

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 | | | | | | | | | | | |
|----------------|---------------|-----------------------|-------------|---|---------------|---------------|-------------|-------------------------|-------------|-------------|------------------|------------|------------|
| | | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | | |
| Variety | 2005 Yield | | 2002-2005 | | 2005 Yield | | 2002-2005 | | 2005 | 2002-2005 | | | |
| | bus / acre | % of Check | Avg. (%) | Station Years | bus / acre | % of Check | Avg. (%) | Station Years | Avg. (%) | Avg. (%) | Station Years | | |
| 5601HR | 65 | efg | 91 | 101 | [4] | 92 | c | 94 | 99 | [4] | 92 | 100 | [8] |
| 5602HR | 71 | cde | 100 | 104 | [2] | 95 | bc | 96 | 95 | [2] | 98 | 100 | [4] |
| AC Barrie | 57 | g | 80 | 104 | [4] | 94 | bc | 96 | 99 | [4] | 88 | 101 | [8] |
| AC Intrepid | 79 | abc | 111 | 107 | [4] | 105 | ab | 107 | 104 | [4] | 109 | 106 | [8] |
| AC Splendor | 70 | cde | 98 | 104 | [4] | 97 | abc | 98 | 98 | [4] | 98 | 101 | [8] |
| Alikat | 73 | b-e | 103 | 102 | [4] | 95 | bc | 96 | 95 | [4] | 100 | 99 | [8] |
| BW 301 | 79 | abc | 111 | 115 | [2] | 108 | a | 110 | 110 | [2] | 110 | 112 | [4] |
| CDC Go | 83 | ab | 117 | 107 | [3] | 105 | ab | 107 | 98 | [3] | 112 | 103 | [6] |
| CDC Imagine | 80 | abc | 113 | 105 | [4] | 108 | a | 109 | 101 | [4] | 111 | 103 | [8] |
| CDC Osler | 78 | a-d | 110 | 105 | [3] | 100 | abc | 101 | 101 | [3] | 106 | 103 | [6] |
| Harvest | 72 | b-e | 102 | 102 | [4] | 98 | abc | 99 | 95 | [4] | 101 | 99 | [8] |
| Infinity | 77 | a-d | 109 | 118 | [2] | 104 | abc | 105 | 104 | [2] | 107 | 111 | [4] |
| Journey | 59 | fg | 84 | 100 | [4] | 93 | c | 94 | 94 | [4] | 89 | 97 | [8] |
| Katepwa | 71 | cde | 100 | 100 | [4] | 98 | abc | 100 | 100 | [4] | 100 | 100 | [8] |
| Lillian | 71 | cde | 100 | 104 | [3] | 101 | abc | 103 | 103 | [3] | 101 | 104 | [6] |
| Lovitt | 70 | cde | 99 | 107 | [3] | 99 | abc | 101 | 102 | [3] | 100 | 105 | [6] |
| Park | 78 | a-d | 109 | 103 | [2] | 97 | abc | 99 | 93 | [2] | 104 | 98 | [4] |
| Peace | 65 | efg | 91 | 103 | [2] | 99 | abc | 100 | 99 | [2] | 96 | 101 | [4] |
| Snowbird** | 67 | def | 95 | 102 | [4] | 97 | abc | 98 | 101 | [4] | 97 | 102 | [8] |
| Superb | 86 | a | 121 | 120 | [4] | 109 | a | 111 | 110 | [4] | 116 | 115 | [8] |
| LSD (P=.05) = | 6.48 | | | | | 6.78 | | | | | | | |
| CV value (%) = | 6.32 | | | | | 4.81 | | | | | | | |
| | | | | <u>Varieties not tested in 2005 (2002-2004)</u> | | | | <u>Last Year Tested</u> | | | | | |
| 5500 HR | | | 109 | [3] | | | 101 | [3] | (2004) | 105 | [6] | | |
| CDC Teal | | | 100 | [3] | | | 94 | [3] | (2004) | 97 | [6] | | |
| Kanata** | | | 82 | [3] | | | 83 | [3] | (2004) | 83 | [6] | | |
| McKenzie | | | 116 | [2] | | | 104 | [2] | (2004) | 110 | [4] | | |
| Prodigy | | | 117 | [3] | | | 99 | [3] | (2004) | 108 | [6] | | |

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 | | | | Alberta Agdex 100/32 | | | | | | | | | Distributor |
|--|---------------------|-----------|---------------|-------------------|----------------------|----------|------------|-------------|-----------------|-----------|---------------|----------|-------------------------|-------------|
| | 2002-2005 | | | | Resistance to: | | | | | | Tolerance to: | | | |
| | Days to Maturity | Height | Bushel Weight | Kernel Protein*** | Lodging | Shatter | Loose Smut | Common Bunt | Common Root Rot | Leaf Spot | Sprouting | FHB | | |
| | +/- check | cm | lbs/bu | % [st.yrs] | | | | | | | | | | |
| ■ 5601HR | 2 | 86 | 64 | 13.5 [8] | G | G | I | I | XX | P | F | F | Agricore United | |
| ■ 5602HR | 3 | 84 | 63 | 12.9 [4] | G | G | R | R | XX | F | XX | G | Agricore United | |
| ■ AC Barrie | 2 | 81 | 64 | 13.9 [8] | G | G | R | R | I | P | G | F | SeCan | |
| ■ AC Intrepid | 0 | 83 | 63 | 13.3 [8] | G | G | I | R | I | F | P | P | Canterra | |
| ■ AC Splendor | -1 | 80 | 63 | 14.0 [8] | F | G | I | I | I | F | F | P | SeCan | |
| Alikat | 0 | 78 | 64 | 13.6 [8] | F | G | R | R | I | P | F | F | Canterra | |
| BW 301 | 0 | 83 | 62 | 12.5 [4] | XX | XX | XX | XX | XX | XX | XX | XX | U of S | |
| CDC Go | -1 | 74 | 64 | 13.8 [6] | G | G | S | I | XX | P | P | F | U of S | |
| ■ CDC Imagine | 0 | 78 | 63 | 13.3 [8] | G | G | R | R | I | P | F | VP | Sask Wheat Pool | |
| CDC Osler | -2 | 77 | 63 | 13.5 [6] | G | G | R | I | XX | XX | F | P | U of S | |
| ■ Harvest | -1 | 77 | 64 | 13.8 [8] | VG | G | R | S | I | P | EX | VP | FarmPure Seeds | |
| ■ Infinity | 2 | 79 | 63 | 12.1 [4] | G | G | R | R | XX | P | G | VP | Canterra | |
| ■ Journey | 3 | 77 | 63 | 14.5 [8] | VG | G | I | R | I | P | G | F | AgPro/Sask Wheat Pool | |
| Katepwa | 0 | 83 | 64 | 13.2 [8] | F | G | R | R | I | P | F | F | SeCan | |
| ■ Lillian | 0 | 81 | 63 | 13.4 [6] | G | G | R | I | I | P | G | VP | SeCan | |
| ■ Lovitt | 0 | 81 | 63 | 12.9 [6] | G | G | G | I | I | XX | VG | P | Canterra | |
| Park | 0 | 83 | 63 | 12.6 [4] | F | G | R | I | I | P | G | VP | Stock Seed Distribution | |
| Peace | 2 | 81 | 63 | 13.0 [4] | G | G | R | R | XX | XX | XX | P | Canterra | |
| ■ Snowbird** | 0 | 83 | 63 | 13.4 [8] | G | G | R | S | I | P | G | P | FarmPure Seeds | |
| ■ Superb | 2 | 78 | 64 | 12.8 [8] | G | G | I | R | I | P | G | P | SeCan | |
| <u>Varieties not tested in 2005 (Averages 2002-2004)</u> | | | | | | | | | | | | | | |
| ■ 5500 HR | 2.5 | 76 | 64 | 13.8 [6] | F | G | I | I | | P | G | F | Agricore United | |
| CDC Teal | 0.1 | 76 | 63 | 13.9 [6] | G | G | I | I | I | P | P | VP | FarmPure Seeds | |
| ■ Kanata** | 0.6 | 71 | 63 | 14.1 [6] | G | G | I | S | I | P | G | F | FarmPure Seeds | |
| McKenzie | 3 | 80 | 63 | 12.9 [6] | F | G | S | R | I | F | EX | F | Agricore United | |
| ■ Prodigy | 1.7 | 79 | 65 | 14.2 [6] | G | F | I | R | I | P | F | VP | Sask Wheat Pool | |

