

APPENDIX VIII.A. ARLINGTON AGRICULTURAL RESEARCH STATION WICST INPUT/OUTPUT DATA - 1993

Corn Treatments

Crop-93 Prev Crop Rotation Treatment Plot #'s	Cont. Corn Corn R1 1 109,204, 306,412	Corn Soybean R2 3 101,214, 303,401	Corn Wheat/RC R3 6 102,212, 313,407	Corn Alfalfa II R4 7 111,209, 305,409	Corn Alfalfa I R5 12 103,213 314,410
Primary Tillage	Chisel Plow 11/30/92	No-till	Chisel Plow Sweeps 5/12/93	Chisel Plow Sweeps 12/1/92	Chisel Plow Sweeps 12/1/92
Secondary Tillage	Disk 4/30/93 Soil Finisher 5/1/93	None	Disk 2X 5/12/93	Disk 4/30/93 Soil Finisher 5/1/93	Disk 4/30/93 Soil Finisher 5/12/93
Planted Variety Rate	5/1/93 Pioneer 3417 32,500	5/1/93 Pioneer 3417 32,500	5/13 Pioneer 3563 32,500	5/1 Pioneer 3417 32,500	5/13 Pioneer 3563 32,500
Fertilizer Starter	100 lb 6-24-24	100 lb 6-24-24	None	100 lb 6-24-24	None
Nitrogen	160 lb N/a as 82-0-0 4/30/93	120 lb N/a as 82-0-0 6/30/93	None	None	None
Manure	None	None	None	20 Ton/a 11/23/92	15 Ton/a 11/30/92
Pesticides	pre 5/7/93 Dual 2 pt/a postemerge Buctril 1 pt/a 6/10/93 Counter 15G 9 lb/a with planter	pre 5/7/93 Dual 2 pt/a postemerge accent 2/3 oz/a 5/21/93 ^{1/} stinger .5 pt/a 5/27/93 ^{2/} Buctril 1 pt/a 6/10/93	None	pre 5/7/93 Dual 2 pt/a postemerge Buctril 1 pt/a 6/10/93	None
Rotary Hoe	None	None	#1 5/21/93 #2 5/28/93 #3 6/7/93	None	#1 5/21/93 #2 5/28/93 #3 6/7/93
Cult.	S-tine 7/5/93	S-tine 7/5/93	S-tine 6/18/93 7/5/93	S-tine 7/5/93	S-tine 6/18/93 7/5/93
Harvest	11/1/93	11/1/93	11/1/93	11/1/93	11/1/93
Yield	124 bu/a	130 bu/a	87 bu/a	165 bu/a	119 bu/a
Fall Practices	Chisel Plow 11/9/93	None	Chisel Plow 11/9/93	20 T/a manure 11/7/93 Chisel Plow 11/9/93	15 T/a manure 11/7/93 Chisel Plow 11/9/93
Crop-94	Corn	NR Soybean	WR Soybean	D.S. Alfalfa	Oats/Alfalfa

^{1/} Applied to plots 101, 214, 401 to kill volunteer aerial seeded wheat

^{2/} Spot sprayed on thistle patches

APPENDIX VIII.B. ARLINGTON AGRICULTURAL RESEARCH STATION WICST INPUT/OUTPUT
DATA - 1993

Soybean and Wheat Treatments

Crop-93	NR Soybean	WR Soybean/ Wheat	Wheat/ Red Clover
Prev. Crop	Corn	Corn	Soybean/Wheat
Rotation	R2	R3	R3
Treatment	2	5	4
Plot #'s	108,206, 310,408	106,202, 307,411	104,201, 301,402
Primary Tillage	Chisel Plow 11/30/92	Chisel Plow 11/30/92	None
Secondary Tillage	Disk 4/30/93 Soil Finisher 5/12/93	Disk 4/30/93 Soil Finisher 5/12/93	None
Planting Date	5/13/93	5/13/93	9/18/92 Wheat 4/2/93 Rd Clov ^{1/}
Variety	Pioneer 9372	Kaltenberg 241	Arlington RC
Rate	235,000 seeds/a	156,000 seeds/a	180 lb/a Wheat 20 lb/a Rd Clov.
Fertilizer	None	None	None
Pesticides	postemerge .25 oz/a Classic .25 oz/a Pinnacle 6/16/93 1.5 pt/a Poast 6/21/93	None	postemerge 5/21/93 Buctril 1 pt/a ^{2/}
Rotary Hoe	None	#1 5/21/93 #2 6/5/93	None
Cultivation	None	S-tine 6/18/93 7/5/93 7/16/93	None
Harvest	10/13/93	10/12/93	7/28/93
Yield	53 bu/a	53 bu/a	29 bu/a wheat 1.43 T/a straw
Fall Practices	None	Soil Finisher 10/12/93 No-till drill Merrimac w.wheat 150 lb/a 10/13/93	Chisel plow (sweeps) 11/8/93
Crop-94	Corn	Wheat/Red Clover	Corn

