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# ALBERTA CORN COMMITTEE

## 2004 Corn Hybrid Trials

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

It was a challenging year for corn production in Alberta and Saskatchewan. Most areas suffered through a cold May and June, which was followed in late summer by some of the earliest frost dates in recent history. The only site that received adequate heat in July and August to compensate for the cool start was Lethbridge, which exceeded the region's mean for corn heat unit accumulation. As for our new sites, what a difference a year can make! We had outstanding yields from both Lacombe and Outlook last year, but this year reminded us that the first consideration for hybrid selection should be maturity, or the appropriate CHU rating in which the hybrid will be grown. The good news is that we were able to use the data from all six of our locations.

Participation in this year's hybrid performance trials was very good and even included a hybrid seed company from overseas. The success of this program is only as strong as the commitment from industry to fully participate and to use the data in a responsible manner.

Corn Heat Units, accumulated from 15 May, 2004 to the first kill frost (-2 degrees Celsius), were as follows: Lethbridge 2267 CHU, Vauxhall 2206 CHU, Brooks 2080 CHU, Bow Island 2251 CHU, Outlook, SK 2073 CHU and Lacombe 1718 CHU.

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## 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 to determine '% moisture'.
  
- 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.

## List of Co-operators

<b>Location of Test</b>	<b>Co-operator</b>	<b>Supervising Agency</b>
Lethbridge & Vauxhall	Brian Beres <i>Technical Support:</i> Ken Coles Ryan Dyck Sheree Kendrick Steven Leusink Toby Mandel Heather McGlynn Jeff Michaelis	Agriculture & Agri-Food Canada
Brooks & Bow Island	M. Bandara <i>Technical Support:</i> J. Webber	AAFRD - Brooks
Outlook	Terry Hogg <i>Technical Support:</i> Clint Ringdal Don David	Agriculture & Agri-Food Canada
Lacombe	Vern Baron <i>Technical Support:</i> Dave Young Tanya Rowe	Agriculture & Agri-Food Canada

**Soil profiles, seeding, and harvest dates**

<b>Location</b>	<b>Soil Type</b>	<b>Soil Zone</b>	<b>Seed Date Silage</b>	<b>Seed Date Grain</b>	<b>Harvest Silage</b>	<b>Harvest Grain</b>
<b>Lethbridge</b>	Loam	Dark Brown	May 6	May 6	Oct 5	Oct 25
<b>Vauxhall</b>	Sandy Loam	Brown	May 4	May 4	Sept 28	Oct 26
<b>Brooks</b>	Silty Loam	Brown	May 17	May 17	Oct 1	Nov 2
<b>Bow Island</b>	Sandy	Brown	May 10	May 10	Oct 9	Oct 27
<b>Outlook, SK</b>	Silty Loam	Dark Brown	May 17	May 17	Oct 6	Oct 25
<b>Lacombe</b>	Clay loam	Black	May 13	n/a	Sept 20	n/a

### Crop Management Summary

Location	Fertilizer Amendments	Pesticides Used	Irrigation Applied
<b>Lethbridge</b>			
Grain/Silage	11-52-00 @ 200 lb/Ac	Eradicane 8E @ 3.4 L/Ac Cocktail: - Accent @ 10 g/Ac - Atrazine @ 300 ml/Ac - Banvel II @ 120 ml/Ac - Merge @ 325 ml/Ac	11.5" (292.1mm)
<b>Vauxhall</b>			
Grain/Silage	26-10-8-8 @ 371 lbs/ac	Bladex 1.2 L/Ac Cocktail: - Accent @ 10 g/Ac - Atrazine @ 300 ml/Ac - Banvel II @ 120 ml/Ac - Merge @ 325 ml/Ac	12" (304.8mm)
<b>Brooks</b>			
Grain/Silage	34-17-0 @ 445.5 lb/ac	Eradicane 8E @ 3.4 L/Ac	8.86" (225.0mm)
<b>Bow Island</b>			
Grain/Silage	34-17-0 @ 445.5 lb/ac	Eradicane 8E @ 3.4 L/Ac	9.92" (252.0mm)
<b>Outlook</b>			
Grain/Silage	Urea 46-0-0 @ 100 lb N/Ac - broadcast method 12-51-0 @ 60 lb P <sub>2</sub> O <sub>5</sub> /Ac - sideband with seed 34-0-0 @ 50 lb N/Ac - broadcast method	Accent Banvel	8.66" (220.0mm)
<b>Lacombe</b>			
Silage	34-0-0 @ 550 lb/Ac 11-51-0 @ 118 lb/Ac 0-0-60 @ 100 lb/Ac	Laddock @ 1.5 L/Ac Assist Surfactant @ 1 L/Ac	none

