

## Appendix I—Tables of Pesticide Treatments by Major Target Pest, State, and Crop

**Appendix table 1.1-Target pests - Corn 1996**

Target pest		State								
		IL	IN	IA	KS	KY	MI	MN	MO	NE
10-Aphids	Pct <sup>1</sup>	0.4	--	--	--	--	--	--	--	--
727-Corn Rootworm (adults)	Pct	1.4	2.5	2.4	3.9	4.4	1.1	0.2	0.3	11.2
728-Corn Rootworm (larvae)	Pct	12.6	9.6	4.4	4.0	0.4	5.1	2.8	5.7	8.5
20-Other Beetles, Weevils, or Wireworms	Pct	0.5	0.5	0.2	2.4	--	--	0.4	5.0	1.1
30-Cutworms or Armyworms	Pct	1.9	4.9	0.3	0.8	4.6	0.1	--	4.1	1.5
40-Other Moths or Caterpillars	Pct	4.1	3.2	0.4	8.6	--	5.6	2.8	0.8	4.6
607-Foxtail	Pct	27.8	22.8	25.8	7.4	9.8	9.9	26.9	17.7	14.5
171-Other Annual Grasses	Pct	15.2	12.2	19.9	15.6	26.7	23.3	16.2	17.1	20.8
617-Shattercane	Pct	1.2	0.3	0.5	6.5	0.1	0.2	--	2.3	4.6
608- Johnsongrass	Pct	0.1	5.3	0.0	1.3	30.2	--	--	1.1	0.4
172-Other Perennial Grasses	Pct	1.9	4.5	3.0	0.8	4.6	7.0	2.7	3.1	2.3
173-Perennial Broadleaves	Pct	2.3	3.5	7.5	34.1	5.1	12.7	11.6	6.8	11.0
174-Annual Broadleaves	Pct	30.7	30.4	35.4	5.4	13.9	26.6	33.4	35.3	19.4
616-Quack Grass	Pct	--	0.3	0.2	0.1	--	8.3	3.0	--	--
50-True Bugs	Pct	--	--	--	0.1	--	--	--	0.2	--
90-Mites	Pct	--	--	--	5.3	--	--	--	--	0.1
180-Other (Defoliant, Desiccant, or Growth Regulator)	Pct	--	--	--	3.8	--	--	--	--	--
80-Grasshoppers or Crickets	Pct	--	--	--	--	0.0	--	--	--	0.0
177-Sedges	Pct	--	--	--	--	--	0.1	--	0.4	--
754-Pink Bollworm	Pct	--	--	--	--	--	--	--	--	--
85-Thrips	Pct	--	--	--	--	--	--	--	--	--
Total	1,000 Acre-Treatments	25048	10751	26504	6012	3210	5530	16575	5528	19629

<sup>1</sup> Percent of acre-treatments.

