



UNIVERSITY OF SASKATCHEWAN

Crop Development Centre

COLLEGE OF AGRICULTURE AND BIORESOURCES  
AGBIO.USASK.CA



# 2017 Pulse Variety Description Booklet



This booklet contains information on varieties developed by Crop Development Centre at the University of Saskatchewan and distributed through the Variety Release Program managed by the Saskatchewan Pulse Growers.

## PEA (Yellow)

‡Check variety changed from CDC Golden to CDC Amarillo

Variety	Year of release	PBR Status	Years Tested *	Yield % Amarillo‡			Maturity	Lodging (1-9)†	Vine Length ***	Resistance to:						Seed Weight (g/1000)	Comments
				1, 2 & South 3**	North 3 & 4**	Irrigation**				Mycosp haerella Blight	Powdery Mildew	Fusarium Wilt	Seed Coat Breakage	Seed Coat Dimpling	Greenness		
CDC Amarillo (2462-30)	2012	-	8	100	100	100	Medium	3.5	85	4.5	R	MR	Fair	Fair	Good	230	Round seed shape
CDC Meadow (653-8)	2006	-	8	90	87	90	Early	4	85	5	R	I	Good	Good	Good	220	Round seed shape
CDC Prosper (1400-8)	2008	-	8	84	79	73	Early	4.5	80	5	R	MR	Good	Fair	Good	150	Smallest seed size; round shape
CDC Treasure (1410-15)	2009	-	8	88	87	93	Early	4	80	5	R	I	Fair	Fair	Good	210	Round seed shape
CDC Hornet (1749-8)	2010	-	8	91	84	91	Medium	4	85	4.5	R	I	Fair	Good	Good	220	Round shape; competitive variety
CDC Saffron (2093-22)	2011	-	8	97	91	91	Early	4	80	4.5	R	I	Good	Fair	Good	250	Round seed shape
CDC Inca (2847-21)	2015	PBR '91 applied	5	106	100	ID	Medium	4	85	4.5	R	I	Good	Good	Fair	230	Round seed shape
CDC Spectrum (2936-7)	2016	PBR '91 applied	5	104	103	ID	Medium	3.5	85	4.5	R	I	ID	Good	Fair	240	Round seed shape
CDC Athabasca (3094-5)	2016	PBR '91 applied	5	94	102	ID	Medium	3	85	4.5	R	I	ID	Fair	Good	300	<b>Very large seed size;</b> Round shape
CDC 3360-7 §	2017	PBR '91 applied	4	98	<b>98</b>	ID	<b>Early</b>	4	90	4.5	R	I	ID	Good	ID	240	Early variety for north

\* Coop and Regional trials in Saskatchewan  
Source: Varieties of Grain Crops 2017

\*\* Refer to map  
ID: Insufficient Data

\*\*\* All varieties are semi-leafless unless otherwise noted  
† Lodging score (1-9) where 1 = completely upright, 9 = completely lodged

