Agronomy:

Step back from the trees to see the forest

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It’s all about RISK (and risk takers)

PROFIT PLANNER CALCULATOR

Region: Edmonton

Projected 2017	Feed Barley	Winter Wheat #2-12.0	HRS Wheat #2 - 13.5	CPS Wheat >11.5	Malt Bly	Oats	Canola	Peas
YIELD	80	55	60	80	80	110	50	50
PRICE	$2.75	$5.20	$6.65	$5.35	$4.95	$2.70	$10.95	$8.80
Breakeven Price	$2.90	$4.60	$4.51	$3.45	$3.11	$1.89	$6.56	$4.97
Breakeven Yield	84.42	48.65	40.73	51.60	50.33	76.90	29.94	28.24
TOTAL REVENUE	$220.00	$286.00	$399.00	$428.00	$396.00	$297.00	$547.50	$440.00
Seed Rate - bu/ac or lbs/ac	2.00	2.00	2.00	2.50	2.00	3.00	5.00	3.00
Seed, Treatment, Technology	13.90	20.00	30.00	30.00	24.50	15.00	65.00	48.82
To change fertilizer values go to the bottom of the spreadsheet.								
Fertilizer	51.64	56.87	60.76	65.98	49.03	49.03	91.13	16.02
Herbicide (inc. preseed/pre-hrvst)	26.00	32.50	36.50	36.50	32.00	10.00	12.00	32.50
Insecticide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fungicide	7.00	10.00	10.00	10.00	10.00	0.00	20.00	15.00
Chemical	33.00	42.50	46.50	46.50	42.00	10.00	32.00	47.50
Repairs	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.60
Fuel	15.40	15.40	15.40	15.40	15.40	15.40	16.50	17.60
Insurance	24.00	24.00	24.00	24.00	24.00	24.00	29.00	24.00
Custom Application	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Operating Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rent/ Land Pmts	72.00	72.00	72.00	72.00	72.00	72.00	72.00	72.00
Labour	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Misc	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
OPERATING EXPENSES	$232.14	$252.97	$270.86	$276.09	$249.13	$207.63	$327.83	$248.54
OPERATING MARGIN / ACI	-$12.14	$33.03	$128.14	$151.91	$146.87	$89.37	$219.67	$191.46

2000 ac HRS wheat = $540,000
2000 ac Canola = $650,000

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IF YOU WANTED TO FOCUS ON MOST PROFITABLE INPUTS, WHICH WOULD THEY BE? **(The Next $10.00)**

1. Certified cereal seed
2. Seed treatments
3. Nitrogen fertilizer
4. Phosphorus, Potassium or Sulfur fertilizer
5. Herbicides
6. Fungicides
7. Micronutrients
8. Fertilizer enhancements (e.g. ESN)
9. New combine

- *Variable Rate Fertilization*
- *Plant Growth Regulators*
- *Controlled Traffic Systems*
- *Sectional Control*
- *Education*
- *Vacation*

