# 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)		Maturity*		- 5	Test Weight (kg/hl)	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	ı	MR	R	S	I	R	ı	I	S

2023 Seed Manitoba - Wheat Comparison

	Site		Maturity Height Resistance to:												
	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 Awesome VB	33	92	11.6	4	10	Υ	G	Р	ı	I	-	R	MR	R	ı
AAC Brandon	97	73	14.5	2	0	Υ	VG	Р	MR	S		R	R	MR	MR
AAC Paramount VB	34	87	11.5	4	8	Υ	VG	Р	MR	S		I	I	R	MS
KWS® Alderon	33	81	12.0	9	-5	N	VG	F		MS	ı	MR	R	MR	
KWS® Sparrow VB	33	83	12.6	8	0	N	VG	G		I	ı	MR	R	MR	
Pasteur	39	81	13.0	7	5	N	VG	G	MS	S	ı	MR	R	MR	I
WPB Whistler	31	83	11.9	7	1	N	VG			I		R	R	R	I
AC® Sadash VB	35	77	10.8	4	8	Υ	VG	Р	ı	S		MR	I	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

#### 2024 Varieties of Grain Crops for Saskatchewan – Wheat Comparison

	Years	Yield as % AAC Years Brandon			Resistance to:														
Variety	Tested	Area 1 & 2	Area 3 & 4	Protein	Lodging	Sprouting	Stem Rust	Leaf Rust	Stripe Rust	Loose Smut	Bunt	Leaf Spot	FHB	Awns	Stem Solid- ness	Relative Maturity (days)	Seed Weight (mg)	Test Weight (kg/hl)	Height (cm)
AAC Brandon	6	100	100	14.3	G	Р	R	R	MR	MR	S	ı	MR	Υ	Н	101	35.9	80.7	81
AAC Awesome VB	5	125	126	-3.0	F	Р	R	MR	R	I	I	ı	- 1	Υ	Н	+1	+4.2	-1.6	+8
AAC Paramount VB	5	122	122	-3.3	VG	Р	I	I	R	MR	S		MS	Υ	Н	+1	+0.7	-2.8	+7
AC Andrew	5	122	129	-3.0	VG	Р	MR	MS	I	S	S		ı	Υ	Н	+1	+0.1	-3.1	+1
KWS® Alderon	5	126	121	-3.0	VG	F	MR	R	MR		MS	ı	MS	Ν	Н	+4	+0.1	-7.4	-5
KWS® Sparrow VB	5	124	125	-2.6	VG	G	MR	R	MR		- 1	ı	MR	N	Н	+4	-0.1	-4.3	+1
Pasteur	5	112	118	-2.0	VG	G	MR	R	MR	MS	S	ı	ı	Ν	Н	+2	+0.4	-1.2	+5
WPB Whistler	4	108	118	-2.9	VG	F	R	R	R		- 1		MS	N	S	+3	+1.5	-4.6	-3
AC® Sadash VB	5	128	131	-3.7	VG	P	MR	I	R	ı	S		S	Υ	Н	+1	-0.6	-2.7	+4

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 Stem Solidness: H = Hollow, SS = semi-solid, S = solid;

#### 2024 Alberta Seed Guide - Special Purpose and Soft White Spring Wheat Comparison

				Yield Category (% AAC Brandon)		Maturity						Resistance to:		Disease Tolerance:		
Variety	Most Recent Year of Testing	Station years of testing	Overall yield	Low <77 bu/ac	High >77 bu/ac		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	94			,								
AAC Brandon - check	2023	71	100	100	100	104	14.0	63	39	84	Υ	G	Р	S	MR	MR
AAC Awesome VB	2018	37	128	124	129	0	-2.5	62	44	92	Υ	G	Р	ı	R	I
AAC Paramount VB	2019	39	125	116	127	0	-3.0	61	41	89	Υ	VG	Р	S	R	MS
AC Andrew	2023	71	118	111	120	0	-3.0	62	40	85	Υ	VG	Р	S	ı	I
KWS® Alderon	2018	37	128	116	131	+4	-2.8	58	41	81	N	VG	F	MS	MR	MS
KWS <sup>®</sup> Sparrow VB	2018	37	128	122	130	+4	-2.6	60	41	85	N	VG	G	ı	MR	MR
Pasteur	2021	52	119	113	120	+3	-2.4	63	39	86	N	VG	G	S	MR	I
WPB Whistler	2021	27	120	113	122	+3	-2.6	60	40	78	N	VG	F		R	MS
AC® Sadash VB	2019	39	125	118	127	0	-3.2	63	40	88	Y	VG	Р	S	R	S

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