Continued--

**Appendix table 1.1—Target pests - Corn 1996 (continued)**

Target pest		State							Total
		NC	OH	PA	SC	SD	TX	WI	
10-Aphids	Pct <sup>1</sup>	--	--	--	--	--	--	--	0.1
727-Corn Rootworm (adults)	Pct	0.2	3.1	0.9	4.8	0.6	1.5	5.9	3.1
728-Corn Rootworm (larvae)	Pct	6.5	4.8	10.5	1.1	1.2	8.7	12.1	7.1
20-Other Beetles Weevils, or Wireworms	Pct	4.9	0.5	--	2.3	--	2.7	--	0.8
30-Cutworms or Armyworms	Pct	1.5	3.3	3.3	4.2	3.6	6.7	--	1.8
40-Other Moths or Caterpillars	Pct	2.7	1.3	0.4	--	5.1	13.4	0.1	3.2
607-Foxtail	Pct	--	29.7	10.4	--	19.9	0.0	21.5	20.5
171-Other Annual Grasses	Pct	29.9	11.7	13.5	46.0	13.1	10.2	10.5	16.8
617-Shattercane	Pct	--	0.2	6.4	--	--	0.1	--	1.4
608-Johnsongrass	Pct	4.9	1.7	2.7	5.1	--	14.7	0.2	1.9
172-Other Perennial Grasses	Pct	8.5	2.9	13.9	11.7	8.8	0.3	7.8	3.9
173-Perennial Broadleaves	Pct	10.9	10.1	12.8	9.1	20.5	8.6	5.2	9.3
174-Annual Broadleaves	Pct	29.1	29.5	22.1	15.7	25.3	28.5	28.2	28.1
616-Quack Grass	Pct	--	1.3	2.8	--	1.1	--	8.4	1.4
50-True Bugs	Pct	0.9	--	--	--	--	1.9	--	0.1
90-Mites	Pct	--	--	--	--	--	2.9	--	0.3
180-Other (Defoliant, Desiccant, or Growth Regulator)	Pct	--	--	--	--	--	--	--	0.1
80-Grasshoppers or Crickets	Pct	--	--	--	--	0.6	--	--	0.0
177-Sedges	Pct	--	--	0.2	--	0.2	--	0.2	0.0
754-Pink Bollworm	Pct	0.0	--	--	--	--	--	--	0.0
85-Thrips	Pct	--	--	--	--	--	0.1	--	0.0
Total	1,000 Acre-Treatments	2114	6216	5063	745	8259	4900	8911	154995

<sup>1</sup> Percent of acre-treatments.

**Appendix table 1.2—Target pests - Soybeans 1996**

Target pest		State								
		IL	IN	IA	MN	MO	NE	OH	AR	LA
727-Corn Rootworm (adults)	Pct <sup>1</sup>	--	--	--	--	--	0.0	--	--	--
728-Corn Rootworm (larvae)	Pct	--	--	0.0	--	--	--	--	--	--
20-Other Beetles Weevils, or Wireworms	Pct	--	--	0.0	--	--	0.2	--	0.2	0.1
30-Cutworms or Armyworms	Pct	--	--	--	--	--	--	0.3	0.6	--
40-Other Moths or Caterpillars	Pct	--	--	0.1	--	--	--	--	--	0.4
607-Foxtail	Pct	26.6	17.1	19.7	18.5	24.3	20.7	23.3	0.5	0.0
171-Other Annual Grasses	Pct	24.6	18.5	24.8	20.4	17.0	10.8	9.5	46.2	19.6
617-Shattercane	Pct	0.2	2.3	0.1	--	1.3	4.4	0.5	--	--
608- Johnsongrass	Pct	0.1	8.1	0.0	0.0	5.0	0.0	0.8	14.6	14.5
172-Other Perennial Grasses	Pct	3.1	7.1	3.8	5.8	7.3	6.5	6.5	8.1	9.8
173-Perennial Broadleaves	Pct	5.6	8.8	9.6	7.6	4.9	8.1	11.5	4.9	5.1
174-Annual Broadleaves	Pct	39.7	37.5	41.9	45.4	39.8	49.2	42.0	24.4	32.6
616-Quack Grass	Pct	0.1	0.5	0.1	2.3	--	--	5.5	0.3	2.0
50-True Bugs	Pct	--	--	--	--	--	--	--	--	13.2
180-Other (Defoliant, Desiccant, or Growth Regulator)	Pct	--	--	--	--	--	--	--	--	--
80-Grasshoppers or Crickets	Pct	--	0.0	--	--	0.1	0.0	--	--	--
177-Sedges	Pct	--	--	--	0.0	0.4	--	--	0.2	0.7
757-Tobacco Budworm	Pct	--	--	--	--	--	--	--	--	1.0
110-Fungus Diseases	Pct	--	--	--	--	--	--	--	--	1.1
Total	1000 Acre-Treatments	24004	11939	21993	13529	8597	6726	11162	7329	2761

<sup>1</sup> Percent of acre-treatments.