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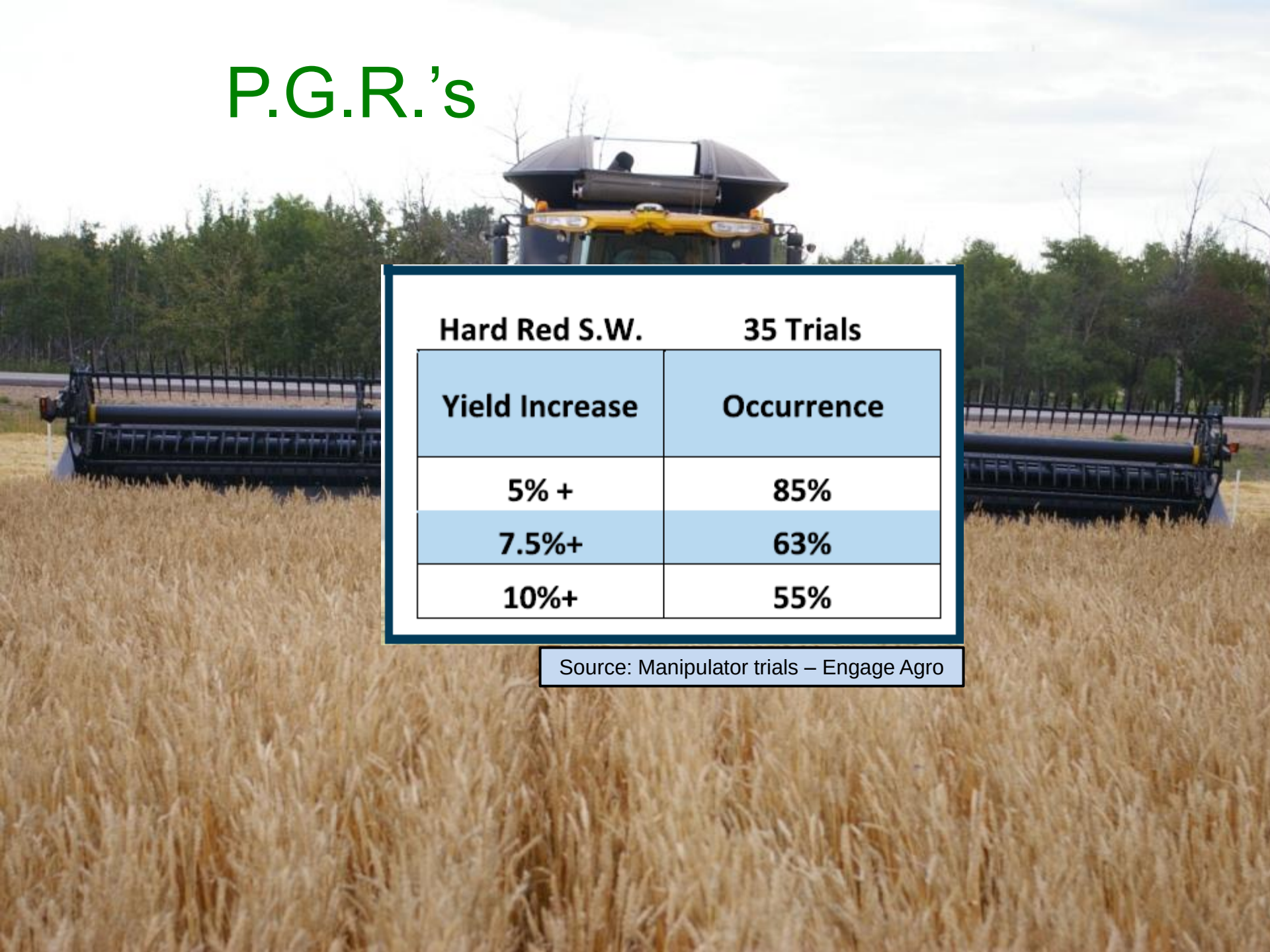
Phosphorus – probability of response

Table 11. Approximate probability of a greater than 2 bu/ac and 5 bu/ac canola response to phosphate fertilizer when following recommendations

Soil test P (lb/ac)	Brown		Dark Brown		Thin Black		Black		Gray Wooded		Irrigated
	>2	>5	>2	>5	>2	>5	>2	>5	>2	>5	
	%										
0-10	90	70	95	80	95	90	95	95	95	90	95
10 - 20	80	60	90	80	95	85	95	90	95	85	90
20 - 30	70	60	80	70	90	75	90	80	90	75	80
30 - 40	60	50	70	60	80	65	85	70	80	65	70
40 - 50	50	40	60	50	70	55	80	60	70	55	60
50 - 60	40	30	50	40	60	45	70	50	60	45	50
60 - 70	40	30	40	30	50	35	60	40	50	35	40
70 - 80	35	20	35	20	40	30	50	30	40	30	30
80 - 100	30	10	30	15	30	20	40	20	30	20	20

