

APPENDIX I

Agronomic Information

2003
Field History Data

	Ames, IA Corn Rootworm YieldGard Rootworm Test	Crawfordsville, IA Corn Rootworm Experimental & YGRW Tests
Insecticide History		
2002	Corn (no insecticide)	No Insecticide (trap crop)
2001	Soybeans	Insecticide Test Plot
2000	Corn (Lorsban)	No Insecticide (trap crop)
1999	Corn (no insecticide)	Insecticide Test Plot
Tillage	Fall chisel; spring cult.	Fall chisel; spring cult.
Variety	DKC60-15, DKC60-12	DKC60-15, DKC60-12
Planting Date	Reps 1-8 May 23 Reps 9-12 May 29	May 14
Planting Rate	29,900	29,900
Herbicide¹	28 oz Frontier - May 22 1 pt Buctril & 1 pt Atrex – June 12	2.5 qt Harness Extra + 3 oz Balance Pro + 1 qt crop oil May 17
Fertilizer²	<u>N</u> <u>P</u> <u>K</u>	<u>N</u> <u>P</u> <u>K</u>
Fall Applied	--- --- ---	--- --- ---
Preplant	156 --- ---	175 --- ---
Dates		
Cultivation	None	None
Stand Count	June 16	June 12
Root Digging	July 16	July 30
Lodging	October 9	September 30
Harvest	October 29	September 30/October 5
Soil Type	Clay Loam	Silty Clay Loam
Soil Organic Matter %	---	4.6
Soil pH	---	5.6

¹Expressed as formulation per acre.

²Expressed as pounds per acre.

2003
Field History Data

	Kanawha, IA Corn Rootworm Experimental & YGRW	Nashua, IA Corn Rootworm Yield Test
Insecticide History		
2002	No Insecticide (trap crop)	No Insecticide (trap crop)
2001		Insecticide Test Plot
2000		No Insecticide (trap crop)
1999		Insecticide Test Plot
Tillage	Fall chisel; spring disk, cult.	Fall chisel; spring field cult.
Variety	DKC60-15, DKC60-12	DKC60-15, DKC60-12
Planting Date	April 28	April 26
Planting Rate	29,900	29,900
Herbicide ¹	2 qt Bladex 4L + 27 oz Frontier 6 – April 26 1.3 pt Marksman May 29	2.75 pt Harness – April 27 2.5 pt Marksman – May 29
Fertilizer ²	<u>N</u> <u>P</u> <u>K</u>	<u>N</u> <u>P</u> <u>K</u>
Fall Applied	52 135 141	--- --- 70
Preplant	194 --- ---	175 --- ---
Dates		
Cultivation	none	none
Stand Count	June 4	June 13
Root Digging	July 10	July 31
Lodging	August 8	September 5
Harvest	October 9	October 21
Soil Type	Canisteo	Loam
Soil Organic Matter %	5.1	4.1
Soil pH	6.4	6.6

¹Expressed as formulation per acre.

²Expressed as pounds per acre.

2003
Field History Data

	Nashua, IA Corn Rootworm YGRW Test	Sutherland, IA Corn Rootworm Yield Test
Insecticide History		
2002	Furadan 4F -corn	No Insecticide (trap crop)
2001	Force 3G - corn	Insecticide Test Plot
2000	Force 3G - corn	No Insecticide (trap crop)
1999	Force 3G - corn	Insecticide Test Plot
Tillage	Fall chisel; spring field cult.	Fall chisel; spring disked & field cult.
Variety	DKC60-15, DKC60-12	DKC60-15, DKC60-12
Planting Date	April 26	May 2
Planting Rate	29,900	29,900
Herbicide¹	2.75 pt Harness – April 27 2.5 pt Marksman – May 29	1.75 oz Balance – May 2 1.33 oz Accent – June 16
Fertilizer²	<u>N</u> <u>P</u> <u>K</u>	<u>N</u> <u>P</u> <u>K</u>
Fall Applied	--- --- 70	--- --- ---
Preplant	175 --- ---	175 95 ---
Dates		
Cultivation	none	None
Stand Count	September 22	June 9
Root Digging	July 17	July 22
Lodging	September 22	October 8
Harvest	October 21	October 20
Soil Type	Kenyon Loam	Silty Clay Loam
Soil Organic Matter %	---	---
Soil pH	6.5	---

¹Expressed as formulation per acre.

