3	BUCTRIL	2	EC	2	pt pr/A	POST	A				
4	ACHIEVE	40	WG	.18	lb ai/A	POST	A	3.3	58.3	62.7	101.2
4	TF8035			.5	% v/v	POST	A				
4	2,4-D ESTER	3.8	EC	.5	lb ai/A	POST	A				
5	ACHIEVE	40	WG	.18	lb ai/A	POST	A	0.0	90.3	89.0	109.3
5	TF8035			.5	% v/v	POST	A				
5	MCPA ESTER	3.7	EC	.5	lb ai/A	POST	A				
6	ACHIEVE	40	WG	.18	lb ai/A	POST	A	0.0	94.7	95.3	127.5
6	TF8035			.5	% v/v	POST	A				
6	BANVEL SGF	2	EC	.37	pt pr/A	POST	A				
7	ACHIEVE	40	WG	.18	lb ai/A	POST	A	0.0	86.3	89.0	110.9
7	TF8035			.5	% v/v	POST	A				
7	HARMONY EXTRA	75	DF	.5	oz pr/A	POST	A				
8	NOELON	3	EC	1	lb ai/A	POST	A	5.0	95.7	93.0	127.1
9	ASSERT	2.5	EC	.46	lb ai/A	POST	A	0.0	94.7	92.0	113.1
9	NIS	1	EC	.25	% v/v	POST	A				
10	AVENGE	2	EC	1	lb ai/A	POST	A	6.7	90.7	86.7	101.3
10	NIS			1	% v/v	POST	A				
11	NONTREATED							0.0	0.0	0.0	63.4
LSD (.05) =								5.3	9.5	8.3	16.5
Standard Dev.=								3.11400	5.58543	4.86328	9.66639
CV =								186.84	6.80	5.94	8.99
Block F								0.313	0.770	0.119	21.884
Block Prob(F)								0.7351	0.4761	0.8883	0.0001
Treatment F								1.891	83.644	105.686	9.530
Treatment Prob(F)								0.1082	0.0001	0.0001	0.0001

