

Research Scoop

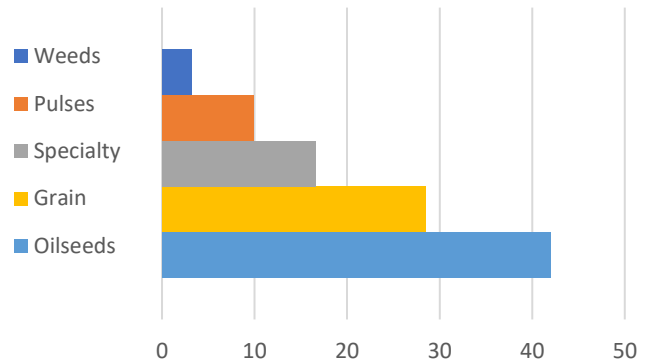


6185 total plots
1306 treatments
87 small plot trials
15 demo sites

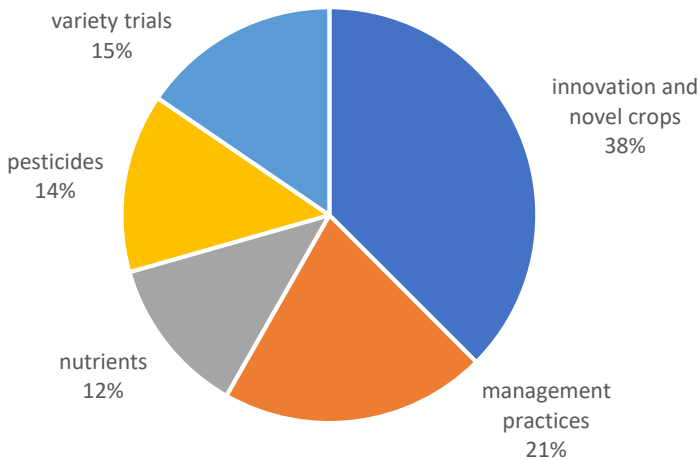


Approx. half of our research is focused on general agronomy (management practices 21%, nutrients 12% and pesticides 14%)

Crop Research %

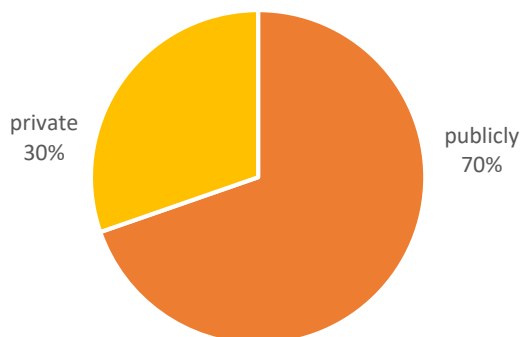


Research Funding %



70% of research is funded by crop commissions and public granting organizations

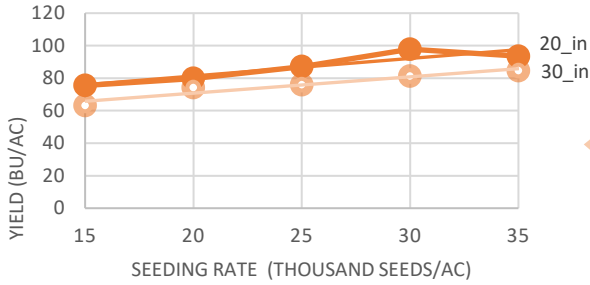
Research Funding %



We are experienced industry trainers and do product demonstrations for:

Canterra, Dow, Dupont, FMC, FP Genetics, NuFarm, SeCan, SeedNet, and others

Dryland Grain Corn

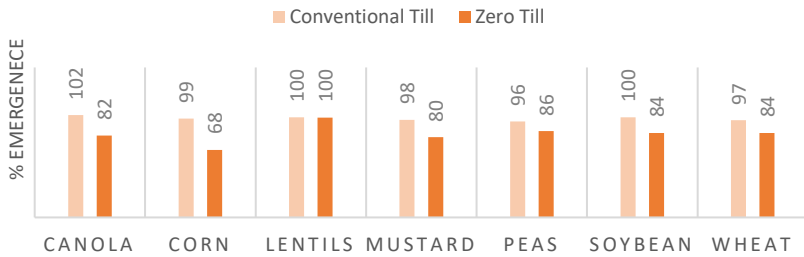


Narrower Rows (20") and higher seeding rates (30,000+ seeds/ac) produced maximum yields in dryland fields of southern Alberta



