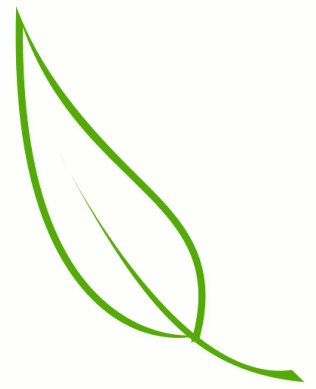




# April/May Report

2018

Brad Alexander



## Drones/IR Imaging

---

- I am almost legal to fly, I just have to wait for the final approval from Transport Canada.
- I am writing a step by step of what I needed to do before I can fly to help others do the same.
- In Canada it is illegal for to fly a drone for commercial or agricultural purposes without having taken the ground-school course.
- Note: A spotter is required when flying
- The drone we have doesn't take true IR pictures because it is not heat sensitive. It can differentiate colour very well, but it can't pick up heat.
- The true IR mapping cameras/drones are very expensive (\$15,000-\$25,000) and require two people to operate, however, they are improving very quickly and the price is already dropping in relation.
- Starting with this drone was a good idea because of the cost and risk involved
- AgCon has had the same issue as us with Skymatics. They were "supposedly working on something together but were only in it for themselves"
- AgCon is working on a proposal for some true IR work on alfalfa, starting with the water trial that Len Hingley is conducting.

## Mutagenesis

---

- The entire site where the treated seeds were planted has been flooded and frozen. But they survived!
- We were rather worried that they wouldn't and I even got more seeds to treat

## Outreach

---

- April, as always, was a flurry of events. Aggie days Calgary and Lethbridge, Drone training, presenting in Tilley, East Brook, and Uplands schools, and presenting at the Brooks Library.
- Jim Anderson from the Grain Academy & Museum would like us to contribute an Alfalfa Seed exhibit. He hadn't even realized that we are such a big part of Alberta agriculture. It would basically be what I put on my display table.

## PGRs

---

- One site is at Bill Dickenson's, and the other is at Art Folkerts
- The sites are set out and the treatments will be applied next week when Tom comes to help.
- I only needed two sites after all, I mixed "sits" up with "reps"

## Olds - Weevil Trial

---

- The sites are all staked out and we are watching the weevils closely for the right time to apply the treatments. Eggs are present in rosemary fields that I checked and I've been keeping the forecast up to date with the weather.

## Renovations

---

- My office/The lab is getting new floors and a sink. I was asked to move out a month ago and told that the floors would only be a few days. Because of backordered tiles, the floors are now scheduled for the 29<sup>th</sup>. I have requested a rebate for the months rent.
- In other news, sometime after we moved our furniture out of the office the cooler turned oven. The supplier is coming soon to fix it.

## AgriScienc Project

---

- Fields are mostly all lined up, we could use a field closer to the Lethbridge area, and another one to the east of duchess would be useful; neither are crucial.
- Sampling is to begin in June.

## Danica Is A Spice Girl

---

- The trial is going outstandingly and has been giving some interestingly unexpected results.
  - Not all cinnamon is the same – It works best if it is ground more finely
  - Turmeric is a new solid contender
  - It has now been noted that the parasites tend to select the biggest bee larva to parasitize. Other such parasites have been noted to do this by drumming on the cocoons.
  - This means that they tend to parasitize a higher proportion of females, and the best males. Removing the parasites could positively affect sex ratio and preserve the most robust bees (it does in the lab).
  - Not only do the best spices work to kill the parasites, but the bees appear to be eating it and gaining some nutrition.
  - Danica's team is now testing one-gallon samples in trays.

## Summer Tour - July 24<sup>th</sup>

---

- Len is available to talk about his trial.
- The PGR trial at Art's is just off the main road and easily accessible
- I will be flying over Len's trial and Art's PGR site frequently and I can demo this at the tour.