* first year tested, very limited data available

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

Katepwa - check variety

Disease Rating: R = Resistant, I = Intermediate, S = Susceptible

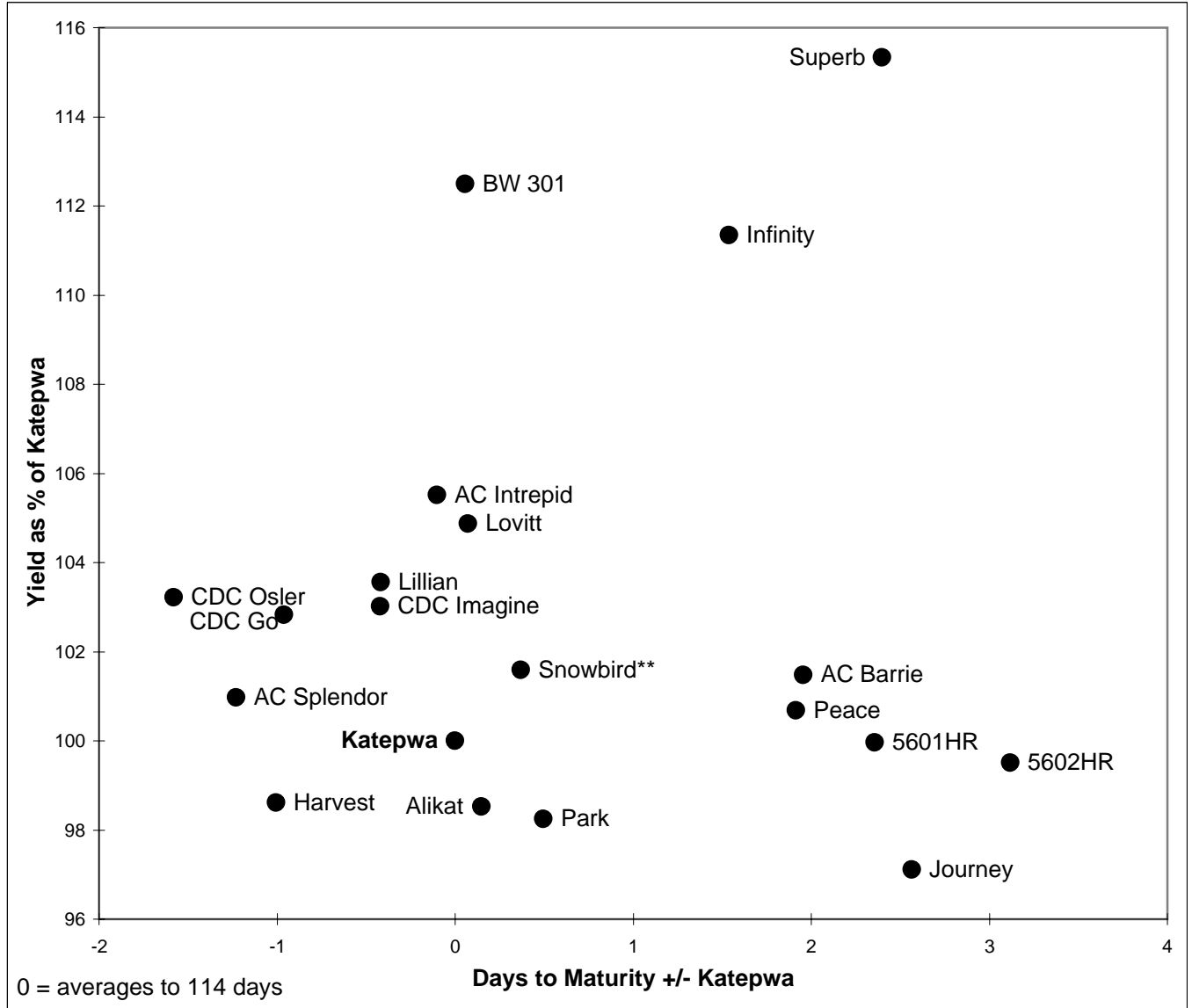
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XX = insufficient data

** HWSW Hard White Spring Wheat

*** % kernel protein data should be considered relative, as fertility can differ between years and sites but not within a particular year & site.

Average maturity for **Katepwa** is 114 days.



* first year tested, very limited data available

** Hard White Spring Wheat

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.

[For testing purposes, the CPS and CWES wheats are traditionally grown together in the same trial]

| CPS Wheat | | Yield as % of AC Taber | | | | | | | | | | | | | |
|-----------------|----------------|------------------------|---------------|-------------|--------------|---------------|---------------|-------------|--------------|-------------|-------------|--------------|------------|------------|--|
| | | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | | | | |
| Variety | Type | 2005 Yield | | 2002-2005 | | 2005 Yield | | 2002-2005 | | 2005 | 2002-2005 | | | | |
| | | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. | | | |
| 5700PR | CPS red | 95 | a | 110 | 101 | [4] | 117 | a | 102 | 98 | [4] | 106 | 100 | [8] | |
| 5701PR | CPS red | 89 | bc | 102 | 103 | [4] | 107 | abc | 94 | 92 | [4] | 98 | 98 | [8] | |
| AC Crystal | CPS red | 84 | d | 97 | 100 | [4] | 102 | bc | 90 | 94 | [4] | 94 | 97 | [8] | |
| AC Foremost | CPS red | 95 | a | 110 | 105 | [4] | 118 | a | 104 | 99 | [4] | 107 | 102 | [8] | |
| AC Taber | CPS red | 87 | cd | 100 | 100 | [4] | 114 | ab | 100 | 100 | [4] | 100 | 100 | [8] | |
| HY 475 | CPS white | 83 | d | 96 | 92 | [2] | 104 | bc | 91 | 93 | [2] | 93 | 92 | [4] | |
| HY 476 | CPS white | 91 | b | 105 | 101 | [2] | 111 | abc | 97 | 106 | [2] | 101 | 103 | [4] | |
| AC Barrie | CWRS | 60 | f | 69 | 87 | [4] | 87 | d | 77 | 79 | [4] | 73 | 83 | [8] | |
| LSD (P=.05) = | | 3.07 | | | | | | 8.35 | | | | | | | |
| CV value (%) = | | 2.54 | | | | | | 5.42 | | | | | | | |

| CWES Wheat | | Yield as % of AC Taber | | | | | | | | | | | | | |
|-----------------|----------------|------------------------|---------------|-------------|--------------|---------------|---------------|-------------|--------------|-------------|-------------|--------------|------------|------------|--|
| | | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | | | | |
| Variety | Type | 2005 Yield | | 2002-2005 | | 2005 Yield | | 2002-2005 | | 2005 | 2002-2005 | | | | |
| | | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. | | | |
| AC Taber | CPS red | 87 | cd | 100 | 100 | [4] | 114 | ab | 100 | 100 | [4] | 100 | 100 | [8] | |
| Amazon | CWES | 75 | e | 86 | 85 | [4] | 98 | c | 86 | 81 | [4] | 86 | 83 | [8] | |
| CDC Rama | CWES | 75 | e | 87 | 94 | [2] | 103 | bc | 91 | 86 | [2] | 89 | 90 | [4] | |
| AC Barrie | CWRS | 60 | f | 69 | 87 | [4] | 87 | d | 77 | 79 | [4] | 73 | 83 | [8] | |
| LSD (P=.05) = | | 3.07 | | | | | | 8.35 | | | | | | | |
| CV value (%) = | | 2.54 | | | | | | 5.42 | | | | | | | |

