## 100+ years of quality development – Nebraska Crop Improvement Association

Article by Caroline Brauer

On a farm outside Hemingford, Neb. more than 120 farmers ranging in age from pre-teen to their 70's congregate inside a machine shed eating donuts and drinking coffee; conversation topics range between local sports, the weather, farm equipment, the markets, property taxes and the day's upcoming guest speakers. These farmers have gathered at the Cullan Seed Farms' 26<sup>th</sup> Annual Customer Appreciation Day to discuss and prepare for the upcoming wheat planting season. Among them walks a middle-aged gentleman by the name of Steve Knox. Casually dressed in jeans and a button down shirt, his unpretentious manner and quick smile allow him to mingle easily with the group. If you didn't already know, it would be hard to guess he leads an organization that has been helping farmers in Nebraska for more than 100 years: the Nebraska Crop Improvement Association (NCIA). In fact, the NCIA operates much like its leader -- unknown and unheard of by most outside the agriculture industry. Yet the organization plays a huge role not only in the wheat industry, but in the production of other commodities in Nebraska as well.

"Because certified seed isn't in the name, a lot of people don't know what we do," said Knox.

A small non-profit entity, NCIA manages the certification of crop seeds, sets and monitors parameters to guarantee the identity and purity of certified seed varieties, shares with the public and farmers who certified suppliers are, and provides education opportunities and information to help improve agronomic practices of farmers in the state. In short, the NCIA guarantees farmers they can buy and plant certified seed with confidence.

The NCIA started in 1902 as the Nebraska Corn Improvers' Association. Its first objective included finding ways to improve the yield and quality of corn. But much like the farmers it represented, the association evolved and adapted over time. The organization incorporated in 1907; in 1911 a State Seed Analyst position was added with the adoption of the Nebraska Pure Seed Act; after much discussion, the name changed in 1920 to the Nebraska Crop Growers' Association. But 1921 saw the first steps of the association becoming what it's known for today.

The Nebraska Crop Growers' Association began certifying seed in 1921. The process had no legal status at the time, but operated similarly to the processes of today. However, in 1931, the Nebraska House of Representatives passed H.R. 67, a state seed law which provided for the certification of seeds and plant parts intended for propagation or sale in Nebraska. The law specified that the certification program would operate on a self-supporting basis. The Nebraska Crop Growers' Association was designated as the official agency to implement the law and certify small grains (like wheat), alfalfa, corn and sorghum. In later years soybeans, field beans, grasses, small-seeded legumes, millet and turf grass sod were also added to the program. And in 1942, the organization name changed to what it's known as today – the Nebraska Crop Improvement Association.

"It always amazes me as to the vision many producers had at the turn of the century," said Chris Cullan, a fourth-generation wheat farmer and certified seed producer. "They understood the value of access and control to preserve good things like seed and enforcement through accountability." Today the NCIA operates out of the Plant Science Hall on the University of Nebraska-Lincoln East Campus. Members pay fees for services that fund both the office and seed lab. According to Knox, being self-funded is important for NCIA as it allows the association to remain independent.

"We're an unbiased, not for profit organization," he said. "We do unbiased inspections. We're out there giving everybody the facts of what we see in the field and that's a benefit to our growers. They know what's out there and that they're selling or buying quality seed."

The addition of the seed lab in 1941 also benefitted the organization. There NCIA can test varieties for issues like germination, purity (no noxious weeds), diseases, test weight and seed counts. In fact, the NCIA lab is recognized as an official member of the Association of Official Seed Analysts. NCIA is also a member of the Association of Official Seed Certifying Agencies, a group of 46 organizations across Canada, Argentina, Chile, Australia and the United States that meet yearly to set base or minimum standards for production of certified seed. NCIA is the only member of AOSCA to have a lab recognized as an official member of Official Seed Analysts.

By definition, certified seed in Nebraska must "meet minimum standards for varietal purity, germination, mechanical purity and be free from certain diseases and objectionable weed seeds." All certified seed varieties in Nebraska are inspected in the field and tested in the lab before they can get a blue tag indicating their passing grade. Farmers growing certified seed must follow set guidelines regarding what can and cannot be grown in a field prior to planting certified seed, what types of irrigation water can or cannot be used, buffer distances of certified seed fields from other fields containing that crop type, control of weeds and treatment of diseases. Then samples of the crop must be sent into the lab for testing at harvest. Policies of the association are managed by a ten-member board of directors: seven elected directors who are active NCIA members and three ex-officio members representing the Nebraska Seed Trade Association, the UNL Department of Agronomy and the Institute of Agriculture and Natural Resources. All officers are elected annually by the board.

"Having an association that is policed by a local board of their peers provides effective policies," said Cullan.

Cullan supports ensuring local representation and information exists for producers in his area. Every year he hosts a Customer Appreciation Day where farmers in his area gather to discuss and learn about seed varieties and agronomic issues from industry leaders like Knox, wheat breeders, plant pathologists, entomologists and extension agents. Several generations of his family were also certified seed producers. To Cullan, the standards and regulation set forth by NCIA for certified seed are important.

"Wheat production has a challenge already where we don't have some of the genetic enhancement in the form of GMO's like other crops," Cullan said. "The crops harvested from certified seed are proven to be higher yielding than 'bin run seed.' Not having the services and enforcement that NCIA provides, it is obvious that poor genetic purity and quality concerns from weed infestation or germination would be detrimental to the profitability of wheat production."

However, the benefits of certified seed and the work of NCIA aids more than just farmers. They're an important selling point on quality assurance to customers and end-users as well. Royce Schaneman serves as the executive director for the Nebraska Wheat Board, the state check-off entity whose mission

includes domestic and international marketing. He said the work of NCIA is often highlighted when the organization brings international trade teams to visit.

"Wheat producers in both Nebraska and the United States pride themselves on offering consistent, highquality grain," Schaneman said. "We're able to take these international customers, show them a seed farm, show them seed cleaning equipment, explain how the Crop Improvement and certified seed process works, and pitch that our producers are focusing on quality all the way from the lab to the final product we harvest and ship."

It's a process and a story that many international customers have indicated they appreciate.

"Every time we have a trade team in the state and they see the quality and cleanliness of the grain coming out of the combines, they all say, 'we want this,'" Schaneman said. "When we're able to tell the whole story, it's another layer of assurance that our farmers care about the product we're trying to sell."

But Knox also wants people to know NCIA does more than certify seeds. "We're not strictly certified seed," he said. "We do quality assurance. We'll work with any company to set up a quality plan so they can sell quality seed."

NCIA also conducts phytosanitary inspections, assists with Identity Preserved programs, and provides educational activities to producers on production practices and quality seed benefits.

"I can say without a doubt, that the Nebraska Crop Improvement Association is a key player in helping us maintain a strong, viable wheat industry in our state," said Schaneman. "The organization's work benefits producers, buyers and consumers."

###