

HIGH DESERT EQUALS LAVISH YARD!

With the right ingredients, water once every 3 weeks, and still have a green yard!

Trees That Please & Soil Secrets® right here in Valencia County, makes this all possible. Multi-dimensional company calls Valencia County home.

Fastest growing organic company shows you how to use the right tree and soil. Soil Secrets® restorer for growing healthy & lavish trees & lawn.



New Mexico Oak Woodland.

Trees That Please

Michael Martin Melendrez and Kari Melendrez, founders and owners of the Arboretum Tomé, Trees That Please and Soil Secrets, have made it their life's work doing what's right in the Green Industry. By first encouraging their nursery customers to purchase only plant material that is adapted to the climate and soils available; Michael's business is the industry leader in the Southwest in growing native trees of the Southwest Desert Region. Michael is a published author on the subject of plants of the Southwest and is recognized worldwide in the scientific community for his expertise in this subject. Trees That Please is one of the oldest nursery tree farms in New Mexico and was the first to explore growing the native hardwoods of our High Desert Region and has been doing so for over two decades. The only solution to shade in the future is our native high desert trees.

Soil Secrets

Since Michael and Kari consider all the trees produced at TTP special and precious, they demand that their customers have the best soil and plant fertility program possible. This started Michael on his quest to develop the protocol that has led to the founding of Soil Secrets. Michael started with the soil back in 1967 while a member of 4-H, doing his annual projects on Soil Restoration. In 1974 while a student in college, Michael wrote the paper - 'Soil Ecology and the Soil Food Web', which is perhaps the first time ever the phase was used. The paper is copyrighted and has been revised many times to keep it accurate and available to the non-technical reader. Today, Soil Secrets is one of the fastest growing and most respected manufacturers of 'Organic' Soil Fertility products, for improving Soil Health and growing Topsoil, in the United States. Soil Secrets is also one of the few 'Organic Approved' companies that has penetrated the vast Corporate Golf Course industry, as Soil Secrets products are now being used on the top courses and Resorts in the United States. Michael is the inventor and exclusive manufacturer of TerraPro®, which is the only Cultured Humus Product in the world - It's like Chicken Soup for the Soil®. After using TerraPro on turf at the Arboretum Tomé for about 10 years, a water reduction of over 80 percent (compared to

standard turf care) has been accomplished. Michael calls this "Maximum Green with Minimum Water" and no healthier or greener lawn can be found in the region then the one at the Arboretum Tomé.

The Arboretum Tomé

In 1987 Michael and Kari started the Arboretum Tomé collection, which today is the largest collection of trees, both exotic and native to the 4-Corner's Region, of any collection private or public. The site started with a poor soil of Saline Clay and included an area the previous landowner damaged with a soil sterilant. Today, Michael and Kari can grow any plant they want, as long as it's tolerant of the zone for cold hardiness. Now a virtual paradise, today the Arboretum Tomé is visited by Plant Scientists, explorers and lovers of trees from all over the world.

Michael's vision & mission with his three entities Soil Secrets, Trees That Please and the Arboretum Tomé is on a regional as well as national and international level. First is the regional objective which is to restore the natural woodland vegetation of New Mexico's High Desert to its pre European colonial period. This region is one of the most diverse Ecotones on earth with more native Oaks than any bioregion in the United States. With over 400 years of grazing, logging, plowing, fuel wood gathering etc., desertification has taken over most of the regions Woodland Savannahs. Michael's dream is to work on bringing the natural vegetation back into balance. To succeed we must first restore the natural biology of the soil by introducing and growing humus which will in turn produce the needed topsoil. - See Michael's paper on 'The Simple Truths' on his www.soilsecrets.com web site.

Soil Secrets Success Stories - HydroFeeding

"Humus is an absolutely essential component in soil for optimum plant health"

Michael Martin Melendrez

What is Hydroseeding?

Hydroseeding is the most efficient and cost effective technique for seeding and establishing a lawn in the Southwest. With Hydroseeding and Soil Secrets you can take a landscape from bare soil to a full lawn in just a few short weeks. Seed, mulch,

Humus, nutrition and all the other goodies for establishing your new lawn is sprayed on in one fast application.

What is HydroFeeding?

At Soil Secrets, we are very excited about using HydroFeeding as a technique for applying our products to landscapes. The benefit is "Maximum Green Using Minimum Water." The two most important limitations that all soils in landscapes have, is a lack of Humus and a lack of a healthy Soil Food Web! Without a pipeline of humus formation in the soil and the symbiotic association of beneficial soil microbes, landscapes cannot be healthy. Without an adequate amount of humus, the potential of a healthy Soil Food Web is very limited and the water and nutrient uptake ability of your landscape is going to be compromised. Modern



Maximum green with minimum water. Arboretum Tomé.

chemical fertilizers contribute to this loss of healthy soils and humus/topsoil erosion. No typical chemical fertilizer has ever made a soil healthier, but Soil Secrets products can! Humus helps soils hold water and makes the water more available for your plants.

With HydroFeeding, you can maintain that healthy lawn or landscape that you jump started with Soil Secrets Hydroseeding techniques. Or you can HydroFeed right onto an existing landscape of trees, shrubs, gardens and turf.

That's where Soil Secrets comes into action and exceeds any product or protocol of products in the industry without exception!

