



## Hamasaki (OP)

Sugano, Radovich, Hamasaki, Uyeda, Migita, Corrales, Shingaki, Motomura, Ogata, Shimabuku, Wang, Teves, Silva, Saito and Fukuda

The Hamasaki eggplant variety was developed by a Laupahoehoe gardener, Mr. Roland Hamasaki. Mr. Hamasaki was given F1 hybrids developed by horticulturalist, Dr. Kenneth Takeda of the University of Hawai'i at Mānoa, College of Tropical Agriculture and Human Resources (CTAHR). Dr. Takeda created the F1 hybrids using Waimanalo Long and a South Pacific eggplant variety, known for its bacterial wilt resistance potential. Waimanalo Long is an open pollinated (OP) cultivar developed by CTAHR. It is a hybrid between Takii Long Black and Molokai Long. Dr. Takeda made additional selections from these hybrids and named them 201, 204, and 210 (Poamoho Dark Long).

The Hamasaki hybrids produce good quality, dark purple, long eggplant fruit. Mr. Hamasaki grew the F1 eggplant variety over successive generations in a bacterial wilt infested field. He made his own selections over the years and kept seeds from the best-looking fruit. The open pollinated (OP) eggplant continues to produce dark colored, long eggplant fruits in bacterial wilt infested soils in Hawai'i county with no difficulty.



The Hamasaki family donated the seed to CTAHR for statewide field trials. CTAHR emeritus pathologist, Dr. Anne Alvarez is currently screening the Hamasaki variety for resistance to virulent strains of the soil-borne pathogen, *Ralstonia solanacearum*. At this current time, we can not confirm that this variety is bacterial wilt resistant. However, based on informal field trials conducted by Extension agent, Randy Hamasaki in soils infected with *Ralstonia*, we expect the variety has a high tolerance to this pathogen.

Extension specialists, CTAHR research station staff conducted statewide eggplant variety trials in 2013-2014 (photos below). Field trial data showed that the Hamasaki variety had commercial potential due to its size, fruit set and quality. Project investigators worked with CTAHR's Agricultural Diagnostic Service Center's Seed Lab to offer this new eggplant variety to commercial producers and home gardeners.



Project leaders decided to name this variety Hamasaki (OP) after the Lapahoehoe gardener, Mr. Roland Hamasaki who cultivated this variety with extreme care and after his son, CTAHR Extension Agent, Randy Hamasaki who has been a significant contributor to Hawai'i's diversified agriculture industry.

Hamasaki eggplant is an open pollinated (OP) variety, not hybridized so producers and gardeners can take their own seeds. Eggplants have the ability to self-pollinate. If no other eggplant varieties are in the growing area, the seeds from the Hamasaki fruit should produce identical plants to the mother plant. It should theoretically breed true to the parent. We call Hamasaki a pure line, similar to other parental lines at CTAHR such as Waimanalo Long, Nitta, Molokai Long and Poamoho Dark Long.

In eggplant cultivation, crop yields from hybridized (F1) plants, cultivars which have two different inbred lines, are typically much higher than pure lines like Hamasaki. Hybridized lines are commonly used in commercial production due to its long-term vigor. However, Hamasaki out produced CTAHRs existing pure lines in statewide field trials and had comparable yields to CTAHR's commercial hybrids. Hamasaki is currently being offered as a non-hybrid option for sale through ADSC. Hamasaki could potentially be a parent line for a new CTAHR eggplant hybrid in future years.

WAIMANALO Research Station (organic) data: June-August 2014

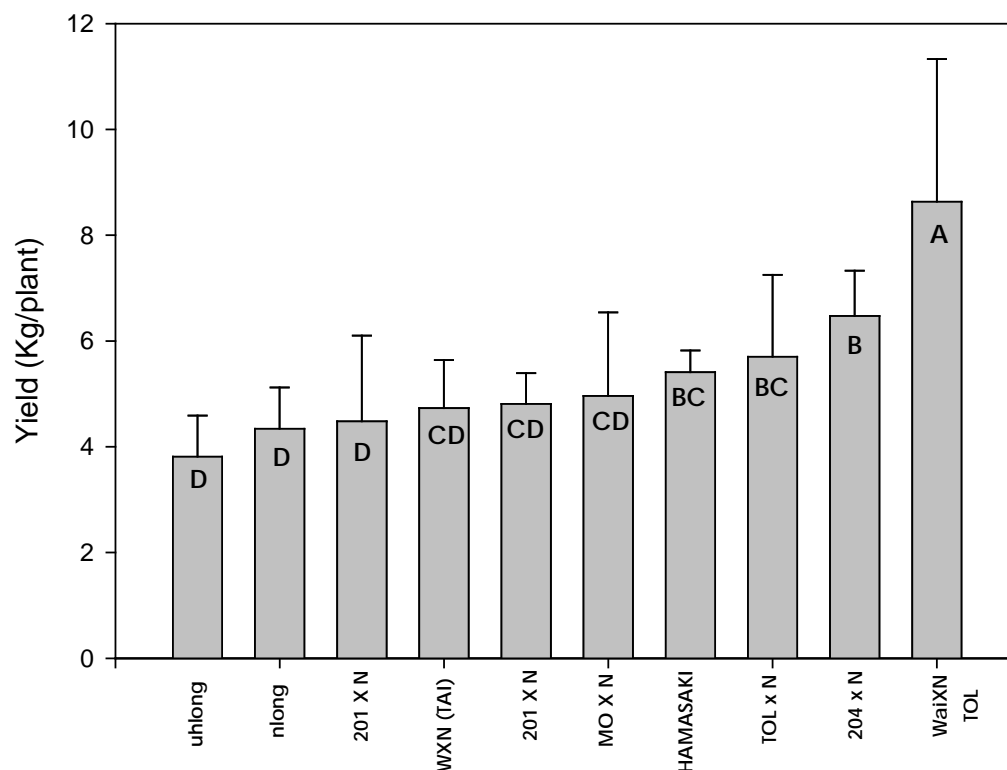




Figure 1: Data from three replications of eggplant grown under organic culture at the Waimanalo Research Station. Hamasaki (OP) was comparable in yield to other commercial hybrid lines.

The Hamasaki eggplant is a fruiting vegetable that excels in well-drained soil and warm weather. It can be grown year-round in Hawai'i on commercial farms and is well suited for the backyard garden. Before fruiting, plants should be staked for support. Growing healthy plants will minimize pest problems. Spider mites, thrips, tobacco flea beetle, and *Cercospora* leaf spot are common pest problems. Pruning shears are commonly used to clip and harvest eggplants when fruits are plump and shiny. Over-mature fruits will lose their sheen on the rind. Hamasaki should be harvested when the fruits are plump and soft to the touch.

A large portion of the seed multiplication work for the statewide trials were conducted at the Poamoho Research Station under the lead of Susan Migita and Steve Fukuda. Mass seed propagation responsibilities then transitioned over to Dr. Ted Radovich at the Waimanalo Research Station. The seeds in our initial seed offering to the public was grown under organic culture in the certified organic plots at the Waimanalo Research Station. At this time, we can not confirm bacterial wilt resistance or certify the seeds as organic.

Hamasaki is a new and promising eggplant variety that will be a nice addition to ADSC Seed Lab's offerings. It is the product of a home gardener in Lapahoe and the partnership with the faculty and staff at UH CTAHR. We are proud to offer Hamasaki (OP) to Hawai'i's food producers for cultivation.

