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SPRING CANOLA POPULATION STUDIES



Precision Planting versus Drilling for Canola

- We are using a lot of canola seed to achieve an adequate stand:
 - Expect only ~50 to 60% establishment
 - Typically use 4.5-6 lbs/A
 - Final stands need to be in the 4-10 plants/ft range (13-33 plants/m)
 - Seed lots can range from 80000 to 120000+ seed/lb!
 - Transgenic seed is very expensive.

Precision Planting versus Drilling for Canola

Monosem

- Calibrated by seed number
- Seed per foot, inches between seed



Conventional Drill

- Calibrated by flow
- Weight of seed per unit time



Older equipment can grind seed...



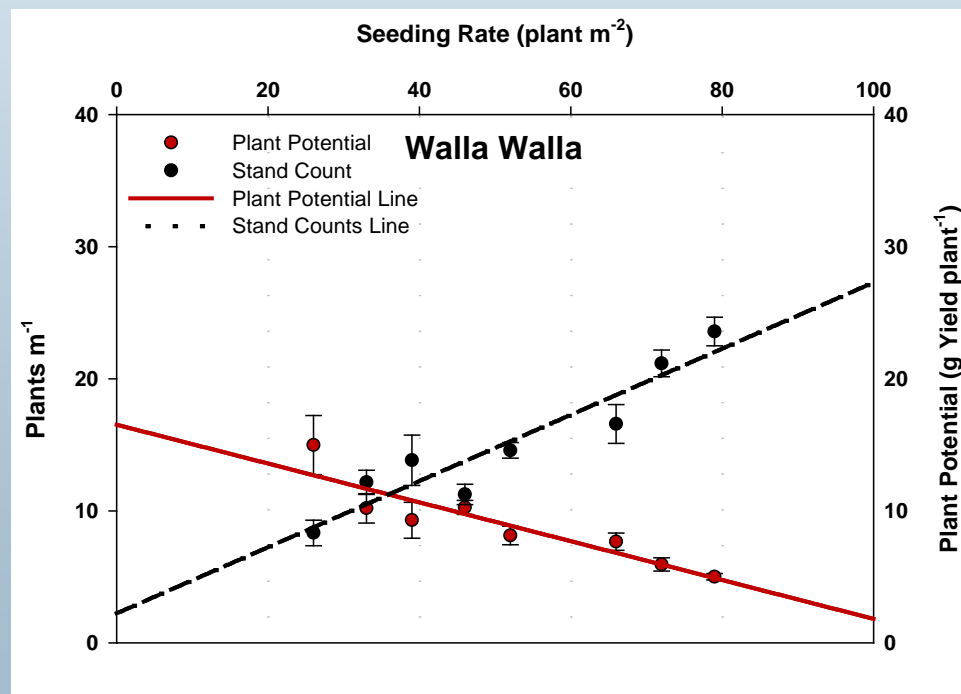
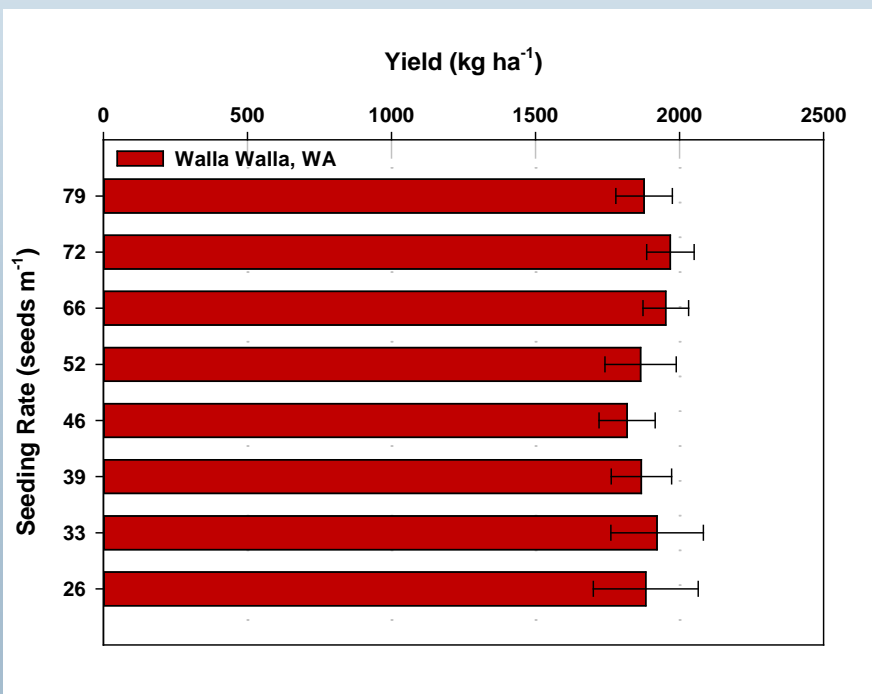
Seed from the bag



