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Kernza perennial grain cultivar released by the University of Minnesota

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University of Minnesota Kernza researcher Prabin Bajgain evaluating intermediate wheatgrass in a selection nursery at St. Paul, MN before harvest. Photo courtesy of Prabin Bajgain.

Compared with annual crops, perennial crops provide sustainable environmental benefits such as reduced soil and water erosion, reduced soil nitrate leaching, and increased carbon sequestration. Inclusion of sustainable cropping systems into mainstream agriculture has been a challenge given the lack of food-grade perennial grain cultivars.

In an article recently published in the *Journal of Plant Registrations*, University of Minnesota researchers report the release of the first commercially available intermediate wheatgrass (IWG) cultivar. Intermediate wheatgrass is a cool-season perennial grain crop domesticated primarily for food use while maintaining the ecological benefits it offers.

The cultivar, named MN-Clearwater, produces 696 kg ha^{-1} (621 lb ac^{-1}) of grain on average with the first two years; it produces its highest grain yields under Minnesota conditions. It is relatively short at 113 cm and has minimal lodging with trace disease levels. MN-Clearwater is expected to perform well in the U.S. Upper Midwest, southern regions of Canada, and the U.S. Northeast.

As the first IWG cultivar released for sale under the Kernza trade name, the researchers expect MN-Clearwater to be a cornerstone resource for the IWG research community as well as for interested growers, food processors, and commercial partners.

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Bajgain, P., Zhang, X., Jungers, J.M., DeHaan, L.R., Heim, B., Sheaffer, C.C., Wyse, D.L., & Anderson, J.A. (2020). 'MN-Clearwater', the first food-grade intermediate

wheatgrass (Kernza perennial grain) cultivar. *Journal of Plant Registrations, 14.*

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