Canada thistle control with [flumetsulam & clopyralid] at Lamberton, MN in 1998. Getting, Jodie K. The objective of this study was to evaluate two rates of [flumetsulam & clopyralid] with and without tank mix partners for the control of Canada thistle. This study was designed for an application to corn, however an appropriate site was not located. Therefore, the treatments were applied to a site that was planted to oats in 1997 and was fall chisel plowed. This study was conducted on a Normania loam soil containing 4.4% organic matter, pH 6.1 and soil test P and K levels of 52 and 336 lb/A, respectively. A randomized complete block design with four replications and a plot size of 10 by 25 ft was used. On April 14, 1998 'Dane' oats were planted at a seeding rate of 90 lbs/A. Because of the severe Canada thistle pressure the oats were not able to compete. All treatments were applied with a tractor-mounted sprayer delivering 20 gpa at a pressure of 40 psi. The sprayer was equipped with 8002 flat-fan nozzles spaced 15 inches apart on the boom. Application dates, environmental conditions, plant sizes and rainfall data are listed below:

Date	May 22
Treatment	POST
Temperature (F)	
air	66
soil (4 inch)	68
Relative humidity (%)	48
Wind (mph)	E 10
Sky	cloudy
Soil moisture	dry
Canada thistle	
height (inch)	4 to 6
no./ft^2	4
Rainfall after application (inch)	
1 week	0.25
2 week	0.25
3 week	0.10

In July, [flumetsulam & clopyralid] applied at [0.034 & 0.094] lb/A had 88% Canada thistle control compared to 94% control from the rate of [0.056 & 0.154] lb/A. [Flumetsulam & clopyralid] applied at [0.034 & 0.094] lb/A with either clopyralid at 0.094 lb/A or dicamba at 0.125 lb/A or BAS 662 at 0.13 lb/A resulted in similar control as [flumetsulam & clopyralid] applied at [0.034 & 0.094] lb/A alone. BAS 662 applied at 0.26 lb/A resulted in 86% control.

Table. Canada thistle control at Lamberton, MN in 1998 (Getting).

		Canada thistle			
Treatment[a]	Rate	6/5	6/15	6/26	7/8
	(lb/A or %)	—(% control)—			
[Flms&Clpy]	[0.034&0.094]	84	85	83	88
[Flms&Clpy]+Clpy	[0.034&0.094]+0.094	91	93	91	91
[Flms&Clpy]	[0.056&0.154]	89	94	95	94
[Flms&Clpy]+Clpy	[0.056&0.154]+0.094	91	93	94	95
[Flms&Clpy]+Dica	[0.034&0.094]+0.125	86	91	86	91
[Flms&Clpy]+BAS 662	[0.034&0.094]+0.13	91	95	94	92
Dicamba	0.5	85	92	92	90
BAS 662	0.26	90	86	85	86
Weedy check		0	0	0	0
	LSD (0.10)	4	5	6	5

[a] BAS 662 = Distinct 70WG; Clpy = Stinger 3SL; Dica or dicamba = Banvel 4S; [Flms&Clpy] = Hornet 85.6WG. All treatments were applied with nonionic surfactant at 0.25% v/v and 28%N at 2.5% v/v.