

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[®] Strongfield
- 5% higher grain yield than AC[®] 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[®] Strongfield
- Moderately resistant to stripe rust
- Moderately susceptible to FHB

Weaknesses:

- Approximately 2 day later maturing than AC[®] Strongfield

Breeder:

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

PBR 91 Protected



Hollow Stem vs Solid Stem

2013-2015 Western Canadian Durum Cooperative Trials - Registration Data

| Variety | Yield (% of AC [®] Strongfield) | Maturity (days) | Lodging 1 = erect 9 = flat | Height (cm) | Grain Protein (%) | TKW (g) | Gluten Strength Index % |
|-----------------------------|--|-----------------|----------------------------|-------------|-------------------|-------------|-------------------------|
| AC [®] 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 |
| AAC Stronghold | 105 | 103 | 1.4 | 87.4 | 13.5 | 44.0 | 68.5 |

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For more information, call 1-800-665-7333 or visit www.secan.com

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2023 Varieties of Grain Crops for Saskatchewan - Canada Western Amber Durum

| Variety | Years Tested | Yield % AC® Strongfield | | | Protein | Resistance to: | | | | | | | | | | Head Awns | Stem Solid- ness | Rel. Maturity (days) | Seed Weight (mg) | Volume Weight (Kg/hl) | Height (cm) |
|-----------------------|--------------|----------------------------|-------------|-----------------|-------------|----------------|-----------|--------------|--------------|----------------|---------------|----------|--------------|-----------------|----------|--------------|------------------------|----------------------------|------------------------|-----------------------------|----------------|
| | | Area 1&2 | Area 3&4 | Irrig- ation | | Lodging | Sprouting | Stem Rust | Leaf Rust | Stripe Rust | Loose Smut | Bunt | Leaf Spot | FHB | | | | | | | |
| AC® Strongfield | 6 | 100 | 100 | 100 | 14.4 | P | F | R | R | MR | R | MR | I | S | Y | H | 102 | 43 | 79.7 | 88 | |
| AAC Antler | 1 | 109 | 108 | --- | -0.2 | F | --- | R | R | R | --- | R | --- | MS ⁶ | Y | H | +1 | -2.0 | +0.8 | +2 | |
| AAC Grainland | 5 | 105 | 108 | 104 | -0.3 | F | G | MR | R | R | R | R | MS | MS | Y | S | +1 | -0.5 | -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 | -2 | |
| CDC Defy | 4 | 112 | 112 | 113 | -0.9 | G | F | MR | R | I | --- | R | --- | MS ⁶ | Y | H | 0 | -3.2 | +1.3 | +4 | |
| CDC Vantta | 2 | 108 | 96 | --- | -0.8 | G | G | I | R | R | --- | R | --- | MS | Y | H | +3 | -1.1 | +0.9 | -8 | |
| Transcend | 5 | 102 | 105 | 93 | -0.2 | F | G | R | R | R | S | R | I | MS ⁶ | Y | H | +1 | -1.1 | +0.1 | +7 | |
| AAC Stronghold | 5 | 101 | 100 | 112 | -0.3 | VG | G | R | R | MR | R | I | I | MS | Y | S | +2 | +0.8 | +0.6 | -3 | |

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; MS⁶ = these varieties generally express lower Fusarium Head Blight symptoms compared to other MS rated cultivars

2023 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 |
| AC® Strongfield (bu/ac) | | | | 68 | 54 | 100 | | | | | | | | | |
| AC® Strongfield | 2022 | 177 | 100 | 100 | 100 | 107 | 14.5 | 62 | 44 | 86 | P | F | MR | MR | S |
| 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 | 2022 | 9 | 102 | XX | XX | +4 | -0.7 | 62 | 42 | 76 | VG | G | R | R | MS |
| Transcend | 2022 | 49 | 100 | 101 | 98 | +2 | +0.6 | 62 | 42 | 93 | F | G | R | R | MS |
| AAC Stronghold | 2022 | 26 | 104 | 101 | 108 | +1 | -0.4 | 63 | 44 | 84 | VG | G | I | MR | MS |

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