

CANADA WESTERN RED SPRING WHEAT

As grain yields increase, protein content generally decreases. Some of the newer varieties have both higher protein and grain yield. To control true *loose smut* of wheat only a systemic fungicide will work as the pathogen is found inside the seed. To control the other types of smut (*covered*, *false loose* and *bunt*) a non-systemic fungicide seed treatment will work as the disease pathogen is on the outside of the seed.

| CWRS Wheat | | Yield as % of Katepwa | | | | | | | | | |
|---|---------------|------------------------------|-------------|------------------|---------------|---------------|-------------|------------------|-------------|-------------------------|------------------|
| Variety | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | |
| | 2003 Yield | | 1994-2003 | | 2003 Yield | | 1994-2003 | | 2003 | 1994-2003 | |
| | bus / acre | % of Check | Avg. (%) | Station Years | bus / acre | % of Check | Avg. (%) | Station Years | Avg. (%) | Avg. (%) | Station Years |
| 5500 HR | 52 ab | 110 | 104 | [4] | 75 efg | 95 | 99 | [5] | 103 | 102 | [9] |
| 5601HR | 48 a-d | 101 | 95 | [2] | 76 d-g | 95 | 98 | [2] | 98 | 96 | [4] |
| AC Barrie | 51 a-d | 107 | 100 | [7] | 79 a-f | 100 | 94 | [10] | 103 | 97 | [17] |
| AC Inrepid | 46 bcd | 97 | 102 | [5] | 83 abc | 104 | 103 | [7] | 100 | 103 | [12] |
| AC Splendor | 48 a-d | 102 | 98 | [6] | 77 b-g | 97 | 94 | [8] | 99 | 96 | [14] |
| Alikat | 47 bcd | 99 | 98 | [4] | 75 efg | 94 | 96 | [5] | 96 | 97 | [9] |
| CDC Bounty | 48 a-d | 102 | 103 | [4] | 82 a-e | 103 | 103 | [5] | 102 | 103 | [9] |
| CDC Imagine | 46 bcd | 98 | 106 | [3] | 78 a-g | 99 | 103 | [3] | 98 | 104 | [6] |
| CDC Teal | 44 d | 93 | 101 | [6] | 75 efg | 94 | 96 | [9] | 94 | 99 | [15] |
| Harvest | 45 cd | 95 | 99 | [3] | 72 gh | 90 | 97 | [3] | 93 | 98 | [6] |
| Journey | 46 bcd | 98 | 104 | [3] | 74 fg | 93 | 93 | [3] | 96 | 98 | [6] |
| Kanata** | 31 e | 65 | 80 | [3] | 67 h | 84 | 84 | [4] | 74 | 82 | [7] |
| Katepwa | 47 a-d | 100 | 100 | [7] | 79 a-f | 100 | 100 | [10] | 100 | 100 | [17] |
| <i>Lillian (BW776)*</i> | 50 a-d | 105 | 105 | [1] | 84 ab | 106 | 106 | [1] | 105 | 105 | [2] |
| McKenzie | 51 abc | 108 | 104 | [4] | 81 a-f | 101 | 101 | [6] | 105 | 103 | [10] |
| Prodigy | 54 a | 113 | 112 | [4] | 76 c-g | 95 | 100 | [6] | 104 | 106 | [10] |
| Roblin | 45 cd | 95 | 95 | [6] | 76 d-g | 95 | 95 | [9] | 95 | 95 | [15] |
| Snowbird** | 48 a-d | 101 | 103 | [3] | 79 a-g | 99 | 97 | [4] | 100 | 100 | [7] |
| Superb | 53 ab | 111 | 110 | [3] | 85 a | 107 | 107 | [3] | 109 | 108 | [6] |
| LSD (P=.05) = | 6.80 | | | | 7.21 | | | | | | |
| CV value (%) = | 10.14 | | | | 6.56 | | | | | | |
| Varieties not tested in 2003 (1989 - 2002) | | | | | | | | | | Last Year Tested | |
| 5600 HR | | | 103 | [3] | | | 108 | [4] | (2002) | 106 | [7] |
| AC Abey | | | 104 | [4] | | | 110 | [6] | (2002) | 107 | [10] |
| AC Cadillac | | | 97 | [4] | | | 83 | [6] | (2001) | 90 | [10] |
| AC Cora | | | 100 | [3] | | | 102 | [6] | (2000) | 101 | [9] |
| AC Domain | | | 94 | [4] | | | 90 | [7] | (2000) | 92 | [11] |
| AC Eatonia | | | 99 | [4] | | | 99 | [7] | (2000) | 99 | [11] |
| AC Elsa | | | 110 | [5] | | | 107 | [7] | (2002) | 109 | [12] |
| AC Majestic | | | 109 | [4] | | | 102 | [7] | (2001) | 106 | [11] |
| AC Michael | | | 100 | [4] | | | 100 | [7] | (2000) | 100 | [11] |
| AC Minto | | | 103 | [5] | | | 103 | [7] | (1995) | 103 | [12] |
| CDC Makwa | | | 100 | [6] | | | 100 | [7] | (1995) | 100 | [13] |
| Columus | | | 97 | [7] | | | 99 | [3] | (1992) | 98 | [10] |
| Laura | | | 101 | [4] | | | 105 | [7] | (2000) | 103 | [11] |
| <i>Lovitt*</i> | | | 106 | [1] | | | 111 | [1] | (2002) | 109 | [2] |
| Neepawa | | | 97 | [9] | | | 101 | [8] | (1996) | 99 | [17] |
| Park | | | 87 | [7] | | | 95 | [5] | (1993) | 91 | [12] |
| Pasqua | | | 99 | [4] | | | 93 | [6] | (1995) | 96 | [10] |

Means followed by the same letter do not significantly differ (P=.05, LSD)

* first year tested, very limited data available

Katepwa - check variety

**HWSW Hard White Spring Wheat

CWRS Wheat

Variety Descriptions

| Variety | B.C. Peace Averages 1994-2003 | | | | | B.C. Peace 2001-02 | | | | | Alberta Agdex 100/32 | | | | | Distributor |
|---|-------------------------------|--------------|-----------|---------------|--------------------|---------------------|----------------|------------|----------|----------|----------------------|-------------|-----------|-----------------------|--|-------------|
| | Whole Head | | Bushel | | | 0-9 scale (0=nil)** | | | | | Resistance to | | | | | |
| | Moist. | +/- check*** | Height cm | Weight lbs/bu | Protein % [st.yrs] | Septoria complex | Powdery Mildew | Lodging | Shatter | Root Rot | Loose Smut | Common Bunt | Sprouting | | | |
| ■ 5500 HR | 27.3 | 2.0 | 88 | 65.4 | 13.9 [7] | 3.8 | 1.8 | 0.0 | G | F | F | F | G | Agricore United | | |
| □ 5601HR | 34.1 | 1.8 | 85 | 64.2 | 14.5 [4] | 2.0 | | | | | | | | Agricore United | | |
| ■ AC Barrie | 24.6 | 3.0 | 91 | 62.8 | 14.3 [7] | 3.7 | 2.8 | 0.0 | G | F | G | G | F | SeCan | | |
| ■ AC Inrepid | 22.1 | -1.2 | 92 | 63.0 | 13.6 [7] | 3.8 | 1.2 | 0.5 | G | F | F | G | P | Canterra | | |
| AC Splendor | 20.6 | -1.9 | 91 | 62.0 | 14.4 [7] | 3.8 | 1.4 | 0.9 | G | F | P | F | F | SeCan | | |
| Alikat | 22.0 | -3.3 | 87 | 63.9 | 14.2 [7] | 5.5 | 2.6 | 0.9 | G | F | G | G | F | Canterra | | |
| CDC Bounty | 26.1 | 0.8 | 92 | 65.4 | 13.7 [7] | 3.7 | 1.3 | 2.6 | G | F | G | G | F | Canterra | | |
| □ CDC Imagine | 28.1 | -1.0 | 88 | 63.3 | 14.0 [6] | 3.6 | 1.0 | 0.0 | | | | | | Sask Wheat Pool | | |
| CDC Teal | 20.7 | -0.7 | 78 | 63.3 | 14.7 [4] | 2.3 | | G | G | F | F | F | F | Quality Assured Seeds | | |
| □ Harvest | 26.9 | -2.3 | 88 | 64.8 | 14.7 [6] | 5.0 | 0.6 | 0.0 | | | | | | Quality Assured Seeds | | |
| ■ Journey | 33.3 | 4.1 | 86 | 64.3 | 15.3 [6] | 3.3 | 2.0 | 0.0 | | | | | | Sask Wheat Pool | | |
| □ Kanata** | 29.7 | 0.5 | 85 | 64.1 | 13.9 [7] | 3.9 | 1.4 | 0.0 | | | | | | Quality Assured Seeds | | |
| Katepwa | 21.6 | 0.0 | 93 | 61.9 | 13.7 [7] | 4.0 | 1.4 | 1.2 | G | F | G | G | F | SeCan | | |
| □ Lillian (BW776)* | 26.9 | -0.6 | 87 | 64.3 | 15.0 [2] | | | | | | | | | SeCan | | |
| McKenzie | 18.3 | -2.3 | 90 | 63.2 | 13.4 [5] | 3.9 | 2.3 | 0 | G | F | P | G | EX | Agricore United | | |
| Prodigy | 26.1 | 1.6 | 92 | 64.9 | 14.0 [7] | 2.6 | 3.3 | 0.0 | G | F | F | F | F | Sask Wheat Pool | | |
| Roblin | 20.9 | -0.5 | 73 | 62.8 | 15.1 [4] | 4.2 | | VG | G | F | G | P | F | SeCan | | |
| □ Snowbird** | 29.8 | 0.6 | 93 | 63.8 | 13.4 [7] | 3.9 | 0.4 | 0.1 | | | | | | Quality Assured Seeds | | |
| □ Superb | 32.9 | 3.7 | 86 | 64.0 | 13.6 [6] | 4.2 | 0.4 | 0.0 | G | F | F | G | G | SeCan | | |
| Varieties not tested in 2003 (Averages 1989-2002) | | | | | | | | | | | | | | | | |
| ■ 5600 HR | 27.8 | 3.1 | 96 | 64.1 | 12.7 [5] | 2.9 | 3.6 | 0.1 | G | F | G | G | G | Agricore United | | |
| ■ AC Abey | 22.4 | -0.1 | 84 | 62.7 | 12.6 [5] | 3.7 | 0.6 | 0.1 | G | F | G | G | P | Semi-arid Prairie Ag | | |
| ■ AC Cadillac | 20.3 | | 99 | 62.8 | 13.5 [3] | 3.9 | 0.7 | 1.8 | G | F | G | G | F | Quality Assured Seeds | | |
| AC Cora | 17.6 | | 93 | 61.6 | 13.3 | | | | G | G | G | G | F | SeCan | | |
| AC Domain | 19.5 | | 85 | 62.4 | 14.2 | | | | VG | G | F | G | F | SeCan | | |
| AC Eatonia | 23.1 | | 92 | 61.1 | 12.9 | | | | F | G | F | F | G | Agricore United | | |
| ■ AC Elsa | 24.8 | 3.1 | 88 | 61.0 | 13.8 [5] | 2.7 | 0.8 | 0.1 | G | F | G | F | F | SeCan | | |
| AC Majestic | 23.2 | | 96 | 61.8 | 12.7 [3] | 2.2 | 2.3 | 0.6 | G | F | F | G | F | SeCan | | |
| AC Michael | 18.5 | | 93 | 60.6 | 12.8 | | | | G | G | F | G | F | SeCan | | |
| AC Minto | 14.6 | | 94 | 62.5 | | | | | G | G | F | G | F | SeCan | | |
| CDC Makwa | 14.9 | | 89 | 61.9 | | | | | G | G | P | G | F | SeCan | | |
| Columus | 25.5 | | 88 | 63.2 | | | | | G | G | F | F | F | SeCan | | |
| Laura | 24.1 | | 92 | 61.1 | 13.0 | | | | G | G | F | F | P | SeCan | | |
| □ Lovitt* | 38.9 | 1.8 | 79 | 64.0 | 13.4 [2] | 2.7 | | | | | | | | Canterra | | |
| Neepawa | 20.0 | | 91 | 60.9 | | | | | G | G | F | G | F | CRC | | |
| Park | 17.1 | | 81 | 62.7 | | | | | F | G | F | G | F | LRC | | |
| Pasqua | 15.8 | | 87 | 61.8 | | | | | G | G | P | P | F | SeCan | | |

