

2003 Corn Hybrid Trials

Table of Contents i

2003 Corn Hybrid Trials 1

Explanation of Variables 2

2003 Corn Hybrid Trial Co-operators 3

Soil Profiles, Seeding and Harvest Dates 4

Crop Management Summary 5

2004 Silage Hybrid Performance List 6

Silage Summary Averaged Over Locations 7

Silage Trial Results 8

2004 Grain Hybrid Performance List 17

Grain Summary Averaged Over Locations 18

Grain Trial Results 19

ALBERTA CORN COMMITTEE

2003 Corn Hybrid Trials

Trials were seeded at Brooks (2200 CHU), Bow Island (2400 CHU), Lethbridge (2100 CHU), Vauxhall (2200 CHU), Lacombe (2000 CHU), and Outlook, SK (2400 CHU). A randomized complete block design with four replicates was generated for each site. Plots consisted of two (2) - six metre rows for the silage trials and four (4) - six metre rows for the grain trials.

Population densities were 60,000 plants/ha (24,000 plants/acre) for the irrigated grain tests, and 75,000 plants/ha (30,000 plants/acre) for the silage tests.

The weather for this past spring was cool and wet, which delayed the seeding of most sites by 10 - 15 days. The hot weather that followed in July aided crop growth and development considerably, which resulted in average to above average yields. Another challenging fall was experienced, but the frost and snow we encountered in early September did not negatively impact our sites. The corn heat units for this year were average, and in the case of Outlook, above average. This was the first year of participation for both Lacombe and Outlook, and both sites generated excellent data! Successful harvests were accomplished and data from all six sites was deemed acceptable.

Corn Heat Units, accumulated from 15MAY03 to the first kill frost (-2 degrees Celsius), were as follows: Lethbridge 2312 CHU, Vauxhall 2324 CHU, Brooks 2334 CHU, Bow Island 2460 CHU, Lacombe 1749 CHU, and Outlook 2489 CHU.

Explanation of Variables

- C **Harvest:** grain yields were determined by harvesting all ears or cobs of the centre two rows in each four row plot. Silage yields were determined by harvesting all plants in the two row plot.
- C **Yield:** grain yield data, adjusted to 15.5 % moisture, is expressed as either g/plot or bu/ac. Silage yield is expressed as tonnes/ha or tonnes/ac on a dry matter basis. Expression of yield will vary depending on which table you are referencing. To convert tonnes/ac to tonnes/ha, multiply value by 2.471. Also, grams/plot in the grain data can be transformed to bu/ac by dividing value by 57.384. Bushels/acre is converted to kg/ha by multiplying value by the test weight (industry standard = 56 lbs/bushel) and dividing value by 0.892. We also report the yield index, which is labelled ‘% Checks’ or ‘% of Pooled Mean’. Values in these columns represent the hybrid’s yield performance relative to the mean of checks (hybrids with 5 or more station years of testing) grown at the same location.
- C **Grain moisture content:** determination of grain moisture at all locations except Outlook was calculated using a Dickey John GAC-II grain moisture computer.
- C **Silage whole plant moisture content:** determined by collecting a 300 g fresh weight of chopped material from the harvested plot which is dried down and then re-weighed.
- C **Anthesis:** first day of anther extrusion on at least 10% of the plants.
- C **Silking:** first day silks are visible on at least 50% of the plants.
- C **Test Weight:** expressed as kg/hl, determined by the GAC-II grain moisture computer at Vauxhall and Lethbridge. To convert to lb/bu multiply by 0.807. Test weights were adjusted to moisture at 15.5% using a method that adjusts for porosity changes.

Table a. 2003 Corn Hybrid Trial Co-operators

Location of test	Co-Operator	Supervising Agency
Lethbridge & Vauxhall	B. Beres	Agriculture & Agri-Food Canada
	Technical support:	
	K. Coles	
	R. Dyck	
	A. Larson	
	H. McGlynn	
	S. Luesink	
Brooks & Bow Island	M. Bandara	AAFRD - Brooks
	Technical support:	
	J. Webber	
Outlook	Terry Hogg	Agriculture & Agri-Food Canada
	Technical support:	
	Clint Ringdal	
	Don David	
Lacombe	Vern Baron	Agriculture & Agri-Food Canada
	Technical support:	
	Dave Young	
	Tanya Rowe	

Table b. 2003 Corn Hybrid Trials: soil profiles, seeding, and harvest dates

	Lethbridge	Vauxhall	Brooks	Bow Island
Soil Type	Loam	Sandy Loam	Silty Loam	Sandy
Soil Zone	Dark Brown	----- Brown -----		
Seeding Date	May 15	May 20	May 24	May 25
Harvest Date	Silage Sept 24	Silage Sept 25	Silage Sept 26	Silage Sept 24
	Grain Oct 8	Grain Oct 6	Grain Oct 8	Grain Oct 7
	Lacombe	Outlook		
Soil Type	Clay Loam	Silty Loam		
Soil Zone	Black	Dark Brown		
Seeding Date	May 22	May 20		
Harvest Date	Silage Sept 18	Silage Sept 25		
		Grain Oct 10		

Table c. 2003 Corn Hybrid Trials - Crop management summary.

