

Technical Bulletin

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Canada's Seed Partner

AC[®] Sadash Soft White Spring Wheat



Description:

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 Coop 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 Coop 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 Registration Trials

Entry	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

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

2013 Seed Manitoba - Wheat Comparison

Variety	Site Years Tested	Yield bu/ac	Protein (+/- AC Barrie)	Relative Maturity (days)	Height	Spike Awned	Resistance to:							
							Lodging	Sprouting	Loose Smut	Bunt	Leaf Spot	Stem Rust	Leaf Rust	FHB
AC Barrie	164	55	14.5	99	37"	N	G	G	MR	I	MS	MR	MS	I
Harvest	61	58	14.3	-1	-2	N	VG	VG	MR	S	MS	R	MR	S
AC® KANE	78	58	14.6	+1	-2	Y	G	VG	MS	I	I	R	R	I
AC® Unity VB*	53	62	14.2	0	0	Y	F	G	MS	R	I	MR	R	I
Pasteur	24	67	12.9	7	-3	N	VG	F	MS	S	I	MR	R	I
AC Andrew	30	68	11.0	4	-4	Y	VG	P	S	S	---	MR	MS	I
AC® Sadash	34	68	10.8	4	-2	Y	VG	P	I	S	---	MR	I	S

F=Fair; G=Good; VG=Very Good; R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

2013 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	14.9	G	G	G	P	VP	G	F	P	F	100	N	36.0	79.9	93
Harvest	6	101	104	---	-0.4	VG	VG	VG	G	G	G	F	P	VP	-1	N	-0.4	+0.1	-6
AC® Unity VB*	9	117	119	---	-0.7	F	VG	G	VG	P	P	VG	F	F	0	Y	-0.6	+1.0	+1
Pasteur	2	146	135	---	-2.7	VG	G	G	VG	G	P	VP	F	F	+8	N	+2.9	+0.9	-7
AC Crystal	11	118	115	110	-1.3	VG	P	VG	P	VP	P	VG	F	VP	+3	Y	+4.9	-0.1	-11
AC Andrew	5	138	135	---	-3.6	G	P	G	P	F	VP	VP	F	F	+5	Y	+0.7	-1.8	-9
AC® Sadash	4	148	131	---	-4.3	VG	P	G	F	G	F	VP	F	VP	+5	Y	+0.7	+0.6	-6

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

2013 Alberta Seed Guide – SWS Wheat Comparison

Variety	Overall Yield (1)		Test Yield Category (2)			Comp. Maturity days	Test Weight (lb/bu)	Kernel Weight g/1000	Height (cm)	Lodging	Resistance to:		Disease Tolerance						
	All Sites	Station years of testing	Low <55 bu/ac	Med 55 - 85 bu/ac	High >85 bu/ac						Shattering	Sprout	Loose Smut	Bunt	Stripe Rust	Leaf Spot	FHB		
			Yield as % of AC Andrew																
AC Andrew bu/ac	82		45	75	115														
AC Andrew	100	(126)	100	100	100	L	62	38	79	VG	VG	P	VP	P	F	G	VP		
AC Meena	97-	(51)	101	-97	95	L	61	37	80	G	G	F	VP	VP	G	F	P		
AC® Sadash	110+	(51)	113+	109+	109+	L	63	39	82	VG	VG	P	VP	VP	VG	F	P		

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

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