EX = excellent, VG = very good, G = good

F = fair, P = poor (susceptible)

* first year tested, very limited data available

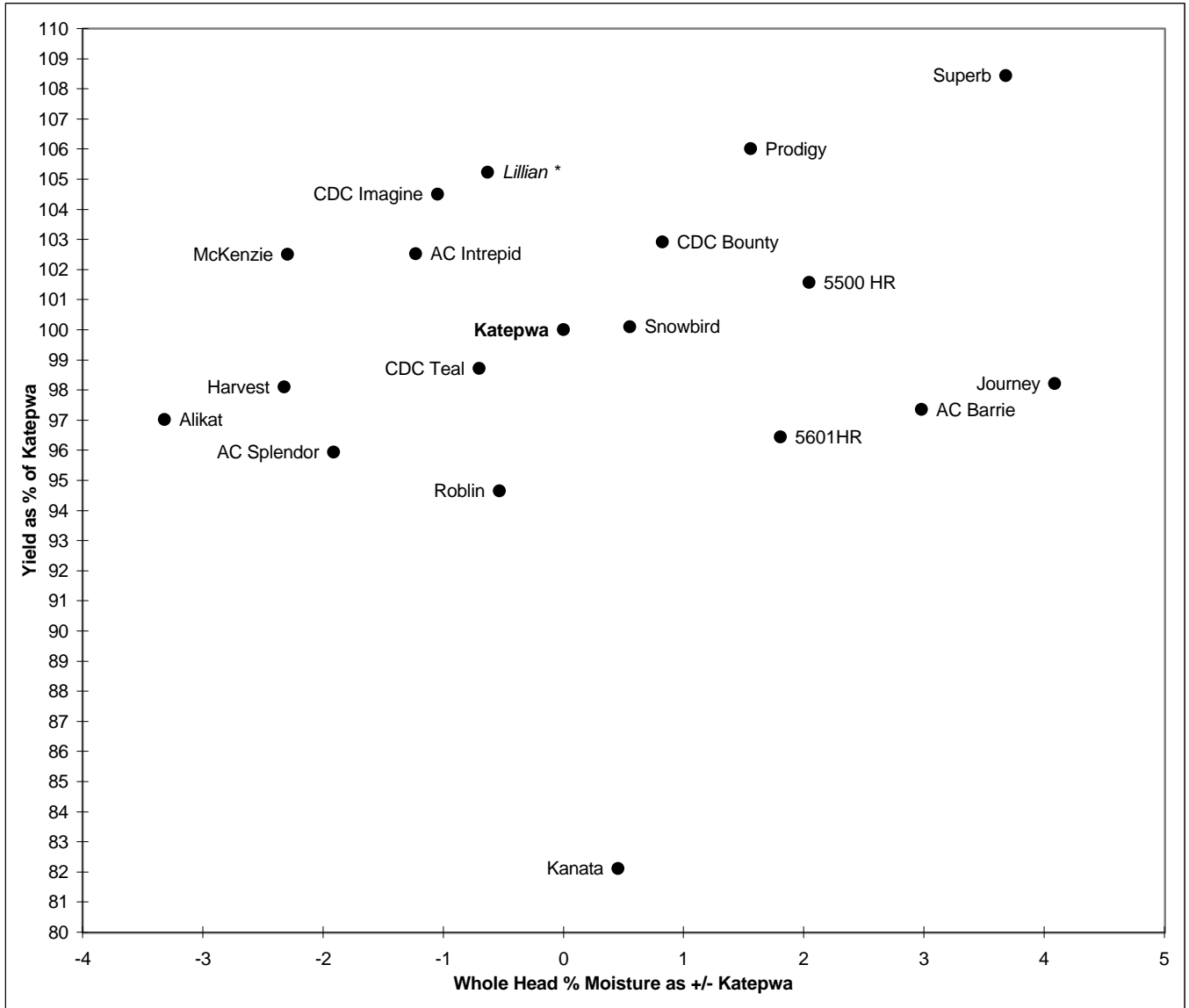
** 0 - 9 scale; 0 = none, 9 = 100% affected

Katepwa - check variety

□ Protection under Plant Breeders' Rights applied for

■ Protected by Plant Breeders' Rights

Note: ***Whole Head %Moisture = To accommodate a more accurate system of comparing maturity *between years*, maturity data (given as whole head % moisture), is now compared as *relative to the check (+/-)* in a similar fashion as yield data. Whole head % moisture is a tangible (quantitative) measurement, not an assigned relative value (qualitative), and thus a more accurate value. The values displayed here show how much "wetter" or "drier" a given variety is as compared to the check variety, at the time of head collection. Head collection occurs when the earliest lines are below 20% moisture.



* first year tested, very limited data available

CANADA PRAIRIE SPRING WHEAT

CANADA WESTERN EXTRA STRONG WHEAT

All current Canada Prairie Spring varieties are awned and should be treated with a systemic fungicide seed treatment to control smut. Canada Western Extra Strong wheats have unique gluten properties. Avoid deep seeding CPS or CWES wheats. Seeding rates for these wheats should be increased 20 to 25% due to the larger kernel size. [The CPS and CWES wheats are traditionally grown together in the same trial]

| CPS Wheat | | Yield as % of AC Taber | | | | | | | | | | | |
|--|----------------|---------------------------------|---------------|-------------|--------------|---------------|---------------|-------------|--------------|-------------------------|-------------|--------------|--|
| Variety | Type | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | | |
| | | 2003 Yield | | 1993-2003 | | 2003 Yield | | 1994-2003 | | 2003 | 1993-2003 | | |
| | | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. | |
| 5700PR | CPS red | 46 d | 89 | 100 | [4] | 85 ab | 96 | 98 | [5] | 93 | 99 | [9] | |
| 5701PR | CPS red | 57 ab | 110 | 115 | [2] | 82 b | 92 | 91 | [3] | 101 | 103 | [5] | |
| AC Crystal | CPS red | 59 a | 113 | 105 | [6] | 86 ab | 98 | 97 | [8] | 105 | 101 | [14] | |
| AC Foremost | CPS red | 54 abc | 104 | 99 | [7] | 91 a | 103 | 100 | [9] | 103 | 99 | [16] | |
| AC Taber | CPS red | 52 c | 100 | 100 | [8] | 88 a | 100 | 100 | [10] | 100 | 100 | [18] | |
| AC Barrie | CWRS | 52 bc | 100 | 88 | [3] | 71 c | 80 | 74 | [3] | 90 | 81 | [6] | |
| Katepwa | CWRS | 52 bc | 101 | 88 | [3] | 72 c | 82 | 76 | [3] | 91 | 82 | [6] | |
| | | LSD (P=.05) = CV value (%) = | | | | 5.23 6.73 | | | | 6.47 5.55 | | | |
| <u>Varieties not tested in 2003 (Averages 1989-2002)</u> | | | | | | | | | | <u>Last Year Tested</u> | | | |
| AC2000** | CPS white | | | 102 | [3] | | | 100 | [4] | (2002) | 101 | [7] | |
| AC Karma | CPS white | | | 96 | [5] | | | 102 | [7] | (2000) | 99 | [12] | |
| AC Vista | CPS white | | | 110 | [4] | | | 101 | [6] | (2001) | 105 | [10] | |
| Cutler | CPS red | | | 90 | [5] | | | 89 | [7] | (1999) | 90 | [12] | |

Means followed by the same letter (both charts as grown together) do not significantly differ (P=.05, LSD)

AC Taber - check variety

* first year tested, very limited data available

**AC 2000 - Restricted registration expires June 27, 2004

CPS & CWES grown together in same trial.

| CWES Wheat | | Yield as % of AC Taber | | | | | | | | | | | |
|--|----------------|---------------------------------|---------------|-------------|--------------|---------------|---------------|-------------|--------------|-------------------------|-------------|--------------|--|
| Variety | Type | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | | |
| | | 2003 Yield | | 1993-2003 | | 2003 Yield | | 1994-2003 | | 2003 | 1993-2003 | | |
| | | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. | |
| AC Taber | CPS red | 52 c | 100 | 100 | [8] | 88 a | 100 | 100 | [10] | 100 | 100 | [18] | |
| Amazon | CWES | 53 bc | 102 | 97 | [4] | 70 c | 80 | 83 | [6] | 91 | 90 | [10] | |
| Glenavon | CWES | 53 bc | 102 | 101 | [3] | 74 c | 83 | 87 | [4] | 93 | 94 | [7] | |
| AC Barrie | CWRS | 52 bc | 100 | 88 | [3] | 71 c | 80 | 74 | [3] | 90 | 81 | [6] | |
| Katepwa | CWRS | 52 bc | 101 | 88 | [3] | 72 c | 82 | 76 | [3] | 91 | 82 | [6] | |
| | | LSD (P=.05) = CV value (%) = | | | | 5.23 6.73 | | | | 6.47 5.55 | | | |
| <u>Varieties not tested in 2003 (Averages 1989-2002)</u> | | | | | | | | | | <u>Last Year Tested</u> | | | |
| AC Corrine | CWES | | | 102 | [1] | | | 95 | [3] | (2000) | 99 | [4] | |
| Bluesky | CWES | | | 93 | [5] | | | 90 | [7] | (2000) | 92 | [12] | |
| CDC Rama | CWES | | | 105 | [2] | | | 81 | [2] | (2002) | 93 | [4] | |
| Glenlea | CWES | | | 97 | [5] | | | 93 | [7] | (2000) | 95 | [12] | |
| Laser | CWES | | | 87 | [2] | | | 83 | [4] | (2000) | 85 | [6] | |
| Wildcat | CWES | | | 78 | [5] | | | 79 | [7] | (1999) | 79 | [12] | |

