

Technical Bulletin

Genes that fit *your* farm.

SeCan

Canada's Seed Partner

CDC Forest Green Field Pea

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Progress Through Research
Le progrès grâce à la recherche

Description:

CDC Forest is a very high yielding green cotyledon, semi-leafless field pea with good lodging tolerance, improved mycosphaerella blight resistance and powdery mildew resistance.

Parentage: CDC Bronco/Nitouche//Argus

Strengths:

- Improved yield (117%) compared to the mean of the green check varieties (CDC Striker and Cooper)
- Fair mycosphaerella resistance, better than the checks
- Powdery mildew resistance

Neutral:

- Good lodging resistance; similar to checks
- Medium vine length, slightly taller than the checks

- Medium maturity, 1 day later than Cooper, and 3 days later than CDC Striker
- Medium seed size, slightly smaller than the checks
- Round seed shape, blockier than CDC Striker but rounder than Cooper
- Low seed coat breakage percent, similar to Cooper and less than CDC Striker
- Good bleaching resistance
- Moderate green colour intensity, similar to checks
- Fair Fusarium wilt resistance; similar to checks

Breeder:

Funded by:



UNIVERSITY OF SASKATCHEWAN

Crop Development Centre
COLLEGE OF AGRICULTURE AND BIORESOURCES
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Table 1: Agronomic performance of CDC Forest compared to the checks (Pea Co-op Test A, 2013-2014)

Variety	Yield (kg/ha)	Yield (% mean of checks)	Days to maturity	Vine length (cm)	Lodging (pre-harvest)	Seed wt (mg)	Seed shape	Seed coat breakage (%)	Bleaching	GCI	Crude protein (%)
CDC Striker	4181	98	97	80	3.9	242	2.5	0.3	3.0	3.5	25.1
Cooper	4310	102	99	82	3.8	257	3.1	5.5	3.2	3.9	23.7
CDC Forest	4948	117	100	86	3.8	230	2.9	2.1	3.2	3.7	23.7
CV	10										
LSD 05	332		0.9	6.9	0.5	9.3	0.2	1.9	0.2	0.2	0.9
# locations	22		20	17	23	19	20	4	19	20	9

Lodging score: 1=upright; 9=completely lodged
Shape: 1=round; 5=cubic

Table 2: Disease resistance data of CDC Spectrum compared to the checks (Pea Co-op Test B, 2012-2013)

Variety	Myco (MB)	Myco (SK)	AUDPC-SK	Fusarium wilt (%)	Powdery mildew
CDC Striker (check)	4.5	3.8	15.7	25	7.4
Cooper (check)	4.0	3.8	12.9	32	0
CDC Forest	4.3	3.0	15.5	29	0
LSD 05	1.3	.7	2.8	21.8	1.0
# locations	2	2	2	2	2

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

Powdery mildew (0=no disease, 9=completely mildewed)

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

2021 Seed Manitoba

Variety	Yield (% of CDC Amarillo)	Site Years Tested	Relative Maturity	Relative Vine Length	Seed Size (TKW)	Resistance to:							
						Lodging	Powdery Mildew	MB ¹	Fusarium Wilt ²	Green Seed Coat ³	Seed Coat Breakage	Seed Coat Dimpling ⁴	Bleaching
CDC Amarillo (C)	100	35	Long	M	230	VG	VG	F	G	G	F	F	N/A
CDC Spruce	98	19	Long	L	240	G	VG	F	F	N/A	F	F	G
CDC Greenwater	97	34	Mid	M	220	G	VG	F	G	N/A	VG	G	G
CDC Forest	101	19	Long	L	230	G	VG	F	F	N/A	G	G	G

1. Mycosphaerella Blight
2. Varieties which show good disease tolerance to one strain of Fusarium wilt may be susceptible to other strains
3. Green seed coats: G= 0-10%, F= 11-25%
4. Seed coat dimpling rating: VG= 0-5%, G= 6-20%, F= 21-50%

2021 SaskSeed Guide

Variety	Years Tested	Yield (% of CDC Amarillo)			Protein	Relative Maturity	Lodging ¹	Vine Length (cm)	Resistance to:							Seed Weight (g/1000)
		1, 2 & South 3	North 3 & 4	Irrigation					MB ²	Powdery Mildew	Fusarium Wilt	Seed Coat Breakage	Bleaching	Seed Coat Dimpling ³	Greenness ⁴	
CDC Amarillo (C)	12	100	100	100	23.0	M	3.5	85	4.5	R	MR	F	N/A	F	G	230
CDC Spruce	10	95	98	---	+0.3	M	4.0	85	4.5	R	I	F	G	F	N/A	240
CDC Greenwater	11	99	93	89	-0.9	M	3.5	90	4.0	R	MR	F	G	F	N/A	230
CDC Forest	8	100	101	---	0.0	M	4.0	85	4.5	R	I	G	G	G	N/A	230

1. Lodging: 1= completely upright, 9= completely lodged
2. Mycosphaerella Blight score (1-9) 1= no disease, 9= completely blighted
3. Seed coat dimpling: VG= 0-5%, G= 6-20%, F= 21-50%
4. Green seed coats: G= 0-15%, F= 16-40%

2021 Alberta Seed Guide

Variety	Overall Yield	Overall Station Years of Testing	Area 1		Area 2		Area 3		Area 4		Area 5		Maturity Rating	Vine Length (cm)	Seed Size (TKW)	Lodging ¹	MB ²	Fusarium Wilt	Bleaching	Seed Coat Breakage ³	Seed Coat Dimpling ⁴
			Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years	Yield (%)	Site Years									
CDC Limerick (C)	100	131	100	22	100	41	100	19	100	35	100	14	M	78	211	3.0	F	F	G	VG	G
CDC Spruce	106	55	101	10	108	15	109	7	103	12	107	11	M	81	254	2.3	F	F	G	G	F
CDC Forest	107	55	113	10	109	15	102	7	105	12	105	11	M	81	236	2.2	F	F	G	G	G

1. Lodging: 1= completely upright 9= completely lodging
2. Mycosphaerella Blight
3. Seed Coat Dimpling: VG= 0-5%, G= 6-20%, F= 21-50%
4. Green Seed Coat: G= 0-10%, F= 11-25%

Resistance: P= Poor, F= Fair, G= good, VG= Very Good R= Resistant

Maturity: E= Early, M= Medium, L= Late

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