Varieties of Cereal and Oilseed Crops for Alberta

This annual publication provides information on cereal and oilseed variety performance in Alberta and northeastern British Columbia. Important agronomic characteristics and disease tolerance information are provided for varieties of wheat, barley, oat, rye, triticale, flax and canola.

The Alberta Regional Variety Testing program for cereals and flax is co-ordinated by the Alberta Regional Variety Advisory Committee (ARVAC) and Alberta Agriculture and Forestry (AAF). Funding for the program is provided by the following:

- Alberta Agriculture and Forestry
- Alberta Wheat Commission
- Alberta Barley Commission
- Alberta Oat Growers Association
- Alberta Seed Growers
- Alberta Seed Processors
- Prairie Oat Growers Association
- Entry fees for the varieties being tested

Data for this publication come from various sources:

- Alberta Agriculture and Forestry
- Agriculture and Agri-Food Canada
- British Columbia Grain Producers
- CPS Canada
- University of Alberta
- Alberta Innovates Technology Futures
- Farming Smarter
- SARDA Ag Research
- Battle River Research Group (BRRG)
- Chinook Applied Research Association (CARA)
- Gateway Research Organization (GRO)
- Lakeland Applied Research Association (LARA)
- Lakeland College

The following individuals are the Regional Variety Trial and crop specific co-ordinators:

- Alex Fedko, Regional Variety Trial Co-ordinator
  - Spring wheat, Drs. H. Randhawa, D. Spaner and S. Strydhorst
  - Barley, J. Anderson
  - Oat, Dr. J. Mitchell-Fetch
  - Triticale, Dr. H. Randhawa
  - Winter Wheat, Dr. R. Graf
  - Fall Rye, Dr. J. Larsen
  - Flax, M. Hartman

Sincere thanks are extended to all individuals and organizations who contribute to this publication.

Yield results and reporting

Variety choice should never be based solely on yield performance as it is only one factor that affects net return. The genetic yield potential of a variety is often masked by numerous factors, some of which can be controlled through variety choice and others through astute agronomic management.

Producers are encouraged to consider other characteristics such as maturity, plant height, lodging and disease/pest resistance when deciding which varieties to grow. Long term satisfaction with a variety is often related to non-yield characteristics.
**New for 2018**

On a trial basis for 2018, the yield data for CWRS wheat are reported in two ways. The first method is the traditional manner that has been used since 2010 (see below). New for 2018 is an alternative method that reports head-to-head comparisons of all varieties on the annual trials within a five-year time frame.

This new method retains low and high yield test categories based on the average yield of the AC Barrie (60 bu/ac), the long-term check. The advantage of this method is that all comparisons within a column are statistically valid, rather than only to the check.

An Overall Yield column is also presented, but in this case, all data are reported resulting in a dataset with varying numbers of comparisons over different years. Thus, for the Overall Yield column, the only valid comparison is back to the common check as has been the case in the traditional method of reporting. Statistical differences among the varieties are also reported for the Overall Yield column. Comments on this new data reporting format are welcome.

Also new for 2018 is the inclusion of “benchmark” varieties. Producers have asked for additional checks in the regional variety trials that reflect more commonly grown varieties. To accommodate this request, two additional varieties are now grown as “benchmark” checks, and these reflect the two most popular varieties for the crop or within a market class during the previous year, based on crop insurance data. These checks will change as the popularity of varieties change.

**Traditional yield reporting method**

Exercise caution when making yield comparisons among varieties. Variety yield should only be directly compared to the standard reference check. Actual head-to-head yield comparisons between other varieties may not have occurred.

Small plot agronomic trials are expensive to grow, and new varieties are registered every year. It is simply impractical to grow all varieties at the same time.

Following several years of data collection, the yield performance for a particular variety stabilizes relative to the check, and further testing is no longer required. It is for these reasons that the check varieties are grown every year (e.g. AC Barrie for CWRS wheat, AC Metcalfe for barley) and that changes to these checks are infrequent. The “Overall Station Years of Testing” column provides an indication of the unbalanced nature of the dataset.

At least six station-years of yield data collected over two years are required before reporting the figures in this publication. For new varieties, Overall Yield is often the first indication of yield potential relative to the check. As additional data become available, yield performance is also expressed on the basis of environmental productivity (Yield Test Categories of Low, Medium, High and Very High).

Yield rankings among varieties can change substantially due to growing conditions. To reflect these differences, results from a test site that produced high yield in a particular year are placed into the database for “high” yielding environments. The same site may contribute to the “low” yield category in a drought year, when yields are low.

Consistent performance over all Yield Test Categories indicates that a variety has environmental responses similar to the check and may have good yield stability over a wide range of environments.

Scientific studies conducted on variety performance in western Canada have shown that Yield Test Category analysis provides a more reliable indication of yield performance than results organized by geographic region.

The yield comparison tables have several features:

- Overall actual yield of the check (bushels/acre) based on all data available to the testing program is provided along with the number of station years of testing.
- The range in yield for each Yield Test Category is defined.
- Actual yield of the check in each Yield Test Category is reported.
- For varieties with sufficient data, the Overall Yield and performance in each Yield Test Category is expressed relative to the check.
- Significant statistical differences relative to the check are indicated.

Yields that are statistically higher (+) or lower (-) than the check are indicated to aid in the selection process. No symbol after the yield figure indicates that there is no statistical difference from the check.
Pay particular attention to data on new varieties that have not been fully tested. If a large difference from the check is reported but is not significant, it could mean that yields have varied widely and/or there are not enough data to prove a statistical difference. With additional years of testing, the reported yield differences will become more accurate.

To make effective use of the yield comparison tables, producers should set a realistic yield target for the season and determine where it fits within the Low, Medium, High and Very High Yield Test Categories. This approach facilitates matching of variety choice to expected productivity levels and is similar to that used when making decisions on other levels of inputs.

Please note that the actual yield levels indicated are from small plot trials, which may be 15 to 20 per cent higher than yields expected under commercial production.

**Maturity ratings**

As is the case for yield, growing conditions have a tremendous influence on the date of maturity. For example, a variety of CWRS wheat may mature in 98 days in Lethbridge, but take 103 days in Edmonton. In the same way, a two-day difference in maturity between varieties in southern Alberta may amount to a five-day difference in a more northerly location.

To take this factor into account, maturity is expressed using a five-category scale: Very Early, Early, Medium, Late and Very Late. To aid producers with this relative scale, the average number of days to maturity for the check is reported. Note that this scale is different for each crop type. For example, an early barley variety will mature much earlier than an early flax variety.

**Seed size and plant populations**

Seed size within a crop kind will vary from variety to variety, requiring adjustment of seeding volumes to achieve desired plant populations. Some of the tables provide an average 1000 kernel weight (TKW) which can be used as a guide for variety differences.

The best approach is to determine the 1000 kernel weight of the seed to be planted, germination rate, emergence mortality and in the case of fall seeded crops, an estimate of winterkill.

For more information and user-friendly seeding rate calculators that take into account these and other considerations, please see: [www.agric.gov.ab.ca/app21/ldcalc](http://www.agric.gov.ab.ca/app21/ldcalc)

**Plant Breeders’ Rights**

Plant Breeders’ Rights (PBR) are a form of intellectual property rights by which plant breeders can protect new varieties in the same way an inventor protects a new invention with a patent.

In 2015, Canada amended the PBR Act to bring it into conformity with UPOV 91. Varieties protected under the previous legislation (UPOV 78) are indicated with the logo, whereas those protected under the new legislation that are shown with a new logo. The use of the logo indicates that an application for PBR has been accepted.

For more information on Plant Breeders’ Rights, please see [www.pbrfacts.ca](http://www.pbrfacts.ca) or the Canadian Food Inspection Agency website at [www.inspection.gc.ca](http://www.inspection.gc.ca).

**Canola**

The Alberta Regional Variety Advisory Committee (ARVAC) does not take any responsibility for accuracy or validity of the canola performance data.

**Diseases, seed treatment and seed testing**

- Disease ratings are compiled from various data sources in Alberta and other prairie provinces.
- Treat rye and flax seed to control seedling blight; cereal seed for smuts and fusarium; canola seed to control flea beetle, seedling blight and the seed-borne phase of virulent blackleg.
- Wheat with Moderately Susceptible (MS) or Susceptible (S) ratings for common bunt should be treated with a systemic fungicide as low levels of infection will restrict marketability.
- Refer to labels for maximum storage periods of treated seed.
- Treated seed must not be fed to livestock, poultry or wildlife and cannot be sold for feed.
- Leaf spot ratings in the wheat tables are a combination of resistance to tan spot and septoria leaf disease complex.
- Fusarium head blight (FHB), caused by *Fusarium graminearum* and other species, is an increasing problem in Alberta. The relative ranking of crops from most susceptible to least susceptible is durum wheat, common wheat, triticale, barley and oat. Corn is a host of *F. graminearum* and can serve as a source of infection when residue
is left on the ground. FHB infection is highly influenced by the environment and heading date. A resistant (R) tolerance rating for FHB does not equate to immunity. Under severe epidemics, all varieties will sustain damage. All seed should be tested for the presence of FHB and treated with an appropriate seed treatment if required. Producers are advised to choose varieties with the best FHB tolerance whenever possible and always use best management practices to slow the spread of this disease.

- Seed used in the Alberta Regional Variety Testing program comes with a “fusarium-free” certificate, and trials are inspected for FHB during the growing season.

Laboratories participating in the FHB testing program:
- 20/20 Seed Labs Ltd., Nisku, AB: 1-877-420-2099
- BioVision Seed Research Ltd., Edmonton, AB: 1-800-952-5407
- Parkland Laboratories, Red Deer, AB: 403-342-0404
- Precision Seed Testing, Beaverlodge, AB: 780-354-2259
- Seed Check Technologies Inc., Leduc, AB: 780-980-8324

Abbreviations and rating scales
- TKW = Thousand kernel weight
- XX = Insufficient data to describe
- Maturity: VE = Very Early, E = Early, M = Medium, L = Late, VL = Very Late
- Resistance Ratings: VP = Very Poor, P = Poor, F = Fair, G = Good, VG = Very Good, EX = Excellent
- Disease Tolerance Ratings: R = Resistant, MR = Moderately Resistant, I = Intermediate, MS = Moderately Susceptible, S = Susceptible
- Kernel Type (winter wheat): HR = Hard Red, SR = Soft Red, HW = Hard White, SW = Soft White
- Awns (wheat): Y = Yes (bearded), N = No (awnless)
- Awn Type (barley): R = Rough, S = Smooth, SS = Semi-smooth
- Seed Size (flax): S = Small, M = Medium, L = Large
- Protected by previous Plant Breeders’ Rights legislation
- Protected under new Plant Breeders’ Rights legislation
- ▲ Applied for Plant Breeders’ Rights protection

Other variety information
For additional information, including varieties not listed in this publication, please call the Alberta Agriculture and Forestry Ag-Info Centre toll-free at 310-FARM (3276). For other cropping information, refer to the website at www.agriculture.alberta.ca.

Factsheet information and tables prepared, reviewed and approved by:
Alberta Regional Variety Advisory Committee (formerly the Alberta British Columbia Grain Advisory Committee, ABCGAC)

Data preparation and factsheet co-ordination by:
Alex Fedko
Co-ordinator RVT/Crop Research Technologist
Alberta Agriculture and Forestry

Variety tables

<table>
<thead>
<tr>
<th>Crop</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada Western red spring wheat</td>
<td>5 – 6</td>
</tr>
<tr>
<td>Canada Western red spring wheat (alternate reporting format)</td>
<td>7</td>
</tr>
<tr>
<td>Canada Western hard white spring wheat</td>
<td>8</td>
</tr>
<tr>
<td>Canada Prairie spring red wheat</td>
<td>8</td>
</tr>
<tr>
<td>Canada Northern hard red wheat</td>
<td>9</td>
</tr>
<tr>
<td>Canada Western special purpose wheat</td>
<td>9</td>
</tr>
<tr>
<td>Canada Western soft white spring wheat</td>
<td>10</td>
</tr>
<tr>
<td>Canada Western amber durum wheat</td>
<td>11</td>
</tr>
<tr>
<td>Malting barley</td>
<td>12</td>
</tr>
<tr>
<td>Feed and food barley</td>
<td>13</td>
</tr>
<tr>
<td>Spring triticale</td>
<td>14</td>
</tr>
<tr>
<td>Oat</td>
<td>15</td>
</tr>
<tr>
<td>Winter wheat</td>
<td>16</td>
</tr>
<tr>
<td>Fall rye</td>
<td>17</td>
</tr>
<tr>
<td>Flax</td>
<td>18</td>
</tr>
<tr>
<td>Canola</td>
<td>21 – 22</td>
</tr>
</tbody>
</table>