There was NO significant yield response to Nitrogen Fertilizer. Anywhere between 50 lbs/ac to 200 lbs/ac of total available nitrogen (soil content + Fertilizer) was sufficient for maximum yield

FERTILIZER IMPACT ON YIELD (BU/AC)



Corn emergence was 99% in cultivated plots and 84% in zero-till plots, but there was no significant difference in yield between Conventional and Zero Till systems

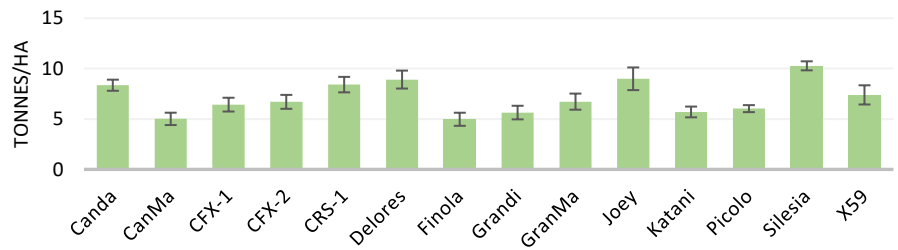
Irrigated Hemp Agronomy: Seeding Rate, Variety and Fertility

MAXIMUM SEED YIELD
6/9 yrs seeded early May
3/9 yrs seeded 3rd week of May
0/9 yrs seeded early June

In Lethbridge, seeding earlier increased seed yield

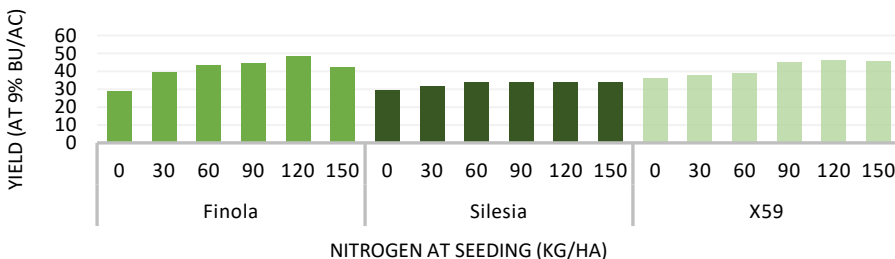


Average Biomass Production



Variety selection is critical for biomass and straw management, but grain yield was similar for most commercial varieties

Average Seed Yield (bu/ac)



Irrigated hemp required approx. 200 kg/ha total N (soil + fertilizer) for optimal grain yield

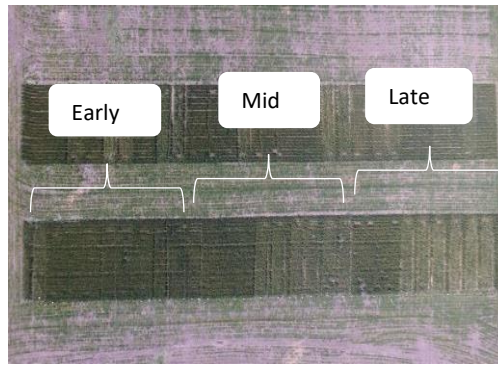


Hail Damage: Canola, Beans, Peas



Nutrients Blends and recovery products have shown inconsistent results

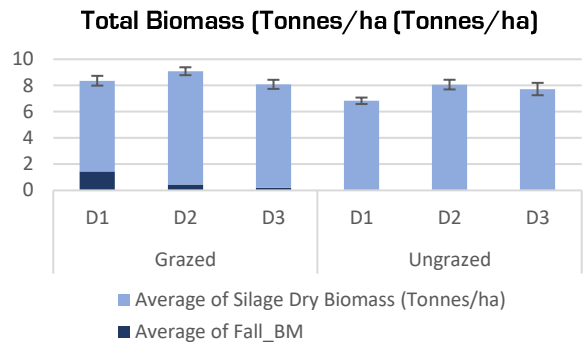
Crops in late growth stages were least able to recover from hail damage