Collected from older drill

Walla Walla, WA

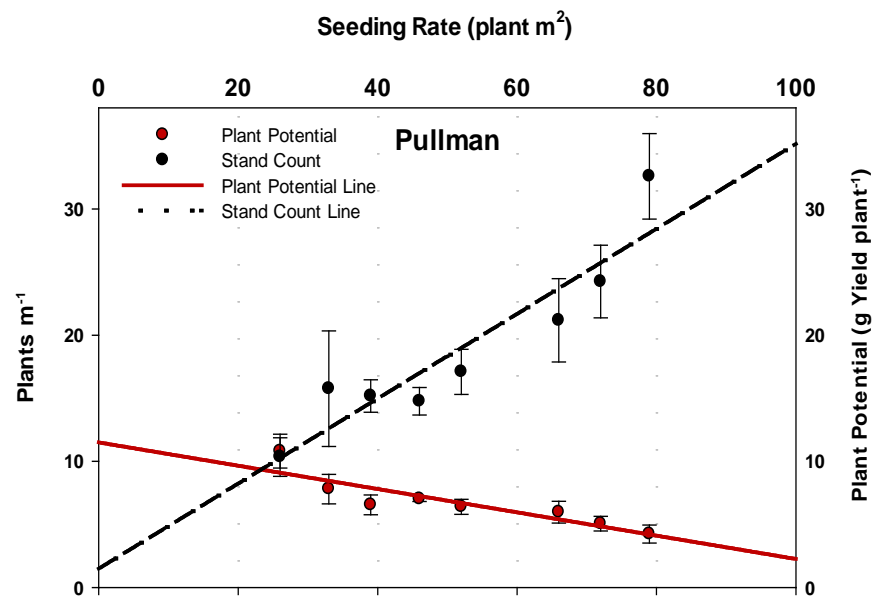
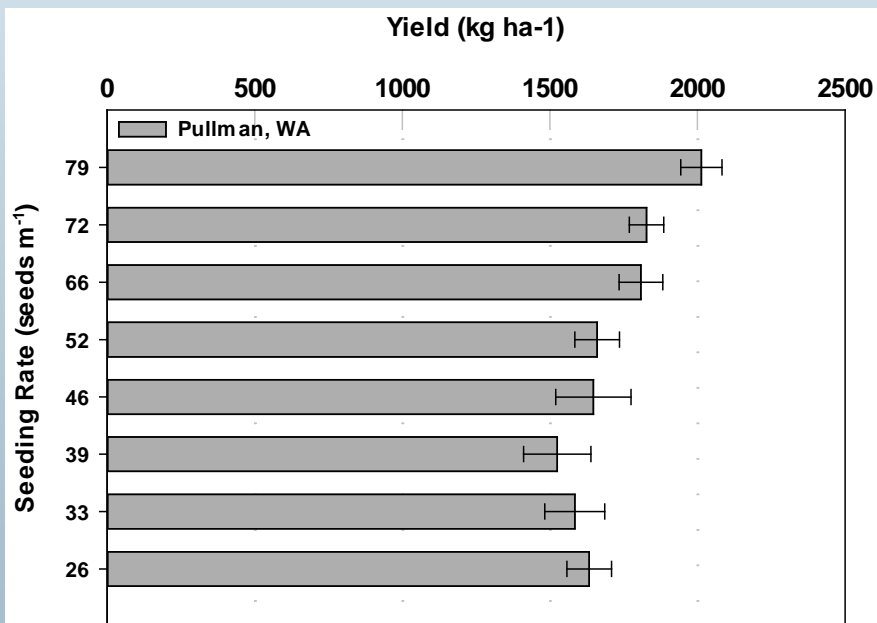
- 2016 and 2017 Combined
- No effect on YIELD