<b>*2005 Alberta Corn Committee Silage Hybrid Performance List</b>						
<b>Company</b>	<b>Hybrid</b>	<b>Location Years</b>	<b>Yield (t/ac) Dry</b>	<b>Yield (% Pooled Mean)</b>	<b>Whole Plant Moisture %</b>	<b>Date of Anthesis</b>
Pioneer	39F45	24	5.9	82	60	22-Jul-04
Pioneer	39P78	12	6.2	87	61	23-Jul-04
Hyland	HLS014	16	7.9	110	64	4-Aug-04
Pioneer	39T68	28	7.1	100	65	26-Jul-04
Hyland	HLS009	16	7.7	108	65	6-Aug-04
Maizex	LF 753	8	7.9	110	65	1-Aug-04
Monsanto	DKC27-12	16	7.4	104	65	27-Jul-04
Pioneer	39T71	16	7.0	99	65	27-Jul-04
Pioneer	3921	47	7.8	109	66	1-Aug-04
Pioneer	39K40	16	7.8	110	66	3-Aug-04
Hyland	HLS007	16	7.3	101	66	28-Jul-04
Hyland	HLS011	8	7.4	103	67	9-Aug-04
Monsanto	DKC32-59	12	6.9	98	67	30-Jul-04
Syngenta	N11-F4	8	7.0	98	67	28-Jul-04
Maizex	LF 850RR	8	7.9	110	69	8-Aug-04
Maizex	MZ27-77RR	8	7.3	101	69	3-Aug-04
Maizex	MZ27-10RR	8	7.4	104	69	6-Aug-04
Syngenta	4043	42	7.9	111	69	2-Aug-04
Maizex	MZ18-02RR	8	7.0	98	70	30-Jul-04

\*Hybrid must have five or more station years accumulated over at least two calendar years to be published in list

**2004 Alberta Corn Committee Silage Hybrid Performance Averaged Over Locations**

<b>Company</b>	<b>Hybrid</b>	<b>Locations</b>	<b>Yield (t/ac) Dry</b>	<b>Yield (% of Checks)</b>	<b>Whole Plant Moisture %</b>	<b>Anthesis</b>
Pioneer	39F45	5	9.6	83	58	26-Jul-04
Pioneer	39P78	5	10.4	87	59	31-Jul-04
Pioneer	39F59	5	12.1	104	61	4-Aug-04
Hyland	HLS014	5	13.0	105	63	13-Aug-04
Pickseed	2230	4	10.0	74	64	29-Jul-04
Hyland	HLS009	5	13.0	108	64	14-Aug-04
Pickseed	SilEx Bt	5	13.7	115	65	8-Aug-04
Pioneer	39T68	5	11.6	99	65	2-Aug-04
Maizex	LF 753	5	12.6	102	66	11-Aug-04
Pioneer	39H83	5	13.2	112	66	6-Aug-04
Pioneer	39T71	5	10.8	93	66	3-Aug-04
Monsanto	DKC30-02	5	12.1	100	66	6-Aug-04
Maizex	LF 802	5	14.0	114	66	14-Aug-04
Syngenta	N05-C7	6	10.1	91	66	6-Aug-04
Pioneer	39T67	5	12.3	104	66	3-Aug-04
Monsanto	DKC35-01	2	14.4	95	66	8-Aug-04
Hyland	HLS011	5	12.6	107	67	16-Aug-04
Pioneer	3921	4	13.9	102	67	10-Aug-04
Hyland	HLS007	5	12.1	100	68	4-Aug-04
Monsanto	DKC27-12	6	11.8	105	68	3-Aug-04
Pickseed	1424RR	5	11.1	93	68	10-Aug-04
Pioneer	39D80	5	11.9	100	68	9-Aug-04
Elite	46T05	6	10.3	93	68	6-Aug-04
Pioneer	39K39	4	13.4	99	68	11-Aug-04
Maizex	MZ27-77RR	5	12.3	100	68	12-Aug-04
Monsanto	DKC32-59	3	10.3	89	68	8-Aug-04
Pioneer	38G16	4	13.8	101	68	10-Aug-04
Maizex	LF 793	5	11.7	98	68	15-Aug-04
Pioneer	39F27	4	15.4	112	69	9-Aug-04
Pioneer	39K40	5	12.4	102	69	12-Aug-04
Maizex	MZ27-10RR	5	12.1	101	69	16-Aug-04
Vanseed	Leafy Man	4	15.3	112	69	17-Aug-04
Maizex	MZ18-02RR	5	11.8	98	69	7-Aug-04
Maizex	LF 850RR	5	12.7	104	69	19-Aug-04
Pickseed	2365RR	5	12.1	100	69	7-Aug-04
Pickseed	ExPress	1	5.4	101	69	20-Aug-04
Monsanto	DKC26-78	4	8.6	92	70	4-Aug-04
Syngenta	N16-N7	6	10.4	91	70	10-Aug-04
Syngenta	NX1212	6	9.9	89	71	10-Aug-04
Syngenta	NX1822	6	10.4	93	71	9-Aug-04
Pickseed	ExSile	1	5.0	93	71	17-Aug-04

