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2007 Crop Variety Highlights and Insect Pest Updates

Regional Testing of Cereal, Oilseed and Pulse Cultivars 2007
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Cultivars are tested regionally to determine their adaptation to the wide range of soil and climatic conditions in Saskatchewan. These tests are conducted at approximately 12 locations each year including two by Scott Research Farm staff (Scott and Glaslyn) and one at the Melfort Research Farm. Results form the basis of cultivar recommendations – yield data can help producers assess the performance of varieties in their area. However, data from a single location can be limited, particularly for new varieties. More comprehensive information is contained in the Saskatchewan Agriculture and Food publication, *Varieties of Grain Crops 2008*. Seed quantities for new varieties listed herein may be limited for 2008.

	<u>Page No.</u>
Table 1: Growing Season Precipitation	1
Table 2: Average Yield of Crop Species on Fallow	2
Table 3: Yield of Spring Wheat Cultivars	3
Table 4: Yield of Oat Cultivars	3
Table 5: Yield of Barley Cultivars	4
Table 6: Yield of Flax Cultivars	4
Table 7: Yield of Lentil Cultivars	5
Table 8: Yield of Pea Cultivars	6
Table 9: Yield of Canola Cultivars	7

Table 1. Growing Season Precipitation (mm) at Scott, Glaslyn and Melfort in 2007

Month	Scott	Glaslyn	Melfort
May	79	70	74
June	103	93	119
July	14	85	48
Total	196	248	241
Long Term Average	158	n/a	188

Table 2. Average Yield of Crop Species on Fallow expressed as a % of hard red spring wheat (AC Barrie) at Scott, Lashburn, Melfort and Loon Lake. For most crops, data presented is based on yields averaged over the past 15-20 years.

		Dark Brown Soil Zone	Thin Black Soil Zone	Thick Black Soil Zone	Grey Wooded Soil Zone
	Cultivar	Scott	Lashburn	Melfort	Loon Lake
Bread Wheat	AC Barrie	100 (2940)	100 (3290)	100 (3440)	100 (2820)
Prairie Spring Wheat	AC Karma, AC Crystal	119	119	129	117
Extra Strong Wheat	Glenlea, AC Glenavon	103	105	111	105
Durum Wheat	Kyle, AC Avonlea	103	103	104	---
Triticale	Frank, AC Certa	125	126	144	---
Barley	Harrington, AC Metcalfe	139	138	112	126
Oat	Calibre	144	144	127	132
Canola	AC Excel, 46A65***	67 ***	66 ***	77 ***	60 ***
Flax	Vimy, CDC Bethune	52	58	49	44
Mustard (Oriental)	Cutlass	77	61 *	---	---
Mustard (Brown)	Commercial Brown	67	59 *	---	---
Mustard (Yellow)	Ochre	51	48 *	---	---
Field Pea	Grand Alfetta	106	99	79	87
Lentil	Laird	61	50 **	47	42

* Less than 4 years of data

** 7 years' data are not included due to lentil crop failure at Lashburn

*** Many newer canola varieties are much higher yielding at 75%-85% of bread wheat

Table 3. Yield of Spring Wheat Cultivars at Scott, Glaslyn and Melfort 2007

Cultivar	2007 Yield (kg/ha)			Long Term Average Yield (% of AC Barrie)		
	Scott	Glaslyn	Melfort	Scott	Glaslyn	Melfort
Bread Wheat						
AC Barrie	3890	2830	2610	100	100 *	100
CDC Abound	3650	2760	2710	94 *	98 *	101 *
CDC Alsask	3700	3230	3020	95 *	114 *	105
Alvena	3290	3140	2820	85 *	111 *	103 *
Goodeve VB	3450	2990	3260	89 *	106 *	124 *
Helios	3470	3010	2540	89 *	106 *	100
CDC Osler	---	---	2590	113	---	99
Infinity	---	---	---	115	---	99
Lillian	---	---	---	111	---	100
Somerset	---	---	---	112	---	93
Unity VB	3890	3040	3970	100 *	107 *	152 *
Waskada	3680	3160	3330	95 *	112 *	128 *
Showstar	3470	2950	2900	89 *	104 *	103 *
Utility Wheat						
AC Andrew	4010	3630	3740	133 *	120 *	144 *
Bhishaj	4100	---	----	136 *	---	---

