# Technical Bulletin

Genes that fit your farm.



# AC® Carberry Canada Western Red Spring Wheat



## **Description:**

AC® Carberry is an awned, semi-dwarf CWRS variety that when compared to Superb has similar grain yield, higher grain protein potential, shorter, stronger straw and much head blight better fusarium resistance. AC® Carberry is equal in maturity to Superb and has good sprouting resistance indicated by a high falling number. AC® Carberry also provides resistance to leaf rust, stem rust, common bunt and loose smut. This variety is well adapted across western Canada but will be especially attractive to wheat producers in the high vielding areas of the Prairies who desire a short, strong strawed variety with good FHB resistance.

Parentage: Alsen/Superb

#### Strengths:

- Grain yield 111% of AC Barrie, 100% of Superb over all sites in 2006 to 2008 Coop Registration trials
- Grain protein potential equal to AC Barrie, 0.5% higher than Superb
- Height 12 cm shorter than AC Barrie, 5 cm shorter than Superb

- Lodging resistance better than AC Barrie and Superb
- Good preharvest sprouting resistance (high falling number)
- Good leaf and stem rust resistance
- Good resistance to common bunt
- "Good" rating for fusarium head blight resistance

#### **Neutral Traits:**

- Higher test weight than AC Barrie and Superb
- Fair resistance to loose smut
- Seed is held tightly to stem but glumes fall easily as crop matures

#### Weaknesses:

 Maturity two days later than AC Barrie, equal to Superb

## **Breeder:**

Dr. Ron DePauw Semiarid Prairie Agricultural Research Centre Agriculture and Agri-Food Canada Swift Current, SK

# 2006-2008 Western Bread Wheat Cooperative Trials - Registration Data

			Lodging		Test	Kernel	Grain		FHB
	Yield	Maturity	1 = erect	Height	Weight	Weight	Protein	Falling	Resistance
Variety	(% of AC Barrie)	(days)	9 = flat	(cm)	(kg/kl)	(mg/kernel)	(%)	Number	Rating
AC Barrie	100	99	2.1	97	79.6	33.8	15.2	398	F
Katepwa	97	98	3.1	101	78.4	32.0	14.9	388	F
Superb	110	101	2.1	90	79.5	38.2	14.7	385	Р
Laura	101	100	3.8	100	79.0	31.9	15.0	375	
AC <sup>®</sup> Lillian	96	99	3.1	97	78.1	35.0	16.3	398	VP
AC <sup>®</sup> Carberry	111	101	1.7	85	80.8	35.0	15.2	377	G

<sup>&#</sup>x27;AC' is an official mark used under license from Agriculture & Agri-Food Canada

# 2016 Seed Manitoba - Wheat Comparison

				Maturity	Height		Resistance to:									
	Site Years	Yield		+/-	+/-	Spike			Loose		Leaf	Stem	Leaf	Stripe		
Variety	Tested	bu/ac	Protein %	99 days	32"	Awned	Lodging	Sprouting	Smut	Bunt	Spot	Rust	Rust	Rust	FHB	
AC Barrie	165	58	14.5	0	+5	N	G	G	MR	I	MS	MR	MS	S	ı	
5603HR	41	63	14.4	+2	+5	Υ	G	VG	MS	ı	MR	MR	R	MS	ı	
AC® KANE	92	61	14.5	+1	+3	Υ	G	VG	MS	ı	I	R	R	MR	ı	
Harvest	61	60	14.3	-1	+3	N	VG	VG	MR	S	MS	R	MR	MR	S	
AAC Brandon	42	65	14.2	+2	0	Υ	VG	Р	MR	S	I	R	R	MR	MR	
AAC Elie	42	64	14.4	+2	-1	Υ	VG	F	ı	ı	I	R	R	MR	ı	
AAC Redwater	42	60	14.6	-2	3	Υ	G	VG	MS	- 1	MS	R	R	MR	ı	
AC <sup>®</sup> Cardale	28	63	14.5	+2	+1	Υ	VG	G	I	MR	MS	R	R	S	MR	
AC® Carberry	70	62	14.5	+2	0	Y	VG	F	MR	R	MS	MR	R	MR	MR	

Lodging Ratings: F=Fair; G=Good; VG=Very Good

Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

# 2016 Varieties of Grain Crops for Saskatchewan – Wheat Comparison

		Yield a	as % of	Carberry					Resista	ance to:					Relative		Seed	Test	
	Years	Area	Area					Stem	Leaf	Stripe	Loose		Leaf		Maturity	Head	Weight	Weight	Height
Variety	Tested	1 & 2	3 & 4	Irrigation	Protein	Lodging	Sprouting	Rust	Rust	Rust	Smut	Bunt	Spot	FHB	(days)	Awnedness	(mg)	(kg/hl)	(cm)
Harvest	6	94	103		-0.3	VG	VG	R	MR	MR	MR	S	MS	S	-3	N	-2.8	-1.6	+10
AAC Brandon	4	107	105		-0.5	G	Р	R	R	MR	MR	S	- 1	MR	0	Υ	-0.1	-0.2	-1
AAC Redwater	4	102	101		+0.1	F	VG	R	R	MR	MS		MS	-	-5	Y	-2.8	-1.7	+7
AC <sup>®</sup> Lillian	6	93	96		+1.1	F	G	MR	R	R	ı	MR	MR	S	-2	N	0.0	-2.7	+12
AC® Cardale	5	99	102		-0.2	G	G	R	R	S	ı	MR	MS	MR	-1	Y	-2.8	-1.2	+3
AC® Stettler	6	105	107	100	+0.2	G	G	MR	MS	MR	R	MR	MS	MS	-1	Y	-1.4	-1.1	+7
AC® Carberry	6	100	100		14.7	VG	F	MR	R	MR	MR	R	MS	MR	105	Υ	36	80.3	84

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

2016 Alberta Seed Guide - CWRS Wheat Comparison

Overall Yield (1) Te				Test Yield Category (2)							Resistance to:		Disease Resistance:					
Variety	All Sites	Station years of testing	Low < 45 bu/ac	Med 45 - 70 bu/ac	High >70 bu/ac	Maturity Rating	Protein %	Test Weight (lb/bu)	Kernel Weight g/1000	Height (cm)	Ldg.	Sprout	Loose Smut	Bunt	Stripe Rust	Leaf Spot	FHB	
Yield as % of AC Barrie																		
AC Barrie bu/ac	59		34	55	78													
AC Barrie	100		100	100	100	М	14.1	64	37	89	G	G	MR	-	S	MS	I	
Harvest	102	118	98	103	104	M	-0.1	62	36	84	VG	VG	MR	S	MR	MS	S	
AAC Brandon	114+	41	106	117+	113+	М	-0.2	64	38	81	G	Р	MR	S	MR		MR	
AAC Redwater	103	41	96	106	104	E	0.0	64	35	87	G	VG	MS	-	MR	MS	I	
AC® Cardale	105+	41	100	106+	105	М	-0.3	63	37	84	G	G		S	MR	MS	MR	
AC® Stettler	112+	69	119+	109+	111+	М	-0.3	63	37	84	G	G	R	I	I	S	MS	
AC® Carberry	107+	91	116+	105	106+	L	-0.1	64	39	77	VG	F	MR	R	MR	MS	MR	

VG = Very Good; G = Good; F = Fair; P = Poor; VP = Very Poor; Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible