



# PAY FOR PROTEIN

How Saskatchewan farmers are making a premium on their pea crops—and changing the global food marketplace



BY DELANEY SEIFERLING

**E**arlier this year, Kristjan Hebert got a call from an AGT Foods grain buyer offering him a premium for his yellow pea based on its protein content.

For Hebert, the Managing Partner of a 12,000-acre grain operation in Fairlight, SK, this was a no-brainer. He sold his entire 1,300-acre yellow pea crop to AGT and he hopes to be able to continue doing so in the future.

“We like the theory that we can get premiums for doing something different,” he says.

AGT is the first grain company in Saskatchewan to offer a “pay for protein” program for yellow peas, driven by a growing worldwide demand for plant-based protein.

The program allows the company to offer premiums to growers based on their crop’s protein content, says Daryl Chilliak, AGT’s Director of Grain Procurement.

This year, growers received premiums ranging from 15 to 20 cents a bushel but typically, that premium could range anywhere from 10-25 cents a bushel, depending on the year and other factors, Chilliak says.

Not surprisingly, this program was welcome news to growers across the province. AGT buyers started talking to growers such as Hebert about it earlier this summer and they had a very positive response, Chilliak says.

“It tweaked guys’ interest. We got to see way more pea samples than we normally would.”

To qualify for the program, growers were asked to send samples of their yellow pea to AGT’s office in Regina, which were then sent for further testing in AGT’s factory in North Dakota. If the sample met the minimum requirements, growers were offered a premium based on the protein content.

Hebert says that offering such a premium to growers is the best way to incent them to try new things in order to increase protein levels in crops.

“They’ve definitely piqued our interest in having some new goals on what we’re trying to accomplish with our crop,” he says. “We just need to get a better understanding of the relationship that’s creating the protein content in the peas.”

## What influences protein levels?

Normal levels of protein content for yellow pea usually fall somewhere between 21-23% in an average year, says Mehmet Tulbek, AGT’s Director of Research and Development.

However, those numbers will vary based on a number of factors, most significantly weather patterns throughout the growing season.

“With higher temperatures during pod and seed development, we may see protein levels closer to 24-25%,” Tulbek says.

Other factors such as soil quality and the amount of fertilizer and nitrogen in the soil can also affect levels.

This year saw pretty good protein levels in crops due to the hotter, dryer weather, Chilliak says.

“Levels were pretty good everywhere because it’s been a dryer year. Typically, we see the higher levels down south where, because of the heat zones and lighter soil, the crop comes in quicker.”

AGT also recently launched a program tracking protein levels across the province and correlating them to regional growing conditions, Chilliak says, which will make it easier for growers to understand their protein levels going forward.

“We started mapping the entire province, tracking all the different soil zones from 1-10, and we will look at the average of all the samples in those zones so that next year we can have a better idea of which zones generally have higher protein content.”

But beyond the generally known factors that contribute to protein levels in pulses, Hebert says he will use some of his on-farm technology to explore the relationship between protein levels in pulses and growing practices. This technology includes weather stations, soil tests, yield monitors and NDBI pictures in crops, which produces data he can then analyze to come up with conclusions.

“We’re big believers in having all the data on farms,” he says. “Number one, you have to get good data, and number two you have to make good decisions based on that data.”

“It’s that data that’s going to allow us to push these crops farther when it comes to yield and nutrient content.”



## Demand going forward

Currently AGT’s program is driven by North American demand for yellow pea protein, which the company manufactures in its North Dakota factory and then supplies to food manufacturers in the United States.

The biggest demand for this protein comes from pet food manufacturers, who are looking to complement the more traditional pet food protein sources such as lamb, chicken and fish with plant-based protein in order to increase the health benefits of pet food, Tulbek says.

Research has shown that including vegetable-based, grain-free protein sources in pet food can lower rates of disease and long-term deficiencies in dogs and cats and can also increase their life expectancy.

Another growing market for pea protein is the human snack food market.

This demand is driven by growing consumer demand for healthier food products. Pulses offer many of the health benefits consumers are looking for, as they are proven to be a good source of protein, fiber and essential nutrients. Research has also proven that pulse consumption is good for your heart health, can lower your risk of certain diseases, and offers benefits in terms of reducing postprandial glucose levels. This demand has also been bolstered by the fact that technology now allows for the removal of the strong pea taste in the pea protein.

Because of these factors, demand for plant-based protein sources will only continue to grow, Tulbek says.

“You’ll see more and more of these products in the human and pet food market in coming months and years,” he says.



AGT’s pulse ingredient production facility in Minot, ND

Learn more about AGT Foods’ Pay for Protein program by contacting their sales team at 1-844-248-4AGT (4248) or visiting [www.agtfoods.com](http://www.agtfoods.com).