

Table 1. Number of crop sites surveyed in each county, 1978.

County	Wheat	Barley	Oats	Flax	Total	County	Wheat	Barley	Oats	Flax	Total
Nelson	26	3	2	—	31	Grant	11	—	8	—	19
Pembina	37	—	—	1	38	Emmons	18	4	6	3	31
Ramsey	27	12	—	—	39	Grand Forks	34	10	2	1	47
Renville	7	16	1	1	25	Golden Valley	9	—	—	—	9
Richland	29	5	3	—	37	Foster	4	9	6	—	19
Sargent	11	3	4	2	20	Divide	21	1	—	—	22
Ransom	14	—	5	—	19	Eddy	4	2	8	—	14
Rolette	14	5	2	1	22	Cavalier	25	21	—	—	46
Pierce	21	1	4	—	26	Cass	39	—	—	—	39
Slope	8	1	3	—	12	Burke	16	3	—	2	21
Stark	20	—	2	—	22	Bowman	11	2	2	—	15
Steele	15	12	—	2	29	Bottineau	19	23	1	1	44
Towner	27	5	—	—	32	Billings	5	—	—	—	5
Traill	18	9	2	2	31	Dunn	13	—	3	—	16
Walsh	38	4	1	1	44	Benson	29	4	3	2	38
Ward	14	30	6	1	51	Barnes	23	19	4	2	48
Williams	26	5	2	0	33	Adams	11	1	3	—	15
Mountrail	24	3	1	—	28	Dickey	7	14	8	—	29
Morton	13	2	5	—	20	Stutsman	3	4	3	1	11
Sioux	6	—	—	—	6	Kidder	1	1	2	1	5
Mercer	9	—	2	—	11	Logan	6	5	5	3	19
McKenzie	13	1	5	—	19	McIntosh	5	13	7	—	25
McHenry	22	5	4	1	32	LaMoure	10	10	8	5	33
McLean	38	1	3	2	44	Burleigh	4	10	12	—	26
Hettinger	19	—	1	—	20	Sheridan	4	7	10	0	21
Oliver	7	—	1	—	8	Wells	15	9	14	4	42
Griggs	9	8	2	1	20						
							859	303	176	40	1378

Table 2. Number of crop sites surveyed in each county, 1979.

County	Wheat	Barley	Oats	Flax	Sunflower	Total
Nelson	18	3	1	—	8	30
Pembina	25	7	—	—	6	38
Ramsey	21	4	—	2	13	40
Renville	14	5	—	1	5	25
Richland	13	1	2	—	23	39
Sargent	8	—	3	—	8	19
Ransom	2	1	2	—	13	18
Rolette	9	8	—	—	3	20
Pierce	18	2	1	1	4	26
Slope	9	—	3	—	—	12
Stark ^a	152(17)	—	26(3)	—	13(2)	191(22)
Steele	10	—	—	—	11	21
Towner	19	4	—	3	6	32
Traill	17	—	—	—	14	31
Walsh	28	9	1	—	5	43
Ward	30	1	1	2	10	44
Williams	34	—	1	—	—	35
Mountrail	27	—	—	—	1	28
Morton	11	3	5	—	1	20
Sioux	8	1	1	—	—	10
Mercer	7	—	3	—	1	11
McKenzie	17	—	2	—	—	19
McHenry	22	1	—	2	3	28
McLean	35	—	3	—	2	40
Hettinger	16	—	—	—	4	20
Oliver	5	2	3	—	—	10
Griggs	5	1	—	1	11	18
Grant	15	—	—	—	4	19
Emmons	25	—	1	5	1	32
Grand Forks	28	8	—	1	8	45
Golden Valley	9	—	—	—	1	10
Foster ^a	33(7)	3(1)	4(1)	—	35(10)	75(19)
Divide	22	—	—	—	—	22

Table 2 (continued)

County	Wheat	Barley	Oats	Flax	Sunflower	Total
Eddy	6	—	3	—	5	14
Cavalier	28	9	1	2	6	46
Cass	23	7	1	—	39	70
Burke	15	—	—	—	1	16
Bowman	12	—	3	—	—	15
Bottineau	28	4	—	6	7	45
Billings	6	—	4	—	—	10
Dunn	16	—	—	—	—	16
Benson	21	2	3	3	9	37
Barnes	15	5	1	1	26	48
Adams	13	—	—	—	2	15
Dickey	13	3	2	2	9	29
Stutsman	26	2	6	1	19	54
Kidder	16	—	1	1	1	19
Logan	16	—	2	—	1	19
McIntosh	13	2	3	5	2	25
LaMoure	15	2	4	2	9	32
Burleigh	20	—	2	—	4	26
Sheridan	15	—	1	—	5	21
Wells	21	2	1	2	12	38
	1050(889)	102(100)	100(74)	43(43)	371(335)	1666(1441)

^a() indicates the number of samples which were included in the state summary.

Table 3. North Dakota weed infestations averaged over wheat, barley, oats and flax based on 1378 surveyed fields, 1978.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	94	82.4	87.2	43.8	47.5	0.2	396.0	215.9
Wild oats	66	32.8	49.8	6.1	9.3	0.2	197.4	68.9
Wild buckwheat	56	27.7	49.7	3.8	6.8	0.2	62.0	55.1
Redroot pigweed	45	15.7	35.1	1.9	4.3	0.2	58.6	35.1
Common lambsquarters	26	9.6	37.0	1.1	4.2	0.2	98.0	20.9
Kochia	25	7.4	29.5	0.9	3.5	0.2	99.6	17.9
Yellow foxtail	13	6.7	49.8	2.4	18.0	0.2	156.0	16.9
Russian thistle	22	6.8	31.6	1.1	5.2	0.2	51.8	16.6
Wild mustard	14	4.5	32.2	0.4	3.2	0.2	31.8	10.1
Perennial sowthistle	12	4.7	40.2	0.4	3.6	0.2	27.2	9.6
Field bindweed	10	4.2	44.1	0.7	7.3	0.2	39.2	9.1
Canada thistle	12	4.3	36.9	0.4	3.7	0.2	30.0	9.1
Volunteer sunflower	12	3.5	29.7	0.4	3.0	0.2	42.8	8.3
Nightflowering catchfly	7	2.5	37.5	0.3	4.5	0.2	23.8	5.4
Prostrate pigweed	5	1.1	20.3	0.1	2.1	0.2	29.4	3.1
Barnyardgrass	3	1.0	32.0	0.3	8.6	0.2	116.2	2.6
Quackgrass	3	1.0	36.2	0.1	4.6	0.2	20.6	2.3
Ragweed	3	0.7	22.0	0.1	1.8	0.2	13.8	1.9
Wild rose	3	0.6	19.5	0.1	2.3	0.2	10.0	1.6
Smartweed	1	0.7	51.4	0.1	6.7	0.6	23.2	1.3
Common purslane	2	0.5	32.6	<0.1	3.1	0.2	13.2	1.1
Prickly lettuce	2	0.2	12.6	<0.1	1.1	0.2	5.2	1.0
Common milkweed	2	0.2	8.1	<0.1	0.6	0.2	3.6	1.0
Bromegrass	1	0.4	50.9	0.1	7.9	2.6	41.8	0.8
Common cocklebur	1	0.3	20.3	<0.1	3.2	0.2	26.4	0.8
Roundleaf mallow	1	0.3	25.4	0.1	5.3	0.2	38.0	0.7
Clover	1	0.3	25.7	<0.1	2.4	0.2	9.0	0.7
Field pennycress	1	0.3	25.0	<0.1	1.8	0.2	6.2	0.6
Muskthistle	1	0.3	25.4	<0.1	1.7	0.4	4.8	0.6
Skeleton weed	1	0.1	15.4	<0.1	2.1	0.2	14.6	0.5
Yellow woodsorrel	1	0.2	28.9	<0.1	3.2	0.8	9.4	0.5
Wild geranium	1	0.2	19.6	<0.1	1.5	0.2	7.0	0.5
Volunteer barley	<1	0.2	37.5	<0.1	5.3	0.4	8.6	0.4

