

Hoolehua PMC News

Helping People Help The Land

Establishing Natives With MLT



MLT is the acronym for the Molokai Land Trust. It is a preserve of over 1600 acres and operations are overseen by Director Butch Haas. Much of the area was once old cattle pastures that have been overgrazed, but there are still some small pockets of native Hawaiian plant treasures left. Butch Haas has a vision to expand these pockets and to one day have native species dominating the preserve.

The PMC is currently working with MLT to develop a technique to establish natives using only natural rainfall in critical areas with about 20" annual rainfall and have windswept soils that are denuded of all vegetation. The technique focuses on creating an environment that encourages seedling development. It involves ripping the exposed soil 3-4" deep, covering the ripped soil with a light layer of mulch that will cool the surface, retain moisture and yet, not inhibit seed germination, an application of fertilizer to strengthen seedlings, and a mix of plant seed that is well adapted to the harsh conditions. The picture above is one of three 10'x20' plots that we successfully established on the land trust. We have just begun prep of three bigger plots to demonstrate that this can be done on a larger scale with a minimum amount of resources.

Maintaining Genetics: TROPIC SUN



When farmers continuously plant a crop year after year using seed that was harvested from the previous year, genetic traits of the original parent plants are eventually lost. This past November, we planted a half acre field of TROPIC SUN crotalaria using original seed that was harvested in 1977. The seed harvested from this planting will be considered breeder-seed. This breeder-seed will be grown-out in the fall of 2016 to produce foundation-seed. The foundation-seed will be made available to commercial producers in the spring of 2017.

One of the many responsibilities of the Hoolehua PMC is to maintain the availability of genetic material of plants it has released for conservation use. Foundation stock is available to growers who are interested in producing plant material for the commercial market. Entities wanting to obtain foundation plant material for commercial production should contact our Plant Materials Liaison, Cynthia Shishido, cynthia.shishido@hi.usda.gov. In exchange we ask that growers provide annual reports of yields and sales produced from the material that was received. If needed, growers are able to obtain additional foundation plant material every [5] years.

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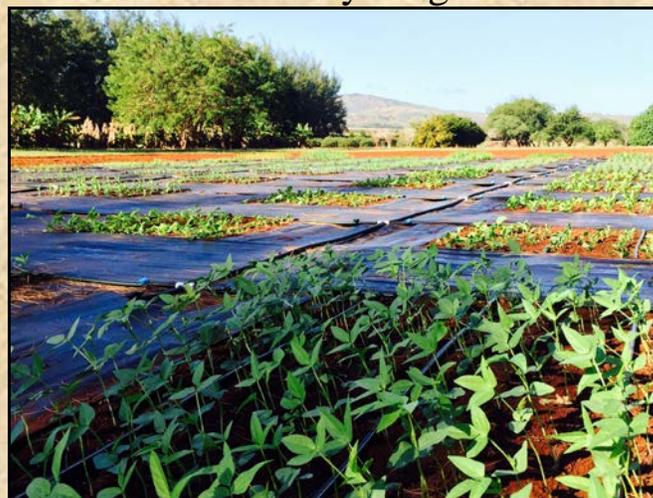
Molokai Youth Getting Down and Dirty

Contributed by: Debbie Kelly – MLSWCD



The Molokai-Lanai Soil and Water Conservation District held the local Conservation Awareness Soil Judging Contest for our Molokai High School students on October 14, 2015 with the assistance from staff of Hoolehua Plant Material Center (PMC) and the Hoolehua Field Office. It was a first for new science teacher Emilio Macaladad and his students. Among many other things, the students learned that dirt is soil that is out of place. Much mahalo for the staff of Hoolehua PMC providing a location for the contest and sharing with our Molokai students about activities done at the center.

TIMING Is Everything



Most plants have basically two stages of growth: a vegetative stage, and a seed production stage. A plant in its vegetative stage will develop lots of leaves and roots for producing and storing nutrients. Eventually, there is a period in time when plant growth will shift from leaf and root development to the seed production stage where the majority of its stored nutrients is directed toward flower and fruit development. Essentially, plants begin to use up the food that was stored. Knowing when your cover crop will be in its seed production stage will dictate how long before your cash crop you must plant it.

Although some organic matter is better than no organic matter, to utilize a cover crop to its fullest potential it is important that it is terminated as close to its blooming period as possible. On the other hand, allowing a cover crop to grow long enough to produce seed not only reduces the amount of nutrients available to your cash crop, but the seed produced could become a very bad weed problem as well.

Knowing the blooming period becomes even more important if you want to mix different cover crops together. Ideally, to get the most out of your cover crop mix, you should select plants that have similar blooming periods. This assures that all the plants utilized are able to reach their full potential by the time they are terminated.

The Hoolehua PMC has just initiated a study to gain a better understanding of the blooming periods for PIA recommended cover crops. We are looking at 25 different species and 60 different varieties. We plan to do another planting during the longer days of summer as well.



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