

Technical Bulletin

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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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SEED AVAILABLE SPRING 2011

2004-2006 Central Bread Wheat Cooperative Trials - Registration Data

Variety	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

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
5602HR	112	77	0.3	1	M	M	F	VG	VG	F	VG	VG	n/a	G
AC [®] KANE	107	43	0.1	1	M	M	G	P	P	F	G	VG	n/a	F
AC [®] Unity VB*	108	29	-0.5	0	M	M	F	P	VG	F	VG	VG	n/a	P
Harvest	108	55	-0.1	-1	M	M	VG	G	F	P	VG	G	n/a	VP
McKenzie	110	37	---	-1	M	M	F	P	VG	F	VG	VG	P	F
Superb	106	89	-0.1	2	M	L	VG	F	VG	P	VG	VP	P	P
AC[®] Fieldstar VB*	104	30	-0.3	0	M	M	F	F	F	F	G	VG	G	F

*varietal blend 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 Awedness	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					
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 [®] Goodeve VB*	6	109	111	---	-0.1	VG	G	G	G	F	G	P	F	VP	-2	N	+0.8	-0.9	-2
AC [®] Unity VB*	6	114	120	---	-0.7	F	G	G	VG	---	P	VG	P	P	0	Y	-0.6	+1.0	+1
Harvest	6	101	104	---	-0.4	VG	VG	G	G	---	G	F	P	VP	-1	N	-0.4	+0.1	-6
AC [®] Lillian	6	103	100	---	+0.2	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	G	VG	P	VP	VG	P	F	-1	Y	-1.5	+0.1	+1
Superb	6	109	109	---	-0.4	G	G	G	P	P	F	G	VP	P	+3	Y	+2.6	-0.5	-7
AC[®] Fieldstar VB*	6	109	109	---	-0.3	F	G	G	VG	---	F	G	---	F	0	Y	-2.1	+0.7	+3

*varietal blend G=Good; VG=Very Good; F=Fair; P=Poor; VP=Very Poor

2010 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:				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 Barrie															
AC Barrie bu/ac	59		36	57	81													
AC Barrie	100	(356)	100	100	100	106	14.4	63	37	89	G	G	F	P	P	G	F	
AC [®] Goodeve VB*	103	(51)	106+	102	100	0	0.1	62	36	88	G	G	P	F	P	XX	VP	
AC [®] Unity VB*	107+	(34)	108	108+	105	1	-0.3	64	36	88	G	P	VG	F	F	G	P	
Harvest	101	(94)	99	103+	101	-1	0.2	62	36	83	VG	G	F	XX	P	VG	VP	
AC [®] Lillian	103	(80)	107	102	100	0	-0.1	61	38	86	G	F	G	G	P	G	VP	
McKenzie	103+	(104)	107+	103	101	-1	-0.9	62	34	90	F	P	VG	P	F	VG	F	
Superb	112+	(155)	112+	113+	111+	2	-0.4	62	42	85	G	F	G	P	P	G	P	
AC[®] Fieldstar VB*	102	(34)	101	102	102	-1	-0.2	64	34	87	F	F	G	G	F	XX	F	

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