

## MEMORANDUM

TO: Prairie Recommending Committee for Pulse and Special Crops  
FROM: T.D. Warkentin, B. Tar'an, S. Banniza, G. Arganosa, B. Barlow, J. Horner, D. de Silva, S. Wagenhoffer, K. Mikituk, Y. Liu, A. Weerasinghe, and D. Raymond  
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DATE: January 11, 2023  
SUBJECT: **Request for support for registration of marrowfat pea variety CDC 1513-2**

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### Strengths

- Improved yield compared to the large seed size marrowfat varieties 1174-3 and 1245-3.
- Greater seed weight compared to the small seed size marrowfat variety 1217-2, similar to the large seed size marrowfat varieties 1174-3 and 1245-3.
- Powdery mildew resistance.

### Neutral traits

- Good lodging resistance, similar to the marrowfat checks.
- Medium vine length, slightly longer than 1174-3 and 1245-3.
- Medium maturity, slightly later than 1245-3.

### Description

Green cotyledon, semileafless marrowfat pea variety CDC 1513-2 was tested in the CDC Marrowfat Elite Yield Trial in 2021 and 2022. Performance data for CDC 1513-2 are summarized in accompanying Table 1. Seed photos for CDC 1513-2 and check varieties are in Fig 1.

Two-year (2021 and 2022) summary of the performance of marrowfat pea variety CDC 1513-2 in the CDC Marrowfat Elite Yield Trial.

<i>locations</i>	7	7	3	3	7	7	7
Variety	Yield in (kg/ha)	Yield (%)	Seed weight (g/1000 seeds)	Vine length (cm)	Maturity (1-3)	Lodging (1-9)	PM
CDC Spectrum	2013	100	244	69	1.6	3.1	R
1174-3	1574	78	371	69	2.2	4.2	R
1217-2	1851	92	285	74	2.1	4.1	R
1245-3	1438	71	367	68	1.9	4.1	R
<b>1513-2</b>	1696	84	374	76	2.4	4.4	R
GRAND MEAN	1714		330	70	2.0	4.0	
CV	8.5		2.8	5.9	16.7	22.0	
LSD	131.5		13.7	6.1	0.3	0.8	

*Notes*

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

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

PM=powdery mildew reaction where R=resistant, S=susceptible

Fig. 1. Scans of seed samples from the 2022 CDC MFEYT at Saskatoon (Sutherland) of marrowfat pea variety CDC 1513-2 and check varieties MFR171, 1174-3, 1245-3, and CDC Spectrum (yellow field pea).