²Expressed as pounds per acre.

2003
Field History Data

Seedcorn Maggot Test
Ames, IA

Insecticide History

2002	No Insecticide (soybeans)
2001	Insecticide Test Plot
2000	No Insecticide (soybeans)
1999	Insecticide Test Plot

Tillage Spring field cultivated

Variety	DKC60-15
Planting Date	May 3
Planting Rate	26,100

Herbicide¹ 28 oz Frontier – April 22

Fertilizer ²	<u>N</u>	<u>P</u>	<u>K</u>
Fall Applied	---	---	---
Preplant	---	---	---

Dates

Cultivation	None
Stand Count	May 23
Seed/Seedling Eval.	May 23

Soil Type Loam

Soil Organic Matter % -----

Soil pH -----

¹Expressed as formulation per acre.

²Expressed as pounds per acre

2003

Field History Data

	Ames, IA Wireworm Test	Carlise, IA Wireworm Test
Insecticide History		
2002	No Insecticide (sod)	No Insecticide (soybeans)
2001	No Insecticide (sod)	No Insecticide (corn)
2000	No Insecticide (sod)	No Insecticide (soybeans)
1999	No Insecticide (sod)	No Insecticide (corn)
Tillage	Fall plowed; spring disked, field cult.	Field cult. (replant)
Variety	DKC60-15	DKC60-15
Planting Date	April 23	May 22
Planting Rate	29,900	29,900
Herbicide ¹	None	1.6 pt Dual
Fertilizer ²	<u>N</u> <u>P</u> <u>K</u>	<u>N</u> <u>P</u> <u>K</u>
Fall Applied	--- --- ---	--- --- ---
Preplant	--- --- ---	170 --- ---
Dates		
Stand Count	None (gopher damage)	June 20
Seed/Seedling Eval.	May 12 & May 22	June 20
Soil Type	Clarion Loam	---
Soil Organic Matter %	5.3	2.40
Soil pH	6.9	7.75

¹Expressed as formulation per acre.²Expressed as pounds per acre.

2003

Field History Data

	Kimballton, IA White Grub Test	Williams, IA White Grub Test
Insecticide History		
2002	No Insecticide (soybeans)	No Insecticide (soybeans)
2001	Kernel Guard ST (corn)	No Insecticide (corn)
2000	No Insecticide (soybeans)	No Insecticide (soybeans)
1999	No Insecticide (corn)	No Insecticide (corn)
Tillage	Planted no-till	Field cult.
Variety	DKC60-15	DKC60-15
Planting Date	May 21	May 13
Planting Rate	29,900	29,900
Herbicide ¹	3 oz BalancePro – May 21	2.75 pt Harness – May 19
Fertilizer ²	<u>N</u> <u>P</u> <u>K</u>	<u>N</u> <u>P</u> <u>K</u>
Fall Applied	--- --- ---	170 --- ---
Preplant	18 49 49	--- --- ---
Side-dress	70 --- ---	
Dates		
Stand Count	June 18	June 5
Seed/Seedling Eval.	June 18	June 5
Soil Type	Marshall	Webster/Clarion
Soil Organic Matter %	2.2	6.15
Soil pH	6.5	7.10

¹Expressed as formulation per acre.²Expressed as pounds per acre.