CPS / CWES Wheat

Variety Descriptions

| Variety | Type | B.C.Peace Averages 1994-2003 | | | | | B.C. Peace 2001-02 | | | | data Alberta Agdex 100/32 | | | | | Distributor |
|--|----------------|------------------------------|-----------------|--------------|----------------------------|-----------------------|---------------------|-------------------|-------------|----------|---------------------------|---------------|----------------|-----------|-----------------|-------------|
| | | ***Whole Head | | Height cm | Bushel Weight lbs/bu | Protein % [st.yrs] | 0-9 scale (0=nil)** | | | | Resistance to | | | | | |
| | | Moist. | +/- check*** | | | | Septoria complex | Powdery Mildew | Lodging | Shatter | Root Rot | Loose Smut | Common Bunt | Sprouting | | |
| ■ 5700PR | CPS red | 28.8 | -0.4 | 74 | 69 | 11.6 [6] | 3.65 | 0.88 | 0 | G | F | P | G | P | Agricore United | |
| □ 5701PR | CPS red | 36.3 | -0.2 | 73 | 62 | 12.4 [4] | 3.33 | | | G | | F | P | P | Agricore United | |
| ■ AC Crystal | CPS red | 27.4 | 0.4 | 79 | 67 | 11.7 [6] | 2.35 | 1.76 | 0.63 | G | P | F | G | P | SeCan | |
| ■ AC Foremost | CPS red | 21.2 | -1.4 | 70 | 62 | 12.0 [4] | | 3 | | G | F | G | G | F | SeCan | |
| ■ AC Taber | CPS red | 24.8 | 0.0 | 80 | 65 | 11.6 [6] | 2.43 | 1.44 | 0.32 | G | F | P | G | P | SeCan | |
| □ Amazon | CWES | 31.7 | 0.7 | 98 | 66 | 13.0 [6] | 3.36 | 1.25 | 2.63 | G | F | G | F | P | U of Manitoba | |
| ■ Glenavon | CWES | 35.1 | -0.3 | 101 | 70 | 12.7 [6] | 3.06 | 1.07 | 2.88 | G | F | G | F | | SeCan | |
| ■ AC Barrie | CWRS | 31.1 | -1.1 | 88 | 65 | 14.2 [6] | 4.58 | 3.07 | 0 | G | F | G | G | G | SeCan | |
| ■ Katepwa | CWRS | 26.6 | -2.6 | 93 | 62 | 13.3 [7] | 4.03 | 1.44 | 1.19 | G | F | G | G | F | SeCan | |
| <u>Varieties not tested in 2003 (Averages 1989-2002)</u> | | | | | | | | | | | | | | | | |
| AC2000 | CPS white | 30.4 | 0.4 | 78 | 69 | 11.3 [4] | 3.28 | 2.19 | 0.19 | G | F | F | G | F | SeCan | |
| AC Corrine | CWES | 27.4 | | 91 | 61 | | | | | G | G | F | G | F | CRC | |
| AC Karma | CPS white | 15.8 | | 83 | 62 | | | | | G | F | G | G | P | SeCan | |
| ■ AC Vista | CPS white | 18.9 | | 88 | 68 | 10.1 [2] | 2.94 | 2.63 | 0.38 | G | F | F | G | P | Quality Assured | |
| ■ Bluesky | CWES | 17.8 | | 99 | 61 | | | | | F | G | G | G | F | SeCan | |
| ■ CDC Rama | CWES | 38.2 | -0.1 | 98 | 80 | 13.7 [4] | 2.9 | 0.94 | 1.75 | | | | | | U of S | |
| ■ Cutler | CPS red | 13.9 | | 77 | 62 | | | | | G | G | F | P | F | UofA | |
| ■ Glenea | CWES | 24.6 | | 102 | 61 | | | | | G | G | G | G | F | U of M | |
| ■ Laser | CWES | 18.1 | | 90 | 61 | | | | | EX | G | F | G | P | U of A | |
| ■ Wildcat | CWES | 16.0 | | 89 | 59 | | | | | F | G | F | G | P | SeCan | |

AC Taber - check variety

- Protection under Plant Breeders' Rights applied for
- Protected by Plant Breeders' Rights

EX = excellent, VG = very good, G = good

F = fair, P = poor (susceptible)

* first year tested, very limited data available

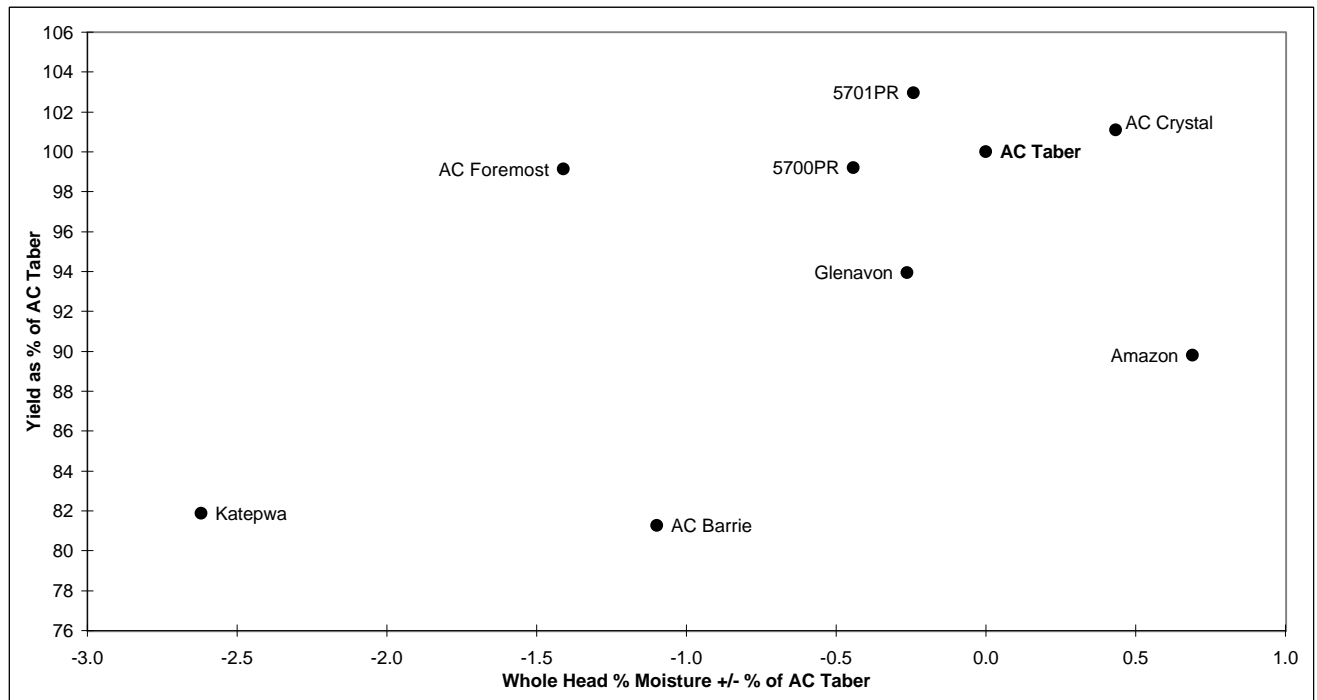
** 0 - 9 scale; 0 = none, 9 = 100% affected

(no lodging or Powdery Mildew occurred in 2002 to record)

*** Whole Head %Moisture = see note bottom of page 8

CPS / CWES Wheat

Regional Variety Performance 1994-2003



BARLEY

Hulless barley varieties have significantly less fibre and higher protein levels than conventional barley and therefore produce a higher level of digestible energy for monogastric animals. In hulless varieties, approximately 12% of the lower yield can be attributed to the lack of a hull. Note that some new lines of hulless are actually surpassing the traditional 2-row barley Harrington in yield. Hulless bushels displayed already adjusted. Two row malting barleys are more susceptible to sprouting. Some malting varieties have interim registration and are only grown under contract for plant scale malting tests.

