

# Technical Bulletin

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Canada's Seed Partner

## AC Andrew (SWS 241) Soft White Spring Wheat

### AC Andrew is the highest yielding Soft White Spring Wheat variety presently registered in western Canada.

It was selected for very high yield, along with short, strong straw for production under irrigation in southern Alberta and Saskatchewan.

#### Strengths:

- Yield 118% of AC Reed
- Highest yielding soft white spring wheat variety presently registered
- Excellent lodging resistance
- Semi-dwarf with short straw
- Resistant to prevalent races of stem rust, stripe rust, powdery mildew (stripe rust was seen in southern Alberta and southern Saskatchewan in 2006)
- Moderately resistant to black point
- Shattering resistant
- Improved sprouting resistance over older SWS varieties (moderate sprouting resistance)

#### Weaknesses:

- Susceptible to loose smut and bunt – seed must be treated for smut and bunt control
- Moderately susceptible to pre-harvest sprouting
- Moderate resistance to leaf rust and black point
- 4 days later maturing than the Check variety AC Reed in registration trials (112 days to maturity in Co-op registration trials at sites in southern Alberta and Saskatchewan)
- Due to its late maturity, AC Andrew may suffer from leaf rust in some years since leaves could still be green when leaf rust spores arrive from the US

#### Observations on Soft White Spring Wheat:

- AC Andrew is traditionally thought to yield 35% more than AC Barrie and 18% more than AC Reed (an older SWS variety)
- Soft White Spring wheat is the lowest protein wheat class (usually 2 to 3% lower grain protein than CWRS)
- 2006 was the first year that a significant acreage of AC Andrew was grown on dryland. Because AC Andrew is a semi-dwarf that was developed for irrigated conditions, we are not certain how it will perform under the drought-stressed conditions often experienced on dryland production

#### Major risks for dryland production:

- 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, Alberta

### 2009 Alberta Seed Guide – Soft White Spring Wheat

Variety	Yield as % of AC Andrew						Maturity (days)	Test Weight (lb/bu)	Kernel Weight (g/1000)	Height (cm)	Resistance to:				Tolerance to:	
	Area 1	Area 2	Area 3	Area 4	Area 5&6	Irrigation					Loose Smut	Bunt	Common Root Rot	Stripe Rust	Sprout	FHB
AC Andrew	100	100	100	100	100	100	112	62	38	70	VP	P	F	G	F	VP
AC Meena	98	83	102	95	103	95	1	61	37	78	VP	VP	F	G	F	P
Bishaj	97	XX	XX	XX	96	106	0	62	37	85	G	VP	G	G	F	VP
AC® Sadash	107	109	121	110	102	116	-3	63	40	85	VP	VP	F	G	F	P

NS=Not Suited For Area EX=Excellent; VG=Very Good; G=Good; F=Fair; P=Poor; VP=Very Poor R=Resistant; I=Intermediate; S=Susceptible; MR=Moderately Resistant; XX=Insufficient Data FHB=Fusarium Head Blight