APPENDIX II

Weather Data

Ames¹
Rainfall and Temperature 2003

Day	May			June			July		
	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches
	Low	High		Low	High		Low	High	
1	49	57	0.86	53	74		57	84	
2	48	65		55	73	T	60	84	
3	49	66	0.02	51	55	0.51	66	87	
4	49	68	0.01	51	64	0	71	95	
5	48	53	1.90	50	74	0.02	65	86	1.47
6	44	61		51	76	0.22	66	85	0.40
7	44	70	0.42	53	70	0.36	74	88	0.07
8	47	68		53	71	0.41	69	88	T
9	47	61	1.22	52	71	0.12	62	85	1.54
10	48	72		61	76	0.08	63	83	1.06
11	44	65	0.1	56	75	T	59	78	
12	44	56	T	58	77		59	81	
13	44	66	T	60	76		58	79	
14	51	71	0.88	61	85		58	82	
15	53	74	0.35	63	86		65	85	T
16	46	65		60	86		58	84	
17	47	70		60	87		57	85	T
18	48	74		61	88	0.02	67	92	
19	55	76		63	85	0.47	59	79	
20	43	71	0.08	51	80		59	81	
21	39	62		53	79		66	84	
22	41	66		56	82		59	79	
23	41	70	0.05	63	86		52	76	
24	52	69		67	89	0.02	51	78	
25	46	66	0.01	68	92		52	81	
26	47	76		54	80	0.83	62	89	
27	47	80		53	73		73	95	
28	59	84	0.07	57	85	1.30	67	82	
29	50	81		60	81		60	83	
30	50	79	0.06	56	79		59	84	
31	53	89					61	84	0.06
Mean/Total	58.3		6.03	67.6		4.36	72.6		5.99
Normal	61.3		4.35	70.4		5.01	73.8		4.43
D.F.N.	-3.0		+1.68	-2.8		-0.65	-1.2		+1.56

¹Weather station located 2 miles SE of test site.

Ames¹
Rainfall and Temperature 2003

Day	August			September		
	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches
	Low	High		Low	High	
1	63	85		52	76	
2	58	83		52	81	
3	58	82		55	76	
4	58	82	T	50	76	
5	58	80	T	49	84	
6	63	73	0.11	55	87	
7	62	81		55	87	
8	62	83		56	84	
9	57	83		54	83	
10	58	83		62	86	
11	59	84	0.18	62	82	1.48
12	61	84		56	75	0.01
13	59	79		56	66	0.01
14	59	82		51	70	0.01
15	63	84		45	78	
16	65	91		51	82	
17	66	95		62	83	
18	65	95		48	73	0.42
19	71	94		39	65	
20	71	89		40	70	
21	73	97	0.09	49	57	1.44
22	59	86		41	64	0.01
23	61	85		39	76	
24	61	85		41	67	
25	64	99		37	62	
26	65	99	1.23	44	66	0.06
27	61	92	0.01	42	58	
28	61	91		38	58	
29	65	89		32	63	
30	57	84		30	62	
31	52	75				

Mean/Total	74.0	1.62	60.7	3.44
Normal	71.5	4.33	62.3	3.09
D.F.N.	+2.5	-2.71	-1.6	+0.35

¹Weather station located 2 miles SE of test site.

Carlisle¹
Rainfall and Temperature 2003

Day	May		Rainfall Inches	June		Rainfall Inches
	Temp (°F)			Temp (°F)		
	Low	High		Low	High	
1	50	64	T	59	74	T
2	51	65	T	53	62	0.40
3	52	70	0.01	52	64	0.01
4	51	59	2.73	53	74	
5	50	63		55	75	0.06
6	47	71	0.41	57	72	0.50
7	48	70		54	73	0.34
8	49	59	1.12	55	72	0.29
9	57	73		54	81	0.38
10	47	65	0.05	64	79	0.05
11	47	57	T	59	78	
12	46	69		63	78	
13	52	75	0.65	64	88	
14	54	76	0.07	66	87	T
15	52	64		68	85	
16	50	70		67	88	
17	51	75		64	89	T
18	57	76		71	81	0.33
19	53	73	0.14	65	81	
20	45	63		57	81	
21	45	67		59	83	
22	47	72	0.01	64	88	0.01
23	54	69		71	91	T
24	56	67	0.01	74	94	T
25	50	76		63	83	0.57
26	53	80		55	76	
27	49	84		57	86	0.80
28	62	83	0.11	64	84	0.47
29	54	81	T	65	81	
30	60	92		63	84	
31	55	75				
Mean/Total	61.0		5.31	70.5		4.21
Normal	61.9		4.25	70.8		4.57
D.F.N.	-0.9		+1.06	-0.3		-0.36

