

ooperative Extension

Poamoho Dark Long (OP)

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Horticulturalist, Dr. Kenneth Takeda of the University of Hawai`i at Mānoa, College of Tropical Agriculture and Human Resources (CTAHR) created F1 hybrids using Waimanalo Long and a South Pacific eggplant variety, known for its bacterial wilt resistance potential. Waimanalo Long is an open pollinated cultivar developed by CTAHR. It is a hybrid between Takii Long Black and Molokai Long.

The hybrids produced good quality, dark purple, long eggplant fruit. Dr. Takeda grew the F1 eggplant variety over successive generations and made his own selections over the years. He named his selections 201, 204, and 210. Extension agents, Extension specialists, CTAHR research station staff conducted statewide eggplant variety trials in 2013-2014 (photos below). Field trial data showed that variety 210 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 named this 210 variety, Poamoho Dark Long (OP) after the location in which it was much of the initial field evaluations took place. Poamoho Research Station is located down a winding road overlooking the beautiful North Shore of Oahu.



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Poamoho Dark Long 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. Poamoho Dark Long should be harvested when the fruits are plump and soft to the touch.

It 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 PDL fruit should produce identical plants to the mother plant. It should theoretically breed true to the parent. We call PDL a pure line, similar to other parental lines at CTAHR such as Waimanalo Long, Nitta, and Molokai Long.

In eggplant cultivation, crop yields from hybridized (F1) plants, cultivars which have two different inbred lines, are much higher than pure lines like Poamoho Dark Long. Hybridized lines are commonly used in commercial production due to its long-term vigor.

PDL out produced CTAHRs existing pure lines in statewide field trials. CTAHR's pure lines are commonly used as parent plants for hybridizing purposes. However, PDL is an aesthetically nicer fruit than other CTAHR pure lines due to its dark purple color and sheen. It is currently being offered as a non-hybrid option for sale. PDL could potentially be a parent for a new CTAHR eggplant hybrid in future years.



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210 or PDL didn't yield as high as 201 or 204 in statewide field trials but informal taste test trials (photo below) suggested it was a better eating fruit due to its dense flesh, firm skin and few seeds.

A large portion of the variety screening work for this new seed offering was conducted at the Poamoho Research Station under the lead of Susan Migita and Steve Fukuda. Mass seed propagation responsibilities then transitioned over to Roger Corrales at the Waimanalo Research Station.

Poamoho Dark Long is a new and promising eggplant variety that will be a nice addition to ADSC Seed Lab's offerings. It is the product of multiple generations of faculty and staff at UH CTAHR. We are proud to offer Poamoho Dark Long (PDL) to Hawai`i's food producers for cultivation.

