Western Innovator: Putting wheat samples to the test

Bon Lee is known for two things — wearing two different colored shoes (which he says he does for fun), and putting together weekly quality reports during wheat harvest, measuring protein levels, test weight, kernel moisture and gluten content.

By GEORGE PLAIVEN  ·  Capital Press
Published on January 4, 2018 9:18AM

Wheat Marketing Center laboratory supervisor Bon Lee demonstrates the falling number test for starch damage. “The trade is interested in all these numbers to see which area produces the quality they want,” he said.

As laboratory supervisor at the nonprofit Wheat Marketing Center in Portland, Bon Lee’s job falls somewhere between data technician and pastry chef.
Not only is Lee responsible for tracking wheat quality across the Northwest, but many of the samples he collects are put to the ultimate culinary test in the center’s product innovation kitchen, making everything from noodles to tortillas.

“Product evaluation is probably the most important part of what we do,” Lee said.

One recent project had Lee and his staff bake nearly 60 Japanese sponge cakes using soft white and soft red wheat samples sent in from Pullman, Wash., and Wooster, Ohio, which they compared to a control flour from a Japanese mill.

“Our findings help determine if a variety is good to release commercially,” Lee explained.

Up to 90 percent of soft white wheat from the Pacific Northwest is exported, which is where Lee and the Wheat Marketing Center come in with the latest data to keep overseas customers informed.

Housed in the old Albers Mill overlooking the Willamette River, the Wheat Marketing Center opened in 1989 with $6 million in federal money secured by former Oregon Sen. Mark Hatfield. The center gets most of its funding today from wheat commissions in Oregon, Washington, Idaho, Montana, North Dakota, Colorado and Nebraska.

Lee, who was born in Japan to Korean parents, joined the center in 1998 after starting his career in the processing side of agriculture, including stints at Hoody’s snacks in Beaverton, Ore., and the Pendleton Flour Mills in Pendleton, Ore.

At the center, Lee is known for two things — wearing two different colored shoes (which he says he does for fun), and putting together weekly quality reports during wheat harvest, measuring protein levels, test weight, kernel moisture and gluten content.

“The trade is interested in all these numbers to see which area produces the quality they want,” Lee said.

To get those numbers, Lee runs hundreds of flour samples through a battery of tests using high-tech equipment such as the Glutomatic, which looks like an espresso machine but actually uses a 2-percent saltwater solution to separate gluten from starch. Then there is the Extensograph, which stretches dough to test its strength and elasticity.

Each machine cost between $50,000 and $70,000. Most are sponsored by the partner wheat commissions.

Blake Rowe, CEO of the Oregon Wheat Commission, said the data they get in return is worth the investment.

“It’s probably the best data, what (Lee) reports every week,” Rowe said. “He puts those out so we can keep a running track of what harvest looks like, and what quality looks like.”

Steve Mercer, spokesman for U.S. Wheat Associates in Arlington, Va., said the data Lee generates is “absolutely essential” for marketing wheat overseas.

“Bon does a wonderful job on this analysis,” Mercer said. “You can just tell he enjoys his work.”

Lee said it is a great feeling to help wheat farmers, traders and breeders.

“People are very nice in the grain industry,” he said.

Bon Lee

Occupation: Lab supervisor at the Wheat Marketing Center, Portland

Age: 60

Education: Bachelor’s degree in food science, Oregon State University, 1983
Hometown: Vancouver, Wash.

Family: Wife, Suki, and son Dean

2007 Freightliner M2-106

mccoyftl.com

24 ft. Box Truck, 176K Miles, 190HP CAT C7

Excellent Grazing Land

wallowacountybrokers.com
With 75 acres tillable drylands farm. Several ponds for livestock water. Enterprise, OR

Real Estate Consulting & Commercial Appraisal Services
powellbanz.com


Farm Production Manager.
hansenagriplacement.com

Let Us Help You Find a New Job!