¹Weather station located at Des Moines airport.

Crawfordsville¹
Rainfall and Temperature 2003

Day	May			June			July		
	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches
	Low	High		Low	High		Low	High	
1	49	56	1.99	49	69		64	85	
2	32	67	0.02	51	62		63	88	
3	41	68		50	62	0.13	70	92	
4	48	54		48	71		75	94	
5	47	68	1.00	47	78		69	90	
6	41	73		54	65	0.29	66	89	
7	46	60		51	74	0.60	73	91	0.04
8	40	61		53	67		68	83	
9	58	79	0.50	53	78	0.30	67	84	0.42
10	50	76		62	78	0.45	62	73	0.44
11	47	55	1.52	59	77		59	81	
12	47	68		57	80		58	82	
13	46	71		64	83		59	81	
14	54	77		63	86		60	84	0.16
15	50	63	0.57	61	86		64	85	
16	44	68		62	85		59	84	
17	50	77		58	89		65	91	
18	52	74		62	82		65	76	0.45
19	53	79		55	79		56	82	
20	47	65	0.55	48	79		61	86	
21	42	65		53	83		63	79	0.14
22	42	69		55	86		56	77	
23	51	67	0.07	67	87		53	79	
24	47	69		71	93		51	79	
25	46	76		65	91		61	86	
26	46	78		55	73	2.33	67	89	
27	49	83		54	84		73	82	
28	56	80	0.08	62	82	0.20	63	79	0.10
29	50	81		63	80		59	84	
30	55	87	0.06	58	84		61	82	
31	52	72	0.12				61	87	0.02
Mean/Total	59.5		6.48	68.0		4.30	73.5		1.77
Normal	62.0		3.85	71.3		4.27	75.8		4.20
D.F.N.	-2.5		+2.63	-3.3		+0.03	-2.3		-2.43

¹Weather station located at test site.

Crawfordsville¹
Rainfall and Temperature 2003

Day	August			September		
	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches
	Low	High		Low	High	
1	63	87		54	73	0.75
2	62	84	0.52	51	78	
3	62	82		55	84	
4	56	81	0.01	49	77	
5	56	78		46	80	
6	66	87		52	83	
7	63	87		56	87	
8	62	84		54	85	
9	58	82		54	82	
10	57	87		57	84	
11	59	85		65	87	
12	60	80	0.14	63	75	
13	59	81		59	69	
14	66	85		53	73	2.57
15	64	92		47	77	
16	65	93		53	81	
17	64	91		58	81	
18	66	88		51	84	
19	65	89		44	64	0.54
20	70	97		39	71	
21	69	93		43	70	
22	60	85		50	70	0.32
23	53	83		40	73	0.16
24	61	92		47	75	
25	65	96		39	64	
26	70	98	0.20	46	69	
27	67	93		44	61	
28	62	92		37	57	
29	65	83		30	61	
30	61	76		33	56	
31	58	65				
Mean/Total	74.0		0.87	61.5		4.34
Normal	69.9		3.76	61.6		2.85
D.F.N.	+4.1		-2.89	-0.1		+1.49

¹Weather station located at test site.

