

# Technical Bulletin

Genes that fit *your* farm.

**SeCan**

Canada's Seed Partner

## AAC Tradition Hard Red Spring Wheat (CGC class to be determined)

### Description:

**AAC Tradition is an awned, medium height hard red spring wheat developed for organic production systems.** AAC Tradition has shown good straw strength and excellent grain yield potential when tested on organically managed plots. AAC Tradition has a well rounded disease package being moderately resistant to leaf rust, stem rust and bunt as well as intermediate resistance to FHB. AAC Tradition is well adapted across western Canada.

**Parentage:** 98B25-AS6D01/ND744

### Strengths:

- Grain yield 109% AC® Unity VB in Bread Wheat Organic trials
- Grain yield 101% of AC® Unity VB in coop registration trials
- Superior lodging resistance to AC® Unity VB, similar to CDC Go
- Large kernels with high test weight

### Neutral Traits:

#### 2011-2013 Central Bread Wheat Cooperative Trials - Registration Data

| Variety              | Yield<br>(% of<br>AC® Unity VB) | Maturity<br>(days) | Lodging<br>1 = erect<br>9 = flat | Height<br>(cm) | Test<br>Weight<br>(kg/kl) | Kernel<br>Weight<br>(mg/kernel) | FHB<br>Resistance<br>Rating |
|----------------------|---------------------------------|--------------------|----------------------------------|----------------|---------------------------|---------------------------------|-----------------------------|
| AC® Unity VB         | 100                             | 95                 | 3.6                              | 96             | 79.1                      | 33.0                            | I                           |
| 5603HR               | 94                              | 97                 | 2.4                              | 97             | 78.0                      | 31.7                            | I                           |
| <b>AAC Tradition</b> | <b>101</b>                      | <b>99</b>          | <b>2.0</b>                       | <b>88</b>      | <b>81.1</b>               | <b>35.5</b>                     | <b>I</b>                    |

#### 2010, 2012 and 2013 Bread Wheat Organic “B” trials

| Variety              | Yield<br>(% of<br>AC Cadillac) | Maturity<br>(days) | Lodging<br>1 = erect<br>9 = flat | Height<br>(cm) | Test<br>Weight<br>(kg/kl) | Kernel<br>Weight<br>(mg/kernel) | Grain<br>Protein |
|----------------------|--------------------------------|--------------------|----------------------------------|----------------|---------------------------|---------------------------------|------------------|
| AC Cadillac          | 100                            | 92.2               | 2.8                              | 100            | 79.5                      | 33.8                            | 14.1             |
| AC® Unity VB         | 101                            | 91.9               | 2.7                              | 95             | 79.0                      | 31.7                            | 14.0             |
| CDC Go               | 99                             | 93.7               | 1.9                              | 83             | 77.6                      | 36.9                            | 14.2             |
| CDC Kernen           | 99                             | 93.9               | 2.4                              | 98             | 77.5                      | 33.3                            | 14.3             |
| <b>AAC Tradition</b> | <b>110</b>                     | <b>96.4</b>        | <b>1.8</b>                       | <b>88</b>      | <b>81.3</b>               | <b>36.5</b>                     | <b>13.7</b>      |

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- Moderately resistant to stem rust, leaf rust and common bunt
- Intermediate resistance to FHB
- Maturity similar to AC® Carberry, 4 days later than AC® Unity VB
- 8cm shorter than AC® Unity VB

### Weaknesses:

- susceptible to stripe rust and loose smut

### Breeders:

Dr. Gavin Humphreys  
AAFC Cereal Research Centre  
Winnipeg, MB

**PBR 91 Applied for**

## 2017 Seed Manitoba - Wheat Comparison

| Variety              | Site Years Tested | Yield bu/ac | Protein %   | Maturity +/- 99 days | Height +/- 91cm | Spike Awned | Resistance to: |           |            |           |           |           |           |             |          |
|----------------------|-------------------|-------------|-------------|----------------------|-----------------|-------------|----------------|-----------|------------|-----------|-----------|-----------|-----------|-------------|----------|
|                      |                   |             |             |                      |                 |             | Lodging        | Sprouting | Loose Smut | Bunt      | Leaf Spot | Stem Rust | Leaf Rust | Stripe Rust | FHB      |
| AC Barrie            | 165               | 58          | 14.5        | 0                    | +13             | N           | G              | G         | MR         | I         | MS        | MR        | MS        | S           | I        |
| AC® Carberry         | 84                | 62          | 14.6        | +2                   | 0               | Y           | VG             | F         | MR         | R         | MS        | MR        | R         | MR          | MR       |
| AC® Cardale          | 28                | 63          | 14.5        | +2                   | +3              | Y           | VG             | G         | I          | MR        | MS        | R         | R         | S           | MR       |
| AAC Brandon          | 46                | 65          | 14.2        | +2                   | 0               | Y           | VG             | P         | MR         | S         | I         | R         | R         | MR          | MR       |
| AAC Elie             | 43                | 64          | 14.3        | +2                   | -3              | Y           | VG             | F         | I          | I         | I         | R         | R         | MR          | I        |
| Harvest              | 61                | 60          | 14.3        | -1                   | +8              | N           | VG             | VG        | MR         | S         | MS        | R         | MR        | MR          | S        |
| AAC Redwater         | 43                | 60          | 14.5        | -2                   | +8              | Y           | G              | VG        | MS         | I         | MS        | R         | R         | MR          | I        |
| CDC Bradwell         | 33                | 62          | 14.4        | +3                   | +5              | Y           | VG             | ---       | MR         | R         | MS        | MR        | R         | MS          | I        |
| <b>AAC Tradition</b> | <b>33</b>         | <b>62</b>   | <b>14.3</b> | <b>+4</b>            | <b>+5</b>       | <b>Y</b>    | <b>G</b>       | <b>VG</b> | <b>MS</b>  | <b>MR</b> | <b>I</b>  | <b>R</b>  | <b>MR</b> | <b>S</b>    | <b>I</b> |

