2020 Kernza call series: Current and prospective growers, industry, partners

Date: February 24, 2020

Attendees: Jim Anderson (UMN Kernza breeder), Jess Gutknecht (UMN soil scientist working in Kernza), Jacob Jungers (UMN Kernza agronomist), Connie Carlson (UMN FGI Commercialization Team), Colin Cureton (UMN FGI Commercialization Team), Tessa Peters (TLI Commercialization Manager), Prabin Bajgain (UMN Kernza breeder), Amy (farmer, Ottertail City), Josie Daniel (organic farmer, MT), Lynn Huston (Becker County), Kris Kimber (Dakota Cty), Sarah Jennin (North Dakota), Justin Honebrink (current Kernza grower, Deer Creek MN), Doug (City of Edgerton), Peter LaFontaine (FMR), Bill Jokela, Brandon Dingman (current Kernza grower, two plots, aggregated 2019 harvest), Al Kraus (CRWP), Brad Gordon (Great River Greening), Suzanne Rhees (BWSR), Justin (Alberta Canada, Farmer), Christopher Abbott (Sprowt), Dale Anderson (Cambridge MN).

Justin Honebrink:

- What is the potential yield?
 - Colin: Field trials so far average 500/lbs/acre out of the field, max we say was around 800 lbs/ac, low was 350-400.
 - Jake: These fields were not grown with nitrogen management, yields can be increased with nitrogen, 60-80lbs/acre; Ideal conditions: 800 -1100lbs/acre.
 - Colin: Forage yield several tons of material. 2-4tons of forage per acre, with relatively good forage value.

Cleaning before sale?

- Colin: There is a cleaning & dehulling process to get to finished grain
- Sale price?
- Colin: Kernza has sold in recent years in a range from \$3.50/lb (non-certified organic) to \$7/lb for certified organic.
- How many pounds/bushel?
 - o Don't have a consistent bushel wt yet. Staying in the lbs.
 - o Grower in MT, in the field 28lbs test weight.

When you combine, how do you do it? Straight? Sickle?

- Jake: We are still figuring this out. The plant still shatters and recommend swathing at higher moisture and let dry down in windrow. Have been doing some straight cutting, works if you can wait for seed to mature. If you have the ability to dry grain then you may be able cut it little earlier.
- Stripper Head?
 - Jake: We saw some nice results.
 - Doug/Edgerton, agree that it worked pretty good after we got the settings right. 4-5miles/hour, so we can get through the field faster.
- Jake: When to harvest is a question and is dependant on the equipment. We are also looking at moisture content of the seed.
- Colin: we are also looking at balancing the harvest equipment and seed/grain quality

What level of moisture for storage?

- Jake: we've been shooting for 13%
- Colin: which means there's often a dry down period after harvest.

Tessa:

- Over the next few months, growers will be able to access more information on Kernza.org.
- Working on a grower network. June 14 16, Kernza Conference in Kansas.

Justin, overview of his 2019 planting:

• Crop Established: went well, 12" rows, grain drill.

Can you plant Kernza in the Spring?:

- Jake: We know grain yields decline after 2 years, by year three we see a drop (not always consistent).
- What we've noticed with Spring planting is that you don't get a fall yield, but it does count
 toward the decline. This was with old germplasm and we haven't done a spring planting
 since. We don't have strong evidence to make that recommendation yet.

Christopher Abbott (Overview of sprowt Labs activity/interests in Kernza):

- We are a Kernza distributor. We are starting ship at 10, 25, 50lbs. Our grain has been processed elsewhere.
- We recently were awarded a crop research grant to research kernza malting.

Jake, and announcement:

- There will be a panel of Kernza speakers at MOSES.
- Tessa Peters & Jake will be at PFI in Springfield, Illinois
- Presentation from Northern Plains will be posted on Youtube

Dale Anderson:

- Is there a licensing agreement I have to fill out with Land Institute to grow.
- Colin: Yes, the process is to start with the TLI; Colin will follow-up.

Kris Kimber:

- We are licensed to grow from 2019 and interested to grow in 2020. Do I need to set up a second account?
- Colin -- You shouldn't need to set up a second account with TLI, but you should enter
 your 2020 seed request in the same form as everyone else. There is an option to check
 a box for current growers.

What have seed inquiries been like this far?

- Colin: 3-5 inquiries have officially come in so far, 30-50 acres each (approx. 5K lbs). But I've heard from maybe 20 or more people, lots of interest making its way to me.
- Tessa: I see 30+ inquiries a week. There is a high demand. Hoping the TLI will have more seed this fall.

Brandon: Can you do something to connect growers with end-users?

- Colin and Connie: Work to develop marketing is ongoing. Multiple conversations taking
 place to formalize aspects of kernza marketing. Connie is aggregating business interest,
 cultivating those relationships. Work to connect Kernza growers with existing grain
 marketing channels is in development, have some grower leadership working on that.
 Don't want to totally drive it as UMN.
- Christopher: We are operating at pilot scale in Burnsville and working on a larger scale center for greater distribution.
- Tessa: In Kansas there are growers aggregating grain, they are finding their own markets. There are similar efforts to bring about more processing infrastructure; looking for more partners to do this.

Dale:

- Is there a processor available for dehulling the grain? He has a market connection with a distillery and wants to know how to process the grain. May not need to dehull?
- Colin: There is one dedicated Kernza processing line in ND so far, but not super interested in a toll processing role. AURI is finalizing cleaning and processing specs presently, and UMN is working with them to engage existing seed cleaners and grain processors to add Kernza in 2020 and beyond. In talks with 3-5 groups on this. Expect that by the time people that plant in 2020 harvest in 2021, we should have options.