Table 3 (continued)

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Sandbur	1	0.2	30.7	<0.1	3.3	0.2	15.6	0.4
Common chickweed	1	0.1	25.7	<0.1	7.9	0.8	42.0	0.4
Wild barley	1	0.1	16.2	<0.1	1.9	0.2	4.2	0.3
Common dandelion	<1	<0.1	12.0	<0.1	1.0	0.2	1.4	0.2
Needle & thread	<1	0.1	60.0	<0.1	5.7	2.6	11.0	0.2
Flixweed	<1	0.1	36.7	<0.1	2.9	2.2	4.2	0.2
Wild mint	<1	0.1	32.5	<0.1	3.3	0.2	8.8	0.2
Downy brome	<1	0.1	32.5	<0.1	4.0	1.2	9.0	0.2
Volunteer millet	<1	0.1	80.0	<0.1	7.3	3.8	10.8	0.2
Horseweed	<1	0.1	25.0	<0.1	3.7	3.6	3.8	0.1
Wild four-o'clock	<1	<0.1	30.0	<0.1	15.0	15.0	15.0	0.1
Silver cinquefoil	<1	<0.1	35.0	<0.1	2.6	2.6	2.6	0.1
Hedge bindweed	<1	<0.1	7.5	<0.1	0.3	0.2	0.6	0.1
Marshelder	<1	<0.1	20.0	<0.1	5.9	1.8	10.0	0.1
Volunteer tame oats	<1	<0.1	5.0	<0.1	0.3	0.2	0.4	0.1
Volunteer soybean	<1	<0.1	12.5	<0.1	0.6	0.6	0.6	0.1
Green sage	<1	<0.1	7.5	<0.1	0.3	0.2	0.4	0.1
Horsetail	<1	<0.1	17.5	<0.1	4.1	0.8	7.4	0.1
False chamomile	<1	<0.1	16.2	<0.1	0.6	0.2	0.8	0.1
Dock	<1	<0.1	10.0	<0.1	0.9	0.2	1.6	0.1
Greenflower pepperweed	<1	<0.1	40.0	<0.1	10.0	2.2	17.8	0.1
Volunteer corn	<1	0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Western snowberry	<1	<0.1	10.0	<0.1	0.4	0.4	0.4	<0.1
Waterleaf	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Timothy	<1	<0.1	5.0	<0.1	0.4	0.4	0.4	<0.1
Leafy spurge	<1	<0.1	20.0	<0.1	1.0	1.0	1.0	<0.1
Garrison creeping foxtail	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Knotweeds	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Weed free	15	4.0	26.3	—	—	—	—	—

Table 4. North Dakota weed infestations averaged over wheat, barley, oats, flax, and sunflowers based on 1441 surveyed fields, 1979.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	94	77.3	81.9	63.2	67.0	0.2	396.0	256.3
Wild oats	60	25.3	42.3	4.1	6.8	0.2	289.0	54.7
Wild buckwheat	65	23.8	36.7	2.6	3.9	0.2	102.2	51.5
Redroot pigweed	63	20.0	31.6	3.7	5.8	0.2	197.8	49.7
Yellow foxtail	33	14.3	43.7	6.4	19.7	0.2	346.4	40.1
Wild mustard	48	15.3	31.5	1.7	3.5	0.2	186.4	35.4
Common lambsquarters	44	11.0	24.9	1.2	2.8	0.2	104.6	28.5
Russian thistle	31	8.7	28.4	1.3	4.2	0.2	68.0	22.0
Kochia	27	5.4	20.1	0.6	2.3	0.2	62.0	15.8
Field bindweed	18	6.1	34.4	0.8	4.7	0.2	34.4	13.9
Canada thistle	21	4.0	19.1	0.5	2.3	0.2	23.0	12.2
Prostrate pigweed	15	2.9	19.8	0.3	2.3	0.2	31.6	8.5
Volunteer sunflower	12	2.8	22.3	0.3	2.5	0.2	48.2	7.6
Prostrate spurge	11	1.8	17.1	0.2	1.6	0.2	40.6	5.7
Wild rose	11	1.5	13.5	0.1	1.1	0.2	13.0	5.5
Quackgrass	7	2.0	28.8	0.5	7.5	0.2	98.2	5.4
Perennial sowthistle	10	1.7	18.1	0.2	1.9	0.2	18.2	5.4
Field pennycress	10	1.7	17.8	0.2	1.9	0.2	35.2	5.4
Nightflowering catchfly	7	2.4	34.9	0.3	4.3	0.2	41.0	5.3
Common cocklebur	6	1.3	21.9	0.2	2.6	0.2	27.2	3.6
Ragweed	6	0.8	13.1	0.1	1.1	0.2	10.8	3.1
Common purslane	5	0.8	16.6	0.2	3.7	0.2	69.6	2.8
Flixweed	4	0.5	14.6	<0.1	1.2	0.2	10.8	1.8

Table 4 (continued)