Source: AB Agric. AgDex – R. McKenzie

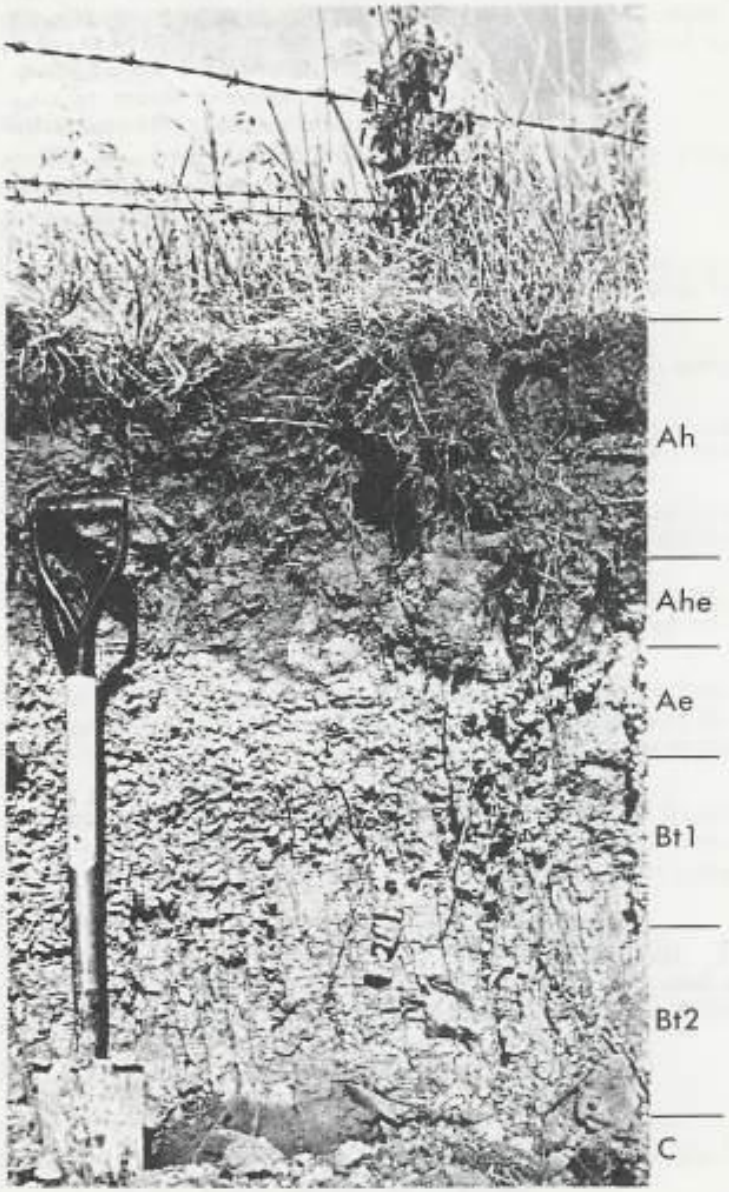
P.G.R.’s



Hard Red S.W.	35 Trials
Yield Increase	Occurrence
5% +	85%
7.5%+	63%
10%+	55%

Source: Manipulator trials – Engage Agro

We do not spend enough time understanding the soil beneath our feet



Eluviated Black

ALBERTA SOIL INFORMATION

Alberta.ca > Agriculture and Forestry

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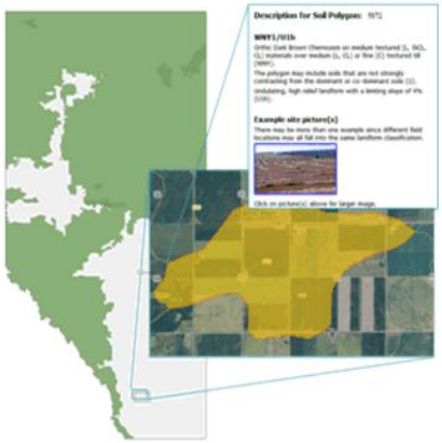
Welcome to The Alberta Soil Information Viewer

Agri-News This Week

Important Status Update

On-line Soil Viewer **NEW**



Read How to:

- Get Started
- Run the Viewer
- Find Your Farm
- Know Your Soil
- Find Your Soil
- Know your Land Suitability
- Map Your Farm
- Save Your Map

Watch How to:

Ag-Info Centre Webinar: The New Soil Information Viewer - Users Guide; February 22, 2017

This free Internet viewer allows the user to view and query soils information in AGRASID (Agricultural Region of Alberta Soil Inventory Database). The spatial and related soil landscape attribute files of AGRASID are available for download through this link.

