

Dry Bean Tillage Trial

Trial ID: 2020-DBT01 – R.M. of Roland

Objective: Quantify the agronomic and economic impacts of strip-till vs. conventional till systems for dry bean production

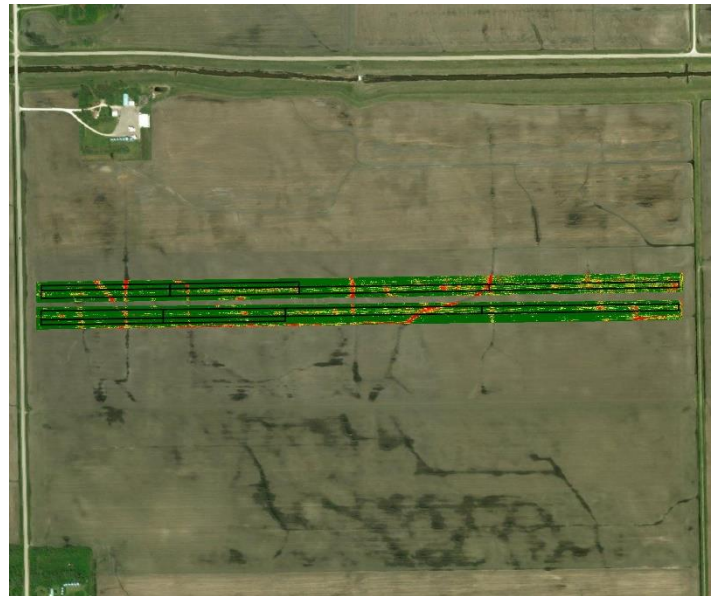
Summary: There was no significant yield difference between tillage systems, however, pinto beans in strip-till plots were less affected by spring sandblasting than pinto beans in conventional till plots. Spring sandblasting can have economic consequences if re-seeding is necessary.

Trial Information†

Treatment	Strip vs Conventional Till
Rural Municipality	Roland
Soil Texture	Very Fine Sandy Loam / Clay
Previous Crop	Canola
Seeding Date	May 18
Variety	SV6139R Pinto
Seeding Rate	71 000 seeds/ac
Row Spacing	30"
Plant Stand @ V8	51 000 plants/ac
Harvest Date	August 29

† A 70-30-0-5 fertilizer blend was banded 6" below the seed in the strip-till treatment and broadcast/incorporated in the conventional till treatment

NDVI Field Image July 25



Precipitation (mm)

	May	June	July	August
Normal	53.8	80.6	65.7	71
Rainfall	29.1	69.1	59	26.7

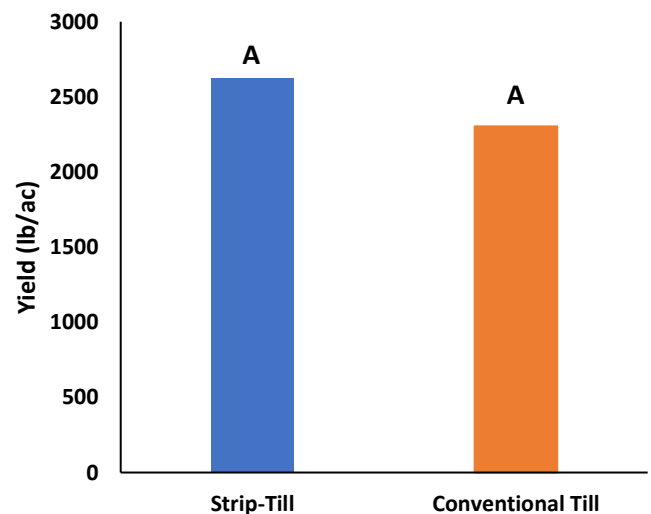
Early Season Observations



Left: sandblasted pinto beans in conventional till plot in early June

Right: strip-till plots were less affected by sandblasting in early June

Yield by Treatment





Overall Yield & Economics

	Mean (lb/ac)
Strip-Till	2629
Conventional Till	2304
Yield Difference	325
P-Value	0.1468
CV	10.4%
Significance	No

Important economic consideration:

- Re-seed due to sandblasting in conventional tilled areas of the trial
- Re-seed operation in dry beans can be in the neighbourhood of **\$80/ac**