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Dwarf mallow	3	0.4	11.9	<0.1	0.9	0.2	6.8	1.6
Common milkweed	3	0.4	12.0	<0.1	1.2	0.2	5.8	1.5
Barnyardgrass	2	0.4	17.6	<0.1	1.7	0.2	8.6	1.3
Shepherdspurse	2	0.3	15.2	<0.1	1.0	0.2	8.2	1.1
Greenflower pepperweed	2	0.3	16.0	<0.1	1.4	0.2	7.8	1.1
Marshelder	2	0.4	22.0	<0.1	2.3	0.2	15.2	1.0
Volunteer millet	1	0.3	42.7	0.2	20.8	0.4	123.8	1.0
Yellow woodsorrel	2	0.3	15.2	<0.1	1.0	0.2	7.0	0.9
Smartweed	2	0.2	12.2	<0.1	1.0	0.2	2.8	0.8
Skeleton weed	2	0.2	12.4	<0.1	0.7	0.2	2.2	0.8
Leafy spurge	1	0.3	24.4	0.1	4.2	0.2	32.2	0.8
Common dandelion	1	0.2	18.9	<0.1	2.0	0.2	19.6	0.7
Large crabgrass	1	0.3	30.4	<0.1	2.7	0.2	14.0	0.7
Prickly lettuce	1	0.1	10.9	<0.1	1.1	0.2	6.6	0.6
Wild barley	1	0.1	13.6	0.1	5.4	0.2	27.4	0.6
Fumitory	1	0.2	26.4	<0.1	2.4	0.2	9.6	0.5
Clover	1	0.1	13.2	<0.1	0.8	0.2	1.8	0.4
Dock	1	0.1	12.5	<0.1	0.9	0.2	3.6	0.4
Hedge bindweed	<1	0.1	15.7	<0.1	1.3	0.2	3.0	0.3
Volunteer soybean	1	0.1	18.1	<0.1	1.1	0.2	3.2	0.3
Knotweeds	1	0.1	15.6	<0.1	0.9	0.2	2.4	0.3
Downy brome	1	0.1	14.4	<0.1	1.9	0.2	6.4	0.3
Volunteer alfalfa	<1	0.2	31.4	<0.1	2.1	0.2	4.4	0.3
Wild vetch	1	0.1	8.3	<0.1	0.4	0.2	1.0	0.3
Volunteer corn	<1	0.1	20.8	<0.1	2.0	0.2	5.0	0.2
Roundleaf mallow	<1	<0.1	11.7	<0.1	0.8	0.2	3.0	0.2
False chamomile	<1	0.1	13.6	<0.1	0.7	0.2	1.4	0.2
Volunteer wheat	<1	<0.1	12.0	<0.1	0.8	0.2	1.8	0.2
Silver cinquefoil	<1	<0.1	18.3	<0.1	1.2	0.2	2.0	0.1
Western salsify	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	0.1
Scurf pea	<1	<0.1	5.0	<0.1	0.5	0.2	0.8	0.1
Poverty weed	<1	<0.1	15.0	<0.1	1.8	0.4	3.2	0.1
Western snowberry	<1	<0.1	55.0	<0.1	6.4	6.4	6.4	0.1
Buffalo bur	<1	<0.1	40.0	<0.1	3.4	3.4	3.4	0.1
Witchgrass	<1	<0.1	8.3	<0.1	0.6	0.2	1.2	0.1
Sandbur	<1	<0.1	16.7	<0.1	0.9	0.2	1.8	0.1
Bromegrass	<1	<0.1	10.0	<0.1	0.7	0.2	1.2	0.1
Horsetail	<1	<0.1	15.0	<0.1	1.1	0.2	2.6	0.1
Volunteer rye	<1	<0.1	12.5	<0.1	0.6	0.2	1.0	0.1
Austrian fieldcress	<1	0.1	37.5	<0.1	3.4	2.6	4.2	0.1
Volunteer flax	<1	<0.1	10.0	<0.1	1.9	0.8	3.0	0.1
Waterpod	<1	<0.1	12.5	<0.1	0.8	0.2	1.4	0.1
Black medic	<1	0.1	85.0	<0.1	25.2	25.2	25.2	0.1
Wild four-o'clock	<1	<0.1	15.0	<0.1	1.2	1.2	1.2	<0.1
Ball mustard	<1	<0.1	15.0	<0.1	1.2	1.2	1.2	<0.1
White mustard	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Gumweed	<1	<0.1	15.0	<0.1	1.6	1.6	1.6	<0.1
Flodmans thistle	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Volunteer barley	<1	<0.1	5.0	<0.1	0.8	0.8	0.8	<0.1
Wild geranium	<1	<0.1	15.0	<0.1	0.6	0.6	0.6	<0.1
Wild licorice	<1	<0.1	20.0	<0.1	1.0	1.0	1.0	<0.1
Weed free	27	6.0	22.0	—	—	—	—	—

Table 5. North Dakota weed infestations in wheat based on 859 surveyed fields, 1978.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	94	80.9	85.3	42.2	43.3	0.2	396.0	210.7
Wild oats	67	32.4	48.6	6.3	9.5	0.2	197.4	69.3
Wild buckwheat	54	23.2	42.9	2.8	5.2	0.2	39.0	47.8
Redroot pigweed	52	17.2	33.4	2.1	4.0	0.2	58.6	39.3
Yellow foxtail	17	8.7	50.4	3.2	18.5	0.2	156.0	22.0
Kochia	26	6.5	25.1	0.6	2.4	0.2	44.2	16.6
Russian thistle	22	6.5	29.5	1.1	5.0	0.2	45.2	16.3
Common lambsquarters	20	5.5	27.6	0.6	2.9	0.2	46.2	13.6
Canada thistle	11	3.8	34.0	0.4	3.5	0.2	15.6	8.5
Field bindweed	9	3.5	37.2	0.7	7.6	0.2	39.2	8.2
Wild mustard	12	3.0	25.7	0.3	2.8	0.2	31.8	7.6
Nightflowering catchfly	8	3.0	38.6	0.4	4.9	0.2	23.8	6.4
Volunteer sunflower	10	2.2	21.5	0.2	2.4	0.2	42.8	6.2
Perennial sowthistle	8	2.8	36.7	0.3	3.3	0.2	27.2	6.0
Prostrate pigweed	6	1.1	19.4	0.1	2.1	0.2	29.4	3.3
Barnyardgrass	3	0.8	25.0	0.3	8.3	0.2	116.2	2.6
Ragweed	4	0.9	21.7	0.1	1.9	0.2	13.8	2.4
Quackgrass	3	0.6	23.6	0.1	3.3	0.2	10.0	1.7
Wild rose	3	0.5	18.3	0.1	2.0	0.2	7.8	1.5
Prickly lettuce	2	0.3	14.3	<0.1	1.3	0.2	5.2	1.2
Smartweed	1	0.5	43.5	0.1	5.6	0.6	21.0	1.0
Common purslane	1	0.4	30.4	<0.1	3.5	0.2	13.2	1.0
Common milkweed	2	0.1	6.6	<0.1	0.4	0.2	1.6	0.9
Roundleaf mallow	1	0.3	27.2	0.1	7.2	0.2	38.0	0.8
Common cocklebur	1	0.2	15.4	<0.1	1.5	0.2	5.2	0.7
Bromegrass	1	0.3	45.8	<0.1	4.8	2.6	11.0	0.6
Common chickweed	1	0.2	29.2	0.1	9.1	0.8	42.0	0.6
Yellow woodsorrel	1	0.2	23.7	<0.1	2.4	0.8	4.8	0.6
Skeleton weed	1	0.1	13.1	<0.1	2.2	0.2	14.6	0.5
Clover	1	0.2	18.1	<0.1	1.5	0.2	3.6	0.5
Flixweed	<1	0.1	36.7	<0.1	2.9	2.2	4.2	0.3
Wild geranium	1	0.1	17.0	<0.1	1.1	0.2	2.2	0.3
Muskthistle	<1	0.1	22.5	<0.1	1.3	0.6	2.2	0.3
Volunteer millet	<1	0.2	80.0	<0.1	7.3	3.8	10.8	0.3
Marshelder	<1	<0.1	20.0	<0.1	5.9	1.8	10.0	0.2
Common dandelion	<1	0.1	11.2	<0.1	0.9	0.2	1.4	0.2
Field pennycress	<1	<0.1	6.3	<0.1	0.3	0.2	0.4	0.2
Needle & thread	<1	0.1	40.0	<0.1	3.0	2.6	3.4	0.2
Wild mint	<1	0.1	57.5	<0.1	6.4	4.0	8.8	0.2
False chamomile	<1	0.1	15.0	<0.1	0.6	0.2	0.8	0.2
Horseweed	<1	<0.1	15.0	<0.1	3.8	3.8	3.8	0.1
Wild four-o'clock	<1	<0.1	30.0	<0.1	15.0	15.0	15.0	0.1
Hedge bindweed	<1	<0.1	5.0	<0.1	0.3	0.2	0.4	0.1
Western snowberry	<1	<0.1	10.0	<0.1	0.4	0.4	0.4	0.1
Sandbur	<1	<0.1	35.0	<0.1	1.8	1.8	1.8	0.1
Volunteer tame oats	<1	<0.1	5.0	<0.1	0.3	0.2	0.4	0.1
Wild barley	<1	<0.1	5.0	<0.1	1.2	0.2	3.0	0.1
Volunteer soybean	<1	<0.1	12.5	<0.1	0.6	0.6	0.6	0.1
Green sage	<1	<0.1	7.5	<0.1	0.3	0.2	0.4	0.1
Horsetail	<1	<0.1	17.5	<0.1	4.1	0.8	7.4	0.1
Downy brome	<1	0.1	22.5	<0.1	1.7	1.2	2.2	0.1
Dock	<1	<0.1	15.0	<0.1	1.6	1.6	1.6	0.1
Greenflower pepperweed	<1	<0.1	40.0	<0.1	17.8	17.8	17.8	0.1
Volunteer corn	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Waterleaf	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Garrison creeping foxtail	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Knotweeds	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Weed free	21	<5.3	25.8	—	—	—	—	—

