

## MEMORANDUM

TO: Prairie Recommending Committee for Pulse and Special Crops  
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DATE: January 23, 2025  
SUBJECT: **Request for support for registration of wrinkled pea variety CDC 6366-4**

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### Strengths

- Wrinkled seed pea phenotype
- Greater yield than the wrinkled pea check CDC 4140-4
- High seed protein concentration
- Powdery mildew resistance

### Neutral traits

- Moderate lodging resistance
- Medium vine length
- Medium maturity
- Moderate resistance to Mycosphaerella blight
- Moderate seed coat breakage score
- Medium seed weight

Yellow cotyledon, semileafless wrinkled pea variety CDC 6366-4 was tested in the CDC pea elite trials in 2023 and 2024. Performance data for CDC 6366-4 are summarized in accompanying Tables 1 and 2. Seed photos for CDC 6366-4 and check varieties are in Fig 1.

Table 1. Performance of wrinkled pea variety CDC 6366-4 compared to checks in 2024 PEYT03

Variety	stnyrs	2	1	2	3	1	2	2	2	
	Type	kg/ha	% yield	ht	mat	lodg	myco	sdwt	prot	SCB
CDC Spectrum	yellow	2718	100	76	1.8	4.2	3.5	212	25.1	1.0
<b>CDC 6366-4</b>	wrinkled	2384	88	90	1.8	5.5	5.0	190	27.3	3.5
CDC 4140-4	wrinkled	2270	83	83	1.0	5.7	5.0	188	27.8	2.0
LSD (0.05)		329		7.1	0.6	1.0	1.4	35.2	1.6	2.5

*Notes*

Testing locations were Saskatoon and Lucky Lake, SK

Yield is % of CDC Spectrum

ht=plant height in cm

mat=maturity rating where 1=early to 3=late

lodg=lodging score where 1=upright to 9=completely lodged

myco=mycosphaerella blight score where 0=no disease to 9=completely blighted

sdwt=seed weight in g/1000 seeds

prot=protein concentration (%) on a dry weight basis

SCB=seed coat breakage with the number representing number broken out of 50

Table 2. Performance of wrinkled pea variety CDC 6366-4 compared to checks in 2023 PEYT02

Variety	stnyrs	6	2	5	6	1	3	4	2	
	type	kg/ha	% yield	ht	mat	lodg	myco	sdwt	prot	SCB
CDC Spectrum	yellow	4223	100	67	2.0	3.5	4.5	249	24.6	1.5
<b>CDC 6366-4</b>	wrinkled	3320	79	68	1.5	3.8	4.5	211	26.2	7.0
LSD (0.05)		241		6.8	0.4	0.5	1.2	24.2	1.3	3.4

*Notes*

Testing locations were Saskatoon, Lucky Lake, Moose Jaw, Rosthern, SK and Lacombe and Namao, AB

All other notes are the same as in Table 1.

Fig. 1. Scans of seed samples from the 2024 CDC PEYT03 at Saskatoon (Sutherland) of wrinkled pea variety CDC 6366-4 and check varieties CDC 4140-4 (wrinkled) and CDC Spectrum (yellow field pea).