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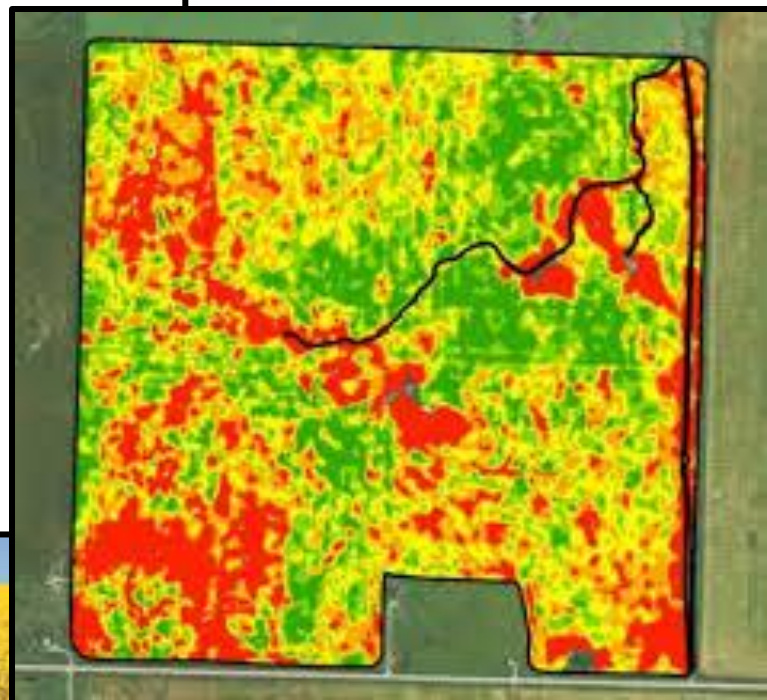
Precision Ag



