

# AAC Coldfront Canada Western Red Winter Wheat



### **Description:**

AAC Coldfront is a very high yielding winter wheat variety with short strong straw, medium-late maturity and excellent disease resistance. AAC Coldfront should be well-suited to all winter wheat growing regions of western Canada.

## Parentage:

Norstar/CDC Falcon//LF1318

## Strengths:

- Excellent grain yield potential, 107% of AAC Elevate and 101% of AAC Wildfire
- VG rating to lodging resistance
- Medium height, similar to AAC Elevate and -3cm compared to AAC Wildfire
- Medium-late maturity, 1 day earlier than AAC Elevate and 2 days earlier than AAC Wildfire
- VG rating for winter survival
- Resistant to leaf rust, stem rust and stripe rust

#### **Neutral Traits:**

- Intermediate resistant to FHB
- Test weight within the range of the checks
- Grain protein within the range of the checks

#### Weakness:

• Susceptible to common bunt

#### Breeder:

Dr. Robert J. Graf Agriculture and Agri-Food Canada Lethbridge, AB

**PBR 91 Protected** 

2018-2020 Western Winter Wheat Cooperative Registration Trial Data

| Variety       | Yield<br>(% Check<br>Mean) | Maturity<br>(days) | Lodging<br>1 = erect<br>9 = flat | Height<br>(cm) | Test<br>Weight<br>(kg/hl) | Seed<br>Mass<br>(mg) | Grain<br>Protein<br>(%) | Winter<br>Survival<br>(%) | Stem<br>Rust | Stripe<br>Rust | FHB |
|---------------|----------------------------|--------------------|----------------------------------|----------------|---------------------------|----------------------|-------------------------|---------------------------|--------------|----------------|-----|
| AAC Elevate   | 103                        | 216.0              | 2.0                              | 76             | 80.2                      | 37.4                 | 11.9                    | 87                        | MR           | S              |     |
| CDC Buteo     | 98                         | 215.9              | 4.0                              | 81             | 82.6                      | 33.2                 | 12.4                    | 89                        | ı            | S              | MR  |
| Emerson       | 97                         | 217.4              | 1.8                              | 79             | 81.4                      | 29.4                 | 13.3                    | 88                        | R            | MR             | R   |
| Moats         | 102                        | 216.3              | 3.0                              | 81             | 81.1                      | 32.3                 | 12.4                    | 88                        | S            | MR             | S   |
| AAC Coldfront | 111                        | 217.8              | 1.7                              | 76             | 81.9                      | 32.8                 | 12.4                    | 89                        | R            | R              | İ   |

## 2024 Seed Manitoba - Winter Wheat Comparison

|               |                         |                |              |                       |                      |                                 | Resistance to: |                |              |              |                |     |  |  |  |
|---------------|-------------------------|----------------|--------------|-----------------------|----------------------|---------------------------------|----------------|----------------|--------------|--------------|----------------|-----|--|--|--|
| Variety       | Site<br>Years<br>Tested | Yield<br>Bu/ac | Protein<br>% | Height<br>+/-<br>75cm | Relative<br>Maturity | Relative<br>Winter<br>Hardiness | Lodging        | Common<br>Bunt | Stem<br>Rust | Leaf<br>Rust | Stripe<br>Rust | FHB |  |  |  |
|               |                         |                |              |                       |                      |                                 |                |                |              |              |                |     |  |  |  |
| AAC Overdrive | 5                       | 82             | 11.7         | +4                    | E                    | VG                              | VG             | R              | R            | MR           | R              | MR  |  |  |  |
| AAC Wildfire  | 33                      | 89             | 11.7         | +10                   | L                    | VG                              | G              | MR             | S            | 1            | R              | MR  |  |  |  |
| AC® Emerson   | 69                      | 83             | 12.7         | +11                   | М                    | G                               | VG             | S              | R            | 1            | MR             | R   |  |  |  |
| CDC Buteo     | 86                      | 80             | 11.6         | +16                   | М                    | VG                              | F              | S              | 1            | 1            | S              | MR  |  |  |  |
| CDC Falcon *  | 103                     | 79             | 11.8         | 0                     | Е                    | F                               | VG             | S              | MR           | MR           | S              | S   |  |  |  |
| Moats         | 35                      | 83             | 12.1         | +16                   | E                    | G                               | F              | MS             | R            | R            | MR             | S   |  |  |  |
| AAC Coldfront | 14                      | 92             | 11.8         | +7                    | M                    | VG                              | VG             | S              | R            | R            | R              | ĺ   |  |  |  |