| Six Row Barley | | Yield as % of Harrington | | | | | | | | | | |
|--|----------------|--------------------------|---------------|----------------------|------------|---------------|---------------|----------------------|-------------|-------------|-------------------------|--------------|
| Variety | Type | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | |
| | | 2003 Yield | | 1993-2003 | | 2003 Yield | | 1993-2003 | | 2003 | 1993-2003 | |
| | | bus / acre | % of check | Avg. Stn. Yrs. | | bus / acre | % of check | Avg. Stn. Yrs. | | Avg. (%) | Avg. (%) | Stn. Yrs. |
| AC Albright | feed | 75 ghi | 89 | 99 | [7] | 125 hij | 100 | 98 | [10] | 95 | 98 | [17] |
| AC Harper | feed | 85 b-g | 102 | 112 | [6] | 143 a-e | 115 | 109 | [8] | 108 | 111 | [14] |
| AC Lacombe | feed | 88 b-e | 105 | 118 | [8] | 143 a-d | 115 | 110 | [11] | 110 | 114 | [19] |
| AC Ranger | forage | 88 b-e | 105 | 119 | [3] | 137 c-g | 110 | 122 | [3] | 108 | 120 | [6] |
| AC Rosser | feed | 84 b-g | 101 | 114 | [6] | 137 c-g | 111 | 116 | [8] | 106 | 115 | [14] |
| B1602 | malt(white) | 77 fgh | 92 | 101 | [7] | 121 jk | 97 | 94 | [9] | 95 | 98 | [16] |
| BT954 | malt(white) | 81 d-g | 97 | 95 | [2] | 127 g-j | 102 | 105 | [2] | 100 | 100 | [4] |
| CDC Battleford | malt | 94 ab | 113 | 115 | [2] | 149 ab | 120 | 121 | [2] | 116 | 118 | [4] |
| CDC Sisler | malt(white) | 79 d-g | 95 | 103 | [5] | 138 c-g | 111 | 106 | [7] | 103 | 104 | [12] |
| CDC Springside | malt(white) | 86 b-f | 103 | 110 | [2] | 136 c-h | 109 | 114 | [2] | 106 | 112 | [4] |
| CDC Tisdale | malt | 83 c-g | 99 | 108 | [2] | 134 d-i | 108 | 121 | [2] | 104 | 114 | [4] |
| Harrington | 2R malt | 84 b-g | 100 | 100 | [8] | 124 ij | 100 | 100 | [11] | 100 | 100 | [19] |
| Kasota | feed(sd) | 83 c-g | 100 | 119 | [8] | 132 e-j | 106 | 111 | [11] | 103 | 115 | [19] |
| <i>Lacey (BT965)*</i> | malt(white) | 75 gh | 90 | 90 | [1] | 130 f-j | 105 | 105 | [1] | 97 | 97 | [2] |
| LEGACY | malt (white) | 84 b-g | 101 | 106 | [3] | 126 hij | 101 | 107 | [3] | 101 | 106 | [6] |
| Mahigan | feed(sd) | 87 b-f | 104 | 117 | [5] | 143 a-d | 115 | 111 | [7] | 109 | 114 | [12] |
| <i>Manny (BT562)*</i> | feed | 104 a | 125 | 125 | [1] | 147 abc | 118 | 118 | [1] | 121 | 121 | [2] |
| Robust | malt (white) | 81 d-g | 96 | 99 | [3] | 124 ij | 100 | 98 | [3] | 98 | 99 | [6] |
| Trochu | feed | 89 bcd | 106 | 114 | [3] | 141 b-f | 113 | 111 | [4] | 110 | 112 | [7] |
| Vivar | feed(sd) | 93 bc | 112 | 123 | [3] | 152 a | 122 | 123 | [4] | 117 | 123 | [7] |
| LSD (P=.05) = | | 10.81 | | | | 10.97 | | | | | | |
| CV value (%) = | | 9.21 | | | | 5.85 | | | | | | |
| <u>Varieties not tested in 2003 (Averages 1989-2002)</u> | | | | | | | | | | | <u>Last Year Tested</u> | |
| AC Stacey | feed | | | 116 | [3] | | | 98 | [3] | (1996) | 107 | [6] |
| Argyle | malt | | | 107 | [8] | | | 99 | [3] | (1994) | 103 | [11] |
| Bonanza | malt | | | 93 | [6] | | | 97 | [1] | (1992) | 95 | [7] |
| Brier | feed | | | 117 | [8] | | | 114 | [4] | (1995) | 116 | [12] |
| Bronco | feed | | | 103 | [3] | | | 105 | [3] | (1998) | 104 | [6] |
| CDC EARL | feed(sd) | | | 111 | [5] | | | 108 | [7] | (1999) | 109 | [12] |
| CDC YORKTON | malt | | | 113 | [1] | | | 106 | [3] | (2000) | 109 | [4] |
| Deul | malt | | | 100 | [6] | | | 94 | [3] | (1995) | 97 | [9] |
| Duke | feed(sd) | | | 101 | [8] | | | 118 | [4] | (1995) | 110 | [12] |
| Excel | malt (white) | | | 113 | [2] | | | 110 | [3] | (2002) | 111 | [5] |
| Foster | malt | | | 104 | [2] | | | 96 | [4] | (2000) | 100 | [6] |
| <i>GAMINE *</i> | | | | 120 | [1] | | | 100 | [1] | (2001) | 110 | [2] |
| Jackson | feed | | | 92 | [8] | | | 94 | [4] | (1995) | 93 | [12] |
| Leduc | feed | | | 108 | [8] | | | 109 | [4] | (1995) | 109 | [12] |
| Niska | feed(sd) | | | 120 | [3] | | | 116 | [4] | (2002) | 118 | [7] |
| Stander | malt | | | 102 | [3] | | | 99 | [5] | (2000) | 100 | [8] |
| Stetson | feed(sd) | | | 112 | [4] | | | 104 | [7] | (2000) | 108 | [11] |
| Tankard | malt | | | 85 | [3] | | | 83 | [3] | (1996) | 84 | [6] |
| Tukwa | feed(sd) | | | 121 | [5] | | | 102 | [7] | (1999) | 111 | [12] |
| <i>Westford</i> | forage | | | 84 | [1] | | | 79 | [1] | (2001) | 81 | [1] |

Means followed by the same letter do not significantly differ (P=.05, LSD)

* first year tested, very limited data available

Harrington - check variety

(sd) semi-dwarf variety

Two Row Barley

Yield as % of Harrington

| Variety | Type | Dawson Creek | | Fort St. John | | | | B.C. Peace | | | | | |
|--|-------------|---------------|---------------|---------------|--------------|----------------|---------------|-------------|--------------|-------------|-------------|--------------|--|
| | | 2003 Yield | | 1993-2003 | | 2003 Yield | | 1993-2003 | | 2003 | 1993-2003 | | |
| | | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. | |
| AC Metcalfe | malt | 82 c-g | 101 | 113 | [8] | 141 b-e | 113 | 108 | [11] | 107 | 111 | [19] | |
| CDC Bold | feed(sd) | 87 bcd | 107 | 110 | [4] | 146 abc | 116 | 116 | [5] | 112 | 113 | [9] | |
| CDC Copeland | malt | 80 d-h | 99 | 100 | [4] | 126 g-j | 100 | 108 | [5] | 100 | 104 | [9] | |
| CDC Dolly | feed | 85 b-e | 104 | 116 | [8] | 143 bcd | 114 | 112 | [11] | 109 | 114 | [19] | |
| CDC Helgason | feed | 82 c-h | 101 | 106 | [3] | 135 d-g | 108 | 109 | [4] | 104 | 108 | [7] | |
| CDC Kendall | malt | 77 f-i | 95 | 101 | [6] | 124 ij | 99 | 98 | [10] | 97 | 99 | [16] | |
| CDC Select | malt | 75 hi | 92 | 101 | [2] | 135 d-h | 108 | 107 | [3] | 100 | 104 | [5] | |
| CDC THOMPSON | malt(sd) | 70 i | 87 | 90 | [6] | 129 f-j | 103 | 105 | [8] | 95 | 98 | [14] | |
| Harrington | malt | 81 c-h | 100 | 100 | [8] | 125 hij | 100 | 100 | [11] | 100 | 100 | [19] | |
| Merit | malt | 92 b | 113 | 114 | [4] | 149 ab | 119 | 113 | [6] | 116 | 114 | [10] | |
| Newdale | malt | 79 e-h | 98 | 106 | [3] | 133 e-i | 106 | 103 | [3] | 102 | 105 | [6] | |
| Niobe | feed | 81 c-h | 100 | 105 | [2] | 143 bcd | 114 | 102 | [2] | 107 | 104 | [4] | |
| <i>Ponoka (TR01656)*</i> | feed | 100 a | 123 | 123 | [1] | 153 a | 122 | 122 | [1] | 123 | 123 | [2] | |
| Rivers (TR256) | feed | 83 c-f | 103 | 103 | [3] | 129 f-j | 103 | 102 | [3] | 103 | 103 | [6] | |
| Robust (6R check) | 6R malt | 75 ghi | 93 | 93 | [3] | 120 j | 95 | 93 | [3] | 94 | 93 | [6] | |
| Seebe | feed | 88 bc | 109 | 118 | [8] | 148 ab | 118 | 112 | [11] | 113 | 115 | [19] | |
| XENA | feed | 83 c-f | 103 | 110 | [4] | 150 ab | 120 | 113 | [5] | 111 | 111 | [9] | |
| LSD (P=.05) = | | 7.16 | | | | 9.73 | | | | | | | |
| CV value (%) = | | 6.14 | | | | 4.98 | | | | | | | |
| <u>Varieties not tested in 2003 (Averages 1989-2002)</u> | | | | | | | | | | | | | |
| <u>Last Year Tested</u> | | | | | | | | | | | | | |
| AC Bountiful | malt | | | 103 | [3] | | | 107 | [5] | (2001) | 105 | [8] | |
| AC Oxbow | malt | | | 114 | [4] | | | 98 | [5] | (1998) | 106 | [9] | |
| B1215 | malt | | | 102 | [3] | | | 105 | [5] | (2000) | 103 | [8] | |
| <i>Calder *</i> | malt | | | 114 | [1] | | | 101 | [1] | (2002) | 108 | [2] | |
| CDC Fleet | feed | | | 101 | [3] | | | 83 | [4] | (1999) | 92 | [7] | |
| CDC STRATUS | malt | | | 117 | [5] | | | 102 | [8] | (2000) | 110 | [13] | |
| <i>CDC Trey (TR359)*</i> | feed | | | 105 | [1] | | | 95 | [1] | (2002) | 100 | [2] | |
| Manley | malt | | | 119 | [5] | | | 105 | [5] | (1998) | 112 | [10] | |

Means followed by the same letter do not significantly differ (P=.05, LSD)

Harrington - check variety

(sd) semi-dwarf variety

* first year tested, very limited data available

Hulless Barley

Yield as % of Harrington

| Variety | Type | Dawson Creek | | Fort St. John | | | | B.C. Peace | | | | | |
|--|----------------|---------------|---------------|---------------|--------------|---------------|---------------|-------------|--------------|-------------|-------------|--------------|--|
| | | 2003 Yield | | 1993-2003 | | 2003 Yield | | 1994-2003 | | 2003 | 1993-2003 | | |
| | | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. | |
| CDC McGwire | 2 row | 62 efg | 90 | 99 | [3] | 104 f-j | 104 | 97 | [4] | 97 | 98 | [7] | |
| Falcon | 6 row | 53 hi | 77 | 99 | [7] | 88 kl | 89 | 89 | [9] | 83 | 94 | [16] | |
| <i>Tyto*</i> | 6 row | 51 i | 74 | 81 | [1] | 83 l | 83 | 86 | [1] | 79 | 84 | [2] | |
| Harrington | 2R malt | 67 b-g | 100 | 100 | [7] | 99 ij | 100 | 100 | [9] | 100 | 100 | [16] | |
| LSD (P=.05) = | | 8.65 | | | | 8.87 | | | | | | | |
| CV value (%) = | | 9.21 | | | | 5.85 | | | | | | | |
| <u>Varieties not tested in 2003 (Averages 1989-2002)</u> | | | | | | | | | | | | | |
| <u>Last Year Tested</u> | | | | | | | | | | | | | |
| AC Bacon | 6 row | | | 99 | [3] | | | 96 | [5] | (2002) | 98 | [8] | |
| AC Hawkeye | 6 Row | | | 99 | [3] | | | 96 | [3] | (1999) | 98 | [6] | |
| CDC Dawn | 2 row | | | 94 | [3] | | | 94 | [5] | (2000) | 94 | [8] | |
| CDC Freedom | 2 row | | | 86 | [3] | | | 79 | [5] | (2002) | 82 | [8] | |
| CDC Gainer | 2 row | | | 76 | [2] | | | 78 | [4] | (2000) | 77 | [6] | |
| CDC Silky | 6 row | | | 96 | [6] | | | 89 | [7] | (2002) | 93 | [13] | |
| <i>CDC Speedy*</i> | 2 row | | | | | | | 92 | [1] | (2000) | 92 | [1] | |
| HB805 | 2 row | | | 88 | [2] | | | 87 | [3] | (2001) | 88 | [5] | |
| Jaeger | 6 row | | | 88 | [2] | | | 93 | [4] | (2000) | 90 | [6] | |
| Peregrine | 6 row | | | 77 | [3] | | | 76 | [4] | (2002) | 76 | [7] | |
| Phoenix | 2 Row | | | 85 | [5] | | | 75 | [5] | (1998) | 80 | [10] | |
| Tercel | 2 row | | | 75 | [2] | | | 85 | [4] | (2000) | 80 | [6] | |