AC Taber - check variety

* first year tested, very limited data available

CPS & CWES are grown together in same trial

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

| CPS / CWES Wheat | | | | | | Variety Descriptions | | | | | | | | | | |
|----------------------------------|----------------|-----------|-----------|-----------|-----------------|---------------------------|----------|----------------|-------------|----------|-----------|-----------|---------------|-----------------|--|-------------|
| B.C. Peace Averages 2002-2005 | | | | | | Data Alberta Agdex 100/32 | | | | | | | | | | |
| Variety | Type | Maturity | | Bushel | | Kernel | | Resistance to: | | | | | Tolerance to: | | | Distributor |
| | | in days | Height | Weight | Protein ** | Lodging | Shatter | Loose Smut | Common Bunt | Root Rot | Leaf Spot | Sprouting | FHB | | | |
| | | +/- check | cm | lbs/bu | % [st.yrs] | | | | | | | | | | | |
| ■ 5700PR | CPS red | -1 | 69 | 63 | 11.6 [8] | G | G | S | R | I | P | P | VP | Agricore United | | |
| ■ 5701PR | CPS red | -1 | 73 | 62 | 11.8 [8] | G | G | I | S | I | P | P | VP | Agricore United | | |
| ■ AC Crystal | CPS red | 0 | 71 | 63 | 11.8 [8] | G | G | I | R | S | F | P | VP | SeCan | | |
| AC Foremost | CPS red | -1 | 65 | 63 | 11.3 [8] | EX | G | R | R | I | P | F | VP | SeCan | | |
| AC Taber | CPS red | 0 | 70 | 63 | 11.4 [8] | G | G | S | R | I | F | P | VP | SeCan | | |
| ■ HY 475 | CPS white | -2 | 74 | 62 | 11.2 [4] | XX | XX | XX | XX | XX | XX | XX | XX | FarmPure Seeds | | |
| ■ HY 476 | CPS white | 0 | 82 | 62 | 10.5 [4] | XX | XX | XX | XX | XX | XX | XX | XX | FarmPure Seeds | | |
| ■ Amazon | CWES | 0 | 93 | 63 | 12.8 [8] | G | G | R | I | I | F | P | P | Canterra | | |
| CDC Rama | CWES | -1 | 94 | 64 | 12.9 [4] | F | G | R | R | XX | P | P | F | FarmPure Seeds | | |
| ■ AC Barrie | CWRS | -3 | 79 | 63 | 12.9 [8] | G | G | R | R | I | P | G | F | SeCan | | |

* first year tested, very limited data available

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

AC Taber - check variety

F = fair, P = poor (susceptible), VP = very poor (very susceptible)

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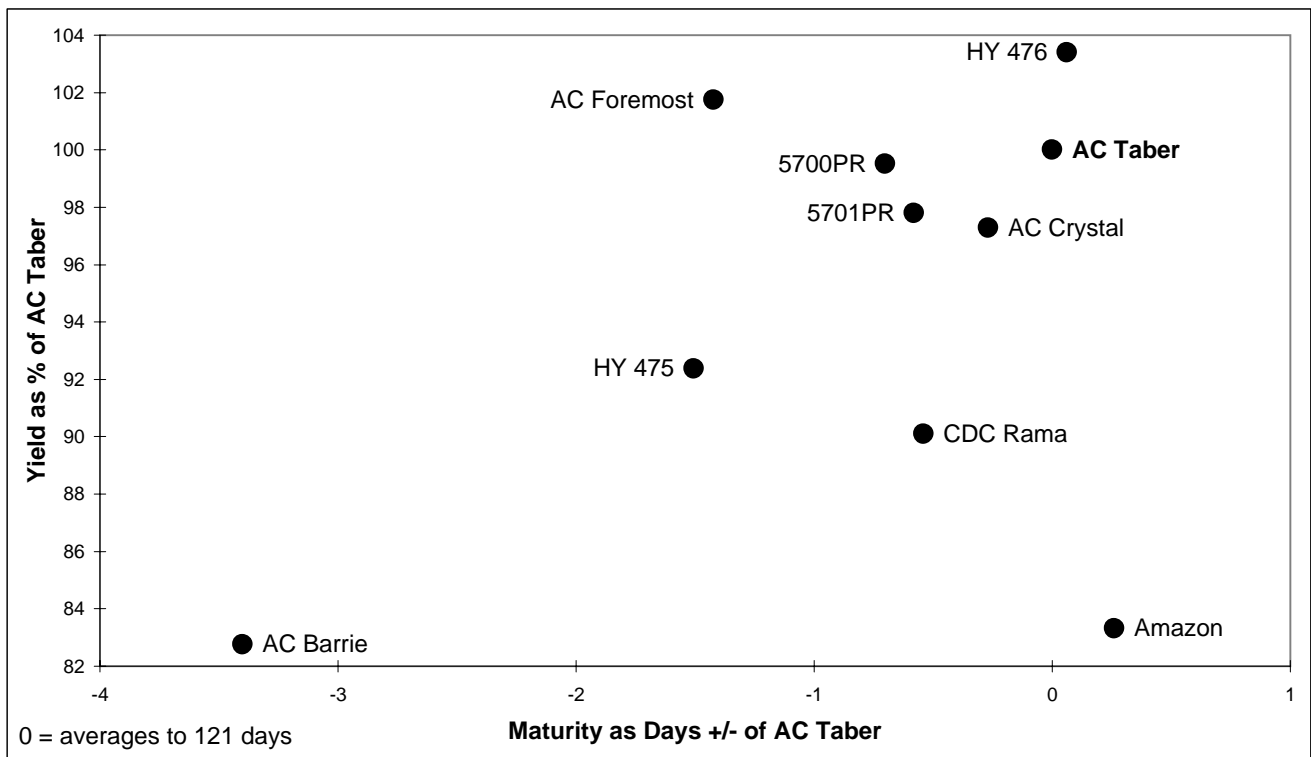
Disease Rating: R = Resistant, I = Intermediate, S = Susceptible

XX = insufficient data

Average maturity for **AC Taber** is 121 days.

** % kernel protein data should be considered relative, as fertility can differ between years and sites but not within a particular year & site.