## PEA (Green)

‡Check variety changed from CDC Golden to CDC Amarillo

Variety	Year of release	PBR Status	Years Tested *	Yield % Amarillo‡			Maturity	Lodging (1-9)†	Vine Length ***	Resistance to:						Seed Weight (g/1000)	Comments
				1, 2 & South 3	North 3 & 4	Irrigation				Mycosp haerella Blight	Powdery Mildew	Fusarium Wilt	Seed Coat Breakage	Seed Coat Dimpling	Bleaching		
CDC Striker (0001)	2002	-	8	82	81	84	Medium	3.5	80	4.5	S	MR	Very good	Good	Good	240	Smooth, round seed shape. Susceptible to powdery mildew
CDC Sage (672-1)	2005	-	5	73	71	73	Medium	4	80	5	R	MR	Good	Fair	Good	220	Round seed shape
CDC Patrick (1434-20)	2008	-	8	87	84	87	Medium	4.5	80	4.5	R	MR	Good	Good	Good	190	Round seed shape
CDC Pluto (1996-216)	2010	-	6	93	82	91	Medium	5.5	80	4.5	R	I	Good	Good	Good	160	New market class due to small seed size. Smooth round seed; good green colour intensity
CDC Tetris (1812-5)	2010	-	8	90	91	88	Medium	4	85	4.5	R	MR	Good	Good	Fair	210	'Espace-type' market class for snack food market in Asia. Blocky seed; good green colour intensity.
CDC Raezer (2336-1)	2011	-	8	82	81	94	Early	3.5	85	5	R	MR	Good	Good	Good	220	Smooth, round seed shape
CDC Limerick (2336-1)	2012	-	8	96	89	90	Medium	3.5	85	4	R	I	Very good	Good	Good	210	Smooth, round seed shape, high protein concentration
CDC Greenwater (2472-4)	2014	-	7	99	91	86	Medium	3.5	90	4	R	MR	Good	Fair	Good	230	Smooth, round seed shape
CDC Spruce (3007-6)	2016	PBR '91 applied	5	95	100	na	Medium	4	85	4.5	R	I	ID	Fair	Good	240	Round seed shape, moderate protein content
3422-8 §	2017	PBR '91 applied	4	99	99	na	Medium	4	85	4	R	I	ID	Good	Good	230	

\* Coop and Regional trials in Saskatchewan

§ Information not included in Varieties of Grain Crops 2017

Source: Varieties of Grain Crops 2017

\*\* Refer to map

ID: Insufficient Data

\*\*\* All varieties are semi-leafless unless otherwise noted

† Lodging score (1-9) where 1 = completely upright, 9 = completely lodged

## 2017 PULSE VARIETY DESCRIPTIONS

### PEA (other)

‡Check variety changed from CDC Golden to CDC Amarillo

Variety	Year of release	PBR Status	Years Tested *	Yield % Amarillo‡			Maturity	Lodging (1-9)†	Vine Length ****	Resistance to:				Seed Weight (g/1000)	Comments
				1, 2 & South 3**	North 3 & 4**	Irrigation**				Mycosp haerella Blight	Powdery Mildew	Seed Coat Breakage	Seed Coat Dimpling		

### MAPLE PEA

CDC Acer (203PMR16)	2001	-	3	84	73	na	Medium	6.5	60	5	R	Good	Very good	170	Moderately round shaped seed
CDC Mosaic (1816-4)	2010	-	4	81	74	58	Medium	4	85	4.5	R	Good	Very good	180	Seed type similar to CDC Acer. First maple with good lodging resistance
CDC Blazer (3012-1LT)	2015	PBR '91 applied	2	99	92	na	Medium	5	80	5	R	ID	Very good	190	Light seed coat

### DUN PEA

CDC Dakota (2098-20)	2010	-	7	105	99	95	Medium	3.5	85	4.5	R	Good	Very good	205	Uniform, nice dun (greenish-tan) seed coat; blocky seed; non-dimpled. Ideal for split pea markets
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## FORAGE PEA

‡Check variety changed from CDC Golden to CDC Amarillo

Variety	Year of release	PBR Status	Information From Variety of Grain Crops 2017*								Information from Pea Forage Elite Trials***						Comments
			Years Tested *	Grain Yield % Amarillo‡			Maturity	Lodging (1-9)†	Vine Length ****	Seed Weight (g/1000)	Yield % of 40-10***		Height	Lodging	Maturity (1-3)	Seed Weight (g/1000)	
				1, 2 & South 3**	North 3 & 4**	Irrigation**					Grain Yield	Dry Matter					
40-10	non VRP	-	3	68	65	47	Medium	8.5	130	140	100	100	133	7.8	3	128	Small seed size and tall. Fully leaved variety with speckled seed coat. Poor lodging.
CDC Tucker (1096-8)	2006	-	3	83	77	74	Medium	4	90	170	140	98	92	4	2.5	158	High biomass; improved protein and relative feed value compared to Trapper and 40-10
CDC Leroy (1287-2)	2008	-	3	82	75	75	Medium	5	85	150	124	89	84	5.2	1.8	132	High biomass; improved protein and relative feed value compared to Trapper and 40-10
CDC Horizon (1681-11)	2010	-	4	88	78	63	Medium	4.5	100	170	130	100	97	3.8	2.3	142	High biomass with similar feed value to Trapper and 40-10
CDC Jasper (3548-2)	2016	PBR '91 applied	-	-	-	-	-	-	-	-	133	105	98	3.9	2.5	175	Highest biomass combined with high grain yield and high relative feed value

