

Technical Bulletin

Genes that fit *your* farm.

SeCan

Canada's Seed Partner

CDC Bow 2-Row Malting Barley



Progress Through Research
Le progrès grâce à la recherche

CDC Bow is a high yielding strong strawed two-row malting barley with large plump kernels and lower grain protein. CDC Bow has grain protein similar to CDC Copeland, malt enzyme activity between AC Metcalfe and CDC Copeland, extract greater than both checks, malt β -glucan lower than both checks and friability and FAN greater than both checks. CDC Bow is widely adapted across the Canadian Prairies and is presently undergoing market development trials with maltsters and brewers.

Strengths:

- 9% higher yield than AC Metcalfe (2011 & 2012 Coop Trials)
- Straw strength greater than the checks including Xena
- Grain protein 8/10% lower than AC Metcalfe, similar to CDC Copeland
- Low malt β -glucan,
- Test weight and kernel weight greater than the checks
- Higher % plump kernels than the checks
- Resistant to covered smut and stem rust

Neutral Traits:

- 1cm taller than AC Metcalfe
- 1 day later maturing than AC Metcalfe
- Intermediate resistance to spot blotch
- Malt enzyme activity between AC Metcalfe and CDC Copeland

Weaknesses:

- Susceptible or moderately susceptible to true loose smut, false smut, scald, septoria and FHB

Breeder:

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PBR 91 Protected

Currently undergoing malt barley market development

Averaged Characteristics from 2011 & 2012 Western Cooperative Two-Row Barley Registration Trials

| Variety | Yield (% of AC Metcalfe) | Maturity (days) | Grain Protein (%) | Height (cm) | Lodging 1 = best 9 = flat | Kernel Weight (mg) | % Plump | Test Weight (kg hl) |
|----------------|--------------------------|-----------------|-------------------|-------------|---------------------------|--------------------|-------------|---------------------|
| CDC Copeland | 106 | 92.7 | 11.3 | 85.9 | 3.5 | 44.2 | 87.6 | 63.4 |
| Xena | 112 | 92.9 | -- | 81.5 | 3.2 | 47.6 | 88.8 | 65.6 |
| AC Metcalfe | 100 | 92.4 | 12.2 | 81.5 | 3.6 | 43.1 | 86.8 | 64.7 |
| CDC Bow | 109 | 93.4 | 11.4 | 83.0 | 2.2 | 47.2 | 92.5 | 65.5 |

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

Seed Manitoba 2019 - Malting Barley Comparison

| Variety | Site Years Tested | Yield bu/ac | Protein +/- check | Maturity +/- 88 days | Height +/- 89cm | Test Tw. +/- 48.7lb/bu | Rough or Smooth Awns | Lodging | Loose Smut | Surface-Borne Smut | Root Rot | Netted Net Blotch | Spotted Net Blotch | Spot Blotch | Stem Rust | Fusarium Head Blight |
|----------------|-------------------|-------------|-------------------|----------------------|-----------------|------------------------|----------------------|----------|------------|--------------------|-----------|-------------------|--------------------|-------------|-----------|----------------------|
| AC Metcalfe | 192 | 96 | 13.0 | 0 | 0 | 0 | R | F | R | I | I | S | I | I | MR | I |
| CDC Copeland | 51 | 97 | 12.6 | 0 | +5 | -0.5 | R | F | MS | I | I | I | I | S | MR | I |
| CDC Fraser | 32 | 107 | 12.2 | +1 | 0 | -0.7 | R | G | R | MR | MS | MR | MR | MR | MR | I |
| CDC Kindersley | 34 | 102 | 12.7 | -1 | -3 | 0 | R | G | S | R | I | MS | MR | I | MR | I |
| Lowe | 35 | 101 | 12.4 | +2 | +5 | -0.4 | R | G | R | R | --- | I | MR | I | S | MR |
| CDC Bow | 44 | 105 | 12.1 | +1 | +3 | +0.5 | R | G | S | I | MS | S | MR | I | MR | MS |