**2004 Alberta Corn Committee Silage Hybrid Performance Averaged Over Locations cont'd**

<b>Company</b>	<b>Hybrid</b>	<b>Locations</b>	<b>Yield (t/ac) Dry</b>	<b>Yield (% of Checks)</b>	<b>Whole Plant Moisture %</b>	<b>Anthesis</b>
Pickseed	ExLeafy	5	12.0	100	71	17-Aug-04
MTI	4MA14	3	9.7	94	72	3-Aug-04
Syngenta	N11-F4	6	10.8	98	72	7-Aug-04
Vanseed	Ultraton	2	14.1	102	72	19-Aug-04
Garst	8961RR	6	9.8	88	72	13-Aug-04
Syngenta	4043	6	12.0	104	72	11-Aug-04
Garst	8905RR	6	10.8	96	73	14-Aug-04
MTI	4MA15	3	9.1	91	74	1-Aug-04
Pickseed	ExAlt	1	5.5	103	75	20-Aug-04
Hyland	Bixio RR	1	7.8	104	87	11-Aug-04

2004 Lethbridge Silage Trial					
Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Whole Plant Moisture %
Pioneer	39F45	28-Jul-04	30-Jul-04	26.6	52.5
Pioneer	39P78	4-Aug-04	6-Aug-04	28.0	55.5
Pioneer	39F59	7-Aug-04	8-Aug-04	32.9	59.6
Syngenta	N05-C7	6-Aug-04	7-Aug-04	30.7	59.9
Pickseed	2230	3-Aug-04	4-Aug-04	26.3	59.9
Monsanto	DKC26-78	4-Aug-04	6-Aug-04	29.8	60.0
MTI	4MA14	2-Aug-04	5-Aug-04	28.1	60.6
Elite	46T05	7-Aug-04	7-Aug-04	30.9	61.5
Hyland	HLS014	13-Aug-04	10-Aug-04	39.5	61.8
Hyland	HLS009	16-Aug-04	15-Aug-04	39.1	61.9
Maizex	LF 753	11-Aug-04	9-Aug-04	40.9	62.1
Pioneer	39T71	6-Aug-04	8-Aug-04	34.0	62.2
Monsanto	DKC27-12	4-Aug-04	6-Aug-04	34.5	62.4
Pioneer	39T68	5-Aug-04	7-Aug-04	29.6	62.7
Pickseed	SilEx Bt	10-Aug-04	11-Aug-04	38.3	62.7
Pioneer	39H83	9-Aug-04	11-Aug-04	37.3	62.7
Syngenta	NX1212	10-Aug-04	12-Aug-04	29.3	63.0
Syngenta	NX1822	10-Aug-04	12-Aug-04	36.3	63.9
Monsanto	DKC30-02	8-Aug-04	10-Aug-04	36.2	64.3
Hyland	HLS007	6-Aug-04	8-Aug-04	34.3	64.4
Pioneer	39T67	6-Aug-04	8-Aug-04	33.1	64.4
MTI	4MA15	2-Aug-04	3-Aug-04	23.1	64.6
Maizex	LF 802	17-Aug-04	14-Aug-04	40.8	64.9
Syngenta	N16-N7	11-Aug-04	12-Aug-04	35.1	65.2
Pioneer	39D80	13-Aug-04	15-Aug-04	33.9	65.5
Pioneer	3921®	13-Aug-04	15-Aug-04	36.6	66.1
Pioneer	39K40	14-Aug-04	14-Aug-04	36.4	66.2
Maizex	LF 793	18-Aug-04	16-Aug-04	36.3	66.2
Syngenta	N11-F4	7-Aug-04	8-Aug-04	32.8	66.5
Hyland	HLS011	20-Aug-04	16-Aug-04	35.3	66.7
Pioneer	38G16	13-Aug-04	15-Aug-04	35.1	66.7
Pickseed	1424RR	14-Aug-04	16-Aug-04	30.2	66.8
Maizex	MZ 27-77RR	14-Aug-04	15-Aug-04	33.1	67.6
Pioneer	39K39	14-Aug-04	15-Aug-04	32.9	67.8
Pioneer	39F27	13-Aug-04	15-Aug-04	35.4	68.0
Garst	8905RR	15-Aug-04	16-Aug-04	36.7	68.1
Pickseed	2365RR	9-Aug-04	11-Aug-04	31.9	68.1
Syngenta	G4043	12-Aug-04	13-Aug-04	37.1	68.3
Garst	8961RR	14-Aug-04	16-Aug-04	27.7	68.4
Maizex	MZ 18-02RR	9-Aug-04	11-Aug-04	32.8	68.4
Maizex	LF 850RR	20-Aug-04	17-Aug-04	34.8	68.5
Vanseed	Leafy Man	20-Aug-04	16-Aug-04	36.6	68.6
Maizex	MZ 27-10RR	19-Aug-04	18-Aug-04	33.1	68.8
Pickseed	ExLeafy	19-Aug-04	16-Aug-04	34.2	69.7
Vanseed	Ultraton	21-Aug-04	19-Aug-04	34.9	72.6

