

Canola: Row Crop Planter & Setup

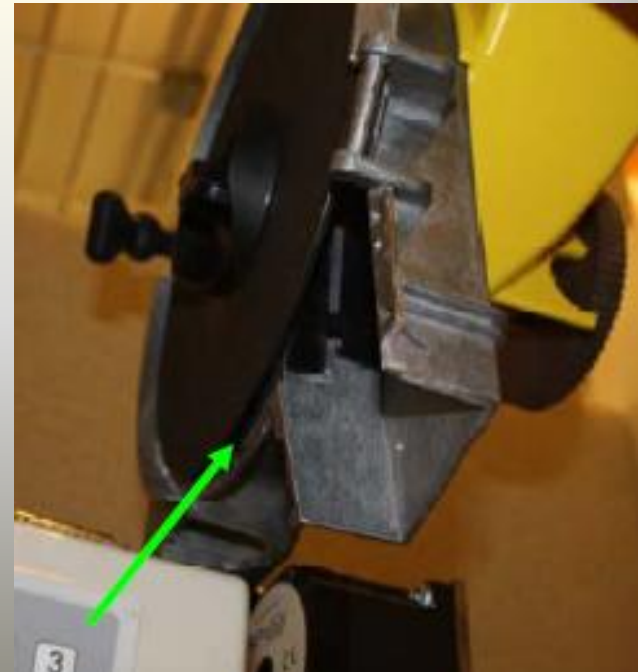
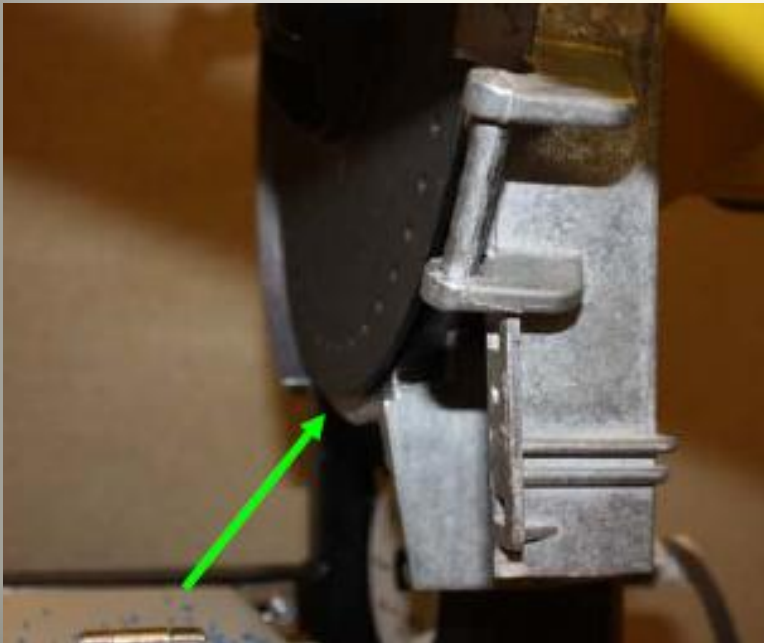
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Row Crop Planter

- A typical row crop planter can be used but will need small modifications to ensure proper seed spacing and placement with minimal losses.
- Tests were checked using a Sorghum Seed Plate on a John Deere Vacuum Meter planter.

Row Crop Planter

- A gap which forms from seed plate wobble can cause the canola seeds to fall out of the bottom of the planter.



Row Crop Planter

- To begin with you should try adjusting the metering hub (see the operators manual for this procedure).
- If adjusting the meter hub doesn't fix the problem some adjustments to the seed plate will need to be made.

Row Crop Planter Seed Plate Adjustments

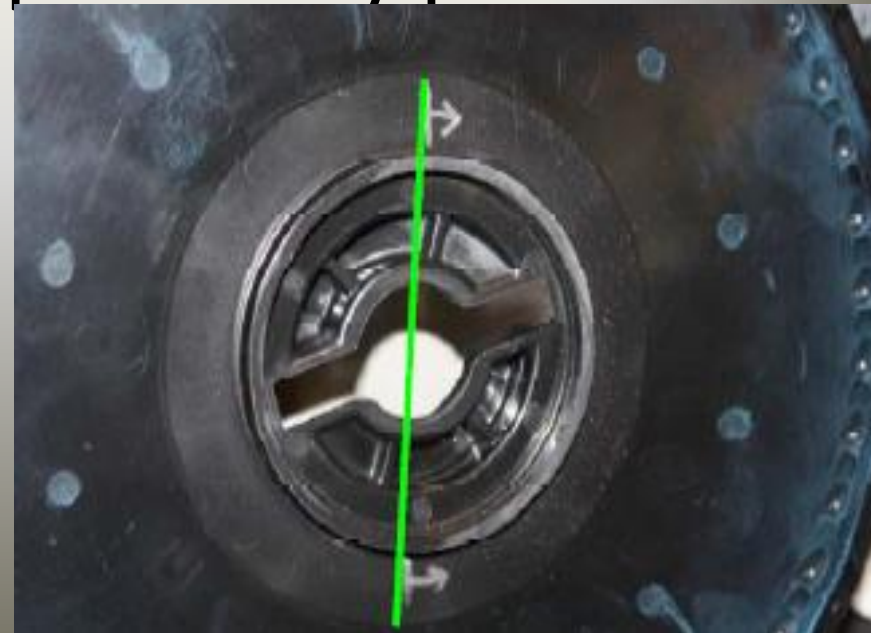
- Start by marking the T-handle and the disk so they will always be installed in the same orientation (also number each disk to put ensure they end up in the same row).
- Once marked rotate the disk by hand to see where the gap occurs. Mark the gap using arrows.