Kanawha¹
Rainfall and Temperature 2003

Day	April			May			June		
	Temp (°F) Low	Temp (°F) High	Rainfall Inches	Temp (°F) Low	Temp (°F) High	Rainfall Inches	Temp (°F) Low	Temp (°F) High	Rainfall Inches
1	46	84	T	44	65	0.26	54	75	
2	47	80		47	66		50	62	
3	35	67		47	68	0.20	49	68	0.20
4	25	35	T	45	53		49	73	
5	23	32	0.38	47	57	2.32	48	74	
6	24	40		44	66		51	66	0.17
7	27	30	0.52	45	66	0.16	48	68	0.37
8	22	35	0.06	43	54		53	70	0.91
9	18	49		51	64	0.82	49	79	
10	30	66		44	57		58	74	0.40
11	33	72		41	56	0.45	58	75	
12	39	70		42	66	T	58	77	
13	39	76		42	71		60	84	0.04
14	55	90		52	73	0.11	59	84	
15	59	87		49	67	0.07	59	85	
16	37	67	0.16	43	71		60	88	
17	35	45	0.17	47	74		62	86	
18	37	49		54	79		62	86	0.08
19	44	54	0.07	46	72		54	79	
20	42	46	0.52	41	60	0.07	50	81	
21	37	61	0.43	38	65		56	85	
22	29	66		41	65		63	84	
23	38	70		44	66	0.34	67	91	0.20
24	48	53		51	63		66	90	1.33
25	38	71	T	43	76	T	58	78	0.94
26	41	77		45	79		53	71	0.88
27	45	78		49	84		53	82	
28	45	69		56	80	0.03	61	79	
29	39	60		50	78	0.05	55	80	0.16
30	46	53	0.37	55	84		54	84	
31	37	61		51	71		56	79	
Mean/Total	49.0		2.68	61.0		4.88	67.5		5.68
Normal	46.2		2.91	59.2		3.67	68.8		4.56
D.F.N.	+2.8		-0.23	+1.8		+1.21	-1.3		+1.12

¹Weather station located at test site.

Kanawha¹
Rainfall and Temperature 2003

Day	July			August			September		
	Temp (°F) Low	Temp (°F) High	Rainfall Inches	Temp (°F) Low	Temp (°F) High	Rainfall Inches	Temp (°F) Low	Temp (°F) High	Rainfall Inches
1	57	85		60	81	0.05	49	78	
2	65	88		58	79		48	80	
3	71	94		56	79	T	52	72	
4	67	82	0.52	53	80		44	76	
5	63	83	0.66	59	70	0.07	44	84	
6	67	83	0.25	63	81	0.24	55	88	
7	64	84		60	83		54	88	
8	59	75	0.53	59	80		57	85	
9	64	77	0.54	56	83		57	84	
10	60	73	0.17	59	81		62	84	
11	56	79		59	82	0.52	65	83	
12	56	79		56	78		56	76	1.11
13	56	81		59	80		54	69	
14	66	84		60	83		45	69	
15	60	80	0.20	66	87		39	78	
16	56	82		63	91		54	84	
17	63	88	T	67	90		64	83	
18	61	79		70	90		46	70	
19	55	81		67	86	1.02	41	65	0.23
20	67	81		69	87		39	73	
21	59	75		61	80		46	59	
22	53	74	0.05	55	79		38	63	0.15
23	47	77		58	81		33	77	0.04
24	52	79		63	91		44	65	
25	64	87		68	91		32	61	
26	72	91		62	89	0.40	41	65	
27	67	82		59	87		40	57	0.10
28	60	82		62	85		32	56	
29	54	83		56	79	T	27	62	
30	61	84		53	72		24	58	
31	60	85		53	72				
Mean/Total	71.5		2.92	71.5		2.39	59.5		1.63
Normal	72.5		4.19	69.4		3.72	61.0		3.64
D.F.N.	-1.0		-1.27	+2.1		-1.33	-1.5		-2.01

¹Weather station located at test site.