Location	Fertilizer Amendments	Pesticides Used	Irrigation Applied
<u>Lethbridge</u>			
Grain / Silage	Soil test: 290lb N, 219lb P *350 lbs 34-0-0 broadcast & disced preplant	Eradicane 8E (3.4L/Ac) Cocktail - Accent 10g/Ac Atrazine300ml/Ac, Banvel II 120 ml/Ac, Merge 325ml/Ac	9.5" Irrigation applied
<u>Vauxhall</u>			
	No Amendments required		
Grain / Silage	170 lbs avail N, 391 lbs avail P	Bladex (2L/Ac), Cocktail - Accent 10g/Ac Atrazine300ml/Ac, Banvel II 120 ml/Ac, Merge 325ml/Ac	16" Irrigation applied
<u>Lacombe</u>			
<u>Outlook</u>			
Grain / Silage	40 lbs/ac 12-51-0 45 lbs/ac 34-0-0 broadcast/ disced	Accent 33.4 g/ha Pardner 1.0 L/ha Merge 225 ml/ha	14" Irrigation applied
<u>Bow Island</u>			
Grain / Silage	*500 lbs/Ac 34-17-0 broadcast/discled	Eradicane 8E (3.4L/Ac) Cocktail - Accent 10g/Ac Atrazine300ml/Ac, Banvel II 120 ml/Ac, Merge 325ml/Ac	12" Irrigation applied
<u>Brooks</u>			
Grain / Silage	*500 lbs/Ac 34-17-0 broadcast/discled	Eradicane 8E (3.4L/Ac) Cocktail - Accent 10g/Ac Atrazine300ml/Ac, Banvel II 120 ml/Ac, Merge 325ml/Ac	11" Irrigation applied

***2004 Alberta Corn Committee Silage Hybrid Performance List**

Company	Hybrid	Location Years	Yield (t/ac) Dry	Yield (% Pooled Mean)	Whole Plant Moisture (%)	Date of Anthesis
Garst	8993	18	6.2	92	67	30-Jul-03
Hyland	HLS014	12	7.4	110	65	5-Aug-03
Hyland	HLSX1002	12	7.4	109	65	2-Aug-03
Hyland	HLS009	12	7.2	108	65	6-Aug-03
Hyland	HLS007	12	6.8	101	66	29-Jul-03
Hyland	HLS012	20	6.8	101	67	6-Aug-03
Monsanto	DKC26-75	5	6.2	92	64	29-Jul-03
Monsanto	DKC27-12	12	7.0	104	65	29-Jul-03
Monsanto	DKC27-15	8	6.9	102	66	27-Jul-03
Monsanto	DKC32-59	10	6.8	101	67	31-Jul-03
Pickseed	2338	6	6.8	101	64	29-Jul-03
Pioneer	39F45	20	5.6	83	61	24-Jul-03
Pioneer	39N03	20	5.6	83	61	26-Jul-03
Pioneer	39P78	8	5.9	86	62	24-Jul-03
Pioneer	39T68	24	6.8	101	65	27-Jul-03
Pioneer	39T71	12	7.0	103	65	28-Jul-03
Pioneer	39K40	12	7.5	112	66	4-Aug-03
Pioneer	3921	43	7.4	110	66	2-Aug-03
Pioneer	38F70	24	7.5	112	68	3-Aug-03
Syngenta	4043	38	7.5	111	69	3-Aug-03

* Hybrid must have five or more station years to be published in list

2003 Alberta Corn Committee Silage Summary Averaged Over Locations

Company	Hybrid	Locations	Yield (t/ac) Dry	Yield (% of Checks)	Whole Plant Moisture (%)	Date of Anthesis
Garst	8961 RR	5	7.9	101	61	2-Aug-03
Garst	8993	5	6.5	82	62	29-Jul-03
Garst	8905 RR	5	8.4	107	63	3-Aug-03
Gold Country Seeds	GC79SLS	2	7.3	94	66	10-Aug-03
Hyland	HLSX1002	4	7.9	108	59	2-Aug-03
Hyland	HLS009	5	8.4	107	59	5-Aug-03
Hyland	HLS014	4	7.9	109	61	6-Aug-03
Hyland	HLS012	4	7.6	103	61	5-Aug-03
Hyland	HL S011	4	7.3	100	61	5-Aug-03
Hyland	HLS007	5	7.8	100	61	29-Jul-03
Maizex	LF 753	4	8.3	114	60	2-Aug-03
Maizex	Leafy 5	4	8.0	110	61	5-Aug-03
Maizex	MZ28-	4	7.9	108	62	6-Aug-03
Maizex	LF 850RR	4	8.3	113	62	8-Aug-03
Maizex	MZ27-	5	8.4	108	63	7-Aug-03
Maizex	MZ27-	5	7.8	99	64	5-Aug-03
Maizex	MZ18-	6	7.6	96	68	2-Aug-03
Maizex	MZ 130	1	6.8	81	74	6-Aug-03
Monsanto	DKC27-12	6	7.9	100	62	29-Jul-03
Monsanto	DKC27-15	5	7.6	97	63	28-Jul-03
Monsanto	DKC35-01	2	7.9	107	63	1-Aug-03
Monsanto	DKC34-60	2	7.1	96	63	3-Aug-03
Monsanto	DKC32-59	3	7.7	93	64	29-Jul-03
Monsanto	DKC26-75	1	8.1	95	70	2-Aug-03
Pickseed	2338	2	7.8	102	46	26-Jul-03
Pickseed	2601RR	4	7.9	108	60	5-Aug-03
Pickseed	X2450RR	2	7.8	112	70	4-Aug-03
Pioneer	39P78	6	7.3	92	56	26-Jul-03
Pioneer	39F45	6	6.8	87	57	24-Jul-03
Pioneer	39H84	4	7.9	108	59	1-Aug-03
Pioneer	39T68	6	8.1	103	60	28-Jul-03
Pioneer	3921	4	8.2	112	60	4-Aug-03
Pioneer	39H85	4	7.7	105	60	2-Aug-03
Pioneer	39T71	4	7.8	106	60	2-Aug-03
Pioneer	39T70	4	7.5	103	61	1-Aug-03
Pioneer	39K40	4	8.1	111	61	3-Aug-03
Pioneer	38F70	4	8.3	114	62	3-Aug-03
Pioneer	39N03	6	7.4	93	64	2-Aug-03
Pioneer	38G60	4	7.4	101	64	4-Aug-03
Syngenta	N11-F4	5	8.0	102	61	30-Jul-03
Syngenta	4043	5	8.7	110	64	3-Aug-03

2003 Lethbridge Silage Trial

Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Moisture (%)
Garst	8993	27-Jul-03	29-Jul-03	15.2	50.0
Garst	8961 RR	1-Aug-03	4-Aug-03	15.9	50.1
Garst	8905 RR	31-Jul-03	2-Aug-03	22.4	53.3
Hyland	HLSX 1002	29-Jul-03	31-Jul-03	20.5	48.2
Hyland	HL S014	1-Aug-03	3-Aug-03	19.8	48.6
Hyland	HL S011	3-Aug-03	3-Aug-03	19.1	49.7
Hyland	HL S009	4-Aug-03	1-Aug-03	17.6	49.9
Hyland	HL S012	2-Aug-03	5-Aug-03	20.8	51.0
Hyland	HL S007	27-Jul-03	29-Jul-03	17.6	53.3
Maizex	LF 753	29-Jul-03	31-Jul-03	21.9	49.3
Maizex	MZ 28-20RR	2-Aug-03	4-Aug-03	19.4	52.1
Maizex	MZ 27-10RR	6-Aug-03	5-Aug-03	19.9	52.1
Maizex	Leafy 5	2-Aug-03	4-Aug-03	18.5	52.4
Maizex	LF 850RR	7-Aug-03	4-Aug-03	21.3	53.5
Maizex	MZ 27-77RR	2-Aug-03	3-Aug-03	19.5	53.7
Maizex	MZ 18-02RR	29-Jul-03	31-Jul-03	17.7	55.3
Monsanto	DKC34-60	30-Jul-03	1-Aug-03	17.9	53.3
Monsanto	DKC35-01	29-Jul-03	31-Jul-03	19.9	53.9
Monsanto	DKC27-15	26-Jul-03	28-Jul-03	18.6	54.1
Monsanto	DKC32-59	29-Jul-03	31-Jul-03	16.4	54.7
Monsanto	DKC27-12	25-Jul-03	27-Jul-03	17.5	55.3
Pickseed	2338	26-Jul-03	28-Jul-03	19.2	44.3
Pickseed	2601RR	2-Aug-03	4-Aug-03	20.8	50.5
Pioneer	39P78	22-Jul-03	24-Jul-03	14.6	41.2
Pioneer	39F45	19-Jul-03	21-Jul-03	13.9	44.9
Pioneer	39H84	27-Jul-03	29-Jul-03	18.5	45.9
Pioneer	39K40	1-Aug-03	3-Aug-03	21.5	47.0
Pioneer	39T68	25-Jul-03	26-Jul-03	17.8	47.8
Pioneer	3921 (R)	29-Jul-03	31-Jul-03	20.9	48.5
Pioneer	39T71	26-Jul-03	28-Jul-03	18.3	48.7
Pioneer	39T70	26-Jul-03	28-Jul-03	17.7	48.8
Pioneer	39N03	30-Jul-03	1-Aug-03	16.3	50.6
Pioneer	39H85	28-Jul-03	30-Jul-03	17.8	50.9
Pioneer	38G60	2-Aug-03	4-Aug-03	20.5	53.3
Pioneer	38F70	1-Aug-03	3-Aug-03	21.0	53.5
Syngenta	N11-F4	27-Jul-03	29-Jul-03	20.1	48.2
Syngenta	G4043	31-Jul-03	2-Aug-03	20.5	55.1

Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Moisture (%)
CV		.51	.47	12.1	5.1
R ²		.95	.94	.57	.73
Mean		30-July-03	31-July-03	18.8	50.6
LSD (alpha = 0.05)		1.6	1.4	3.4	3.6

2003 Vauxhall Silage Trial

Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Moisture (%)
Garst	8993	27-Jul-03	29-Jul-03	15.2	50.0
Garst	8961 RR	1-Aug-03	4-Aug-03	15.9	50.1
Garst	8905 RR	31-Jul-03	2-Aug-03	22.4	53.3
Hyland	HLSX 1002	29-Jul-03	31-Jul-03	20.5	48.2
Hyland	HL S014	1-Aug-03	3-Aug-03	19.8	48.6
Hyland	HL S011	3-Aug-03	3-Aug-03	19.1	49.7
Hyland	HL S009	4-Aug-03	1-Aug-03	17.6	49.9
Hyland	HL S012	2-Aug-03	5-Aug-03	20.8	51.0
Hyland	HL S007	27-Jul-03	29-Jul-03	17.6	53.3
Maizex	LF 753	29-Jul-03	31-Jul-03	21.9	49.3
Maizex	MZ 28-20RR	2-Aug-03	4-Aug-03	19.4	52.1
Maizex	MZ 27-10RR	6-Aug-03	5-Aug-03	19.9	52.1
Maizex	Leafy 5	2-Aug-03	4-Aug-03	18.5	52.4
Maizex	LF 850RR	7-Aug-03	4-Aug-03	21.3	53.5
Maizex	MZ 27-77RR	2-Aug-03	3-Aug-03	19.5	53.7
Maizex	MZ 18-02RR	29-Jul-03	31-Jul-03	17.7	55.3
Monsanto	DKC34-60	30-Jul-03	1-Aug-03	17.9	53.3
Monsanto	DKC35-01	29-Jul-03	31-Jul-03	19.9	53.9
Monsanto	DKC27-15	26-Jul-03	28-Jul-03	18.6	54.1
Monsanto	DKC32-59	29-Jul-03	31-Jul-03	16.4	54.7
Monsanto	DKC27-12	25-Jul-03	27-Jul-03	17.5	55.3
Pickseed	2338	26-Jul-03	28-Jul-03	19.2	44.3
Pickseed	2601RR	2-Aug-03	4-Aug-03	20.8	50.5
Pioneer	39P78	22-Jul-03	24-Jul-03	14.6	41.2
Pioneer	39F45	19-Jul-03	21-Jul-03	13.9	44.9
Pioneer	39H84	27-Jul-03	29-Jul-03	18.5	45.9
Pioneer	39K40	1-Aug-03	3-Aug-03	21.5	47.0
Pioneer	39T68	25-Jul-03	26-Jul-03	17.8	47.8
Pioneer	3921 (R)	29-Jul-03	31-Jul-03	20.9	48.5
Pioneer	39T71	26-Jul-03	28-Jul-03	18.3	48.7
Pioneer	39T70	26-Jul-03	28-Jul-03	17.7	48.8
Pioneer	39N03	30-Jul-03	1-Aug-03	16.3	50.6
Pioneer	39H85	28-Jul-03	30-Jul-03	17.8	50.9
Pioneer	38G60	2-Aug-03	4-Aug-03	20.5	53.3
Pioneer	38F70	1-Aug-03	3-Aug-03	21.0	53.5
Syngenta	N11-F4	27-Jul-03	29-Jul-03	20.1	48.2
Syngenta	G4043	31-Jul-03	2-Aug-03	20.5	55.1

Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Moisture (%)
CV		0.51	0.47	12.1	5.1
R ²		0.95	0.94	0.57	0.73
Mean		30-July-03	31-July-03	18.8	50.6
LSD (alpha = 0.05)		1.6	1.4	3.4	3.6

