

## Soybean Response To Row Width and Seeding Rate in Ontario

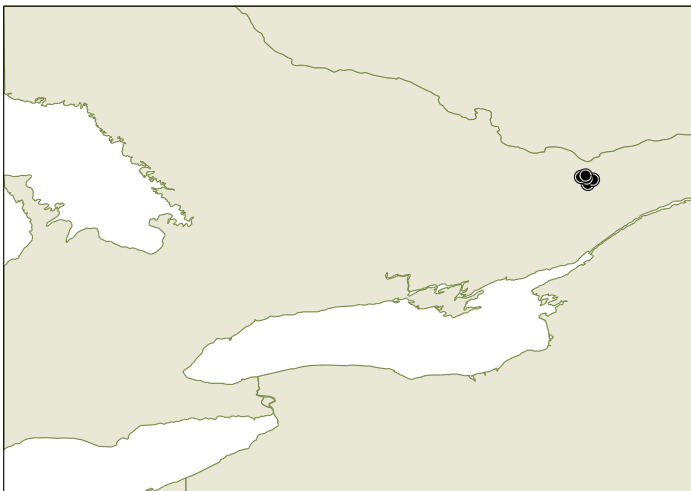
2016

### Objectives

- On-farm trials were conducted in 2016 to evaluate row width and seeding rate effects on soybean yield in Eastern Ontario. The 2016 trials repeated a similar study conducted at several locations in 2015.

### Study Description

<b>Locations:</b>	5 co-operator sites in Eastern Ontario
<b>Plot Layout:</b>	Field-length strips
<b>Replicates:</b>	2 replications per location
<b>Planting Timing:</b>	May 10
<b>Seeding Rates:</b>	120,000 and 170,000 seeds per acre
<b>Row Width:</b>	15-inch and 30-inch
<b>Equipment:</b>	Case IH Early Riser® 12/23 split-row planter
<b>Variety/Brand<sup>1</sup>:</b>	91Y01 (R)



### In-Season Observations

- 2016 was noteworthy for being abnormally hot and dry throughout the vegetative growth phase of the growing season. Under these conditions, soybeans in 15-inch rows reached canopy closure faster than soybeans in 30-inch rows.

### Results

- In 2016, the average soybean yield was significantly greater in 15-inch rows than in 30-inch rows (Figure 1).
- Seeding rate did not have a significant effect on soybean yield (data not shown).

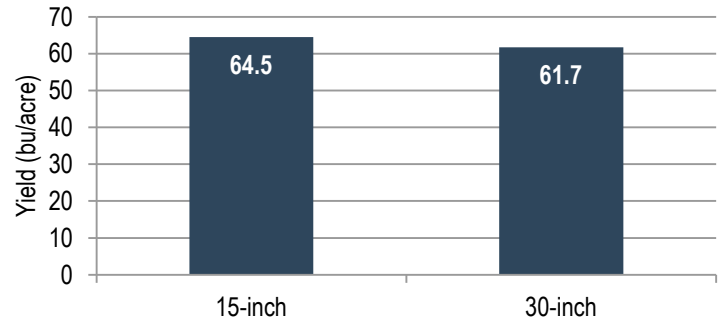


Figure 1. Average soybean yield (bu/acre) by row width across five study locations in 2016.

### Two-Year Results and Considerations

- 2016 was the second year of the trial. Although 15-inch rows were advantageous in 2016, in the combined 2-year results 30-inch row soybeans yielded an average of 1.7 bu/acre more than soybeans in 15-inch rows (Figure 2).
- In a wide row soybean system, early planting dates and soybean varieties with aggressive growth are key to maximizing soybean yields.
- Populations can be reduced on highly productive soils with early planting dates especially in areas where white mold is historically present.
- However, heavy corn residue situations such as no-till may warrant higher populations under cool and moist soil conditions.

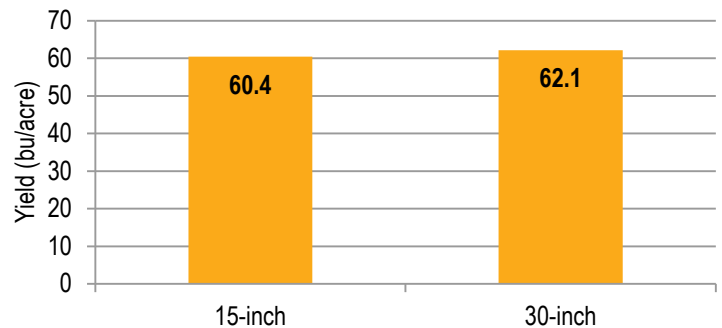


Figure 2. Average soybean yield (bu/acre) by row width across 16 study locations in 2015 and 2016.

#### Special thanks to our cooperators:

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