CPS / CWES Wheat Regional Variety Performance 2002-2005



BARLEY

| Six Row Barley | | Yield as % of Harrington | | | | | | | | | | | | |
|---|----------------|--------------------------|---------------|-------------|--------------|---------------|---------------|-------------|--------------|-------------|------------------|--------------|------------|------------|
| Variety | Type | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | | | |
| | | 2005 Yield | | 2002-2005 | | 2005 Yield | | 2002-2005 | | 2005 | 2002-2005 | | | |
| | | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. | | |
| AC Albright | feed | 109 | ab | 109 | 97 | [4] | 107 | ab | 99 | 93 | [4] | 104 | 95 | [8] |
| AC Lacombe | feed | 110 | ab | 110 | 108 | [4] | 104 | ab | 97 | 109 | [4] | 103 | 108 | [8] |
| AC Metcalfe ¹ | 2R malt | 105 | ab | 105 | 110 | [2] | 102 | ab | 95 | 99 | [2] | 100 | 104 | [4] |
| CDC Battleford | malt | 114 | ab | 114 | 114 | [4] | 96 | b | 89 | 107 | [4] | 102 | 111 | [8] |
| CDC Clyde * | malt | 115 | ab | 115 | 115 | [1] | 100 | ab | 93 | 93 | [1] | 104 | 104 | [2] |
| Harrington | 2R malt | 100 | b | 100 | 100 | [4] | 107 | ab | 100 | 100 | [4] | 100 | 100 | [8] |
| Kasota | feed(sd) | 98 | b | 98 | 99 | [4] | 107 | ab | 100 | 96 | [4] | 99 | 97 | [8] |
| LEGACY | malt (white) | 111 | ab | 111 | 105 | [4] | 97 | b | 90 | 97 | [4] | 101 | 101 | [8] |
| Manny | feed | 110 | ab | 110 | 116 | [3] | 111 | ab | 103 | 109 | [3] | 107 | 112 | [6] |
| Tradition | malt(white) | 104 | ab | 104 | 98 | [4] | 93 | b | 87 | 98 | [4] | 95 | 98 | [8] |
| Trochu | feed | 108 | ab | 107 | 107 | [4] | 98 | ab | 91 | 107 | [4] | 99 | 107 | [8] |
| Vivar | feed | 116 | ab | 116 | 114 | [3] | 99 | ab | 93 | 110 | [3] | 104 | 112 | [6] |
| LSD (P=.05) = | | 10.75 | | | | 12.31 | | | | | | | | |
| CV value (%) = | | 6.87 | | | | 8.38 | | | | | | | | |
| Varieties not tested in 2005 (Averages 2002-2004) | | | | | | | | | | | Last Year Tested | | | |
| AC Harper | feed | 105 [3] | | | | 111 [3] | | | | (2004) | 108 | [6] | | |
| AC Rosser | feed | 109 [3] | | | | 121 [3] | | | | (2004) | 115 | [6] | | |
| B1602 | malt(white) | 97 [3] | | | | 96 [3] | | | | (2004) | 96 | [6] | | |
| CDC Sisler | malt(white) | 103 [3] | | | | 111 [3] | | | | (2004) | 107 | [6] | | |
| CDC Springside | malt(white) | 111 [3] | | | | 109 [3] | | | | (2004) | 110 | [6] | | |
| CDC Tisdale | malt | 109 [3] | | | | 113 [3] | | | | (2004) | 111 | [6] | | |
| CDC YORKTON * | malt | 105 [1] | | | | 91 [1] | | | | (2004) | 98 | [2] | | |
| Lacey | malt(white) | 95 [2] | | | | 101 [2] | | | | (2004) | 98 | [4] | | |
| Mahigan | feed(sd) | 102 [3] | | | | 101 [3] | | | | (2004) | 101 | [6] | | |

| Two Row Barley | | Yield as % of Harrington | | | | | | | | | | | | |
|---|-------------|--------------------------|---------------|-------------|--------------|---------------|---------------|-------------|--------------|-------------|------------------|--------------|------------|------------|
| Variety | Type | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | | | |
| | | 2005 Yield | | 2002-2005 | | 2005 Yield | | 2002-2005 | | 2005 | 2002-2005 | | | |
| | | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. | | |
| AC Metcalfe ¹ | malt | 113 | bc | 107 | 107 | [4] | 101 | ab | 103 | 108 | [4] | 105 | 107 | [8] |
| Calder | malt | 120 | a | 114 | 116 | [3] | 99 | ab | 100 | 106 | [3] | 107 | 111 | [6] |
| CDC Copeland | malt | 97 | e | 92 | 107 | [4] | 84 | b | 85 | 103 | [4] | 88 | 105 | [8] |
| CDC Cowboy * | | 103 | d | 98 | 98 | [1] | 94 | ab | 95 | 95 | [1] | 97 | 97 | [2] |
| CDC Helgason | feed | 110 | bcd | 105 | 109 | [4] | 105 | ab | 106 | 110 | [4] | 105 | 109 | [8] |
| CDC Trey | feed | 111 | bcd | 105 | 107 | [3] | 91 | ab | 92 | 99 | [3] | 99 | 103 | [6] |
| CONLON * | | 112 | bc | 106 | 106 | [1] | 83 | b | 84 | 84 | [1] | 95 | 95 | [2] |
| Harrington | malt | 105 | cd | 100 | 100 | [4] | 99 | ab | 100 | 100 | [4] | 100 | 100 | [8] |
| McLeod (TR710) | feed | 109 | bcd | 104 | 111 | [3] | 96 | ab | 97 | 107 | [3] | 101 | 109 | [6] |
| Merit | malt | 125 | a | 119 | 123 | [4] | 95 | ab | 96 | 118 | [4] | 107 | 120 | [8] |
| Ponoka | feed | 121 | a | 115 | 125 | [3] | 115 | a | 116 | 125 | [3] | 115 | 125 | [6] |
| Seebe | feed | 111 | bcd | 106 | 109 | [4] | 106 | ab | 107 | 114 | [4] | 107 | 112 | [8] |
| XENA | feed | 124 | a | 118 | 114 | [4] | 102 | ab | 103 | 115 | [4] | 110 | 115 | [8] |
| LSD (P=.05) = | | 5.25 | | | | 15.44 | | | | | | | | |
| CV value (%) = | | 3.28 | | | | 10.99 | | | | | | | | |
| Varieties not tested in 2005 (Averages 2002-2004) | | | | | | | | | | | Last Year Tested | | | |
| CDC Bold | feed(sd) | 110 [3] | | | | 110 [3] | | | | (2004) | 110 | [6] | | |
| CDC Dolly | feed | 109 [3] | | | | 112 [3] | | | | (2004) | 110 | [6] | | |
| CDC Kendall | malt | 102 [3] | | | | 102 [3] | | | | (2004) | 102 | [6] | | |
| CDC Select | malt | 107 [3] | | | | 109 [3] | | | | (2004) | 108 | [6] | | |
| Niobe | feed | 107 [3] | | | | 106 [3] | | | | (2004) | 106 | [6] | | |
| Rivers | feed | 109 [3] | | | | 101 [3] | | | | (2004) | 105 | [6] | | |