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

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

## 2017 Varieties of Grain Crops for Saskatchewan – Wheat Comparison

| Variety              | Years Tested | Yield as % of Carberry |            |            | Protein     | Resistance to: |           |           |           |             |            |           |           |          | Relative Maturity (days) | Head Awnedness | 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 | FHB      |                          |                |                  |                     |             |
| AC® Carberry         | 6            | 100                    | 100        | 100        | 14.6        | VG             | F         | MR        | R         | MR          | MR         | R         | MS        | MR       | 100                      | Y              | 34.5             | 79.0                | 83          |
| AC® Cardale          | 5            | 99                     | 101        | ---        | -0.1        | F              | G         | R         | R         | S           | I          | MR        | MS        | MR       | 0                        | Y              | -0.7             | -1.1                | +2          |
| AAC Brandon          | 5            | 106                    | 106        | ---        | -0.4        | G              | P         | R         | R         | MR          | MR         | S         | I         | MR       | 0                        | Y              | +0.5             | -0.1                | 0           |
| AAC Elie             | 5            | 105                    | 105        | ---        | -0.2        | G              | F         | R         | R         | MR          | I          | I         | I         | I        | 0                        | Y              | +0.3             | 0.0                 | -1          |
| Harvest              | 6            | 94                     | 103        | ---        | -0.3        | G              | VG        | R         | MR        | MR          | MR         | S         | MS        | S        | -3                       | N              | -2.8             | -1.6                | +10         |
| AAC Redwater         | 5            | 102                    | 101        | ---        | +0.1        | F              | VG        | R         | R         | MR          | MS         | I         | MS        | I        | -5                       | Y              | -3.0             | -1.5                | +9          |
| AC® Stettler         | 6            | 105                    | 107        | 100        | +0.2        | F              | G         | MR        | MS        | MR          | R          | MR        | MS        | MS       | -1                       | Y              | -1.4             | -1.1                | +7          |
| CDC Bradwell         | 3            | 100                    | 107        | ---        | 0.0         | VG             | F         | MR        | R         | MS          | MR         | R         | MS        | I        | -1                       | Y              | -1.2             | +0.5                | +9          |
| <b>AAC Tradition</b> | <b>2</b>     | <b>106</b>             | <b>107</b> | <b>---</b> | <b>-0.5</b> | <b>F</b>       | <b>VG</b> | <b>R</b>  | <b>MR</b> | <b>S</b>    | <b>MS</b>  | <b>MR</b> | <b>I</b>  | <b>I</b> | <b>+1</b>                | <b>Y</b>       | <b>+2.2</b>      | <b>+1.4</b>         | <b>+8</b>   |

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

## 2017 Alberta Seed Guide - CWRS Wheat Comparison

| Variety                 | Overall Yield (1) |                          | Test Yield Category (2) |                   |                | Maturity Rating | Protein % | Test Weight (lb/bu) | Kernel Weight g/1000 | Height (cm) | Resistance to: |        | Disease Resistance: |      |             |           |     |
|-------------------------|-------------------|--------------------------|-------------------------|-------------------|----------------|-----------------|-----------|---------------------|----------------------|-------------|----------------|--------|---------------------|------|-------------|-----------|-----|
|                         | All Sites         | Station years of testing | Low < 45 bu/ac          | Med 45 - 70 bu/ac | High >70 bu/ac |                 |           |                     |                      |             | Ldg.           | Sprout | Loose Smut          | Bunt | Stripe Rust | Leaf Spot | FHB |
|                         |                   |                          |                         |                   |                |                 |           |                     |                      |             |                |        |                     |      |             |           |     |
| Yield as % of AC Barrie |                   |                          |                         |                   |                |                 |           |                     |                      |             |                |        |                     |      |             |           |     |
| AC Barrie bu/ac         | 60                |                          | 36                      | 57                | 81             |                 |           |                     |                      |             |                |        |                     |      |             |           |     |
| AC Barrie               | 100               |                          | 100                     | 100               | 100            | M               | 14.0      | 62                  | 38                   | 87          | G              | G      | MR                  | I    | S           | MS        | I   |
| AAC Brandon             | 114+              | 41                       | 106                     | 117+              | 113+           | M               | -0.2      | 64                  | 38                   | 81          | G              | P      | MR                  | S    | MR          | I         | MR  |
| AAC Redwater            | 103               | 41                       | 96                      | 106               | 104            | E               | 0.0       | 64                  | 35                   | 87          | G              | VG     | MS                  | I    | MR          | MS        | I   |
| AC® Cardale             | 105+              | 41                       | 100                     | 106+              | 105            | M               | -0.3      | 63                  | 37                   | 84          | G              | G      | I                   | S    | MR          | MS        | MR  |
| AC® Carberry            | 107+              | 91                       | 116+                    | 105               | 106+           | L               | -0.1      | 64                  | 39                   | 77          | VG             | F      | MR                  | R    | MR          | MS        | MR  |
| AC® Stettler            | 112+              | 69                       | 119+                    | 109+              | 111+           | M               | -0.3      | 63                  | 37                   | 84          | G              | G      | R                   | I    | I           | S         | MS  |
| AAC Tradition           | Insufficient Data |                          |                         |                   |                |                 |           |                     |                      |             |                |        |                     |      |             |           |     |

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

For more information, call 1-800-665-7333 or visit [www.secan.com](http://www.secan.com)