* Less than 3 years of data

Table 4. Yield of Oat Cultivars at Scott, Glaslyn and Melfort 2007

Cultivar	2007 Yield (kg/ha)			Long Term Average Yield (% of CDC Dancer)		
	Scott	Glaslyn	Melfort	Scott	Glaslyn	Melfort
CDC Dancer	4380	4550	4390	100	100 *	100
Calibre	3900	4210	4920	94	93 *	109
SW Betania	5160	4590	5710	111 *	101 *	130
Hi Fi	4550	4110	5110	104 *	90 *	116 *
Jordan	4290	4230	5780	110 *	93 *	132
Leggett	4630	3940	5350	98	86 *	112
AC Morgan	4620	4760	5670	104	105 *	124
AC Mustang	5090	4980	6030	104	109 *	137 *
CDC Pro-Fi	4120	3300	4760	94 *	72 *	109 *
CDC Sol-Fi	4240	4340	4850	92	95 *	107
SW Triactor	4930	4530	5810	113 *	100 *	132 *
CDC Weaver	4130	4130	5340	101 *	91 *	122
7600M	4500	4130	5410	94 *	91 *	123 *

* Less than 3 years of data

Table 5. Yield of Barley Cultivars at Scott, Glaslyn and Melfort 2007

Cultivar	2007 Yield (kg/ha)			Long Term Average Yield (% of AC Metcalfe)		
	Scott	Glaslyn	Melfort	Scott	Glaslyn	Melfort
TWO ROW						
AC Metcalfe	3250	3300	4200	100	100 *	100
Champion	4500	3610	4800	138 *	110 *	116 *
CDC Coalition	3760	3770	4150	116 *	114 *	110 *
CDC Cowboy	3460	3040	4350	93 *	92 *	103
Formosa	4240	3410	4330	130 *	103 *	108 *
McLeod	4380	3830	4640	116	116 *	115
CDC Mindon	3980	3120	4200	122 *	95 *	102 *
Ponoka	3240	3710	4830	106	113 *	117
SIX ROW						
Alston	3530	3760	3790	108 *	114 *	100 *
CDC Clyde	3600	3520	3350	99 *	107 *	95
CDC Laurence	3870	3770	3920	102 *	114 *	99
Manny	2990	3440	3970	96	104 *	104
Sundre	3630	3680	3800	111 *	112 *	104 *

* Less than 3 years of data

Table 6. Yield of Flax Cultivars at Scott, Glaslyn and Melfort 2007

Cultivar	2007 Yield (kg/ha)			Long Term Average Yield (% of CDC Bethune)		
	Scott	Glaslyn	Melfort	Scott	Glaslyn	Melfort
CDC Bethune	1210	1790	1810	100	100 *	100
CDC Grande	1150	1490	1430	89 *	83	108 *
Prairie Thunder	1180	1640	1910	95 *	92 *	97
CDC Sorrel	1220	1830	1730	101 *	102 *	101

* Less than 3 years of data

Table 7. Yield of Lentil Cultivars at Scott, Glaslyn and Melfort 2007

Cultivar	2007 Yield (kg/ha)			Long Term Average Yield (% of CDC Milestone)		
	Scott	Glaslyn	Melfort	Scott	Glaslyn	Melfort
Small Green						
CDC Milestone	1790		2830	100		100
Eston	1610		2070	87		96
Medium Green						
CDC Impress CL	1920		2230	108 *		79 *
CDC Richlea	1890		2760	98		100
Large Green						
Laird	1780	Test Failed	2280	83		80
CDC Greenland	1760		2430	99 *		101
CDC Improve CL	1630		2420	91 *		98 *
CDC Plato	1890		2620	98		107
Small Red						
CDC Impact CL	1510		2060	85 *		77
CDC Maxim CL	1790		2560	100 *		90 *
CDC Redberry	2000		1910	105		108
CDC Red Rider	1740		2340	98 *		83 *
CDC Rouleau	2080		2350	117 *		103
Extra Small Red						
CDC Impala CL	1840		2630	103 *		93 *
CDC Imperial	1600		1910	90 *		83
CDC Robin	1570		2630	88		98
CDC Rosetown	1830		2790	103 *		122