AC Metcalfe¹ (2R malt) will be the future barley check. (sd) semi-dwarf variety

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

* first year tested, very limited data available

Harrington - check variety

| Feed Barley | | | | | | | | | | | Variety Descriptions | | | | | | |
|---|-------|---------------------|--------|---------------|---------------------|-------|------------|----------------------|-------|------------|----------------------|----------|-----|-----------------|-----------|--|--|
| Variety | Type | B.C. Peace Averages | | | | | | Alberta Agdex 100/32 | | | | | | Distributor | | | |
| | | 2002-2005 | | | 0-9 scale (0=nil)** | | | Resistance to | | | | | | | | | |
| | | Days to Maturity | Height | Bushel Weight | Kernel Protein*** | Scald | Net Blotch | Lodging | Scald | Loose Smut | False Smut | Root Rot | FHB | | Tolerance | | |
| | | +/- check | cm | lbs/bu | % [st.yrs] | | | | | | | | | | | | |
| Eligible for General Purpose Grades Only | | | | | | | | | | | | | | | | | |
| AC Albright | 6 row | -5 | 73 | 53 | 12.0 [6] | 1.8 | 1.5 | | S | S | S | S | | SeCan | | | |
| ■ AC Lacombe | 6 row | -1 | 67 | 50 | 11.2 [6] | 1.6 | 1.7 | G | I | S | R | S | VP | SeCan | | | |
| ■ CDC Helgason | 2 row | -1 | 66 | 54 | 13.2 [6] | 2.0 | 1.5 | G | S | R | R | I | P | SeCan | | | |
| ■ CDC Trey | 2 row | -1 | 65 | 54 | 13.0 [4] | 3.1 | 1.4 | G | I | I | R | R | F | SeCan | | | |
| ■ Manny | 6 row | -1 | 74 | 51 | 10.8 [4] | 1.0 | 2.5 | G | R | I | R | S | P | SeCan | | | |
| ■ McLeod (TR710) | 2 row | 3 | 59 | 53 | 13.2 [4] | 3.1 | 1.7 | G | S | S | R | I | P | Agricore United | | | |
| ■ Ponoka | 2 row | 2 | 69 | 54 | 11.9 [4] | 1.3 | 1.0 | G | I | R | R | I | F | SeCan | | | |
| ■ Seebe | 2 row | 6 | 75 | 54 | 14.1 [6] | 0.8 | 1.3 | G | R | S | R | S | G | SeCan | | | |
| ■ Trochu | 6 row | -2 | 65 | 51 | 11.4 [6] | 2.0 | 1.1 | G | I | S | R | R | P | SeCan | | | |
| ■ Vivar | 6 row | 0 | 60 | 52 | 11.2 [6] | 2.4 | 1.4 | VG | I | I | R | R | VP | SeCan | | | |
| ■ XENA | 2 row | 2 | 65 | 53 | 12.9 [6] | 2.1 | 1.5 | G | S | S | I | R | F | Agricore United | | | |
| Semi-dwarf varieties | | | | | | | | | | | | | | | | | |
| ■ Kasota | 6 row | -4 | 56 | 51 | 11.9 [6] | 1.6 | 2.3 | EX | R | S | R | I | VP | SeCan | | | |
| Forage varieties | | | | | | | | | | | | | | | | | |
| CDC Cowboy * | 2 row | 2 | 90 | 55 | 13.4 [2] | 2.4 | 1.3 | | | | | | | SeCan | | | |
| Varieties not tested in 2005 (Averages 2002-2004) | | | | | | | | | | | | | | | | | |
| ■ AC Harper | 6 row | 1 | 62 | 48 | 12.3 [4] | 1.6 | 1.8 | G | I | S | I | I | P | SeCan | | | |
| ■ AC Rosser | 6 row | 3 | 63 | 50 | 11.5 [4] | 2.4 | 1.2 | F | S | S | R | I | VP | SeCan | | | |
| CDC Bold (sd) | 2 row | 1 | 59 | 51 | 13.3 [4] | 0.8 | 1.7 | G | I | S | R | I | VP | Canterra | | | |
| CDC Dolly | 2 row | 4 | 59 | 53 | 13.7 [4] | 1.3 | 2.3 | F | I | S | R | I | F | SeCan | | | |
| ■ Mahigan (sd) | 6 row | -2 | 53 | 51 | 12.7 [4] | 1.1 | 3.4 | EX | R | S | R | I | VP | SeCan | | | |
| ■ Niobe | 2 row | 1 | 63 | 52 | 13.4 [4] | 0.5 | 1.5 | G | I | I | R | I | P | SeCan | | | |
| ■ Rivers | 2 row | 1 | 61 | 51 | 12.8 [4] | 2.4 | 1.2 | G | S | R | R | R | F | FarmPure Seeds | | | |

| Malt Barley | | | | | | | | | | | Variety Descriptions | | | | | | |
|---|--------------|---------------------|-----------|---------------|---------------------|------------|------------|----------------------|----------|------------|----------------------|----------|----------|-----------------|-----------|--|--|
| Variety | Type | B.C. Peace Averages | | | | | | Alberta Agdex 100/32 | | | | | | Distributor | | | |
| | | 2002-2005 | | | 0-9 scale (0=nil)** | | | Resistance to | | | | | | | | | |
| | | Days to Maturity | Height | Bushel Weight | Kernel Protein*** | Scald | Net Blotch | Lodging | Scald | Loose Smut | False Smut | Root Rot | FHB | | Tolerance | | |
| | | +/- check | cm | lbs/bu | % [st.yrs] | | | | | | | | | | | | |
| ■ AC Metcalfe ¹ | 2 row | 0 | 66 | 53 | 13.1 [12] | 1.8 | 1.8 | F | S | R | I | I | F | SeCan | | | |
| ■ Calder | 2 row | 0 | 65 | 53 | 12.8 [4] | 2.1 | 1.6 | F | S | R | R | I | F | SeCan | | | |
| ■ CDC Battleford | 6 row | -1 | 70 | 51 | 11.5 [6] | 2.4 | 1.3 | G | S | S | R | R | VP | FarmPure Seeds | | | |
| ■ CDC Clyde * | 6 row | -4 | 66 | 54 | 11.3 [2] | 3.3 | 1.7 | | | | | | | Agricore Unitec | | | |
| ■ CDC Copeland | 2 row | 2 | 73 | 52 | 12.8 [6] | 2.5 | 1.4 | F | S | S | I | I | F | SeCan | | | |
| ■ CONLON * | 2 row | -8 | 75 | 55 | 13.7 [2] | 3.9 | 2.8 | | | | | | | Seed Depot Corp | | | |
| ■ Harrington | 2 row | 0 | 64 | 52 | 12.9 [12] | 2.8 | 2.7 | F | S | S | S | I | G | SeCan | | | |
| ■ LEGACY | 6 row | -2 | 67 | 51 | 11.6 [6] | 2.5 | 1.6 | G | S | I | R | R | P | Agricore Unitec | | | |
| ■ Merit | 2 row | 5 | 66 | 52 | 12.4 [6] | 2.3 | 1.5 | F | S | S | R | I | F | Agricore Unitec | | | |
| ■ Tradition | 6 row | -3 | 69 | 52 | 12.1 [6] | 3.0 | 1.2 | G | S | S | R | R | VP | Busch Ag | | | |
| Varieties not tested in 2005 (Averages 2002-2004) | | | | | | | | | | | | | | | | | |
| B1602 | 6 row | -3 | 67 | 52 | 11.5 [4] | 2.2 | 1.4 | G | S | S | I | R | VP | Agricore Unitec | | | |
| ■ CDC Kendall | 2 row | 0 | 61 | 51 | 13.8 [4] | 1.8 | 2.0 | F | S | S | S | I | F | Agricore Unitec | | | |
| ■ CDC Select | 2 row | 3 | 63 | 52 | 13.0 [4] | 2.2 | 1.2 | F | S | R | I | I | VP | Agricore Unitec | | | |
| ■ CDC Sisler | 6 row | 0 | 77 | 50 | 12.0 [4] | | | P | S | S | S | I | F | Agricore Unitec | | | |
| ■ CDC Springside | 6 row | -2 | 72 | 50 | 11.5 [4] | 2.4 | 1.3 | G | | R | R | I | VP | Agricore Unitec | | | |
| ■ CDC Tisdale | 6 row | -1 | 73 | 49 | 11.6 [4] | 2.2 | 0.8 | G | S | S | R | I | P | FarmPure Seeds | | | |
| ■ CDC YORKTON | 6 row | -3 | 59 | 45 | | 1.8 | | G | S | S | R | R | P | Agricore Unitec | | | |
| ■ Lacey | 6 row | -2 | 63 | 51 | 12.7 [2] | 2.4 | | G | S | I | R | R | VP | Newfield Seeds | | | |

(sd) semi-dwarf variety

* first year tested, very limited data available

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

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

F = fair, P = poor, VP = very poor

Harrington - check variety

AC Metcalfe¹ (2R Malt) will be the future barley check.