Breeding institutions and Seed Distributors of Varieties | 23 – 24 |
### Varieties tested in the 2017 trials (Yield, significant differences and agronomic data only directly comparable to AC Barrie)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Station</th>
<th>Years of Testing</th>
<th>Overall Yield (bu/ac)</th>
<th>Low (&lt;45)</th>
<th>Medium (45-75)</th>
<th>High (&gt;70)</th>
<th>Agronomic Characteristics:</th>
<th>Resistance to</th>
<th>Disease Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low (bu/ac)</td>
<td>Medium (bu/ac)</td>
<td>High (bu/ac)</td>
<td>TKW Height</td>
<td>Height</td>
<td>Lodging</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rating (%)</td>
<td>Protein (%)</td>
<td>Maturity Rating</td>
<td>Protein %</td>
<td>TKW (g)</td>
<td>Height (cm)</td>
</tr>
<tr>
<td>Carberry - check</td>
<td>55</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>104</td>
<td>M</td>
<td>0</td>
<td>63</td>
</tr>
<tr>
<td>AAC Cameron VB</td>
<td>42</td>
<td>117</td>
<td>110</td>
<td>123</td>
<td>115</td>
<td>115</td>
<td>M</td>
<td>-0.6</td>
<td>62</td>
</tr>
<tr>
<td>AAC Redberry</td>
<td>42</td>
<td>108</td>
<td>108</td>
<td>109</td>
<td>106</td>
<td>106</td>
<td>M</td>
<td>-0.1</td>
<td>63</td>
</tr>
<tr>
<td>AAC Tisdale</td>
<td>28</td>
<td>106</td>
<td>106</td>
<td>107</td>
<td>106</td>
<td>106</td>
<td>M</td>
<td>0.4</td>
<td>63</td>
</tr>
<tr>
<td>AAC Viewfield</td>
<td>42</td>
<td>117</td>
<td>116</td>
<td>118</td>
<td>117</td>
<td>117</td>
<td>L</td>
<td>-0.3</td>
<td>63</td>
</tr>
<tr>
<td>CDC Adamant VB</td>
<td>28</td>
<td>111</td>
<td>103</td>
<td>118</td>
<td>110</td>
<td>110</td>
<td>M</td>
<td>-0.3</td>
<td>63</td>
</tr>
<tr>
<td>CDC Bradwell</td>
<td>42</td>
<td>108</td>
<td>107</td>
<td>108</td>
<td>110</td>
<td>110</td>
<td>L</td>
<td>-0.3</td>
<td>63</td>
</tr>
<tr>
<td>CDC Go</td>
<td>104</td>
<td>111</td>
<td>106</td>
<td>113</td>
<td>115</td>
<td>115</td>
<td>M</td>
<td>0.1</td>
<td>61</td>
</tr>
<tr>
<td>CDC Hughes VB</td>
<td>28</td>
<td>111</td>
<td>110</td>
<td>111</td>
<td>112</td>
<td>112</td>
<td>M</td>
<td>-0.2</td>
<td>64</td>
</tr>
<tr>
<td>CDC Landmark VB</td>
<td>28</td>
<td>113</td>
<td>108</td>
<td>117</td>
<td>113</td>
<td>113</td>
<td>M</td>
<td>-0.1</td>
<td>64</td>
</tr>
<tr>
<td>Settler</td>
<td>83</td>
<td>112</td>
<td>115</td>
<td>110</td>
<td>112</td>
<td>112</td>
<td>M</td>
<td>0</td>
<td>62</td>
</tr>
<tr>
<td>SY State</td>
<td>42</td>
<td>108</td>
<td>108</td>
<td>110</td>
<td>106</td>
<td>106</td>
<td>M</td>
<td>0.2</td>
<td>62</td>
</tr>
<tr>
<td>SY Sovite</td>
<td>28</td>
<td>104</td>
<td>105</td>
<td>109</td>
<td>101</td>
<td>101</td>
<td>M</td>
<td>0</td>
<td>62</td>
</tr>
</tbody>
</table>

### Previously tested varieties (Yield, significant differences and agronomic data only directly comparable to AC Barrie)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Station</th>
<th>Years of Testing</th>
<th>Overall Yield (bu/ac)</th>
<th>Low (bu/ac)</th>
<th>Medium (bu/ac)</th>
<th>High (bu/ac)</th>
<th>Agronomic Characteristics:</th>
<th>Resistance to</th>
<th>Disease Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low (bu/ac)</td>
<td>Medium (bu/ac)</td>
<td>High (bu/ac)</td>
<td>TKW Height</td>
<td>Height</td>
<td>Lodging</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rating (%)</td>
<td>Protein (%)</td>
<td>Maturity Rating</td>
<td>Protein %</td>
<td>TKW (g)</td>
<td>Height (cm)</td>
</tr>
<tr>
<td>5604HR CL</td>
<td>76</td>
<td>99</td>
<td>102</td>
<td>98</td>
<td>99</td>
<td>E</td>
<td>-0.7</td>
<td>63</td>
<td>33</td>
</tr>
<tr>
<td>5605HR CL</td>
<td>43</td>
<td>109</td>
<td>XX</td>
<td>114</td>
<td>106</td>
<td>E</td>
<td>0.2</td>
<td>64</td>
<td>38</td>
</tr>
<tr>
<td>AAC Bailey</td>
<td>58</td>
<td>103</td>
<td>102</td>
<td>104</td>
<td>103</td>
<td>M</td>
<td>-0.6</td>
<td>63</td>
<td>37</td>
</tr>
<tr>
<td>AAC Brandon</td>
<td>41</td>
<td>114</td>
<td>106</td>
<td>117</td>
<td>113</td>
<td>M</td>
<td>-0.2</td>
<td>64</td>
<td>38</td>
</tr>
<tr>
<td>AAC Conroyy</td>
<td>42</td>
<td>106</td>
<td>XX</td>
<td>108</td>
<td>108</td>
<td>E</td>
<td>0</td>
<td>62</td>
<td>40</td>
</tr>
<tr>
<td>AAC Elie</td>
<td>41</td>
<td>115</td>
<td>107</td>
<td>120</td>
<td>112</td>
<td>M</td>
<td>-0.1</td>
<td>64</td>
<td>38</td>
</tr>
<tr>
<td>AAC Pervall</td>
<td>42</td>
<td>106</td>
<td>XX</td>
<td>107</td>
<td>107</td>
<td>L</td>
<td>-0.6</td>
<td>62</td>
<td>39</td>
</tr>
<tr>
<td>AAC Redwater</td>
<td>41</td>
<td>103</td>
<td>96</td>
<td>106</td>
<td>104</td>
<td>E</td>
<td>0</td>
<td>64</td>
<td>35</td>
</tr>
<tr>
<td>AC Intrepid</td>
<td>107</td>
<td>102</td>
<td>98</td>
<td>103</td>
<td>105</td>
<td>E</td>
<td>0</td>
<td>62</td>
<td>39</td>
</tr>
<tr>
<td>AC Splendor</td>
<td>153</td>
<td>95</td>
<td>93</td>
<td>96</td>
<td>98</td>
<td>VE</td>
<td>0.9</td>
<td>61</td>
<td>37</td>
</tr>
<tr>
<td>Cardale</td>
<td>41</td>
<td>105</td>
<td>100</td>
<td>106</td>
<td>105</td>
<td>M</td>
<td>-0.3</td>
<td>63</td>
<td>37</td>
</tr>
<tr>
<td>Coleman</td>
<td>43</td>
<td>101</td>
<td>XX</td>
<td>105</td>
<td>98</td>
<td>M</td>
<td>0</td>
<td>64</td>
<td>37</td>
</tr>
<tr>
<td>CDC Abound</td>
<td>88</td>
<td>110</td>
<td>108</td>
<td>110</td>
<td>112</td>
<td>M</td>
<td>0.1</td>
<td>63</td>
<td>40</td>
</tr>
<tr>
<td>CDC VR Morris</td>
<td>41</td>
<td>109</td>
<td>105</td>
<td>111</td>
<td>107</td>
<td>M</td>
<td>-1</td>
<td>65</td>
<td>37</td>
</tr>
<tr>
<td>CDC Prentifil</td>
<td>41</td>
<td>106</td>
<td>100</td>
<td>108</td>
<td>106</td>
<td>M</td>
<td>-0.2</td>
<td>64</td>
<td>35</td>
</tr>
<tr>
<td>Variety</td>
<td>Overall Station Years of Testing</td>
<td>Overall Yield</td>
<td>Yield Category (%AC Barrie):</td>
<td>Agronomic Characteristics:</td>
<td>Resistance to:</td>
<td>Disease Tolerance:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------</td>
<td>---------------</td>
<td>------------------------------</td>
<td>---------------------------</td>
<td>----------------</td>
<td>-------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Maturity Rating</td>
<td>Protein % (h/lbu)</td>
<td>TKW (g)</td>
<td>Height (cm)</td>
<td>Avns (Y/N)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;45</td>
<td>45-75</td>
<td>&gt;70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(bu/ac)</td>
<td>(bu/ac)</td>
<td>(bu/ac)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDC Stanley</td>
<td>62</td>
<td>113+</td>
<td>114+</td>
<td>112+</td>
<td>M</td>
<td>-0.8</td>
<td>63</td>
<td>34</td>
<td>87</td>
</tr>
<tr>
<td>CDC Titanium VB</td>
<td>41</td>
<td>108+</td>
<td>XX</td>
<td>113+</td>
<td>E</td>
<td>0.5</td>
<td>65</td>
<td>41</td>
<td>87</td>
</tr>
<tr>
<td>CDC Utmost VB</td>
<td>53</td>
<td>112+</td>
<td>115+</td>
<td>112+</td>
<td>M</td>
<td>-0.2</td>
<td>64</td>
<td>36</td>
<td>85</td>
</tr>
<tr>
<td>Glenn</td>
<td>61</td>
<td>104</td>
<td>110+</td>
<td>100</td>
<td>L</td>
<td>-0.2</td>
<td>65</td>
<td>36</td>
<td>85</td>
</tr>
<tr>
<td>Go Early</td>
<td>42</td>
<td>104</td>
<td>XX</td>
<td>105</td>
<td>VE</td>
<td>0.3</td>
<td>61</td>
<td>40</td>
<td>93</td>
</tr>
<tr>
<td>Goodeve VB†</td>
<td>96</td>
<td>105+</td>
<td>107+</td>
<td>103</td>
<td>M</td>
<td>-0.1</td>
<td>62</td>
<td>36</td>
<td>88</td>
</tr>
<tr>
<td>Muchmore</td>
<td>53</td>
<td>111+</td>
<td>114+</td>
<td>107</td>
<td>L</td>
<td>-0.9</td>
<td>63</td>
<td>37</td>
<td>75</td>
</tr>
<tr>
<td>Peace †</td>
<td>53</td>
<td>100</td>
<td>100</td>
<td>97</td>
<td>M</td>
<td>0.1</td>
<td>63</td>
<td>37</td>
<td>92</td>
</tr>
<tr>
<td>Shaw VB</td>
<td>53</td>
<td>112+</td>
<td>116+</td>
<td>109+</td>
<td>M</td>
<td>-0.9</td>
<td>63</td>
<td>37</td>
<td>92</td>
</tr>
<tr>
<td>Superb</td>
<td>184</td>
<td>112+</td>
<td>110+</td>
<td>112+</td>
<td>L</td>
<td>-0.4</td>
<td>62</td>
<td>42</td>
<td>85</td>
</tr>
<tr>
<td>SY433</td>
<td>44</td>
<td>104</td>
<td>101</td>
<td>104</td>
<td>M</td>
<td>-1</td>
<td>64</td>
<td>39</td>
<td>95</td>
</tr>
<tr>
<td>SY479 VB†</td>
<td>42</td>
<td>97</td>
<td>XX</td>
<td>100</td>
<td>M</td>
<td>0.8</td>
<td>62</td>
<td>40</td>
<td>94</td>
</tr>
<tr>
<td>SY637 ‡</td>
<td>42</td>
<td>103</td>
<td>XX</td>
<td>101</td>
<td>L</td>
<td>0.8</td>
<td>62</td>
<td>39</td>
<td>91</td>
</tr>
<tr>
<td>Thorsby</td>
<td>43</td>
<td>106+</td>
<td>XX</td>
<td>110</td>
<td>E</td>
<td>-0.5</td>
<td>64</td>
<td>38</td>
<td>89</td>
</tr>
<tr>
<td>Vesper VB†</td>
<td>45</td>
<td>106+</td>
<td>106</td>
<td>108+</td>
<td>M</td>
<td>-1.5</td>
<td>63</td>
<td>37</td>
<td>90</td>
</tr>
<tr>
<td>WR859 CL†</td>
<td>79</td>
<td>106+</td>
<td>110+</td>
<td>103</td>
<td>M</td>
<td>-0.4</td>
<td>64</td>
<td>34</td>
<td>81</td>
</tr>
</tbody>
</table>

**Remarks:** For explanations on data summarization methods, abbreviations and other pertinent information, please see the comments at the beginning of this publication. Several CWRS varieties will be reclassified to the new CNHR wheat class, effective August 1, 2018. The varieties affected are AC Abbey, AC Cora, AC Eatonia, AC Majestic, AC Michael, AC Minto, Alvena, Alikat, CDC Makwa, CDC Osler, Columbus, Conway, Harvest, Kane, Katepwa, Leader, Lillian, McKenzie, Neepawa, Park, Pasqua, Pembina, Thatcher, Unity VB and 5603HR. For more information see the Canadian Grain Commission website [www.grainscanada.gc.ca](http://www.grainscanada.gc.ca). The long term average maturity for AC Barrie is 106 days and rated as Medium (M). Fusarium Head Blight (FHB) infection is highly influenced by the environment and heading date. Under high levels of FHB all varieties will sustain damage. Moderately Resistant (MR) and Resistant (R) ratings for FHB do not equate to immunity. Varieties rated Intermediate (I) to Susceptible (S) for loose smut or bunt should be treated with a systemic seed treatment to reduce the potential for infection. CDC Adamant VB, CDC Landmark VB and CDC Hughes VB have a solid stem that confers resistance to the wheat stem sawfly. 5804HR CL, 5805HR CL, CDC Abound, CDC Imagine, CDC Thrive and WR589 CL are tolerant to the CLEARFIELD® herbicides Adrenalin SC and Altitude FX. VB - designates a varietal blend to preserve the Sm1 orange wheat blossom midge tolerance gene. New CWRS registrations: AAC Jatharia VB (BW483), AAC Alida (BW980), CDC Adamant VB (BW488). Insufficient data to describe: AAC Jatharia VB, AAC Alida, and Parata. XX - Insufficient data to describe. † - Flagged for possible removal in 2019.
### CANADA WESTERN RED SPRING WHEAT (alternate reporting format)