2000 kg/ha = ~1800 lb/A

Pullman, WA

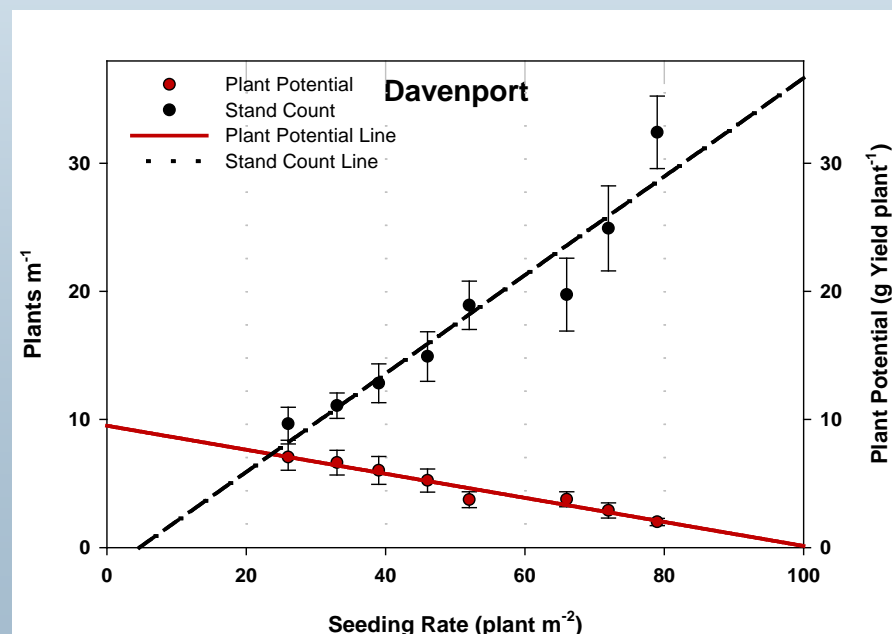
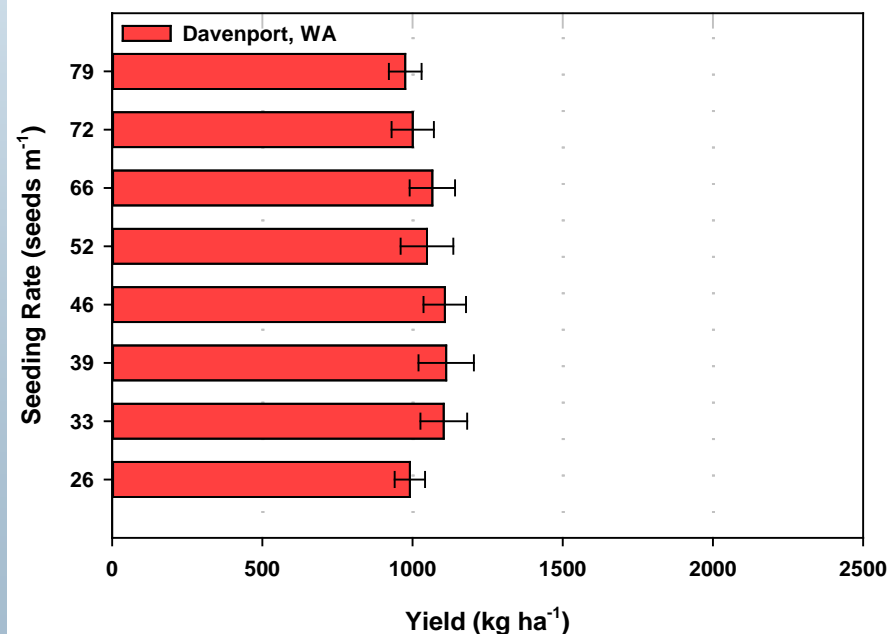
- 2017 and 2018 Combined
- Higher yields were observed as seeding rate increased



