

Views from VanDeWalle

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Innovative Youth Corn Challenge Contest 2019 Results

Science, technology, engineering, and math (STEM) careers are in high demand and will continue to be in future years. To engage youth in crop science based education, the Innovative Youth Corn Challenge (IYCC) was created as a partnership between the Nebraska Corn Board and Nebraska Extension. Since the Innovative Youth Corn Challenge program's inception in 2012, 53 teams have participated in the program with 32 teams successfully harvesting and analyzing their plot data. A total of 148 youth have participated. This contest, open to 4-H members or FFA members, guided participants through all aspects of corn production, as well as agricultural careers related to corn production.

The winning team from the 2019 growing season was the Kornhusker Kids 4-H Club which included Kaleb and Landon Hasenkamp, Matthew and James Rolf, Levi Schiller, Ian and Payton Schiller. They worked with the UNL Project SENSE on an in-season nitrogen management program comparing using in-canopy sensors, a drone MZR treatment, or their standard grower treatment. Their results showed that the grower strips had the highest yield of 256.6 bu/acre but cost the most. The MZR treatment yielded 238.67 bu/acre. The Project SENSE treatment yielded 245.5 bu/acre and had the best return on investment. Also, it is important to note is that this team randomized their treatments and had 3 replications of the plots which is important in figuring out the statistical significance. Their project sponsor was Chris Schiller.

Receiving second place was the Allen-Wakefield FFA Chapter which consisted of Katie Bathke and Ashley Kraemer with Jeff Geiger as their sponsor and Josh Batenhorst as their advisor. They wanted to test a polymicrobial solution for bulk fertilizers called Nachurs Rhyzo-Link LF. The hypothesized that the treated plants would yield better due to the five Bacillus strains creating a better environment for the roots. They found that the Rhyzo-Link plot had a yield of 243 bu/acre compared to 240 bu/acre for the control, with five replications.

Third place went to the Rising Stars 4-H Club from Platte County which consisted of Kade and Isaac Stromberg with Brad Stephens as their sponsor. They tested seeding a blend of two hybrids compared to each planted separately. They had two replications and found that the blend of Pioneer 1197AM with Dekalb DKC60-88RIB yielded 245.48 bushels/acre, while the 1197 by itself yielded 243.99 and the 60-88 yielded 240.29 by itself. This team also took advantage of an offer from Crop Metrics to have a free soil water sensor placed in their field to monitor irrigation scheduling.

Other teams who completed their plots were the Oakland-Craig FFA team of Joe Monson, Aiden Jorgensen, Ryan Smith, Cole Buress, Hannah Mosemen with Kylie Penke as their sponsor. They tested Envite seed treatment, which is supposed to help non-legume plants fix nitrogen to see if there would be an increased yield when the nitrogen rate on the entire plot was reduced by 40%. They found that the Envite plot had a yield of 232 bu/acre compared to 229 bu/acre for the control.

Also finishing their project was Shelton FFA with Jacob Synder and Andrew Rayburn and Hannah Horak as their advisor. The main topic of their research was a starter fertilizer with a microbial catalyst called Nachur's Rhyzo-Link 9-15-3. They had 2 reps and found that the Nachur's



Rhyzo-Link yielded 230.25 bu/acre at a cost of \$9.95 per acre and no treatment yielded 224.4 bu/acre.

Other teams that participated but due to various circumstances were unable to finish their project included Adams Central FFA Chapter, Ord FFA Chapter and the Golden Gate Clever Clovers 4-H Club of Washington County.

As a team, youth worked with an adult mentor throughout the process. Mentors can be extension faculty, ag teachers, or other qualified agronomy professionals.

Other awards handed out during the banquet held on UNL's East Campus included:

- The Extra Mile Award went to the Rising Stars 4-H Club.
- The Innovation Award was presented to the Kornhusker Kids 4-H Club.
- The Sustainability Award went to the Rising Stars 4-H Club. They utilized the Field to Market tool which is a leading multi-stakeholder initiative that is working to unite the agricultural supply chain in defining, measuring and advancing the sustainability of food, fiber and fuel production in the United States.

To participate in 2020, youth must complete and return an entry form by March 15th to the Fillmore County Extension Office in Geneva, NE. Forms can be downloaded at <http://cropwatch.unl.edu/youth/cornchallenge>. For more information, contact Brandy VanDeWalle at brandy.vandewalle@unl.edu.