Life-long producer Edmon Perkins wasn’t sure what to expect when he planted tanchi corn, a Choctaw heirloom crop, in the garden plot that runs along the side of his Hughes County home.

“We planted it, and it got up tall. It got taller and taller and wound up 15 feet tall, which is amazing. It had huge brace roots coming down,” he said. “The corn is really good tasting. It’s good for you, full of vitamins. It’s basically history, the flavor of history.”

Perkins is among a growing number of producers willingly joining a broad Choctaw Nation of Oklahoma initiative centered around the importance of revitalizing heirloom Native American crops like the tanchi corn.

As part of the initiative, the Choctaw Nation is working with the Oklahoma State University Center for Sovereign Nations and OSU researchers, including multiple Oklahoma Cooperative Extension specialists with the Division of Agricultural Sciences and Natural Resources.

The effort fits perfectly with OSU’s land-grant mission of teaching, research and Extension, as well as DASNR’s mission to enhance the lives and communities of Oklahomans of all ages.

The clearest evidence yet of the steady evolution of the heirloom crops project can be found in a newly constructed greenhouse on the grounds of the Choctaw Nation capitol at Tushkahoma in Pushmataha County.

Completed in December 2017, the greenhouse is funded by a four-year U.S. Department of Agriculture Community Food Promotion grant administered by the Choctaw Nation Agricultural Outreach Department. OSU is partnering with the Choctaw Nation to study the cultivation, production, nutritional value and commercialization of traditional crops.

The structure will be used to grow threatened Choctaw heirloom crops in a protected environment. One goal is to create stable seed bases that can be shared with tribal families interested in growing these traditional crops.

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Some of the crops we’ll be growing here are incredibly threatened,” said Ian Thompson, tribal historic preservation officer for the Choctaw Nation of Oklahoma. “If we did it as we have traditionally, in an open field, there’s every chance a rabbit could come along and make that crop extinct. OSU has experience growing in different, more protected conditions and they will be sharing that with us to ensure we’re able to get those growing again.”

The greenhouse will include Choctaw varieties of a dry bean, hominy corn, flower corn, squash, tobacco, lambsquarter and a variety of field pea brought from Mississippi by Thompson’s family.

The project holds special meaning to Maudell Meshaya, a member of the Choctaw Nation of Oklahoma, who contributed a few precious seeds of a Choctaw bean variety that, hopefully, also will be grown in the greenhouse.

“It came down from my grandfather, who gardened a lot. He grew everything. He had those beans, and he passed them on to my grandmother, then my mother and then to me,” she said. “I was able to grow them in the 1970s, so to carry it on would be wonderful.”

The greenhouse initiative is part of a much larger effort, the Preserving Choctaw Culture by Growing Hope project, which also is
funded by an USDA CFP grant administered by the Choctaw Nation Agricultural Outreach Department.

It is aimed at helping tribal nations in Oklahoma develop their own food systems around three general purposes – cultural, nutritional and commercialization.

Many traditional crops are used in culturally significant powwows, festivals and ceremonies. Following a diet rich in traditional foods has been shown as healthy and effective in addressing diabetes, obesity and other conditions prevalent within Native American populations.

“The idea is focused on local foods, but with the understanding that in Oklahoma we’re unique because of all the tribal nations here and local foods are especially important to them,” said Joshua Ringer, visiting assistant professor in OSU’s Department of Horticulture and Landscape Architecture. “What OSU is offering is help providing research into these traditional crops and how they can be used for whatever purposes tribal nations prefer.”

Thompson and his wife Amy began the revitalization project about six years ago as part of research on indigenous Choctaw foods and an effort to be healthier.

“We’d grown up with some of those traditional foods, but a lot of those foods are sleeping today. They are not actively prepared or grown by community members. So, we started to research and bring them back in our kitchen,” he said.

Part of reintroducing those traditional dishes meant locating original varieties of Choctaw beans, squash and other ingredients.

“We were lucky enough to have some of those seeds passed down to us or be able to find others. We grew them in our gardens and were able to take those to interested growers who wanted to help us grow out some of those seeds,” Thompson said. “It’s been a partnership from the beginning. With the greenhouse, it’s just expanding to a whole different level.”

Beyond the greenhouse, the broader initiative is progressing along some other different, but related tracks thanks, in part, to multiple grants.

For instance, OSU researchers Ringer, Justin Moss and Lynn Brandenberger looked at water-use efficiency of varieties of traditional Native American legumes.

In the study funded by an Oklahoma Department of Agriculture, Food and Forestry grant, the trio determined two heirloom varieties of cow pea – Pottawatomie and battered buffalo skull – are capable of performing well, even in dryland conditions.

The full results of the study will be shared later this year.

“Say, if the Choctaw Nation in southeast Oklahoma wanted to grow these, I suspect they could do it with no irrigation,” said Moss, OSU Cooperative Extension specialist for urban landscape, water and environmental issues. “The good thing we found out is that if a small producer wanted to take these culturally significant varieties and wanted to grow a quarter or half acre, they could do it with no irrigation and get good yield.”

Other takeaways from the research include best practices for protecting and harvesting heirloom crops.

Brandenberger, OSU Cooperative Extension food crops specialist, also sees branding and marketing possibilities in the legume varieties, noting that in Africa the cow pea and its leaves are used for everything from salads to cooked greens to flour. Not to mention, with 25 to 30 percent protein, high levels of complex carbs, lots of fiber and high levels of folate, it is a superstar nutritionally.

“I really think there’s a lot of potential there,” he said. “If tribal nations consider what kinds of products they can make out of a cow pea, then they could brand it as a tribal heirloom crop.”

Also, another USDA grant administered by the Oklahoma County OSU Cooperative Extension office and the Choctaw Nation is helping to draw youth into agriculture, as well as train producers on the unique production requirements of heirloom crops and how to market them.

While this initiative is rooted in reviving heirloom crops, it’s really about far more than growing these new-old potential food sources.

“Bringing back to life some of our heritage is in a small way bringing part of our culture out of obscurity,” Thompson said. “Over the last many generations, some things in Choctaw culture have been marginalized so they’ve fallen asleep. This is about the community proactively working with other partners to bring some of those sleeping aspects back into regular practice.”

For more information on the Choctaw Nation of Oklahoma’s heirloom crops project, visit the OSU Center for Sovereign Nations website at sovnationcenter.okstate.edu.

- By Leilana McKindra

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Oklahoma State University’s Division of Agricultural Sciences & Natural Resources is dedicated to developing and disseminating science-based information relevant to helping people improve the quality of life for them, their families and communities. The Division is comprised of the College of Agricultural Sciences & Natural Resources, the Oklahoma Agricultural Experiment Station and the Oklahoma Cooperative Extension Service.