Feed Barley

Variety Descriptions

| Variety | Type | B.C. Peace Averages | | | | | B.C. 2001-2003 | | | | Alberta Agdex 100/32 | | | | Distributor |
|---|-----------|----------------------|------------------|-----------|---------------|--------------------|---------------------|------------|---------|----------|----------------------|------------|--|--|---------------------|
| | | 2001-03 | 2002-03 | 1993-2003 | | | 0-9 scale (0=nil)** | | | | Resistance to | | | | |
| | | ***Whole Head %Moist | Days to Maturity | Height cm | Weight lbs/bu | Protein % [st.yrs] | Scald | Net Blotch | Lodging | Root Rot | Loose Smut | False Smut | | | |
| Eligible for General Purpose Grades Only | | | | | | | | | | | | | | | |
| AC Albright | 6 row | -11.2 | 87 | 85 | 52 | 12.6 [4] | 1.8 | 1.7 | | P | P | P | | | SeCan |
| ■ AC Harper | 6 row | 2.9 | 96 | 78 | 49 | 12.6 [6] | 2.1 | 2.0 | 0.3 | F | P | F | | | SeCan |
| ■ AC Lacombe | 6 row | 0.0 | 94 | 83 | 50 | 11.6 [6] | 1.7 | 1.5 | 0.6 | P | P | G | | | SeCan |
| ■ AC Rosser | 6 row | 7.1 | 97 | 80 | 50 | 11.6 [6] | 2.9 | 1.7 | 2.4 | F | P | G | | | SeCan |
| CDC Dolly | 2 row | 3.8 | 97 | 73 | 55 | 13.1 [6] | 2.0 | 2.4 | 0.1 | F | P | G | | | SeCan |
| ■ CDC Helgason | 2 row | -0.2 | 96 | 77 | 55 | 13.0 [6] | 2.3 | 2.3 | 0.1 | F | G | G | | | SeCan |
| □ Niobe | 2 row | 0.6 | 96 | 64 | 54 | 13.4 [4] | 0.6 | 1.5 | | | | | | | SeCan |
| □ <i>Ponoka (TR01656)*</i> | 2 row | 10.5 | 104 | 68 | 53 | 12.7 [2] | 1.1 | | | | | | | | SeCan |
| □ Rivers (TR 256) | 2 row | -2.8 | 95 | 75 | 53 | 12.6 [6] | 3.2 | 1.7 | 0.0 | P | G | G | | | Quality Assured |
| Seebe | 2 row | 13.4 | 103 | 86 | 54 | 14.2 [6] | 0.7 | 2.2 | 0.8 | P | P | G | | | SeCan |
| □ Trochu | 6 row | 0.8 | 94 | 78 | 52 | 11.5 [6] | 2.1 | 1.2 | 0.3 | G | P | G | | | SeCan |
| ■ XENA | 2 row | 2.1 | 98 | 72 | 55 | 12.7 [6] | 2.4 | 2.2 | 0.0 | G | P | P | | | Agricore United |
| Semi-dwarf varieties | | | | | | | | | | | | | | | |
| CDC Bold | 2 row | 1.4 | 96 | 67 | 55 | 13.0 [6] | 0.9 | 2.4 | 0.0 | F | P | G | | | Canterra |
| ■ Kasota | 6 row | -4.1 | 89 | 69 | 52 | 12.3 [6] | 1.7 | 3.4 | 0.0 | F | P | G | | | SeCan |
| Mahigan | 6 row | -2.0 | 93 | 67 | 52 | 12.6 [6] | 1.8 | 3.6 | 0.0 | F | P | G | | | SeCan |
| □ <i>Manny (BT562)*</i> | 6 row | 2.5 | 99 | 67 | 51 | 11.3 [2] | 0.8 | | | | | | | | SeCan |
| ■ Vivar | 6 row | 6.0 | 96 | 71 | 52 | 11.5 [6] | 2.2 | 1.9 | 0.1 | G | F | G | | | SeCan |
| Forage varieties | | | | | | | | | | | | | | | |
| AC Ranger | 6 row | 6.1 | 97 | 77 | 51 | 11.4 [6] | 2.8 | 1.5 | 1.7 | | | | | | Brandon Res. Center |
| Varieties not tested in 2003 (Averages 1989-2002) | | | | | | | | | | | | | | | |
| AC Stacey | 6 row | | 93 | 65 | 52 | | | | | P | P | G | | | SeCan |
| Brier | 6 row | | 99 | 80 | 50 | | | | | P | P | G | | | SeCan |
| Bronco | 6 row | | 102 | 90 | 54 | | | | | F | P | F | | | Value Added |
| CDC EARL | 6 row(sd) | | 101 | 69 | 50 | | | | | F | P | G | | | SeCan |
| CDC Fleet | 2 row | | 97 | 77 | 55 | | | | | P | P | P | | | Quality Assured |
| □ <i>CDC Trey (TR359)*</i> | 2 row | -5.0 | 89 | 59 | 55 | 13.6 [2] | 2.7 | 1.8 | | | | | | | SeCan |
| Duke | 6 row(sd) | | 98 | 72 | 51 | | | | | F | P | F | | | SeCan |
| <i>GAMINE *</i> | 6 row | | 106 | 97 | 49 | 11.9 [2] | 6.0 | 3.1 | 0.0 | | | | | | ProMark Seed |
| Jackson | 6 row | | 92 | 66 | 52 | | | | | P | P | P | | | SeCan |
| Leduc | 6 row | | 97 | 77 | 50 | | | | | F | F | G | | | SeCan |
| ■ Niska | 6 row | 9.0 | 102 | 70 | 53 | 11.3 [4] | 1.2 | 1.4 | 0.8 | P | P | G | | | Canterra |
| ■ Stander | 6 row | | 103 | 77 | 53 | | | | | F | P | F | | | Agricore United |
| Stetson | 6 row(sd) | | 102 | 53 | 51 | | | | | F | P | G | | | Agricore United |
| Tukwa | 6 row(sd) | | 100 | 73 | 51 | | | | | F | P | G | | | SeCan |
| <i>Westford *</i> | 6 row | | 102 | 112 | 47 | 11.3 [2] | 3.4 | 2.4 | 0.3 | | | P | | | Agricore United |

□ Protection under Plant Breeders' Rights applied for

■ Protected by Plant Breeders' Rights

(sd) semi-dwarf variety

** 0 - 9 scale; 0 = none, 9 = 100% affected

(no lodging present to record in 2002 & 2003)

EX = excellent, VG = very good, G = good

F = fair, P = poor (susceptible)

* first year tested, very limited data available

Note: ***Whole Head %Moisture = To accommodate a more accurate system of comparing maturity *between years*, maturity data (given as whole head % moisture), is now compared as *relative to the check (+/-)* in a similar fashion as yield data. Whole head % moisture is a tangible (quantitative) measurement, not an assigned relative value (qualitative), and thus a more accurate value. The values displayed here show how much "wetter" or "drier" a given variety is as compared to the check variety, at the time of head collection. Head collection occurs when the earliest lines are below 20% moisture.

| Malt Barley | | Variety Descriptions | | | | | | | | | | | | |
|---|--------------|----------------------|-------------|-----------|-----------|------------------|---------------------|-------------------|------------|---------------|----------------------|------------|------|-----------------|
| | | B.C. Peace Averages | | | | | | 2001-03 B.C. Avr. | | | Alberta Agdex 100/32 | | | |
| Variety | Type | 2001-2003 | 2002-03 | 1994-2003 | | | 0-9 scale (0=nil)** | | | Resistance to | | | | Distributor |
| | | ***% Moist. | Days | Height | Weight | Protein | Scald | Net Blotch | Lodging | Root Rot | Loose Smut | False Smut | Smut | |
| | | +/- of Check | to Maturity | cm | lbs/bu | % [st.yrs] | | | | | | | | |
| ■ AC Metcalfe | 2 row | 1.7 | 97 | 80 | 54 | 13.0 [6] | 2.2 | 2.1 | 0.5 | F | G | F | | SeCan |
| ■ CDC Copeland | 2 row | 1.8 | 99 | 79 | 53 | 12.5 [6] | 3.4 | 2.1 | 0.3 | F | P | G | | SeCan |
| ■ CDC Kendall | 2 row | -3.1 | 95 | 76 | 54 | 13.3 [6] | 2.3 | 2.3 | 0.3 | F | P | P | | Agricore United |
| ■ CDC Select | 2 row | 5.1 | 99 | 68 | 53 | 13.0 [4] | 2.1 | 1.2 | | F | G | G | | Agricore United |
| CDC THOMPSON | 2 row | -1.8 | 95 | 57 | 55 | 13.2 [4] | 1.5 | 3.7 | 0.0 | F | P | G | | Quality Assured |
| Harrington | 2 row | 0.0 | 95 | 72 | 54 | 12.8 [12] | 3.8 | 2.8 | 0.8 | F | P | P | | SeCan |
| ■ Merit | 2 row | 11.5 | 101 | 73 | 54 | 12.3 [6] | 2.5 | 2.2 | 0.0 | F | P | G | | Agricore United |
| □ Newdale | 2 row | 1.4 | 97 | 73 | 53 | 13.2 [6] | 2.7 | 1.9 | 0.0 | G | P | G | | Quality Assured |
| B1602 | 6 row | -3.9 | 92 | 83 | 53 | 11.5 [4] | 2.3 | 1.4 | | F | P | F | | Agricore United |
| BT954 | 6 row | -4.1 | 92 | 70 | 52 | 12.4 [4] | 3.0 | 1.0 | | | | | | Busch Ag |
| ■ CDC Battleford | 6 row | 2.0 | 96 | 71 | 52 | 11.6 [4] | 1.9 | 1.0 | | | | | | Quality Assured |
| ■ CDC Sisler | 6 row | 1.6 | 95 | 89 | 52 | 12.0 [4] | 2.4 | 1.0 | G | F | P | P | | Agricore United |
| ■ CDC Springside | 6 row | -2.4 | 96 | 75 | 52 | 11.5 [4] | 2.3 | 1.4 | | | | | | Agricore United |
| ■ CDC Tisdale | 6 row | 2.0 | 96 | 74 | 50 | 11.6 [4] | 2.1 | 0.8 | | | | | | Quality Assured |
| □ Lacey (BT965)* | 6 row | -5.7 | 95 | 67 | 52 | 12.7 [2] | 3.0 | | | | | | | Newfield Seeds |
| ■ LEGACY | 6 row | 1.0 | 93 | 80 | 52 | 12.4 [6] | 2.9 | 2.0 | 1.2 | G | F | G | | Agricore United |
| Robust | 6 row | 1.0 | 95 | 78 | 53 | 13.3 [10] | 2.5 | 1.9 | 1.1 | F | F | F | | Cargill |
| Varieties not tested in 2003 (Averages 1989-2002) | | | | | | | | | | | | | | |
| AC Bountiful | 2 row | | 102 | 85 | 55 | 12.5 [2] | 4.0 | 2.6 | 0.3 | F | G | G | | Quality Assured |
| AC Oxbow | 2 row | | 100 | 87 | 54 | | | | | VG | F | G | F | SeCan |
| Argyle | 6 row | | 96 | 93 | 51 | | | | | G | F | P | P | SeCan |
| B1215 | 2 row | | 103 | 75 | 54 | | | | | VG | F | P | F | Agricore United |
| Bonanza | 6 row | | 95 | 77 | 50 | | | | | P | F | P | P | public |
| □ Calder* | 2 row | -1.2 | 90 | 59 | 54 | 13.1 [2] | 1.7 | 1.4 | | | | | | SeCan |
| CDC STRATUS | 2 row | | 101 | 74 | 54 | | | | | G | F | F | F | Quality Assured |
| ■ CDC YORKTON | 6 row | | 103 | 71 | 52 | | | | | G | G | P | G | Agricore United |
| Duel | 6 row | | 98 | 89 | 50 | | | | | G | F | P | F | Agricore United |
| Excel | 6 row | 4.9 | 99 | 81 | 52 | 11.7 [4] | 2.4 | 1.6 | 0.7 | F | P | G | | Agricore United |
| ■ Foster | 6 row | | 101 | 79 | 50 | | | | | G | | P | | Agricore United |
| Manley | 2 row | | 104 | 78 | 53 | | | | | G | F | P | F | SeCan |
| Tankard | 6 row | | 103 | 80 | 63 | | | | | G | F | P | P | SeCan |

