Dry Bean Seeding Rate Trial

Trial ID: 2025-DBSR01 – R.M. of St. Clements

Objective: Quantify the agronomic and economic impacts of different dry bean seeding rates.

Summary: Average early season plant establishment (V4) and late season plant survivability (R7) were similar between seeding rates. Average lowest pod bearing node height was similar between seeding rates. There was no significant yield difference between seeding rates of 74,000, 94,000 and 114,000 seeds/ac. As a result, there was a decrease in profit equivalent to the increase in seed cost for the higher seeding rates.

Trial Information

Treatment	74k vs. 94k vs. 114k
Soil Texture	Fine Sandy Loam
Previous Crop	Forage
Tillage	Conventional Tillage
Seeding Equipment	39 ft Planter
Seeding Date	24/05/25
Market Class	Pinto bean
Germination	97%
Row Spacing	15 in.
Harvest Date	30/09/25

Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	15.2	54.1	48.7	69.9	187.9
Normal	65.02	89.83	77.24	74.64	306.73
% Norm	23%	60%	63%	94%	61%

Plant Stand (plants/ac) ǂ

	V4	R7
74K	72,000 C	71,000 C
94K	86,000 B	85,125 B
114K	110,625 A	110,500 A

ǂ Columns followed by different letters are significantly different from one another.

Plant Establishment and Survivability ǂ

	Establishment at V4	Survivability to R7	Change V4 to R7
74K	97%	96%	1%
94K	91%	91%	0%
114K	97%	97%	0%

ǂ % establishment = plant count at V stages/seeding rate; % survivability = plant count at R stages/seeding rate.

Lowest Pod Height (cm) ǂ

	Lowest Pod Height (cm)
74K	5.2 A
94K	5.0 A
114K	5.3 A

ǂ Lowest pod height measurements are the distance between the soil surface and attachment point of the lowest pod bearing node on the stem. Columns followed by different letters are significantly different from one another.

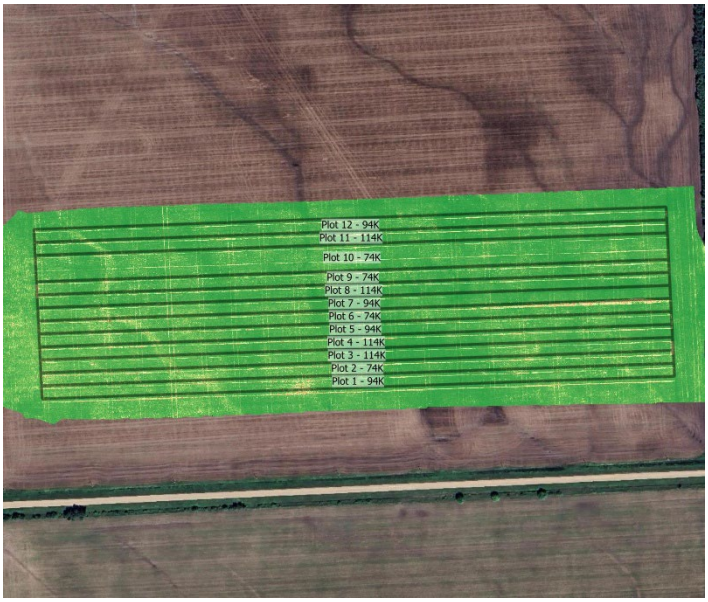
Additional On-Farm Network Research Reports

MANITOBA Pulse Soybean GROWERS
T 204 745.6488
www.manitobapulse.ca

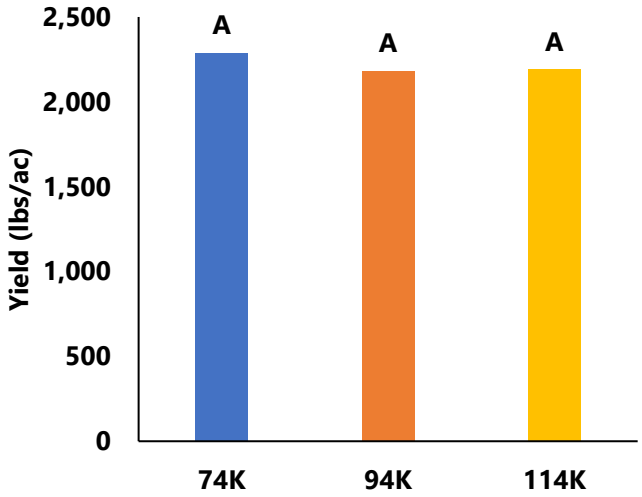
Dry Bean Seeding Rate Trial

on-farm network
PARTICIPATORY • PRECISE • PROACTIVE

NDVI Field Image July 15



Yield by Treatment



Overall Yield & Economics

	Mean (lbs/ac)	Cost ǂ	Change in Profit ǂǂ	
74k	2287	$88.8/ac		
94k	2181	$112.8/ac	-$24.0/ac	
114k	2190	$136.8/ac	-$48.0/ac	
P-Value	0.8738	**Economic**	74k → 94k	**No**
CV	13.1%		74k → 114k	**No**
Significance	**No**		94k → 114k	**No**

ǂ Based on a $120/unit (1 unit = 100,000 dry bean seeds) dry bean seed costs (Source: Producer seed costs).

ǂ ǂ Change in profit is calculated as the difference in cost between seeding rate treatments. Because yields were not significantly different, there is no increased income to offset the increase in seed cost

MANITOBA Pulse Soybean GROWERS
T 204 745.6488
www.manitobapulse.ca