Table 6. North Dakota weed infestations in wheat based on 889 surveyed fields, 1979.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	95	81.9	86.3	70.7	74.6	0.2	396.0	278.5
Wild oats	67	29.8	44.5	5.1	7.6	0.2	289.0	64.0
Redroot pigweed	67	23.5	35.1	4.5	6.7	0.2	197.8	56.4
Wild buckwheat	66	26.0	39.3	2.8	4.2	0.2	89.8	54.6
Yellow foxtail	27	12.9	47.5	6.5	24.1	0.2	346.4	37.1
Common lambsquarters	40	10.8	27.0	1.4	3.4	0.2	104.6	27.2
Wild mustard	39	11.1	28.7	1.3	3.3	0.2	146.0	27.0
Russian thistle	33	10.0	30.3	1.6	4.9	0.2	68.0	24.6
Kochia	27	5.4	20.3	0.7	2.7	0.2	62.0	16.0
Field bindweed	19	7.1	36.5	1.0	5.0	0.2	34.4	15.8
Canada thistle	17	3.4	19.8	0.4	2.3	0.2	23.0	10.1
Prostrate pigweed	15	3.3	22.3	0.4	2.9	0.2	31.6	9.3
Volunteer sunflower	15	3.3	22.2	0.4	2.6	0.2	48.2	9.2
Nightflowering catchfly	8	2.7	35.7	0.4	4.8	0.2	41.0	6.1
Wild rose	11	1.7	14.8	0.1	1.2	0.2	13.0	5.7
Field pennycress	9	1.5	17.3	0.2	1.9	0.2	35.2	4.8
Perennial sowthistle	8	1.6	19.9	0.2	2.0	0.2	18.2	4.7
Prostrate spurge	8	1.3	15.7	0.1	1.3	0.2	18.8	4.4
Common cocklebur	7	1.6	23.8	0.2	2.7	0.2	18.0	4.1
Quackgrass	5	1.4	31.3	0.3	5.8	0.4	29.2	3.6
Common purslane	4	0.7	18.9	0.2	6.1	0.2	69.6	2.5
Flixweed	4	0.7	14.9	<0.1	1.1	0.2	6.4	2.2
Ragweed	4	0.5	11.7	<0.1	1.1	0.2	10.8	1.9
Dwarf mallow	3	0.5	13.2	<0.1	1.0	0.2	6.8	1.7
Barnyardgrass	2	0.5	19.1	<0.1	1.4	0.2	4.0	1.4
Marshelder	2	0.5	23.2	0.1	2.4	0.2	15.2	1.3
Greenflower pepperweed	2	0.4	15.5	<0.1	1.2	0.2	7.8	1.3
Leafy spurge	1	0.3	25.9	0.1	5.5	0.4	32.2	0.9
Skeleton weed	2	0.2	13.0	<0.1	0.7	0.2	2.2	0.8
Common milkweed	2	0.2	13.6	<0.1	1.1	0.2	3.6	0.8
Yellow woodsorrel	2	0.3	16.4	<0.1	1.3	0.2	7.0	0.8
Common dandelion	1	0.3	26.0	<0.1	3.1	0.2	19.6	0.7
Wild barley	1	0.1	11.4	0.1	4.3	0.2	24.8	0.7
Large crabgrass	1	0.3	37.5	<0.1	2.4	0.2	6.2	0.7
Smartweed	1	0.2	11.7	<0.1	1.0	0.2	2.8	0.6
Prickly lettuce	1	0.1	10.5	<0.1	1.0	0.2	4.0	0.5
Fumitory	1	0.3	46.0	<0.1	4.6	0.4	9.6	0.5
Volunteer millet	<1	0.2	55.0	0.1	24.1	1.6	67.4	0.5
Downy brome	1	0.1	15.0	<0.1	2.2	0.2	6.4	0.4
Dock	1	0.1	10.0	<0.1	0.7	0.2	2.0	0.4
Volunteer soybean	<1	0.1	23.7	<0.1	1.3	0.2	3.2	0.3
Clover	1	0.1	10.0	<0.1	0.8	0.2	1.8	0.3
Knotweeds	1	0.1	16.0	<0.1	1.1	0.2	2.4	0.3
False chamomile	1	0.1	13.0	<0.1	0.7	0.2	1.4	0.3
Wild vetch	1	0.1	7.5	<0.1	0.4	0.2	1.0	0.3
Roundleaf mallow	<1	0.1	16.7	<0.1	1.2	0.2	3.0	0.2
Hedge bindweed	<1	0.1	23.3	<0.1	1.9	0.2	3.0	0.2
Sandbur	<1	0.1	16.7	<0.1	0.9	0.2	1.8	0.2
Volunteer alfalfa	<1	0.1	23.3	<0.1	1.3	0.2	3.4	0.2
Austrian fieldcress	<1	0.1	37.5	<0.1	3.4	2.6	4.2	0.2
Shepherdspurse	1	<0.1	6.0	<0.1	0.2	0.2	0.4	0.2
Volunteer corn	<1	0.1	25.0	<0.1	2.9	0.8	5.0	0.1
Silver cinquefoil	<1	<0.1	15.0	<0.1	1.1	0.2	2.0	0.1
Scurf pea	<1	<0.1	5.0	<0.1	0.6	0.4	0.8	0.1
Poverty weed	<1	<0.1	20.0	<0.1	3.2	3.2	3.2	0.1
Witchgrass	<1	<0.1	8.3	<0.1	0.6	0.2	1.2	0.1
Horsetail	<1	<0.1	30.0	<0.1	2.6	2.6	2.6	0.1
Volunteer flax	<1	<0.1	7.5	<0.1	1.9	0.8	3.0	0.1
Waterpod	<1	<0.1	10.0	<0.1	0.8	0.2	1.4	0.1
Western salsify	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Flodmans thistle	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Bromegrass	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Volunteer rye	<1	<0.1	5.0	<0.1	0.2	0.2	0.2	<0.1
Weed free	16	2.8	17.3	—	—	—	—	—

