

# Chickpea UPDATE – 2021

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## Characteristics of Chickpea Varieties 2021

Market class	Variety	Years Tested	Yield (% Amit)		Seed Weight (g/1000)	Ascochyta Blight	Yield 2019	Yield 2020	SW 2019	SW 2020	Asco 2019	Asco 2020
			Area 1*	Area 2*								
Kabuli	Amit (B-90) ^	19	100	100	258	4.4	100	100	265	228	5.1	4.4
	CDC Frontier	19	107	104	350	4.5	106	111	352	332	4.8	4.6
	CDC Leader	15	107	105	390	4.5	99	90	368	372	5.2	5.3
	CDC Orion	14	105	102	428	5.6	99	47	388	403	5.6	6.7
	CDC Palmer^	10	105	100	415	4.9	107	87	403	394	5.3	5.5
Desi	CDC Consul	13	111	108	299	4.0	105	100	292	263	4.6	4.5

\* Area 1: brown soil zone; Area 2: dark brown soil zone



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## Historical ascochyta blight scores of kabuli cultivars in the south (2010-2020)

(Based on SK Chickpea Regional Trials)

NAME	2010	2014	2016	2019	2020			
	Man	Limerick	Limerick	Limerick	Swift Current	Pasqua	Lucky Lake	Elose
Amit	4.7	4.3	6.0	5.4	4	4.8	4.3	4.1
CDC Frontier	4.4	4.5	6.5	5.2	4.2	4.8	4.3	4.6
<b>CDC Orion</b>	<b>5.1</b>	<b>5.0</b>	<b>6.0</b>	<b>6.4</b>	<b>5.8</b>	<b>6.7</b>	<b>6.6</b>	<b>6.7</b>
CDC Leader	4.2	4.2	5.8	5.5	4.5	5.5	5.4	5.1
CDC Palmer	4.4	4.8	6.2	5.8	4.5	5.2	5.5	5.9



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CDC Leader, Limerick July 2019



CDC Orion, Limerick July 2019



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## New Release 2021

Name	Type	Yield	1000 Seed weight (g)		Ascochyta blight	
		2019-2020	2019	2020	2019	2020
CDC Lancer	K	107	396	367	5.2	5.0
CDC Orkney	K	105	411	361	4.6	5.1
3647	K	104	326	328	4.8	4.7
3652	K	86	528	423	4.8	5.1
2510-2	D	103	286	296	4.9	4.5
2570-2	BD	100	248	242	4.2	4.9



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## 2020 release



**CDC Orkney  
(1748-1)**

- Yield: 105 of Amit (2019-2020)
- 386 g/1000 seeds similar to CDC Leader (2019-2020)
- Ascochyta blight score = 4.9 (similar to CDC Leader and CDC Palmer)



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## 2021



3647

- Small seeded kabuli
- Yield 104% of Amit (2019-2020; 10 station-year)
- Seed weight = 327g/1000 seeds
- Ascochyta blight = 4.8 (2019-2020)
- Earlier maturity than Amit



3652

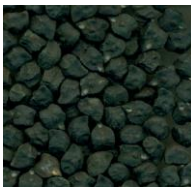
- Large kabuli (476g/1000 seeds; ~10 mm)
- Yield: 86-90 % of Amit (2019-2020)
- AB = 5.0 (2019-2020)



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## 2021 desi/specialty chickpeas



2570-2

- Black seed coat desi
- Yield 100% of Amit (2019-2020)
- Seed weight = 245 g/1000 seeds
- Ascochyta blight = 4.6 (2019-2020)
- Earliest maturity of all Regional Entries



2510-2

- Desi type
- Yield: 103 % of Amit (2019-2020)
- Seed weight= 291g/1000 seeds
- AB = 4.7 (2019-2020)



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## Chickpea Breeding objectives:

- Yield
- Resistance to ascochyta blight
- Early maturity
- Improve weed management
- Seed Quality (size, shape and colour, compositions)

**Funding for chickpea breeding for the next 3 years: ADF (75%), SPG (25%)**  
Smaller than the previous period thus smaller program!



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- CSFL Pulse Breeding Staff
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- CDC Pulse Pathology group
- Grain Innovation Lab.



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