

Technical Bulletin

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SeCan

Canada's Seed Partner

AC[®] Fieldstar VB CWRS Midge Tolerant Wheat



Description:

AC[®] Fieldstar VB is an awned CWRS variety which provides tolerance to the orange wheat blossom midge. AC[®] Fieldstar VB has shown very high grain yield, improved leaf rust resistance and maturity equal to AC Barrie, along with very good sprouting resistance. AC[®] Fieldstar VB is well-adapted across the western Canadian Prairies.

Certified seed of AC[®] Fieldstar VB will be sold as a varietal blend made up of 90% AC[®] Fieldstar and 10% AC[®] Waskada. Blending with the midge susceptible variety AC[®] Waskada, provides a refuge area for non-virulent midge to survive at low levels, thereby extending the useful life of the *Sm1* midge tolerance gene.

Parentage: McKenzie*3//BW174*2/Clark (Clark is a Soft Red Winter Wheat and is the source of midge tolerance)

Strengths:

- Reduced wheat midge damage due to the *Sm1* midge tolerance gene
- Grain yield 111% of AC Barrie, 101% of Superb over all sites in 2004 to 2006 Coop Registration trials
- Grain protein potential 0.4% higher than AC Barrie and McKenzie, 1.3% higher than Superb

- Maturity equal to AC Barrie, 2 to 3 days earlier than Superb
- "Fair" rating for fusarium head blight resistance
- Very good preharvest sprouting resistance (high falling number, and low sprouting score)
- Very good leaf and stem rust resistance
- Very good resistance to common bunt

Neutral Traits:

- Height 1 cm taller than AC Barrie, 9 cm taller than Superb
- Very high test weight, similar to McKenzie
- Intermediate resistance to loose smut and common bunt

Weaknesses:

- Straw strength similar to McKenzie, weaker straw than AC Barrie and Superb
- 2 cm taller than McKenzie, 3 cm taller than AC Barrie

Breeder:

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Agriculture and Agri-Food Canada
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2004-2006 Central Bread Wheat Cooperative Trials - Registration Data

Entry	Yield (% Barrie)	Maturity days	Lodging 1 = erect 9 = flat	Height (cm)	Test wt. (kg/hL)	Kernel Kernel Wt (mg/kernel)	Grain Protein (%)	Sprout Score 1=best	FHB Resistance Rating
AC Barrie	100	100	2.0	96	78	33.4	13.8	4.2	F
Katepwa	98	98	2.8	99	77	32.1	13.6	5.6	F
McKenzie	110	99	2.9	97	78	31.8	13.8	3.0	F
CDC Teal	104	99	2.2	94	77	33.0	14.2	5.9	VP
Superb	109	103	1.8	88	78	36.0	12.9	3.2	P
AC [®] Fieldstar VB*	111	100	2.7	99	79	31.3	14.2	2.1	F

*Varietal Blend

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

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2012 Seed Manitoba - Wheat Comparison

Variety	Long Term Average Yield (% AC Barrie)	Site Years Tested	Protein (+/- AC Barrie)	Relative Maturity (days)	Height	Spike Awned	Resistance to:						
							Lodging	Loose Smut	Bunt	Leaf Spot	Stem Rust	Leaf Rust	FHB
AC Barrie	100	217	0	99	37	N	G	MR	I	MS	MR	MS	I
5602HR	111	89	0.3	1	0	Y	F	R	MR	I	R	R	MR
AC® Unity VB*	113	52	-0.3	0	0	Y	F	MS	R	I	MR	R	I
AC® KANE	107	66	0.0	+1	-2	Y	G	MS	I	I	R	R	I
Harvest	108	60	-0.1	-1	-2	N	VG	MR	S	MS	R	MR	S
McKenzie	110	36	---	-1	0	Y	F	MS	R	I	R	R	I
Superb	105	87	-0.1	+2	-3	Y	VG	I	MR	MS	R	S	MS
AC® Fieldstar VB*	109	42	-0.1	0	+1	Y	F	I	I	I	MR	R	I

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

2012 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	
AC® Goodeve VB*	8	111	111	---	0.0	VG	G	G	G	F	G	P	F	VP	-2	N	+0.8	-0.9	-2	
AC® Unity VB*	8	118	120	---	-0.7	F	G	VG	VG	P	P	VG	F	P	0	Y	-0.6	+1.0	+1	
Harvest	6	101	104	---	-0.4	VG	VG	VG	G	---	G	F	P	VP	-1	N	-0.4	+0.1	-6	
AC® Lillian	7	102	99	---	+0.3	F	G	G	VG	G	F	G	P	VP	0	N	-0.3	-1.1	-1	
McKenzie	6	107	103	109	-0.4	F	G	VG	VG	P	VP	VG	P	F	-1	Y	-1.5	+0.1	+1	
Superb	7	109	108	---	-0.4	G	F	VG	P	VP	F	G	VP	P	+3	Y	+2.6	-0.5	-7	
AC® Fieldstar VB*	8	111	110	---	-0.3	F	VG	G	VG	P	F	G	---	F	0	Y	-2.1	+0.7	+3	

*Varietal Blend G=Good; VG=Very Good; F=Fair; P=Poor; VP=Very Poor

2012 Alberta Seed Guide – CWRs 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:		Disease Resistance:						
	All Sites	Station years of testing	Low < 45 bu/ac	Med 45 - 70 bu/ac	High >70 bu/ac						Lodging	Sprout	Loose Smut	Bunt	Stripe Rust	Leaf Spot	FHB		
			Yield as % of AC Barrie																
AC Barrie bu/ac	59		36	55	79														
AC Barrie	100	(357)	100	100	100	M	13.3	62	37	88	G	G	G	F	VP	P	P	F	
AC® Goodeve VB*	106+	(84)	109+	104	104	M	0.3	62	37	88	VG	G	G	P	F	P	P	VP	
AC® Unity VB*	111+	(67)	112+	110+	111+	M	-0.4	64	36	90	G	G	P	VG	P	P	P	P	
Harvest	102	(114)	98	103	104	M	0.1	62	37	83	VG	VG	G	F	G	P	P	VP	
AC® Lillian	105+	(83)	111+	100	104	M	-0.1	61	37	86	G	G	F	G	VG	P	P	VP	
McKenzie	103+	(104)	101	104	105+	M	-0.9	62	34	90	F	VG	P	VG	P	F	F	F	
Superb	112+	(177)	110+	111+	115+	L	-0.2	62	42	85	G	F	F	G	VP	P	P	P	
AC® Fieldstar VB*	102	(50)	102	102	102	M	-0.3	63	33	88	F	VG	F	G	P	XX	F	F	

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