Mahana Estates at Kapalua Resort: Land Development with Nature in Mind

On the beautiful island of Maui, a beneficial fungus provides the key to successful cover propagation at a problematic construction site

For over 100 years, pie-sliced sections of land on West Maui were given over to agriculture. Beginning in 1912, much of that acreage was dedicated to the cultivation of pineapple. While pineapple plantations played a large role in the island economy, the absence of crop rotation didn't do the soil any favors.

Over time, the practice of agricultural monocropping (planting the exact same crop year after year) depletes the soil of necessary nutrients, and increases dependence upon harmful fertilizers and pesticides. The cumulative effects of these once common agricultural methods make it difficult, if not impossible to successfully re-establish beneficial, nitrogen-fixing plants and turf grass.

Fast forward to today. Land once devoted to pineapple cultivation is now home to the Mahana Estates planned residential development project. These new home sites are surrounded by the prestigious Kapalua Resort, where ecologically-aware 'sustainable principles and practices' now guide development at every phase. But years of poor soil practices have created real problems for this project site almost a century later.

Project Manager Pam English explains: "Our development is in an area of the island that gets heavy rainfall, especially during the winter. Our 125-acre job site ranges from 100 ft. to 800 ft. above sea level, and

Before Endonet

Endonet Establishing

Slope Example after Endonet

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Erosion Control: Mahana Estates at Kapalua Resort *Continued from Page 1*

the land is quite steep, so runoff is a constant worry. Grading and developing that land is a challenge, especially since the area is not only culturally significant, but is home to nature preserves, and Hawaii State Marine Life Conservation Districts. We open 15 acres at a time, hop scotch-style, closing up, and trying to re-vegetate the previous area before moving on. Because the soil quality is so bad, conventional mulch and hydroseed wouldn't take hold."

Fast Germination keeps construction phases on target

Pam continues: "For three years we tried everything, but couldn't get any seed to consistently sprout and establish. Soil tests revealed that the dirt was completely devoid of nutrients. Finally, I consulted with Stephen Knutson at Stover Seed. Understanding our situation, Stephen suggested that we try a granular inoculum in the form of **MycoApply Endonet** to see if we couldn't give the seed a better chance at survival. We tried a test bag, integrating it into our standard hydroseed matrix. The results have been astounding. The seed is not only germinating quickly, but the cover establishes completely. I wish I had known about this product 3 years ago."

MycoApply EndoNet mycorrhizal granular inoculum consists of a proven species of endomycorrhizal fungi for use in restoration. This beneficial fungus builds a natural microbial system, which greatly enhance plant growth, vigor and tolerance of environmental extremes.

Beneficial mycorrhizal fungi expand into the surrounding soil and greatly increase the root's ability to absorb water and nutrients, while improving plant yields and health.

Stover Seed experts are crisis managers and troubleshooters when re-vegetation is critical. We provide technical seed support on a wide range of native species. We can help you solve erosion problems with our wide-ranging seed mixtures, mulches, binders and inoculum products. For more information, ask for Stephen Knutson at 800-621-0315 or visit: http://www.stoverseed.com/products_erosion.html

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