Table 7. North Dakota weed infestations in barley based on 303 surveyed fields, 1978.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	98	90.1	91.3	42.0	43.3	0.2	342.4	220.8
Wild oats	63	35.7	56.7	7.1	11.3	0.2	94.8	73.4
Wild buckwheat	53	30.0	56.5	4.6	8.6	0.2	62.0	58.4
Common lambsquarters	37	18.3	49.1	1.7	4.5	0.2	14.2	34.7
Redroot pigweed	33	13.9	42.1	1.4	4.4	0.2	23.8	28.3
Kochia	28	11.7	41.0	1.9	6.9	0.2	99.6	25.7
Perennial sowthistle	21	9.7	45.0	0.8	3.7	0.2	11.2	18.7
Russian thistle	16	6.1	37.4	1.0	6.4	0.2	51.8	13.9
Volunteer sunflower	16	6.6	41.4	0.6	4.0	0.2	30.2	13.3
Canada thistle	15	6.3	43.6	0.7	4.6	0.2	30.0	12.7
Wild mustard	13	5.1	38.6	0.4	3.2	0.2	15.0	10.5
Field bindweed	9	5.8	63.0	0.6	6.6	0.2	15.2	10.3
Nightflowering catchfly	8	2.9	35.4	0.3	3.6	0.2	16.8	6.4
Quackgrass	4	2.1	49.2	0.2	5.2	0.2	20.6	4.1
Prostrate pigweed	4	1.1	26.2	0.1	2.2	0.2	11.2	2.8
Yellow foxtail	2	1.2	62.5	0.4	18.0	3.2	53.8	2.7
Smartweed	2	1.5	64.3	0.2	8.9	2.2	23.2	2.7
Field pennycress	3	1.1	35.6	0.1	2.6	0.4	6.2	2.2
Common purslane	3	0.9	33.1	0.1	2.5	0.4	6.0	1.9
Barnyardgrass	1	0.8	57.5	0.1	8.9	1.0	17.0	1.5
Ragweed	2	0.6	27.9	<0.1	2.0	0.8	3.4	1.5
Sandbur	2	0.6	30.0	0.1	3.5	0.2	15.6	1.4
Common milkweed	3	0.4	12.2	<0.1	1.2	0.2	3.6	1.4
Volunteer barley	1	0.6	47.5	0.1	6.5	4.8	8.6	1.3
Muskthistle	2	0.5	23.3	<0.1	1.5	0.4	3.4	1.2
Bromegrass	1	0.5	46.7	<0.1	4.2	3.6	5.0	0.9
Wild geranium	1	0.2	16.2	<0.1	0.9	0.6	1.2	0.7
Wild rose	1	0.1	10.0	<0.1	0.7	0.2	1.4	0.6
Clover	1	0.2	23.3	<0.1	1.8	0.4	4.4	0.6
Roundleaf mallow	1	0.2	18.3	<0.1	1.5	0.4	3.4	0.5
Downy brome	<1	0.2	55.0	<0.1	9.0	9.0	9.0	0.4
Yellow woodsorrel	<1	0.2	70.0	<0.1	9.4	9.4	9.4	0.4
Skeleton weed	<1	0.2	50.0	<0.1	5.0	5.0	5.0	0.3
Common cocklebur	1	0.1	10.0	<0.1	0.8	0.2	1.4	0.3
Wild mint	1	<0.1	7.5	<0.1	0.3	0.2	0.4	0.3
Silver cinquefoil	<1	0.1	35.0	<0.1	2.6	2.6	2.6	0.2
Hedge bindweed	<1	<0.1	15.0	<0.1	0.6	0.6	0.6	0.2
Leafy spurge	<1	0.1	20.0	<0.1	1.0	1.0	1.0	0.2
False chamomile	<1	0.1	20.0	<0.1	0.8	0.8	0.8	0.2
Prickly lettuce	<1	<0.1	5.0	<0.1	0.4	0.4	0.4	0.1
Weed free	7	2.3	31.6	—	—	—	—	—

Table 8. North Dakota weed infestations in barley based on 100 surveyed fields, 1979.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	99	90.1	91.0	92.6	93.5	0.2	396.0	339.1
Wild buckwheat	86	38.2	44.5	4.3	5.0	0.2	33.0	77.0
Wild oats	68	36.1	53.2	5.4	8.0	0.2	59.4	71.5
Redroot pigweed	56	16.4	29.3	2.3	4.2	0.2	81.4	40.5
Yellow foxtail	25	12.1	48.4	8.6	34.3	0.2	301.0	40.4
Canada thistle	32	8.1	25.3	1.1	3.4	0.2	22.4	21.3
Common lambsquarters	35	7.8	22.3	0.7	1.9	0.2	9.8	21.0
Wild mustard	32	6.1	19.1	0.7	2.1	0.2	22.8	18.3
Kochia	30	6.3	21.0	0.7	2.4	0.2	20.2	18.0
Nightflowering catchfly	20	7.6	38.0	0.8	3.8	0.2	14.2	16.0
Russian thistle	16	4.6	29.1	0.6	3.8	0.2	19.6	11.4
Volunteer sunflower	11	4.1	37.3	0.6	5.6	0.2	21.8	9.2

Table 8 (continued)

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Quackgrass	8	2.9	36.9	1.0	12.6	0.4	68.6	8.0
Field bindweed	10	3.1	31.5	0.3	2.8	0.2	10.2	7.1
Perennial sowthistle	9	2.9	32.2	0.4	4.4	0.2	12.8	6.8
Wild rose	11	1.8	16.8	0.1	1.1	0.2	2.6	5.8
Prostrate spurge	10	1.9	19.0	0.1	1.3	0.2	4.8	5.5
Common cocklebur	7	1.3	19.3	0.1	1.9	0.4	3.8	4.0
Prostrate pigweed	6	1.1	18.3	0.1	1.7	0.2	6.0	3.3
Field pennycress	7	0.5	7.1	<0.1	0.6	0.2	2.8	2.9
Barnyardgrass	4	0.8	21.2	0.1	2.0	0.2	5.0	2.4
Common milkweed	4	0.5	13.7	0.1	1.8	0.8	3.0	2.0
Dwarf mallow	5	0.2	5.0	<0.1	0.2	0.2	0.4	1.9
Ragweed	3	0.4	13.3	<0.1	0.5	0.2	1.2	1.4
Yellow woodsorrel	2	0.3	17.5	<0.1	1.0	0.2	1.8	1.1
Dock	1	0.4	45.0	<0.1	3.6	3.6	3.6	0.9
Volunteer alfalfa	1	0.2	25.0	<0.1	2.0	2.0	2.0	0.6
Fumitory	1	0.2	20.0	<0.1	1.6	1.6	1.6	0.6
Ball mustard	1	0.1	15.0	<0.1	1.2	1.2	1.2	0.5
Leafy spurge	1	0.1	15.0	<0.1	1.2	1.2	1.2	0.5
Volunteer corn	1	<0.1	5.0	<0.1	1.2	1.2	1.2	0.4
Marshelder	1	<0.1	5.0	<0.1	0.2	0.2	0.2	0.4
Prickly lettuce	1	0.1	10.0	<0.1	0.4	0.4	0.4	0.4
Weed free	19	3.1	16.3	—	—	—	—	—

