Appendix I-A. 1997 WICST INPUT/OUTPUT DATA - ARLINGTON RESEARCH STATION

Corn rotations

CROP-97 Rotation Treatment #	Continuous CORN CS1 1	CORN CS2 3	CORN CS3 4	CORN CS4 7	CORN CS5 13
Plot #'s	109, 204, 306, 412	101, 214, 303, 401	104, 201, 301, 402	111, 209, 305, 409	114, 211, 312, 403
Primary Tillage	11/06/96 Chisel plow	No-till	04/10/97 Chisel w/sweeps 04/28/97 tw shank	04/10/97 Chisel plow	04/10/97 Chisel w/sweeps
Secondary Tillage	04/24/97 Field Cultivator	None	05/14/97 Field Cultivator	04/24/97 Field digger	04/28/97 tw shank 05/14/97 Fld digger
Planting Date	04/25/97	04/25/97	05/14/97	04/25/97	05/14/97
Variety	Gold.Harv.2441	Gold.Harv.2441	Dekalb 471	Gold.Harv.2441	Dekalb 471
Rate	32,000	32,000	34,000	32,000	34,000
Starter Fertilizer	100 Lb 6-24-24	100 Lb 6-24-24	None	100 Lb 6-24-24	None
Nitrogen Fertilizer	120 Lb N/a 82-0-0 07/03/97 (not Rep 1)	120 Lb N/a 82-0-0 07/03/97	None	None	None
Manure	None	None	None	20 ton/a 11/06/96	15 ton/a 11/06/96
Pesticides	04/25/97 Force 3G (4 lb/a) Post-emergence: 05/16-Dual (2 pt/a) 06/09-Buctril (1 pt/a) 06/14-Accent[1] (0.72oz/a) 06/26-Buctril (# 109)	Pre-plant: 04/25/97 Roundup Ultra (1pt/a) + Am.Sulf. (3lb/a) Post-emergence: 06/09-Buctril (1 pt/a) 06/09-Stinger (#214) 06/14-Accent (0.72 oz/a)	None	Post-emergence: 06/09-Buctril (1 pt/a) 06/14-Accent (0.72 oz/a)	None
Rotary Hoe	05/22/97	None	05/22/97 05/23/97 05/28/97	None	05/22/97
Cultivation	06/23/97 06/25/97 07/03/97 (# 109) 07/10/97 (# 109)	None	06/12/97 06/13/97 06/17/97 06/23/97 06/25/97 07/03/97 07/10/97	06/23/97 06/25/97 06/28/97 (# 209) 07/03/97 07/10/97	06/12/97 06/13/97 06/17/97 06/23/97 06/25/97 06/28/97 (#211, 312) 07/03/97 07/10/97
Harvest	11/01/97	11/01/97	11/01/97	11/01/97	11/01/97
Yield	128.55 bu/a	157.43 bu/a	147.64 bu/a	159.05 bu/a	155.29 bu/a
Fall Practices	11/04/97 Stalk chop 11/20/97 Chisel plow	None	11/04/97 Stalk chop 11/20/97 Chisel plow	11/04/97 Chop 11/06/97 Manure – 20 ton/a 11/20/97 Chisel	11/04/97 Chop 11/06/97 Manure – 15 ton/a 11/28/97 Chisel
Crop-98	**Corn**	**Soybean**	**Soybean**	**D.S. Alfalfa**	**Oats/Alfalfa**

[1] North and South ends of plots only

Appendix I-A. 1997 WICST INPUT/OUTPUT DATA - ARLINGTON RESEARCH STATION

Soybean and Wheat Rotations

CROP-97 Rotation Treatment #	NR Soybean CS2 2	WR Soybean/Wheat CS3 6	Wheat/Red Clover[1] CS3 5
Plot #'s	108, 206, 310, 408	102, 212, 313, 407	106, 202, 307, 411
Primary Tillage	No-till	Chisel Plow 11/06/96	10/06/96 Disk
Secondary Tillage	None	Field Cultivation 05/05/97 05/15/97	None
Planting Date	05/15/97	SB: 05/15/97 WW: 10/02/97	10/06/96 Winter Wheat 02/24/97 Red Clover 04/17/97 Spring Wheat[2] 08/27/97 Hairy Vetch[1]
Variety Rate	Asgrow 1900 250,000 seeds/a	Kaltenberg 241 190,000 seeds/a Glacier 150 lb/a	150 lb/a Glacier 15 lb/a Red Clover 100 lb/a Spring Wheat 25 lb/a Hairy Vetch
Fertilizer	None	None	None
Pesticides	Pre-plant: 05/15/97 Roundup-Ultra (1 pt/a) + Am.Sulf. (3 lb/a) + NIS Pre-emergence: 05/18 Pursuit (4 oz/a) and Dual (2 pt/a)	None	None
Rotary Hoe	None	05/22/97 05/23/97 05/28/97	None
Cultivation	None	06/02/97 06/12/97 06/13/97 06/17/97 06/23/97 06/25/97 06/28/97 (#212, 313) 07/03/97 07/10/97	None
Harvest	10/10/97	10/02/97	08/08/97
Yield	51.9 bu/a	48.8 bu/a	54.4 bu/a Wheat 0.96 tons/a straw
Fall Practices	None	10/02/97 digger 10/02/97 Double disk drill	08/25/97 Field digger 11/20/97 Chisel Plow
Crop 98	**Corn**	**Wheat / Red Clover**	**Corn**

[1] CS3 red clover interseeding did not take, Hairy Vetch was sequentially seeded following the wheat harvest.
[2] Moderate winterkill of winter wheat planted 10/06/96. Spring wheat overseeded.

