Additional Project Outputs for OREI 2020-51300-32179
Developing Mulituse Naked Barley for Organic Farming Systems II

Resources for farmers and processors:

- Presentation on the Multi-use Naked Barley project at the Culinary Variety Showcase in 2021. Malting, baking, and roasted barley tea. https://youtu.be/60V62G8yREo?t=5531.
- Brian Baker, Brigid Meints, and Patrick Hayes. 2020. *Organic and Naked (Hull-less) Barley: Practices, Production Costs, and Benefits*. Article. https://eorganic.org/node/34371.
- Jordyn Bunting. 2022. *Food Functionality of Naked Barley*. Webinar. https://eorganic.org/node/35312.
- *Naked Barley Brewing Experiment with Univ. of MN Barley Breeding Program*: https://www.youtube.com/watch?v=-_A1il9Wy_I.

Presentations from 2021 Grains Week conference:

- Naked Barley for Malting, Brewing, and Distilling: https://youtu.be/8L_kgXyWJ-g.
- Managing Smut and Bunt in Organic: https://youtu.be/FigLTzqoliI?t=623.
- Nutritional Quality and Density: https://youtu.be/GM2UlIQgoEk?t=3702.
- Sensory Evaluation: https://youtu.be/GM2UlIQgoEk?t=369.
- Research Updates: Barley: https://youtu.be/8L_kgXyWJ-g?t=10842.

Journal articles:

- Kunze, K.H., Meints, B., Massman, C., Gutiérrez, L., Hayes, P.M., Smith, K.P., Bergstrom, G.C. and Sorrells, M.E., 2024. *Genome-wide association of an organic naked barley diversity panel identified quantitative trait loci for disease resistance*. The Plant Genome, p.e20530. https://doi.org/10.1002/tpg2.20530. *Open access*.
- Massman, C., Meints, B., Hernandez, J., Kunze, K., Hayes, P.M., Sorrells, M.E., Smith, K.P., Dawson, J.C. and Gutierrez, L., 2022. *Genetic characterization of agronomic traits and grain threshability for organic naked barley in the northern United States*. Crop Science, 62(2), pp.690-703. https://doi.org/10.1002/csc2.20686. *Paywall.*
- Massman, C., B. Meints, J. Hernandez, K. Kunze, K.P. Smith, M.E. Sorrells, P.M. Hayes, and L. Gutierrez. 2023. *Genomic prediction of threshability in naked barley*. Crop Science 63: 674689. https://doi.org/10.1002/csc2.20907. *Open access*.
- Bunting, J.S.; Ross, A.S.; Meints, B.M.; Hayes, P.M.; Kunze, K.; Sorrells, M.E. Effect of Genotype and Environment on Food-Related Traits of Organic Winter Naked Barleys. Foods 2022, 11, x https://doi.org/10.3390/foods11172642. *Open access.*

Theses and dissertations:

- Kunze, K., 2023. *Genomic And Phenotypic Characterization of Malting Barley and Naked Multi-use Barley as Winter Crops for New York State* (Doctoral dissertation, Cornell). https://ecommons.cornell.edu/items/5c024108-80d7-41d1-8bef-9b07bc5c308e.
- Massman, C., 2023. *Organic Multiuse Naked Barley Characterization and Genomic Studies* (Doctoral dissertation, The University of Wisconsin-Madison). https://asset.library.wisc.edu/1711.dl/TZSECYVADU6IP86/R/file-4b7c8.pdf.

Other resources for plant breeders and researchers:

- Genotype and phenotype data from regional trials and diversity panels have been uploaded to the T3 Triticeae Toolbox at https://barley.triticeaetoolbox.org/.

Lesson plans:

- Colors of barley https://oregonaitc.org/lessonplan/colors-of-barley-an-introduction-to-selective-breeding/.
- Introduction to inherited traits: https://oregonaitc.org/lessonplan/barley-and-beasts-an-introduction-to-inherited-traits/.
- Observable traits of barley: https://oregonaitc.org/lessonplan/the-barley-family-observable-traits-of-barley/.
- F2-generation of Buck and Lightning barley https://oregonaitc.org/lessonplan/the-f2-generation-of-buck-and-lightning/.