\* Coop and Regional trials in Saskatchewan \*\* Refer to map

\*\*\* Data from 2012 to 2015 Pea Silage Elite Trials (10 site years) - Crop Development Centre, University of Saskat

Source: Varieties of Grain Crops 2017

\*\*\*\* All varieties are semi-leafless unless otherwise noted

NOTE: all forage varieties rated similar for resistance to Mycosphaerella blight (4.5), seed coat breakage (Good), and seed coat dimpling (Goo † Lodging score (1-9) where 1 = completely upright, 9 = completely lodged

## LENTIL (Small Red)

Variety	Year of release	Herbicide Tolerance	PBR Status	Years Tested*	Market class	Seed Coat Colour	Yield % of CDC Maxim		Resistance to <sup>1</sup> :		Maturity	Days to Flower	Height (cm)	Seed Weight (g/1000) ***	Comments
							Area 1-2	Area 3-4	Ascochyta	Anthraxnose (race 1)					
<b>CDC Maxim</b> (3114)	2007	CL	-	10	Small red	Grey	100	100	MR	MR	Early-medium	51	34	40	Most similar to CDC Redberry, seed a little smaller. Most widely grown red lentil
<b>CDC Redberry</b> (1254S-1)	2004	-	-	6	Small red	Grey	97	99	MR	MR	Early-medium	50	34	42	Rated highly acceptable (Pulse Canada Market Survey) in India and Turkey, acceptable for splitting
<b>CDC Impact</b> (2462)	2006	CL	-	6	Small red	Grey	80	76	MR	MS	Early	47	30	34	Most similar to CDC Blaze
<b>CDC Red Rider</b> (1308M-7)	2007	-	-	6	Small red	Grey	95	85	MR	I	Early-medium	52	34	45	A little larger in diameter with a thicker seed vs. CDC Redberry but a bit later than CDC Redberry
<b>CDC Redcoat</b> (2154S-4)	2009	-	-	6	Small red	Grey	105	93	MR	MR	Early-medium	50	33	39	Plump, between Blaze and Redberry in size. Good lodging tolerance
<b>CDC Imax</b> (IBC-187)	2009	CL	-	10	Small red	Grey	96	82	MR	I	Early-medium	51	35	45	Most similar to CDC Red Rider but a bit earlier
<b>CDC Redcliff</b> (2271-5)	2010	-	-	7	Small red	Grey	107	103	MR	I	Early-medium	51	35	38	Seed type good for standard small red markets
<b>CDC Dazil</b> (IBC-289)	2010	CL	-	9	Small red	Grey	104	98	MR	I	Early-medium	53	33	35	Seed most similar to dimensions of CDC Impact but a bit later maturity
<b>CDC Cherie</b> (2702-10)	2012	-	-	5	Small red	Grey	109	106	MR	I	Early-medium	51	32	39	Acceptable seed characters for standard small red with good lodging resistance
<b>CDC Scarlet</b> (3160-21)	2012	-	-	8	Small red	Grey	105	103	MR	I	Early-medium	53	35	36	Acceptable seed characters for standard small red with good lodging resistance
<b>CDC Impulse</b> (IBC 479)	2014	CL	PBR'91 applied	7	Small red	Grey	108	95	MR	MR	Early-medium	52	37	44	Acceptable seed characters, 10% larger than Maxim

\* Coop and Regional trials in Saskatchewan **Source**: Varieties of Grain Crops 2017

\*\* Refer to map <sup>2</sup> Race 1

\*\*\* CDC Richlea 51g/1000; Eston 33g/1000

§ Information not included in Varieties of Grain Crops 2017

<sup>1</sup> Resistance ratings: R = Resistant; MR = Moderately Resistant; I = Intermediate Resistance; MS = Moderately Susceptible; S = Susceptible.