- We have the best, the richest, and the most biologically viable humus available - called Cultured Humus® which is unique and exclusive to Soil Secrets.
- We have the most concentrated and diverse mix of indigenous and specific soil microorganisms in the industry.
- We use the best quality and highest count Mycorrhizae blend in the industry.
- We manufacture the best and highest quality blend of enzymes needed to act as catalysts in biological and chemical processes in the soil, needed for a healthy soil and good plant health.
- We saturated our Cultured Humus® with all these components so that our finished product

is the best delivery system possible for Restoring the Natural Process of the Soil Food Web®.

With all these benefits added to our Cultured Humus® (see Figure 3) the whole product is then called TerraPro® the most effective and fastest growing Inoculant in the country. TerraPro combined with its second half product Protein Crumbles® can then be applied with typical fertilizer spreaders for most landscape needs. But here's the good news, if you own or know someone who owns a commercial Hydroseeder, all the products made by Soil Secrets can be broadcast via a water spray from such equipment in an easy one step process.

With this technique, there are faster results, faster application, faster penetration into the soil and the plants vascular system

and finally if spraying onto tightly manicured sites such as Golf Course Greens, there is no large and unsightly residues remaining on the ground when finished.

"This technique works extraordinarily well"

Do I Need Soil Restoration by Soil Secrets?

In today's man-made environments plants can be greatly stressed and the relationship between the soils beneficial microorganisms such as bacteria and mycorrhizal fungi and the plants root is critical. Unnatural conditions such as concrete, asphalt, roadsides, sidewalk cut outs, trenching, drain fields, air pollution, shopping malls, business districts, and suburban developments adversely effect the presence and abundance of this beneficial Soil Food Web and the pipeline of Humus formation. You cannot have a healthy soil without Humus being sustainable in a soil.

Man-made environments often suffer from disturbance, compaction, top soil loss, and the absence of quality soil humus conditions which reduce the habitat necessary for the Soil Food Web to survive and thrive. Artificial landscapes effect the soils symbiotic relationship with plants in two fundamental ways. First, they isolate the plant from beneficial soil microorganisms available in natural settings and, secondly, they increase plant stress and the need for water,

nutrients, and soil structure mediated by their below-ground "partners" by destroying the natural humus and humus pipeline that must be present for optimum plant health. Trees, shrubs and other plants produced in commercial nurseries along with agricultural soils lack this Soil Humus and Soil Food Web due to excessive and long-term uses of chemical fertilizers and pesticides.

Huge Water Savings Possible because New Mexico Company

Promising results of soil treatments to sequester carbon developed by a Los Lunas New Mexico Scientist.

Across the globe, desertification has been an issue along with the loss of topsoil on farmlands. Perhaps the single greatest threat to the survival of mankind in the near future is the loss of our rich farm soils and consequently our ability to produce food. The problem is complex and two fold when it comes to desertification. First, is the massive amount of carbon that is lost from our soils during the destruction of the humus topsoil matrix. When carbon is no longer tied up in the soil it contributes to the greenhouse gas called CO₂ or Carbon dioxide. Second is the loss of the critical component of a healthy soil, that which we call humus. In fact, by definition, without humus you do not have soils and therefore you cannot possibly have healthy vegetation, particularly farm crops. The tillage of agricultural soils or the simple act of constructing a building or highway road cuts, will slice and dice the microbial life right out of a soil, resulting in an interruption of the Humus pipeline and a release of carbon dioxide into the atmosphere more significant than the burning of fossil fuels.

An approach to stalling global warming can be reinvigorating nutrient-depleted farmland, or as Michael Martin Melendrez describes it, "Restoring the Natural Process of the Soil Food Web". It has been found that we can promote soil's natural ability to soak up greenhouse-gas carbon dioxide from the surrounding air by this process of increasing the humus production in soils.

Research led by Michael Martin Melendrez at the Soil Secrets facility in Los Lunas New Mexico, has demonstrated that by producing Humus along

with a soil community of specific microorganisms, including mycorrhizae, the production of Humus can be accelerated. Michael calls this end product, Cultured Humus®. His company, Soil Secrets, manufactures and markets it under the trade names TerraPro and Earth Magic. The key to the process is proprietary, but Michael will say that an exact process of increasing the reaction rate between oxygen and humus precursors, such as phenols and hydroxybenzoic acids, to form quinones is the key. Amino acids produced by the rapid microbial degradation of proteins react with quinones which then form complex, durable molecules called humic polymers or humic substances better known by most people as Humus. Balancing the humus precursors, the phenols and acids along with amino acids and proteins are all part of the complex chemical and biological equation that Michael has been working on for the better part of two decades. His other partner in soil building is another protein called Glomalin, a sticky protein in the soil made by fungi. Glomalin could be one of the most significant contributors to the building of humus rich topsoils. The fungi that produces Glomalin is manufactured by Soil Secrets and put into the TerraPro / Earth Magic humus products for the purpose of inoculating plants to become mycorrhizal and to jump start this process. In most typical landscapes that have been historically fertilized with commercial fertilizers this natural mycorrhizal relationship rarely survives, so the protocol of staying with a natural fertility program must be part of the follow-up program.

Time is wasting. Hurry, because Trees That Please is having its annual Fall Sale now! This sale ends Oct. 31 and you need to hurry. We have large field grown trees to choose from or smaller containerized trees. If you need help with delivery or planting, we can help you with that as well. Where is Trees That Please? Four miles south of Main Street and Hwy 47 intersection and across the street from Tomé Hill.

New Fall Hours-Oct. 31
M-F 9 a.m. to 5 p.m.
Sat. 9 a.m. to 5 p.m.
Sun. Noon to 5 p.m.

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Hydro Feeding.



Trees That Please Nursery.