Table 9. North Dakota weed infestations in oats based on 176 surveyed fields, 1978.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	89	80.3	87.4	28.9	32.7	0.6	376.4	177.4
Wild buckwheat	65	42.3	64.8	6.8	10.4	0.2	35.2	80.0
Wild oats	73	33.1	45.5	4.2	5.7	0.2	54.6	67.1
Common lambsquarters	36	14.4	39.6	2.2	6.1	0.2	76.4	31.7
Redroot pigweed	34	10.8	32.1	1.8	5.3	0.2	45.0	26.1
Russian thistle	26	9.3	36.2	1.4	5.3	0.2	24.6	21.0
Yellow foxtail	15	5.8	39.2	2.0	13.8	0.2	78.0	15.5
Wild mustard	19	6.6	35.2	0.6	3.3	0.2	30.0	14.3
Perennial sowthistle	14	5.5	38.4	0.6	4.0	0.2	18.2	11.5
Field bindweed	12	5.3	44.8	0.9	7.6	0.2	28.2	11.4
Volunteer sunflower	13	4.9	37.4	0.4	3.1	0.2	13.0	10.2
Kochia	16	3.8	24.1	0.3	2.2	0.2	14.2	9.9
Canada thistle	7	2.5	37.1	0.2	2.7	0.6	5.2	5.2
Wild rose	5	1.6	31.7	0.2	4.3	0.2	10.0	3.8
Prostrate pigweed	4	0.9	21.4	0.1	3.0	0.2	15.0	2.5
Common cocklebur	3	1.0	36.0	0.2	8.4	0.2	26.4	2.5
Quackgrass	2	1.3	78.3	0.2	12.2	2.6	18.4	2.4
Wild barley	3	0.7	23.0	0.1	2.4	1.4	4.2	1.8
Brome grass	1	0.6	100.0	0.2	41.8	41.8	41.8	1.3
Clover	1	0.7	62.5	0.1	6.4	3.8	9.0	1.3
Prickly lettuce	2	0.2	7.5	<0.1	0.8	0.2	2.0	1.0
Common milkweed	2	0.1	6.3	<0.1	0.3	0.2	0.6	0.9
Needle & thread	1	0.6	100.0	0.1	11.0	11.0	11.0	0.9
Ragweed	2	0.2	11.7	<0.1	0.7	0.2	1.6	0.8
Barnyardgrass	2	0.1	5.0	<0.1	0.2	0.2	0.2	0.7
Volunteer barley	1	0.2	17.5	<0.1	2.8	0.4	5.2	0.7
Muskthistle	1	0.3	25.0	<0.1	1.8	0.6	3.0	0.7
Common purslane	1	0.3	55.0	<0.1	4.0	4.0	4.0	0.6
Wild geranium	1	0.3	50.0	<0.1	7.0	7.0	7.0	0.6
Smartweed	1	0.2	40.0	<0.1	2.6	2.6	2.6	0.5
Skeleton weed	1	0.1	10.0	<0.1	0.6	0.2	1.0	0.5

Table 9 (continued)

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Horseweed	1	0.2	35.0	<0.1	3.6	3.6	3.6	0.4
Downy brome	1	0.2	30.0	<0.1	3.6	3.6	3.6	0.4
Dock	1	0.1	5.0	<0.1	0.2	0.2	0.2	0.4
Greenflower pepperweed	1	0.2	40.0	<0.1	2.2	2.2	2.2	0.4
Roundleaf mallow	1	0.1	15.0	<0.1	1.4	1.4	1.4	0.3
Common dandelion	1	0.1	15.0	<0.1	1.2	1.2	1.2	0.3
Nightflowering catchfly	1	0.1	15.0	<0.1	0.8	0.8	0.8	0.3
Field pennycress	1	<0.1	5.0	<0.1	0.6	0.6	0.6	0.2
Common chickweed	1	<0.1	5.0	<0.1	0.8	0.8	0.8	0.2
Timothy	1	<0.1	5.0	<0.1	0.4	0.4	0.4	0.2
Weed free	7	1.8	24.6	—	—	—	—	—

Table 10. North Dakota weed infestations in oats based on 74 surveyed fields, 1979.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	95	79.9	84.4	112.8	119.2	0.2	396.0	374.6
Wild buckwheat	77	36.2	47.0	5.7	7.4	0.2	102.2	75.3
Redroot pigweed	61	20.3	33.4	7.4	12.2	0.2	184.0	57.9
Common lambsquarters	73	21.8	29.9	2.4	3.3	0.2	35.0	51.7
Yellow foxtail	31	15.7	50.7	9.5	30.6	0.2	281.0	48.3
Russian thistle	57	20.3	35.8	3.0	5.3	0.2	56.6	46.3
Wild mustard	51	17.8	34.7	4.5	8.8	0.2	186.4	45.5
Wild oats	45	19.0	42.6	3.5	7.9	0.2	61.0	42.0
Kochia	42	9.9	23.7	1.0	2.4	0.2	18.6	26.2
Field bindweed	24	7.8	31.9	1.0	4.0	0.4	13.8	18.2
Prostrate pigweed	19	4.3	22.9	0.4	2.3	0.2	12.2	11.7
Canada thistle	15	3.9	26.4	0.6	4.3	0.2	21.4	10.4
Field pennycress	14	3.9	28.5	0.4	3.2	0.2	9.8	9.4
Quackgrass	15	2.7	18.2	0.5	3.0	0.6	8.6	8.7
Perennial sowthistle	14	3.1	23.0	0.5	3.6	0.2	12.4	8.7
Volunteer sunflower	16	2.3	14.2	0.2	1.0	0.2	5.6	8.1
Prostrate spurge	11	2.9	26.9	0.7	6.5	0.2	40.6	8.1
Volunteer millet	3	1.8	67.5	1.8	68.3	12.8	123.8	7.0
Wild rose	14	1.4	10.5	0.1	0.9	0.2	2.2	6.2
Common purslane	5	1.7	31.3	0.3	6.0	0.4	19.4	4.3
Large crabgrass	5	1.5	27.5	0.2	4.3	0.6	14.0	3.8
Yellow woodsorrel	7	1.3	19.0	0.1	1.1	0.8	1.8	3.7
Prickly lettuce	7	0.9	13.0	0.1	1.8	0.2	6.6	3.4
Common cocklebur	5	1.3	23.7	0.1	2.1	1.2	4.4	3.4
Common milkweed	5	1.0	18.8	0.2	3.1	1.0	5.8	3.2
Common dandelion	5	0.9	17.5	0.1	1.2	0.2	3.2	2.9
Flixweed	7	0.5	8.0	<0.1	0.4	0.2	0.8	2.9
Ragweed	5	0.7	13.7	0.1	1.1	0.4	1.6	2.7
Black medic	1	1.1	85.0	0.3	25.2	25.2	25.2	2.4
Leafy spurge	4	0.8	20.0	0.1	1.9	1.6	2.0	2.3
Smartweed	4	0.7	18.3	<0.1	0.9	0.2	1.8	2.2
Nightflowering catchfly	1	1.0	75.0	0.1	8.2	8.2	8.2	1.7
Skeleton weed	3	0.5	17.5	<0.1	1.1	0.2	2.0	1.4
Western snowberry	1	0.7	55.0	0.1	6.4	6.4	6.4	1.4
Knotweeds	3	0.4	15.0	<0.1	0.8	0.2	1.4	1.4
Volunteer wheat	3	0.4	15.0	<0.1	1.0	0.2	1.8	1.4
Downy brome	3	0.3	12.5	<0.1	0.7	0.6	0.8	1.3
Clover	3	0.3	10.0	<0.1	0.5	0.4	0.6	1.2
Volunteer alfalfa	1	0.7	50.0	<0.1	3.0	3.0	3.0	1.2
Dwarf mallow	3	0.3	10.0	<0.1	0.8	0.6	1.0	1.2
Volunteer corn	1	0.5	40.0	<0.1	2.6	2.6	2.6	1.1
Roundleaf mallow	3	0.1	5.0	<0.1	0.3	0.2	0.4	1.1