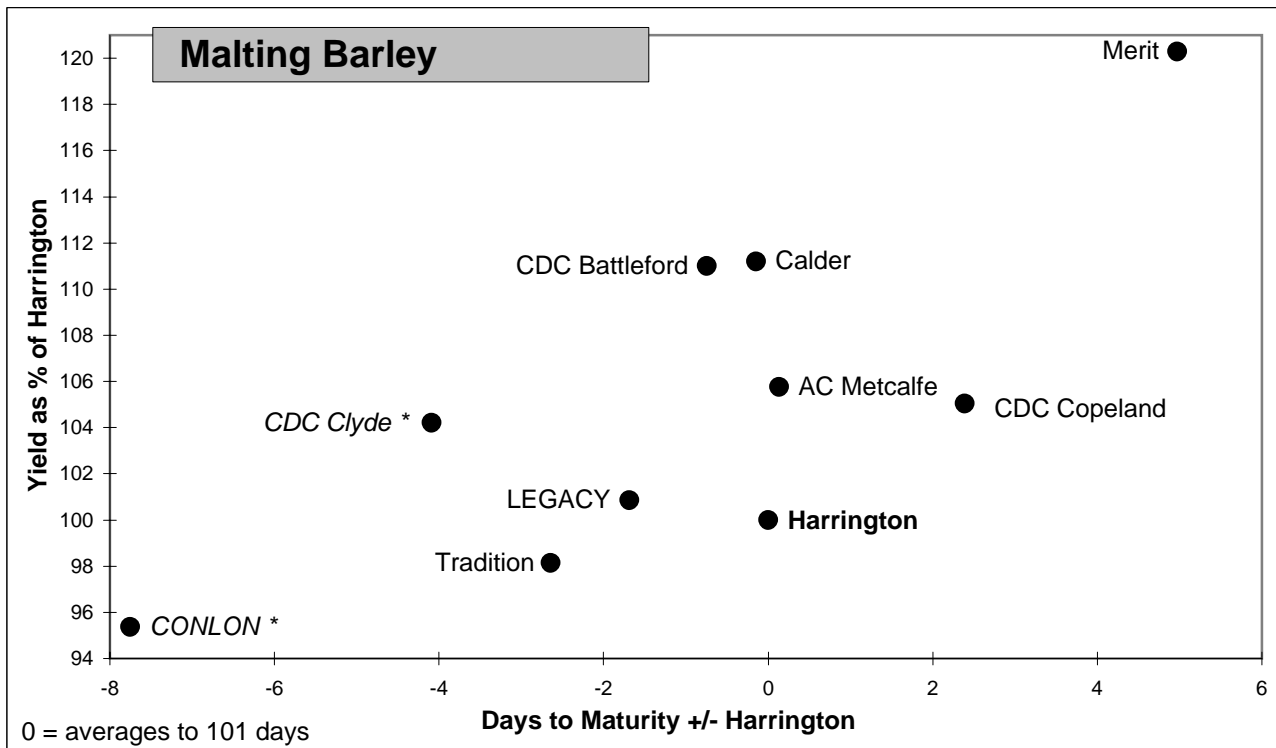
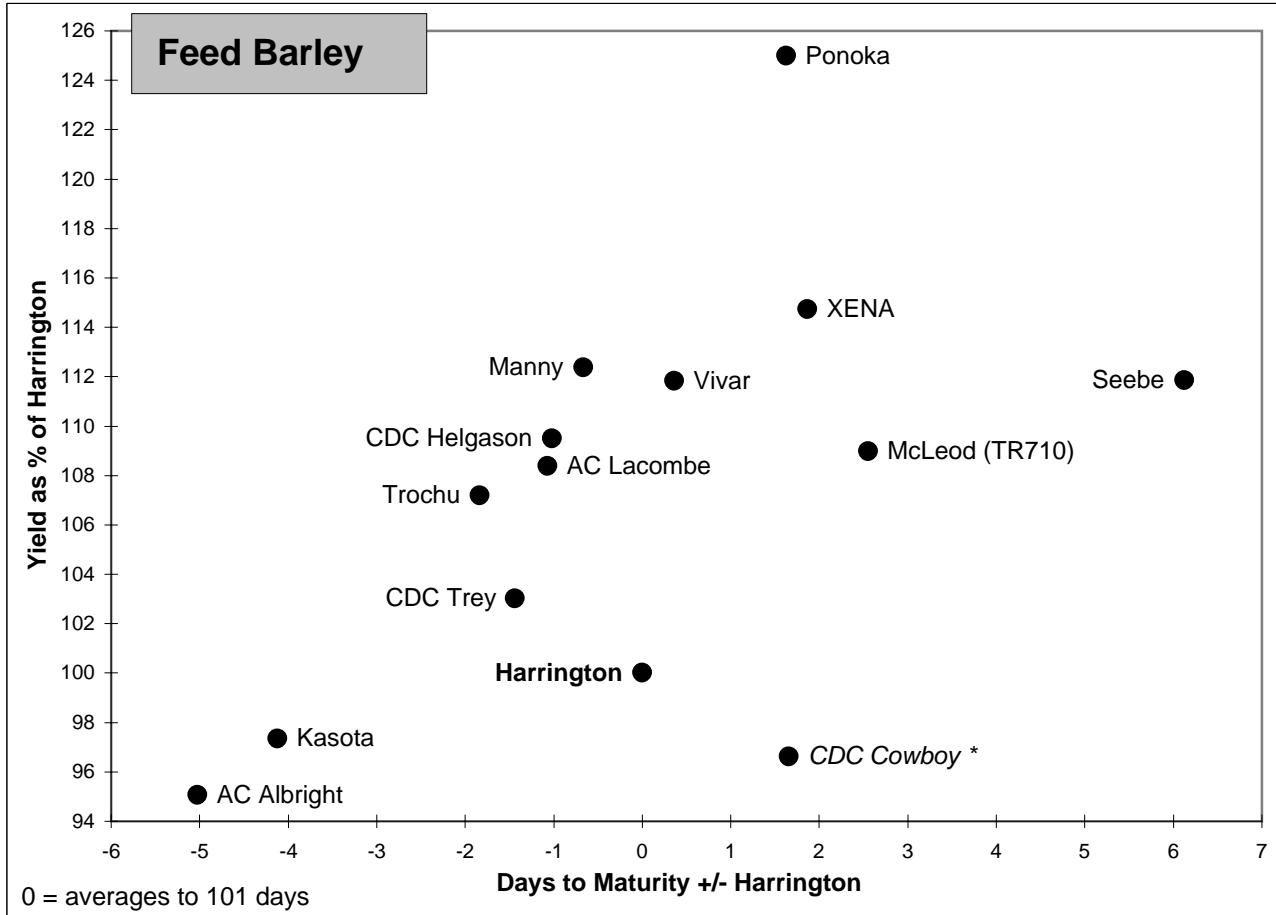
R = Resistant I = Intermediate S = Susceptible

*** % kernel protein data should be considered relative, as fertility can differ between years and sites but not within a particular year & site.

