

**NATURE'S MIRACLE:**  
**Gardening "green" by not using polluting toxic chemicals**

Gardening here in San Diego County and around the country is more than just a week-end seasonal hobby. It is becoming a craze. Homeowners everywhere are devoted to beautifying their yards year round and they are increasingly looking for ways to maximize their efforts. Most importantly, the use of chemical fertilizers and pesticides is becoming less attractive to those who garden. They seek alternative ways to grow their plants, trees, and lawns without the use of toxic pollutants. They are becoming increasingly aware of the adverse environmental impact of these products. Yard runoff flows indirectly to our oceans and seeps into the underground water supply. Chemicals pollute. Thus, people are becoming more 'green' minded. Hence an increasing demand for organic products. Worm castings and worm 'tea' are two of those products.

Worm castings are nature's miracle fertilizer. They are the result of specialized worms eating and digesting an organic source such as manure compost. The end product is worm castings, or more simply put, worm manure. These 'castings' are rich in multiple nutrients and provide plants with a variety of essential elements found in nature that they need to grow. They are also an effective soil enhancer. And most importantly, they are all - natural and toxic chemical free.

In order to see first hand how this process works and how castings develop from a compost pile to market I visited Legacy Ranch for a first hand look. Legacy Ranch is secluded in the mountains of Campo, California about 50 miles east of San Diego owned and operated by long time rancher and horse aficionado, Lonnie Sole. Lonnie is a 'cowboy' in the old fashioned sense and looks every bit like one. Lean and wiry, Lonnie is a no non-sense guy when it comes to ranching. He loves the solitude and beauty of country living. He is at home listening to the coyotes and other wild creatures that roam his ranch by night and attending his horses and Texas long horned cattle by day. Doesn't really like city life at all. Now in his 60's, he still rides horses regularly and his horses know him by sight.

More than four years ago, Lonnie got the idea of producing worm castings for commercial sale. I believe he did so out of curiosity, somewhat from the challenge, but mostly due to his growing concern over the use of polluting chemicals and their effect on the increasingly fragile soil and limited fresh water supply of our good earth. "My worm castings and 'tea' are nature's miracle for growing beautiful flowers, plants, shrubs, trees, and lawns safely *without* toxic chemicals. Plants love it; insects hate it" says Lonnie.

It has not been an easy journey. He started from scratch and has built his operation into a major endeavor. He now estimates he has ten million worms 'working' for him. It is an intensely interesting operation and one full of details and watchful care.

Worms can be finicky little creatures. The wrong temperature in the beds, inappropriate food, or any little annoyance can send them scurrying away. And you don't want to see

your investment leaving home. Constant vigilance is required to feeding, moisture content of the compost, and the well being of the worms themselves.

Presently, Lonnie and his workers have three old converted chicken barns that house his worms and the castings. He has installed sprinkler systems and various pieces of equipment to minimize labor. However, worms require an intense amount of attention. There are lots of hand tools around, too.

He begins by laying out windrows of moistened composted horse manure. Each is about four to six feet wide and the length of the barn, about 200 feet or so. To this he adds his specialized worms, India Blue. They begin work immediately eating and digesting their favorite food. More compost is added to the top of the row as required and as the worms consume what they had initially been fed working their way from the bottom to the top of the windrow. Within four to six weeks they have converted a row of compost to rich and valuable worm castings. It is now harvest time.

Harvesting castings is done largely by hand. A new windrow of composted horse manure is laid down adjacent to the first. Feeding and watering of the initial windrow is terminated. The worms, seeking food and water, migrate from the first windrow to the new one rather rapidly. What is left in the first windrow is the sought after results of the eager worms 'work', rich and beneficial worm castings along with the eggs left behind to hatch later and replenish the stock.

Once the castings are harvested, they are moved to the processing barn where they must be screened. This process removes the clumps that may contain eggs and any uneaten hay or the like from the castings. The final product is a dark, rich, brown, granulated, soil like material. That is the sought after nutrient rich plant food. It has no obvious odor except that of the forest floor or a rich humus soil.

Worm castings may be bagged for direct sale or mixed with a compost to use as a planting medium. They are an excellent fertilizer and soil enhancer, are 100 % organic, and are becoming increasingly more popular in the organic gardening movement.

Last year Lonnie began a process of brewing a 'tea' with his castings. This is a liquid form of dry castings using natural spring water and other organic ingredients. He brews this concoction for about twenty-four hours in special tanks. He has developed a unique product and it is presently on the market under his own label, "Nature's Big Bud Liquid Worm Castings, Premium 100% Organic Liquid Plant Food ". He also sells to other independent distributors, farmers, and commercial plant growers. His product is high in microbial content attributed, according to Lonnie, to his use of pure, high quality worm castings, the natural mountain spring water and other organic ingredients he is reluctant to discuss. Trade secret. But I know that natural yucca extract is one of them. His 'tea' is becoming a widely sought after gardening product.

His use of natural unfiltered mountain spring water makes his product unique. He may be the only brewer doing so. This water, straight from a natural spring on the property, is

pure and full of essential minerals unlike city water. It contains neither chemicals nor additives. That may be one of the keys to his product.

Lonnie swears by his 'tea' and he is not alone. A brief surf on the Internet and one can view hundreds of sites pertaining to worm castings and worm 'tea'. These informative and interesting sites all have one thing in common to the gardening buff: they are gleeful in their endorsement of worm castings and worm 'tea'. Testing has shown these unique organic and natural products to be highly beneficial. Many noted soil experts are further studying the phenomena, but most agree that there is merit in the claims even though they don't necessarily know exactly why. There is increasing evidence that worm castings and worm 'tea' assist in insect control also. It is strongly believed further testing will prove that out. However, there is little dispute that worm castings and 'tea' work! And work well!

Lonnie is currently working on a new product which will be composed of worm castings, composted horse manure, and dry yucca extract. He hopes to market it soon and initial tests have shown it to be an excellent planting medium. Also, he touts natural yucca extract as good for the soil and plants and will soon begin marketing that as well.

I spent many hours with Lonnie discussing his love of his worm farming efforts. Several things were evident. Lonnie knows worms. He loves producing a product that is going to help people garden more efficiently and in a manner friendly to the environment. He is not an environmental fanatic, but he knows that chemical free gardening is preferable and somewhat inevitable. The transition to "green" gardening is here and it is real.

Lonnie loves the land and by all accounts, the land loves Lonnie. His worms are promoting a healthy, chemical free environment and that comforts him.

Me, too!

(Written by Dennis Copson, Oceanside, CA. Contact him at [denniscopson@cox.net](mailto:denniscopson@cox.net). More information about Nature's Big Bud Liquid Worm Castings is available on their website, [www.naturesbigbud.com](http://www.naturesbigbud.com).)