Continued--

**Appendix table 1.2 —Target pests - Soybeans 1996 (continued)**

Target pest		State		
		MS	TN	Total
727-Corn Rootworm (adults)	Pct <sup>1</sup>	--	--	0.0
728-Corn Rootworm (larvae)	Pct	--	--	0.0
20-Other Beetles Weevils, or Wireworms	Pct	0.0	--	0.0
30-Cutworms or Armyworms	Pct	0.1	--	0.1
40-Other Moths or Caterpillars	Pct	0.4	--	0.0
607-Foxtail	Pct	--	--	18.5
171-Other Annual Grasses	Pct	23.0	27.4	21.9
617-Shattercane	Pct	--	--	0.7
608-Johnsongrass	Pct	6.1	24.7	3.5
172-Other Perennial Grasses	Pct	13.9	6.8	5.8
173-Perennial Broadleafs	Pct	8.9	3.0	7.6
174-Annual Broadleafs	Pct	44.9	37.8	40.3
616-Quack Grass	Pct	--	--	1.0
50-True Bugs	Pct	1.4	--	0.4
180-Other (Defoliant, Desiccant, or Growth Regulator)	Pct	0.7	--	0.0
80-Grasshoppers or Crickets	Pct	--	0.2	0.0
177-Sedges	Pct	0.5	--	0.1
757-Tobacco Budworm	Pct	--	--	0.0
110-Fungus Diseases	Pct	0.1	0.1	0.0
Total	1,000 Acre-Treatments	4565	3084	115689

<sup>1</sup> Percent of acre-treatments.

**Appendix table 1.3—Target pests - Cotton 1996**

Target pest		State								
		TX	AR	LA	MS	TN	AZ	CA	GA	Total
10-Aphids	Pct <sup>1</sup>	3.4	0.2	1.4	0.5	0.0	--	8.4	0.2	2.0
728-Corn Rootworm (larvae)	Pct	--	0.5	2.0	--	--	--	--	0.0	0.4
20-Other Beetles Weevils, or Wireworms	Pct	26.6	32.6	27.3	16.2	20.4	--	0.6	0.3	19.7
30-Cutworms or Armyworms	Pct	0.5	1.4	4.1	0.8	--	0.1	1.8	2.7	1.5
40-Other Moths or Caterpillars	Pct	2.7	2.9	6.3	5.6	0.3	--	3.2	1.5	3.5
607-Foxtail	Pct	0.1	--	--	0.1	--	--	0.0	0.0	0.1
171-Other Annual Grasses	Pct	2.0	4.8	3.5	10.1	12.7	1.7	8.3	18.5	6.8
617-Shattercane	Pct	--	--	0.2	--	--	--	--	--	0.0
608-Johnsongrass	Pct	4.9	4.9	4.9	2.9	4.7	0.8	0.8	0.1	3.6
172-Other Perennial Grasses	Pct	2.6	7.8	3.2	3.7	1.6	1.5	2.5	4.1	3.6
173-Perennial Broadleaves	Pct	5.5	2.2	3.1	2.6	2.5	6.2	0.8	5.0	3.6
174-Annual Broadleaves	Pct	23.3	17.5	12.3	17.2	29.5	6.3	9.5	30.0	19.0
616-Quack Grass	Pct	--	--	0.2	--	--	--	--	--	0.0
50-True Bugs	Pct	2.2	1.7	3.5	10.5	1.6	17.8	3.4	2.1	4.4
90-Mites	Pct	0.0	--	0.1	--	--	--	19.0	--	1.7
180-Other (Defoliant, Desiccant, or Growth Regulator)	Pct	16.6	14.0	9.9	18.2	23.4	17.8	39.7	18.6	18.2
80-Grasshoppers or Crickets	Pct	--	--	--	--	--	--	0.0	0.0	0.0
177-Sedges	Pct	0.1	--	0.3	0.1	0.8	0.2	0.2	0.8	0.2
754-Pink Bollworm	Pct	4.5	1.0	5.2	3.4	0.0	24.7	0.6	5.6	4.0
85-Thrips	Pct	3.3	2.4	1.4	4.3	0.9	--	0.8	6.2	2.9
757-Tobacco Budworm	Pct	1.5	1.4	6.9	3.3	--	--	--	4.2	2.6
110-Fungus Diseases	Pct	0.1	2.1	1.2	0.3	0.9	--	0.0	--	0.6
60-Whitefly, Mealybugs, or Leafhoppers	Pct	0.1	--	0.1	--	--	22.9	0.2	--	0.6
100-Nematodes	Pct	0.1	2.6	3.0	--	0.1	0.0	0.2	0.0	0.8
120-Virus Diseases	Pct 1/	--	--	0.2	--	0.0	--	--	--	0.0
95-Flies or Maggots	Pct	0.0	--	--	--	0.6	--	--	--	0.0
<b>Total</b>	<b>1000 Acre-Treatments</b>	<b>25546</b>	<b>12329</b>	<b>13984</b>	<b>18095</b>	<b>4566</b>	<b>2459</b>	<b>8596</b>	<b>9004</b>	<b>94579</b>