Understand the impact of those factors you have no control over

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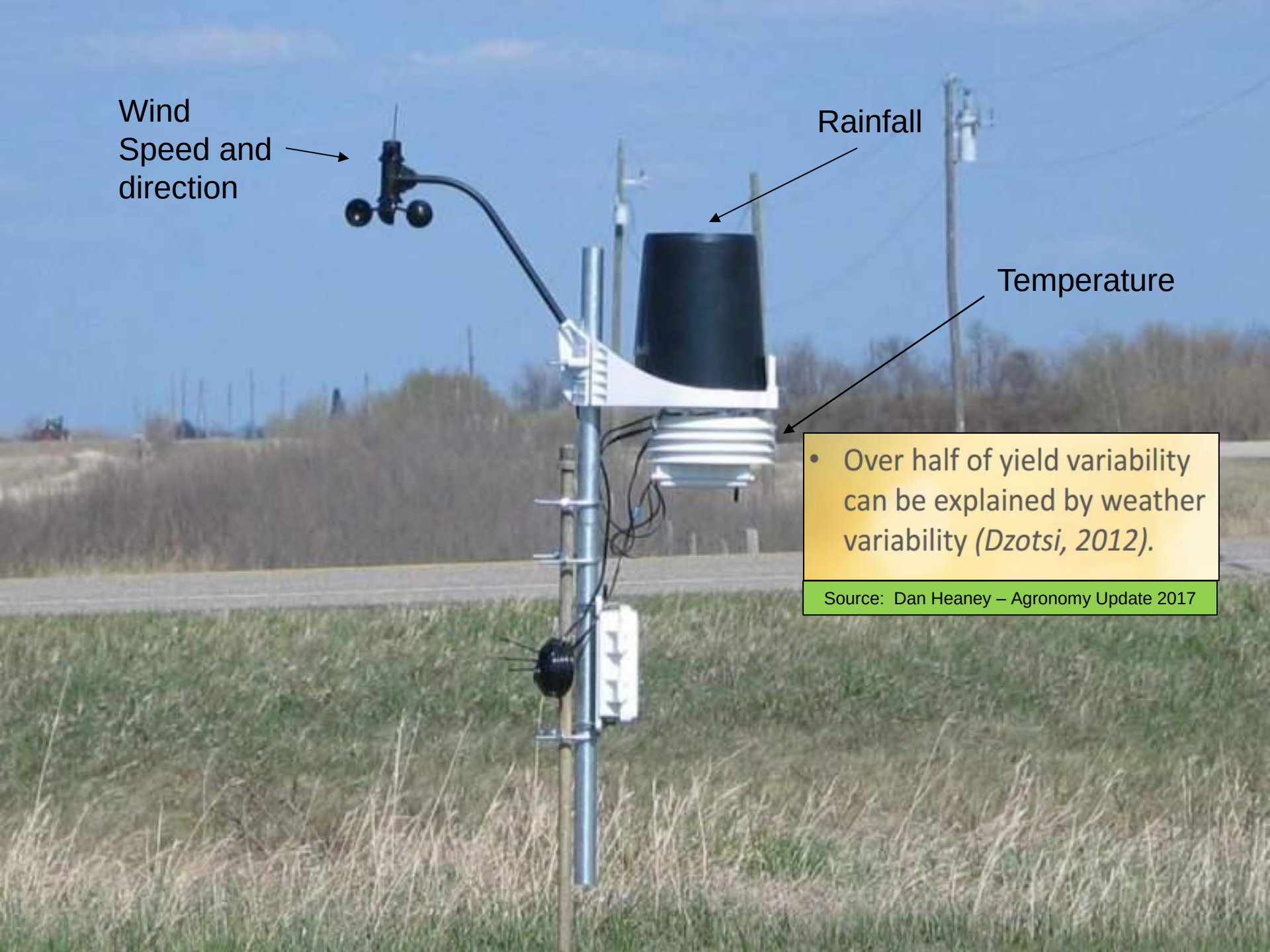


- Over half of yield variability can be explained by weather variability *(Dzotsi, 2012).*

Source: Dan Heaney – Agronomy Update 2017

Current and Historical Alberta Weather Station Data Viewer

Brought to you by the Alberta Climate Information Service (ACIS)

About ACIS
Data Disclaimer
News
Glossary
Reference Documents

Weather Data
Weather Station Data Viewer
Historical Weather Data
Weather Station Summary
Almanac

Maps
Weather Conditions Map
Climate and Atlas Maps
Weather Radar Imagery

Show Directions

Legend

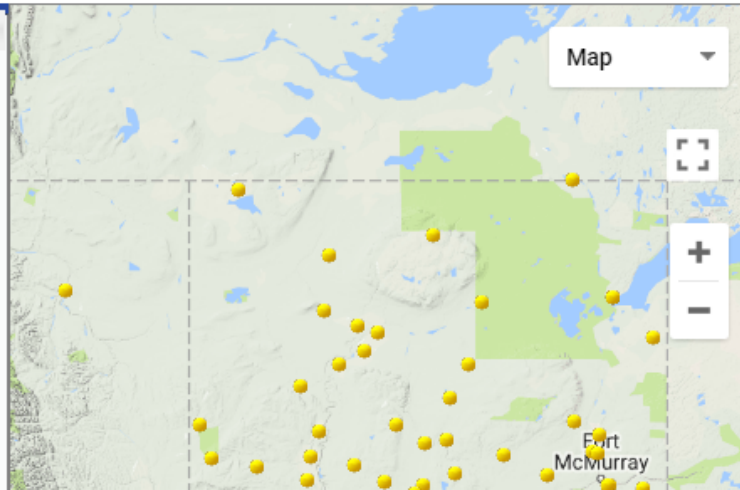
- Available for all selected stations
- Not available for some selected stations
- Not available for any selected stations
- Station with data available through ACIS
- Station with all requested elements available
- Selected station with all requested elements available
- Selected station with one or more requested elements not available
- Station with one or more requested elements not available