**Yield: Annual Means by Productivity Environment *\)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Barrie (bu/ac)</td>
<td>36</td>
<td>44</td>
<td>46</td>
<td>48</td>
<td>47</td>
<td>75</td>
<td>71</td>
<td>69</td>
<td>78</td>
<td>75</td>
<td>60</td>
<td>363</td>
</tr>
<tr>
<td>AC Barrie (check)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Carberry</td>
<td>106</td>
<td>104</td>
<td>113</td>
<td></td>
<td></td>
<td>107</td>
<td>101</td>
<td>109</td>
<td></td>
<td></td>
<td>107+</td>
<td>138</td>
</tr>
<tr>
<td>5604HR CL</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>99</td>
<td>76</td>
</tr>
<tr>
<td>5605HR CL</td>
<td>114</td>
<td>95</td>
<td>105</td>
<td></td>
<td></td>
<td>114</td>
<td>109</td>
<td>108</td>
<td></td>
<td></td>
<td>109+</td>
<td>43</td>
</tr>
<tr>
<td>AAC Bailey</td>
<td>106</td>
<td>94</td>
<td></td>
<td></td>
<td></td>
<td>98</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
<td>103</td>
<td>58</td>
</tr>
<tr>
<td>AAC Brandon</td>
<td>119</td>
<td>104</td>
<td></td>
<td></td>
<td></td>
<td>114</td>
<td>122</td>
<td></td>
<td></td>
<td></td>
<td>114+</td>
<td>41</td>
</tr>
<tr>
<td>AAC Elie</td>
<td>135</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td>114</td>
<td>121</td>
<td></td>
<td></td>
<td></td>
<td>115+</td>
<td>41</td>
</tr>
<tr>
<td>AAC Redwater</td>
<td>103</td>
<td>97</td>
<td></td>
<td></td>
<td></td>
<td>107</td>
<td>109</td>
<td></td>
<td></td>
<td></td>
<td>103</td>
<td>41</td>
</tr>
<tr>
<td>Cardale</td>
<td>113</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
<td>103</td>
<td>108</td>
<td></td>
<td></td>
<td></td>
<td>105+</td>
<td>41</td>
</tr>
<tr>
<td>CDC VR Morris</td>
<td>105</td>
<td>115</td>
<td></td>
<td></td>
<td></td>
<td>113</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td>109+</td>
<td>41</td>
</tr>
<tr>
<td>CDC Plentiful</td>
<td>111</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
<td>108</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td>106+</td>
<td>41</td>
</tr>
<tr>
<td>CDC Stanley</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>113+</td>
<td>76</td>
</tr>
<tr>
<td>CDC Titanium VB</td>
<td>112</td>
<td>102</td>
<td>110</td>
<td></td>
<td></td>
<td>107</td>
<td>111</td>
<td>104</td>
<td></td>
<td></td>
<td>108+</td>
<td>41</td>
</tr>
<tr>
<td>Coleman</td>
<td>104</td>
<td>92</td>
<td>94</td>
<td></td>
<td></td>
<td>103</td>
<td>104</td>
<td>101</td>
<td></td>
<td></td>
<td>101</td>
<td>43</td>
</tr>
<tr>
<td>Katepwa</td>
<td>95</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
<td>98</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
<td>97</td>
<td>278</td>
</tr>
<tr>
<td>SY433</td>
<td>108</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>104</td>
<td>44</td>
</tr>
<tr>
<td>Thorsby</td>
<td>98</td>
<td>97</td>
<td>103</td>
<td></td>
<td></td>
<td>106</td>
<td>113</td>
<td>109</td>
<td></td>
<td></td>
<td>106+</td>
<td>43</td>
</tr>
<tr>
<td>AAC Connery</td>
<td>94</td>
<td>104</td>
<td>107</td>
<td></td>
<td></td>
<td>108</td>
<td>108</td>
<td>108</td>
<td></td>
<td></td>
<td>106+</td>
<td>42</td>
</tr>
<tr>
<td>AAC Prevail VB</td>
<td>99</td>
<td>104</td>
<td>106</td>
<td></td>
<td></td>
<td>107</td>
<td>107</td>
<td>109</td>
<td></td>
<td></td>
<td>106+</td>
<td>42</td>
</tr>
<tr>
<td>Go Early</td>
<td>97</td>
<td>107</td>
<td>102</td>
<td></td>
<td></td>
<td>105</td>
<td>109</td>
<td>102</td>
<td></td>
<td></td>
<td>104</td>
<td>42</td>
</tr>
<tr>
<td>SY479 VB</td>
<td>95</td>
<td>98</td>
<td>99</td>
<td></td>
<td></td>
<td>97</td>
<td>98</td>
<td>97</td>
<td></td>
<td></td>
<td>97-</td>
<td>42</td>
</tr>
<tr>
<td>SY637</td>
<td>95</td>
<td>101</td>
<td>98</td>
<td></td>
<td></td>
<td>107</td>
<td>104</td>
<td>103</td>
<td></td>
<td></td>
<td>103</td>
<td>42</td>
</tr>
<tr>
<td>AAC Cameron VB</td>
<td>112</td>
<td>113</td>
<td>105</td>
<td></td>
<td></td>
<td>118</td>
<td>118</td>
<td>122</td>
<td></td>
<td></td>
<td>117+</td>
<td>42</td>
</tr>
<tr>
<td>AAC Redberry</td>
<td>109</td>
<td>109</td>
<td>107</td>
<td></td>
<td></td>
<td>111</td>
<td>104</td>
<td>108</td>
<td></td>
<td></td>
<td>108+</td>
<td>42</td>
</tr>
<tr>
<td>CDC Viewfield ▲</td>
<td>118</td>
<td>116</td>
<td>110</td>
<td></td>
<td></td>
<td>116</td>
<td>117</td>
<td>119</td>
<td></td>
<td></td>
<td>117+</td>
<td>42</td>
</tr>
<tr>
<td>CDC Bradwell</td>
<td>104</td>
<td>112</td>
<td>106</td>
<td></td>
<td></td>
<td>105</td>
<td>112</td>
<td>109</td>
<td></td>
<td></td>
<td>108+</td>
<td>42</td>
</tr>
<tr>
<td>SY Sate ▲</td>
<td>109</td>
<td>106</td>
<td>109</td>
<td></td>
<td></td>
<td>106</td>
<td>105</td>
<td>113</td>
<td></td>
<td></td>
<td>108+</td>
<td>42</td>
</tr>
<tr>
<td>AAC Tisdale ▲</td>
<td>107</td>
<td>103</td>
<td></td>
<td></td>
<td></td>
<td>106</td>
<td>107</td>
<td>106</td>
<td></td>
<td></td>
<td>106</td>
<td>28</td>
</tr>
<tr>
<td>CDC Adamant VB ▲</td>
<td>109</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
<td>110</td>
<td>116</td>
<td>111+</td>
<td></td>
<td></td>
<td>111+</td>
<td>28</td>
</tr>
<tr>
<td>CDC Hughes VB ▲</td>
<td>111</td>
<td>107</td>
<td></td>
<td></td>
<td></td>
<td>109</td>
<td>114</td>
<td>111+</td>
<td></td>
<td></td>
<td>111+</td>
<td>28</td>
</tr>
<tr>
<td>CDC Landmark VB ▲</td>
<td>110</td>
<td>103</td>
<td></td>
<td></td>
<td></td>
<td>112</td>
<td>119</td>
<td>113+</td>
<td></td>
<td></td>
<td>113+</td>
<td>28</td>
</tr>
<tr>
<td>SY Sovite</td>
<td>105</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td>102</td>
<td>106</td>
<td>104</td>
<td></td>
<td></td>
<td>104</td>
<td>28</td>
</tr>
<tr>
<td>CDC Go (benchmark)</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>111+</td>
<td>104</td>
</tr>
<tr>
<td>Stettler □ (benchmark)</td>
<td>107</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>112</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>112+</td>
<td>83</td>
</tr>
</tbody>
</table>

* Please see the INTRODUCTION for an explanation of this new yield format.
### CANADA WESTERN HARD WHITE SPRING WHEAT

**Variety**

**Overall Station**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Overall Station</th>
<th>Yield Category (% AC Barrie):</th>
<th>Agronomic Characteristics:</th>
<th>Disease Tolerance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Barrie (bu/</td>
<td>60</td>
<td>Low (&lt; 45)</td>
<td>Medium</td>
<td>High (&gt; 70)</td>
</tr>
<tr>
<td>bu/ac)</td>
<td>42</td>
<td>(bu/ac)</td>
<td>(bu/ac)</td>
<td>(bu/ac)</td>
</tr>
<tr>
<td>AC Barrie</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>AAC Iceberg</td>
<td>39</td>
<td>104</td>
<td>96</td>
<td>106</td>
</tr>
<tr>
<td>CDC Whitewood</td>
<td>43</td>
<td>107+</td>
<td>XX</td>
<td>110</td>
</tr>
<tr>
<td>Snowbird</td>
<td>94</td>
<td>101</td>
<td>101</td>
<td>101</td>
</tr>
<tr>
<td>Snowstar</td>
<td>58</td>
<td>102</td>
<td>99</td>
<td>103</td>
</tr>
<tr>
<td>Whitehawk</td>
<td>42</td>
<td>107</td>
<td>112+</td>
<td>108+</td>
</tr>
<tr>
<td>AAC Iceberg</td>
<td>39</td>
<td>104</td>
<td>96</td>
<td>106</td>
</tr>
<tr>
<td>CDC Whitewood</td>
<td>43</td>
<td>107+</td>
<td>XX</td>
<td>110</td>
</tr>
<tr>
<td>Snowbird</td>
<td>94</td>
<td>101</td>
<td>101</td>
<td>101</td>
</tr>
<tr>
<td>Snowstar</td>
<td>58</td>
<td>102</td>
<td>99</td>
<td>103</td>
</tr>
<tr>
<td>Whitehawk</td>
<td>42</td>
<td>107</td>
<td>112+</td>
<td>108+</td>
</tr>
</tbody>
</table>

### CANADA PRAIRIE RED SPRING WHEAT

**Variety**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Overall Station</th>
<th>Yield Category (% AC Barrie):</th>
<th>Agronomic Characteristics:</th>
<th>Disease Tolerance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Barrie</td>
<td>66</td>
<td>Low (&lt; 45)</td>
<td>Medium</td>
<td>High (&gt; 70)</td>
</tr>
<tr>
<td>bu/ac)</td>
<td>42</td>
<td>(bu/ac)</td>
<td>(bu/ac)</td>
<td>(bu/ac)</td>
</tr>
<tr>
<td>AC Barrie</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>AAC Crossfield</td>
<td>43</td>
<td>122+</td>
<td>119+</td>
<td>124+</td>
</tr>
<tr>
<td>AAC Entice ▲</td>
<td>30</td>
<td>119+</td>
<td>114+</td>
<td>125+</td>
</tr>
<tr>
<td>AAC Goodwin ▲</td>
<td>31</td>
<td>123+</td>
<td>121+</td>
<td>126+</td>
</tr>
<tr>
<td>AAC Penhold ▲</td>
<td>58</td>
<td>118+</td>
<td>113+</td>
<td>123+</td>
</tr>
<tr>
<td>CDC Terrain ▲</td>
<td>30</td>
<td>122+</td>
<td>124+</td>
<td>122+</td>
</tr>
<tr>
<td>SY Rowyn ▲</td>
<td>30</td>
<td>114+</td>
<td>117+</td>
<td>117+</td>
</tr>
</tbody>
</table>

### Remarks:
For explanations on data summarization methods, abbreviations and other pertinent information, please see the comments at the beginning of this publication. The long term average maturity for AC Barrie is 106 days and rated as Medium (M). Fusarium Head Blight (FHB) infection is highly influenced by the environment and heading date. Under high levels of FHB all varieties will sustain damage. Moderately Resistant (MR) and Resistant (R) ratings for FHB do not equate to immunity. Varieties rated Intermediate (I) to Susceptible (S) for loose smut or bunt should be treated with a systemic seed treatment to reduce the potential for infection. XX - Insufficient data to describe. † - Flagged for possible removal in 2019.
### CANADA NORTHERN HARD RED WHEAT

#### Overall Disease Tolerance:

<table>
<thead>
<tr>
<th>Variety</th>
<th>Yield Category (% AC Barrie)</th>
<th>Station</th>
<th>Maturity</th>
<th>Test Fusarium Head Blight</th>
<th>Leaf Rust</th>
<th>Spot Blight</th>
<th>Stem Blight</th>
<th>Stripe Rust</th>
<th>Loose Head</th>
<th>Spur</th>
<th>lodging</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Barrie</td>
<td>66</td>
<td>60</td>
<td>83</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carberry - check</td>
<td>106+</td>
<td>107+</td>
<td>106+</td>
<td>M</td>
<td>L</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elgin</td>
<td>100+</td>
<td>100+</td>
<td>100+</td>
<td>M</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Agronomic Characteristics:

- **Effective August 1, 2018 the following varieties are designated as CANADA NORTHERN HARD RED:**
  - AC Foremost *
  - Conquer VB *
  - Harvest 118
  - Lillian
  - Unity VB †

**Remarks:**
- For explanations on data summarization methods, abbreviations and other pertinent information, please see the comments at the beginning of this publication.
- The long term average maturity for AC Barrie is 106 days and rated as Medium (M). Fusarium Head Blight (FHB) infection is highly influenced by the environment and heading date. Under high levels of FHB all varieties will sustain damage. Moderately Resistant (MR) and Resistant (R) ratings for FHB do not equate to immunity. AAC Concord has a solid stem that confers resistance to the wheat stem sawfly. Varieties rated Intermediate (I) to Susceptible (S) for loose smut or bunt should be treated with a systemic seed treatment to reduce the potential for infection.

