Kernza Spirits Catching On

Kernza, a perennial grain with a distinctive taste, is catching on with distillers and brewers. The soil-health-building small grain is showing up in beer and spirits throughout the Midwest and western U.S.

"The distillers and brewers who have tried it all comment on the unique taste," says Katharine Chute, Forever Green Initiative. "It offers a product with a different flavor and an environmental story of revitalizing the soil and protecting water quality."

Chute and her associates at the University of Minnesota's Forever Green Initiative are well-versed in Kernza. They've developed new varieties and helped producers fine-tune their agronomic practices. They also work with companies interested in bringing Kernza products to the marketplace.

"The supply chain is still in the early stages," says Chute. "Kernza has only been in commercial production for four or five years, but a lot of it is already stored on farms."

Minneapolis-based Tattersall Distilling is working with the raw Kernza. Co-founder Jon Kreidler reports that Kernza makes a unique whiskey.

"We've been working with Kernza for about six years," says Kreidler. "During the first few years after distilling, it had some brandy notes and nutty flavors. The brandy notes died off as it aged, but the nutty flavor stuck with it."

Tattersall released a barrel of 100 percent Kernza whiskey in 2024. The goal was to showcase its taste and how it could be used.

"We released 250 bottles, and the response was great," says Kreidler. "It sold out almost immediately. We have a few more barrels of five-year-old Kernza whiskey and plan to play around with it, probably blending it in a bourbon."

Tattersall distilled more Kernza whiskey this past fall. It's aging in barrels and will likely be mixed with corn whiskey.

"Kernza whiskey has a nice flavor, not too intense," says Kreidler. "I think mixing it with a corn whiskey will bring out the sweetness and have a broader appeal."

Tattersall Distilling in Minnesota is making Kernza whiskey.

Another reason to blend Kernza with other spirits is its cost. Current varieties produce lower yields than other grains, so farmers must sell it at a higher price to make a profit.

"If you make whiskey with 100 percent Kernza, it's too expensive," says Kreidler. "Most consumers won't pay a high price for a young whiskey, even if it's unique."

Kreidler plans to use Kernza whiskey as 15 to 20 percent of a blend with other whiskeys. "Perhaps we'll make a Kernza blend bourbon with a nutty note on top," he says.

However Tattersall uses it, new Kernza blends will be released in 2025. "Kernza is gaining so much interest," notes Kreidler.

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Photo courtesy of Alpen High Performance Products in collaboration with photographer Kimberly T.

Using EcoBlox instead of traditional wood frames adds about 15 percent to the total wall assembly cost. However, Morey says the long-term benefits of masonry construction often offset this.

Fire-Resistant EcoBlox Also Insulate Structures

Historically, Compressed Earth Blocks (CEB), such as adobe, are used for building in hot climates. But they're also a great option in colder climates, says Lisa Morey, a civil engineer and owner of Colorado Earth.

Her company makes EcoBlox from sand and clay fines, a byproduct of a local granite quarry, plus a small amount of hydrated lime for water protection and added strength.

Regardless of climate, its advantages, including fire resistance, have drawn attention to this alternative building material. Morey saw an uptick in interest after a 2021 fire destroyed 991 structures in Boulder, Colo.

During a fire rating test, an EcoBlox wall was exposed to a 1,800-degree furnace for eight hours. There was no sense of heat on the other side of the 10-in. thick wall. The only change was slight discoloration and a 1/4-in. ceramic-like finish on the outside.

Morey developed two ways to build with EcoBlox and add an insulating R-value. The first was to wrap the building with insulation and add stucco. The second method leaves a 3-in. cavity between two EcoBlox walls filled with perlite, a lightweight, naturally occurring volcanic rock that insulates. Interior and exterior walls can be plastered or finished however the customer wants. The resulting walls have an R-17 value and thermal capacity to store energy.

The buildings are fire-resistant, thanks to their design, which avoids external flammable materials and attics. They also have closed soffit systems, metal roofs and high-performance windows.

EcoBlox are also resistant to mold, bugs and bullets, Morey adds.

Shortly after earning her civil engineering degree, while studying architectural design in Auckland, Morey met Vince Ogletree, an earth builder. She worked with him for five years before he died of cancer. When she returned to the U.S. and ended up in Colorado, she felt it was the right environment to create compressed earth blocks and set herself apart by making earthen buildings for colder climates.

EcoBlox come in two sizes: 6 by 12 by 3 1/2 in. and 4 by 12 by 3 1/2 in. At about 16 lbs., they're lighter and easier to handle than traditional adobe blocks.

Her business ships anywhere in the U.S. Morey would like to expand to other regions where EcoBlox can be produced locally.

Using EcoBlox instead of traditional wood frames adds about 15 percent to the total wall assembly cost. However, Morey says the long-term benefits of masonry construction often offset this.

"We need a cultural mind shift. My work is focused on advocacy and training on how to work with this material," she says. "That includes educating home builders, commercial builders and developers."

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Hard-To-Find Yellow Submarine Tomato Is Flavorful

Petra Page-Mann from Fruition Seeds, Naples, N.Y., says the Yellow Submarine tomato checks all the boxes gardeners look for in a new variety. It was developed by Phillip Griffins at Cornell University and released in 2024. Page-Mann was excited to partner with Cornell and add it to the 350 seeds she propagates.

"One of the things I love about it is its creamy texture," she says, adding the small tomatoes, which are tasty and fresh and ideal to dehydrate for salads year-round. Paste tomato characteristics give it a nice density for a cherry-size tomato.

The flavor is surprising also for a yellow tomato. Though lower in acidity, the Yellow Submarine has a robust tomato flavor. The 1 1/2 to 2-in. long fruits resemble the shape of a submarine. Page-Mann says the tomatoes are ready in 68 to 75 days, produce well and are crack-resistant.

Like all her seeds, they're heirloom, so they're self-sustaining and can be saved. In 2024, orders came from all over the U.S.

"After selling and shipping seeds for 12 years, Fruition Seeds has transformed into sharing seeds to cultivate a gift economy," Page-Mann says. "Though we no longer sell or ship seeds, if you'd love to receive Yellow Submarine seeds to sow and share in your community, look at our events page and join in our events on the farm and across the Northeast where seeds are shared as gifts."

The 1 1/2 to 2-in. long fruits resemble the shape of a submarine. Page-Mann says the tomatoes are ready in 68 to 75 days, produce well and are crack-resistant.

She also encourages growers to develop relationships with growers who may have seeds and are willing to share them. Page-Mann's weekly email newsletter offers stories and invitations from the farm, nurturing relationships.

"We're known for regional adaptation, and our model is to share growing and seed-saving information. We're a seed company trying to do something different," Page-Mann says.

The Yellow Submarine tomato propagated at Cornell differs from a pear-shaped variety of the same name available in Europe.

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