Kimballton¹
Rainfall and Temperature 2003

Day	May			June		
	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches
	Low	High		Low	High	
1	47	56	0.14	52	76	
2	47	64		54	73	0.23
3	45	68		48	54	0.24
4	45	73	0.51	48	64	
5	48	53	2.02	49	70	
6	48	64	0.07	54	75	0.1
7	43	64	0.13	52	74	
8	44	71		51	65	0.21
9	49	55	0.53	50	71	T
10	46	69	T	60	84	0.75
11	42	52	0.27	54	76	
12	40	51		56	77	
13	50	68	0.12	60	76	
14	48	78	0.77	58	87	
15	50	73	0.02	60	88	
16	46	61		62	87	
17	45	68		61	87	
18	45	73		64	86	0.02
19	54	79		58	87	0.01
20	42	65	0.38	56	80	
21	38	61		55	80	
22	39	67		60	84	
23	45	71	0.11	66	84	0.34
24	50	71	0.05	68	87	
25	44	63	0.03	69	92	0.03
26	44	75		51	81	0.45
27	52	79		51	76	
28	57	81	0.18	56	86	0.36
29	53	84		58	81	
30	52	82	0.03	56	80	
31	52	89				
Mean/Total	57.7		5.36	67.6		2.74
Normal	60.0		4.18	69.8		4.35
D.F.N.	-2.3		+1.18	-2.2		-1.61

¹Weather station located at Harlan.

Nashua¹
Rainfall and Temperature 2003

Day	April			May			June		
	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches
	Low	High		Low	High		Low	High	
1	40	79		44	65		51	74	
2	39	76		50	65		50	61	0.17
3	32	49		43	67		49	68	
4	21	32	S 0.27	46	50	1.25	49	72	0.07
5	19	32		47	56		52	77	
6	24	39		43	69		51	65	1.89
7	26	30	S 0.45	47	62	0.96	50	69	
8	19	37		42	56	0.70	53	69	0.80
9	14	46		51	67		50	76	0.49
10	26	64		44	65	0.25	58	78	0.20
11	33	70		43	52		57	73	
12	37	68		44	65		53	79	
13	37	74		39	71		61	84	0.03
14	52	89		52	72	0.34	62	83	
15	54	86		47	66		59	84	
16	36	66	0.54	43	71		60	85	
17	35	44		48	72		58	86	
18	38	49	0.49	52	77		64	85	
19	47	59	0.46	50	77		58	77	
20	42	49	0.03	41	61		49	79	
21	39	59		40	64		52	83	
22	33	63		43	68	0.18	60	86	
23	38	68		44	66		68	88	
24	46	57		48	66		66	92	0.36
25	38	70		43	75		58	78	1.93
26	39	74		47	77		53	71	
27	44	77		46	83		52	82	0.15
28	46	69		55	79		61	79	
29	43	62		49	80	0.21	58	80	
30	47	53	1.60	53	84		56	84	
31				49	70				
Mean/Total	48.0	79.0	3.84	57.0	70.0	3.89	67.0	78.0	6.09
Normal	50.5	76.0	3.41	60.2	74.0	4.34	69.3	76.0	4.91
D.F.N.	-2.5	3.0	+0.43	-3.2	-4.0	-0.45	-2.3	2.0	+1.18

¹Weather station located at test site.