### CANADA WESTERN SPECIAL PURPOSE WHEAT

#### Overall Disease Tolerance:

<table>
<thead>
<tr>
<th>Variety</th>
<th>Yield Category (% AC Barrie)</th>
<th>Station</th>
<th>Maturity</th>
<th>Test Fusarium Head Blight</th>
<th>Leaf Rust</th>
<th>Spot Blight</th>
<th>Stem Blight</th>
<th>Stripe Rust</th>
<th>Loose Head</th>
<th>Spur</th>
<th>lodging</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Barrie</td>
<td>66</td>
<td>60</td>
<td>83</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carberry - check</td>
<td>106+</td>
<td>107+</td>
<td>106+</td>
<td>M</td>
<td>L</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elgin</td>
<td>100+</td>
<td>100+</td>
<td>100+</td>
<td>M</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Agronomic Characteristics:

- **Effective August 1, 2018 the following varieties are designated as CANADA WESTERN SPECIAL PURPOSE:**
  - AAC Awesome VB ▲
  - Charing VB ▲
  - Sparrow VB
  - Pasteur *

**Remarks:**
- For explanations on data summarization methods, abbreviations and other pertinent information, please see the comments at the beginning of this publication.
- The long term average maturity for AC Barrie is 106 days and rated as Medium (M). Fusarium Head Blight (FHB) infection is highly influenced by the environment and heading date. Under high levels of FHB all varieties will sustain damage. Moderately Resistant (MR) and Resistant (R) ratings for FHB do not equate to immunity. AAC Concord has a solid stem that confers resistance to the wheat stem sawfly. Varieties rated Intermediate (I) to Susceptible (S) for loose smut or bunt should be treated with a systemic seed treatment to reduce the potential for infection.

XX- Insufficient data to describe. Faller, 9
<table>
<thead>
<tr>
<th>Variety</th>
<th>Overall Station Years of Testing</th>
<th>Overall Yield (bu/ac)</th>
<th>Yield Category (% AC Andrew)</th>
<th>Agronomic Characteristics:</th>
<th>Resistance to:</th>
<th>Disease Tolerance:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>&lt;65</td>
<td>65-100</td>
<td>&gt;100</td>
<td>Test</td>
<td>TKW (g) Height (cm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maturity Rating</td>
<td>Protein Weight (lb/bu)</td>
<td>Lodging</td>
<td>Sprouting</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Y/N)</td>
</tr>
<tr>
<td>AC Andrew (bu/ac)</td>
<td>85</td>
<td>54</td>
<td>86</td>
<td>123</td>
<td>11.0</td>
<td>62</td>
</tr>
<tr>
<td>AC Andrew *</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>L</td>
<td>62</td>
</tr>
<tr>
<td>AAC Indus VB @</td>
<td>39</td>
<td>104</td>
<td>96</td>
<td>108</td>
<td>VL</td>
<td>-0.2</td>
</tr>
<tr>
<td>Sadash VB Δ</td>
<td>61</td>
<td>107+</td>
<td>110+</td>
<td>106+</td>
<td>L</td>
<td>-0.1</td>
</tr>
<tr>
<td>AAC Chiffon VB @</td>
<td>39</td>
<td>104+</td>
<td>106</td>
<td>105+</td>
<td>L</td>
<td>-0.4</td>
</tr>
<tr>
<td>AC Meena †</td>
<td>51</td>
<td>97-</td>
<td>101</td>
<td>97-</td>
<td>L</td>
<td>0</td>
</tr>
</tbody>
</table>

**Remarks:** For explanations on data summarization methods, abbreviations and other pertinent information, please see the comments at the beginning of this publication. AC Andrew yields about 35% more than AC Barrie. In addition to traditional markets, SWS wheat varieties may have demand as a feedstock for ethanol production. *Maturity, resistance to lodging and sprouting are compared with AC Barrie. Varieties rated Intermediate (I) to Susceptible (S) for loose smut or bunt should be treated with a systemic seed treatment to reduce the potential for infection. New CWSWS registrations: AAC Paramount (SWS433). Insufficient data to describe: AAC Paramount. * Yield figures based on direct and indirect comparisons with AC Andrew. † - Flagged for possible removal in 2019.
### CANADA WESTERN AMBER DURUM WHEAT

#### Varieties tested in the 2017 trials (Yield, significant differences and agronomic data only directly comparable to Strongfield)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Test Weight (lb/bu)</th>
<th>Overall Yield (bu/ac)</th>
<th>Medium Yield (bu/ac)</th>
<th>Overall Maturity Rating</th>
<th>Protein %</th>
<th>TKW (g)</th>
<th>Test Height (cm)</th>
<th>Lodging</th>
<th>Sprouting</th>
<th>Resistance</th>
<th>Fusarium Head Blight</th>
<th>Maturity Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAC Congress ▲</td>
<td>23</td>
<td>104</td>
<td>109</td>
<td>100</td>
<td>M -0.3</td>
<td>63</td>
<td>44</td>
<td>81</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>R</td>
</tr>
<tr>
<td>Brigade ▲</td>
<td>77</td>
<td>103+</td>
<td>105</td>
<td>103</td>
<td>L -0.6</td>
<td>63</td>
<td>47</td>
<td>87</td>
<td>G</td>
<td>F</td>
<td>S</td>
<td>F</td>
</tr>
<tr>
<td>CDC Alloy ▲</td>
<td>14</td>
<td>102</td>
<td>97</td>
<td>99</td>
<td>M 0.2</td>
<td>63</td>
<td>44</td>
<td>85</td>
<td>F</td>
<td>F</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>CDC Dynamic ▲</td>
<td>14</td>
<td>97</td>
<td>XX</td>
<td>99</td>
<td>M 0.6</td>
<td>62</td>
<td>44</td>
<td>82</td>
<td>F</td>
<td>F</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Transcend ▲</td>
<td>43</td>
<td>101</td>
<td>102</td>
<td>103</td>
<td>M XX</td>
<td>63</td>
<td>45</td>
<td>87</td>
<td>F</td>
<td>F</td>
<td>S</td>
<td>R</td>
</tr>
</tbody>
</table>

#### Previously tested varieties (Yield, significant differences and agronomic data only directly comparable to Strongfield)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Test Weight (lb/bu)</th>
<th>Overall Yield (bu/ac)</th>
<th>Medium Yield (bu/ac)</th>
<th>Overall Maturity Rating</th>
<th>Protein %</th>
<th>TKW (g)</th>
<th>Test Height (cm)</th>
<th>Lodging</th>
<th>Sprouting</th>
<th>Resistance</th>
<th>Fusarium Head Blight</th>
<th>Maturity Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAC Cabri ＃</td>
<td>25</td>
<td>94-</td>
<td>98</td>
<td>93-</td>
<td>XX</td>
<td>M 0.1</td>
<td>62</td>
<td>45</td>
<td>86</td>
<td>G</td>
<td>P</td>
<td>MR</td>
</tr>
<tr>
<td>AAC Current ＃</td>
<td>30</td>
<td>99</td>
<td>104</td>
<td>98</td>
<td>XX</td>
<td>M 0</td>
<td>62</td>
<td>44</td>
<td>85</td>
<td>F</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>AAC Durafied ＃</td>
<td>22</td>
<td>99</td>
<td>XX</td>
<td>99</td>
<td>XX</td>
<td>M -1</td>
<td>64</td>
<td>46</td>
<td>76</td>
<td>F</td>
<td>F</td>
<td>S</td>
</tr>
<tr>
<td>AAC Marchwell VB ＃</td>
<td>32</td>
<td>99</td>
<td>107</td>
<td>96</td>
<td>98</td>
<td>M -0.1</td>
<td>63</td>
<td>46</td>
<td>83</td>
<td>F</td>
<td>F</td>
<td>MR</td>
</tr>
<tr>
<td>AAC Raymore ＃</td>
<td>34</td>
<td>97</td>
<td>99</td>
<td>98</td>
<td>94</td>
<td>M 0.8</td>
<td>62</td>
<td>47</td>
<td>82</td>
<td>F</td>
<td>F</td>
<td>MS</td>
</tr>
<tr>
<td>AAC Spitfire ＃</td>
<td>25</td>
<td>97</td>
<td>100</td>
<td>96</td>
<td>M -0.4</td>
<td>61</td>
<td>46</td>
<td>82</td>
<td>G</td>
<td>P</td>
<td>MS</td>
<td>R</td>
</tr>
<tr>
<td>AC Navigator</td>
<td>65</td>
<td>95-</td>
<td>102</td>
<td>93-</td>
<td>93-</td>
<td>M XX</td>
<td>63</td>
<td>45</td>
<td>77</td>
<td>G</td>
<td>G</td>
<td>S</td>
</tr>
<tr>
<td>CDC Carbide VB ▲</td>
<td>25</td>
<td>100</td>
<td>104</td>
<td>100</td>
<td>XX</td>
<td>M 0</td>
<td>62</td>
<td>45</td>
<td>85</td>
<td>G</td>
<td>P</td>
<td>MS</td>
</tr>
<tr>
<td>CDC Desire ▲</td>
<td>34</td>
<td>102</td>
<td>106</td>
<td>101</td>
<td>101</td>
<td>E 0</td>
<td>62</td>
<td>44</td>
<td>83</td>
<td>F</td>
<td>G</td>
<td>MS</td>
</tr>
<tr>
<td>CDC Fortitude ＃</td>
<td>32</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>103</td>
<td>M -0.6</td>
<td>63</td>
<td>45</td>
<td>81</td>
<td>G</td>
<td>F</td>
<td>MS</td>
</tr>
<tr>
<td>CDC Verona ＃</td>
<td>46</td>
<td>102</td>
<td>103</td>
<td>103</td>
<td>99</td>
<td>M XX</td>
<td>62</td>
<td>46</td>
<td>82</td>
<td>G</td>
<td>F</td>
<td>MS</td>
</tr>
<tr>
<td>CDC Vivid ▲</td>
<td>34</td>
<td>100</td>
<td>104</td>
<td>99</td>
<td>98</td>
<td>M 0.1</td>
<td>62</td>
<td>45</td>
<td>83</td>
<td>G</td>
<td>F</td>
<td>I</td>
</tr>
<tr>
<td>Enterprise ＃</td>
<td>48</td>
<td>101</td>
<td>104</td>
<td>100</td>
<td>102</td>
<td>M XX</td>
<td>63</td>
<td>44</td>
<td>83</td>
<td>G</td>
<td>F</td>
<td>MS</td>
</tr>
</tbody>
</table>

### Remarks:
For explanations on data summarization methods, abbreviations and other pertinent information, please see the comments at the beginning of this publication. Generally, durum wheat is best adapted to southern Alberta. Outside of this area, durum tends to be late maturing and often subject to quality loss. The long term average maturity for Strongfield is 105 days and is rated as Medium (M). Strongfield yields about 10% higher than AC Barrie in areas of best adaptation. Durum varieties are generally more susceptible to Fusarium Head Blight than CWRS wheat varieties. AAC Cabri, AAC Raymore and CDC Fortitude have a solid stem that confers resistance to the wheat stem sawfly. VB - designates a varietal blend to preserve the Sm1 orange wheat blossom midge tolerance gene. New registrations: AAC Succeed VB (DT871). Insufficient data to describe: AAC Succeed. XX - Insufficient data to describe. ＃ - Flagged for possible removal in 2019.
### Varieties tested in the 2017 trials (Yield, significant differences and agronomic data only directly comparable to AC Metcalfe)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Years of Testing</th>
<th>Overall Yield (bu/ac)</th>
<th>Maturity Rating</th>
<th>Seed Test Weight (lb/bu)</th>
<th>Fusarium Resistance</th>
<th>Net Blotch Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Metcalfe</td>
<td>0-6</td>
<td>2 R 100 99 98 97</td>
<td>M 52 46 79 F</td>
<td>R I I S I S I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAC Connect</td>
<td>0-6</td>
<td>2 R 27 103+</td>
<td>XX XX 106 104+</td>
<td>M 50 49 77 G</td>
<td>S R MS S MR I MR</td>
<td></td>
</tr>
<tr>
<td>AAC Synergy</td>
<td>0-6</td>
<td>2 R 54 114+</td>
<td>121+ 112+ 114+</td>
<td>M 51 48 76 F</td>
<td>S I I S R MR MS</td>
<td></td>
</tr>
<tr>
<td>CDC Fraser</td>
<td>0-6</td>
<td>2 R 39 109+</td>
<td>XX 114 110+ 108+</td>
<td>M 51 49 76 G</td>
<td>R MR MS MR MR MR</td>
<td></td>
</tr>
<tr>
<td>Lowe</td>
<td>0-6</td>
<td>2 R 27 110+</td>
<td>XX XX 115+ 105+</td>
<td>L 51 48 84 F</td>
<td>R R XX MR MR I MR</td>
<td></td>
</tr>
<tr>
<td>Sirish</td>
<td>0-6</td>
<td>2 R 27 111+</td>
<td>XX XX 108 114+</td>
<td>M 51 48 67 G</td>
<td>S R XX MR MS MS</td>
<td></td>
</tr>
<tr>
<td>TR13606</td>
<td>0-6</td>
<td>2 R 27 109+</td>
<td>XX XX 107 109+</td>
<td>M 51 46 79 G</td>
<td>R R XX MS MR I I</td>
<td></td>
</tr>
</tbody>
</table>

