

SOW COLD

Ultra-early wheat seeding system on its way

By Megan Hall

Marketing and Events Coordinator



Graham Collier takes notes in his ultra-early seeded field near Lethbridge.

Should growers in Western Canada plan to seed at sub-optimal soil temperatures?

Ultra-early seeding has become a hot topic at conferences and field days throughout the province. Meteorological data collection has established that an earlier frost-free period throughout Western Canada may allow farmers to examine the option of

seeding as much as two weeks earlier than normal.

Two experiments conducted by Agriculture and Agri-Food Canada research scientist Brian Beres in 2015 produced good indications that farmers can expect to move toward ultra-early seeding. Dean Spaner and Graham Collier of the University of Alberta joined forces with Beres and

added three additional experiments that further assess the practicality of early seeding, with the ultimate goal of providing farmers with a complete agronomic management package that supports this option.

The package will include recommendations on varieties that could perform well in these conditions, along with suggested seeding rates, seeding depths, fertility sources, ideal soil temperature ranges and comprehensive weed management strategies. Collier, Beres and Spaner plan to have the full management package available to farmers in 2020.

At the recent Cereals Innovation Symposium, held by the Alberta Wheat Commission and Alberta Barley in Red Deer, Collier noted that the optimal soil temperature range is anywhere between 2°C and 6°C, based on preliminary research results.

“Once we have the agronomic package fully developed, producers should be able to implement the ultra-early seeding system with minimal changes to their farm plan and minimal additional cost,” said Collier.

He suggested that farmers start by switching a couple of fields to an ultra-early system once the management package is distributed. This way, they can evaluate if it’s a fit for their operation. “Some fields will be better suited than others on the farm—ones that drain well, are easily accessible and that can be prepared for seeding in the fall.”

The potential benefits of ultra-early seeding are attractive. The ability to capture early-season snowmelt and rainfall is a clear advantage, encouraging a healthy crop and good yield.

Another major benefit to this system is the spreading out of labour and equipment resources during the busy spring seeding season. With many producers growing more than one crop, putting their wheat in the ground earlier than other crops may

help create better work-life balance on the farm.

Collier also remarked on the early canopy closure developed with ultra-early seeding. Once the crop is established, it can help suppress weed emergence in the spring and capture additional early-season growing-degree days. “More leaf area out earlier in the year can make better use of our long days in June, adding to yield potential,” he said.

“Currently, these results are all preliminary. But, with the first two projects’ data collection completed and the third, fourth and fifth projects with one year of data collection remaining, we are optimistic about how ultra-early seeding can benefit western Canadian farmers,” Collier said.

PROJECT PROGRESS

- *The initial ultra-early seeding projects evaluated differences between conventional spring-type cultivars and cold-tolerant, spring-type cultivars at a range of seeding dates and soil temperatures. As well, they determined the response of cold-tolerant wheat lines to manipulations in agronomic management at a range of seeding dates and temperatures.*
- *The final three projects investigating ultra-early seeding will evaluate fall-applied residual herbicides for early-season weed management; nitrogen sources and application timings; and identification of conventional varieties suited to an ultra-early wheat seeding system.*

WINNING WHEAT

During the 2017 growing season, the Alberta Wheat Commission (AWC) held its first-ever Wheat Yield Challenge. The contest featured two categories: irrigated and dryland. Up for grabs was the title of most productive wheat grower in the province. Each winner received a FarmTech pass and one full year of bragging rights.

IRRIGATED LAND



MATTHEW STANFORD
Magrath, AB

VARIETY:
AAC Gateway

YIELD:
113 bu/ac

“Planning is critical to success. This year, I was confident my ‘planned’ recipe would show results even before the yield challenge was announced in June,” said Stanford.

DRYLAND



ALFRED VANDELIGHT
Eggleston, AB

VARIETY:
AC Settler

YIELD:
100 bu/ac

“Balanced nutrition is a key to success; the rate of fertilizer doesn’t matter if you don’t know what is in your soil. Soil testing is vitally important to producing a good crop and no field is the same,” said Vandelight.