Nashua¹
Rainfall and Temperature 2003

Day	July			August			September		
	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches
	Low	High		Low	High		Low	High	
1	59	85		59	80		48	79	
2	63	88		57	79	0.20	49	84	
3	69	94		59	79	0.12	50	73	
4	67	87	0.51	56	80		45	77	
5	63	85	0.54	56	71	0.03	44	84	
6	65	84	0.08	59	82		56	90	
7	64	84	0.24	60	83		55	92	
8	62	72	0.48	59	80		58	88	
9	61	74	0.44	56	83		56	86	
10	60	71	0.17	59	80	0.03	60	84	
11	55	78	0.05	58	83		68	87	
12	56	79		54	79		58	75	0.74
13	57	82		59	83		56	63	0.17
14	62	82	0.07	61	85		49	70	
15	60	79		64	90		43	76	
16	55	81		64	92		52	84	
17	63	88		65	89		62	83	
18	58	78		66	92		47	80	0.62
19	53	82		70	91	0.02	40	64	
20	65	78	0.31	69	94		40	73	
21	58	75		60	84		46	57	0.28
22	53	72		54	82		44	66	T
23	50	76		57	86		37	72	
24	51	79		61	94		44	65	
25	61	86		68	98	0.09	36	60	0.13
26	71	89		63	92		43	63	
27	68	84		58	90		39	57	T
28	64	83		64	91		33	53	
29	58	85		55	82		31	61	T
30	63	84		56	74		29	56	
31	61	87	0.10	54	71				
Mean/Total	71.5		2.99	72.0		0.49	60.0		1.94
Normal	72.7		4.67	70.5		4.88	61.4		3.14
D.F.N.	-1.2		-1.68	+1.5		-4.39	-1.4		-1.20

¹Weather station located at test site.

Sutherland¹
Rainfall and Temperature 2003

Day	May			June			July		
	Temp (°F) Low	Temp (°F) High	Rainfall Inches	Temp (°F) Low	Temp (°F) High	Rainfall Inches	Temp (°F) Low	Temp (°F) High	Rainfall Inches
1	46	63		55	70	0.28	61	85	
2	47	65		49	63	0.38	66	89	
3	45	72		44	63	0.03	67	92	0.96
4	46	57	1.45	52	71	0.10	63	79	
5	43	56		52	76	0.39	64	84	0.37
6	42	62		54	66		62	85	0.02
7	39	72		50	65		66	84	0.88
8	48	55		53	68	0.40	57	75	2.23
9	44	61		49	79	0.17	64	81	
10	41	52	0.89	56	72		57	77	
11	40	56		51	76		56	79	
12	38	67	0.38	61	84		54	78	
13	49	69	0.31	58	84		58	81	
14	46	65		61	85		65	89	
15	47	63		61	86		59	83	
16	43	70		60	88		61	84	
17	45	75		64	86	1.61	64	86	
18	56	78	0.73	59	81		64	79	
19	42	65	0.04	54	80		57	83	0.97
20	38	60		55	81		64	84	
21	39	66		62	82		59	74	
22	46	65		65	83	0.19	54	75	0.08
23	49	67		63	88	1.88	50	76	
24	53	61		65	89	2.21	54	80	
25	47	73		52	70	0.42	65	88	
26	47	78		51	71		69	91	
27	50	80		52	83	0.06	63	79	
28	56	82		59	81		59	82	
29	51	80		55	81		55	82	
30	56	81		55	82		59	84	
31	51	71					59	87	
Mean/Total	56.5		3.80	67.0		8.12	71.0		5.51
Normal	59.5		3.70	69.1		4.43	73.3		4.11
D.F.N.	-3.0		+0.10	-2.1		+3.69	-2.3		+1.40

¹Weather station located at test site.

Sutherland¹
Rainfall and Temperature 2003

Day	August			September		
	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches
	Low	High		Low	High	
1	59	81		50	77	
2	56	80		51	85	
3	56	80		48	76	
4	55	79	0.16	40	78	
5	64	80		51	87	
6	62	80		57	89	
7	59	84		51	86	
8	59	81		51	83	
9	57	83		61	73	0.72
10	58	83		64	80	0.27
11	58	83		51	67	0.55
12	57	80		45	78	
13	56	81		48	69	
14	60	83		43	69	
15	64	87		41	80	
16	63	95		52	85	
17	69	93	0.05	65	85	0.46
18	70	93		37	73	
19	66	86		33	66	
20	69	88		43	73	0.24
21	57	81		47	66	
22	53	80		38	65	
23	63	86		36	79	
24	67	93	0.23	37	65	
25	66	94		29	65	
26	60	91		40	68	
27	57	89		39	57	
28	56	85		29	58	
29	54	78		29	63	
30	51	72		29	60	
31	53	73				
Mean/Total	72.0		0.44	59.0		2.24
Normal	71.0		4.63	61.8		3.08
D.F.N.	+1.0		-4.19	-2.4		-0.84

¹Weather station located at test site.