| Hulless Barley | | Variety Descriptions | | | | | | | | | | | | |
|---|-------|----------------------|-------------|-----------|--------|---------|---------------------|-------------------|---------|---------------|---------------|------------|------|-----------------|
| | | B.C. Peace Averages | | | | | | 2001-2003 Average | | | Resistance to | | | |
| Variety | Type | 2001-2003 | 2002-03 | 1994-2003 | | | 0-9 scale (0=nil)** | | | Resistance to | | | | Distributor |
| | | ***%Moist. | Days | Height | Weight | Protein | Scald | Net Blotch | Lodging | Root Rot | Loose Smut | False Smut | Smut | |
| | | +/- of Check | to Maturity | cm | lbs/bu | % | | | | | | | | |
| ■ CDC McGwire | 2 row | 7.2 | 98 | 76 | 64 | 12.7 | 0.8 | 2.2 | | G | P | G | | SeCan |
| ■ Falcon | 6 row | 3.5 | 95 | 65 | 62 | 14.8 | 1.5 | 2.1 | | F | P | G | | Progress./SeCan |
| □ Tyto* | 6 row | -1.8 | 97 | 60 | 61 | 13.3 | 1.6 | | | | | | | Progressive |
| Varieties not tested in 2003 (Averages 1989-2002) | | | | | | | | | | | | | | |
| AC Bacon | 6 row | 0.5 | 99 | 81 | 61 | | 2 | 1.5 | | F | P | G | | SeCan |
| ■ AC Hawkeye | 6 row | | 102 | 100 | 62 | | | | | F | P | P | | Agricore United |
| CDC Dawn | 2 row | | 101 | 81 | 62 | | | | | F | P | P | | SeCan |
| CDC Freedom | 2 row | -1.5 | 98 | 86 | 63 | | 3.7 | 2.5 | | F | P | G | | SeCan |
| CDC Gainer | 2 row | | 97 | 81 | 62 | | | | | F | P | F | | Quality Assured |
| CDC Silky | 6 row | 5.5 | 102 | 76 | 60 | | 1.3 | 1.3 | | F | F | F | | Value Added |
| CDC Speedy* | 2 row | | | 82 | 64 | | | | | | | | | Value Added |
| HB805 | 2 row | | 100 | 77 | 61 | | 3.7 | 2.6 | | | | | | Agricore United |
| Jaeger | 2 row | | 103 | 65 | 60 | | | | | P | P | P | | Progressive |
| ■ Peregrine | 6 row | -2.7 | 97 | 58 | 62 | | 2.2 | 2.3 | | F | P | F | | Progressive |
| Phoenix | 2 row | | 101 | 83 | 62 | | | | | F | P | F | | Progress./SeCan |
| Terrel | 6 row | | 99 | 76 | 62 | | | | | F | P | F | | Progressive |

□ Protection under Plant Breeders' Rights applied for

■ Protected by Plant Breeders' Rights

(sd) semi-dwarf variety

*** Whole Head %Moisture = see note bottom of page 14

EX = excellent, VG = very good, G = good

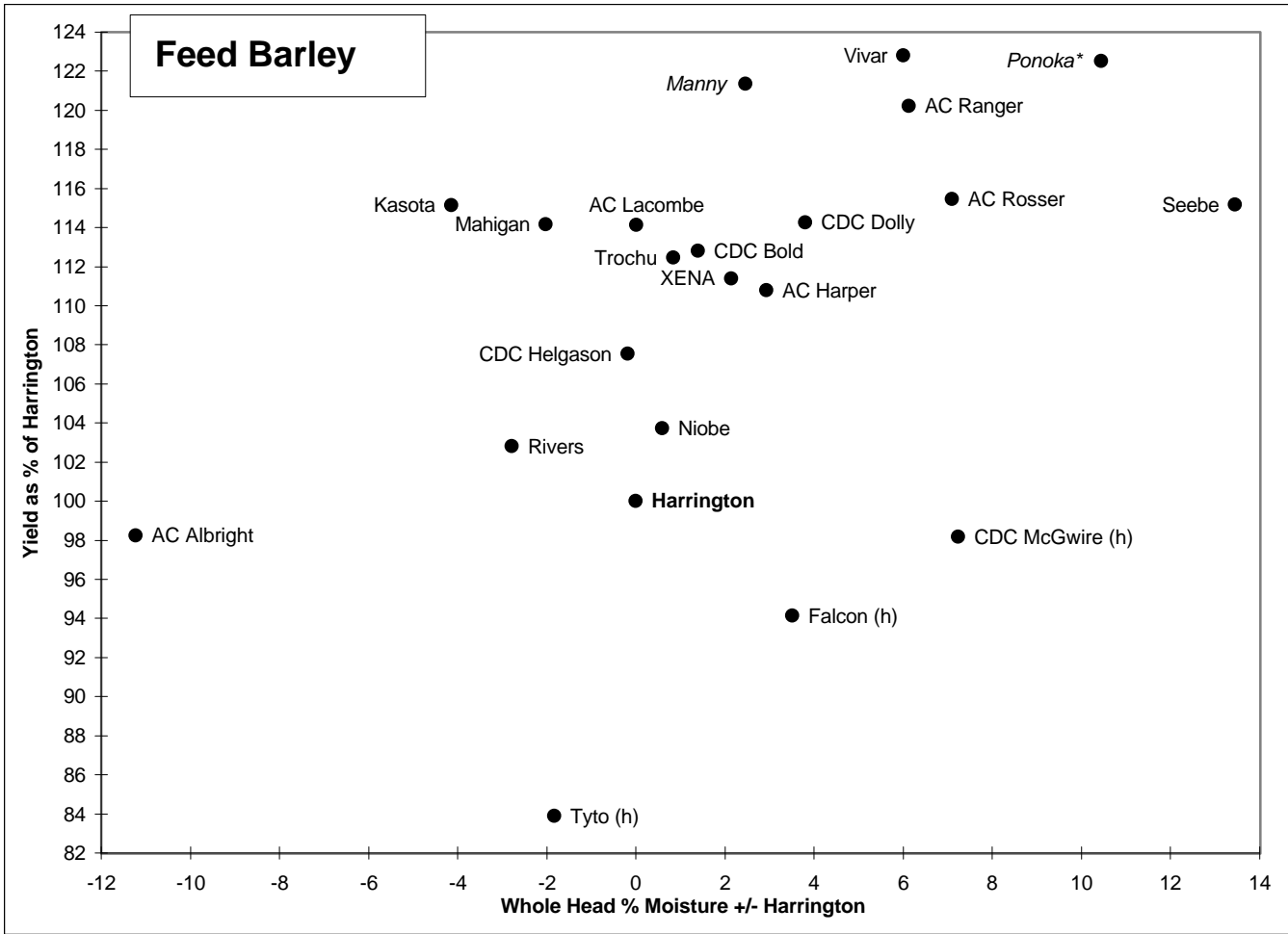
F = fair, P = poor (susceptible)

* first year tested, very limited data available

** 0 - 9 scale; 0 = none, 9 = 100% affected

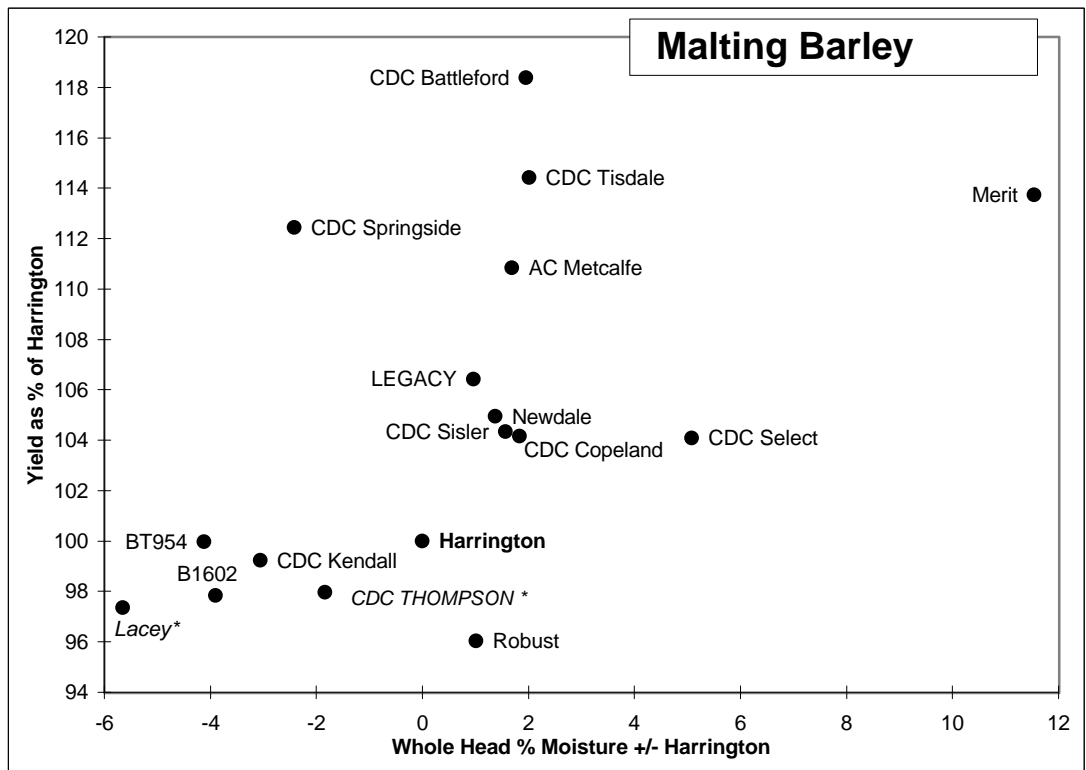
Barley

Regional Variety Performance 1993-2003



(h) Hulless

* first year tested
very limited data
available.