### Previously tested varieties (Yield, significant differences and agronomic data only directly comparable to AC Metcalfe)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Years of Testing</th>
<th>Overall Yield (bu/ac)</th>
<th>Maturity Rating</th>
<th>Seed Test Weight (lb/bu)</th>
<th>Fusarium Resistance</th>
<th>Net Blotch Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentley</td>
<td>2</td>
<td>2 R 77 105+</td>
<td>109 102 105+ 106+</td>
<td>M 52 47 81 G</td>
<td>MS MR MR S R MS</td>
<td></td>
</tr>
<tr>
<td>CDC Bow</td>
<td>2</td>
<td>2 R 42 104+</td>
<td>XX 106 105 104</td>
<td>M 51 48 77 VG</td>
<td>S I MS MS MR S MS</td>
<td></td>
</tr>
<tr>
<td>CDC Clear (hulless)</td>
<td>2</td>
<td>2 R 43 95-</td>
<td>XX 92- 100 XX</td>
<td>M 62 47 85 G</td>
<td>R R I S R MR MS</td>
<td></td>
</tr>
<tr>
<td>CDC Copeland</td>
<td>2</td>
<td>2 R 137 103+</td>
<td>96 101 106+ 104+</td>
<td>M 51 47 81 F</td>
<td>MS I I S I I I</td>
<td></td>
</tr>
<tr>
<td>CDC Kindersley</td>
<td>2</td>
<td>2 R 47 104+</td>
<td>XX 102 104+</td>
<td>E 53 43 78 G</td>
<td>S R I S MR MS I</td>
<td></td>
</tr>
<tr>
<td>CDC Meredith</td>
<td>2</td>
<td>2 R 65 107+</td>
<td>102 108+ 108+ 107+</td>
<td>L 51 46 76 F</td>
<td>R MR MR S R S I</td>
<td></td>
</tr>
<tr>
<td>CDC PlatinumStar</td>
<td>2</td>
<td>2 R 42 106+</td>
<td>XX 108 107+ 102</td>
<td>M 53 49 82 F</td>
<td>R R S S MR I MR</td>
<td></td>
</tr>
<tr>
<td>CDC PolarStar</td>
<td>2</td>
<td>2 R 43 101</td>
<td>XX 103 105+ 97</td>
<td>M 52 44 79 G</td>
<td>S R MS S MR S MR</td>
<td></td>
</tr>
<tr>
<td>Cerveza</td>
<td>2</td>
<td>2 R 49 109+</td>
<td>XX 109+ 108+ 109+</td>
<td>M 51 46 74 F</td>
<td>R R I S MR MS I</td>
<td></td>
</tr>
<tr>
<td>Harrington</td>
<td>2</td>
<td>2 R 284 93-</td>
<td>96- 94- 93- 91-</td>
<td>M 51 44 78 F</td>
<td>MS MS I MS S MR</td>
<td></td>
</tr>
<tr>
<td>Major</td>
<td>2</td>
<td>2 R 72 107+</td>
<td>104 108+ 107+ 106+</td>
<td>M 51 45 73 G</td>
<td>R MR I MS MR I I</td>
<td></td>
</tr>
<tr>
<td>Merit 57</td>
<td>2</td>
<td>2 R 87 109+</td>
<td>110+ 108+ 109+ 111+</td>
<td>VL 51 44 79 F</td>
<td>MS S I MS MR MS</td>
<td></td>
</tr>
<tr>
<td>Newdale</td>
<td>2</td>
<td>2 R 94 105+</td>
<td>106 104+ 105+ 106+</td>
<td>M 52 46 73 F</td>
<td>S MR MR MS MR I I</td>
<td></td>
</tr>
<tr>
<td>LEGACY</td>
<td>6</td>
<td>6 SS 122 99 93- 95- 102 103</td>
<td>M 49 39 82 G</td>
<td>I MR MR S MR S MS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tradition</td>
<td>6</td>
<td>6 SS 121 98 90- 95- 101 103</td>
<td>E 50 40 81 G</td>
<td>S MR MR S I S S</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Remarks:** For explanations on data summarization methods, abbreviations and other pertinent information, please see the comments at the beginning of this publication. The long term average maturity for AC Metcalfe is 95 days and is rated as Medium (M). Varieties rated Intermediate (I) to Susceptible (S) for smuts should be treated with a systemic seed treatment to reduce the potential for infection. The Canadian Malting Barley Technical Centre (CMBTC) evaluates and recommends malting barley varieties for industry acceptance. Please refer to the 2017-2018 CMBTC Recommended Malt Barley Variety List for more information. CDC Clear is a hulless malting variety. New registrations: AAC Connect (TR12225), CDC GoldStar (TR13812), Lowe (TR13609), Sirish (TR14928). † - Flagged for possible removal in 2019.
### FEED AND FOOD BARLEY

#### Agronomic Characteristics:

<table>
<thead>
<tr>
<th>Variety</th>
<th>2 or 6 row</th>
<th>Overall Maturity Rating</th>
<th>TKW (g)</th>
<th>Height (cm)</th>
<th>Resistance to lodging</th>
<th>Loose Other Root Smuts</th>
<th>Root Rot</th>
<th>Spot Net</th>
<th>Fusarium Head Blight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 or 6 row</td>
<td>Overall Low Medium High V. High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 or 6 row</td>
<td>&lt;75 75-100 100-125 &gt;125</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Weight</td>
<td>Rating (at1% (bu/ac)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Disease Tolerance:

<table>
<thead>
<tr>
<th>Variety</th>
<th>2 or 6 row</th>
<th>Overall Maturity Rating</th>
<th>TKW (g)</th>
<th>Height (cm)</th>
<th>Resistance to lodging</th>
<th>Loose Other Root Smuts</th>
<th>Root Rot</th>
<th>Spot Net</th>
<th>Fusarium Head Blight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 or 6 row</td>
<td>Overall Low Medium High V. High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 or 6 row</td>
<td>&lt;75 75-100 100-125 &gt;125</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Weight</td>
<td>Rating (at1% (bu/ac)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### GENERAL PURPOSE:

#### Varieties tested in the 2017 trials (Yield, significant differences and agronomic data only directly comparable to AC Metcalfe):

<table>
<thead>
<tr>
<th>Variety</th>
<th>2 or 6 row</th>
<th>Overall Maturity Rating</th>
<th>TKW (g)</th>
<th>Height (cm)</th>
<th>Resistance to lodging</th>
<th>Loose Other Root Smuts</th>
<th>Root Rot</th>
<th>Spot Net</th>
<th>Fusarium Head Blight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 or 6 row</td>
<td>Overall Low Medium High V. High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 or 6 row</td>
<td>&lt;75 75-100 100-125 &gt;125</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test Weight</td>
<td>Rating (at1% (bu/ac)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Remarks:

For explanations on data summarization methods, abbreviations and other pertinent information, please see the comments at the beginning of this publication. The long term average maturity for AC Metcalfe is 95 days and is rated as Medium (M). Varieties rated Intermediate (I) to Susceptible (S) for smuts should be treated with a systemic seed treatment to reduce the potential for infection. Hulless varieties leave the hull in the field and thus grain yields comparable to hulled varieties are 9-12% lower. Handling of hulless varieties should be minimized to avoid ... starch barleys suitable for food use. New registrations: CDC Ascent (HB13324). † - Flagged for possible removal in 2019.
## SPRING TRITICALE

### Varieties tested in the 2017 trials (Yield, significant differences and agronomic data only directly comparable to Brevis)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Overall Yield Category (&lt;70 bu/ac)</th>
<th>Medium Yield Category (70-100 bu/ac)</th>
<th>High Yield Category (100-130 bu/ac)</th>
<th>V. High Yield Category (&gt;130 bu/ac)</th>
<th>Maturity Test</th>
<th>Height (cm)</th>
<th>Lodging</th>
<th>Shattering</th>
<th>Sprouting</th>
<th>Ergot</th>
<th>Rust</th>
<th>Bunt</th>
<th>Blight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brevis (bu/ac)</td>
<td>102</td>
<td>61</td>
<td>90</td>
<td>124</td>
<td>158</td>
<td>Brevis</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>M</td>
<td>60</td>
</tr>
<tr>
<td>AAC Delight ▲</td>
<td>21</td>
<td>95-</td>
<td>XX</td>
<td>XX</td>
<td>98</td>
<td>94</td>
<td>M</td>
<td>57</td>
<td>55</td>
<td>96</td>
<td>G</td>
<td>G</td>
<td>XX</td>
</tr>
<tr>
<td>Sunray</td>
<td>35</td>
<td>90-</td>
<td>93-</td>
<td>91-</td>
<td>XX</td>
<td>91-</td>
<td>M</td>
<td>57</td>
<td>45</td>
<td>94</td>
<td>VG</td>
<td>G</td>
<td>F</td>
</tr>
<tr>
<td>Taza 🌽</td>
<td>35</td>
<td>88-</td>
<td>91-</td>
<td>89-</td>
<td>XX</td>
<td>90-</td>
<td>M</td>
<td>58</td>
<td>47</td>
<td>100</td>
<td>G</td>
<td>G</td>
<td>F</td>
</tr>
</tbody>
</table>

### Previously tested varieties: 2011 - 2013 (Yield and agronomic data only directly comparable to Brevis)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Overall Yield Category (&lt;70 bu/ac)</th>
<th>Medium Yield Category (70-100 bu/ac)</th>
<th>High Yield Category (100-130 bu/ac)</th>
<th>V. High Yield Category (&gt;130 bu/ac)</th>
<th>Maturity Test</th>
<th>Height (cm)</th>
<th>Lodging</th>
<th>Shattering</th>
<th>Sprouting</th>
<th>Ergot</th>
<th>Rust</th>
<th>Bunt</th>
<th>Blight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Ultima (bu/ac)</td>
<td>82</td>
<td>54</td>
<td>85</td>
<td>117</td>
<td>146</td>
<td>AC Ultima</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>E</td>
<td>57</td>
</tr>
<tr>
<td>Bumper † 🌽</td>
<td>41</td>
<td>104</td>
<td>114+</td>
<td>100</td>
<td>99</td>
<td>96</td>
<td>E</td>
<td>59</td>
<td>45</td>
<td>90</td>
<td>VG</td>
<td>G</td>
<td>F</td>
</tr>
<tr>
<td>Pronghorn</td>
<td>120</td>
<td>101</td>
<td>100</td>
<td>101</td>
<td>103</td>
<td>102</td>
<td>M</td>
<td>55</td>
<td>43</td>
<td>98</td>
<td>G</td>
<td>G</td>
<td>F</td>
</tr>
<tr>
<td>Taza 🌽</td>
<td>48</td>
<td>98</td>
<td>98</td>
<td>100</td>
<td>93-</td>
<td>XX</td>
<td>M</td>
<td>57</td>
<td>47</td>
<td>99</td>
<td>G</td>
<td>G</td>
<td>F</td>
</tr>
<tr>
<td>Tyndal 🌽</td>
<td>55</td>
<td>101</td>
<td>104</td>
<td>99</td>
<td>98</td>
<td>96</td>
<td>L</td>
<td>57</td>
<td>44</td>
<td>97</td>
<td>G</td>
<td>G</td>
<td>P</td>
</tr>
</tbody>
</table>

### Remarks:
- Triticale is late maturing compared to CWRS wheat (approximately five days later). AC Ultima yields about 30% more than AC Barrie (CWRS wheat) in areas of adaptation. AAC Delight, Bunker, Taza, and Tyndal have heads with reduced-awns which may be beneficial when harvested as forage or silage. New registration: AAC Delight (T225). XX - Insufficient data to describe. † - Flagged for possible removal in 2019.
<table>
<thead>
<tr>
<th>Variety</th>
<th>Yield Category (% CDC Dancer):</th>
<th>Agronomic Characteristics:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Station</td>
<td>Overall</td>
</tr>
<tr>
<td>CDC Dancer</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>AC Morgan</td>
<td>73</td>
<td>113+ 110</td>
</tr>
<tr>
<td>Akina</td>
<td>30</td>
<td>109+ XX 103</td>
</tr>
<tr>
<td>CDC Ruffian</td>
<td>38</td>
<td>110+ 109</td>
</tr>
<tr>
<td>Kara</td>
<td>20</td>
<td>108 XX 101</td>
</tr>
<tr>
<td>Kyron</td>
<td>20</td>
<td>115+ XX 108</td>
</tr>
<tr>
<td>Pomona</td>
<td>20</td>
<td>104 XX 101</td>
</tr>
</tbody>
</table>

**Remarks:** For explanations on data summarization methods, abbreviations and other pertinent information, please see the comments at the beginning of this publication. The long term average maturity for CDC Dancer is 98 days and rated as Early (E). Varieties rated Intermediate (I) to Susceptible (S) for the smuts should be treated with a systemic seed treatment to reduce the potential for infection. New registrations: Kara (CFA1102), Kyron (CFA1207), ORe3541M (OT6008), ORe3542M (OT6009), OT3085 and Pomona (CFA1220). Insufficient data to describe: ORe3541M (OT6008), ORe3542M (OT6009) and OT3085.