Early Seeding Varieties



Alberta Wheat
COMMISSION

CDC Titanium Maturity Rating ○.....E Early

CWRS Highlights

- High yield and excellent protein potential
- Moderate resistance to fusarium head blight (FHB)
- Recommended for high midge forecast areas in Western Canada



Resistance to:

Lodging: Good
Sprouting: Poor



Disease Tolerance:

- Stripe Rust: Resistant
- Leaf Spot: Moderately susceptible
- FHB: Moderately resistant

AAC Connery Maturity Rating ○.....E Early

CWRS Highlights

- Shorter stature and good grade retention
- Improved FHB rating
- Suitable for intensive management



Resistance to:

Lodging: Very Good
Sprouting: Good



Disease Tolerance:

- Stripe Rust: Resistant
- Leaf Spot: Intermediate
- FHB: Moderately resistant

Go Early Maturity Rating ○.....V Very Early

CWRS Highlights

- Large kernel size
- Good resistance to diseases
- Early maturity



Resistance to:

Lodging: Good
Sprouting: Poor



Disease Tolerance:

- Stripe Rust: Intermediate
- Leaf Spot: Susceptible
- FHB: Intermediate

5604 CL Maturity Rating ○.....E Early

CWRS Highlights

- High yield potential with early maturing and top grades
- Short stature
- Great standability
- Excellent resistance to diseases



Resistance to:

Lodging: Good
Sprouting: Good



Disease Tolerance:

- Stripe Rust: Insufficient data
- Leaf Spot: Moderately susceptible
- FHB: Intermediate

Thorsby Maturity Rating ○.....E Early

CWRS Highlights

- Broad geographic fit
- Resistant to strip rust
- Awnless



Resistance to:

Lodging: Good
Sprouting: Fair



Disease Tolerance:

- Stripe Rust: Resistant
- Leaf Spot: Moderately susceptible
- FHB: Intermediate





Agronomic conditions *are constantly changing.*



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at www.albertawheat.com



DID YOU KNOW:

The thirteenspotted lady beetle
can eat about **135 aphids**
in **24 hours**

**FIELD
HEROES**



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THINK BENEFICIALS BEFORE YOU SPRAY

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CHAIR'S MESSAGE

*Ensuring your voice
is heard*



Spring is nearly here, and soon we'll be getting ready to head back to the fields to start another season. While much of our focus will be on our farms for the next few months, I'd like to take a moment to recognize the hard work being done behind the scenes that helps us succeed.

Alberta Barley staff members are just like farmers—looking ahead, planning carefully and executing projects that will benefit farms across Alberta. Everything we do has you in mind, from meeting with researchers at field days and conferences to consulting with our research committee. We are also committed to funding research that has direct, tangible results on your farm. Head over to albertabarley.com/research to see some of the projects currently being funded.

While your farm gate may seem far from the political centres of Edmonton and Ottawa, Alberta Barley is there to

bridge this gap. Twice in the past year, we travelled with Team Alberta to Ottawa to fight for farmers and to make their voices be heard. As well, many of our board members have advocated for the interests of farmers at the provincial level.

The farm tradeshow season is over but consumer outreach activities continue year-round. You'll find Alberta Barley staff at both Calgary and Edmonton beer festivals as well as the Calgary Stampede, spreading the word about our world-class barley and the farmers who grow it.

In an initiative led by market development and policy manager Shannon Sereda, Alberta Barley has also created a strategic market development action plan. The results of this comprehensive study will inform our domestic and international market development work, and you can read more about it in the following pages.

Throughout the past winter months, we tested the possibility of merging Alberta Barley and Alberta Wheat Commission management staff, beginning with the appointment of Tom Steve as interim general manager of Alberta Barley in September 2017. The pilot project has now come to an end and we are approaching a final decision on moving forward with this plan. Stay tuned for further developments on this topic.

This season, while you focus on growing the best barley you can, Alberta Barley will focus on ensuring your voice is heard.

Happy seeding,
Jason





ADVENTURE AWAITS

Alberta Barley's Choose Your Own Adventure panel takes its show on the road

Premiering at Alberta Barley's Prairie Barley Summit (PBS) in December 2017, the Choose Your Own Adventure discussion panel focused on the novel and interesting ways people have chosen to participate in agriculture and expand their farming operations. From succession planning to creating a micro malt business to teaming up with a few friends to launch a brewery, our panelists have gained valuable experience in their entrepreneurial adventures. And as with all great adventurers, they have faced risks and challenges, but they have learned the tricks and tools of success.

After a successful showing at PBS, Alberta Barley decided to take the show on the road to FarmTech 2018. Illustrating the shape of farming in the 21st century, individual panelists discussed creating a value-added business, returning to the family farm after years working off-farm and partnering with like-minded farmers to fill a gap in a booming industry sector. Check out the stories of our moderator and three panelists here, and be inspired to take on your own adventures.

OVERHEARD AT PRAIRIE BARLEY SUMMIT

"I would give the panel 10 stars."

"I loved the theme of this panel. It really had a grassroots feel."

"This is one of the best presentations I've seen coming from young farmers in our industry."



Hannah Konschuh
Sage Bluff Farms
Cluny

It was a phone call from her parents that brought Hannah back to the family farm in southern Alberta from a Saskatoon ag research job. The family's succession plans were up in the air, and Hannah was the most likely candidate to take over the farm's operation. Despite knowing that the schooling and off-farm work she had been doing didn't directly translate to farming, the sense of accomplishment she felt working a full season from seeding to harvest made the choice to dive in an easy one.



