

Hops

Craft beer brewing has enjoyed a resurgence in the United States. As small breweries spring up, so does the opportunity for nearby farmers to supply them with locally grown hops. From weed management, to pest management, to exploring marketing strategies, NCR-SARE has supported work by farmers, researchers, and brewers that has promoted sustainable hop production practices.

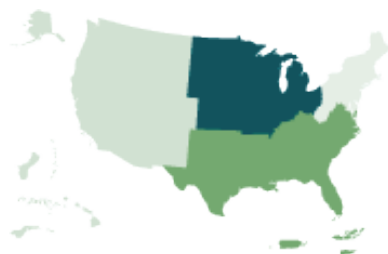
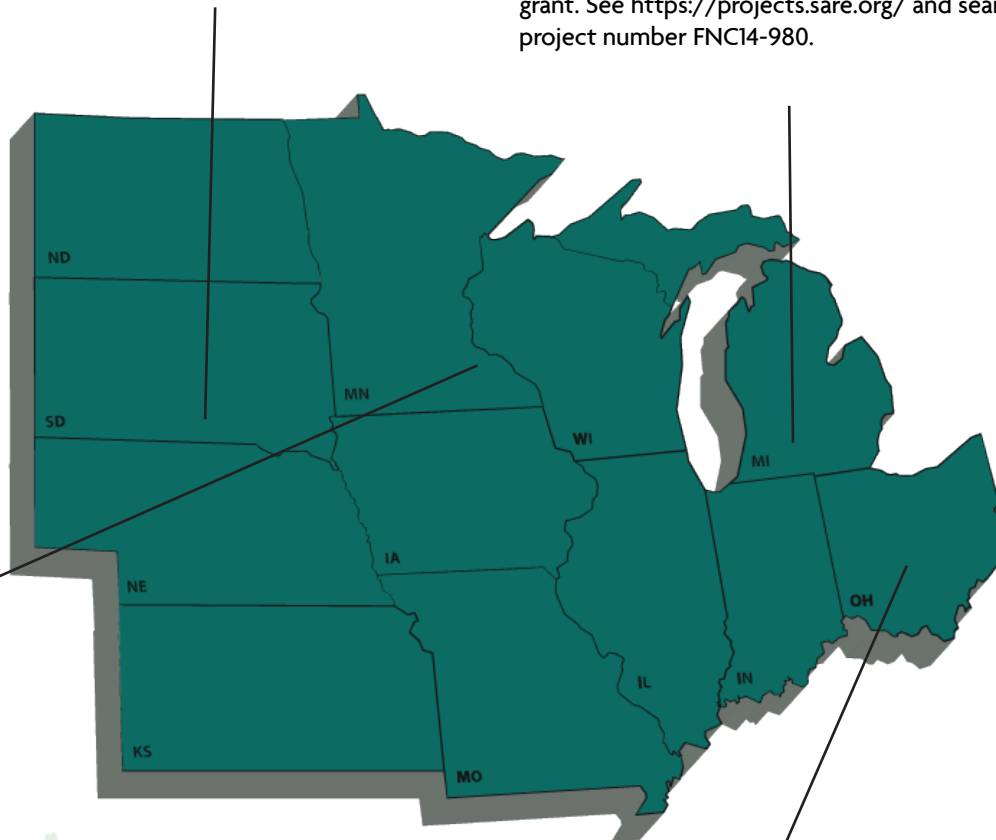
NCR-SARE Project Sampler

To view SARE's entire hops portfolio, or just the North Central region's, visit <https://projects.sare.org/>. For selected NCR hops grants, see the reverse side.

Yvonne Hines examined the productivity of four hops varieties in two soil types in southwest South Dakota. She found that Cascade, Centennial, Triple Perle, and Chinook hops were the most productive of the varieties; in that order. See <https://projects.sare.org/> and search for project number FNC16-1036.

Weed management can be a difficult part of farming hops organically. Farmer Amy Tennis, from New Mission Organics, was able to expand her sheep herd and control weeds in her hops with support from a SARE grant. See <https://projects.sare.org/> and search for project number FNC14-980.

At the University of Minnesota, a graduate student screened 112 wild hop accessions for their response to *Pseudoperonospora humuli*, the causal organism of hop downy mildew. His preliminary findings indicated that resistance to downy mildew could be independent of climatic factors and primarily composed of genetic factors. See <https://projects.sare.org/> and search for project number GNC15-204.



A producer built a mobile hop dryer that could dry hops to national quality standards for processing, storage, and sale. Allowing sharing among collaborating growers reduced the need for all growers to build fixed facilities, saving them money, and improving crop quality and marketability. See <https://projects.sare.org/> and search for project number FNC17-1103.

NCR-SARE's Hops Portfolio

Selected Grants

FARMER AND RANCHER GRANTS

Mobile Hop Dryer

David Volkman, Ohio Valley Hops, Ohio, FNC17-1103, \$7,500

Examination of the Productivity of Four Hops Varieties (*Humulus lupulus L.*) in Two Soil Types in Southwest South Dakota

Yvonne Hines, Hines Hops Farm, South Dakota, FNC16-1036, \$7,500

Developing a System of Tissue Culture and Hydroponic Growing Medium for Hop Plant Production

Tim Small, Great Lakes Hydrogrow, Michigan, FNC16-1057, \$22,500

Optimizing a Short Trellis System for Growing Cascade Hops in Michigan

John Spieth, Honeybee Farm, Michigan FNC16-1060, \$7,500

Developing Effective Alternative Pest and Disease Management Strategies for Sustainable Hop Production

Carla Wosoba, Wosoba Farm Hops, Iowa, FNC16-1066, \$6,472

Multi-farm Assessment of the Optimal Yield Performance in Six Hop Cultivars Grown Throughout Ohio

Steve Patterson, Hot 'n' Pepper Farms, Ohio, FNC15-1008, \$22,497

The Economic Impact of Fall Planting vs Spring Planting Hops

Stephen Howe, Howe Farms, Indiana, FNC15-997, \$7,397

Economics of Growing Hops In Indiana: Planting Rhizomes versus Fully Rooted Plants

Justin Kratoska, Hoosier Hops Farm, Indiana, FNC14-954, \$7,465

An Integrated Organic Hops/Cover Crop/Pastured Sheep Production System To Address Agroecological Challenges And Diversify Farming Operations

Amy Tennis, New Mission Organics, Michigan, FNC14-980, \$22,288

RESEARCH AND EDUCATION GRANTS

High Quality Beverage Raw Materials for the Craft Brewing Industry

Carl Duley, University of Wisconsin Extension, Wisconsin, LNC13-349, \$196,953

GRADUATE STUDENT GRANTS

Augmentative Biological Control of Spider Mites on Hops

Susan Ndiaye, The Ohio State University, Ohio, GNC16-230, \$11,432

Identification of Native Minnesota/Midwestern U.S. Hop (*Humulus lupulus L.*) Communities as a Resource for Novel Disease Resistance Traits

Joshua Havill, University of Minnesota, Minnesota, GNC15-204, \$9,808

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For information on more SARE-funded hops projects search the SARE project database: <https://projects.sare.org>.



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