2000 kg/ha = ~1800 lb/A

Davenport, WA

- 2017 & 2018 Combined
- No effect on YIELD



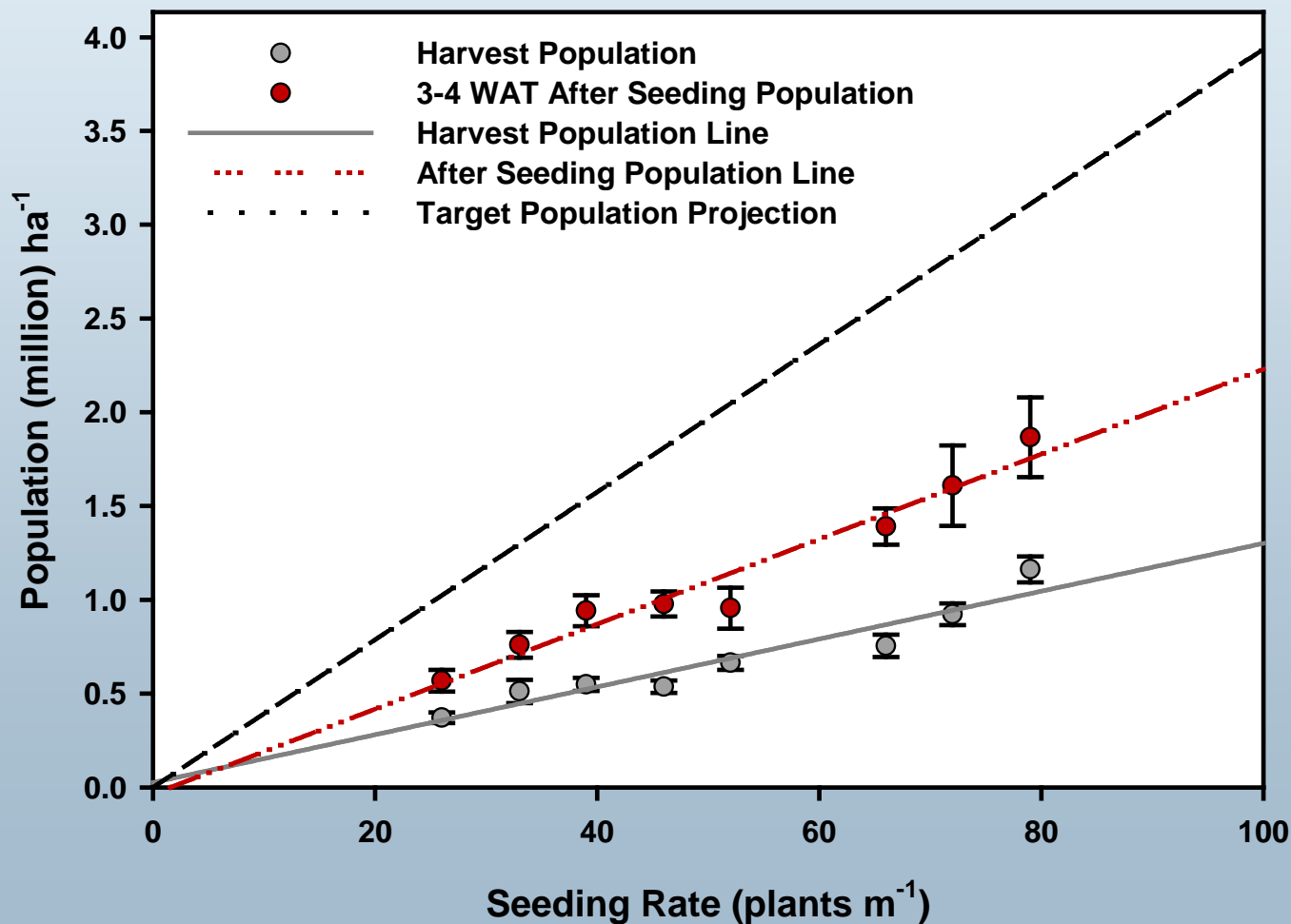
2000 kg/ha = ~1800 lb/A

Davenport, WA



Stand Establishment

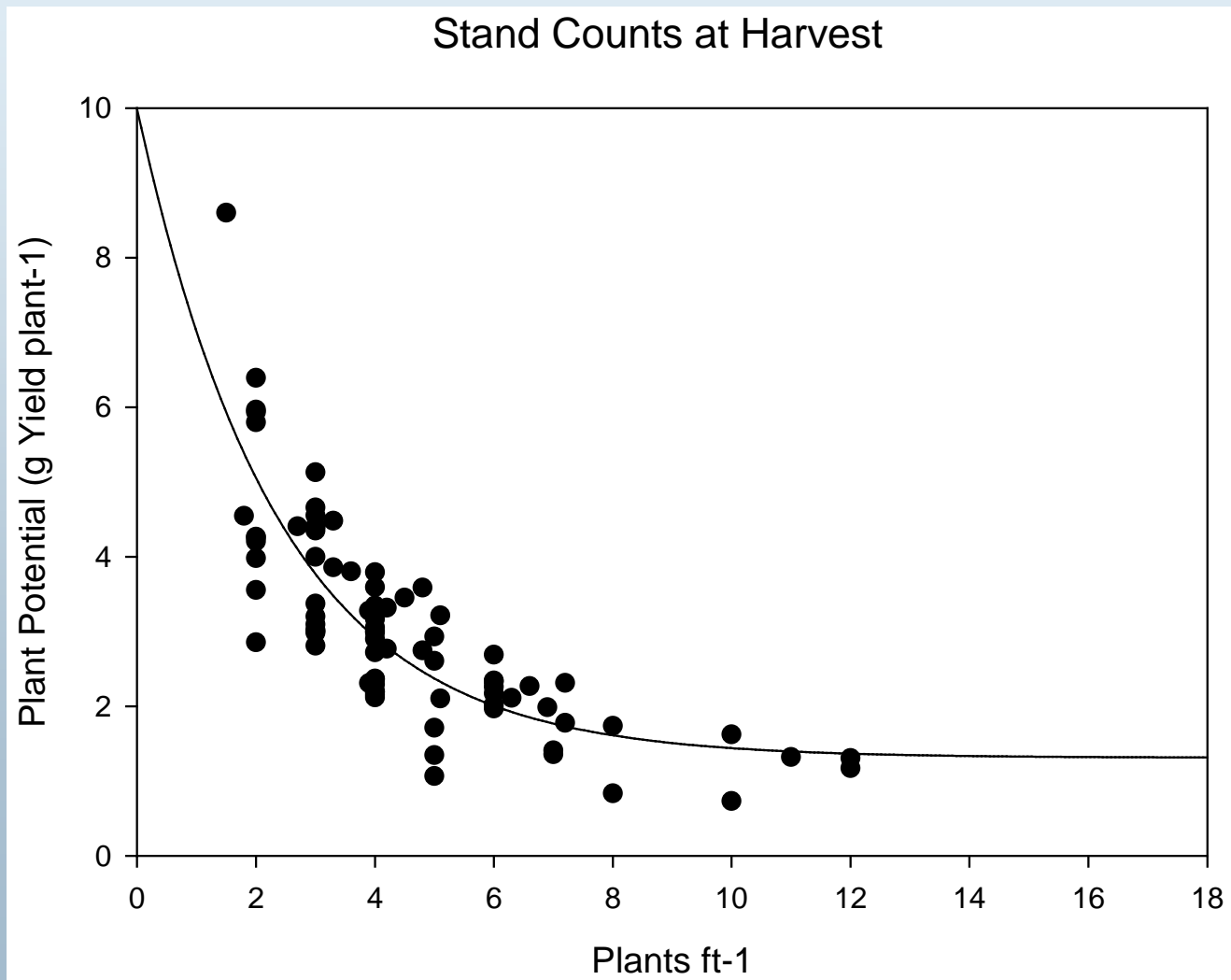
Stand Establishment