## LENTIL (Small Red continued)

Variety	Year of release	Herbicide Tolerance	PBR Status	Years Tested*	Market class	Seed Coat Colour	Yield % of CDC Maxim		Resistance to <sup>1</sup> :		Maturity	Days to Flower	Height (cm)	Seed Weight (g/1000) ***	Comments
							Area 1-2	Area 3-4	Ascochyta	Anthracnose <sup>2</sup>					
<b>CDC Proclaim</b> (IBC 550)	2014	CL	PBR '91 applied	6	Small red	Grey	105	101	MR	MR	Early-medium	51	34	40	Similar to CDC Maxim
<b>CDC Redmoon</b> (3646-4)	2015	-	PBR '91 applied	6	Small red	Grey	115	102	MR	MR	Early-medium	52	33	41	Similar to CDC Maxim
<b>4371-4</b> §	2016	-	PBR '91 applied	4	Small red	Grey	111	108	MR	MR	Early-medium	53	33	38	Acceptable seed characteristics compared to Maxim
<b>3674-15</b> §	2016	-	PBR '91 applied	5	Small red	Grey	111	113	MR	MR	Early-medium	52	34	42	Acceptable seed characteristics compared to Maxim

\* Coop and Regional trials in Saskatchewan **Source:** Varieties of Grain Crops 2017

\*\* Refer to map <sup>2</sup> Race 1

\*\*\* CDC Richlea 51g/1000; Eston 33g/1000

§ Information not included in Varieties of Grain Crops 2017

<sup>1</sup> Resistance ratings: R = Resistant; MR = Moderately Resistant; I = Intermediate Resistance; MS = Moderately Susceptible; S = Susceptible.

## LENTIL (Extra Small Red)

Variety	Year of release	Herbicide Tolerance	PBR Status	Years Tested*	Type	Seed Coat Colour	Yield % of CDC Maxim		Resistance to <sup>1</sup> :		Maturity	Days to Flower	Height (cm)	Seed Weight (g/1000) ***	Comments
							Area 1-2**	Area 3-4**	Ascochyta	Anthraco-nose <sup>2</sup>					
CDC Imperial (2464)	2006	CL	-	6	Extra small red	Grey	84	79	MR	MR	Early	49	30	30	Most similar to CDC Robin
CDC Impala (3110)	2007	CL	-	8	Extra small red	Grey	94	91	MR	MR	Early	51	30	31	Most similar to CDC Rosetown
CDC Redbow (1894T-1)	2009	-	-	6	Extra small red	Grey	102	99	MR	MR	Early	49	30	32	More plump than Robin. Good lodging tolerance
CDC Rosebud (1788S-4e)	2009	-	-	6	Extra small red	Tan	100	99	MR	MR	Early	50	30	31	Tan seed coat. More plump than Robin
CDC Rosie (3155-18)	2012	-	-	7	Extra small red	Grey	92	90	MR	MR	Early-medium	52	33	30	Acceptable seed characters for extra small red market. Plump seed; good lodging tolerance
CDC Roxy (3959-6)	2014	-	PBR '91 applied	6	Extra small red	Grey	103	102	MR	MR	Early-medium	53	34	32	More plump than most extra smalls. Good lodging tolerance

\* Coop and Regional trials in Saskatchewan **Source**: Varieties of Grain Crops 2017 \*\* Refer to map <sup>2</sup> Race 1

\*\*\* CDC Richlea 51g/1000; Eston 33g/1000

<sup>1</sup> Resistance ratings: R = Resistant; MR = Moderately Resistant; I = Intermediate Resistance; MS = Moderately Susceptible; S = Susceptible.