OATS

Oats are usually a feed crop but some varieties are also suitable for higher value feed and food markets. The milling industry prefers higher protein varieties with plump kernels and lower hull content, while the horse industry prefers white hulled varieties. Hulless oat varieties have excellent feed and food value but need to be stored drier than normal varieties (<12% moisture) and do not flow as well in the bin due to their pubescence (hairs), which seem to "lock together". Yield values for hulless oat varieties are expressed after hull removal, which reduces the seed weight by 20-25% compared to the normal varieties. Keep this in mind while comparing yields of hulless oats to hulled varieties.

| Oats | | Yield as % of Cascade | | | | | | | | | | |
|--|----------------|-----------------------|---------------|-------------|--------------|-------------------------|---------------|-------------|--------------|-------------|-------------|--------------|
| Variety | Colour | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | |
| | | 2003 Yield | | 1993-2003 | | 2003 Yield | | 1994-2003 | | 2003 | 1993-2003 | |
| | | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. |
| AC Juniper | white | 134 b | 99 | 105 | [6] | 172 cde | 104 | 102 | [10] | 101 | 103 | [16] |
| AC Morgan | white | 144 ab | 107 | 110 | [4] | 186 ab | 113 | 109 | [5] | 110 | 110 | [9] |
| AC Mustang | white | 154 a | 114 | 108 | [7] | 182 ab | 111 | 107 | [11] | 112 | 107 | [18] |
| Cascade | yellow | 135 b | 100 | 100 | [7] | 165 e | 100 | 100 | [11] | 100 | 100 | [18] |
| <i>CDC Baler *</i> | | 145 ab | 107 | 107 | [1] | 178 bc | 108 | 108 | [1] | 107 | 107 | [2] |
| CDC Dancer | yellow | 135 b | 99 | 93 | [3] | 167 de | 102 | 97 | [4] | 101 | 95 | [7] |
| CDC Orrin | white | 156 a | 115 | 110 | [2] | 190 a | 115 | 110 | [2] | 115 | 110 | [4] |
| Derby | white | 153 a | 113 | 100 | [6] | 169 de | 102 | 98 | [10] | 108 | 99 | [16] |
| Ronald (AC Ronald) | yellow | 133 b | 98 | 95 | [3] | 170 cde | 103 | 98 | [3] | 101 | 97 | [6] |
| | LSD (P=.05) = | 12.98 | | | | 8.69 | | | | | | |
| | CV value (%) = | 6.46 | | | | 3.48 | | | | | | |
| <u>Varieties not tested in 2003 (Averages 1989-2002)</u> | | | | | | <u>Last Year Tested</u> | | | | | | |
| AC Assiniboia | tan | | | 86 | [4] | | | 88 | [8] | (2002) | 87 | [12] |
| AC Gwen (h) | white | | | 75 | [2] | | | 81 | [3] | (2002) | 78 | [5] |
| AC Belmont (h) | | | | 75 | [4] | | | 78 | [8] | (2000) | 76 | [12] |
| AC Ernie (h) | | | | 71 | [1] | | | 65 | [2] | (1999) | 68 | [3] |
| AC Medallion | | | | 116 | [2] | | | 94 | [5] | (2000) | 105 | [7] |
| AC Preakness | | | | 113 | [4] | | | 102 | [8] | (2000) | 108 | [12] |
| AC Rebel | yellow | | | 104 | [2] | | | 93 | [3] | (2001) | 99 | [5] |
| Athabasca | | | | 88 | [4] | | | 92 | [2] | (1992) | 90 | [6] |
| Boudrais (h) | white | | | 84 | [2] | | | 85 | [2] | (2002) | 85 | [4] |
| Bullion (h) | white | | | 73 | [2] | | | 70 | [3] | (2001) | 72 | [5] |
| Calibre | | | | 97 | [6] | | | 105 | [5] | (1995) | 101 | [11] |
| CDC Boyer | yellow | | | 100 | [6] | | | 97 | [9] | (2002) | 98 | [15] |
| CDC Pacer | | | | 103 | [2] | | | 100 | [5] | (2000) | 101 | [7] |
| Foothill | | | | 90 | [4] | | | 91 | [2] | (1992) | 91 | [6] |
| Grizzly | | | | 90 | [4] | | | 87 | [2] | (1992) | 89 | [6] |
| Jasper | | | | 105 | [4] | | | 96 | [8] | (2000) | 101 | [12] |
| Kaufmann | yellow | | | 88 | [2] | | | 90 | [3] | (2002) | 89 | [5] |
| Pinnacle | yellow | | | 105 | [3] | | | 99 | [4] | (2002) | 102 | [7] |
| Robert | | | | 95 | [6] | | | 95 | [4] | (1994) | 95 | [10] |
| SW EXACTOR | white | | | 109 | [3] | | | 103 | [5] | (2002) | 106 | [8] |
| Triple Crown | | | | 110 | [2] | | | 100 | [3] | (2000) | 105 | [5] |
| Waldern | | | | 108 | [5] | | | 109 | [5] | (1995) | 109 | [10] |

Means followed by the same letter do not significantly differ (P=.05, LSD)

* first year tested, very limited data available

Cascade - check variety

(h) hulless variety

| Oats | | Variety Descriptions | | | | | | | |
|--|---------------|---------------------------|---------------------------------|------------|----------------------|---------------|----------|----------|-----------------|
| Variety | Type | BC Peace Avg. (1994-2003) | | | | Resistance to | | | Distributor |
| | | Days to Maturity | ***2002&03 Whole Head +/-%moist | Height cm | Bushel Weight lbs/bu | Lodging | Shatter | Smuts | |
| AC Juniper | milling | 107 | -0.6 | 95 | 42 | VG | G | I | Agricore United |
| AC Morgan | milling | 111 | 3.9 | 92 | 42 | VG | | I | SeCan |
| AC Mustang | feed / forage | 109 | 5.5 | 104 | 43 | G | G | I | Agricore United |
| Cascade | feed | 108 | 0.0 | 104 | 41 | G | G | S | SeCan |
| <i>CDC Baler *</i> | forage | 109 | 11.5 | 98 | 41 | | | | Quality Assured |
| ■ CDC Dancer | milling | 110 | -1.0 | 96 | 43 | G | | R | Cargill |
| □ CDC Orrin | milling | 108 | 5.4 | 83 | 43 | | | | Quality Assured |
| Derby | milling | 108 | 5.5 | 100 | 42 | G | G | S | Agricore United |
| ■ Ronald (AC Ronald) | milling | 112 | 5.2 | 86 | 44 | VG | | R | SeCan |
| <u>Varieties not tested in 2003 (Averages 1989-2002)</u> | | | | | | | | | |
| ■ AC Assiniboia | milling | 110 | 4.0 | 97 | 40 | G | G | F | SeCan |
| AC Gwen (OT 297) | hulless | 123 | 11.6 | 106 | 47 | VG | | G | SeCan |
| AC Belmont | hulless | 109 | | 94 | 41 | G | G | G | SeCan |
| AC Ernie | hulless | 108 | | 85 | 42 | F | | G | C&M Seed Sales |
| AC Medallion | milling | 109 | | 97 | 40 | F | | VG | Cargill |
| AC Preakness | milling | 108 | | 101 | 40 | F | G | G | Agricore United |
| AC Rebel | milling | 114 | | 95 | 42 | G | | G | Canterra Seeds |
| Athabasca | feed | 103 | | 87 | 40 | G | G | P | SeCan |
| ■ Boudrais (OT 799) | hulless | 119 | 11.9 | 104 | 45 | VG | | | Quality Assured |
| □ Bullion | hulless | 113 | | 90 | 51 | VG | | P | Agricore United |
| Calibre | milling | 109 | | 100 | 42 | F | G | P | SeCan |
| CDC Boyer | milling | 109 | 4.9 | 103 | 40 | G | G | P | SeCan |
| CDC Pacer | milling | 108 | | 93 | 42 | F | G | F | Quality Assured |
| Foothill | forage | 105 | | 99 | 39 | F | G | P | SeCan |
| Grizzly | feed / forage | 107 | | 90 | 41 | F | G | P | public |
| Jasper | milling | 105 | | 104 | 42 | F | G | P | SeCan |
| ■ Kaufmann (OT 797) | milling | 120 | 8.0 | 109 | 42 | G | | | SeCan |
| ■ Pinnacle | milling | 115 | 7.7 | 94 | 41 | F | | G | Quality Assured |
| Robert | | 106 | | 93 | 40 | G | G | G | SeCan |
| ■ SW EXACTOR | milling | 112 | 4.2 | 95 | 40 | VG | | F | Quality Assured |
| ■ Triple Crown | milling | 108 | | 92 | 38 | VG | | G | Canterra |
| Waldern | feed | 107 | | 106 | 40 | G | G | P | SeCan |

Cascade - check variety

EX = excellent, VG = very good, G = good, F = fair, P = poor (susceptible)