Row Crop Planter Seed Plate Adjustments



Row Crop Planter Seed Plate Adjustments

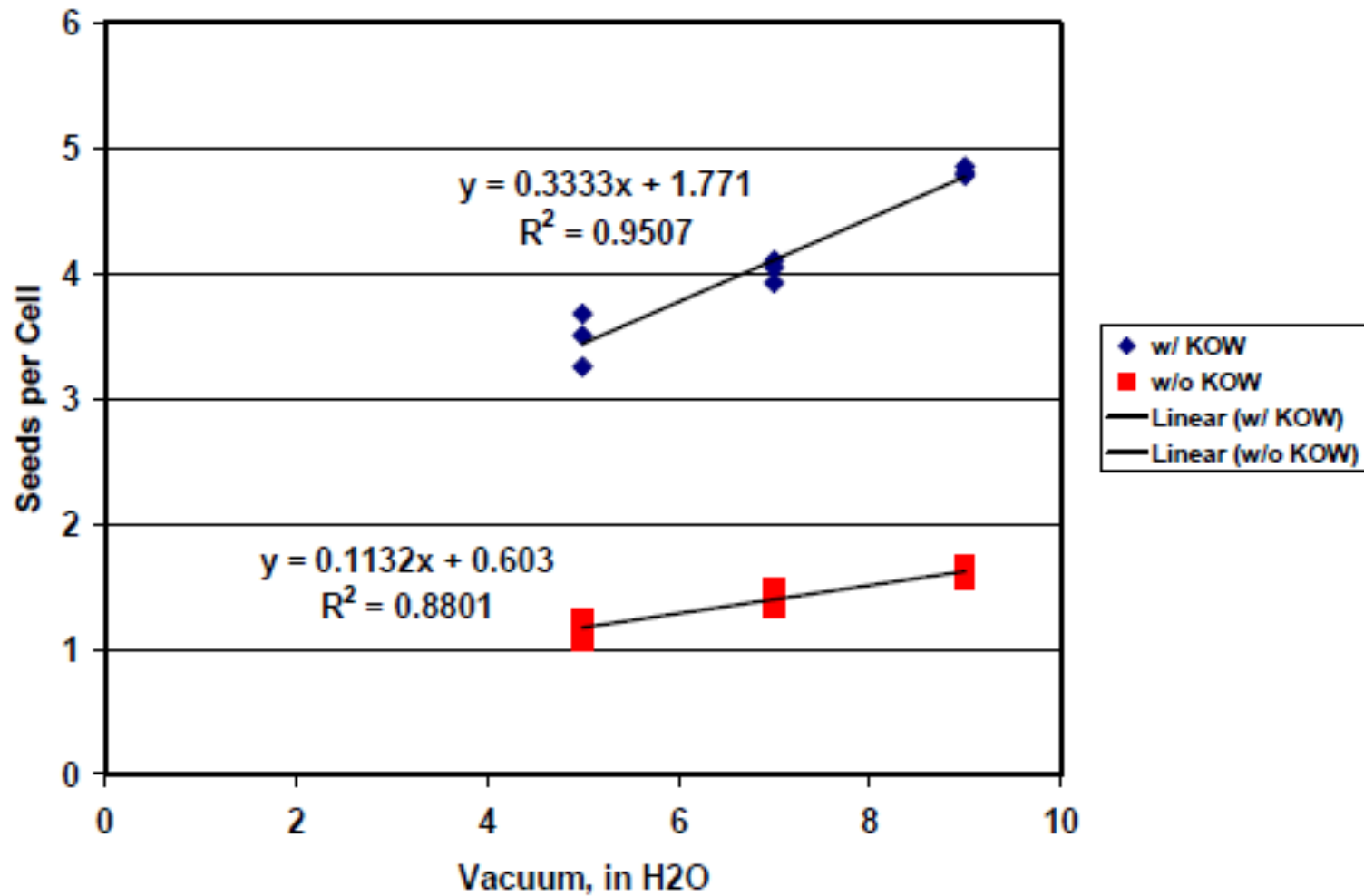
- Transfer the marks to the ring on the seed plate where it is “high”.
- The parts that are high need to be lightly filed down until no gap is visibly present when the plate is rotated by hand.



