# Technical Bulletin Genes that fit your farm.



## **AC® Sadash VB**Soft White Spring Wheat





AC® Sadash VB is a high yielding and high quality, awned, soft white spring wheat.

In 2017 AC® Sadash was identified as containing the *Sm1* trait – meaning it is tolerant to wheat midge and requires the addition of a refuge (AC Andrew) and stewardship to protect the midge tolerance for the future.

Producers with farm saved seed from nonblended AC® Sadash (purchased prior to 2018) are asked to do one of three things:

- 1) Purchase seed of AC® Sadash VB (or any newer product with refuge added)
- 2) Add 1 bus of AC Andrew to every 9 bushels of AC® Sadash
- 3) Spray every year to control midge.

AC® Sadash VB was selected for grain yield similar to AC Andrew but in addition, has lower protein than AC Andrew. AC® Sadash VB 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 VB, along with its high grain yields, should make it very suitable for ethanol production.

#### **Observations on Soft White Spring Wheat:**

- Varieties like AC<sup>®</sup> Sadash VB are thought to yield 25% to 30% more than AC<sup>®</sup> Carberry over the long term
- Soft White Spring wheat is one of the lowest protein wheat classes (usually 2 to 3% lower grain protein than CWRS)

### 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

#### 2012-2014 Western Soft White Spring Wheat Cooperative Registration Trials

Variety	Mean* (kg/ha)	% AC Andrew	Maturity* (days)		- 5		Kernel Weight (mg/kernel)	
AC Andrew	6772	100	105	2.5	92	76.4	38.0	
AC® Sadash VB	6993	103	105	2.6	94	77.9	37.7	

Variety				Common Bunt			Black Point	Leaf Spot	FHB
AC Andrew	MS	MR	I	S	S	R	I	I	I
AC® Sadash VB	I	MR	R	S	I	R	I		S

2022 Seed Manitoba - Wheat Comparison

		-		Maturity	Height		Resistance to:								
	Site Years	Yield		+/-	+/-	Spike			Loose	Common	Leaf	Stem	Leaf	Stripe	
Variety	Tested	bu/ac	Protein %	99 days	81cm	Awned	Lodging	Sprouting	Smut	Bunt	Spot	Rust	Rust	Rust	FHB
AAC Brandon	85	71	14.4	2	0	Υ	VG	Р	MR	S	l	R	R	MR	MR
AAC Awesome VB	33	89	11.5	4	10	Υ	G	Р	I	I	l	R	MR	R	ı
AAC Paramount	34	84	11.5	4	8	Υ	VG	Р	MR	S		ı	ı	R	MS
KWS® Alderon	33	78	12.0	9	-5	N	VG	F		MS	l	MR	R	MR	
KWS® Sparrow VB	33	81	12.5	8	0	N	VG	G		I	l	MR	R	MR	
Pasteur	39	79	12.9	7	5	N	VG	G	MS	S	l	MR	R	MR	ı
WPB Whistler	31	80	11.8	7	1	N	VG			I		R	R	R	ı
AC® Sadash VB	35	77	10.8	4	8	Υ	VG	Р	ı	S		MR		R	S

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

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

#### 2022 Varieties of Grain Crops for Saskatchewan – Wheat Comparison

		Yield as	s % AAG	C Brandon					Resistance to:							Stem	Relative	Seed	Test	
	Years	Area	Area					Stem	Leaf	Stripe	Loose		Leaf			Solid-	Maturity	Weight	Weight	Height
Variety	Tested	1 & 2	3 & 4	Irrigation	Protein	Lodging	Sprouting	Rust	Rust	Rust	Smut	Bunt	Spot	FHB	Awns	ness	(days)	(mg)	(kg/hl)	(cm)
AAC Brandon	6	100	100	100	14.3	G	Р	R	R	MR	MR	S		MR	Υ	Η	101	35.9	80.5	81
AAC Awesome VB	5	125	126	127	-3.0	F	Р	R	MR	R		- 1	ı	ı	Υ	I	+1	+4.0	-1.7	+7
AAC Paramount VB	5	122	122	128	-3.2	VG	Р	ı	1	R	MR	S		MS	Υ	Ι	+1	+0.5	-2.9	+7
AC Andrew	5	122	129		-2.9	VG	Р	MR	MS		S	S		I	Υ	Η	+1	-0.2	-3.3	0
KWS® Alderon	5	126	121	121	-2.9	VG	F	MR	R	MR		MS	ı	MS	N	Ι	+4	-0.1	-7.6	-5
KWS® Sparrow VB	5	124	125	128	-2.5	VG	G	MR	R	MR		-	ı	MR	N	Ι	+4	-0.4	-4.4	0
Pasteur	5	112	118		-1.9	VG	G	MR	R	MR	MS	S		I	Ν	Η	+2	+0.1	-1.4	+4
WPB Whistler	2	99	115		-2.9	VG		R	R	R		I		MS		Η	+3	+1.6	-4.4	-4
AC® Sadash VB	5	129	131		-3.6	VG	Р	MR	ı	R		S		s	Υ	Ι	0	-1.0	-2.8	+3

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

#### 2022 Alberta Seed Guide - Special Purpose and Soft White Spring Wheat Comparison

	Overal	Overall Yield		Yield Category (% AAC Brandon)							Resista	ince to:	Disease Tolerance:		
Variety	Station years of testing	Overall yield	Low <77 bu/ac	High >77 bu/ac	Rating (Days +/- AAC Brandon)	Protein %	Test Weight (lb/bu)	Kernel Weight g/1000	Height (cm)	Awns (Y/N)	Lodging	Sprouting	Bunt	Stripe Rust	FHB
AAC Brandon (bu/ac)		83	52	93											
AAC Brandon - check		100	100	100	104	14.0	63	40	84	Υ	G	Р	S	MR	MR
AAC Awesome VB	37	128	124	129	0	-2.5	62	44	92	Υ	G	Р		R	_
AAC Paramount VB	39	125	116	127	0	-3.0	61	41	89	Υ	VG	Р	S	R	MS
AC Andrew	44	121	115	123	+1	-3.1	61	40	85	Υ	VG	Р	Α	I	I
KWS® Alderon	37	128	116	131	+4	-2.8	58	41	81	N	VG	F	MS	MR	MS
KWS® Sparrow VB	37	128	122	130	+4	-2.6	60	41	85	N	VG	G		MR	MR
Pasteur	41	120	115	122	+3	-2.0	61	41	85	N	VG	G	S	MR	
WPB Whistler	27	120	113	122	+3	-2.6	59	41	78	N	VG	XX		R	MS
AC® Sadash VB	39	125	118	127	0	-3.2	63	40	88	Υ	VG	Р	Α	R	S

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