**2004 Lethbridge Silage Trial cont'd**

		<b>Anthesis</b>	<b>Silking</b>	<b>Dry Yield (t/ha)</b>	<b>Whole Plant Moisture %</b>
R <sup>2</sup>		0.98	0.96	0.70	0.90
CV		0.43	0.48	9.04	2.27
Root MSE		0.97	1.08	3.04	1.46
Mean		11-Aug-04	12-Aug-04	33.91	64.58
LSD (alpha = 0.05)		1.35	1.51	4.25	2.05

2004 Vauxhall Silage Trial					
Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Whole Plant Moisture %
Pioneer	39P78	30-Jul-04	1-Aug-04	26.2	48.8
Pioneer	39F45	27-Jul-04	29-Jul-04	22.2	52.2
Pioneer	39F59	31-Jul-04	2-Aug-04	29.9	56.3
Elite	46T05	3-Aug-04	4-Aug-04	25.6	57.3
Pickseed	SilEx Bt	2-Aug-04	4-Aug-04	39.3	57.6
Pioneer	39T68	30-Jul-04	1-Aug-04	29.1	58.6
Syngenta	N05-C7	4-Aug-04	6-Aug-04	21.5	59.2
Hyland	HLS014	11-Aug-04	7-Aug-04	27.7	59.7
Pioneer	39T67	30-Jul-04	1-Aug-04	35.5	59.9
Pioneer	39H83	2-Aug-04	4-Aug-04	30.3	60.0
Pioneer	39T71	1-Aug-04	3-Aug-04	24.5	60.1
Monsanto	DKC30-02	1-Aug-04	3-Aug-04	27.4	60.5
Syngenta	NX1212	6-Aug-04	8-Aug-04	24.4	61.3
Monsanto	DKC27-12	31-Jul-04	2-Aug-04	27.7	61.4
Syngenta	N16-N7	3-Aug-04	4-Aug-04	26.2	61.7
Maizex	LF 802	11-Aug-04	6-Aug-04	34.8	61.7
Syngenta	N11-F4	2-Aug-04	4-Aug-04	29.4	62.4
Hyland	HLS009	11-Aug-04	6-Aug-04	28.0	62.7
Pickseed	2230	31-Jul-04	2-Aug-04	16.7	62.9
Pioneer	39D80	6-Aug-04	8-Aug-04	28.8	63.2
Maizex	LF 753	11-Aug-04	8-Aug-04	25.8	63.3
Maizex	MZ 27-77RR	8-Aug-04	7-Aug-04	32.6	63.5
Syngenta	G4043	6-Aug-04	8-Aug-04	37.6	64.1
Pickseed	1424RR	5-Aug-04	8-Aug-04	27.6	64.1
Pioneer	39F27	6-Aug-04	7-Aug-04	33.1	64.2
Vanseed	Leafy Man	14-Aug-04	10-Aug-04	36.5	64.8
Hyland	HLS007	3-Aug-04	6-Aug-04	28.9	64.8
Pioneer	39K39	8-Aug-04	10-Aug-04	28.6	64.8
Maizex	MZ 27-10RR	12-Aug-04	14-Aug-04	30.2	64.8
Pioneer	39K40	9-Aug-04	11-Aug-04	28.4	64.9
Hyland	HLS011	15-Aug-04	15-Aug-04	25.8	65.0
Monsanto	DKC32-59	5-Aug-04	7-Aug-04	23.0	65.3
Pickseed	2365RR	4-Aug-04	6-Aug-04	30.5	65.6
Garst	8961RR	11-Aug-04	13-Aug-04	21.6	65.9
Garst	8905RR	10-Aug-04	12-Aug-04	24.2	66.1
Maizex	MZ 18-02RR	7-Aug-04	10-Aug-04	21.4	66.2
Pioneer	38G16	8-Aug-04	10-Aug-04	25.7	66.6
Pioneer	3921®	10-Aug-04	12-Aug-04	24.6	66.6
Syngenta	NX1822	7-Aug-04	8-Aug-04	19.7	66.7
Monsanto	DKC35-01	6-Aug-04	7-Aug-04	24.9	67.0
Maizex	LF 850RR	17-Aug-04	15-Aug-04	29.9	67.0
Maizex	LF 793	16-Aug-04	14-Aug-04	22.3	67.7
Pickseed	ExLeafy	17-Aug-04	14-Aug-04	22.5	70.7
Vanseed	Ultraton	17-Aug-04	19-Aug-04	28.4	71.5