Row Crop Planter Vacuum Level

- Once the seeds do not leak around the wheel anymore the correct vacuum level must be set.
- From table top tests it is obvious that knock out wheels are better at collecting seeds than flats without them.

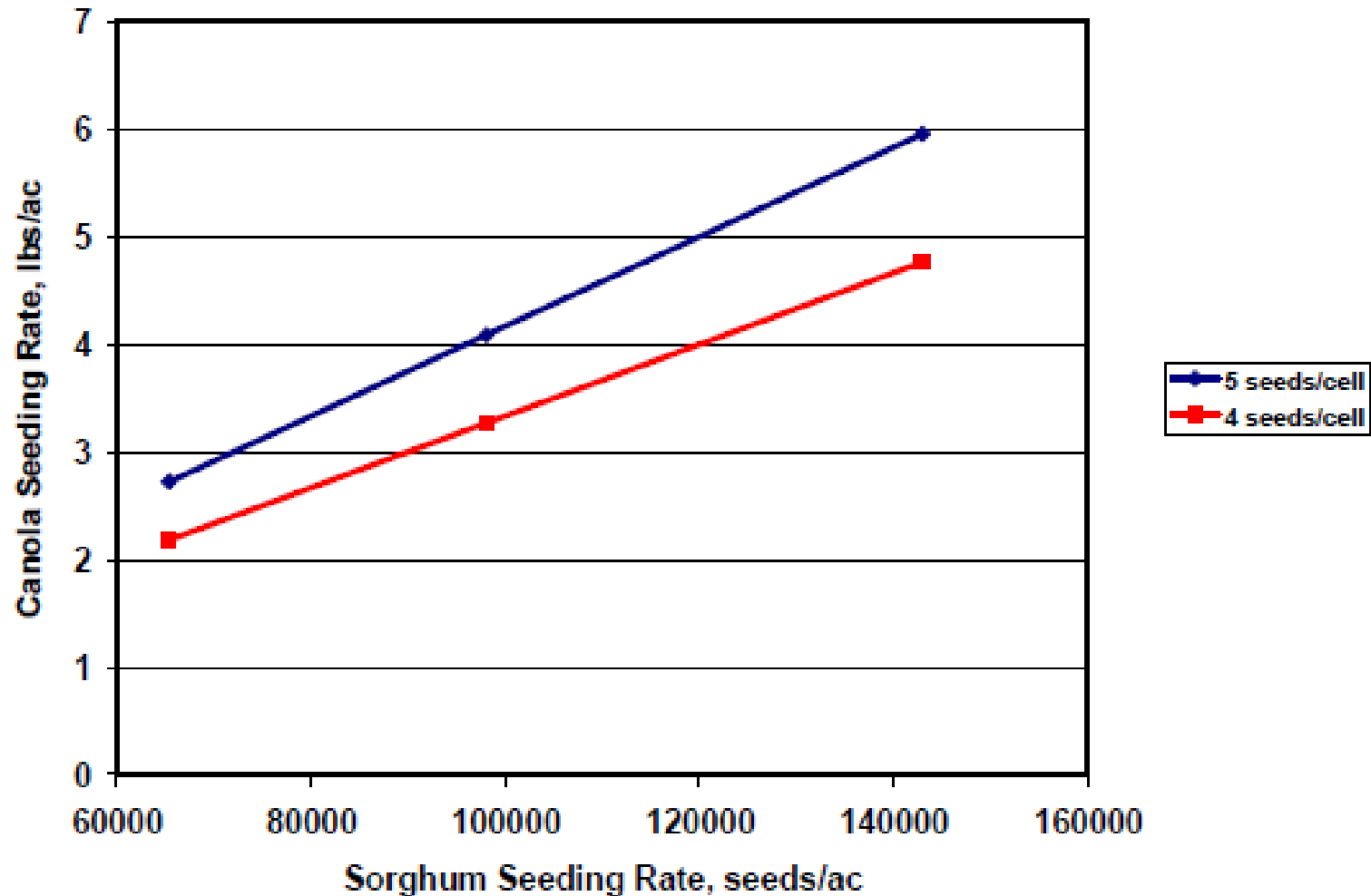
Row Crop Planter Vacuum Level



Row Crop Planter Equating Sorghum Seeds to Canola Seeds

- With about 4-5 seeds per cell consistently a rough conversion based on 120000 seeds per pound for canola can be made.
- For example operating at a vacuum level of 10 inches of H₂O, for 4-5 lbs/ac or canola you will need to set the metering rate at 10,000-12,0000 seeds/ac. This means at 4-5 mph the metering disk will turn about 45-65 rpm.

