Technical Bulletin

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Canada's Seed Partner

AC® Sadash
Soft White Spring Wheat

AC® Sadash is a high yielding and high quality, awned, soft white spring wheat. It was selected for grain yield similar to AC Andrew but in addition, has lower protein than AC Andrew. AC® Sadash is a semi-dwarf with short, strong straw. It was especially selected for production under irrigation in southern Alberta and Saskatchewan to produce high quality, low protein wheat for the SWS milling market. The lower protein of AC® Sadash, along with its high grain yields, should make it very suitable for ethanol production.

Strengths:
- Very high grain yield similar to AC Andrew
- 0.5% lower grain protein than AC Andrew in co-op registration trials
- Maturity similar to AC Andrew
- Excellent lodging resistance, stronger straw than AC Andrew
- Resistant to prevalent races of stripe rust and powdery mildew
- Moderately resistant to stem rust and loose smut

Weaknesses:
- 2% lower grain yield than AC Andrew in 2003 soft white spring wheat co-op registration trial
- 3 cm taller than AC Andrew
- Moderately susceptible to leaf rust
- Susceptible to common bunt and black point – seed should be treated for bunt and smut control
- Moderately susceptible to pre-harvest sprouting

Observations on Soft White Spring Wheat:
- Varieties like AC® Sadash are thought to yield 20% to 35% more than AC Barrie over the long term
- Soft White Spring wheat is the lowest protein wheat class (usually 2 to 3% lower grain protein than CWRS)
- 2006 was the first year that a significant acreage of soft white spring wheat was grown on dryland. Because all the soft white varieties are semi-dwarf in stature and have been developed for irrigated conditions, we are not certain how they will perform under the drought-stressed conditions often experienced on dryland production.

Major risks for dryland production of soft white spring wheat in western Canada:
- Delayed maturity under cool growing conditions
- Late maturity combined with early fall frost
- Moderately susceptible to reduced yield and increased grain protein under drought stress conditions
- Pre-harvest sprouting under wet harvest conditions

Breeder:
AAFC Lethbridge Research Centre
Lethbridge, AB

2003-2005 Soft White Spring Wheat Cooperative Registation Trials

Variety	Yield (% Reed)	Maturity (days)	2003 Lodging 1=erect 9=flat	2003 Height (cm)	Grain Protein (%)	1000 Kernel Weight (mg)
AC Reed	100	108	3.6	75	10.7	32
AC Phil	100	108	4.2	75	+0.1	32
AC Nanda	100	---	3.0	83	---	33
AC Andrew	120	110	3.0	79	+0.5	34
AC®Sadash	118	110	2.9	82	+0.1	36

*Protein of AC Andrew relative to AC Reed in the 1997-99 Coop registration trial

For more information, call 1-800-665-7333 or visit www.secan.com

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2010 Seed Manitoba - Wheat Comparison

Variety	Long Term Average Yield (% AC Barrie)	Site Years Tested	Protein (+/- AC Barrie)	Relative Maturity (days)	Height	Seed Size	Resistance to:							
							Lodging	Loose Smut	Bunt	Leaf Spot	Stem Rust	Leaf Rust	Stripe Rust	FHB
AC Barrie	100		0	0	M	L	G	G	F	P	G	P	P	F
AC Andrew	121	30	-3.8	0	M	M	VG	P	P	n/a	G	VP	VG	F
AC® Sadash	**125**	**12**	**-4.6**	**0**	**M**	**M**	**VG**	**P**	**VP**	**n/a**	**VG**	**VP**	**n/a**	**P**

M=Medium; L=Large; G=Good; VG=Very Good; F=Fair; P=Poor; VP=Very Poor; n/a=Not Available

2010 Varieties of Grain Crops for Saskatchewan – Wheat Comparison

Variety	Years Tested	Yield as % of AC Barrie			Protein	Resistance to:									Relative Maturity (days)	Head Awnedness	Seed Weight (mg)	Test Weight (kg/hl)	Height (cm)
		Area 1 & 2	Area 3 & 4	Irrigation		Lodging	Sprouting	Stem Rust	Leaf Rust	Stripe Rust	Loose Smut	Bunt	Leaf Spot	FHB					
AC Barrie	11	100	100	100	14.8	G	G	G	P	P	G	F	P	F	100	N	36.0	79.9	93
AC Andrew	3	136	137	129	-3.5	G	P	G	P	---	P	P	---	F	+5	Y	+0.7	-1.8	-9
Bjishaj	5	128	---	128	---	G	---	P	F	---	F	P	---	VP	+3	Y	-4.2	-2.0	-7
AC® Sadash	**2**	**141**	**---**	**---**	**-4.2**	**VG**	**P**	**F**	**F**	**G**	**P**	**VP**	**---**	**P**	**+5**	**Y**	**+0.7**	**+0.6**	**-6**

G=Good; VG=Very Good; F=Fair; P=Poor; VP=Very Poor

2010 Alberta Seed Guide – SWS Wheat Comparison

Variety	Overall Yield (1)		Test Yield Category (2)			Comp. Maturity days	Protein %	Test Weight (lb/bu)	Kernel Weight g/1000	Height (cm)	Resistance to:				Tolerance to:		
	All Sites	Station years of testing	Low < 45 bu/ac	Med 45 - 70 bu/ac	High >70 bu/ac						Lodging	Loose Smut	Bunt	Stripe Rust	Leaf Spot	Sprout	FHB
			Yield as % of AC Andrew														
AC Andrew bu/ac	82		38	70	109												
AC Andrew	100	(88)	100	100	100	109	11.5	62	38	79	VG	VP	P	G	XX	F	VP
AC Meena	97-	(51)	102	98	94-	1	-0.6	61	37	80	G	VP	VP	G	XX	F	P
Bhishaj	100	(24)	XX	102	100	0	XX	62	37	85	VG	G	VP	G	XX	F	VP
AC® Sadash	**111+**	**(37)**	**XX**	**106+**	**110+**	**0**	**-0.4**	**63**	**39**	**83**	**VG**	**VP**	**VP**	**G**	**XX**	**F**	**P**

G=Good; VG=Very Good; F=Fair; P=Poor; VP=Very Poor

2007 Ethanol Variety Trials at 13 sites Across the Western Canadian Prairies

Variety	Type	Average Yield % Superb	Average Kernel Weight (mg)	Average Test Weight (kg/hl)
Superb	CWRS	100	35.8	75.6
AC Barrie	CWRS	86	33.5	77.7
5700PR	CPS-Red	106	36.3	77.0
AC Crystal	CPS-Red	107	34.8	76.0
AC Vista	CPS-White	116	37.5	74.2
Snowhite475	CPS-White	112	38.2	75.8
AC® Sadash	**Soft White Spring**	**128**	**31.6**	**75.7**
AC Andrew	Soft White Spring	122	32.7	74.4
Bhishaj	Soft White Spring	124	30.8	74.5
AC Ultima	Triticale	131	42.6	68.9

*This table contains limited grain yield data from only one year of trials in the 2007 Ethanol variety trials across 13 sites at Killam, Sexsmith, Vermillion, Westlock, Lake Lenore, Outlook, Regina, Saskatoon, Scott, Watrous, Melita, Neepawa, and Roblin

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