<sup>1</sup> Percent of acre-treatments.

**Appendix table 1.4—Target pests - Winter wheat 1996**

Target pest		State								
		KS	NE	SD	TX	CO	DE	ID	MT	OK
10-Aphids	Pct <sup>1</sup>	5.7	--	--	16.1	0.6	3.7	0.8	--	41.8
20-Other Beetles, Weevils, or Wireworms	Pct	--	--	--	--	--	14.8	--	--	--
30-Cutworms or Armyworms	Pct	0.6	--	--	20.4	--	--	--	--	--
607-Foxtail	Pct	0.8	--	6.0	--	--	--	--	--	.
171-Other Annual Grasses	Pct	2.4	12.5	7.9	1.2	19.8	--	19.7	9.0	0.3
617-Shattercane	Pct	--	--	--	--	--	--	--	--	
608-Johnsongrass	Pct	2.0	--	--	0.2	--	--	--	--	0.8
172-Other Perennial Grasses	Pct	2.1	13.6	--	1.7	1.2	25.9	--	--	1.7
173-Perennial Broadleaves	Pct	24.7	26.6	47.4	0.7	14.5	7.4	27.5	9.0	5.7
174-Annual Broadleaves	Pct	59.6	46.7	38.6	32.7	55.1	11.1	50.5	79.9	49.7
616-Quack Grass	Pct	--	--	--	--	--	--	0.8	--	.
50-True Bugs	Pct	--	--	--	23.9	--	--	--	--	.
90-Mites	Pct	2.1	--	--	2.0	8.7	--	--	--	--
180-Other (Defoliant, Desiccant, or Growth Regulator)	Pct	--	--	--	1.2	--	--	0.7	--	--
80-Grasshoppers or Crickets	Pct	--	0.5	0.1	--	--	--	--	1.4	--
85-Thrips	Pct	--	--	--	--	--	--	--	--	--
110-Fungus Diseases	Pct	--	--	--	--	--	37.0	--	0.7	--
120-Virus Diseases	Pct	--	--	--	--	--	--	--	--	--
Total	1000 Acre- Treatments	7535	1858	1919	2348	2782	27	1317	4824	3154

<sup>1</sup> Percent of acre-treatments

Continued--

**Appendix table 1.4—Target pests - Winter wheat, 1996 (continued)**

Target pest		State		
		OR	WA	Total
10-Aphids	Pct <sup>1</sup>	0.5	1.7	6.9
20-Other Beetles, Weevils, or Wireworms	Pct	--	--	0.0
30-Cutworms or Armyworms	Pct	--	--	1.6
607-Foxtail	Pct	0.6	2.6	1.0
171-Other Annual Annual	Pct	6.3	8.2	7.2
617-Shattercane	Pct	10.7	1.7	1.0
608-Johnsongrass	Pct	--	--	0.6
172-Other Perennial Grasses	Pct	0.6	3.0	2.1
173-Perennial Broadleafs	Pct	46.5	19.5	20.3
174-Annual Broadleafs	Pct	32.2	59.1	54.9
616-Quack Grass	Pct	--	--	0.0
50-True Bugs	Pct	--	--	1.7
90-Mites	Pct	--	--	1.4
180-Other (Defoliant, Desiccant, or Growth Regulator)	Pct	--	--	0.1
80-Grasshoppers or Crickets	Pct	--	--	0.2
85-Thrips	Pct	0.1	--	0.0
110-Fungus Diseases	Pct	2.5	3.7	0.8
120-Virus Diseases	Pct	--	0.4	0.1
Total	1000 Acre- Treatments	2293	4347	32404

<sup>1</sup> Percent of acre-treatments.