* Yield figures based on direct and indirect comparisons with CDC Dancer. † - Flagged for possible removal in 2019.
# Winter Wheat

## Varieties

<table>
<thead>
<tr>
<th>Variety</th>
<th>Yield Category (% Radiant):</th>
<th>Agronomic Characteristics:</th>
<th>Disease Tolerance:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Radiant (bu/ac)</td>
<td>76</td>
<td>37</td>
<td>63</td>
</tr>
<tr>
<td>AAC Elevate</td>
<td>72</td>
<td>106+</td>
<td>106</td>
</tr>
<tr>
<td>AAC Gateway</td>
<td>75</td>
<td>100</td>
<td>XX</td>
</tr>
<tr>
<td>AAC Goldrush</td>
<td>29</td>
<td>102</td>
<td>XX</td>
</tr>
<tr>
<td>AAC Wildfire</td>
<td>43</td>
<td>114+</td>
<td>XX</td>
</tr>
<tr>
<td>AC Tempest</td>
<td>117</td>
<td>97-</td>
<td>96</td>
</tr>
<tr>
<td>CDC Buteo</td>
<td>198</td>
<td>97-</td>
<td>94-</td>
</tr>
<tr>
<td>CDC Chase</td>
<td>43</td>
<td>101</td>
<td>XX</td>
</tr>
<tr>
<td>Emerson</td>
<td>79</td>
<td>98</td>
<td>96</td>
</tr>
<tr>
<td>Flourish</td>
<td>119</td>
<td>100</td>
<td>99</td>
</tr>
<tr>
<td>Moats</td>
<td>90</td>
<td>104+</td>
<td>91</td>
</tr>
</tbody>
</table>

## Remarks

Winter wheat can be grown successfully in all areas of Alberta if seeded into standing stubble within the optimal seeding date period (generally before September 15) and if there is adequate snowfall. Varieties with poor (P) winter survival are generally not suitable outside of southern Alberta. The long term average maturity for Radiant is August 10 and is rated as late (L). Fusarium head blight infection may be reduced if varieties with Intermediate (I) resistance or better are used and when recommended seeding dates are followed. Radiant and AAC Elevate have tolerance to the wheat curl mite, the vector for Wheat Streak Mosaic Virus. To preserve the effectiveness of the wheat curl mite tolerance gene, agronomic practices that eliminate the "green bridge" of plant material that serves as a reservoir for mites should be followed whenever possible. Fields in southern Alberta should be inspected in the fall for infestation by Russian wheat aphid, as it may reduce winter survival. AAC Wildfire expresses some tolerance to Russian wheat aphid. AC Tempest, Radiant and AAC Wildfire have bronze chaff at maturity. AAC Icefield is a hard white winter wheat under interim registration, eligible for experimental grades to facilitate market research under an Identity Preserved system. AAC Icefield expresses high milling yield of very white flour and good gluten strength at lower protein concentrations that may be of interest in some niche markets. For more information contact FP Genetics. Pintail has an awnless head which may improve palatability when harvested for forage or silage. AAC Wildfire will be available in 2018. Limited quantities of AAC Goldrush and AAC Icefield may be available in 2019. **XX** - Insufficient data to describe. † Flagged for possible removal in 2019.
### FALL RYE

#### Yield Category (% Hazlet):

<table>
<thead>
<tr>
<th>Variety</th>
<th>Overall Yield (bu/ac)</th>
<th>Low (&lt; 48)</th>
<th>Medium (48 - 80)</th>
<th>High (80 - 112)</th>
<th>V. High (&gt; 112)</th>
<th>Agronomic Characteristics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazlet (bu/ac)</td>
<td>OP</td>
<td>101</td>
<td>48</td>
<td>67</td>
<td>94</td>
<td>137</td>
</tr>
<tr>
<td>Hazlet</td>
<td>Hybrid or OP Variety</td>
<td>Years of Testing</td>
<td>Overall Yield</td>
<td>Low (&lt; 48)</td>
<td>Medium (48 - 80)</td>
<td>High (80 - 112)</td>
</tr>
<tr>
<td>KWS Bono</td>
<td>Hybrid</td>
<td>24</td>
<td>137+</td>
<td>XX</td>
<td>115</td>
<td>130+</td>
</tr>
<tr>
<td>Brasetto</td>
<td>Hybrid</td>
<td>20</td>
<td>123+</td>
<td>XX</td>
<td>121</td>
<td>134</td>
</tr>
<tr>
<td>KWS Daniello</td>
<td>Hybrid</td>
<td>11</td>
<td>123+</td>
<td>XX</td>
<td>115</td>
<td>126</td>
</tr>
<tr>
<td>KWS Gatano</td>
<td>Hybrid</td>
<td>14</td>
<td>124+</td>
<td>XX</td>
<td>XX</td>
<td>125+</td>
</tr>
<tr>
<td>Guttino</td>
<td>Hybrid</td>
<td>20</td>
<td>120+</td>
<td>XX</td>
<td>119</td>
<td>122+</td>
</tr>
<tr>
<td>Prima</td>
<td>OP</td>
<td>51</td>
<td>85</td>
<td>77-</td>
<td>75-</td>
<td>91</td>
</tr>
</tbody>
</table>

**REMARKS:** Hazlet has lower viscosity which improves feed performance in monogastric livestock. Fall rye is much more cold tolerant than winter wheat or winter triticale. The long term average heading date and maturity for Hazlet is June 1 and August 6, respectively. All fall rye varieties are similar for heading and maturity and are considered early. A major factor in marketing rye grain into the milling market is sprouting. This is generally measured using the Hagberg falling number test and is measured in seconds. Typically, a falling number of 180 seconds or greater is preferred by the rye milling market. Falling number is heavily influenced by moisture around harvest time and producers must make sure rye is harvested in a timely manner, similar to wheat crops. There is considerable variation in fall rye varieties for falling number and this must be considered if the milling market is the targeted end-user for rye grain. All fall rye is susceptible to ergot, however Daniello and Gatano have reduced susceptibility. AFSC crop insurance deadlines for seeding fall rye is September 20, north of the Bow River and September 30, south of the Bow River. XX - Insufficient data to describe.
<table>
<thead>
<tr>
<th>Variety</th>
<th>Overall Station Years of Testing</th>
<th>Overall Yield (bu/ac)</th>
<th>Low &lt; 20 (bu/ac)</th>
<th>Medium 20 - 30 (bu/ac)</th>
<th>High 30 - 37 (bu/ac)</th>
<th>V. High &gt; 37 (bu/ac)</th>
<th>Maturity Rating</th>
<th>Seed Colour</th>
<th>Seed Size</th>
<th>Height (cm)</th>
<th>Resistance to Lodging</th>
<th>Fusarium Wilt</th>
<th>Powdery Mildew</th>
<th>Oil Content (%)</th>
<th>ALA Content (%)</th>
<th>Iodine Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDC Bethune</td>
<td>31</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>L</td>
<td>brown</td>
<td>L</td>
<td>57</td>
<td>G</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>46</td>
<td>55</td>
<td>189</td>
</tr>
<tr>
<td>CDC Buryu ▲</td>
<td>26</td>
<td>100</td>
<td>97</td>
<td>104</td>
<td>99</td>
<td>L</td>
<td>brown</td>
<td>L</td>
<td>57</td>
<td>G</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>46</td>
<td>56</td>
<td>193</td>
</tr>
<tr>
<td>CDC Plava</td>
<td>34</td>
<td>101</td>
<td>98</td>
<td>108</td>
<td>103</td>
<td>M</td>
<td>brown</td>
<td>M</td>
<td>53</td>
<td>G</td>
<td>MR</td>
<td>XX</td>
<td></td>
<td>47</td>
<td>57</td>
<td>196</td>
</tr>
<tr>
<td>Topaz</td>
<td>26</td>
<td>101</td>
<td>100</td>
<td>97</td>
<td>105</td>
<td>L</td>
<td>brown</td>
<td>M</td>
<td>55</td>
<td>G</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>47</td>
<td>55</td>
<td>189</td>
</tr>
<tr>
<td>WestLin 61</td>
<td>26</td>
<td>101</td>
<td>99</td>
<td>106</td>
<td>100</td>
<td>M</td>
<td>brown</td>
<td>S</td>
<td>52</td>
<td>G</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>48</td>
<td>61</td>
<td>197</td>
</tr>
<tr>
<td>WestLin 72</td>
<td>26</td>
<td>100</td>
<td>96</td>
<td>106</td>
<td>103</td>
<td>VL</td>
<td>brown</td>
<td>S</td>
<td>53</td>
<td>VG</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>47</td>
<td>57</td>
<td>193</td>
</tr>
<tr>
<td>AAC Bravo</td>
<td>23</td>
<td>104</td>
<td>XX</td>
<td>XX</td>
<td>105+</td>
<td>L</td>
<td>brown</td>
<td>L</td>
<td>64</td>
<td>G</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>45</td>
<td>60</td>
<td>194</td>
</tr>
<tr>
<td>CDC Glas</td>
<td>23</td>
<td>106+</td>
<td>XX</td>
<td>XX</td>
<td>106</td>
<td>108+</td>
<td>L</td>
<td>brown</td>
<td>M</td>
<td>61</td>
<td>G</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>46</td>
<td>57</td>
</tr>
<tr>
<td>CDC Sanctuary</td>
<td>27</td>
<td>106+</td>
<td>112</td>
<td>99</td>
<td>XX</td>
<td>104</td>
<td>VL</td>
<td>brown</td>
<td>M</td>
<td>64</td>
<td>G</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>46</td>
<td>57</td>
</tr>
<tr>
<td>CDC SorreL</td>
<td>32</td>
<td>104</td>
<td>112</td>
<td>104</td>
<td>100</td>
<td>99</td>
<td>L</td>
<td>brown</td>
<td>L</td>
<td>61</td>
<td>F</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>45</td>
<td>58</td>
</tr>
<tr>
<td>Hanley †</td>
<td>37</td>
<td>97-</td>
<td>99</td>
<td>97</td>
<td>95</td>
<td>97</td>
<td>M</td>
<td>brown</td>
<td>M</td>
<td>53</td>
<td>VG</td>
<td>R</td>
<td>MR</td>
<td></td>
<td>45</td>
<td>59</td>
</tr>
<tr>
<td>Prairie Grande†</td>
<td>76</td>
<td>98-</td>
<td>103</td>
<td>101</td>
<td>94</td>
<td>96</td>
<td>M</td>
<td>brown</td>
<td>M</td>
<td>53</td>
<td>G</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>46</td>
<td>58</td>
</tr>
<tr>
<td>Prairie Sapphire</td>
<td>23</td>
<td>96</td>
<td>XX</td>
<td>XX</td>
<td>100</td>
<td>L</td>
<td>brown</td>
<td>M</td>
<td>64</td>
<td>G</td>
<td>MR</td>
<td>MR</td>
<td></td>
<td>48</td>
<td>57</td>
<td>193</td>
</tr>
<tr>
<td>Prairie Thunder</td>
<td>40</td>
<td>100</td>
<td>106</td>
<td>95</td>
<td>99</td>
<td>M</td>
<td>brown</td>
<td>M</td>
<td>55</td>
<td>G</td>
<td>R</td>
<td>MR</td>
<td></td>
<td>45</td>
<td>58</td>
<td>195</td>
</tr>
<tr>
<td>Taurus †</td>
<td>27</td>
<td>98-</td>
<td>103</td>
<td>97</td>
<td>XX</td>
<td>XX</td>
<td>M</td>
<td>brown</td>
<td>M</td>
<td>53</td>
<td>VG</td>
<td>MR</td>
<td>R</td>
<td></td>
<td>46</td>
<td>54</td>
</tr>
<tr>
<td>VT50</td>
<td>24</td>
<td>103</td>
<td>XX</td>
<td>109</td>
<td>104</td>
<td>97</td>
<td>VL</td>
<td>yellow</td>
<td>S</td>
<td>51</td>
<td>VG</td>
<td>MR</td>
<td>XX</td>
<td></td>
<td>47</td>
<td>68</td>
</tr>
<tr>
<td>WestLin 60</td>
<td>24</td>
<td>100</td>
<td>100</td>
<td>105</td>
<td>XX</td>
<td>98</td>
<td>M</td>
<td>brown</td>
<td>M</td>
<td>50</td>
<td>G</td>
<td>MR</td>
<td>XX</td>
<td></td>
<td>46</td>
<td>60</td>
</tr>
<tr>
<td>WestLin 71</td>
<td>25</td>
<td>95-</td>
<td>99</td>
<td>91</td>
<td>XX</td>
<td>94</td>
<td>L</td>
<td>brown</td>
<td>M</td>
<td>56</td>
<td>G</td>
<td>MR</td>
<td>MS</td>
<td></td>
<td>48</td>
<td>61</td>
</tr>
</tbody>
</table>

**Remarks:** For explanations on data summarization methods, abbreviations and other pertinent information, please see the comments at the beginning of this publication. The long term average maturity for CDC Bethune in Alberta is 110 days and rated as Late (L). All varieties are immune to flax rust. Insufficient data to describe: AAC Prairie Sunshine. † - Flagged for possible removal in 2019.
Canola variety information

Canola Performance Trials (CPT) have been conducted since 2011 and represent the next generation in variety evaluation for Western Canadian canola growers. The trials were designed to provide the following key information:

- relevant, unbiased and timely performance data that reflects actual production practices
- comparative data on leading varieties and newly introduced varieties from participating companies
- detailed reporting on agronomic characteristics such as yield, height, lodging, maturity and economic performance as well as site specific performance variables including weather, soil type, crop nutrition, seeding and harvest management

The CPT trials are conducted under the guidance of a governance committee that approves participating varieties, protocol design, data collection, analyses, reports and finance management.

