PROVINCIAL PULSE UNIT HEAD MARK OLSON HONOURED WITH 2020 ALBERTA PULSE INDUSTRY INNOVATOR AWARD

The Alberta Pulse Growers (APG) selected Mark Olson, who continues to be instrumental in building Alberta's pulse industry, as the winner of the sixth annual Alberta Pulse Industry Innovator Award.

"Mark Olson has had a positive influence on pulse production for more than 30 years in Alberta," said APG Chair Don Shepert. "He has participated in nearly every aspect of production, extension, innovation, processing and marketing of pulses in Alberta. He continues to research and experiment with new pulse crops that could be added to Alberta crop rotations and further build Alberta's pulse industry."

Each year, APG recognizes a person or organization whose progressive thinking and tireless efforts helped build Alberta's pulse industry into the flourishing sector that it is today.

"It's really a genuine honour," Olson said on learning he had been selected to receive this year's award. "Focusing on pulses throughout my career has been easy because it is a positive crop in so many ways. These crops fix their nitrogen from the air reducing fertilizer costs and carbon footprint, are high in protein and nutrient dense, the growers I've worked with are optimistic and innovative, and best of all the crops put dollars in the pockets of growers making for more sustainable cropping systems."

APG Chair Don Shepert (right) presented Mark Olson with the 2020 Innovator Award.

Olson was raised on a mixed farm near Stony Plain (west of Edmonton). He earned a Bachelor of Science in Agriculture and Masters of Agriculture degree from the University of Alberta. He began working with Alberta Agriculture and Rural Development as a summer technician for special crops at the Crop Diversification Centre South, and then as an assistant district agriculturist in Barrhead and district agriculturist in Sangudo. Olson went on to specialize in pulses and special crops in many positions in several different areas of the province before and after gaining extensive expertise in direct seeding systems during a secondment to the Alberta Reduced Tillage Initiative. In 2011, he was asked to head up the Alberta pulse program within the Crop Research and Extension Division of Alberta Agriculture and Forestry (AF).

In addition to field pea, faba bean, lentil, dry bean and chickpea, Olson and his colleagues began agronomic research and value-added development (fractionation) work on

Olson checks soybeans grown near Namao during a crop walk in 2016.

a series of pulse crops never grown before in Alberta, and some that were never grown before in Western Canada, including lupin, mung bean, and winter varieties of pea, lentil, and faba bean.

"I am excited by innovation and the challenge of proving something can be done rather than being dismissive," he explained. "I was often told that can't possibly work or that crop can't grow here, but I truly believe it is the understanding or level of knowledge we have at the time that is the problem. The number of crops that fall into the pulse category make it a very intellectually stimulating area to work in. The farmers that grow pulse crops are leading edge, knowledgeable individuals for whom I have the utmost respect."

Olson said he has seen Alberta's small pulse industry of the 1980s grow to include millions of acres and be worth a billion dollars, if one takes into account annual farm gate receipts and the downstream economic benefits.

He said the biggest success story of all the pulses he helped to establish in Alberta is obviously field pea, which is the most widely adapted and grown.

"Although, Saskatchewan has larger pulse acres and gets the majority of credit when it comes to anything pulse related, it was Alberta folks that brought the dry pea we grow today to Western Canada," he recalled. "Prior to the mid-1980s, very little field pea was grown in Alberta or Western Canada and a large portion of what was grown was processing pea."

He explained that the dry field pea varieties being bred at the time (i.e. Century, Trapper, Triumph, Tara) were long vined (greater than two metres in length), normal leaf type with poor standability (especially in wet harvest seasons).

"Harry Arnot (Columbia Seeds), Joe St. Denis (grower at Morinville), as well as Blair Roth, Bob Park and Ken Lopetinsky from Alberta Agriculture facilitated the importation of European field pea genetics from companies such as Booker Seeds in the United Kingdom and Cebeco (now Limagrain) in the Netherlands," Olson recollected. "As well, Alberta Agriculture's Field Crops Branch in Lacombe assisted in several large screening trials. These first lines were short vine, semi-leafless, and in the case of the Radley green pea also had excellent bleaching resistance. It was the introduction of the semi-leafless characteristic, where tendrils replace the leaves, that was instrumental in providing a crop where the canopy knitted together resulting in better standability and as a result an easier harvest."

Olson (right) attended an international research conference in Morocco in 2018 along with (left to right) Dr. Manjula Bandara of Alberta Agriculture, Dr. Stan Blade of the University of Alberta and Dr. Jagroop Gill Kahlon of Alberta Pulse Growers.

Olson earned many accolades over the course of his career so far, including multiple Alberta Agriculture Teamwork Recognition Awards, Alberta Agriculture Performance Excellence Awards, and Premier's Awards of Excellence.

"For the research and demonstration work on-farm looking at pulse crops and later direct seeding in APG's Zones 2 and 3 we used whatever equipment the farmer had to seed, spray and harvest trials, which was a great learning experience as a young agrologist," he noted. "AF brought the labour, seed, inoculant, seed treatment and made up plot plans for large size replicated field trials. I really got to know the cooperator-farmers well and learned a whole lot about the slightly different ways of growing pulse crops in a successful way, but I could see what was common (or the absolute musts) between the systems if you were going to have any success. About 15 years into my career, a lot of that information and knowledge was captured in the *Pulse Crop in Alberta* manual which I co-authored and it won the American Society of Agronomy award that year for best publication."

As AF Pulse Crops Unit Head, Olson presented his research and participated in trade activities around the world including China, Portugal, Turkey, India and United Arab Emirates.

Olson expects the future of Alberta's pulse industry to include more new pulses to be grown by Alberta farmers and more fractionation, which builds on the work done by Alberta Agriculture that was "ahead of its time" in the early 2000s.

"I foresee the demand for the plant protein industry to continue which will mean even more pulse acres," he said. "I can see faba bean acres increasing as companies start to fractionate more than just field pea. I think this is also true for lupin. This is not the Australian lupin that many farmers think of, but European plant materials and we are seeing some high yielding varieties with good adaptation to Alberta. There really needs to be some strong market development in conjunction with fine-tuning of the agronomy of the crop."

Since receiving the Innovator Award in January, Olson has begun his own consulting business.

Alberta Pulse Growers celebrated its 25th year as a commission by launching the Alberta Pulse Industry Innovator Award and presenting the organization's founding president, Lud Prudek, with the first annual award in 2015. Since that time, the award has been presented to esteemed pulse researcher Ken Lopetinsky, life-long pulse supporter Blair Roth, Dr. Hans-Henning Muendel who developed numerous bean cultivars, and Kirsty Ross (Piquette) who was instrumental in building the field pea industry in northeastern Alberta.