^{1/} Seeded with hand operated spreader

^{2/} Applied to control common lambsquarter between rows of wheat

APPENDIX VIII.C. ARLINGTON AGRICULTURAL RESEARCH STATION WICST INPUT/OUTPUT DATA - 1993

Forage Treatments

Crop-93	D. Seeded Alfalfa	Estab. Alfalfa I	Estab. Alfalfa II	Oats/ Alfalfa	Estab. Alfalfa I	Pasture
Prev. Crop Rotation	Filler Corn R4	D.S. Alf. R4	Alfalfa I R4	Corn R5	Oats/Alf. R5	Pasture R6
Treatment	10	9	8	11	13	14
Plot #'s	107,205 309,404	105,203 308,406	113,210, 311,414	110, 208 304, 413	114,211, 312,403	112,207 302,405
Primary Tillage	Chisel Plow 11/30/92			Chisel Plow 11/30/92		
Secondary Tillage	Disk 4/30/93 Soil Finisher 5/1/93			Disk 4/30/93 Soil Finisher 5/1/93		
Planting Date	5/1/93	4/7/92 4/28/93 ^{1/}	4/8/91 4/28/93 ^{1/}	5/1/93	4/7/92 4/28/93 ^{1/}	4/23/90 4/30/92 O gr/Br/Tim 7/31/92 O gr 4/9/93 ^{2/}
Variety	Magnum III	Magnum III	Magnum III	Prairie-oats Magnum III-alf.	Magnum III	Timothy-Toro Brome-Badger Arl Rd Clov ^{2/}
Planting Rate	15 lb/a			64 lb/a oats 15 lb/a alfalfa		6 lb/a O gr 12 lb/a Br 6 lb/a Tim 4.5 lb/a O gr 12 lb/a RC ^{2/}
Fertilizer Manure	20 ton/a 11/23/92	None	None	15 ton/a 11/30/92	None	grazing
Pesticides	Eptam 2 qt/a ppi 5/1/93	None	2,4-D 1 pt/a Banvel .5 pt/a 10/6/93	None	None	None
Harvest	7/16/93 haylage 9/2/93 haylage	6/11/93 haylage 7/13/93 haylage 9/2/93 haylage	6/11/93 haylage 7/13/93 haylage 9/2/93 haylage	8/11/93 oats 8/13/93 straw	6/11/93 haylage 7/14/93 haylage 9/2/93 haylage	begin grazing 5/17/93 bale excess 6/11/93
Yield	3.27 tDM/a	3.70 tDM/a	3.25 tDM/a	62 bu/a 1.52 tDM/a	4.65 tDM/a	0.4 tDM/a hay 482 lb gain/a
Fall Practices	None	None	20 T/a manure 11/7/93	None	15 T/a manure 11/7/93	None
Crop-94	Alfalfa I	Alfalfa II	Corn	Alfalfa I	Corn	Pasture

^{1/} No-till drill

T9 105 - whole plot 5 lb/a perennial rye, 203, 308, 406 - whole plots 5 lb/a perennial rye + 8 lb/a Magnum alfalfa

T8 whole plots 5 lb/a perennial rye + 6 lb/a Arlington red clover

T13 114 - whole plot 5 lb/a perennial rye, 211 - north 4/5 plot 5 lb/a peren. rye + 6 lb/a Arlington RC, 312 - north 1/3 plot 5 lb/a peren. rye + 6 lb/a Arlington RC, 403 - south 1/3 plot 5 lb/a peren. rye + 6 lb/a Arlington RC.

^{2/} Seeding with hand operated cyclone seeder