Average maturity for **Harrington** is 101 days.

Barley

Regional Variety Performance 2002-2005



* 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 in mind while comparing hulless to hulled. No hulless lines are currently being tested (see earlier reports).

| Oats | | Yield as % of Cascade | | | | | | | | | | |
|---|----------------|-----------------------|------------|------------|------------|----------------|------------|------------|------------|------------------|------------|------------|
| Variety | Colour | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | |
| | | 2005 Yield | | 2002-2005 | | 2005 Yield | | 2002-2005 | | 2005 | 2002-2005 | |
| | | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. |
| AC Juniper | white | 134 b | 93 | 89 | [4] | 128 b-f | 94 | 101 | [4] | 93 | 95 | [8] |
| AC Morgan | white | 144 a | 99 | 101 | [4] | 143 b | 105 | 107 | [4] | 102 | 104 | [8] |
| AC Mustang | white | 142 a | 98 | 105 | [4] | 139 bcd | 102 | 106 | [4] | 100 | 106 | [8] |
| Cascade | yellow | 144 a | 100 | 100 | [4] | 136 bcd | 100 | 100 | [4] | 100 | 100 | [8] |
| CDC Baler (forage oat) | white | 133 b | 92 | 98 | [3] | 162 a | 119 | 109 | [3] | 105 | 103 | [6] |
| CDC Orrin | white | 132 b | 91 | 103 | [4] | 137 bcd | 101 | 107 | [4] | 96 | 105 | [8] |
| CDC Sol-Fi * | white | 113 d | 78 | 78 | [1] | 114 f | 84 | 84 | [1] | 81 | 81 | [2] |
| CDC Weaver * | white | 134 b | 93 | 93 | [1] | 127 c-f | 93 | 93 | [1] | 93 | 93 | [2] |
| Furlong | tan | 121 c | 84 | 85 | [2] | 125 def | 92 | 97 | [2] | 88 | 91 | [4] |
| Leggett (OT 2021) | white | 121 c | 84 | 88 | [2] | 119 ef | 87 | 91 | [2] | 86 | 90 | [4] |
| Lu | yellow | 134 b | 92 | 91 | [4] | 133 b-e | 98 | 99 | [4] | 95 | 95 | [8] |
| Murphy (forage oat) | white | 127 bc | 88 | 94 | [2] | 142 bc | 104 | 107 | [2] | 96 | 101 | [4] |
| OT 566 | white | 125 bc | 87 | 89 | [2] | 119 ef | 87 | 96 | [2] | 87 | 92 | [4] |
| SW Betania * | | 127 bc | 88 | 88 | [1] | 128 b-f | 94 | 94 | [1] | 91 | 91 | [2] |
| | LSD (P=.05) = | 5.85 | | | | 9.85 | | | | | | |
| | CV value (%) = | 3.13 | | | | 5.21 | | | | | | |
| Varieties not tested in 2005 (Averages 2002-2004) | | | | | | | | | | Last Year Tested | | |
| Ronald | yellow | | | 92 | [3] | | | 102 | [3] | (2004) | 97 | [6] |

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

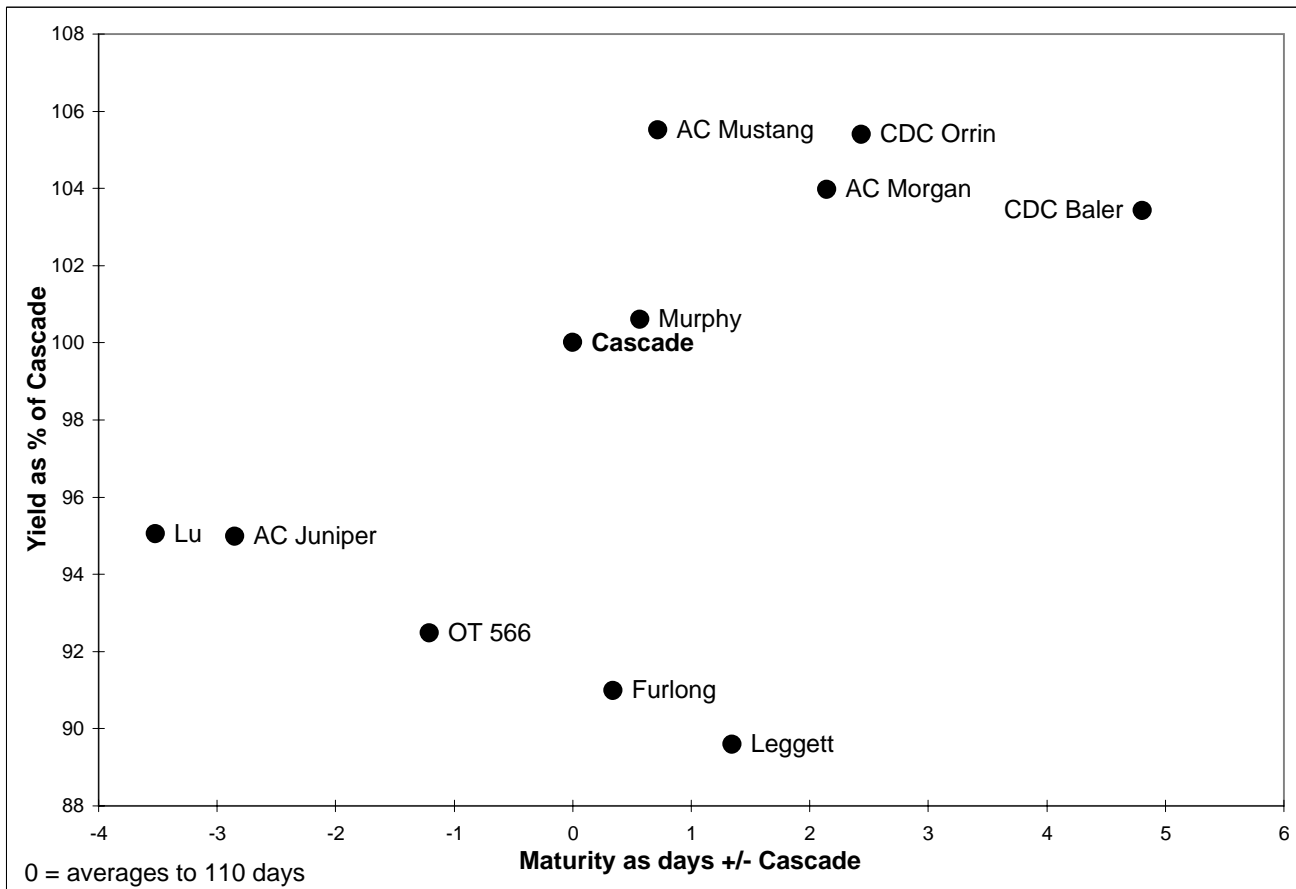
Average maturity for Cascade is 110 days.