2003 Brooks Silage Trial

Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Moisture (%)
Garst	8961 RR	1-Aug-03	8-Aug-03	20.4	65.3
Garst	8905 RR	9-Aug-03	13-Aug-03	15.8	69.7
Garst	8993	3-Aug-03	9-Aug-03	11.5	71.7
Hyland	HLSX 1002	6-Aug-03	10-Aug-03	16.9	63.7
Hyland	HL S007	2-Aug-03	8-Aug-03	18.3	64.7
Hyland	HL S012	7-Aug-03	11-Aug-03	13.9	68.7
Hyland	HL S009	5-Aug-03	11-Aug-03	15.8	69.7
Hyland	HL S011	7-Aug-03	12-Aug-03	14.8	72.0
Hyland	HL S014	7-Aug-03	12-Aug-03	14.5	74.0
Maizex	LF 850RR	7-Aug-03	12-Aug-03	18.3	65.3
Maizex	LF 753	2-Aug-03	8-Aug-03	15.6	65.7
Maizex	Leafy 5	6-Aug-03	10-Aug-03	17.4	67.0
Maizex	MZ 28-20RR	8-Aug-03	12-Aug-03	15.9	67.7
Maizex	MZ 27-10RR	6-Aug-03	11-Aug-03	15.9	68.0
Maizex	MZ 18-02RR	6-Aug-03	10-Aug-03	14.8	72.7
Maizex	MZ 27-77RR	7-Aug-03	13-Aug-03	12.3	73.3
Monsanto	DKC27-15	1-Aug-03	7-Aug-03	17.6	65.7
Monsanto	DKC27-12	6-Aug-03	11-Aug-03	17.4	67.0
Pickseed	2601RR	6-Aug-03	11-Aug-03	15.0	68.0
Pickseed	X2450RR	4-Aug-03	9-Aug-03	17.3	68.7
Pioneer	39H84	6-Aug-03	11-Aug-03	17.9	64.5
Pioneer	39H85	4-Aug-03	10-Aug-03	18.1	65.0
Pioneer	39N03	3-Aug-03	9-Aug-03	15.5	65.0
Pioneer	39P78	4-Aug-03	8-Aug-03	16.2	65.0
Pioneer	38F70	3-Aug-03	8-Aug-03	16.0	65.7
Pioneer	3921 (R)	8-Aug-03	12-Aug-03	17.5	66.0
Pioneer	39T70	9-Aug-03	14-Aug-03	17.9	66.0
Pioneer	39T71	16-Aug-03	19-Aug-03	19.3	67.5
Pioneer	39T68	4-Aug-03	9-Aug-03	16.3	68.0
Pioneer	39F45	7-Aug-03	12-Aug-03	17.2	68.5
Pioneer	39K40	4-Aug-03	9-Aug-03	16.8	69.3
Pioneer	38G60	5-Aug-03	11-Aug-03	12.9	71.0
Sygenta	G4043	7-Aug-03	12-Aug-03	15.7	67.7
Sygenta	N11-F4	3-Aug-03	9-Aug-03	13.4	69.0
CV		2.0	1.5	16.0	5.7
R ²		.37	.38	0.5	0.45
Mean		5-Aug-03	10-Aug-03	16.1	67.8
LSD (alpha = 0.05)		6.4	5.6	4.5	6.0

2003 Outlook Silage Trial

Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Moisture (%)
Garst	8993	24-Jul-03	29-Jul-03	21.2	59.5
Garst	8961 RR	29-Jul-03	1-Aug-03	22.6	62.9
Garst	8905 RR	31-Jul-03	4-Aug-03	23.3	63.0
Hyland	HL S009	2-Aug-03	1-Aug-03	26.7	56.3
Hyland	HL S007	23-Jul-03	31-Jul-03	22.4	62.3
Maizex	MZ 27-77RR	3-Aug-03	3-Aug-03	22.3	63.5
Maizex	MZ 27-10RR	5-Aug-03	6-Aug-03	25.2	64.3
Maizex	MZ 18-02RR	28-Jul-03	2-Aug-03	24.7	64.6
Monsanto	DKC27-12	21-Jul-03	28-Jul-03	23.7	59.3
Monsanto	DKC27-15	24-Jul-03	29-Jul-03	19.7	62.1
Monsanto	DKC32-59	26-Jul-03	30-Jul-03	22.1	63.0
Pioneer	39F45	16-Jul-03	23-Jul-03	16.6	53.2
Pioneer	39P78	16-Jul-03	26-Jul-03	18.1	54.3
Pioneer	39T68	20-Jul-03	26-Jul-03	20.5	57.3
Pioneer	39N03	29-Jul-03	4-Aug-03	22.0	62.3
Syngenta	N11-F4	26-Jul-03	31-Jul-03	23.9	63.0
Syngenta	G4043	31-Jul-03	2-Aug-03	27.3	66.0
CV		.85	.67	8.3	2.4
R ²		.94	.91	0.8	.90
Mean		26-Jul-03	31-Jul-03	22.5	60.9
LSD (alpha = 0.05)		2.5	2.0	2.6	2.1