## LENTIL (French Green)

Variety	Year of release	Herbicide Tolerance	PBR Status	Years Tested*	Type	Seed Coat Colour	Yield % of CDC Maxim		Resistance to <sup>1</sup> :		Maturity	Days to Flower	Height (cm)	Seed Weight (g/1000) ***	Comments
							Area 1-2**	Area 3-4**	Ascochyta	Anthraco-nose <sup>2</sup>					
CDC LeMay (983-87)	2002	-	-	6	French green	Dark marbled	84	80	I	S	Early	48	35	33	Appearance and size similar to other French green
CDC Peridot (IBC-188)	2008	CL	-	6	French green	Dark marbled	84	94	I	MS	Early	48	37	38	Seed size slightly larger than CDC LeMay. Agronomically similar to CDC LeMay
CDC Marble (3494-6)	2013	-	-	8	French green	Marbled green	107	103	MR	I	Early	49	36	34	Slightly lighter colour pattern than other French greens. Improved lodging tolerance & disease package.

\* Coop and Regional trials in Saskatchewan **Source**: Varieties of Grain Crops 2017 \*\* Refer to map <sup>2</sup> Race 1

\*\*\* CDC Richlea 51g/1000; Eston 33g/1000

<sup>1</sup> Resistance ratings: R = Resistant; MR = Moderately Resistant; I = Intermediate Resistance; MS = Moderately Susceptible; S = Susceptible.



## LENTIL (Small, Medium & Large Green)

Variety	Year of release	Herbicide Tolerance	PBR Status	Years Tested*	Type	Seed Coat Colour	Yield % of CDC Maxim		Resistance to:		Maturity	Days to Flower	Height (cm)	Seed Weight (g/1000) ***	Comments
							Area 1-2**	Area 3-4**	Ascochyta	Anthracnose <sup>2</sup>					
<b>CDC Sovereign</b> (804-3)	1999	-	-	6	Large green	Green	83	77	Good	Poor	Late	52	40	66	Plump seed combined with Ascochyta resistance means less damage and discolouration. Earlier than CDC Glamis and CDC Grandora. Stiffer stems
<b>CDC Greenland</b> (1196D-5)	2006	-	-	7	Large green	Green	89	70	Good	Very Poor	Medium-late	52	38	64	Between CDC Glamis and CDC Grandora in size, best colour retention of all large green lentil varieties. Maturity similar to CDC Plato
<b>CDC Impower</b> (IBC-194)	2009	CL	-	9	Large green	Green	85	68	Good	Very Poor	Medium-late	52	41	64	Yield similar to CDC Improve, better seed coat colour
<b>CDC Greenstar</b> (3339-3)	2013	-	-	8	Large green	Green	101	78	Good	Fair	Medium-late	52	40	73	Largest seed in market class, between CDC Greenland and CDC Plato for colour
<b>CDC Meteor</b> (1038L-18)	2005	-	-	6	Medium green	Green	102	89	Good	Very poor	Medium	50	34	51	Widely adapted, less Ascochyta staining, colour retention less than CDC Richlea
<b>CDC Impress</b> (2471)	2007	CL	-	6	Medium green	Green	87	71	Good	Poor	Medium	50	34	52	Most similar to CDC Meteor
<b>CDC Imigreen</b> (IBC-145)	2009	CL	-	7	Medium green	Green	78	71	Good	Very poor	Medium	50	44	57	Better green colour retention compared to all other lentil varieties
<b>CDC Asterix</b> (2861-15a)	2012	-	-	9	Extra small green	Green	99	101	Good	Fair	Early	48	30	26	Extra small seed size attractive in some markets. Colour retention like CDC Viceroy
<b>CDC Viceroy</b> (1066E-4)	2004	-	-	6	Small green	Green	97	98	Good	Good	Early	49	34	33	Seed characteristics similar to Eston, better colour retention than CDC Milestone
<b>CDC Invincible</b> (IBC-112)	2009	CL	-	10	Small green	Green	96	83	Good	Good	Early	49	33	34	All marketing characteristics very similar to CDC Viceroy
<b>CDC Kermit</b> (3592-13)	2014	-	PBR '91 applied	7	Small green	Green	106	102	Good	Good	Early-medium	49	36	34	Seed characteristics similar to CDC Viceroy and CDC Invincible CL. Good lodging tolerance

