

MEMORANDUM

TO: Prairie Recommending Committee for Pulse and Special Crops
FROM: T.D. Warkentin, K.K. Gali, T. Gela, B. Tar'an, S. Banniza, G. Arganosa, B. Barlow, J. Horner, D. de Silva, S. Wagenhoffer, K. Mikituk, Y. Liu, C. Breitkreutz, A. Weerasinghe, and D. Raymond
Crop Development Centre, 51 Campus Drive
University of Saskatchewan
Saskatoon, Saskatchewan S7N 5A8
DATE: January 23, 2025
SUBJECT: Request for support for registration of dun pea variety CDC PR20-62

Strengths

- Dun seed coat
- Greater yield than the dun pea check CDC Dakota
- Powdery mildew resistance

Neutral traits

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

Yellow cotyledon, dun seed coat, semileafless maple pea variety CDC PR20-62 was tested in the CDC pea elite trials in 2023 and 2024. Performance data for CDC PR20-62 are summarized in accompanying Tables 1 and 2. Seed photos for CDC PR20-62 and check varieties are in Fig 1.

Table 1. Performance of dun pea variety CDC PR20-62 compared to checks in 2024 PEYT03

	stnyrs		2		1	2	3	1	2	2	2
Variety		Туре	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 Dakota		dun	2607	96	82	2.0	4.5	3.5	175	26.9	0.5
PR-20-62		dun	2898	107	79	1.8	5.0	3.0	194	26.6	1.0
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 dun pea variety CDC PR20-62 compared to checks in 2023 PEYT02

stnyrs	5	6		2	5	6	1	3	4	2
Variety	type	kg/ha	% yield	ht	mat	lodg	myco	sdwt	prot	SCB
CDC Spectrum	Y	4223	100	67	2.0	3.5	4.5	249	24.6	1.5
CDC Dakota	D	3585	85	71	2.1	3.1	4.5	211	25.6	0.5
PR-20-62	DUN	4134	98	67	1.6	3.3	5.0	227	26.1	6.0
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 dun pea variety CDC PR20-62 and check varieties CDC Dakota (dun) and CDC Spectrum (yellow field pea).