<b>2004 Vauxhall Silage Trial cont'd</b>					
		<b>Anthesis</b>	<b>Silking</b>	<b>Dry Yield (t/ha)</b>	<b>Whole Plant Moisture %</b>
R <sup>2</sup>		0.92	0.88	0.67	0.85
CV		0.87	0.95	14.19	3.66
Root MSE		1.91	2.09	3.85	2.30
Mean		6-Aug-04	7-Aug-04	27.13	63.00
LSD (alpha = 0.05)		2.67	2.95	6.00	3.30

2004 Brooks Silage Trial					
Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Whole Plant Moisture %
Pioneer	39F45	25-Jul-04	31-Jul-04	16.9	67.8
Syngenta	N05-C7	2-Aug-04	9-Aug-04	20.3	68.8
Hyland	HLS014	11-Aug-04	11-Aug-04	23.7	69.5
Pioneer	39F59	3-Aug-04	10-Aug-04	21.2	69.5
Maizex	LF 753	8-Aug-04	13-Aug-04	22.2	69.8
Monsanto	DKC26-78	27-Jul-04	5-Aug-04	18.1	70.0
Syngenta	NX1822	5-Aug-04	13-Aug-04	19.6	70.2
Hyland	HLS009	13-Aug-04	15-Aug-04	23.0	70.5
MTI	4MA14	28-Jul-04	4-Aug-04	17.7	70.5
Monsanto	DKC27-12	31-Jul-04	10-Aug-04	21.9	70.8
Pioneer	39P78	27-Jul-04	4-Aug-04	18.2	70.8
Elite	46T05	3-Aug-04	10-Aug-04	19.0	70.8
Syngenta	N16-N7	6-Aug-04	13-Aug-04	18.0	70.8
Hyland	HLS011	13-Aug-04	16-Aug-04	22.7	71.5
Pioneer	39H83	4-Aug-04	11-Aug-04	23.7	71.5
Pioneer	39T67	2-Aug-04	9-Aug-04	24.2	71.5
Pickseed	SilEx Bt	6-Aug-04	13-Aug-04	18.7	72.0
Pioneer	3921®	8-Aug-04	15-Aug-04	22.4	72.0
Pioneer	39T68	31-Jul-04	8-Aug-04	22.5	72.0
MTI	4MA15	27-Jul-04	5-Aug-04	18.0	72.2
Maizex	LF 802	12-Aug-04	14-Aug-04	23.6	72.8
Monsanto	DKC30-02	5-Aug-04	11-Aug-04	21.1	72.8
Garst	8961RR	11-Aug-04	17-Aug-04	19.8	73.0
Pioneer	39D80	6-Aug-04	12-Aug-04	19.3	73.0
Garst	8905RR	10-Aug-04	17-Aug-04	19.2	73.2
Pickseed	2230	28-Jul-04	5-Aug-04	18.3	73.2
Vanseed	Leafy Man	16-Aug-04	18-Aug-04	21.7	73.2
Pioneer	38G16	8-Aug-04	14-Aug-04	22.5	73.5
Maizex	LF 793	13-Aug-04	15-Aug-04	20.0	73.8
Maizex	MZ 18-02RR	4-Aug-04	13-Aug-04	20.2	73.8
Pickseed	1424RR	8-Aug-04	16-Aug-04	18.6	73.8
Pioneer	39K39	11-Aug-04	16-Aug-04	21.1	73.8
Syngenta	NX1212	6-Aug-04	14-Aug-04	19.9	73.8
Maizex	LF 850RR	16-Aug-04	18-Aug-04	21.1	74.0
Pioneer	39T71	2-Aug-04	11-Aug-04	18.5	74.0
Syngenta	N11-F4	4-Aug-04	12-Aug-04	18.7	74.0
Maizex	MZ 27-77RR	11-Aug-04	16-Aug-04	20.2	74.2
Hyland	HLS007	2-Aug-04	12-Aug-04	20.0	74.5
Pioneer	39K40	10-Aug-04	16-Aug-04	21.3	74.5
Pickseed	2365RR	6-Aug-04	13-Aug-04	20.5	74.8
Syngenta	G4043	7-Aug-04	15-Aug-04	21.5	74.8
Maizex	MZ 27-10RR	14-Aug-04	21-Aug-04	20.0	75.2
Pickseed	ExLeafy	14-Aug-04	17-Aug-04	19.4	76.0
Pioneer	39F27	8-Aug-04	16-Aug-04	21.9	76.5

2004 Brooks Silage Trial cont'd					
		<b>Anthesis</b>	<b>Silking</b>	<b>Dry Yield (t/ha)</b>	<b>Whole Plant Moisture %</b>
R <sup>2</sup>		0.97	0.95	0.54	0.78
CV		0.54	0.54	11.06	2.23
Root MSE		1.18	1.22	2.26	1.62
Mean		6-Aug-04	12-Aug-04	20.47	72.46
LSD (alpha = 0.05)		1.65	1.71	3.17	2.26

