



Student Collaborative Organic Plant Breeding Education

The Tomato Project

The team's breeding goals are to develop heirloom-like tomato varieties with increased disease resistance, higher yields, and improved fruit quality. Students are selecting for excellent flavor, attractive color, shape, and patterning of fruit, foliage that is easy to manage via trellising while adequately shading fruits against sun scald, and high yields. The team is working to develop both inbred lines and hybrid varieties that combine the best traits associated with heirloom varieties and traits associated with improved agronomic and horticultural varieties, such as higher marketable yield, reduced fruit cracking, disease resistance, and better growth habit, especially for production in the dry heat of California's Central Valley. In 2018, the team also planted in replicate at UC Davis and a dry farmed location in Humboldt County; selections were made in both locations. Before public release, preferred lines must be field-tested and further inbred. The tomato team is seeking collaborators in multiple locations for further field testing, and hopes to work with growers who might market potential varieties.



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