Appendix I-A. 1997 WICST INPUT/OUTPUT DATA - ARLINGTON RESEARCH STATION

	Forage rotations					
CROP-97 Rotation Treatment #	**D.S. Alfalfa CS4 10**	**Estab. Alfalfa I CS4 9**	**Estab. Alfalfa II CS4 8**	**Oats/Alfalfa CS5 12**	**Estab. Alfalfa I CS5 11**	**Pasture CS6 14**
bPlot #'s	107, 205, 309, 404	105, 203, 308, 406	113, 210, 311, 414	103, 213, 314, 410	110, 208, 304, 413	112, 207, 302, 405
Primary Tillage	04/10/97 Chisel Plow	None	None	04/10/97 Chisel Plow	None	None
Secondary Tillage	04/17/97 Disc and Soil finisher	None	None	04/17/97 Disc and Soil Finisher	None	None
Planting Date Variety	04/17/97 Innovator+Z	04/08/96 ICI 631	04/24/95 ICI 631 05/08/97[1] Oat/pea/A.rye Red Clover	04/17/97 Bay Oats Trapper Pea Innovator+Z P. Ryegrass	04/08/96 ICI 631	04/05/97 Med. Red Clover
Rate	15 lb/a	15 lb/a	64 lb/a Oats 20 lb/a Peas 3 lb/a A. rye 10 lb/a RClvr	50 lb/a Oats 50 lb/a Pea 15 lb/a Alf 2 lb/a Rye	15 lb/a	6 lb/a
Fertilizer	None	As required	As required	None	None	None
Manure	11/06/96 20 ton/a	None	None	11/06/96 15 ton/a		Grazing
Pesticides	Post-emerge: 06/14/97 Pursuit (3 oz/a) + NIS + 28%	Post-emerge: 06/14/97 Pursuit (3 oz/a)	09/11/97 Roundup (2 pts/a)	None	None	None
Harvest	07/25/97 09/04/97	06/02/97 07/02/97 07/30/97 09/04/97	07/02/97 07/30/97 09/14/97	Oatlage: 06/24/97 Hay: 09/04/97	07/07/97 08/26/97 10/01/97	Rotational Grazing
Yield	3.56 tDM/a	5.08 tDM/a	4.50 tDM/a	4.66 tDM/a	4.99 tDM/a	332.7 lb gain/a
Fall Practices			11/06/97 Manure 20 T/a 11/28/97 Chisel plow		11/06/97 Manure15T/a 11/28/97 Chisel plow	
Crop-98	**Alf I**	**Alf II**	**Corn**	**Alf I**	**Corn**	**Pasture**

[1] Winterkill required interseeding dead areas w/Oat, Annual Rye, Clover, and Peas. Total area reseeded: 1.4 acres; 0.35 acre/plot.

Appendix I-A. 1997 WICST INPUT/OUTPUT DATA - ARLINGTON RESEARCH STATION

Satellite plots – Cropping System 3

CROP-97	Corn	WR Soybean/Wheat	Wheat/Red Clover[1]
Rotation	CS3	CS3	CS3
Treatment #	4	6	5
Primary Tillage	04/10/97 Chisel w/sweeps 04/28/97 Chisel w/tw shank	Chisel Plow 11/06/96	10/06/96 Disk
Secondary Tillage	05/14/97 Field cultivator	Field Cultivation 05/05/97 05/15/97	None
Planting Date	05/14/97	05/15/97	10/06/96 Winter Wheat 02/24/97 Red Clover 04/17/97 Spring Wheat[2] 08/27/97 Hairy Vetch[1]
Variety Rate	Dekalb 471 34,000	Kaltenberg 241 190,000 seeds/a	150 lb/a Glacier 15 lb/a Red Clover 100 lb/a Spring Wheat 25 lb/a Hairy Vetch
Fertilizer	None	None	None
Pesticides	Post-emergence: 06/09 Buctril (1 pt/a) 06/26 Accent (0.66 oz/a) Band	06/24 Crop oil (2 pt/a) Poast+ (1.5 pt/a)	None
Rotary Hoe	05/22/97 05/23/97 05/28/97	05/22/97 05/23/97 05/28/97	None
Cultivation	06/12/97 06/13/97 06/17/97 06/23/97 06/25/97 07/03/97 07/10/97	06/02/97 06/12/97 06/13/97 06/17/97 06/23/97 06/25/97 06/28/97 (#212, 213) 07/03/97 07/10/97	None
Harvest	11/01/97	10/02/97	08/08/97
Yield	236.9 bu/a	46.1 bu/a	51.9 bu/a Wheat 0.99 tons/a straw
Fall Practices	11/04/97 Stalk chop 11/20/97 Chisel plow	10/02/97 digger 10/02/97 Double disk drill Glacier W.Wheat (150 lb/a)	08/25/97 Field digger 11/20/97 Chisel Plow
Crop 98	**Soybean**	**Wheat / Red Clover**	**Corn**

[1] CS3 red clover interseeding did not take, Hairy Vetch was sequentially seeded following the wheat harvest.
[2] Moderate winterkill of winter wheat planted 10/06/96. Spring wheat overseeded.