

PMc News

'Tropic Sun'



USDA - Natural Resource Conservation Service - Ho'olehua Plant Materials Center

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Panax Potential

Due to the onslaught of the *Erythrina* Gall Wasp, a search for a replacement for the 'Tropic Coral' was initiated. The 'Tropic Coral' was the ideal windbreak tree for the crop-producer with its rapid growth, a max height pushing 40ft, and a columnar growth habit. To find a tree with similar traits would be challenging. With few plants on our list to choose from, we decided to test *Panax (Polyscias guilfoylei)* first because its growth form is very similar to that of 'Tropic Coral'.

The objective of our trial is to produce a growth-rate in *Panax* that is comparable to that of *Erythrina variegata* or 'Tropic Coral' by applying various nitrogen treatments. *Panax* cuttings were planted as windbreaks to simulate actual wind situations. Therefore, the plots were aligned in a single row with four replications. The nitrogen source is Ammonium Sulfate (21-0-0).

It has already been 1 year since the cuttings were first planted and we feel that they are doing extremely well with an average growth height of about 8 feet, although, we are not seeing any significant differences between the different treatments. This could be due to a number of factors including the base fertilizer application and residual effects of the 'Tropic Coral' that was just removed from the same spot. We will continue to evaluate *Panax* as a potential release as it shows great promise!



The Mission of the NRCS Plant Materials Program:

We develop and transfer plant materials and plant technology for the conservation of natural resources. In working with a broad range of plant species, including grasses, forbs, trees, and shrubs, the program seeks to address priority needs of field offices and land managers in both public and private sectors. Emphasis is focused on using native plants as a sustainable way to solve conservation problems and protect ecosystems.

Sporobolus virginicus

We are currently evaluating five different accessions of a native Hawaiian grass *Sporobolus virginicus* or more commonly known in Hawaii as 'aki 'aki. This species is well adapted to coastal habitats and is commonly found in dune areas. *S. virginicus* does well in poor soils and is also very drought tolerant. With its deep root system, it would be well suited as a soil stabilizer on slopes.

'Aki 'aki occurs naturally on all of the Hawaiian Islands. Our trial is designed to evaluate any establishment, growth-rate and morphological differences that might occur within the species by collecting accessions from different islands. If there are any differences, we will select the accession that has the most favorable traits needed for soil stabilization.



We have also tested a new technique of propagation, suggested to us by Craig Smith, Agronomist PIA West. Though *S. virginicus* produces seed, very few are viable. The only practical means of propagation is by vegetative slips. In the past, rhizomes were planted by single slips in dibble tubes which resulted in an average 30% take. Using the new technique, 4-6 rhizome slips were planted in each dibble tube. This increased the take to 70-80%.

This looks like another good plant and we will keep you all informed as this trial progresses.

A New Turn In Life



After eight years at the Hoolehua PMC as Biological Science Technician, Nancy Bauman is retiring from the Natural Resource Conservation Service on April 30, 2007. Nancy began her career with the federal government twenty years ago working with Farmers Home Administration (FmHA) and then with Farms Services Agency (FSA) in Illinois. Initially, Nancy moved away from Molokai to Illinois because her husband, Ron, needed to follow his career with a major corn-seed company. They have always dreamt of returning to Molokai. Fortunately for Nancy, after twelve years with FSA, a position opened at the Hoolehua PMC in 1999 just prior to her move back to Molokai.

Thank you Nancy for all the years of commitment, excellence and valuable service you have given to the Natural Resource Conservation Service. You have done well and your efforts here at the PMC have made a significant impact on the Plant Materials program. You have witnessed from the beginning, the growth of our native plant re-vegetation effort for the island of Kahoolawe. The many hours you have spent propagating, caring for, harvesting and shipping of these thousands of native plants is something you can be proud of. You have made a difference! Your dedication and professionalism truly exemplifies the spirit of NRCS excellence.

Congratulations Nancy! We will miss you.



We're on the Web!

www.plant-materials.nrcs.usda.gov



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