Appendix I. Arlington Agricultural Research Station WICST Input/Output Data - 1995

Corn Treatments

Crop-95	Cont. Corn	Corn	Corn	Corn	Corn
Prev Crop	Corn	Soybean	Wheat/RC	Alfalfa II	Alfalfa I
Cropping sys.	CS1	CS2	CS3	CS4	CS5
Treatment	1	3	5	9	11
Primary Tillage	Chisel Plow 11/7/94	No-till	Chisel Plow Sweeps 11/7/94	Chisel Plow 11/7/94	Chisel Plow Sweeps 11/7/94
Secondary Tillage	Digger 5/1/95	None	Digger 5/1/95 5/12/95	Digger 5/1/95	Digger 5/1/95 5/12/95
Planted	5/1/95	5/1/95	5/12/95	5/1/95	5/12/95
Variety	Pioneer 3563	Pioneer 3563	Pioneer 3751	Pioneer 3563	Pioneer 3751
Rate	31,500	31,500	34,000	31,500	34,000
Population	29,250	30,200	28,100	27,850	28,300
Fertilizer					
Starter	100 lb 6-24-24	100 lb 6-24-24	None	100 lb 6-24-24	None
Nitrogen	100 lb N/a* as 82-0-0 6/12/95	120 lb N/a as 82-0-0 6/16/95	None	None	None
Manure	None	None	None	20 Ton/a 11/3/94	15 Ton/a 11/3/94
Pesticides	pre 5/12/95 Dual 2 pt/a postemerge Buctril 1 pt/a 6/6/95 Counter 15G 9 lb/a with planter	pre 5/12/95 Dual 1.3 pt/a postemerge Buctril 1 pt/a 6/6/95	None **	Buctril 1 pt/a 6/6/95 postemerge ***	None ****
Rotary Hoe	5/19/95	5/19/95	#1 5/19/95 #2 5/25/95 #3 6/2/95	5/19/95	#1 5/19/95 #2 5/25/95 #3 6/2/95
Cultivation (S-tine)	6/12/95	6/12/95	6/12/95 6/22/95	6/12/95	6/12/95 6/22/95
Harvest	10/13/95	10/13/95	10/13/95	10/13/95	10/13/95
Yield	143 bu/a	168 bu/a	156 bu/a	167 bu/a	157 bu/a
Fall Practices	Chisel Plow 11/8/95	None	Chisel Plow 11/8/95	20 T/a manure 11/7/95	15 T/a manure 11/7/95
				Chisel Plow 11/8/95	Chisel Plow 11/8/95
Crop-96	Corn	NR Soybeans	WR Soybeans	D.S. Alfalfa	Oats/Alfalfa

* Reps 1,3,4 - 110 lb/a, rep 2 - 70 lb/a.
** Reps 3 and 4 - spot treatment of Stinger for thistle control (.37 pt/a).
*** Rep 2 - .67 oz/a Accent to control foxtail.
**** Rep 1 - .67 oz/a Accent to control quackgrass, spot treatment of Stinger for thistle control (37 pt/a).

Appendix I. Arlington Agricultural Research Station WICST Input/Output Data (continued)

Soybean and Wheat Treatments

Crop-95	NR Soybean	WR Soybean/ Wheat	Wheat/ Red Clover
Prev. Crop	Corn	Corn	Soybean/Wheat
Cropping sys.	CS2	CS3	CS3
Treatment	2	4	6
Primary Tillage	No-till	Chisel Plow 11/7/94	None
Secondary Tillage	None	Digger 5/3, 5/12/95	None
Planting	5/6/95	5/12/95	10/14/94 Wheat
Date			2/24/95 Rd Clov
Rate/Variety	235,000 s/a Kalt. 241	200,000 s/a As 1900	180 lb/a Merrimac Wh 20 lb/a Arlington RC
Population	153,406	199,542	
Fertilizer	None	None	None
Pesticides	preemerge 5/10/95 12 oz/a Roundup post emerge 6/17/95 4 oz/a Pursuit + NIS .125 oz/a Pinnacle + NIS 2 qt/A 28%	None	None
Rotary Hoe	None	#1 5/19/95 #2 5/25/95 #3 6/2/95	None
Cultivation (S-tine)	None	6/12/95 6/22/95	None
Harvest	10/13/95	9/29/95	7/25/95
Yield	58 bu/a	63 bu/a	67.7 bu/a wheat 1.21 T/a straw
Fall Practices	None	Field Cult. 2X 9/29/95 Double disk drill 9/29/95 Glacier W. Wheat 150 lb/a	Chisel plow (sweeps) 11/8/95
Crop-96	Corn	Wheat/Red Clover	Corn

Appendix I. Arlington Agricultural Research Station WICST Input/Output Data (continued)

Forage Treatments

Crop-95	D. Seeded	Estab. Alfalfa	Estab. Alfalfa II	Oats/ Alfalfa II	Estab. Alfalfa	Pasture Alfalfa I
Prev. Crop	Corn	D.S. Alf.	Alfalfa I	Corn	Oats/Alf.	Pasture
Crop. sys.	CS4	CS4	CS4	CS5	CS5	CS6
Treatment	8	7	10	13	12	14
Primary Tillage	Chisel Plow 11/8/94			Chisel Plow 11/8/94		
Secondary Tillage	Soil Finisher 2X 4/17/95			Soil Finisher 4/17/95		
Planting Date	4/24/95	4/18/94	5/1/93	4/20/95	4/18/94	4/30/92 O,B,T 7/31/92 O 4/9/93 RC* 3/17/95 RC**
Variety	ICI	Magnum III	Magnum III	Bay-oats ICI-alf.	Magnum III	Timothy-Toro Brome-Badger Arl Rd Clov
Planting Rate	15 lb/a			64 lb/a oats 15 lb/a alfalfa		15 lb/a RC
Fertilizer Manure	20 ton/a	None 11/3/94	None	15 ton/a	None 11/3/94	grazing
Pesticides	Eptam 2 qt/a	Dimate 4E ppi 4/24/95 Dimate 4E .75 pt/a 7/25/95	Dimate 4E .75 pt/a 7/25/95	None .75 pt/a 7/25/95	None	None
Harvest	7/6/95 haylage 8/21/95 haylage	5/31/95 haylage 7/6/95 haylage 8/10/95 haylage 9/5/95 haylage	5/31/95 haylage 7/6/95 haylage 8/8/95 haylage 9/5/95 haylage	6/23/95 oatlage 8/23/95 haylage	5/31/95 haylage 7/6/95 haylage 8/10/95 haylage 9/14/95 haylage	began grazing May 11, 1995
Yield	3.19 TDM/a	4.02 TDM/a	2.24 TDM/a	3.21 TDM/a	4.89 TDM/a	1.37 TDM/a + 134 lb gain/a
Fall Practices	None	None	Roundup 2 qt/a Surfactant 6 oz/a 10/12/95 20 T/a manure 11/7/95 Chisel Plow Spring 1996	None	Roundup*** 15 T/a manure 11/7/95 Chisel Plow (sweeps) Spring 1996	None
Crop-96	Alfalfa I	Alfalfa II	Corn	Alfalfa I	Corn	Pasture

* Seeding with hand operated cyclone seeder
** No-till drill
*** Roundup applied to reps 1 and 2 to control quackgrass (same rates as to R4, trt 10)