2003 Bow Island Silage Trial

Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Moisture (%)
Garst	8993	31-Jul-03	5-Aug-03	13.0	69.3
Garst	8961 RR	9-Aug-03	14-Aug-03	14.2	70.5
Garst	8905 RR	8-Aug-03	13-Aug-03	15.8	71.8
Hyland	HL S009	12-Aug-03	13-Aug-03	15.9	65.5
Hyland	HL S011	9-Aug-03	13-Aug-03	16.4	66.5
Hyland	HL S014	13-Aug-03	15-Aug-03	16.0	68.0
Hyland	HLSX 1002	6-Aug-03	12-Aug-03	16.9	68.8
Hyland	HL S007	3-Aug-03	9-Aug-03	13.9	69.0
Hyland	HL S012	9-Aug-03	13-Aug-03	15.7	70.0
Maizex	LF 753	8-Aug-03	12-Aug-03	17.1	68.8
Maizex	MZ 27-77RR	8-Aug-03	12-Aug-03	16.0	69.3
Maizex	Leafy 5	12-Aug-03	15-Aug-03	17.1	70.0
Maizex	LF 850RR	14-Aug-03	16-Aug-03	17.2	70.3
Maizex	MZ 28-20RR	11-Aug-03	15-Aug-03	17.1	71.3
Maizex	MZ 27-10RR	14-Aug-03	17-Aug-03	16.2	72.5
Maizex	MZ 18-02RR	4-Aug-03	11-Aug-03	15.6	75.5
Monsanto	DKC27-12	2-Aug-03	8-Aug-03	14.7	69.3
Monsanto	DKC35-01	5-Aug-03	9-Aug-03	15.6	71.3
Monsanto	DKC27-15	4-Aug-03	9-Aug-03	13.3	72.0
Monsanto	DKC34-60	8-Aug-03	12-Aug-03	14.0	72.3
Monsanto	DKC32-59	3-Aug-03	7-Aug-03	13.2	73.3
Pickseed	2601RR	9-Aug-03	13-Aug-03	17.2	69.3
Pickseed	X2450RR	4-Aug-03	7-Aug-03	17.5	71.0
Pioneer	39P78	28-Jul-03	3-Aug-03	13.4	65.5
Pioneer	39F45	24-Jul-03	31-Jul-03	12.8	65.8
Pioneer	39H85	7-Aug-03	11-Aug-03	16.2	67.5
Pioneer	3921 (R)	9-Aug-03	12-Aug-03	16.6	67.8
Pioneer	39T68	31-Jul-03	7-Aug-03	16.9	67.8
Pioneer	38F70	7-Aug-03	11-Aug-03	17.8	69.0
Pioneer	39K40	8-Aug-03	13-Aug-03	15.9	69.5
Pioneer	39H84	4-Aug-03	9-Aug-03	15.9	69.8
Pioneer	39T71	2-Aug-03	7-Aug-03	15.7	69.8
Pioneer	39N03	6-Aug-03	11-Aug-03	14.8	70.0
Pioneer	39T70	4-Aug-03	10-Aug-03	14.1	71.5
Pioneer	38G60	8-Aug-03	13-Aug-03	15.1	71.8
Syngenta	N11-F4	3-Aug-03	9-Aug-03	15.7	69.3
Syngenta	G4043	8-Aug-03	11-Aug-03	15.9	72.5

Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Moisture (%)
CV		.93	.97	12.8	3.7
R ²		.87	.77	.43	.60
Mean		6-Aug-03	11-Aug-03	15.6	69.8
LSD (alpha = 0.05)		2.8	3.0	2.8	3.6

2003 Lacombe Silage Trial

Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Moisture (%)
Gold Country	GC 79SLS	16-Aug-03	19-Aug-03	14.6	78.4
Maizex	MZ 130	6-Aug-03	10-Aug-03	15.3	73.8
Maizex	MZ 18-02RR	7-Aug-03	14-Aug-03	12.4	79.1
Monsanto	DKC27-12	2-Aug-03	6-Aug-03	17.4	66.4
Monsanto	DKC26-75	2-Aug-03	5-Aug-03	18.1	69.8
Pioneer	39F45	28-Jul-03	31-Jul-03	19.1	59.7
Pioneer	39P78	1-Aug-03	6-Aug-03	20.5	61.6
Pioneer	39T68	2-Aug-03	6-Aug-03	21.5	63.6
Pioneer	39N03	6-Aug-03	13-Aug-03	15.7	75.6
CV		.27	.51	13.9	3.1
R ²		.99	.97	.74	.94
Mean		4-Aug-03	8-Aug-03	17.2	69.8
LSD (alpha = 0.05)		.90	1.6	3.5	3.1