Matt Hamill
Red Shed Malting
Penhold

The decision to open a micro-malthouse was driven by the Hamill family's love of beer as well as a need for succession planning—it was a way to get Matt and his brother Joe interested in the family farm again. The biggest challenge the Hamills faced was in balancing work, fun and family, something they've overcome through meaningful, honest communication. Having the whole family involved—including Matt's dad, mom and sister-in-law—has allowed each of them to contribute to the success of Red Shed Malting.



Josh Lubach
*Siding 14 Brewing Company
Ponoka*

Josh always knew he wanted to work on the farm after high school, but it wasn't until the family sold their poultry operation in 2012 and went all-in on grain farming that he found his niche in farm production. In 2015, looking for an exciting new challenge, Josh and his wife, Femke, launched a craft brewing business with partners Brent and Kari Tarasoff and Marc Shields. In June of 2017, they launched Siding 14 Brewing Company, a brewery and tasting room located in the town of Ponoka.



Carmen Sewell
*Catalyst LLP/Sewell Grain Farm
High River*

Carmen knew marrying into the Sewell family, owners of a fourth-generation grain farm, meant eventually taking over the operations. Assuming all the risks and stresses of running the farm while also working off-farm and raising kids isn't easy, but moving closer to a farm family lifestyle that maintains flexibility is the reward for making the move. In her work with Catalyst LLP, having an inside understanding of agriculture helps her relate to clients.



**Alberta
Barley**

PRESENTS

**FARMING IN
THE 21ST
CENTURY**

CHOOSE YOUR OWN Adventure

Our panel took place on Tuesday, Jan. 30, 2018, during the Alberta Barley power hour at the FarmTech conference in Edmonton. Here are some highlights from the event.



Moderator Carmen Sewell led this panel discussion between young ag-entrepreneurs whose farming careers have bucked the trend of traditional succession planning, adding on-farm value in new and innovative ways.





CUTTING-EDGE CROP SCIENCE

First Cereals Innovation Symposium highlighted research



The international cereal markets panel participants: Geoff Backman, Kevin Auch, Jason Lenz and Cam Dahl.

Hosted by the Alberta Wheat Commission (AWC) and Alberta Barley, and held in conjunction with the provincial agronomy update, the January 11 Cereals Innovation Symposium in Red Deer welcomed speakers working within the cereals research arena.

The evening of January 10, the symposium opened with a reception that featured a panel discussion on international cereals mission trips. Moderated by AWC business development and markets manager Geoff Backman, Alberta Barley chair Jason Lenz, AWC chair Kevin Auch and Cereals Canada president Cam Dahl spoke about their experiences promoting Canadian grains abroad as well as the importance of communicating with international buyers.

"We wanted to show that we are working hard to make sure strong export markets are available to accommodate the high yields Alberta farmers are producing," Backman said.

Alberta-based researchers including Harpinder Randhawa and Alicja Ziemienowicz with Agriculture and Agri-Food Canada (AAFC) Lethbridge, Breanne Tideman with AAFC Lacombe and Yadeta Kabeta with the Field Crop Development Centre in Lacombe spoke on cutting-edge research in variety development and agronomic practice that pertain to wheat and barley.

"Ensuring research and innovation gets from the lab to the farmer is important," Lenz said. "The Cereals Innovation Symposium was designed to do just that."

University of Alberta PhD candidate Graham Collier focused on the benefits of adopting ultra-early wheat seeding while Kevin Sich of Rahr Malting provided insight into the production of marketable malt barley.

University of Saskatchewan plant geneticist and wheat breeder Curtis Pozniak delivered a presentation on the exciting new technologies that will help wheat breeders produce superior varieties in the coming decades.

"These projects are the future of the cereals sector," Auch said. "We're looking at some exciting times ahead."

MEET THE STAFF



Irene Lano
Senior Accountant

A joint employee with the Alberta Wheat Commission, senior accountant Irene Lano is one of Alberta Barley's longest-serving employees. She has previously worked for Unilever, Heineken and in the oil and gas sector. Her current position represents her first foray into the agricultural and not-for-profit sectors.

An accounting assistant with her master's degree in banking and finance, since joining Alberta Barley in 2012, Irene received her Certified Management Accountant certification in November 2013 and moved into her current joint role.

Handling the preparation of financial statements and monitoring project spending, Irene has previously covered the maternity leave of chief financial officer Syeda Khurram, giving her the opportunity to work on the big-picture financials for both crop groups.

Outside of work, Irene spends time with her husband and their four children watching movies and enjoying family game nights. In addition, Irene is involved in her community as a Sunday school teacher and volunteers at her children's school.