| Oats | | Variety Descriptions | | | | | | |
|---|----------------|----------------------------|-----------|----------------------|----------------|----------|------------------|--|
| Variety | Type | BC Peace Avg. (2002-2005) | | | Resistance to: | | Distributor | |
| | | Maturity as days +/- check | Height cm | Bushel Weight lbs/bu | Lodging | Smuts | | |
| AC Juniper | milling | -3 | 82 | 42 | VG | I | Agricore United | |
| AC Morgan | milling | 2 | 86 | 42 | VG | R | SeCan | |
| AC Mustang | feed / forage | 1 | 92 | 43 | G | I | Agricore United | |
| Cascade | feed | 0 | 93 | 41 | G | S | SeCan | |
| CDC Baler | forage | 5 | 99 | 41 | XX | S | FarmPure Seeds | |
| ■ CDC Orrin | milling | 2 | 87 | 43 | G | R | FarmPure/Cargill | |
| ■ CDC Sol-Fi * | milling | XX | 108 | 40 | F | R | Agricore United | |
| ■ CDC Weaver * | milling | XX | 101 | 40 | F | R | SeCan | |
| ■ Furlong | milling / feed | 0 | 94 | 40 | G | R | Canterra/Cargill | |
| ■ Leggett | milling | 1 | 87 | 42 | G | R | FarmPure Seeds | |
| Lu | feed | -4 | 81 | 41 | G | R | SeCan | |
| ■ Murphy | forage | 1 | 110 | 41 | XX | S | SeCan | |
| OT 566 | milling | -1 | 96 | 42 | XX | XX | Agricore United | |
| ■ SW Betania * | milling | XX | 95 | 42 | G | R | SW Seed Ltd | |
| Varieties not tested in 2005 (Averages 2002-2005) | | | | | | | | |
| ■ Ronald | milling | 0 | 76 | 43 | VG | R | SeCan | |

Cascade - check variety

■ Protected by Plant Breeders' Rights
XX = insufficient data

EX = excellent, VG = very good, G = good, F = fair, P = poor (susceptible)
S = Susceptible I = Intermediate R = Resistant
* first year tested, very limited data available



Varieties with only one station year of maturity data are not shown. (FSJ site did not allow for good oat maturity data collection in 2005).

Oats for Feed

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 protein¹. Many years of comparing yields of oats with barley have shown oats to be superior in the Black and Grey Wooded soil zones¹. 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 barley¹. Oats have about 22-26 percent hull whereas barley averages about 12-14 per cent hull on a weight basis¹. 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 grain¹. We do not currently evaluate oat varieties for forage yield in these tests.

Forage Oats

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 leafiness². Having said that however, such work has not likely included the newer lines of forage oats that are entering the market place now. These new "forage only" lines, such as *CDC Baler* and *Murphy*, have usually been much larger plants in our tests than their traditional counterparts developed for seed quality, which should translate to more biomass to be available for forage production. Note however, that traditionally our oat tests do not lodge and so it is unclear as to whether larger plants are going to be a concern for early lodging in a large-scale forage production practice in our area. Lodging data here is from Alberta Agdex 100/32.

Other Comments

On heavier soils and in the more moist areas, lodging resistance should be considered, but again, traditionally lodging has not been a concern in our BC Peace oat trials, and as mentioned above, lodging data provided here is from Alberta Agdex 100/32. The variation in straw feed quality between oat varieties is insignificant and should not be used as a variety selection criterion³. The average feed values are: protein 4%, fibre 49%, calcium 0.27%, and phosphorus 0.08%³.

Source^{1,2,3}: 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. Some varieties are proving to be earlier than traditional spring triticale varieties, and perhaps as breeding continues earlier lines may come along that we can grow here for grain. Their grain yields are "attention grabbers", and so it is worth watching their development at least for now. Drought tolerance is the primary advantage that spring triticales have over other spring cereal crops. Spring triticales are also a valuable alternative or compliment to barley & oats as forage feed. It is for these reasons that data is included.

| Variety | Yield as % of Pronghorn | | | | | | | | | | |
|-------------------------|-------------------------|---------------|----------------|--------------|---------------|---------------|----------------|--------------|-------------|----------------|--------------|
| | Dawson Creek | | | | Fort St. John | | | | B.C. Peace | | |
| | 2005 Yield | | 2002-2005 | | 2005 Yield | | 2002-2005 | | 2005 | 2002-2005 | |
| | bus / acre | % of check | Avg. (%) | Stn. Yrs. | bus / acre | % of check | Avg. (%) | Stn. Yrs. | Avg. (%) | Avg. (%) | Stn. Yrs. |
| AC Alta | 109 b | 100 | 103 [4] | | 152 b | 90 | 99 [4] | | 95 | 101 [8] | |
| AC Ultima | 118 a | 108 | 97 [4] | | 165 a | 98 | 93 [4] | | 103 | 95 [8] | |
| Companion (forage type) | 98 c | 90 | 89 [2] | | 153 b | 91 | 88 [2] | | 90 | 89 [4] | |
| Pronghorn | 109 b | 100 | 100 [4] | | 169 a | 100 | 100 [4] | | 100 | 100 [8] | |
| | LSD (P=.05) = 3.78 | | | | 10.28 | | | | | | |
| | CV value (%) = 2.18 | | | | 4.02 | | | | | | |

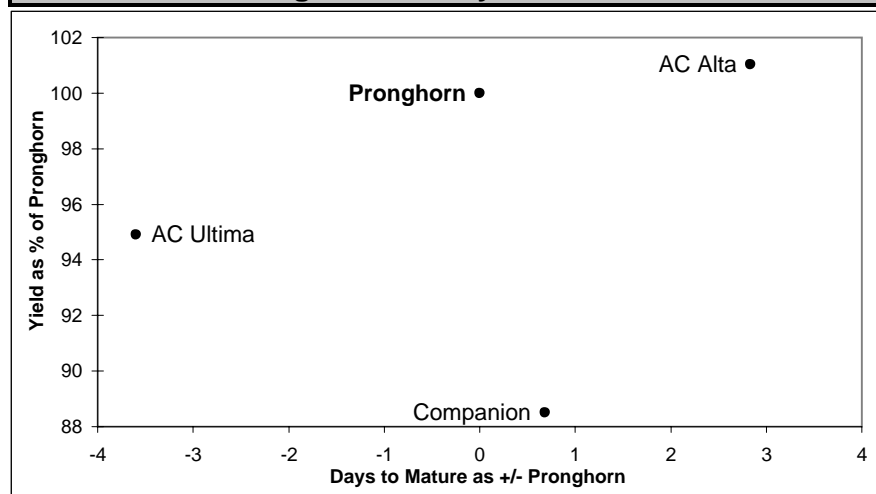
Means followed by the same letter do not significantly differ (P=.05, LSD)

* first year tested, very limited data available

Pronghorn - check variety

| Spring Triticale | Variety Descriptions | | | | |
|-------------------------|----------------------------------|----------------|-------------------------------|----------------------|--------------------|
| | Maturity as days +/- check | Height (cm) | Bushel Weight (lbs/bus) | TKW (g / 1000) | Distributor |
| | AC Alta | 3 | 87 | 53 | 53 |
| AC Ultima | -4 | 92 | 57 | 46 | FarmPure Seeds |
| Companion (forage type) | 1 | 116 | 51 | 47 | SW Seed Canada Ltd |
| Pronghorn | 0 | 97 | 56 | 44 | Progressive |

Triticale Regional Variety Performance 2002-2005



Average maturity for Pronghorn is 125 days.

Soft White Spring Wheat is no longer grown on the BCGPA research sites because its growing season at present exceeds that of our area.

There were no **Polish Canola** performance trials in 2005 due to a lack of submitted varieties. A private trial was conducted, but the results are not shown here. See the *2004 Field Crop Variety Performance* book for data on current Polish varieties, also available on our website, www.bcgrain.com.