Peas and wheat were least able to recover from late hail damage

Winter Grazing

Fall grazing decreased winter survival from approx. 100% to 60%

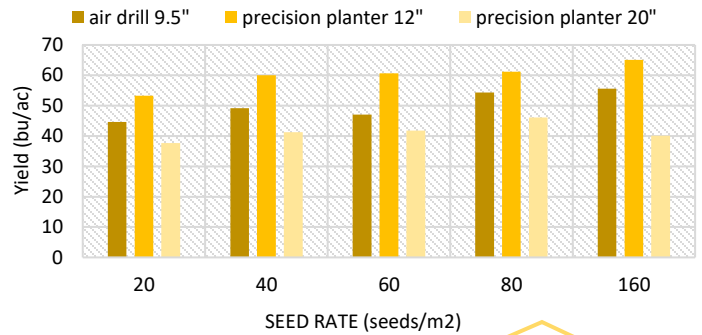


Additional fall growth helped grazed cereals produce more overall biomass than ungrazed

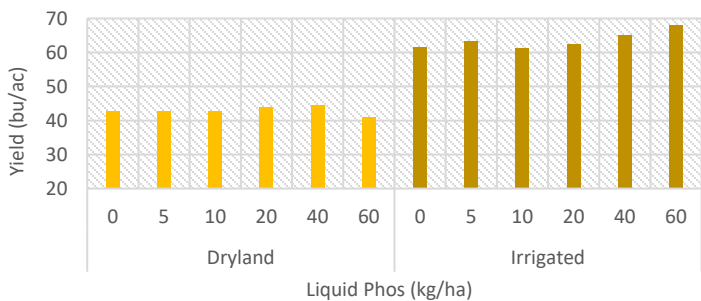
Crops seeded in August produced the most fall biomass

Crops seeded early to mid-September had the highest total biomass (fall and silage)

Precision Canola: Seeding Rate and Liquid Phosphorus



On 12" Row spacing, 40 seeds/m2 was sufficient under irrigation



High canola yields required more phosphorus but % emergence decreased sharply after adding 60 kg/ha of 10-34-0 liquid phosphorus

Our People and Equipment

Our research team has a wide range of expertise in

- Pesticides application
- Weed management
- Insect collection
- Plant identification
- PGRs
- IPM
- Liquid fertilizers
- Novel crops
- Field scale research
- UAV imagery
- Trial design
- Data analysis
- Greenseeker/NDVI
- Veris



Our On-Farm research program helps Alberta farmers to see new products, technologies, and ideas proven and adapted in a real-world field environment. Farming Smarter works with producers to conduct field scale trials using the tools of precision agriculture, GPS technology, and spatial analysis.

Our extension team provides education through events, demonstrations, tours, video, conferences, magazines and more

Name	Position	Years	Expertise
Ken Coles	General Manager	20+	M. Sc., B.Sc., P.Ag, CCA
Jamie Puchinger	Assistant Manager	10+	B.Sc., CCA
Michael Gretzinger	Research Coordinator	10+	B.Sc., CCA
Toby Mandel	Field Manager	15+	
Lewis Baarda	Precision Ag Specialist	5+	M.Sc., B.Sc., CCA
Claudette Lacombe	Communication Manager	20+	Journalist
Shelly Barclay	Office Manager	20+	Contracts, budget, reports

We use a custom-built air drill with dual Almaco cones and 4 seed boxes for endless configurations. We use a 4 row Monosem vacuum planter or two-row corn planter for precision crops.



We use a 2013 Wintersteiger Classic combine (with weight scale and corn header) and have a custom-built biomass/grain dryer and NIR (protein/oil machine)