

# Plants Available from the USDA-NRCS Plant Materials Center

Trees for Improving Sustainability, Resource Conservation, and Profitability  
on Farms and Ranches

Kona, Hawai'i May 16-19, 2006

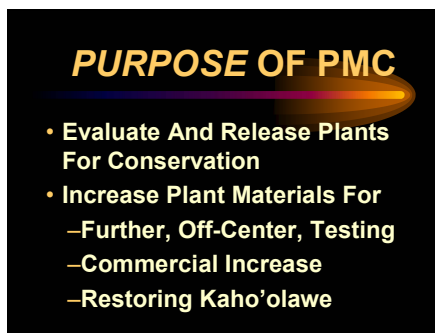
**Robert Joy, Plant Materials Specialist, USDA-NRCS, Moloka'i, Hawai'i**

Slide 1



The USDA Natural Resources Conservation Service (NRCS) Plant Materials Center (PMC) is located in Ho'olehua, Molokai. The PMC is one of 27 centers nationwide. The area served by the Ho'olehua PMC includes the Hawaiian Islands, Guam, Islands of the Commonwealth of the Northern Marianas, the Republic of Belau, Federated States of Micronesia, Marshall Islands, and American Samoa.

Slide 2



Plants for conservation uses are evaluated and released for public use. Conservation uses include green manure crops, cover crops for orchards, forage plants, windbreaks, vegetative barriers, and others. The evaluation process for any given plant takes up to 10 years to determine that it will be non-invasive and will serve its intended purpose. Native and introduced plants are included in the testing program, but the emphasis is on natives. Plant materials are produced for on and off-center trials and, for plants released for public use, commercial production. The PMC also has a Congressional Mandate to produce native

plants and seeds for the restoration of Kaho'olawe.

Slide 3

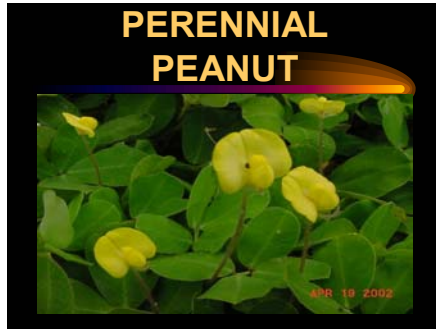
A black rectangular slide with yellow and white text. The title 'NRCS FIELD OFFICES' is at the top in yellow, with a yellow and orange oval graphic to its right. Below the title is a bulleted list of four items in white text.

**NRCS FIELD OFFICES**

- **Initiate Off-Center Plantings**
- **Receive Plant Materials**
- **Evaluate Off Center Plantings**
- **PM Needs Guide PMC Testing**

PMC services are delivered through the NRCS Field Offices in the form of Technical Guides and other means. Off-Center trials, called Field Plantings, are arranged between the clients (farmers, ranchers, etc.), Field Office personnel, and the Plant Materials Specialist. The Field Office receives the plant materials from the PMC and the client does the planting. Information from these trials goes toward supporting a new plant release and recommendations for its use. The plant materials needs expressed by the Field Offices determines what plants are tested at the PMC.

Slide 4



Perennial or forage peanut (*Arachis pinto*) is promising as a cover crop in orchards and as a low-growing legume for erosion control and beautification. It can be grazed by animals.

Slide 5



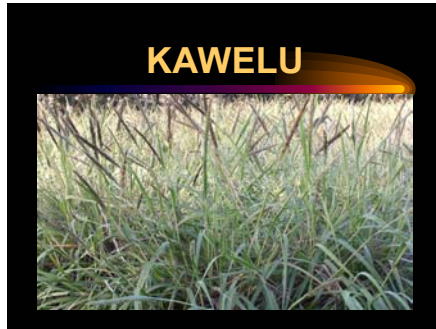
'Tropic Sun' sunn hemp (*Crotalaria juncea*) is an excellent cover/green manure crop. It's an annual legume that adds nitrogen to the soil and is resistant to root-knot and reniform nematodes.

Slide 6



'A'ali'i (*Dodonaea viscosa*) is a native shrub that makes a good windbreak, hedge, and screen. It's also used for landscaping.

Slide 7



Kawelu (*Eragrostis variabilis*) is endemic to Hawaii. It is an attractive grass that has value for erosion control, restoration, wildlife, and beautification. Native birds use it for food and cover in the Northwestern Hawaiian Islands.

Slide 8



Pili (*Heteropogon contortus*) is a native grass that is drought tolerant and is currently the main grass being used for the restoration of Kaho'olawe.

Slide 9



'Aki'aki (*Sporobolus virginicus*) is a native grass that is usually found growing just above the high-tide mark. It can grow up to 1,000' in elevation, but the soil must be fairly loose for the rhizomes to spread. It is drought tolerant and very salt tolerant. It has use for shoreline stabilization and restoration, especially on saline soils.

Slide 10



Vetiver (*Vetiveria zizanioides* syn. *Chrysopogon zizanioides*) is a tall bunchgrass. Its main use is as a vegetative barrier for controlling erosion on sloping land.

Slide 11



'Tropic Lalo' paspalum (*Paspalum hieronymii*) is a traffic tolerant perennial grass that forms a dense cover. It can be used on farm roads, lawns, terraces, waterways, and as a permanent cover in orchards. The slide shows it mowed (L) and un-mowed (R).

Slide 12



'Mott' is a hybrid Napier or elephantgrass (*Pennisetum purpureum*) developed by the University of Florida. It is very leafy and is a good forage plant for green chop or grazing.

Slide 13



Gliricidia (*Gliricidia sepium*) is a nitrogen fixing tree useful for windbreak and alley cropping. Its forage can be fed to animals.

Slide 14



The dwarf Brazilian banana (*Musa* sp.) is a very wind-tolerant banana that makes a good multi-purpose windbreak.

Slide 15



Panax (*Polyscias guilfoylei*) is native to Polynesia. It is a good space-saving windbreak. Its growth habit is similar to 'Tropic Coral' tall erythrina, but its growth is slower and it doesn't grow as tall.

Slide 16