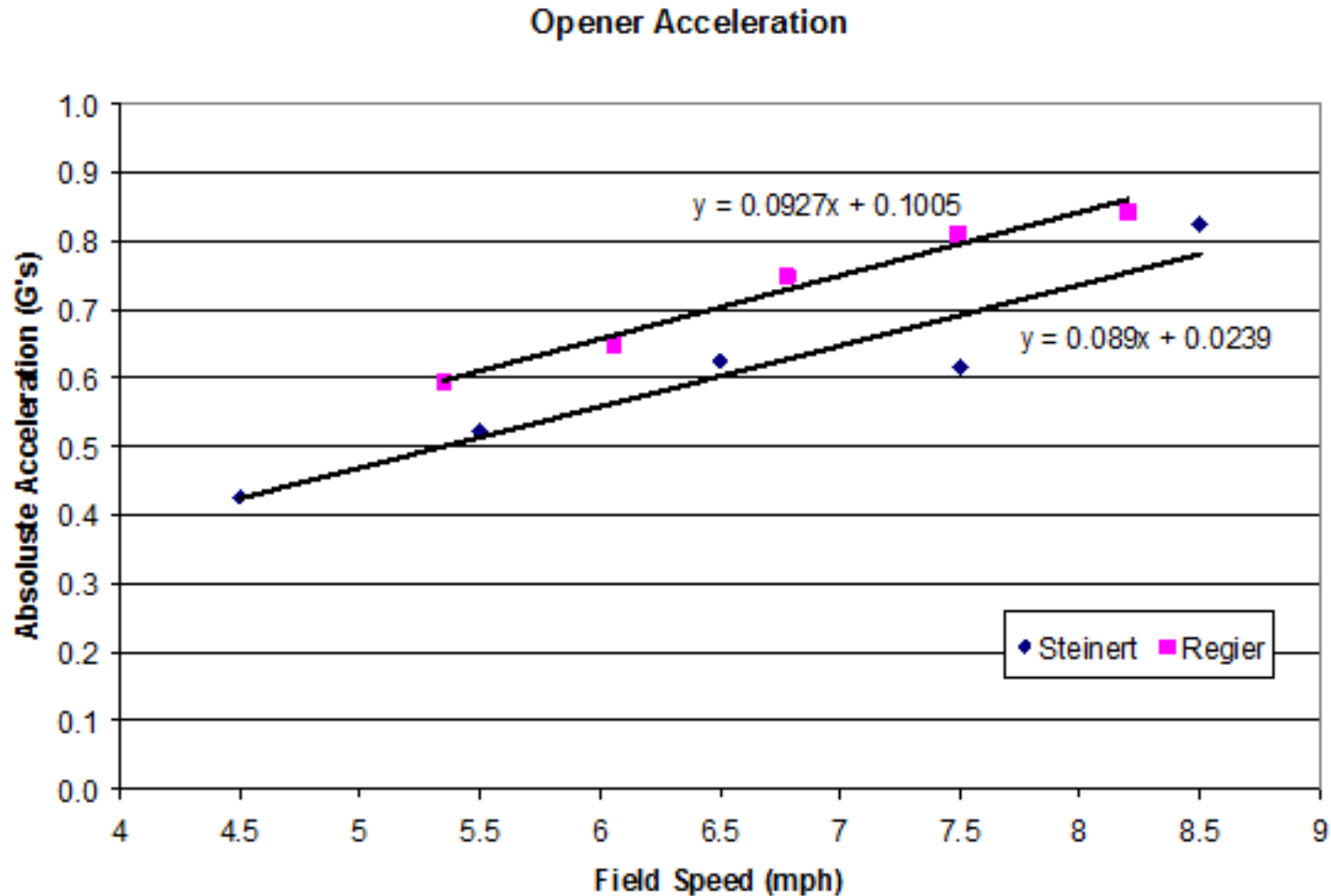
Row Crop Planter Equating Sorghum Seeds to Canola Seeds



Seed Drill Planting

- When using a seed drill ground speed can have a large impact on canola seeding rates and emergence.
- Through field tests a positive relationship between field speed and vertical acceleration of the row unit was found.
- Higher vertical accelerations can lead to a decrease in seeding depth because of vibrations in the row units.

Planter Speed and Row Unit Acceleration



Planter vs. Drill in Trials

- Overall planter plots emerged quicker and more evenly.
- A greater percentage of emergence was observed with planted plots compared to drilled plots especially true at lower seeding rates.