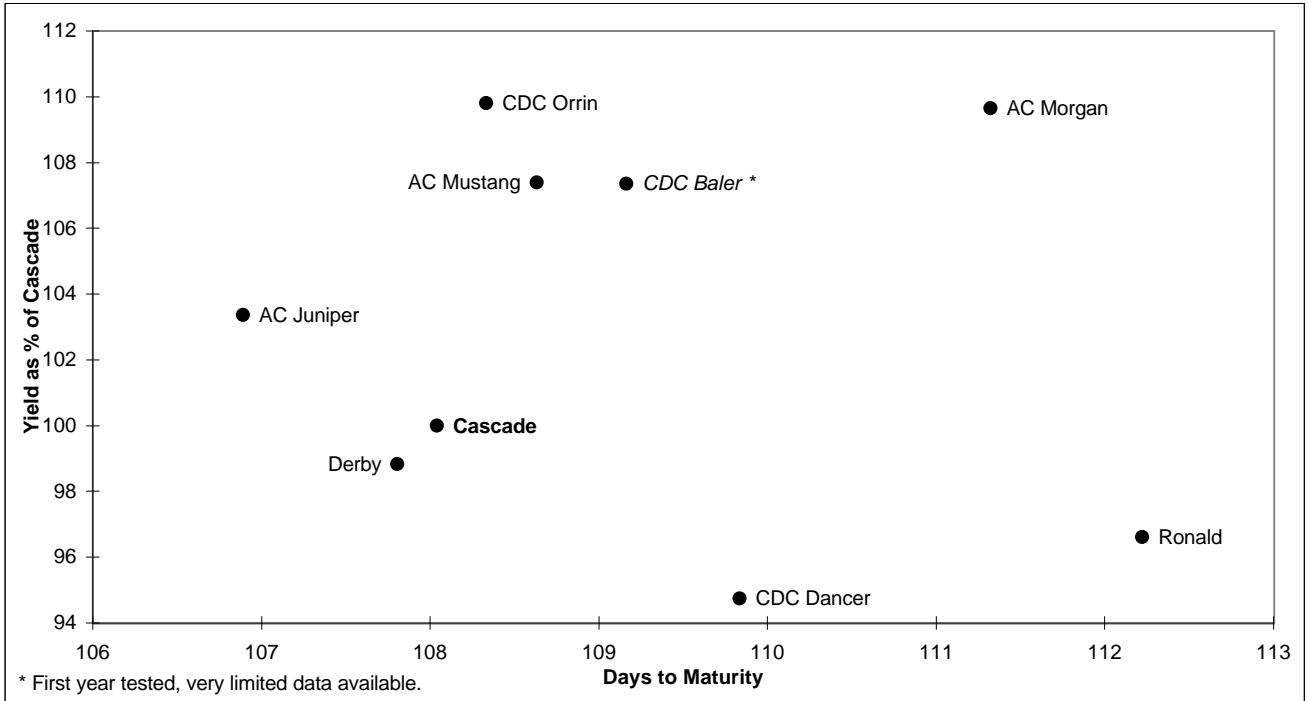
■ Protected by Plant Breeders' Rights

S = Susceptible I = Intermediate R = Resistant

□ Protection under Plant Breeders' Rights applied for

* first year tested, very limited data available

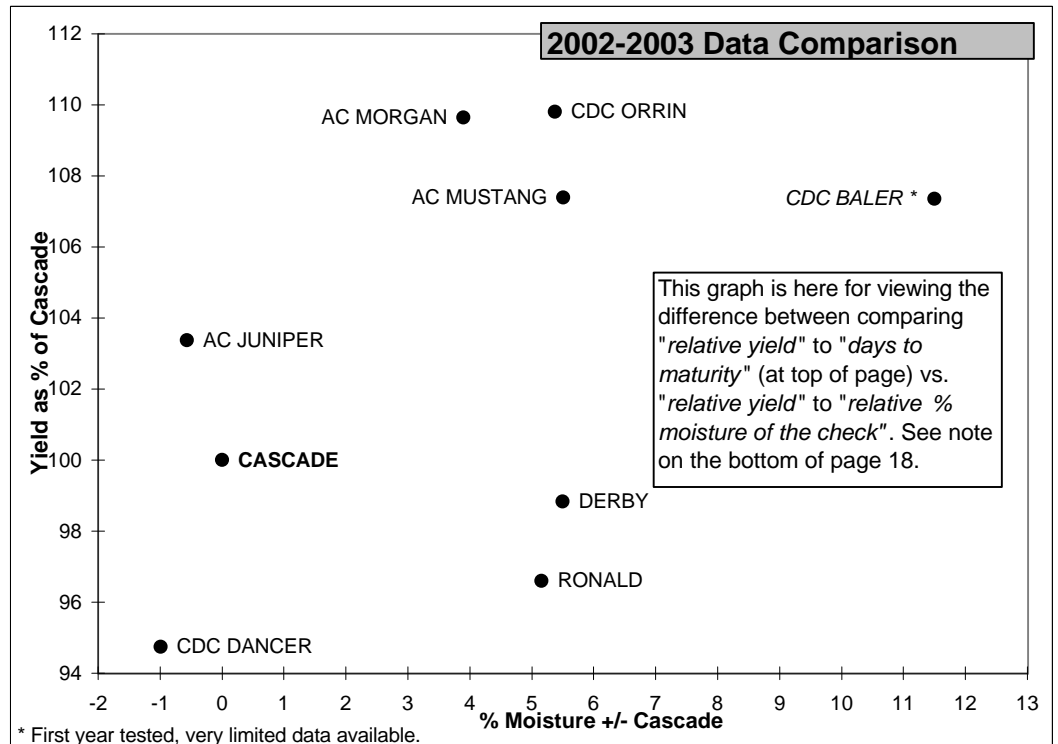
Note: ***Whole Head +/- % Moisture: These values display how much "wetter" or "drier" a given variety is as compared to the check variety at the time of head collection. Head collection occurs when the earliest lines are below 20% moisture. This was developed to accommodate a more accurate system of comparing maturity *between years*, using oat panicles (heads) in a similar fashion as they are used for barley and wheat heads (see pages 8 & 11 for wheat). The difference is oat "heads", or rather oat panicles, have a larger tissue to seed ratio than barley or wheat. This data displays comparisons as *relative to the check (+ / -)* in a similar fashion as yield data. The assumption is that everyone knows the abilities and or inabilities of the check variety for our area, and thus can derive how much later or earlier maturing a given variety is based on whole head % moisture. *Whole head % moisture* is a tangible (quantitative) measurement, not an assigned relative value (qualitative), and thus should be more accurate than maturity estimates based on visual assessments. However, according to two years worth of data collected from two stations as displayed above, the relationship between "days to" and "whole head + / - % moisture" does not necessarily co-relate, thus it is best to rely on "*days to maturity*" column for now until this is investigated further. This new column and corresponding graph are still inconclusive, **and are displayed here in this report for interest only at this time.**



Oats are often sown to provide fodder in the form of silage or greenfeed. Oats will yield more silage or greenfeed per unit area than any other cereal crop. If managed properly, it can provide 3-4.5 tons of dry matter per acre, or more, of high quality feed containing up to 10 percent protein. Many years of comparing yields of oats with barley have shown oats to be superior in the Black and Grey Wooded soil zones. Although the percent protein level in barley is higher than in oats, the total amount of protein produced on a given area is higher with oats than with barley. Oats have about 22-26 percent hull whereas barley averages about 12-14 per cent hull on a weight basis. When choosing a variety, the seed yield as well as the forage yield should be considered, thereby keeping one's options open to harvest as forage or grain. It is believed by some farmers that one variety might be better than another because it appears leafier; however, tests on a number of varieties have shown very little variation in leafiness.

On heavier soils and in the more moist areas, lodging resistance should be considered. The variation in straw feed quality between oat varieties is insignificant and should not be used as a variety selection criterion. The average feed values are: protein 4%, fibre 49%, calcium 0.27%, and phosphorus 0.08%.

Source: Alberta Agriculture, Food, and Rural Development website
www.agric.gov.ab.ca



SPRING TRITICALE

Triticale is a genetic cross (not a hybrid) developed by crossing wheat (*Triticum turgidum* or *Triticum aestivum*) with rye (*Secale cereal*). All varieties of spring triticale currently available are approximately 10 days later maturing than CWRS wheats, and as such they should not be grown in the B.C. Peace River region for grain production. All three varieties entered here in this trial are earlier than other traditional spring triticale varieties, and perhaps as breeding continues earlier lines may come along that we can grow for grain here. Their grain yields are "attention grabbers", and so it is worth watching their development. Drought tolerance is the primary advantage that spring triticales have over other spring cereal crops. Spring triticales are also a valuable alternative to barley & oats forage and feed. It is for these reasons that data is included.

| Spring Triticale | | Yield as % of Pronghorn | | | | | | | | | |
|--|---------------|-------------------------|-----------------------|--|---------------|------------------|-----------------------|--|-------------|----------------|--------------|
| Variety | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | |
| | 2003 Yield | | 2001-2003 | | 2003 Yield | | 2001-2003 | | 2003 | 2001-2003 | |
| | bus / acre | % of check | Avg. Stn. (%) Yrs. | | bus / acre | % of check | Avg. Stn. (%) Yrs. | | Avg. (%) | Avg. (%) | Stn. Yrs. |
| AC Alata | 79 a | 114 | 106 [2] | | 131 a | 103 | 103 [2] | | 109 | 104 [4] | |
| AC Certa | 61 c | 88 | 88 [2] | | 111 b | 87 | 89 [2] | | 88 | 88 [4] | |
| AC Ultima | 67 bc | 97 | 101 [3] | | 108 b | 84 | 94 [3] | | 91 | 97 [6] | |
| Pronghorn | 69 b | 100 | 100 [3] | | 128 a | 100 | 100 [3] | | 100 | 100 [6] | |
| LSD (P=.05) = | 7.61 | | | | 7.69 | | | | | | |
| CV value (%) = | 8.24 | | | | 4.36 | | | | | | |
| Varieties not tested in 2003 (Averages 2001) | | | | | | Last Year Tested | | | | | |
| SANDRO | | | 104 [1] | | | | 97 [1] | | 100 (2001) | [2] | |

Means followed by the same letter do not significantly differ (P=.05, LSD)

* first year tested, very limited data available

Pronghorn - check variety

| Spring Triticale | | Variety Descriptions | | | | | | |
|--|-----------------------|----------------------|----------------|---------------------|----------------------|---------------------|------------|--------------------|
| Variety | Maturity (days to) | Whole | Height (cm) | Bushel | TKW (g / 1000) | 0 - 9 scale; 0=nil | | Distributor |
| | | Head % Moist. | | Weight (lbs/bus) | | Septoria complex | Ergot | |
| AC Alata | 123 | 8.8 | 87 | 54 | 55 | 3.0 | | Progressive |
| AC Certa | 118 | 1.2 | 98 | 60 | 45 | 2.3 | | Progressive |
| AC Ultima | 123 | -5.5 | 103 | 59 | 50 | 3.2 | 0.6 | Quality Assured |
| Pronghorn | 126 | 0.0 | 106.8 | 57 | 47 | 3.1 | 0.3 | Progressive |
| Varieties not tested in 2003 (Averages 2001) | | | | | | | | |
| SANDRO | 148 | | 117 | 58 | 50 | 1.5 | 3.1 | Promark Seed |

SOFT WHITE SPRING WHEAT

| Soft White Spring Wheat | | Yield as % of AC Reed and Variety Descriptions | | | | | | | | | | |
|--|---------------|--|---------------|---------------|-----------------------|--------------------------|-------------------------------|---------------------|-----------------|----------------|-----------------|-------------|
| Variety | Dawson Creek | | Fort St. John | | | | B.C. Peace 2002-2003 Averages | | | | | Distributor |
| | 2003 Yield | | 2002** | | 2003 Yield | | 2002-2003 | | Bushel | | | |
| | bus / acre | % of check | bus / acre | % of check | Avg. Stn. (%) Yrs. | Stn. Yield Yrs. Avg % | Stn. Yield Yrs. Avg % | Days to Maturity | Weight lb/bu | Height (cm) | | |
| AC Andrew | 70.1 a | 115 | 111 a | 111 | 115 [2] | [3] 115 | 114 | 63 | 75 | | SeCan | |
| AC Meena | 68.3 a | 115 | 111 a | 110 | 115 [2] | [3] 115 | 115 | 64 | 75 | | Haney Farms | |
| AC Reed | 44.7 b | 100 | 101 b | 100 | 100 [2] | [3] 100 | 116 | 63 | 69 | | SeCan | |
| <i>Bhishaj (SWS-285)*</i> | 67 a | | 109 a | 109 | 109 [1] | [1] 109 | 118 | 65 | 88 | | Tony Crooymans | |
| LSD (P=.05) = | 4.94 | | 5.26 | | | | | | | | | |
| CV value (%) = | 4.94 | | 4.83 | | | | | | | | | |
| Varieties not tested in 2003 (Averages 2002) | | | | | | | | | | | | |
| AC Nanda* | | 106 | | 105 | | [2] 106 | 112 | 62 | 70 | | Quality Assured | |
| AC Phil* | | 108 | | 100 | | [2] 104 | 104 | 62 | 63 | | Proven Seeds | |

Means followed by the same letter do not significantly differ (P=.05, LSD)

* first year tested, very limited data available

**DC yield data is not included in long term average due to poor germination of check variety

AC Reed - check variety