Table 10 (continued)

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Buffalo bur	1	0.5	40.0	<0.1	3.4	3.4	3.4	1.1
Western salsify	3	0.1	5.0	<0.1	0.2	0.2	0.2	1.0
False chamomile	1	0.3	25.0	<0.1	1.2	1.2	1.2	0.8
Wild licorice	1	0.3	20.0	<0.1	1.0	1.0	1.0	0.8
Gumweed	1	0.2	15.0	<0.1	1.6	1.6	1.6	0.7
Bromegrass	1	0.2	15.0	<0.1	1.2	1.2	1.2	0.7
Wild geranium	1	0.2	15.0	<0.1	0.6	0.6	0.6	0.7
Volunteer flax	1	0.2	15.0	<0.1	2.0	2.0	2.0	0.7
Poverty weed	1	0.1	10.0	<0.1	0.4	0.4	0.4	0.6
Wild barley	1	0.1	10.0	<0.1	0.4	0.4	0.4	0.6
Hedge bindweed	1	0.1	5.0	<0.1	0.2	0.2	0.2	0.5
White mustard	1	0.1	5.0	<0.1	0.2	0.2	0.2	0.5
Scurf pea	1	0.1	5.0	<0.1	0.2	0.2	0.2	0.5
Wild vetch	1	0.1	5.0	<0.1	0.2	0.2	0.2	0.5
Waterpod	1	0.1	5.0	<0.1	0.2	0.2	0.2	0.5
Greenflower pepperweed	1	0.1	5.0	<0.1	0.2	0.2	0.2	0.5
Weed free	12	2.1	17.2	—	—	—	—	—

Table 11. North Dakota weed infestations in flax based on 40 surveyed fields, 1978.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	92	80.4	91.3	24.8	26.1	1.6	86.0	168.9
Wild buckwheat	68	42.0	62.2	6.0	8.9	0.2	34.6	78.4
Wild mustard	45	21.7	48.3	2.2	4.9	0.2	20.6	41.9
Redroot pigweed	38	18.6	49.7	2.4	6.5	0.2	21.6	36.8
Wild oats	38	17.6	47.0	2.5	6.7	0.2	39.2	36.0
Common lambsquarters	25	11.4	45.5	3.1	12.5	0.4	98.0	27.0
Russian thistle	38	9.0	24.0	1.0	2.6	0.2	15.2	23.8
Kochia	28	11.1	40.5	1.0	3.7	0.4	12.2	22.7
Yellow foxtail	13	9.0	72.0	3.1	25.0	3.4	64.0	20.5
Barnyardgrass	15	9.4	62.5	2.2	14.4	1.4	27.0	19.4
Canada thistle	15	5.0	33.3	0.3	2.1	0.8	4.6	10.7
Perennial sowthistle	13	4.4	35.0	0.4	3.4	0.4	5.0	9.5
Volunteer sunflower	13	3.5	28.0	0.2	1.8	0.6	4.0	8.2
Field bindweed	8	3.4	45.0	0.3	3.8	2.2	4.8	6.5
Prostrate pigweed	13	1.6	13.0	0.1	1.1	0.2	3.8	6.1
Muskthistle	5	1.9	37.5	0.1	2.9	1.0	4.8	3.9
Clover	5	1.1	22.5	0.1	2.6	1.4	3.8	3.1
Wild rose	8	0.4	5.0	<0.1	0.4	0.4	0.4	2.9
Wild geranium	5	0.9	17.5	<0.1	0.8	0.6	1.0	2.6
Bromegrass	3	1.1	45.0	0.1	3.6	3.6	3.6	2.2
Roundleaf mallow	3	1.0	40.0	0.1	2.6	2.6	2.6	2.0
Skeleton weed	3	0.2	10.0	<0.1	1.4	1.4	1.4	1.2
Quackgrass	3	0.4	15.0	<0.1	0.6	0.6	0.6	1.2
Prickly lettuce	3	0.1	5.0	<0.1	0.2	0.2	0.2	1.0
Volunteer tame oats	3	0.1	5.0	<0.1	0.4	0.4	0.4	1.0

Table 12. North Dakota weed infestations in flax based on 43 surveyed fields, 1979.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	93	77.7	83.5	53.4	57.4	2.8	321.0	233.3
Wild mustard	74	31.2	41.9	3.4	4.5	0.2	33.6	63.8
Wild oats	67	24.2	35.9	2.5	3.7	0.2	21.6	52.5
Wild buckwheat	63	24.0	38.1	2.2	3.5	0.2	10.4	49.9
Redroot pigweed	65	22.0	33.7	2.5	3.8	0.2	20.0	49.5
Common lambsquarters	56	20.9	37.5	2.4	4.2	0.2	15.0	45.0
Yellow foxtail	33	15.9	48.9	5.8	17.8	0.2	72.8	40.3
Russian thistle	35	10.8	31.0	1.2	3.5	0.2	14.6	25.3
Kochia	35	7.7	22.0	0.4	1.3	0.4	4.0	20.3
Field bindweed	21	8.6	41.1	1.2	5.8	0.8	18.6	18.4
Canada thistle	26	5.1	20.0	0.4	1.7	0.2	5.0	14.7
Quackgrass	9	3.8	41.2	2.2	23.3	0.6	85.2	12.0
Volunteer sunflower	16	4.8	29.3	0.4	2.5	0.4	11.0	11.2
Prostrate pigweed	19	2.7	14.4	0.2	0.9	0.2	2.2	9.3
Prostrate spurge	9	4.1	43.8	0.5	4.9	0.2	13.8	8.2
Field pennycress	14	1.7	12.5	0.1	0.8	0.4	1.4	6.7
Perennial sowthistle	12	2.0	17.0	0.2	1.7	0.2	4.0	6.3
Common cocklebur	12	1.5	13.0	0.1	1.0	0.4	2.8	5.6
Nightflowering catchfly	5	1.5	32.5	0.1	2.5	0.4	4.6	3.3
Wild rose	7	0.8	11.7	<0.1	0.6	0.4	0.8	3.2
Skeleton weed	5	0.2	5.0	<0.1	0.2	0.2	0.2	1.8
Ragweed	5	0.2	5.0	<0.1	0.5	0.2	0.8	1.8
Hedge bindweed	5	0.2	5.0	<0.1	0.3	0.2	0.4	1.8
Clover	2	0.7	30.0	<0.1	1.4	1.4	1.4	1.5
Volunteer millet	2	0.6	25.0	<0.1	1.2	1.2	1.2	1.4
Barnyardgrass	2	0.3	15.0	0.1	2.6	2.6	2.6	1.3
Wild four-o'clock	2	0.3	15.0	<0.1	1.2	1.2	1.2	1.2
Common purslane	2	0.3	15.0	<0.1	1.2	1.2	1.2	1.2
Shepherdspurge	2	0.3	15.0	<0.1	0.6	0.6	0.6	1.2
Smartweed	2	0.2	10.0	<0.1	1.0	1.0	1.0	1.1
Flixweed	2	0.2	10.0	<0.1	0.4	0.4	0.4	1.0
Prickly lettuce	2	0.1	5.0	<0.1	0.2	0.2	0.2	0.9
Greenflower pepperweed	2	0.1	5.0	<0.1	0.2	0.2	0.2	0.9
Weed free	21	3.8	18.3	—	—	—	—	—

Table 13. North Dakota weed infestations in sunflower based on 335 surveyed fields, 1979.

