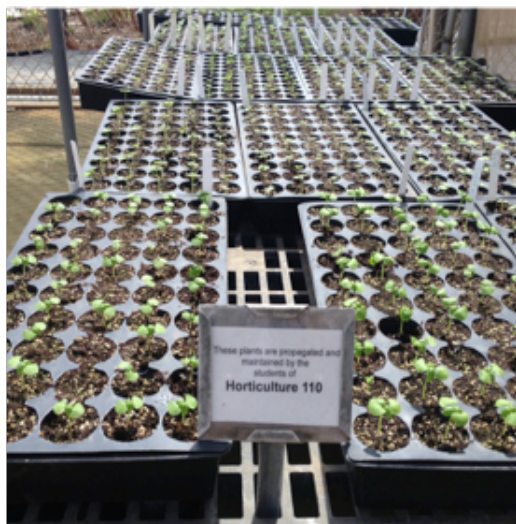


## Citizen Science Project: Basil Variety Trial

*Dr. Daniela Elliott, Leeward Community College*



*Hort 110 Students working on the basil trial in the fall semester of 2014.*

A new initiative by Leeward Community College's Plant Biology and Tropical Agriculture (PBT) degree program is providing horticulture students with the opportunity to conduct scientific research and work side-by-side with farmers, researchers and agricultural professionals. During the Fall 2014 semester, twenty students enrolled in Horticulture 110 completed a basil variety trial in collaboration with Jay Bost of GoFarm Hawaii, CTAHR professor Dr. Miaoying Tian and the organic seed company, Vitalis. A parallel trial was also conducted in the Waimānalo Research Station.



Students evaluated 12 varieties of basil for growth and resistance to downy mildew, a disease that negatively impacts Hawaii's basil production. Resistant basil varieties offer a potential way to combat the problem. Of the 12 varieties trialed by LCC's Hort 110 students, three showed significant resistance to downy mildew. Jari Sugano and Jensen Uyeda organized a small conference to disseminate results and bring together the student researchers with, faculty, farmers, and Vitalis representative Erica Renaud.

*Examples of different varieties trialed by students. Varieties 1 and 3 were highly susceptible to downy mildew compared to variety 2.*

The project is part of a larger effort by Dr. Elliott to encourage student-led horticultural research and other forms of place-based learning. Place-based learning achieves learning outcomes by getting students out of the classroom and interacting with community members and other local resources. Students learn first-hand how research can be applied to problems in their own communities and answer questions that can help the future of agriculture in Hawaii. Other upcoming student research projects include the development of a growth protocol for the endemic Hawaiian plant species, *Diospyros sandwicensis* also known as Lama. This semester the class will be participating in a cabbage and a broccoli trial being organized by Jay Bost. The initiative is supported by funding from USDA-NIFA consortium grant.

*Article content is the sole responsibility of the author. For more information about this article, contact Dr. Daniela Elliott (ddutra@hawaii.edu).*