You might have heard of Kernza®, a sweet and nutty perennial variety of intermediate wheatgrass being developed by the plant breeders and ecologists at The Land Institute in Salina, Kansas. Kernza® can be cooked like rice or ground into flour. It has attracted the attention of growers, chefs, and brewers who are interested in supporting a new, sustainable crop. With additional support from a SARE grant, Jacob Jungers, a researcher at the University of Minnesota, and several area producers are working on a new facet of Kernza® production—intercropping it with legumes.

“Preliminary data show that Kernza® can be grown in mixture with legumes, but the agronomic practices needed to manage crop interactions to optimize profitability and ecological services are not well established and require regional assessment,” said Jungers.

Six farmers from Minnesota, Wisconsin, and Kansas have teamed up with Jungers to intercrop four legumes including alfalfa, red clover, birdsfoot trefoil, and sainfoin (a perennial, cool-season legume used for forage) with Kernza®.

Growing partners sign trademark licensing agreements that support ongoing research to collect data about Kernza®. This research team hopes that legume intercropping might help to reduce or eliminate the already low synthetic nitrogen fertilizer requirements of Kernza®, which would improve its ecological footprint. They will collect yield and input offset data and share it through their Kernza® growers’ network.

North Central Region Sustainable Agriculture Research and Education strengthens rural communities, increases farmer / rancher profitability, and improves the environment by supporting research and education. Any opinions, findings, conclusions or recommendations expressed within this product do not necessarily reflect the view of the SARE program or the U.S. Department of Agriculture. USDA is an equal opportunity provider and employer.