*** 2004 Alberta Corn Committee Grain Hybrid Performance List**

Company	Hybrid	Number of Location/Years	Grain Yield (bu/ac)	% of Pooled Mean	Grain Moisture (%)	Test Weight (lb/bu)	Date of Anthesis
Hyland	HL2093	19	110.9	101.0	24.8	53.6	28-Jul-03
Hyland	HL2017	28	113.6	107.0	26.2	54.0	25-Jul-03
Pioneer	39P78	8	106.4	99.0	22.8	56.6	25-Jul-03
Pioneer	39F45	14	100.5	93.0	25.2	57.1	22-Jul-03
Pioneer	39N03	11	102.7	96.0	26.2	53.1	25-Jul-03

* Hybrid must have five or more station years to be published in list

2003 Alberta Corn Committee Grain Summary Averaged Over Locations

Company	Hybrid	N	Yield (bu/ac)	Yield (% checks)	Moisture (%)	Test Weight (lb/bu)	Anthesis
Hyland	HL2093	4	138	106	23.2	67.8	27-Jul-03
Hyland	HL2017	4	131	100	25.3	68.2	26-Jul-03
Hyland	HLX2023	4	110	84	29.0	63.8	26-Jul-03
Maizex	MZ 119	2	156	116	20.3	68.3	27-Jul-03
Maizex	MZ 130	2	126	91	21.2	66.9	31-Jul-03
Maizex	MZ 18-02RR	2	104	75	27.1	64.6	29-Jul-03
Monsanto	DCK26-75	4	139	107	24.7	66.2	26-Jul-03
Pioneer	39P78	4	129	99	22.5	70.1	26-Jul-03
Pioneer	39F45	4	123	94	24.3	71.0	22-Jul-03
Pioneer	39N03	3	131	97	30.3	60.1	30-Jul-03
Syngenta	N02-K1	4	135	103	27.3	69.8	23-Jul-03
Syngenta	N06-J6	4	143	110	28.7	71.0	27-Jul-03

2003 Lethbridge Grain Trials

Company	Hybrid	Anthesis (10%)	Silking (50%)	Yield (g/plot)	Yield (bu/ac)	Moisture (%)	Test Weight (kg/hl)
Hyland	HL 2093	26-Jul-03	28-Jul-03	8944.0	155.9	18.2	72.3
Hyland	HL 2017	22-Jul-03	24-Jul-03	8286.2	144.4	19.1	74.3
Hyland	HLX 2023	24-Jul-03	27-Jul-03	7482.9	130.4	22.9	66.1
Monsanto	DCK26-75	26-Jul-03	28-Jul-03	7983.8	139.1	19.8	68.9
Pioneer	39P78	24-Jul-03	26-Jul-03	7570.2	131.9	18.6	74.9
Pioneer	39F45	21-Jul-03	23-Jul-03	6776.8	118.1	20.1	76.1
Pioneer	39N03	26-Jul-03	29-Jul-03	7819.5	136.3	21.2	62.2
Syngenta	N02-K1	23-Jul-03	25-Jul-03	7917.9	138.0	22.3	72.5
Syngenta	N06-J6	24-Jul-03	27-Jul-03	8839.3	154.0	25.7	74.7
CV		.54	.58	9.4		5.9	2.7
R ²		.80	.80	.61		.84	.89
Mean		24-Jul-03	26-Jul-03	7958		20.9	71.3
LSD (alpha = 0.05)		1.6	1.7	1086		1.8	2.8

2003 Vauxhall Grain Trials

Company	Hybrid	Anthesis (10%)	Silking (50%)	Yield (g/plot)	Yield (bu/ac)	Moisture (%)	Test Weight (kg/hl)
Hyland	HL 2093	26-Jul-03	28-Jul-03	8755.5	152.6	20.0	70.4
Hyland	HL 2017	23-Jul-03	25-Jul-03	8790.0	153.2	21.3	70.3
Hyland	HLX 2023	24-Jul-03	26-Jul-03	7182.8	125.2	25.9	66.6
Maizex	MZ 130	28-Jul-03	30-Jul-03	8689.4	151.4	18.9	70.9
Maizex	MZ 119	26-Jul-03	28-Jul-03	9344.4	162.8	19.7	70.5
Maizex	MZ 18-02RR	29-Jul-03	31-Jul-03	7502.6	130.7	22.2	66.5
Monsanto	DCK26-75	25-Jul-03	27-Jul-03	10228.3	178.2	20.8	70.9
Pioneer	39P78	23-Jul-03	25-Jul-03	8620.8	150.2	18.5	75.2
Pioneer	39F45	19-Jul-03	21-Jul-03	8269.3	144.1	21.1	73.1
Pioneer	39N03	28-Jul-03	30-Jul-03	8971.4	156.3	23.7	64.7
Syngenta	N02-K1	21-Jul-03	23-Jul-03	10124.7	176.4	22.8	73.2
Syngenta	N06-J6	24-Jul-03	26-Jul-03	9688.7	168.8	25.1	70.8
CV		.46	.45	8.9		2.5	7.7
R ²		.93	.93	.80		.81	.75
Mean		25-Jul-03	27-Jul-03	8840.4		70.3	21.7
LSD (alpha = 0.05)		1.4	1.3	1193		2.4	2.5

