

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 maple pea variety CDC 6859-2**

Strengths

- Maple seed coat
- Smaller seed weight than CDC Blazer
- Low seed coat breakage score
- Greater yield than the maple check CDC Blazer
- Powdery mildew resistance

Neutral traits

- Moderate lodging resistance
- Medium vine length
- Medium maturity
- Moderate resistance to *Mycosphaerella* blight
- Medium-high seed protein concentration

Yellow cotyledon, maple seed coat, semileafless maple pea variety CDC 6859-2 was tested in the CDC pea elite trials in 2023 and 2024. Performance data for CDC 6859-2 are summarized in accompanying Tables 1 and 2. Seed photos for CDC 6859-2 and check varieties are in Fig 1.

Table 1. Performance of maple pea variety CDC 6859-2 compared to checks in 2024 PEYT03

Variety	<i>stnyrs</i> Type	2 kg/ha	% yield	1 ht	2 mat	3 lodg	1 myco	2 sdwt	2 prot	2 SCB
CDC Spectrum	yellow	2718	100	76	1.8	4.2	3.5	212	25.1	1
CDC 6859-2	maple	2634	97	79	1.8	5.8	3.5	159	26.2	1
CDC Blazer	maple	2469	91	76	1.3	6.2	4.5	167	28.2	1
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 maple pea variety CDC 6859-2 compared to checks in 2023 PEYT02

Variety	<i>stnyrs</i> type	6 kg/ha	% yield	2 ht	5 mat	6 lodg	1 myco	3 sdwt	4 prot	2 SCB
CDC Spectrum	yellow	4223	100	67	2.0	3.5	4.5	249	24.6	2
CDC 6859-2	maple	3658	87	68	1.4	4.1	5.0	183	24.8	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 maple pea variety CDC 6859-2 and check varieties CDC Blazer (maple) and CDC Spectrum (yellow field pea).