2004 Bow Island Silage Trial					
Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Whole Plant Moisture %
Pioneer	39F59	5-Aug-04	9-Aug-04	36.8	53.5
Pioneer	39F45	23-Jul-04	31-Jul-04	29.0	55.8
Syngenta	N05-C7	4-Aug-04	3-Aug-04	34.0	55.8
Hyland	HLS009	14-Aug-04	13-Aug-04	42.7	57.3
Pioneer	39P78	29-Jul-04	6-Aug-04	33.8	57.8
Hyland	HLS014	13-Aug-04	11-Aug-04	43.9	58.5
Monsanto	DKC27-12	2-Aug-04	9-Aug-04	41.6	59.5
Pickseed	2230	23-Jul-04	4-Aug-04	28.2	60.8
Maizex	LF 802	13-Aug-04	11-Aug-04	46.5	61.2
Hyland	HLS011	15-Aug-04	17-Aug-04	41.9	61.5
Monsanto	DKC30-02	9-Aug-04	12-Aug-04	39.0	61.8
Elite	46T05	4-Aug-04	7-Aug-04	35.0	62.5
Maizex	LF 753	11-Aug-04	13-Aug-04	42.0	63.0
Pickseed	SilEx Bt	11-Aug-04	13-Aug-04	43.0	63.0
Pioneer	39T71	2-Aug-04	9-Aug-04	30.8	63.0
Pickseed	1424RR	11-Aug-04	14-Aug-04	36.9	63.5
Pioneer	39H83	7-Aug-04	12-Aug-04	41.6	63.5
Pioneer	39T68	3-Aug-04	5-Aug-04	36.0	63.7
Hyland	HLS007	4-Aug-04	12-Aug-04	41.1	64.5
Maizex	MZ 27-77RR	13-Aug-04	15-Aug-04	41.0	64.5
Pioneer	3921®	10-Aug-04	13-Aug-04	41.2	64.5
Maizex	LF 793	14-Aug-04	15-Aug-04	39.6	65.0
Maizex	MZ 18-02RR	7-Aug-04	12-Aug-04	44.4	65.0
Pioneer	39T67	4-Aug-04	9-Aug-04	34.5	65.0
Syngenta	N16-N7	11-Aug-04	14-Aug-04	35.3	65.2
Syngenta	NX1822	9-Aug-04	15-Aug-04	36.0	65.2
Garst	8961RR	12-Aug-04	16-Aug-04	36.8	65.8
Syngenta	G4043	9-Aug-04	13-Aug-04	40.2	65.8
Monsanto	DKC35-01	10-Aug-04	13-Aug-04	39.4	66.0
Pioneer	39F27	11-Aug-04	15-Aug-04	48.0	66.0
Pioneer	39K39	13-Aug-04	16-Aug-04	37.7	66.0
Syngenta	NX1212	10-Aug-04	15-Aug-04	33.3	66.0
Monsanto	DKC32-59	8-Aug-04	12-Aug-04	35.1	66.2
Pioneer	39D80	12-Aug-04	16-Aug-04	39.2	66.2
Pioneer	39K40	12-Aug-04	15-Aug-04	41.8	66.5
Maizex	MZ 27-10RR	14-Aug-04	16-Aug-04	40.5	66.8
Pickseed	2365RR	8-Aug-04	12-Aug-04	41.8	66.8
Maizex	LF 850RR	20-Aug-04	18-Aug-04	45.4	67.0
Pioneer	38G16	11-Aug-04	14-Aug-04	40.0	67.0
Pickseed	ExLeafy	18-Aug-04	18-Aug-04	44.5	67.2
Garst	8905RR	11-Aug-04	15-Aug-04	37.2	68.5
Syngenta	N11-F4	8-Aug-04	12-Aug-04	35.3	68.8
Vanseed	Leafy Man	21-Aug-04	18-Aug-04	42.0	69.2

2004 Bow Island Silage Trial cont'd					
		<b>Anthesis</b>	<b>Silking</b>	<b>Dry Yield (t/ha)</b>	<b>Whole Plant Moisture %</b>
R <sup>2</sup>		0.93	0.80	0.71	0.82
CV		0.86	1.07	9.31	3.22
Root MSE		1.91	2.42	3.62	2.05
Mean		9-Aug-04	12-Aug-04	38.91	63.77
LSD (alpha = 0.05)		2.41	3.16	4.95	2.67

