

# Technical Bulletin

Genes that fit *your* farm.

**SeCan**

Canada's Seed Partner

## AAC Stronghold (Solid Stem) Canada Western Amber Durum



Progress Through Research  
Le progrès grâce à la recherche

### Description:

**AAC Stronghold is solid stem Canada Western Amber Durum with excellent yield potential and short strong straw. The solid stem of AAC Stronghold provides excellent wheat stem sawfly tolerance.** AAC Stronghold has a good overall disease package, high test weight, good gluten strength, good pasta colour and low grain Cadmium. AAC Stronghold should be a good fit in all durum growing areas of Western Canada.

**Parentage:** DT805/DT795

### Strengths:

- Very good straw strength, better than all the checks
- 2cm shorter than AC<sup>®</sup> Strongfield
- 5% higher grain yield than AC<sup>®</sup> Strongfield
- Solid stem for excellent wheat stem sawfly tolerance
- Resistant to leaf and stem rust and loose smut rust
- Low grain cadmium
- Good rating to sprouting tolerance

### Neutral Traits:

- -0.4% Protein compared to AC<sup>®</sup> Strongfield
- Moderately resistant to stripe rust
- Moderately susceptible to FHB

### Weaknesses:

- Approximately 2 day later maturing than AC<sup>®</sup> Strongfield

### Breeder:

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

**PBR 91 Protected  
PVP Granted**



**Hollow Stem vs Solid Stem**

### 2013-2015 Western Canadian Durum Cooperative Trials - Registration Data

| Variety                     | Yield (% of AC <sup>®</sup> Strongfield) | Maturity (days) | Lodging 1 = erect 9 = flat | Height (cm) | Grain Protein (%) | TKW (g)     | Gluten Strength Index % |
|-----------------------------|--|-----------------|----------------------------|-------------|-------------------|-------------|-------------------------|
| AC <sup>®</sup> Strongfield | 100                                      | 101             | 3.1                        | 89.5        | 13.9              | 41.5        | 80.5                    |
| AAC Cabri                   | 104                                      | 103             | 3.0                        | 93.0        | 13.6              | 40.7        | 79.5                    |
| AC Navigator                | 92                                       | 102             | 2.2                        | 77.2        | 13.4              | 44.3        | 88.5                    |
| <b>AAC Stronghold</b>       | <b>105</b>                               | <b>103</b>      | <b>1.4</b>                 | <b>87.4</b> | <b>13.5</b>       | <b>44.0</b> | <b>68.5</b>             |

AC<sup>®</sup> is an official mark used under license from Agriculture & Agri-Food Canada

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

**2024 Varieties of Grain Crops for Saskatchewan - Canada Western Amber Durum**

| Variety               | Years Tested | Yield % AC® Strongfield |            |            | Protein     | Resistance to: |           |           |           |             |            |          |           |                 |          | Head Awns | Stem Solidness | Rel. Maturity (days) | Seed Weight (mg) | Volume 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® Strongfield       | 6            | 100                     | 100        | 100        | 14.3        | P              | F         | R         | R         | MR          | R          | MR       | I         | S               | Y        | H         | 101            | 42.9                 | 79.7             | 87                    |             |
| AAC Antler            | 2            | 108                     | 104        | ---        | 0.0         | F              | F         | R         | R         | R           | ---        | R        | ---       | MS <sup>6</sup> | Y        | H         | +1             | -1.9                 | +0.9             | +2                    |             |
| AAC Grainland         | 5            | 105                     | 108        | 104        | -0.2        | F              | G         | MR        | R         | R           | R          | R        | MS        | MS              | Y        | S         | +1             | -0.4                 | -0.6             | +1                    |             |
| AAC Spitfire          | 5            | 108                     | 110        | 111        | -0.4        | G              | F         | R         | R         | R           | MS         | R        | MS        | S               | Y        | H         | 0              | 0.0                  | -0.1             | -1                    |             |
| CDC Defy              | 5            | 111                     | 111        | 115        | -0.9        | G              | F         | MR        | R         | I           | ---        | R        | ---       | MS <sup>6</sup> | Y        | H         | 0              | -3.0                 | +1.3             | +4                    |             |
| CDC Vantta            | 3            | 109                     | 97         | 113        | -0.8        | G              | G         | I         | R         | R           | ---        | R        | ---       | MS              | Y        | H         | +3             | -0.9                 | +1.0             | -8                    |             |
| Transcend             | 5            | 102                     | 105        | 93         | -0.1        | F              | G         | R         | R         | R           | S          | R        | I         | MS <sup>6</sup> | Y        | H         | +1             | -1.1                 | +0.1             | +7                    |             |
| <b>AAC Stronghold</b> | <b>5</b>     | <b>101</b>              | <b>100</b> | <b>112</b> | <b>-0.3</b> | <b>VG</b>      | <b>G</b>  | <b>R</b>  | <b>R</b>  | <b>MR</b>   | <b>R</b>   | <b>I</b> | <b>I</b>  | <b>MS</b>       | <b>Y</b> | <b>S</b>  | <b>+2</b>      | <b>+0.9</b>          | <b>+0.7</b>      | <b>-2</b>             |             |