**Appendix table 1.5—Target pests - Durum wheat, North Dakota, 1996**

Target pest		ND	Total
607-Foxtail	Pct <sup>1</sup>	5.0	5.0
171-Other Annual Grasses	Pct	15.2	15.2
172-Other Perennial Grasses	Pct	0.7	0.7
173-Perennial Broadleafs	Pct	21.1	21.1
174-Annual Broadleafs	Pct	56.5	56.5
616-Quack Grass	Pct	0.2	0.2
80-Grasshoppers or Crickets	Pct	0.0	0.0
110-Fungus Diseases	Pct	0.7	0.7
95-Flies or Maggots	Pct	0.6	0.6
Total	1000 Acre-Treatments	7370	7370

<sup>1</sup> Percent of acre-treatments.

**Appendix table 1.6—Target pests - Spring wheat, 1996**

Target pest		State			Total
		MN	MT	ND	
10-Aphids	Pct <sup>1</sup>	6.3	--	--	1.0
607-Foxtail	Pct	15.6	--	8.1	7.4
171-Other Annual Grasses	Pct	19.6	9.1	14.3	13.9
172-Other Perennial Grasses	Pct	4.0	8.0	8.6	7.8
173-Perennial Broadleafs	Pct	11.9	17.0	12.0	13.1
174-Annual Broadleafs	Pct	35.3	65.4	54.1	53.8
616-Quack Grass	Pct	0.4	0.6	0.7	0.6
110-Fungus Diseases	Pct	5.2	--	1.1	1.5
95-Flies or Maggots	Pct	1.7	--	1.2	1.0
Total	1000 Acre-Treatments	4578	6819	18473	29870

<sup>1</sup> Percent of acre-treatments.



**Appendix table 1.7—Target pests - Potatoes, 1996**

Target pest		State				Total
		ID	WA	ME	RR	
10-Aphids	Pct <sup>1</sup>	2.4	10.4	4.4	1.0	4.1
20-Other Beetles, Weevils, or Wireworms	Pct	14.2	13.3	4.4	17.0	13.6
40-Other Moths or or Caterpillars	Pct	0.7	1.2	--	0.7	0.7
607-Foxtail	Pct	0.0	--	--	0.3	0.1
171-Other Annual Grasses	Pct	1.1	2.5	0.3	1.0	1.3
172-Other Perennial Grasses	Pct	1.4	1.0	0.1	--	0.8
173-Perennial Broadleaves	Pct	5.0	3.4	0.1	0.1	2.7
174-Annual Broadleaves	Pct	18.0	7.8	5.4	5.0	10.6
616-Quack Grass	Pct	0.3	0.1	--	--	0.1
50-True Bugs	Pct	0.0	1.9	--	0.8	0.7
90-Mites	Pct	--	1.2	--	--	0.3
180-Other (Defoliant, Desiccant, or Growth Regulator)	Pct	8.4	6.4	12.4	12.9	9.6
85-Thrips	Pct	0.1	--	--	--	0.0
110-Fungus Diseases	Pct	45.6	46.6	71.9	44.3	48.7
60-Whitefly, Mealybugs, or Leafhoppers	Pct	--	--	--	0.1	0.0
100-Nematodes	Pct	2.1	3.4	0.9	--	1.7
120-Virus Diseases	Pct	0.8	0.8	--	16.8	5.0
Total	1000 Acre- Treatments	2129	1303	680	1502	5614

<sup>1</sup> Percent of acre-treatments.