The 2017 CPT program was funded by the Alberta Canola Producers Commission, SaskCanola and the Manitoba Canola Growers Association with contributions from the British Columbia Grain Producers Association. The Canola Council of Canada delivers the program on their behalf. More about the CPT program and the CPT Technical and Governance Committee is in the Canola Variety Selection Guide available at the website: [www.canolaperformancetrials.ca/](http://www.canolaperformancetrials.ca/)

Canola trial summaries

The CPT summaries in this factsheet are based on successful trials that did not show confounding factors during field inspections. The combination of drought and excessive moisture in different areas resulted in only 10 successful small plot trials in 2017. The small trial sites were distributed based on seeded acres in Manitoba, Saskatchewan and Alberta.

Small plot trials included a limited selection of popular and newly introduced varieties. The new small plot system ensured the following:

- all varieties are treated with appropriate commercially associated herbicides and seed treatments
- an independent third-party representative inspected all trials

- harvest occurred at the most appropriate time to minimize harvest losses due to maturity differences

Field scale comparisons add extra perspective for assessing consistency in variety performance. In 2015, the large scale comparisons were changed to assess the yield impact of selected shatter tolerant varieties under swath or straight cut harvest systems. In 2017, selected clubroot resistant varieties were also tested in large scale trials (but not on clubroot infested land).

Canola trial analysis

To ensure quality data and statistical analysis, the CPT technical committee established protocols and developed research plot designs. Performance objectives were established to provide guidelines on timely field operations and data collection. All sites were inspected to verify that guidelines were followed for fair comparisons among the varieties tested.

Audits of field scale projects give growers the confidence that the protocol was conducted in a scientifically sound manner and that comparisons are appropriate. Qualified professionals with extensive backgrounds in conducting field scale research trials performed the audits.

Small yield differences can easily be due to random variation and, thus, are unlikely to be real effects of varieties. When comparing average zone yields for varieties in the small plot data, the least significant difference (LSD) ranged from 10 to 14 per cent in 2017. This number is based on a confidence level that similar differences would occur by chance less than 5 per cent of the time.

In the small plot design used, varieties are grouped by herbicide system, which means that the LSD shown strictly applies only to comparisons between a few varieties of the same herbicide system. Comparisons between many varieties or between different herbicide systems are still valid, but the LSD would be larger.

More importantly, comparisons between varieties within the same herbicide system reveal only genetic differences, whereas variety comparisons from different herbicide systems involve the net effect of both genetic and herbicide effects (weed control + crop tolerance).

When comparing variety yields in the field scale summaries, an asterisk (*) indicates yields that are statistically different (5% level) using the paired t-test.
As results from more sites are combined, the statistical power to determine if small differences are not due to chance often improves quickly up to 15 to 20 sites, and then marginally after that. This result means that smaller differences are more relevant when all sites are averaged, rather than just a few selected sites. Also, the predictability that the average yield differences would likely occur in other fields in future years increases when there are a high number of individual sites for comparing two varieties.

**Where are CPT results available?**

Results from zones with less than 5 sites of data are not shown in this publication due to limited reliability. Full results are available through an online interactive tool at the website: [www.canolaperformancetrials.ca](http://www.canolaperformancetrials.ca)

The interactive tool allows growers to explore many agronomic factors and to search for trial data in specific geographic areas near their farming operations. Details on management, operations and environmental data for each individual site will be reported online. The online tool has an economic calculator that includes the costs associated with growing the selected variety to assist growers in determining potential profitability.

*Brassica rapa* (Polish canola) and Canola Quality

*Brassica juncea*: no varieties were tested under PCT in 2012 through 2017.
## CANOLA PERFORMANCE TRIALS 2017 - SMALL PLOT RESULTS

<table>
<thead>
<tr>
<th>Distributor</th>
<th>Name</th>
<th>Yield (%5440)</th>
<th>Days to maturity</th>
<th>Lodging¹</th>
<th>Height (Inches)</th>
<th>Yield (%5440)</th>
<th>Days to maturity</th>
<th>Lodging¹</th>
<th>Height (Inches)</th>
<th>Disease tolerance²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearfield</td>
<td>BrettYoung 5545 CL</td>
<td>96</td>
<td>97</td>
<td>1.7</td>
<td>42</td>
<td>96</td>
<td>98</td>
<td>1.5</td>
<td>47</td>
<td>BL</td>
</tr>
<tr>
<td>CANTERRA SEEDS</td>
<td>CS2200 CL</td>
<td>89</td>
<td>100</td>
<td>1.6</td>
<td>42</td>
<td>90</td>
<td>100</td>
<td>1.4</td>
<td>46</td>
<td>BL</td>
</tr>
<tr>
<td>Crop Production Services / Proven Seed</td>
<td>PV 200 CL</td>
<td>93</td>
<td>98</td>
<td>1.7</td>
<td>43</td>
<td>94</td>
<td>98</td>
<td>1.4</td>
<td>47</td>
<td>BL</td>
</tr>
<tr>
<td>DupontPioneer</td>
<td>46H75</td>
<td>96</td>
<td>100</td>
<td>1.6</td>
<td>43</td>
<td>96</td>
<td>100</td>
<td>1.4</td>
<td>47</td>
<td>BL</td>
</tr>
<tr>
<td></td>
<td>LSD (5%)</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberty Link</td>
<td>Bayer CropScience 5440</td>
<td>100</td>
<td>96</td>
<td>1.3</td>
<td>43</td>
<td>100</td>
<td>97</td>
<td>1.2</td>
<td>47</td>
<td>BL</td>
</tr>
<tr>
<td>Bayer CropScience</td>
<td>L241C</td>
<td>97</td>
<td>96</td>
<td>1.3</td>
<td>42</td>
<td>98</td>
<td>96</td>
<td>1.2</td>
<td>45</td>
<td>BL, CR</td>
</tr>
<tr>
<td>Bayer CropScience</td>
<td>L252</td>
<td>105</td>
<td>96</td>
<td>1.4</td>
<td>43</td>
<td>105</td>
<td>98</td>
<td>1.3</td>
<td>46</td>
<td>BL</td>
</tr>
<tr>
<td></td>
<td>LSD (5%)</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roundup Ready</td>
<td>DupontPioneer 45H33</td>
<td>100</td>
<td>95</td>
<td>1.7</td>
<td>42</td>
<td>99</td>
<td>96</td>
<td>1.5</td>
<td>48</td>
<td>BL, CR</td>
</tr>
<tr>
<td>DupontPioneer</td>
<td>45M35</td>
<td>103</td>
<td>97</td>
<td>1.5</td>
<td>41</td>
<td>102</td>
<td>97</td>
<td>1.4</td>
<td>45</td>
<td>BL</td>
</tr>
<tr>
<td>BrettYoung</td>
<td>6074 RR</td>
<td>99</td>
<td>100</td>
<td>1.7</td>
<td>40</td>
<td>99</td>
<td>99</td>
<td>1.4</td>
<td>44</td>
<td>BL, S</td>
</tr>
<tr>
<td>BrettYoung</td>
<td>6076 RR</td>
<td>95</td>
<td>98</td>
<td>1.5</td>
<td>44</td>
<td>95</td>
<td>98</td>
<td>1.3</td>
<td>48</td>
<td>BL, CR, S</td>
</tr>
<tr>
<td>BrettYoung</td>
<td>6080 RR</td>
<td>91</td>
<td>97</td>
<td>1.5</td>
<td>38</td>
<td>91</td>
<td>97</td>
<td>1.3</td>
<td>43</td>
<td>BL</td>
</tr>
<tr>
<td>BrettYoung</td>
<td>6090 RR</td>
<td>101</td>
<td>99</td>
<td>1.5</td>
<td>45</td>
<td>99</td>
<td>98</td>
<td>1.4</td>
<td>49</td>
<td>BL, CR</td>
</tr>
<tr>
<td>DEKALB</td>
<td>74-44 BL</td>
<td>87</td>
<td>95</td>
<td>1.7</td>
<td>39</td>
<td>90</td>
<td>96</td>
<td>1.4</td>
<td>42</td>
<td>BL</td>
</tr>
<tr>
<td>CANTERRA SEEDS</td>
<td>CS2000</td>
<td>94</td>
<td>98</td>
<td>1.7</td>
<td>41</td>
<td>94</td>
<td>97</td>
<td>1.4</td>
<td>46</td>
<td>BL, CR</td>
</tr>
<tr>
<td>CANTERRA SEEDS</td>
<td>CS2100</td>
<td>97</td>
<td>97</td>
<td>1.8</td>
<td>40</td>
<td>95</td>
<td>97</td>
<td>1.6</td>
<td>44</td>
<td>BL</td>
</tr>
<tr>
<td>CANTERRA SEEDS</td>
<td>CS2300</td>
<td>103</td>
<td>98</td>
<td>1.5</td>
<td>42</td>
<td>101</td>
<td>99</td>
<td>1.3</td>
<td>48</td>
<td>BL</td>
</tr>
<tr>
<td>DL Seeds</td>
<td>DL1634 RR</td>
<td>96</td>
<td>100</td>
<td>1.5</td>
<td>43</td>
<td>96</td>
<td>100</td>
<td>1.3</td>
<td>48</td>
<td>BL</td>
</tr>
<tr>
<td>Crop Production Services / Proven Seed</td>
<td>PV 540 G</td>
<td>94</td>
<td>96</td>
<td>1.6</td>
<td>40</td>
<td>96</td>
<td>97</td>
<td>1.3</td>
<td>44</td>
<td>BL</td>
</tr>
<tr>
<td>Crop Production Services / Proven Seed</td>
<td>PV 581 GC</td>
<td>97</td>
<td>99</td>
<td>1.5</td>
<td>43</td>
<td>95</td>
<td>99</td>
<td>1.3</td>
<td>48</td>
<td>BL, CR</td>
</tr>
<tr>
<td>BrettYoung</td>
<td>4187 RR</td>
<td>97</td>
<td>99</td>
<td>1.4</td>
<td>43</td>
<td>97</td>
<td>99</td>
<td>1.3</td>
<td>47</td>
<td>BL, CR</td>
</tr>
<tr>
<td>Cargill</td>
<td>V12-1*</td>
<td>95</td>
<td>96</td>
<td>1.6</td>
<td>41</td>
<td>95</td>
<td>97</td>
<td>1.4</td>
<td>44</td>
<td>BL</td>
</tr>
<tr>
<td></td>
<td>LSD (5%)</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CHECK 5440 AVERAGE YIELD (BU/AC)

- **Mid Season zone (5 sites)**
  - **Yield (%5440)**: 67
  - **Days to maturity**: 65

* Indicates varieties with Specialty oil profiles and premiums associated with pricing. Visit www.canolaperformance_trials.ca for more details.

1 - Lodging score, 1 to 5 scale, lower score indicates less lodging.

2 - Indicates genetic disease resistance with an "R" or resistant rating to BL=Blackleg, CR=Clubroot and improved tolerance to sclerotinia "S", based on variety descriptions submitted to CFIA. LSD - least significant difference at 5% level
### CANOLA PERFORMANCE TRIALS 2017 - LARGE SCALE VARIETY (% YIELD OF 5440)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Season Zone</th>
<th>Overall Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Long (7)</td>
<td>Mid (14)</td>
</tr>
<tr>
<td><strong>Standard Harvest Trials</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45H33</td>
<td>56</td>
<td>53</td>
</tr>
<tr>
<td>L252</td>
<td>61*</td>
<td>57*</td>
</tr>
</tbody>
</table>

* - indicates statistically significant different yield (5% level)

<table>
<thead>
<tr>
<th>Variety</th>
<th>Season Zone</th>
<th>Overall Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Long (9)</td>
<td></td>
</tr>
<tr>
<td><strong>Straight Cut Trials</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45M35</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>75-65 RR</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>L140P</td>
<td>45*</td>
<td></td>
</tr>
</tbody>
</table>

* - indicates L140P yield is statistically different than the other 2 varieties (5% level). While 45M35 and 75-65 RR yields are statistically similar

<table>
<thead>
<tr>
<th>Variety</th>
<th>Season Zone</th>
<th>Overall Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Clubroot Resistant Variety Trials</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS2000</td>
<td></td>
<td>61</td>
</tr>
<tr>
<td>L241C</td>
<td></td>
<td>62ns</td>
</tr>
</tbody>
</table>

ns - indicates the yields were not statistically different
## BREEDING INSTITUTIONS AND SEED DISTRIBUTORS OF VARIETIES LISTED IN THIS PUBLICATION

