Description

CDC Spruce is a green cotyledon, semi-leafless field pea variety. In two years of testing in the field pea co-op registration test “A” in 2012 – 2013, CDC Spruce yielded 109% of the green pea check varieties CDC Striker and Cooper (Table 2). In seven years of testing in the co-op and regional trials in Saskatchewan, CDC Spruce yielded 13% higher than CDC Striker southern regions and 19% higher in the north (Table 1). Relative to the yellow pea check variety CDC Amarillo, CDC Spruce yielded 94% in the south and 99% in the north. CDC Spruce has PBR protection.

Strengths

• Medium vine length
• Powdery mildew resistance

Neutral

• Good lodging resistance
• Medium maturity
• Medium seed size
• Round seed shape
• Good resistance to bleaching
• Moderate protein (similar to CDC Amarillo)
• Moderate cooking time
• Fair resistance to Mycosphaerella blight and Fusarium wilt

Weaknesses

• Rated fair for seed coat breakage and dimpling
Table 1: Agronomic Performance for CDC Spruce from Co-op and Regional Trials in Saskatchewan
Adapted from Varieties of Grain Crops 2019

<table>
<thead>
<tr>
<th>VARIETY</th>
<th>YEAR REGISTERED</th>
<th>YEARS TESTED</th>
<th>1, 2, &amp; SOUTH 3*</th>
<th>NORTH J &amp; 4*</th>
<th>MATURET Y</th>
<th>LODGING (1-9)**</th>
<th>VINE LENGTH (CM)</th>
<th>MYCOSPHAERELLA BLIGHT***</th>
<th>POWDERLY MILDEW</th>
<th>FUSARIUM WILT</th>
<th>SEED COAT BREAKAGE</th>
<th>SEED COAT DIMPING***</th>
<th>BLEACHING</th>
<th>SEED WEIGHT (G/1000)</th>
<th>PROTEIN VS. CDC AMARILLO</th>
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<tr>
<td>CDC AMARILLO</td>
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<td>R</td>
<td>MR</td>
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<td>BLUEMAN</td>
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<td>R</td>
<td>I</td>
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<td>FAIR</td>
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<td>FAIR</td>
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<td>81</td>
<td>80</td>
<td>MEDIUM</td>
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<td>80</td>
<td>4.5</td>
<td>S</td>
<td>MR</td>
<td>VERY GOOD</td>
<td>GOOD</td>
<td>GOOD</td>
<td>240</td>
<td>+2.0</td>
</tr>
</tbody>
</table>

Source: Varieties of Grain Crops 2019 (SaskSeed Guide)

*A Area 1: Brown soil zone; Area 2: Dark brown; Area 3: Black; Area 4: Dark grey
**Lodging score: 1 = Upright; 9 = Completely lodged
***Mycosphaerella blight score: 1 = No disease, 9 = Completely blighted
****Seed coat dimpling: Very Good = 0-5%; Good = 6-20%; Fair = 21-50%

For more information, visit saskpulse.com
Table 2: Performance of CDC Spruce Compared to the Checks (Pea Co-op Test A, 2012-2013)

<table>
<thead>
<tr>
<th>VARIETY</th>
<th>YIELD (KG/HA)</th>
<th>YIELD (% MEAN OF CHECKS)</th>
<th>DAYS TO MATURITY</th>
<th>VINE LENGTH (CM)</th>
<th>LODGING*</th>
<th>SEED WEIGHT (MG)</th>
<th>SEED SHAPE**</th>
<th>CRUDE PROTEIN (%)</th>
<th>COOKING TIME (MIN)***</th>
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<tr>
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<td>97</td>
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</tbody>
</table>

Source: CDC Pulse Breeding Group, U of S

*Lodging score: 1 = Upright; 9 = Completely lodged
**Seed shape: 1 = Round; 5 = Cubic
***Cooking time = Mattson cooking time (min)

Table 3: Disease Resistance Data of CDC Spruce Compared to the Checks (Pea Co-op Test A, 2012-2013)

<table>
<thead>
<tr>
<th>VARIETY</th>
<th>MYCO (MB)*</th>
<th>MYCO (SK)**</th>
<th>AUDPC - MB***</th>
<th>FUSARIUM WILT (%)</th>
<th>POWDERY MILDEW****</th>
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<tbody>
<tr>
<td>CDC STRIKER (CHECK)</td>
<td>4.4</td>
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<td>1.6</td>
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<td># Locations</td>
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<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: CDC Pulse Breeding Group, U of S

*Myco (MB) = mycosphaerella blight assessed at Morden, MB (1 = No disease, 9 = Completely blighted)
**Myco (SK) = mycosphaerella blight assessed at Saskatoon, SK.
***AUDPC = mycosphaerella blight area under the disease progress curve assessed at Morden
****Powdery mildew: 0 = No disease, 9 = Completely mildewed

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