

Student Collaborative Organic Plant Breeding Education

The Project

The SCOPE project is a USDA-NIFA funded, student-led collaborative of faculty and student plant breeders working with local organic growers on improving crop varieties for organic farming systems in Northern California. The organic plant breeding project was developed in direct response to California's organic growers and our collaborators, the Organic Seed Alliance, who have reported a scarcity of seeds for cultivars that meet the needs of organic farmers. Using traditional, field-based plant breeding methods, new varieties of flavorful slicing tomatoes, jalapeño peppers, sunscald resistant bell peppers, low-input, dry farmed wheat, and pest and disease resistant common and lima beans are being developed on certified organic land at The Student Farm at UC Davis. In addition to the breeding projects, the students participate in seminars focused on conducting outreach activities, organic farming methods, and project management, and participate in field days to showcase their work to a broad audience. The project also provides hands-on training to graduate and undergraduate students, providing them with the skills necessary for a career in private or public plant breeding.





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