

Student Collaborative Organic Plant Breeding Education

The Small Grains Project

The breeding goal of the Small Grains team is combining improved yield, weed competitiveness, lodging and disease resistance, with unique flavor profiles and quality characteristics. Current trials include heritage varieties and advanced experimental lines from breeding programs of wheat, barley, and triticale, to be used as parents or released as varieties. Larger blocks of selected varieties were planted for quality, baking tests, and seed increase. The project is currently focusing on breeding three wheat populations, grown in field trials representative of low input dry farming systems which are the primary farming method of organic wheat farmers in California. The team anticipates a possible public release of a hard, white wheat variety with yellow pigment incorporated from ancestral wheats, with increased lutein content. It is an advanced line from the wheat breeding program, tested in recent SCOPE trials, and will be tested in regional low input trials in 2019.





Get Involved

The SCOPE project is currently seeking collaborations with growers and seed producers for on-farm trials. We are also looking to expand to new crops that are integral to the California organic seed industry. To become part of the SCOPE network of on-farm trials, or propose a collaboration for a new crop, contact: asaichaie@ucdavis.edu.

For more information on the projects, visit: plantbreeding.ucdavis.edu