

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 red pea variety CDC 6716-5

Strengths

• Red cotyledon colour

• Greater yield than the red pea check Redbat88

• Powdery mildew resistance

Neutral traits

Good lodging resistance

- Medium vine length
- Medium+ maturity
- Moderate resistance to Mycosphaerella blight
- Medium-high seed protein concentration
- Low seed coat breakage score
- · Medium seed weight

Red cotyledon, semileafless pea variety CDC 6716-5 was tested in the CDC pea elite trials in 2023 and 2024. Performance data for CDC 6716-5 are summarized in accompanying Tables 1 and 2. Seed photos for CDC 6716-5 and check varieties are in Fig 1.

Table 1. Performance of red pea variety CDC 6716-5 compared to checks in 2024 PEYT03

9	stnyrs	2		1	2	3	1	2	2	2
Variety	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
CDC 6716-5	red	2901	107	77	2.5	3.7	3.5	203	26.1	1.0
Redbat 88	red	2134	79	80	2.0	5.2	5.5	182	28.8	3.5
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 red pea variety CDC 6716-5 compared to checks in 2023 PEYT02

	stnyrs		6		2	5	6	1	3	4	2
Variety		type	kg/ha	% yield	ht	mat	lodg	myco	sdwt	prot	SCB
CDC Spectrum		Υ	4223	100	67	2.0	3.5	4.5	249	24.6	1.5
CDC 6716-5		RED	4030	95	76	2.3	3.5	5.0	232	25.0	1.0
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 red pea variety CDC 6716-5 and check varieties Redbat88 (red) and CDC Spectrum (yellow field pea).