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

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

2019 Saskatchewan Varieties of Grain - Malting Barley Comparison

| Variety | # Rows | Awn Type | Yield as % of AC Metcalfe | | Relative Maturity | Lodging | Resistance to: | | | | | | | | |
|----------------|----------|----------|---------------------------|------------|-------------------|-----------|---------------------|----------------------|-------------|-----------|------------|-------------|-----------|-----------|----------------------|
| | | | Area 1 & 2 | Area 2 & 3 | | | Net-Form Net Blotch | Spot-Form Net Blotch | Spot Blotch | Scald | Loose Smut | Other Smuts | Root Rot | Stem Rust | Fusarium Head Blight |
| AC Metcalfe | 2 | R | 100 | 100 | M | F | S | I | I | MS | R | I | I | MR | I |
| CDC Copeland | 2 | R | 107 | 108 | M | F | I | I | S | MS | MS | I | I | MR | I |
| CDC Fraser | 2 | R | 112 | 115 | M | G | MR | R | MR | MS | R | R | MS | MR | I |
| CDC Kindersley | 2 | R | 105 | 107 | E | G | MS | MR | I | S | S | R | I | MR | I |
| Lowe | 2 | R | 112 | 110 | L | F | I | MR | I | MR | R | R | --- | S | MR |
| CDC Bow | 2 | R | 111 | 111 | M | VG | S | MR | I | MS | S | I | MS | MR | MS |

M=Medium; L=Late; G=Good; VG=Very Good; F=Fair; P=Poor; VP=Very Poor

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

2019 Alberta Seed Guide - Malting Barley Comparison

| Variety | 2 or 6 Row | Awn | All sites | Station Years | Low <75 bu/ac | Medium 75-100 bu/ac | High 100-125 bu/ac | Very High >125 bu/ac | Maturity Days +/- AC Metcalfe | Test Weight lb/bu | Kernel Weight g/1000k | Height (cm) | Lodging | Disease Tolerance | | | | | | |
|----------------------------|------------|----------|------------|---------------|---------------|---------------------|--------------------|----------------------|-------------------------------|-------------------|-----------------------|-------------|-----------|-------------------|-------------|-----------|-----------|----------------------|---------------------|------------------|
| | | | | | | | | | | | | | | Loose Smut | Other Smuts | Root Rot | Scald | Spot Form Net blotch | Net Form Net Blotch | Tolerance to FHB |
| AC Metcalfe (bu/ac) | | | | | 59 | 88 | 110 | 137 | | | | | | | | | | | | |
| AC Metcalfe | 2 | R | 100 | 538 | 100 | 100 | 100 | 100 | M | 52 | 46 | 79 | F | R | I | I | S | I | S | I |
| CDC Copeland | 2 | R | 103 | 137 | 98 | 104 | 104 | 104 | M | 51 | 48 | 81 | F | MS | I | I | S | I | I | I |
| CDC Fraser | 2 | R | 109 | 39 | XX | 114 | 110 | 108 | M | 51 | 49 | 76 | G | R | MR | MS | MS | MR | MR | I |
| CDC Kindersley | 2 | R | 104 | 47 | XX | 102 | 104 | 104 | E | 53 | 43 | 78 | G | S | R | I | S | MR | MR | MS |
| Lowe | 2 | R | 111 | 42 | XX | 113 | 117 | 106 | L | 51 | 50 | 87 | F | R | R | XX | MR | MR | I | MR |
| CDC Bow | 2 | R | 104 | 42 | XX | 106 | 105 | 104 | M | 51 | 48 | 77 | VG | S | I | MS | MS | MR | S | MS |

Fl. & Cov. Smut=False Loose & Covered Smuts; R=Rough; G=Good; VG=Very Good; F=Fair; P=Poor; VP=Very Poor

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

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