\* Coop and Regional trials in Saskatchewan **Source:** Varieties of Grain Crops 2017

\*\* Refer to map <sup>2</sup> Race 1

\*\*\* CDC Richlea 51g/1000; Eston 33g/1000

## 2017 PULSE VARIETY DESCRIPTIONS

### CHICKPEA

Variety	Year of release	PBR Status	Years Tested	Type	Yield % Amit		Ascochyta Blight Rating **	Maturity	Days to Flower	Height (cm)	Seed Weight (g/1000)	Seed Coat color	Seed Shape	Comments
					Area 1*	Area 2*								
Amit (B-90) CHECK	non VRP	PBR '78	15	Kabuli	100	100	4.5	Late	56	47	258	Beige	Round	7 mm seed size
CDC Frontier (95NN29)	2003	-	15	Kabuli	108	104	4.5	Late	56	46	349	Beige	Ram-head	8 mm seed size
CDC Orion (491-5)	2010	-	10	Kabuli	108	106	5.1	Late	51	45	434	Beige	Ram-head	10 mm size
CDC Alma (CP71)	2010	-	8	Kabuli	92	91	6.3	Late	54	43	364	Beige	Ram-head	8-9 mm size; Slightly earlier maturity than CDC Frontier
CDC Leader (493-24)	2011	-	11	Kabuli	109	108	4.5	Medium	54	42	390	Beige	Ram-head	9-10 mm size
CDC Palmer (1041-3)	2014	PBR '91 applied	6	Kabuli	109	106	4.9	Medium-late	53	44	418	Beige	Ram-head	10 mm size
CDC Cory (CP55)	2010	-	8	Desi	115	108	4.3	Medium	57	49	270	Tan	Angular/Plump	Medium seed size
CDC Consul (603-3)	2013	-	9	Desi	113	112	4	Medium	53	46	303	Light tan	Plump	Medium seed size

Source : Varieties of Grain Crops 2017

\*\* Ascochyta Blight at pod filling period: 0-9 scale; where: 0 = no symptoms; 9 = plants are completely blighted. Scores 4 - 6 are considered intermediate

\* Refer to map (Area 1: brown soil zone; Area 2: dark brown soil zone)

## FABA BEAN

Variety	Year of Release	PBR Status	Years Tested*	Type	Yield % of CDC Fatima	Maturity (days)	Height (cm)	Lodging ****	Seed Coat Colour	Seed size	Seed Weight (g/1000)	Comments
<b>CDC Fatima</b> CHECK	Non VRP	-	11	Colored flower; normal tannin	100	105	106	3.8	Tan	Large	520	Industry standard for food type export trade
<b>CDC Snowdrop</b> (FB34-2)	2012	-	8	White flower; zero tannin	94	104	98	2.6	White	Small seeded	335	First small-seeded low tannin type

\* Coop and Regional trials in Saskatchewan since 1995

\*\*\* Lodging based on scale of 1-9 where 1 = completely upright, 9 = completely lodged