Williams¹
Rainfall and Temperature 2003

Day	May			June		
	Temp (°F)		Rainfall Inches	Temp (°F)		Rainfall Inches
	Low	High		Low	High	
1	45	56	0.32	52	74	
2	45	66		54	73	
3	47	67		50	57	0.49
4	48	67		49	68	
5	47	51	2.13	48	74	
6	44	61		52	75	0.42
7	45	69	0.22	50	69	0.18
8	43	69		52	68	0.39
9	47	56	0.65	52	72	0.21
10	41	69		60	78	0.38
11	43	59	0.16	52	78	
12	41	54		55	77	
13	44	69		59	76	
14	51	71	0.22	57	84	
15	52	77		58	85	
16	45	65		59	86	
17	47	70		59	88	
18	52	73		64	86	
19	57	77		62	86	
20	42	73	0.03	48	81	
21	38	62		52	82	
22	41	65		56	85	
23	43	68	0.15	62	86	
24	47	69		66	90	0.3
25	44	63		67	92	
26	46	77		53	75	1.78
27	48	80		53	73	
28	60	84		56	83	0.35
29	46	80		57	81	
30	58	80	0.06	54	81	
31	53	86				
Mean/Total	57.8		3.94	67.2		4.50
Normal	60.2		4.13	69.4		5.23
D.F.N.	-2.4		-0.19	-2.2		-0.73

¹Weather station located at Williams.

APPENDIX III

Materials Tests

Materials Tested in 2003 Iowa State University Efficacy Tests			
Common/code name	Formulation	Chemical name	Company
Agrox Premiere	Hopperbox ST	Diazinon-Lindane-Captan-metalaxyl	AGRILIANCE LLC
AGST 02002	Hopperbox ST	NA	AGRILIANCE LLC
AGST 03001	Hopperbox ST	NA	AGRILIANCE LLC
Aztec	4.67G	tebupirimphos & cyfluthrin	AMVAC Chem. Corp.
Aztec	2.1G	tebupirimphos & cyfluthrin	Bayer Corp.
Capture	2EC	bifenthrin	FMC Corp.
Counter	20CR	terbufos	BASF
Cruiser	Commercially applied ST	thiamethoxam	Syngenta
DKC60-12 seedcorn + Gaucho ST	Transgenic seedcorn + Commercially applied ST	Cry 3Bb1 (MON 863) + fludioxonil + mefenoxam + imidachloprid	Monsanto Gustafson
DKC60-15 seedcorn	Iosline of DK60-12	fludioxonil + metalaxyl	Monsanto
Force	3G	tefluthrin	Syngenta
Fortress	2.5G	chlorethoxyfos	AMVAC Chem. Corp.
Fortress	5G	chlorethoxyfos	AMVAC Chem. Corp.
Furadan	4F	carbofuran	FMC Corp.
Gaucho 0.16 mg/seed	Commercially applied ST	imidachloprid	Gustafson
HM-0117	1.15G	bifenthrin	Helena
Kernel Guard	Hopperbox ST	Captan-Lindane-Diazinon	Trace Chemicals Inc.
Kernel Guard Supreme	Hopperbox ST	permethrin-carboxin	Trace Chemicals Inc.
L1282-A1	Hopperbox ST	imidacloprid	Trace Chemicals Inc.
L1311-A1	Hopperbox ST	zeta-cypermethris-vitavax-metalaxyl	Trace Chemicals Inc.
Lorsban	15G	chlorpyrifos	Dow AgroSciences
Poncho 0.25 mg/seed	Commercially applied ST	clothianidin	Gustafson
Poncho 1.25 mg/seed	Commercially applied ST	clothianidin	Gustafson