<table>
<thead>
<tr>
<th>Crop Kind, Class &amp; Variety</th>
<th>Breeding Institution</th>
<th>Distributor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FEED and FOOD BARLEY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-Row</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albarado</td>
<td>Highland Specialty Grains</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>Brahmani</td>
<td>Westbred, LLC.</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>Busby</td>
<td>FCDC (Lacombe)</td>
<td>Mastin Seeds</td>
</tr>
<tr>
<td>Cammore</td>
<td>FCDC (Lacombe)</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>CDC Austenson</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC Coalition</td>
<td>U of S - CDC</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>CDC Cowboy</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC Maverick</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC Trey</td>
<td>U of S - CDC</td>
<td>FP Genetics</td>
</tr>
<tr>
<td>Champion</td>
<td>Westbred, LLC.</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>Claymore</td>
<td>Highland Specialty Grains</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>CONLON</td>
<td>NDSU</td>
<td>Seed Depot</td>
</tr>
<tr>
<td>Gadsby</td>
<td>FCDC (Lacombe)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Oreena</td>
<td>Highland Specialty Grains</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>Ponoka</td>
<td>FCDC (Lacombe)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Seebe</td>
<td>FCDC (Lacombe)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>XENA</td>
<td>Westbred, LLC.</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>Six-Row</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Harper</td>
<td>AACF (Lethbridge)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>AC Ranger</td>
<td>AACF (Brandon)</td>
<td>FP Genetics</td>
</tr>
<tr>
<td>AC Rosser</td>
<td>AACF (Brandon)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Amisk</td>
<td>FCDC (Lacombe)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Chigwell</td>
<td>FCDC (Lacombe)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Muskwa</td>
<td>FCDC (Lacombe)</td>
<td>SeNet Inc.</td>
</tr>
<tr>
<td>Sundre</td>
<td>FCDC (Lacombe)</td>
<td>Mastin Seeds</td>
</tr>
<tr>
<td>Trochu</td>
<td>FCDC (Lacombe)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td><strong>HULLESS - FOOD and FEED BARLEY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDC Ascent</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC Carter</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC McIvor</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Falcon</td>
<td>FCDC (Lacombe)</td>
<td>Progressive Seeds Ltd</td>
</tr>
<tr>
<td>Tyto</td>
<td>FCDC (Lacombe)</td>
<td>Progressive Seeds Ltd</td>
</tr>
<tr>
<td><strong>MALTING BARLEY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-Row</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAC Conrict</td>
<td>AACF (Brandon)</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>AAC Synergy</td>
<td>AACF (Brandon)</td>
<td>Syngenta Canada</td>
</tr>
<tr>
<td>AC Metcalfe</td>
<td>AACF (Brandon)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Bentley</td>
<td>FCDC (Lacombe)</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>CDC Bow</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC Clear (hulless)</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC Copeland</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC Fraser</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC Kinderley</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC Meredith</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC PlatinumStar</td>
<td>U of S - CDC</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>CDC PolarStar</td>
<td>U of S - CDC</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>Cerveza *</td>
<td>AACF (Brandon)</td>
<td>Mastin Seeds</td>
</tr>
<tr>
<td>Harrington</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Lowe</td>
<td>FCDC (Lacombe)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Major</td>
<td>AACF (Brandon)</td>
<td>Alliance Seed</td>
</tr>
<tr>
<td>Merit 57</td>
<td>Busch Ag Res. Inc.</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>Newdale</td>
<td>AACF (Brandon)</td>
<td>FP Genetics</td>
</tr>
<tr>
<td>Sirish</td>
<td>Syngenta AG</td>
<td>Syngenta Canada</td>
</tr>
<tr>
<td>TR13806</td>
<td>FCDC (Lacombe)</td>
<td>FCDC (Lacombe)</td>
</tr>
<tr>
<td>Six-Row</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legacy</td>
<td>Busch Ag Res. Inc.</td>
<td>Proven Seed/FP Genetics</td>
</tr>
</tbody>
</table>

## CANADA WESTERN AMBER DURUM

<table>
<thead>
<tr>
<th>Crop Kind, Class &amp; Variety</th>
<th>Breeding Institution</th>
<th>Distributor</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAC Cabri</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>AAC Congress</td>
<td>AACF (Swift Current)</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>AAC Current</td>
<td>AACF (Swift Current)</td>
<td>Alliance Seed</td>
</tr>
<tr>
<td>AAC Durafield</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>AAC Marchwell VB</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>AAC Raymore</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>AAC Spiffire</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>AC Navigator</td>
<td>AACF (Swift Current)</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>Brigade</td>
<td>AACF (Swift Current)</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>CDC Alyce</td>
<td>U of S - CDC</td>
<td>FP Genetics</td>
</tr>
<tr>
<td>CDC Caridolo</td>
<td>U of S - CDC</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>CDC Desire</td>
<td>U of S - CDC</td>
<td>Syngenta Canada</td>
</tr>
<tr>
<td>CDC Dynamic</td>
<td>U of S - CDC</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>CDC Fortitude</td>
<td>U of S - CDC</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>CDC Verona</td>
<td>U of S - CDC</td>
<td>Alliance Seed.</td>
</tr>
<tr>
<td>CDC Vivid</td>
<td>U of S - CDC</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>Enterprise</td>
<td>AACF (Swift Current)</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>Strongfield</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Transcend</td>
<td>AACF (Swift Current)</td>
<td>FP Genetics</td>
</tr>
</tbody>
</table>

## CANADA WESTERN RED SPRING

<table>
<thead>
<tr>
<th>Crop Kind, Class &amp; Variety</th>
<th>Breeding Institution</th>
<th>Distributor</th>
</tr>
</thead>
<tbody>
<tr>
<td>5604HR CL</td>
<td>Syngenta Seeds Canada Inc.</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>5603HR CL</td>
<td>Syngenta Seeds Canada Inc.</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>AAC Bailey</td>
<td>AACF (Swift Current)</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>AAC Brandon</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>AAC Cameron VB</td>
<td>AACF (Brandon)</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>AAC Conroy</td>
<td>AACF (Swift Current)</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>AAC Elie</td>
<td>AACF (Swift Current)</td>
<td>Alliance Seed</td>
</tr>
<tr>
<td>AAC Pervail VB</td>
<td>AACF (Winnipeg)</td>
<td>Alliance Seed</td>
</tr>
<tr>
<td>AAC Redberry</td>
<td>AACF (Swift Current)</td>
<td>Alliance Seed</td>
</tr>
<tr>
<td>AAC Redwater</td>
<td>AACF (Winnipeg)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>AAC Tisdale</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>AAC Viewfield</td>
<td>AACF (Swift Current)</td>
<td>FP Genetics</td>
</tr>
<tr>
<td>AC Barrie</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>AC Intrepid</td>
<td>AACF (Swift Current)</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>AC Splendor</td>
<td>AACF (Winnipeg)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Carberry</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Cardale</td>
<td>AACF (Winnipeg)</td>
<td>Seed Depot</td>
</tr>
<tr>
<td>Coleman</td>
<td>U of Alberta</td>
<td>Lefrud Seed</td>
</tr>
<tr>
<td>CDC Adamant VB</td>
<td>U of S - CDC</td>
<td>FP Genetics</td>
</tr>
<tr>
<td>CDC Abound</td>
<td>U of S - CDC</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>CDC Bradwell</td>
<td>U of S - CDC</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>CDC Go</td>
<td>U of S - CDC</td>
<td>Public release U of S - CDC</td>
</tr>
<tr>
<td>CDC Hughes VB</td>
<td>U of S - CDC</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>CDC Landmark VB</td>
<td>U of S - CDC</td>
<td>FP Genetics</td>
</tr>
<tr>
<td>CDC Plentilful</td>
<td>U of S - CDC</td>
<td>FP Genetics</td>
</tr>
<tr>
<td>CDC Stanley</td>
<td>U of S - CDC</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>CDC Titanium VB</td>
<td>U of S - CDC</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>CDC Ulstrom VB</td>
<td>U of S - CDC</td>
<td>FP Genetics</td>
</tr>
<tr>
<td>CDC VR Morris</td>
<td>U of S - CDC</td>
<td>Proven Seed/CPS Canada Inc.</td>
</tr>
<tr>
<td>Glenn</td>
<td>NDSU</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>Go Early</td>
<td>U of Alberta</td>
<td>Mastin Seeds</td>
</tr>
<tr>
<td>Goodeve VB</td>
<td>AACF (Swift Current)</td>
<td>Alliance Seed</td>
</tr>
<tr>
<td>Muchmore</td>
<td>AACF (Swift Current)</td>
<td>FP Genetics</td>
</tr>
<tr>
<td>Peace</td>
<td>AACF (Winnipeg)</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>Shaw VB</td>
<td>AACF (Winnipeg)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Stetler</td>
<td>AACF (Swift Current)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>Superb</td>
<td>AACF (Winnipeg)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>SY433</td>
<td>Syngenta Seeds Canada Inc.</td>
<td>Syngenta Canada</td>
</tr>
<tr>
<td>SY479 VB</td>
<td>Syngenta Seeds Canada Inc.</td>
<td>Alliance Seed</td>
</tr>
<tr>
<td>SY Slate</td>
<td>Syngenta Seeds Canada Inc.</td>
<td>Syngenta Canada</td>
</tr>
<tr>
<td>SY Sylite</td>
<td>Syngenta Seeds Canada Inc.</td>
<td>Syngenta Canada</td>
</tr>
<tr>
<td>Thorsby</td>
<td>U of Alberta</td>
<td>CANTERRA SEEDS</td>
</tr>
<tr>
<td>Vesper VB</td>
<td>AACF (Winnipeg)</td>
<td>SeCan Members</td>
</tr>
<tr>
<td>WR859CL *</td>
<td>Syngenta Seeds Canada Inc.</td>
<td>Richardson Inl</td>
</tr>
</tbody>
</table>
## BREEDING INSTITUTIONS AND SEED DISTRIBUTORS OF VARIETIES LISTED IN THIS PUBLICATION (continued)

<table>
<thead>
<tr>
<th>Crop Kind, Class &amp; Variety</th>
<th>Breeding Institution</th>
<th>Distributor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OAT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milling</td>
<td>AAC Justice</td>
<td>FP Genetics</td>
</tr>
<tr>
<td></td>
<td>AC Juniper</td>
<td>SeCan Members</td>
</tr>
<tr>
<td></td>
<td>AC Morgan</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>Akira</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>Bradley</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>CDC Boyer</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>CDC Dancer</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>CDC Minstrel</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>CDC Norseman</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>CDC Oriin</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>CDC Ruffian</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>CDC Sea biscuit</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>CDC Weaver</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>CS Camden</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>Derby</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>Jordan</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>Kara</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>Kyron</td>
<td>Lantmannen SW Seed</td>
</tr>
<tr>
<td></td>
<td>Pomona</td>
<td>University of Minnesota</td>
</tr>
<tr>
<td></td>
<td>Souris</td>
<td>NDSU</td>
</tr>
<tr>
<td></td>
<td>Stride</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Triactor</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FALL RYE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bono</td>
<td>KWS Lockow GMBH</td>
</tr>
<tr>
<td></td>
<td>Brasnetto</td>
<td>KWS Lockow GMBH</td>
</tr>
<tr>
<td></td>
<td>Daniello</td>
<td>KWS Lockow GMBH</td>
</tr>
<tr>
<td></td>
<td>Gatoano</td>
<td>KWS Lockow GMBH</td>
</tr>
<tr>
<td></td>
<td>Guttingo</td>
<td>KWS Lockow GMBH</td>
</tr>
<tr>
<td></td>
<td>Hazlett</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Prima</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TRITICALE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAC Delight</td>
<td>Fabian Seeds Ltd.</td>
</tr>
<tr>
<td></td>
<td>AC Ultima</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Bumper</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Bunker</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Pronghorn</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Sunday</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Taza</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Tyndal</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WHEAT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAC Bravo</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>CDC Beltune</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>CDC Glas</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>CDC Neela</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>CDC Playa</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>CDC Sanctuary</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>CDC Sorrel</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Henley</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Prairie Grande</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Prairie Saphire</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Prairie Thunder</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Taurus</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Topaz</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>VT50</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>West Lin 60</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>West Lin 61</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>West Lin 71</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>West Lin 72</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CANADA WESTERN HARD WHITE SPRING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAC Iceberg</td>
<td>Alliance Seed</td>
</tr>
<tr>
<td></td>
<td>CDC Whitewood</td>
<td>U of S - CDC</td>
</tr>
<tr>
<td></td>
<td>Snowbird</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Snowstar</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Whitehawk</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CANADA PRAIRIE SPRING RED</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5700PR</td>
<td>Syngenta Seeds Canada Inc.</td>
</tr>
<tr>
<td></td>
<td>AAC Crossfield</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Crusader</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Entice</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Foray VB</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Goodwin</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Perhold</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Ryley</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Tenacious VB</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AC Crystal</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>CDC Terain</td>
<td>U of S - CDC</td>
</tr>
<tr>
<td></td>
<td>SY1985</td>
<td>Syngenta Seeds Canada Inc.</td>
</tr>
<tr>
<td></td>
<td>SY2006</td>
<td>Syngenta Seeds Canada Inc.</td>
</tr>
<tr>
<td></td>
<td>SY Rowyn</td>
<td>Syngenta Seeds Canada Inc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CANADA WESTERN SPECIAL PURPOSE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAC Awesome VB</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Innova</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC NRG097</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Alderon</td>
<td>KWS-UK</td>
</tr>
<tr>
<td></td>
<td>CDC NRG003</td>
<td>U of S - CDC</td>
</tr>
<tr>
<td></td>
<td>Charing VB</td>
<td>KWS-UK</td>
</tr>
<tr>
<td></td>
<td>Pasteur</td>
<td>Wiersum Plant Breeding</td>
</tr>
<tr>
<td></td>
<td>Sparrow VB</td>
<td>KWS-UK</td>
</tr>
<tr>
<td></td>
<td>SY1087</td>
<td>Syngenta Seeds Canada Inc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CANADA WESTERN SOFT WHITE SPRING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAC Chiffon VB</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Indus VB</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AC Andrew</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AC Meena</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Sadsash VB</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CANADA NORTHERN HARD RED</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAC Concord</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AC Foremost</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Conquer VB</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Elgin ND</td>
<td>NDSU</td>
</tr>
<tr>
<td></td>
<td>Harvest</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Lillian</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Unity VB</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CANADA WESTERN RED WINTER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAC Elevate</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Gateway</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC Goldrush</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AAC WildFire</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>AC Tempest</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>CDC Buteo</td>
<td>U of S - CDC</td>
</tr>
<tr>
<td></td>
<td>CDC Chase</td>
<td>U of S - CDC</td>
</tr>
<tr>
<td></td>
<td>Emerson</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Flourish</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td>Moats</td>
<td>U of S - CDC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CANADA WESTERN EXPERIMENTAL WINTER WHEAT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AAC Icefield</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CANADA WESTERN SPECIAL PURPOSE WINTER WHEAT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pintail</td>
<td>AAC Elevate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>