Select Station(s): Select Station

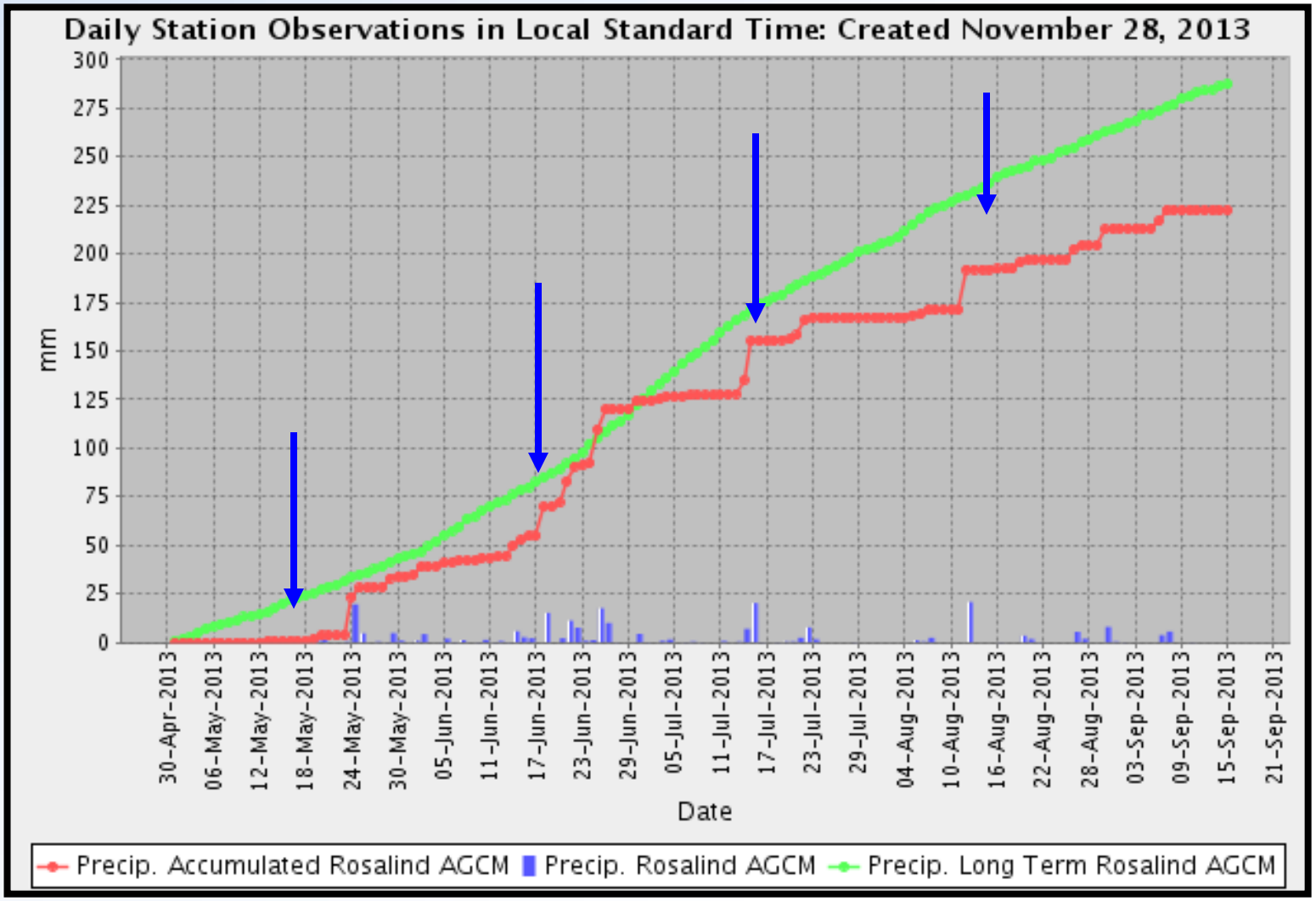
Popular | **Elements** | **Derivatives** | **Normals** | **Almanac**