2004 Outlook Silage Trial					
Company	Hybrid	Anthesis	Silking	Dry Yield (t/ha)	Whole Plant Moisture %
Pioneer	39F45	27-Jul-04	4-Aug-04	12.5	60.8
Pioneer	39P78	3-Aug-04	9-Aug-04	10.2	64.0
Monsanto	DKC26-78	5-Aug-04	11-Aug-04	9.9	65.6
Pioneer	39F59	8-Aug-04	13-Aug-04	14.5	66.1
Monsanto	DKC27-12	4-Aug-04	11-Aug-04	11.5	66.4
Hyland	HLS014	18-Aug-04	18-Aug-04	10.5	67.6
Syngenta	N05-C7	10-Aug-04	14-Aug-04	11.4	68.1
Pioneer	39T68	5-Aug-04	10-Aug-04	12.9	68.1
Pickseed	SilEx Bt	11-Aug-04	15-Aug-04	14.6	69.0
Hyland	HLS011	19-Aug-04	22-Aug-04	15.2	69.4
Pickseed	ExPress	20-Aug-04	22-Aug-04	12.1	69.4
Maizex	MZ 27-10RR	22-Aug-04	24-Aug-04	12.2	69.6
Pioneer	39T71	5-Aug-04	11-Aug-04	13.3	69.6
Maizex	LF 753	14-Aug-04	15-Aug-04	10.0	69.7
Elite	46T05	9-Aug-04	13-Aug-04	12.2	69.7
Hyland	HLS007	8-Aug-04	15-Aug-04	11.6	69.8
Hyland	HLS009	19-Aug-04	22-Aug-04	12.7	69.8
Maizex	LF 793	18-Aug-04	21-Aug-04	12.8	69.9
Monsanto	DKC30-02	11-Aug-04	16-Aug-04	11.5	70.1
Maizex	LF 802	19-Aug-04	17-Aug-04	11.6	70.1
Pickseed	1424RR	13-Aug-04	18-Aug-04	11.3	70.2
Maizex	LF 850RR	26-Aug-04	26-Aug-04	11.5	70.2
Pioneer	39D80	12-Aug-04	16-Aug-04	12.5	70.3
Pioneer	39H83	8-Aug-04	14-Aug-04	15.0	70.7
Pickseed	ExSile	17-Aug-04	22-Aug-04	11.1	71.2
Pioneer	39T67	7-Aug-04	12-Aug-04	11.0	71.2
Syngenta	N16-N7	13-Aug-04	16-Aug-04	10.3	71.4
Pickseed	2365RR	10-Aug-04	15-Aug-04	11.2	71.5
Maizex	MZ 27-77RR	17-Aug-04	22-Aug-04	10.5	71.6
Syngenta	NX1822	11-Aug-04	15-Aug-04	11.2	71.8
Garst	8961RR	15-Aug-04	20-Aug-04	11.8	71.8
Syngenta	NX1212	13-Aug-04	17-Aug-04	12.0	71.9
Pioneer	39K40	16-Aug-04	21-Aug-04	11.1	72.5
Syngenta	N11-F4	9-Aug-04	14-Aug-04	12.7	72.5
Maizex	MZ 18-02RR	11-Aug-04	16-Aug-04	13.2	72.7
Syngenta	G4043	14-Aug-04	19-Aug-04	11.6	72.8
Garst	8905RR	17-Aug-04	22-Aug-04	12.8	73.2
Monsanto	DKC32-59	12-Aug-04	17-Aug-04	11.4	73.6
Pickseed	ExLeafy	21-Aug-04	24-Aug-04	13.9	73.7
Pickseed	ExAlt	20-Aug-04	22-Aug-04	12.3	75.4

<b>2004 Outlook Silage Trial cont'd</b>					
		<b>Anthesis</b>	<b>Silking</b>	<b>Dry Yield (t/ha)</b>	<b>Whole Plant Moisture %</b>
R <sup>2</sup>		0.95	0.92	0.80	0.46
CV		0.73	0.71	14.63	2.31
Root MSE		1.65	1.64	1.76	1.62
Mean		13-Aug-04	17-Aug-04	12.01	70.08
LSD (alpha = 0.05)		2.12	2.13	3.14	2.17



**\*2005 Alberta Corn Committee Grain Hybrid Performance List**

<b>Company</b>	<b>Hybrid</b>	<b>Location Years</b>	<b>Yield (bu/ac)</b>	<b>Yield (% of Pooled Mean)</b>	<b>Grain Moisture %</b>	<b>Test Weight(lb/bu)</b>	<b>Date of Anthesis</b>
Pioneer	39P78	12	107.1	99.0	23.7	56.3	24-Jul-04
Maizex	MZ 119	6	119.3	110.0	24.7	53.5	26-Jul-04
Hyland	HL2093	23	110.1	101.0	25.1	53.4	27-Jul-04
Pioneer	39F45	18	102.9	96.0	25.2	57.4	21-Jul-04
Hyland	HL2017	32	113.0	106.0	26.7	53.9	24-Jul-04
Maizex	MZ 130	6	93.6	84.0	28.8	50.8	31-Jul-04

\*Hybrid must have five or more station years accumulated over two or more calendar years to be published in list.



