Pesticide Use and Pest Management Practices for Major Crops in North Dakota - 2000

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PESTICIDE USE FOR OAT

North Dakota oat is used primarily for livestock feed and forage.

Total herbicide use on oat acreage was 43.6% (Table 11), slightly less than the 48% treated in 1996. The most frequently used herbicide was 2,4-D applied to 21.8% acres, alone or as a commercial premix. The second most frequently used herbicide was MCPA applied to 13% of oat acres, alone or as a premix. Dicamba was third and was

applied to only 3.3% of the oat acreage. The majority of herbicides on oat were applied once by the farmer with ground equipment. No major changes in the use of herbicide active ingredients have occurred in the past 10 years (Figure 3).

No insecticide or fungicide usage on oat was reported by the survey respondents.

TABLE 10. Production summary for OAT, North Dakota, 1996-2000 (NDASS, 2001)

	A	cres	Yield		Marketing Year Avg.	Value of	Value per harvested	Т	J .S.
Year	Planted	Harvested	Per Acre	Production	Price	Production Production	Acre	Production	
	(000	Acres)	(Bu.)	(000 Bu.)	(\$/Bu.)	(000 Dols.)	(Dols.)	(%)	(Rank)
1996	530	380	50.0	19,000	1.68	31,920	84.00	12	2
1997	700	425	44.0	18,700	1.32	24,684	58.08	10	2
1998	730	420	60.0	25,200	0.93	23,436	55.80	16	1
1999	650	330	51.0	16,830	0.90	15,147	45.90	12	3
2000	600	315	63.0	19,845	1.50	22,320	54.18	13	2

TABLE 11. OAT: Herbicide, Insecticide, and Fungicide usage and application method. North Dakota, 2000

			Applications			Applicator		Method of Application	
	Acres Treated ²	Acres Treated	1 X	2 X	3 X	Farm Operator	Custom	Aerial	Ground
	(1000)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Herbicide ¹									
2,4-D	129.4	21.6	100.0			89.7	10.3	0.8	99.2
Bromoxynil	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoxynil + MCPA	11.6	1.9	100.0			95.1	4.9	4.9	95.1
Clopyralid + 2,4-D	1.4	0.2	100.0			71.4	28.6		100.0
Clopyralid + MCPA	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dicamba	19.9	3.3	100.0			85.7	14.3		100.0
Fenoxaprop-P + Safener	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluroxypyr + MCPA Ester	NS	NS	NS	NS	NS	NS	NS	NS	NS
Glyphosate	15.4	2.6	100.0			74.4	25.6		100.0
MCPA	66.3	11.1	100.0			90.4	9.6	0.8	99.2
Nicosulfuron	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 11. Continued

			Applications			Applicator		Method of Application	
	Acres Treated ²	Acres Treated	1 X	2 X	3 X	Farm Operator	Custom	Aerial	Ground
	(1000)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Picloram	NS	NS	NS	NS	NS	NS	NS	NS	NS
Propanil	NS	NS	NS	NS	NS	NS	NS	NS	NS
Quizalofop-P	NS	NS	NS	NS	NS	NS	NS	NS	NS
Thifensulfuron	NS	NS	NS	NS	NS	NS	NS	NS	NS
Thifensulfuron + Tribenuron	4.4	0.7	100.0			61.1	38.9		100.0
Tribenuron	4.7	0.8	100.0			100.0			100.0
All Herbicides	261.3	43.6	100.0			88.4	11.6	0.8	99.2

¹ Herbicides applied as a tank mixture were considered separately unless a commercial premix was used.

² Multiple applications to the same acre were reported as separate values. Acres treated can exceed 100% of the planted acres. NS - not sufficient to estimate district or state projections.

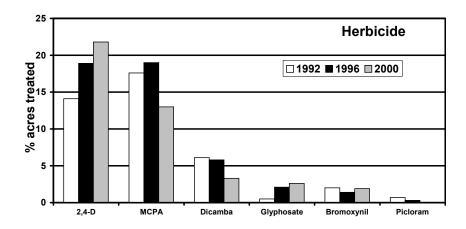


Figure 3. Percent of North Dakota oat acres treated with the top five active ingredients from the herbicide pesticide group reported in the 1992, 1996, and 2000 statewide pesticide use surveys.