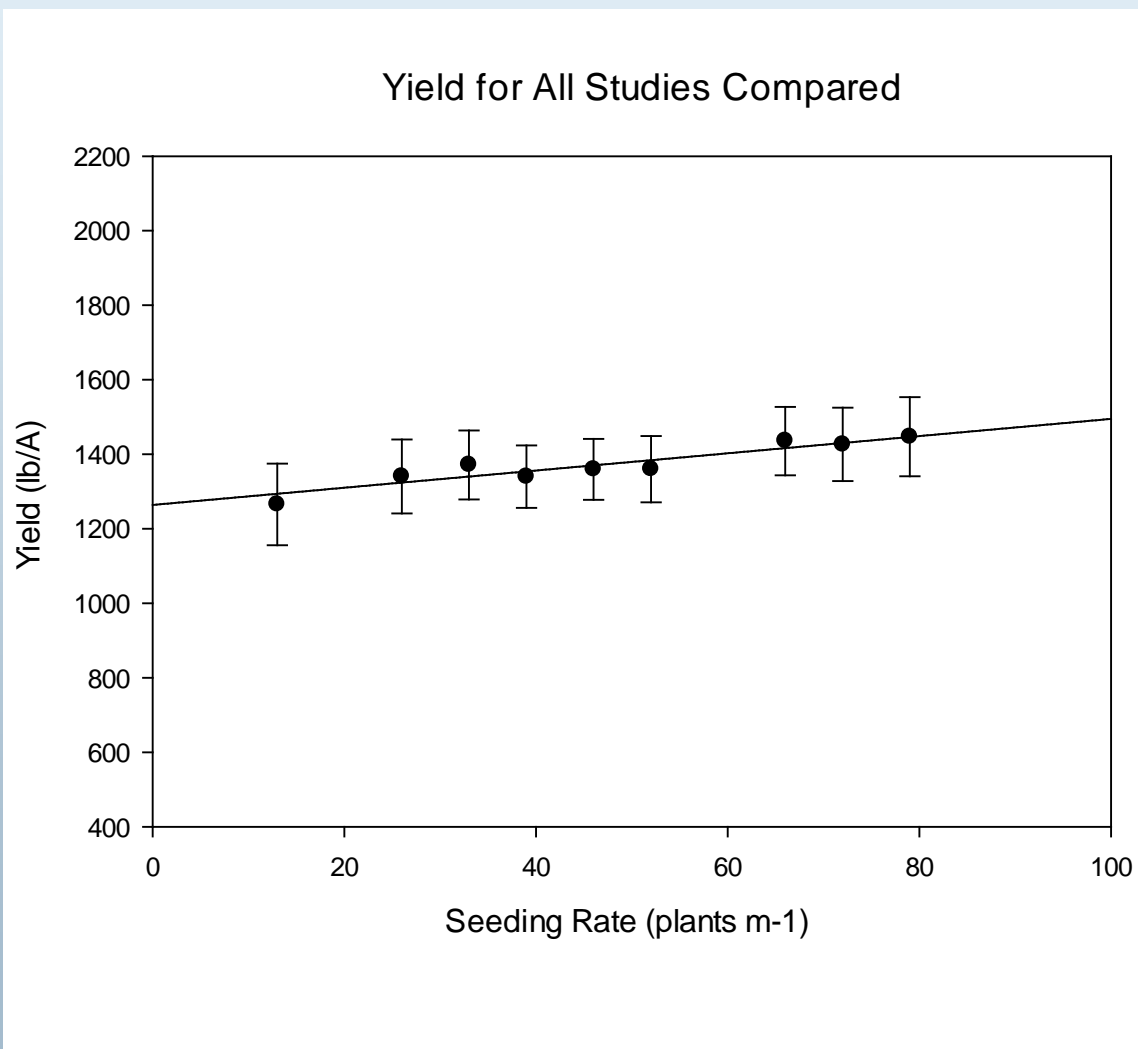
Stand Establishment



Plant Potential All Studies Combined



YIELD – All Years & All Sites Combined



Conclusions

- Lower 'seeding rates' are likely best achieved by buying canola seed with greater seed per pound, increased germination, or both
- The optimum seeding rate is likely in the range of 4.5 to 6 lbs using a drill
- Using a singulator changes the calculation to seed per foot,
 - need 4 to 6 plants per foot
 - and would need to drop 8 to 12 to get that!

Questions?