Source: Varieties of Grain Crops 2017

## BEAN (Narrow row production)

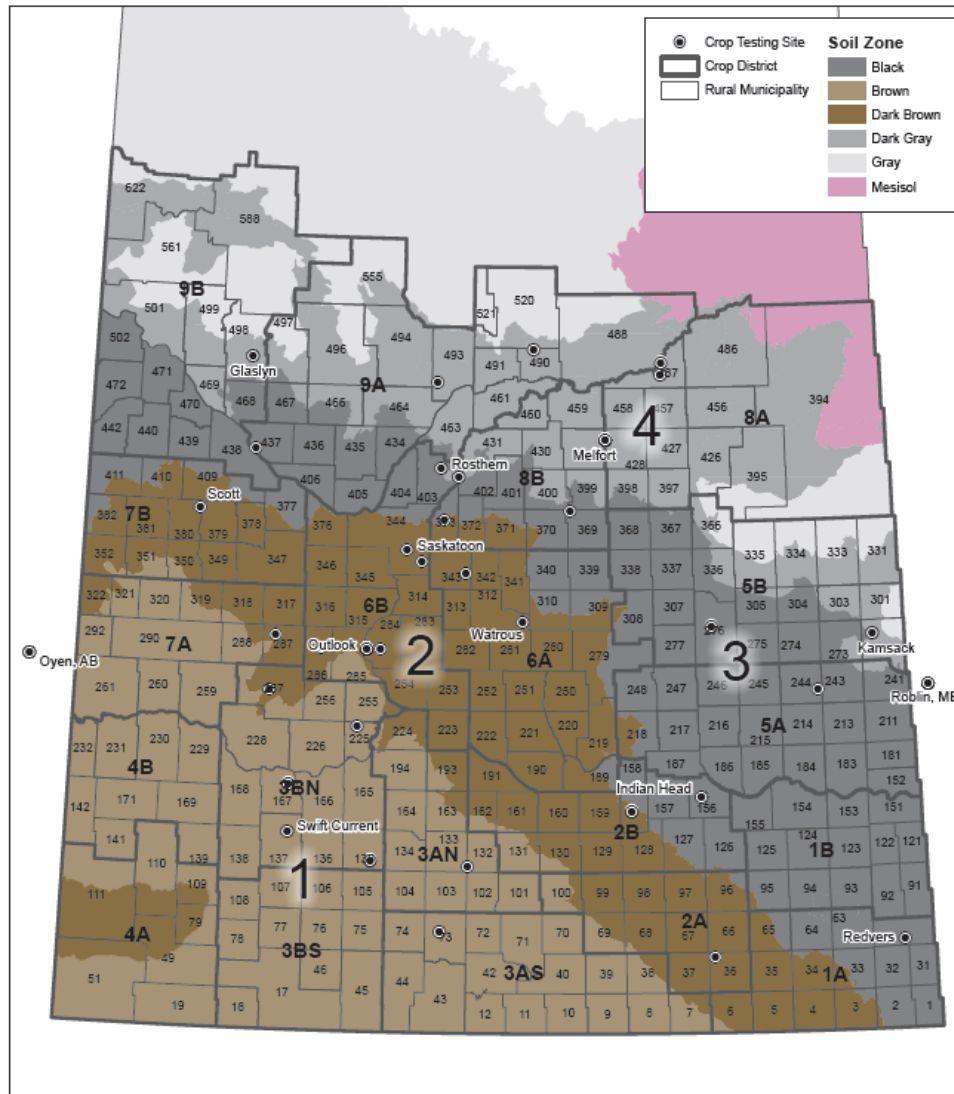
Variety	Year of Release	PBR Status	Years Tested*	Market Class	Growth Habit	Yield % CDC Pintium		Pod Clearance (%) ***	Days to Flower	Maturity	Seed Weight (g/1000)	Market Comments
						Irrigation	Dryland					
<b>CDC Pintium</b> (93708) CHECK	1999	-	15	Pinto	Determinant Bush	100	100	85	50	Early	350	Plump seeds, early maturity allows frost avoidance and early shipping. Earliest type 1, good pod clearance and best variety for black soil zone
<b>CDC Marmot</b> (2537-12)	2013	-	7	Pinto	Determinant Bush	112	109	80	50	Early	367	Regular darkening type. Short but good pod clearance and some tolerance to anthracnose races 73 and 104

\* Yield results based on narrow row trials only from Coop and Regional trials in Saskatchewan and western Manitoba;

Source: Varieties of Grain Crops 2017 and CDC Pulse Crop Breeding Group

\*\*\*% Pod Clearance: percentage of pods expected to completely clear the cutterbar of swather

# Crop Production Zones



Source: Varieties of Grain Crops 2017