



PROFILES IN soil health

Mr. Ralph Tsugawa

Kealakekua, Hawaii

Crop: coffee

Practices: conservation cover,
mulching, and nutrient management

Coffee Farmer Perks up about Soil Health

The South Kona property where Ralph Tsugawa is growing coffee trees was mostly rocky lava fields with limited soil for developing proper root structure. To increase his orchard's health, he needed to produce more soil by adding organic matter.

Making the Change

He did not start out with soil health as a goal, but once he was introduced to the Natural Resources Conservation Service (NRCS), Ralph learned about mulching and minimizing soil loss by maintaining ground cover. As a result, he observed a big difference in the growth of the trees and the quality of the coffee. Now he tells all his farming friends about how mulching helped his farm.

"Mulching and building my soil health really improved my farm."

- Ralph Tsugawa, Coffee Farmer

The Practices

Through the Environmental Quality Incentives Program, Ralph is getting assistance with mulching and nutrient management.

Similarly, the Agricultural Management Assistance Program is providing assistance with an irrigation pipeline, water management system, and a pumping plant for efficient water use.



Farming for Health

As a result of the NRCS conservation practices that Ralph installed, the coffee trees are much healthier than before. The mulch retains soil moisture so the trees are less susceptible to drought and the carbon feeds the soil microorganisms that are important in maintaining plant vigor. In addition to building soils and minimizing erosion, Ralph is testing different fertilizers and reducing chemical inputs.

For other farmers in the area with orchards on rocky lava substrate, Ralph recommends adding organic material to build soil depth. Once that is established, he also recommends protecting it from erosion by installing vegetative cover. Not only is this good for the soils, but it's safer for the workers who no longer have to worry about unstable rocky surfaces.



Jessica Schmelz and Ralph Tsugawa discuss coffee bean health.



Mulching builds soil and retains moisture.

Contact

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