

AGILE to Celebrate Project Success at Ag In Motion

To share in the success of the AGILE (“Application of Genomics to Innovation in the Lentil Economy”) project, the team will hold a beer and perogies reception at Ag In Motion 2019. The reception is supported by the Department of Plant Sciences and will start at 2 pm on July 18th at the University of Saskatchewan’s College of Agriculture and Bioresources exhibit booth (#328).

Since its launch in 2015, the AGILE project has generated a wealth of genetic resources which will allow the Canadian lentil breeding program to continue to deliver superior varieties for the industry. Because lentil is not native to Canada, lentils adapted to growing here are largely based on a limited genetic foundation. The AGILE project, therefore, focused specifically on answering what makes a lentil flower and maturing at the right time.

The University of Saskatchewan, in partnership with several international crop research institutions, conducted field trials of a global collection of lentil cultivars in 8 countries around the world. The project team also sequenced the genomes of two wild lentil species in 2017, less than 2 years after the releasing the sequence of the cultivated lentil genome (CDC Redberry). This solidifies Canada’s place as the world’s leader in lentil research and innovation.

The project has thus far generated valuable information to illuminate the underlying genetics behind important agronomic and quality traits. The use of molecular breeding and selection techniques developed under the project will help deliver improved varieties faster than ever before.

“We have already developed a series of molecular markers that will predict adaptation to different growing environments,” said project lead Dr. Kirstin Bett. “These markers will be implemented into the breeding program as soon as next year.”

Lentils are becoming increasingly popular in the Western world as a healthy food ingredient. A lentil perogy, developed in partnership with Genome Prairie and Red River College, was developed to help promote the incorporation of this plant-based protein into a traditional Eastern European staple food.

Ag In Motion attendees are invited to join the celebration on July 18th and enjoy some lentil perogies and a lentil ale (by Rebellion Brewery), while networking with AGILE research scientists.

About AGILE

AGILE is a \$8 million project that aims to provide Canadian farmers with faster access to better lentil varieties that will excel under Canadian growing conditions through understanding the genomics of lentil diversity. The project is led by the University of Saskatchewan and managed by Genome Prairie.

The project would like to thank its funders - Genome Canada, Saskatchewan Pulse Growers, Western Grain Research Foundation, Saskatchewan Ministry of Agriculture, and University of Saskatchewan – for the support of this important research endeavor.