F=Fair; G=Good; VG=Very Good; 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; MS<sup>6</sup> = these varieties generally express lower Fusarium Head Blight symptoms compared to other MS rated cultivars

**2024 Alberta Seed Guide - Canada Western Amber Durum**

| Variety                        | Most Recent Year of Testing | Overall Station years of testing | Overall Yield | Yield as % of AC® Strongfield |                | Maturity Rating (days +/- AC® Strongfield) | Protein %   | Test Weight (lb/bu) | Kernel Weight (mg) | Height (cm) | Resistance to: |           | Disease Tolerance: |             |           |
|--------------------------------|-----------------------------|----------------------------------|---------------|-------------------------------|----------------|--|-------------|---------------------|--------------------|-------------|----------------|-----------|--------------------|-------------|-----------|
|                                |                             |                                  |               | Low <77 bu/ac                 | High >77 bu/ac |  |             |                     |                    |             | Lodging        | Sprouting | Bunt               | Stripe Rust | FHB       |
| <b>AC® Strongfield (bu/ac)</b> |                             |                                  |               | <b>68</b>                     | <b>54</b>      | <b>100</b>                                 |             |                     |                    |             |                |           |                    |             |           |
| AC® Strongfield                | 2023                        | 180                              | 100           | 100                           | 100            | 107  | 14.5        | 62                  | 44                 | 86          | F              | F         | MR                 | MR          | S         |
| AAC Antler                     | 2023                        | 33                               | 102           | 104                           | 100            | +1   | +0.2        | 63                  | 42                 | 87          | F              | F         | R                  | R           | MS        |
| AAC Grainland                  | 2020                        | 11                               | 97            | 97                            | XX             | +1   | -0.5        | 62                  | 43                 | 86          | F              | G         | R                  | R           | MS        |
| AAC Spitfire                   | 2016                        | 21                               | 98            | 98                            | XX             | 0  | -0.6        | 61                  | 46                 | 83          | G              | F         | R                  | R           | S         |
| CDC Defy                       | 2021                        | 18                               | 105           | 106                           | 102            | 0  | -1.0        | 63                  | 42                 | 90          | G              | F         | R                  | I           | MS        |
| CDC Vantta                     | 2023                        | 12                               | 101           | XX                            | 99             | +4   | -0.7        | 62                  | 42                 | 76          | VG             | G         | R                  | R           | MS        |
| Transcend                      | 2022                        | 55                               | 101           | 102                           | 99             | +1   | +0.2        | 62                  | 42                 | 93          | F              | G         | R                  | R           | MS        |
| <b>AAC Stronghold</b>          | <b>2023</b>                 | <b>29</b>                        | <b>104</b>    | <b>101</b>                    | <b>108</b>     | <b>+1</b>                                  | <b>-0.5</b> | <b>62</b>           | <b>45</b>          | <b>83</b>   | <b>VG</b>      | <b>G</b>  | <b>I</b>           | <b>MR</b>   | <b>MS</b> |

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