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Green foxtail	92	60.7	66.0	25.0	27.1	0.2	389.2	149.6
Wild mustard	75	26.4	35.3	2.4	3.2	0.2	52.6	57.0
Yellow foxtail	50	18.0	36.1	4.9	9.8	0.2	153.0	46.1
Redroot pigweed	55	11.3	20.5	1.3	2.4	0.2	118.0	32.9
Wild buckwheat	53	11.0	20.7	0.8	1.5	0.2	18.6	30.5
Wild oats	40	11.4	28.4	1.4	3.6	0.2	30.4	28.0
Common lambsquarters	50	8.8	17.6	0.7	1.5	0.2	21.0	27.1
Canada thistle	29	4.4	14.9	0.5	1.9	0.2	14.2	15.4
Russian thistle	23	3.9	16.7	0.3	1.3	0.2	10.6	12.4
Kochia	22	3.7	17.0	0.3	1.3	0.2	12.6	11.8
Field bindweed	13	3.6	26.6	0.5	3.9	0.2	23.4	9.3
Prostrate spurge	17	2.6	15.4	0.2	1.1	0.2	7.6	8.6
Quackgrass	10	2.6	25.7	0.8	8.0	0.2	98.2	7.9
Prostrate pigweed	15	2.0	13.3	0.1	1.0	0.2	9.2	7.3
Ragweed	13	2.0	14.6	0.2	1.2	0.2	10.0	6.8
Field pennycress	12	2.2	18.7	0.2	2.1	0.2	27.6	6.6
Perennial sowthistle	12	1.3	10.7	0.1	1.0	0.2	4.6	5.7
Wild rose	11	1.0	9.7	0.1	0.8	0.2	3.8	4.8
Common purslane	10	1.2	12.3	0.1	1.0	0.2	7.8	4.6

Table 13 (continued)

Weed species	Weed Frequency (%)	Field Uniformity Per cent		Weed Density Plants/M ²		Density Range Plants/M ²		Weed Index
		All	Inf.	All	Inf.	Low	Hi	
Shepherdspurse	7	1.2	17.1	0.1	1.1	0.2	8.2	3.8
Common milkweed	7	0.7	9.6	0.1	0.8	0.2	3.4	3.1
Volunteer sunflower	5	0.7	15.6	<0.1	0.9	0.2	2.4	2.4
Common cocklebur	3	0.6	17.3	0.1	3.3	0.2	27.2	1.9
Dwarf mallow	3	0.4	11.8	<0.1	0.9	0.2	2.6	1.5
Smartweed	3	0.3	11.1	<0.1	1.0	0.2	2.0	1.3
Barnyardgrass	2	0.3	11.9	<0.1	2.0	0.2	8.6	1.2
Volunteer millet	1	0.4	29.0	0.1	3.8	0.4	9.6	1.1
Flixweed	2	0.3	19.2	<0.1	2.5	0.2	10.8	1.0
Nightflowering catchfly	2	0.3	12.9	<0.1	0.9	0.2	3.8	1.0
Greenflower pepperweed	1	0.3	23.0	<0.1	2.9	0.2	6.6	0.9
Skeleton weed	1	0.1	11.2	<0.1	0.8	0.2	2.0	0.6
Common dandelion	1	0.1	6.0	<0.1	0.4	0.2	1.0	0.6
Wild barley	1	0.2	27.5	0.1	14.0	0.6	27.4	0.6
Volunteer soybean	1	0.1	12.5	<0.1	0.9	0.2	2.4	0.6
Leafy spurge	1	0.2	26.7	<0.1	2.4	0.2	4.2	0.6
Yellow woodsorrel	1	0.1	7.0	<0.1	0.4	0.2	0.8	0.6
Fumitory	1	0.1	8.0	<0.1	0.4	0.2	1.0	0.6
Marshelder	1	0.2	20.0	<0.1	2.5	0.2	7.0	0.5
Volunteer alfalfa	1	0.2	37.5	<0.1	2.9	1.4	4.4	0.5
Clover	1	0.1	15.0	<0.1	0.7	0.6	0.8	0.4
Volunteer wheat	1	0.1	10.0	<0.1	0.7	0.6	0.8	0.4
Dock	1	0.1	8.3	<0.1	0.6	0.2	1.0	0.4
Volunteer corn	1	0.1	15.0	<0.1	1.1	0.2	2.0	0.3
Knotweeds	1	0.1	15.0	<0.1	0.6	0.2	1.0	0.3
Wild vetch	1	0.1	12.5	<0.1	0.5	0.2	0.8	0.3
Silver cinquefoil	<1	0.1	25.0	<0.1	1.4	1.4	1.4	0.2
Hedge bindweed	<1	0.1	25.0	<0.1	2.8	2.8	2.8	0.2
Horsetail	1	<0.1	7.5	<0.1	0.4	0.2	0.6	0.2
Volunteer rye	<1	0.1	20.0	<0.1	1.0	1.0	1.0	0.2
Large crabgrass	1	<0.1	7.5	<0.1	0.4	0.4	0.4	0.2
Waterpod	<1	0.1	25.0	<0.1	1.4	1.4	1.4	0.2
Roundleaf mallow	<1	<0.1	10.0	<0.1	0.4	0.4	0.4	0.1
Volunteer barley	<1	<0.1	5.0	<0.1	0.8	0.8	0.8	0.1
False chamomile	<1	<0.1	5.0	<0.1	0.4	0.4	0.4	0.1
Weed free	63	16.3	26.1	—	—	—	—	—

Table 14. The ten most abundant weeds in wheat, barley, oats, flax and sunflowers based on weed index in 1978 and 1979.

Weed ¹	Average of 1978 and 1979					1979				
	Wheat		Barley		Oats		Flax		Sunflowers	
	Weed index	Weed	Weed index	Weed	Weed index	Weed	Weed index	Weed	Weed index	
Grft	244.6	Grft	280.0	Grft	226.0	Grft	201.1	Grft	149.6	
Wioa	66.6	Wioa	72.4	Wibw	77.6	Wibw	64.1	Wimu	57.0	
Wibw	51.2	Wibw	67.7	Wioa	54.6	Wimu	52.8	Yeft	46.1	
Rrpw	47.8	Rrpw	34.4	Rrpw	42.0	Wioa	44.2	Rrpw	32.9	
Yeft	29.6	Colq	27.8	Colq	41.7	Rrpw	43.1	Wibw	30.5	
Colq	20.4	KOCZ	21.8	Ruth	33.6	Colq	36.0	Wioa	28.0	
Ruth	20.4	Yeft	21.6	Yeft	31.9	Yeft	30.4	Colq	27.1	
Wimu	17.3	Cath	17.0	Wimu	29.9	Ruth	23.8	Cath	15.4	
KOCZ	16.3	Wimu	14.4	KOCZ	18.0	KOCZ	21.5	Ruth	12.8	
Fibw	12.0	Pest	12.8	Fibw	14.8	Fibw	12.4	KOCZ	11.8	

¹Grft-Green Foxtail, Wioa-Wild Oat, Wibw-Wild Buckwheat, Rrpw-Redroot Pigweed, Yeft-Yellow Foxtail, Colq-Common Lambsquarters, Ruth-Russian Thistle, Wimu-Wild Mustard, KOCZ-Kochia, Fibw-Field Bindweed, Cath-Canada Thistle, and Pest-Perennial Sowthistle.