

Technical Bulletin

Genes that fit *your* farm.

SeCan

Canada's Seed Partner

AAC Grainland (Solid Stem) Canada Western Amber Durum



Progress Through Research
Le progrès grâce à la recherche

Description:

AAC Grainland is a solid stem Canada Western Amber Durum with excellent grain yield potential, fair lodging tolerance and a good disease package. The solid stem of AAC Grainland provides excellent wheat stem sawfly tolerance. AAC Grainland should be a good fit in all dryland durum growing areas of Western Canada. If growing under irrigation then we would suggest the use of a plant growth regulator.

Parentage: A0463&AP018/Transcend

Strengths:

- 10% higher grain yield than AC® Strongfield
- Good sprouting tolerance rating
- Similar height to AC® Strongfield, 1cm taller
- Rated resistant to common bunt, loose smut as well as leaf and stripe rust
- Moderately resistant to stem rust
- Low grain cadmium

Neutral Traits:

- 1 day later maturity than AC® Strongfield
- -0.2% Protein compared to AC® Strongfield
- Moderately susceptible to FHB and leaf spot

Weaknesses:

- Fair rating to lodging tolerance, improved compared to AC® Strongfield

Breeder:

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Semiarid Prairie Agricultural Research Centre
Agriculture and Agri-Food Canada
Swift Current, SK

PBR 91 Protected



Hollow Stem vs Solid Stem

2015-2017 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 | 98.6 | 3.9 | 86.5 | 14.2 | 40.3 | 72 |
| AC Navigator | 93 | 99.0 | 3.3 | 75.8 | 13.7 | 42.7 | 80 |
| Brigade | 108 | 101.4 | 2.6 | 94.2 | 13.4 | 42.2 | 92 |
| AAC Cabri | 102 | 100.4 | 3.9 | 88.9 | 14.0 | 40.1 | 71 |
| AAC Grainland | 110 | 99.9 | 3.0 | 87.8 | 14.0 | 40.3 | 83 |

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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 Spitfire | 5 | 108 | 110 | 111 | -0.4 | G | F | R | R | R | MS | R | MS | S | Y | H | 0 | 0.0 | -0.1 | -2 | |
| 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 | |
| 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 Grainland | 5 | 105 | 108 | 104 | -0.3 | F | G | MR | R | R | R | R | MS | MS | Y | S | +1 | -0.5 | -0.6 | +1 | |

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 Spitfire | 2016 | 21 | 98 | 98 | XX | 0 | -0.6 | 61 | 46 | 83 | G | F | R | R | S |
| AAC Stronghold | 2022 | 26 | 104 | 101 | 108 | +1 | -0.4 | 63 | 44 | 84 | VG | G | I | MR | MS |
| 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 Grainland | 2020 | 11 | 97 | 97 | XX | +1 | -0.5 | 62 | 43 | 86 | F | G | R | R | MS |

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