* Less than 3 years of data

Table 8. Yield of Pea Cultivars at Scott, Glaslyn and Melfort 2007

Cultivar	2007 Yield (kg/ha)			Long Term Average Yield (% of Cutlass)		
	Scott	Glaslyn	Melfort	Scott	Glaslyn	Melfort
Yellow						
Cutlass	3570	2650	3600	100	100 *	100
Canstar	3560	2430	4150	99 *	92 *	111 *
CDC Centennial	3720	2550	3980	104 *	96 *	110 *
CDC Meadow	3580	2450	4550	100 *	92 *	124
Eclipse	3020	2380	3710	84 *	90 *	97
Fusion	2910	2160	3610	81 *	82 *	99 *
Polstead	3400	2330	4140	95 *	88 *	123 *
Reward	3390	2590	4570	95 *	98 *	124 *
SW Benefit	2820	2020	3740	79 *	76 *	97 *
SW Cartier	3360	2410	4090	94 *	91 *	118 *
SW Marquee	3060	2780	4440	85 *	105 *	114
Green						
Bluebird	3000	2470	4150	84 *	93 *	97
CDC Striker	3480	2460	3280	97 *	93 *	87
Cooper	3540	2640	2500	99 *	100 *	101
SW Sargeant	3040	2220	3810	85 *	84 *	107
Tamora	2930	1980	2110	82 *	75 *	77 *
Maple						
CDC Rocket	3450	2990	4030	97 *	113 *	112 *
Silage						
CDC Tucker	3110	2000	3240	87 *	75 *	90 *

* Less than 3 years of data

Table 9. Yield of Argentine Canola Cultivars at Scott and Melfort 2007

Cultivar	Herbicide	2007 Yield (kg/ha) % of 45H21,5020*	
		Scott	Melfort
46A65	CO	87 (1930)	83 (2050)
30314-A5	CF	104	106
5843	CF	91	87
1651 H	CF	96	95
7130-CL	CF	93	91
45H73	CF	104	93
45P70	CF	97	93
SP761 CL	CF	102	105
SP Force CL	CF	85	77
05RHY/ 959	LL	109	99
1143	LL	103	106
5020	LL	102	107
5030	LL	107	122
5070	LL	104	104
5440	LL	116	111
8440	LL	107	108
9590	LL	99	114
4414RR	RR	90	103
4362RR	RR	93	109
1759 S	RR	95	101
1768 S	RR	102	99
1818	RR	93	80
1839V	RR	---	---
1841	RR	100	97
1847V	RR	93	81
1852H	RR	96	101
1855H	RR	103	108
1896	RR	100	90
V1035	RR	105	102
V2018	RR	91	89
93H01 RR	RR	96	105
83S01 RR	RR	93	94
71-45 RR	RR	107	109
43H57	RR	87	96
45H21	RR	98	90
45H24	RR	98	89
45H25	RR	94	108
45H26	RR	101	99
Café	RR	102	87
Rugby	RR	95	90
SP Desirable RR	RR	99	93
SP Banner RR	RR	100	91
SP 621 RR	RR	103	102
SW-PI H02-0474	RR	98	80
46P50	RR	94	97
SP Favourable RR	RR	104	103
43A56	RR	96	83
9551	RR	88	92

Herbicide (CO=Conventional, CF=Clearfield, LL=Liberty Link, RR=Roundup Ready)

* Average of 45H21 and 5020 = 100