2004 Lethbridge Grain Trial							
Company	Hybrid	Anthesis (10%)	Silking (50%)	Yield (g/plot)	Yield (bu/ac)	Moisture (%)	TWT (kg/ha)
Pioneer	39F45	28-Jul-04	30-Jul-04	5701.8	99.4	26.2	.
Maizex	MZ 119	6-Aug-04	7-Aug-04	6036.8	105.2	28.5	.
AAFC	03TC5-50760	5-Aug-04	7-Aug-04	5949.6	103.7	29.7	.
Hyland	HL2093	6-Aug-04	8-Aug-04	5647.8	98.4	30.4	.
Pioneer	39P78	4-Aug-04	6-Aug-04	5753.8	100.3	31.3	.
MTI	4MA15	2-Aug-04	4-Aug-04	6612.1	115.2	31.5	.
Hyland	HL2017	4-Aug-04	6-Aug-04	5875.4	102.4	34.2	.
Maizex	MZ 130	9-Aug-04	11-Aug-04	4826.8	84.1	35.4	.
MTI	4MA14	3-Aug-04	5-Aug-04	6393.0	111.4	37.9	.
Hyland	Bixxio	5-Aug-04	7-Aug-04	5587.8	97.4	38.7	.
R <sup>2</sup>		0.95	0.95	0.65	.	0.80	.
CV		0.36	0.38	8.47	.	7.95	.
Root MSE		0.79	0.82	494.63	.	2.57	.
Mean		4-Aug-04	6-Aug-04	5838.50	.	32.38	.
LSD (alpha = 0.05)		1.15	1.20	718.00	.	3.74	.





<b>2004 Bow Island Grain Trial</b>							
<b>Company</b>	<b>Hybrid</b>	<b>Anthesis (10%)</b>	<b>Silking (50%)</b>	<b>Yield (g/plot)</b>	<b>Yield (bu/ac)</b>	<b>Moisture (%)</b>	<b>TWT (kg/ha)</b>
Hyland	HL2093	2-Aug-04	8-Aug-04	5539.1	96.5	28.0	59.5
Pioneer	39F45	24-Jul-04	31-Jul-04	5029.9	87.7	28.9	64.8
Maizex	MZ 119	31-Jul-04	6-Aug-04	5269.0	91.8	29.1	59.0
Pioneer	39P78	26-Jul-04	4-Aug-04	4196.5	73.1	31.1	59.2
Hyland	HL2017	29-Jul-04	3-Aug-04	4820.2	84.0	31.7	59.4
AAFC	03TC5-50760	31-Jul-04	5-Aug-04	4806.2	83.8	31.8	56.1
Hyland	Bixxio	1-Aug-04	7-Aug-04	3924.8	68.4	38.3	56.6
Maizex	MZ 130	5-Aug-04	11-Aug-04	2611.8	45.5	38.8	53.9
Maizex	EX 1033	2-Aug-04	8-Aug-04	4713.8	82.1	42.5	52.8
R <sup>2</sup>		0.95	0.87	0.76	.	0.89	0.85
CV		0.38	0.62	13.63	.	6.89	2.84
Root MSE		0.81	1.36	625.17	.	2.31	1.64
Mean		31-Jul-04	6-Aug-04	4586.77	.	33.54	57.59
LSD (alpha = 0.05)		1.30	2.12	1004.00	.	3.71	2.63

<b>2004 Outlook Grain Trial</b>							
<b>Company</b>	<b>Hybrid</b>	<b>Anthesis (10%)</b>	<b>Silking (50%)</b>	<b>Yield (g/plot)</b>	<b>Yield (bu/ac)</b>	<b>Moisture (%)</b>	<b>TWT (kg/hi)</b>
Maizex	MZ 130	12-Aug-04	16-Aug-04	1728.4	30.1	7.5	43.8
AAFC	03TC5-50760	5-Aug-04	10-Aug-04	3218.8	56.1	8.1	50.3
Hyland	HL2093	8-Aug-04	14-Aug-04	2828.6	49.3	9.4	51.2
Maizex	MZ 119	10-Aug-04	15-Aug-04	2161.1	37.7	9.8	49.2
Monsanto	DKC26-78	4-Aug-04	10-Aug-04	3548.0	61.8	10.0	38.4
Hyland	HL2017	6-Aug-04	9-Aug-04	3820.9	66.6	10.6	56.0
Hyland	Bixxio	5-Aug-04	12-Aug-04	2000.2	34.9	12.0	46.9
Maizex	EX 1033	10-Aug-04	14-Aug-04	2354.0	41.0	12.1	44.4
R <sup>2</sup>		0.89	0.91	0.86	.	0.45	0.39
CV		0.55	0.44	15.10	.	28.09	18.42
Root MSE		1.21	0.98	403.49	.	2.78	8.70
Mean		7-Aug-04	12-Aug-04	2671.57	.	9.91	47.24
LSD (alpha = 0.05)		1.82	1.48	607.42	.	4.19	13.10