F=Fair; G=Good; VG=Very Good; R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

## 2024 Varieties of Grain Crops for Saskatchewan - Winter Wheat Comparison

|               | Site   | Yield as % c | of CDC Buteo | Protein |          |         |      | Resistar | nce to: |      | Seed | Volume   |        |         |        |
|---------------|--------|--------------|--------------|---------|----------|---------|------|----------|---------|------|------|----------|--------|---------|--------|
|               | Years  |              |              | Content | Winter   |         | Stem | Leaf     | Stripe  |      |      | Relative | Weight | Weight  | Height |
| Variety       | Tested | Area 1 & 2   | Area 3 & 4   | (%)     | Survival | Lodging | Rust | Rust     | Rust    | Bunt | FHB  | Maturity | (mg)   | (kg/hL) | (cm)   |
| CDC Buteo     | 25     | 100          | 100          | 12.0    | VG       | F       | ı    | ı        | S       | S    | MR   | M        | 33.7   | 81.1    | 90     |
| AAC Wildfire  | 12     | 111          | 115          | -0.1    | VG       | G       | S    | I        | MR      | MR   | MR   | VL       | +1.2   | -2.3    | -5     |
| Radiant       | 23     | 102          | 102          | 0.0     | VG       | VG      | S    | S        | S       | S    | S    | L        | +1.8   | -2.2    | -1     |
| Moats         | 16     | 103          | 101          | +0.3    | G        | F       | R    | MR       | MR      | MS   | S    | М        | -1.1   | -0.6    | +1     |
| AAC Coldfront | 5      | 113          | 117          | +0.3    | VG       | VG      | R    | R        | R       | S    | I    | L        | -1.7   | +0.3    | -7     |

F=Fair; G=Good; VG=Very Good; R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

# 2024 Alberta Seed Guide - CWRW Wheat Comparison

|                 |   |  |                      | d Test<br>egory      | Agronomic Characteristics: |                 |           |                           |            |             |                       | Disease Resistance |              |              |      |     |
|-----------------|---|--|----------------------|----------------------|----------------------------|-----------------|-----------|---------------------------|------------|-------------|-----------------------|--------------------|--------------|--------------|------|-----|
| Variety         | Overall<br>Station<br>Years of<br>Testing | Overall<br>Yield as<br>% of<br>Radiant | Low<br>< 80<br>bu/ac | High<br>>80<br>bu/ac | Winter<br>Survival         | Maturity<br>(d) | Protein % | Test<br>Weight<br>(lb/bu) | TKW<br>(g) | Height (cm) | Resistance to Lodging | Stripe<br>Rust     | Leaf<br>Rust | Stem<br>Rust | Bunt | FHB |
| Radiant (bu/ac) |   | 76                                     | 61                   | 95                   |                            |                 |           |                           |            |             |                       |                    |              |              |      |     |
| Radiant         |   |  | 100                  | 100                  | VG                         | 219             | 12.0      | 63                        | 35         | 89          | VG                    | S                  | S            | S            | S    | S   |
| AAC Overdrive   | 21  | 108                                    | 106                  | 111                  | VG                         | -3              | +0.6      | 62                        | 31         | 80          | VG                    | R                  | MR           | R            | R    | MR  |
| AAC Wildfire    | 79  | 113                                    | 115                  | 109                  | VG                         | +2              | +0.2      | 63                        | 38         | 85          | G                     | MR                 | Ī            | S            | MR   | MR  |
| AAC Coldfront   | 31  | 111                                    | 111                  | 110                  | VG                         | 0               | +0.4      | 64                        | 34         | 83          | VG                    | R                  | R            | R            | S    | ı   |

VG=Very Good; G=Good; F=Fair; P=Poor; VP=Very Poor; R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

<sup>\*</sup>CDC Falcon has moved to the Canada Western General Purpose class in August 2014