2003 Bow Island Grain Trials

Company	Hybrid	Anthesis (10%)	Silking (50%)	Yield (g/plot)	Yield (bu/ac)	Moisture (%)	Test Weight (kg/hl)
Hyland	HL 2093	27-Jul-03	5-Aug-03	6947.9	121.1	23.6	64.7
Hyland	HL 2017	28-Jul-03	4-Aug-03	6793.1	118.4	27.0	63.5
Hyland	HLX 2023	28-Jul-03	5-Aug-03	5794.2	101.0	28.6	62.9
Maizex	MZ 119	29-Jul-03	5-Aug-03	8610.7	150.1	21.0	66.3
Maizex	MZ 130	4-Aug-03	8-Aug-03	5733.7	99.9	23.5	63.0
Maizex	MZ 18-02RR	29-Jul-03	6-Aug-03	4462.9	77.8	32.1	62.8
Monsanto	DCK26-75	27-Jul-03	4-Aug-03	6672.5	116.3	26.9	61.1
Pioneer	39P78	26-Jul-03	4-Aug-03	6660.8	116.1	25.4	63.7
Pioneer	39F45	23-Jul-03	30-Jul-03	6970.2	121.5	26.4	66.3
Syngenta	N06-J6	30-Jul-03	5-Aug-03	6140.3	107.0	29.5	68.3
Syngenta	N02-K1	23-Jul-03	3-Aug-03	6633.7	115.6	30.3	64.9
CV		1.1	.83	13.4		8.5	3.4
R ²		.78	.72	.67		.74	.59
Mean		28-Jul-03	4-Aug-03	6535.3		26.4	64.3
LSD (alpha = 0.05)		3.6	2.9	1400		3.6	3.5

2003 Brooks Grain Trials

Company	Hybrid	Anthesis (10%)	Silking (50%)	Yield (g/plot)	Yield (bu/ac)	Moisture (%)	Test Weight (kg/hl)
Hyland	HL 2093	1-Aug-03	6-Aug-03	7092.9	123.6	31.2	64.1
Hyland	HL 2017	1-Aug-03	4-Aug-03	6248.8	108.9	34.0	65.0
Hyland	HLX 2023	30-Jul-03	3-Aug-03	4895.5	85.3	38.7	59.9
Monsanto	DCK26-75	27-Jul-03	3-Aug-03	7098.4	123.7	31.4	64.0
Pioneer	39P78	1-Aug-03	5-Aug-03	6660.3	116.1	27.6	66.7
Pioneer	39F45	25-Jul-03	29-Jul-03	6145.4	107.1	29.6	68.6
Pioneer	39N03	5-Aug-03	11-Aug-03	5709.1	99.5	46.1	53.7
Syngenta	N02-K1	28-Jul-03	3-Aug-03	6427.4	112.0	34.1	68.9
Syngenta	N06-J6	30-Jul-03	4-Aug-03	8253.0	143.8	34.6	70.5
CV		.78	.74	12.4		5.4	2.6
R ²		.85	.85	.66		.93	.92
Mean		30-Jul-03	4-Aug-03	6561.2		34.1	64.9
LSD (alpha = 0.05)		2.5	2.4	1240		2.8	2.7

2003 Outlook Grain Trials

Company	Hybrid	Anthesis (10%)	Silking (50%)	Yield (g/plot)	Yield (bu/ac)	Moisture (%)	Test Weight (kg/hl)
Hyland	HL 2093	25-Jul-03	29-Jul-03	10855.4	189.2	17.7	74.7
Hyland	HL 2017	23-Jul-03	28-Jul-03	10521.4	183.4	18.4	77.8
Hyland	HL 2232	30-Jul-03	4-Aug-03	10328.9	180.0	21.9	72.7
Pioneer	39T68	23-Jul-03	28-Jul-03	10800.0	188.2	18.3	77.3
Pioneer	39P78	18-Jul-03	28-Jul-03	9112.8	158.8	19.0	79.3
Pioneer	39F45	16-Jul-03	24-Jul-03	8536.6	148.8	19.6	80.7
Pioneer	39N03	30-Jul-03	4-Aug-03	10413.4	181.5	27.8	69.5
Syngenta	N02-K1	21-Jul-03	27-Jul-03	10596.1	184.7	21.1	79.5
Syngenta	N06-J6	25-Jul-03	29-Jul-03	10998.5	191.7	23.2	80.4
CV		.40	.36	6.3		13.6	2.1
R ²		.98	.97	.70		.64	.89
Mean		23-Jul-03	29-Jul-03	10240.3		20.8	76.9
LSD (alpha = 0.05)		1.2	1	941		4.1	2.3