Clear Selection | Clear All Tabs | Definitions

	Observed	Normal
Precipitation (mm)	☐	
Accumulated Precipitation (mm)	☐	☐
Temperature (°C)	☐	☐
Minimum Temperature (°C)	☐	☐
Maximum Temperature (°C)	☐	☐
Relative Humidity at 2m (%)	☐	



Precipitation



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Blend science with practical experience

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Early Weed Control

Sclerotinia - Canola

Risk Factor	Possible Answers	Risk Points
Number of Years Since Canola Crop	More than six years	0
	Three to six years	5
	One to two years	10
Disease Incidence in Last Host Crop	None	0
	Low (1 to 10%)	5
	Moderate (11 to 30%)	10
	High (31 to 100%)	15
Crop Density	Low	0
	Normal	5
	High	10
Rain in the Last Two Weeks	Less than 10 mm (0.4")	0
	10 to 30 mm (0.4 to 1.2")	5
	More than 30 mm (1.2")	10
Weather Forecast	High pressure	0
	Variable	10
	Low pressure	15
Regional Risk for Apothecia Development	None found	0
	Low numbers	10
	High numbers	15
Total Risk Points		


55
38

EDITORIAL

2018: rise of the robots

A SIGN OF THE TIMES

Artificial intelligence tool could help predict major forest fires

BY HELEN METELLA

Artificial intelligence – coming to an advisor near you

To make decisions that will result in great returns, financial advisors are adapting to the world of algorithms and statistics. But 'you're still going to need human beings to interact with people and explain what all this means'

Waymo's autonomous minivan

DRIVE

Cars of the Future

Three trends making waves in showrooms around the world

BY MARK RICHARDSON

AGRI-CULTURE

Farmers need high-tech

PRECISION AGRICULTURE

Digital agriculture: the next green revolution?

Data collection methods are still emerging but the transformation change in the industry is exciting, says farmer

BY BRIAN CROSS
SASKATOON NEWSROOM

The adoption of digital technology on the farm represents the next Green Revolution in agricultural production.

That's according to business leaders who attended the 2017 Farms.com Precision Agriculture Conference in Saskatoon Oct. 25.

"We absolutely think the next green revolution in agriculture is

DENISE HOCKADAY
CLIMATE CORP.

variety of sources and across various brands.

Customer support will also be critically important, she said.

Wade Barnes, a Manitoba farmer who founded Farmer's Edge, agreed that digital data collection and analytics has the potential to transform modern agriculture.

But much of that potential will be lost if the industry fails to develop products that offer "integrated

through one platform, from seeding and fertility rates to timing of herbicide and fungicide applications to optimal combine speeds and grain storage solutions.

The companies that develop the most flexible and reliable integrated software products will emerge as dominant players as the industry.

"I think the sad part about it is that when the dust settles, there probably won't be that many players left

see some great tech companies get swallowed up by bigger companies."

That said, it's an exciting time to be involved in agriculture, he added.

"I think we're (in a) really lucky time to be involved in agriculture right now because we're actually going to see another really big transformative change in the industry."

There was the green revolution, which I wasn't around for, but I

Precision ag evolving quickly

Companies are lining up to help farmers manage, analyze and integrate data collection

BY BRIAN CROSS
SASKATOON NEWSROOM

systems to cloud-based data analytics — is attracting a lot of prod-

business of farming. I want this tool to tell me what to do and when

so we could talk about what's out there ...."

Consider ….

1. *It's a risky game!*
2. *Understand the soil beneath our feet*
3. *Understand factors we have no control over.*
4. *Blend science with practical experience.*
5. *Expect more tools in the toolbox …*

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