How is Our Fertilizer the World's Best?

To be highly productive, any fertilizer ***must have highly marketable benefits.*** The unique benefits of our premium end product (branded most places in the world as Nu-Soil Organic Fertilizer) are:

- ✓ **We can increase crop yields at least 100%; the best petrochemicals can offer is up to 20%.**
- ✓ **With an average over 100% yield increase, growers can easily double their incomes.**
- ✓ **Our fertilizer WILL NEVER "BURN" any plant; no risk to a grower.**
- ✓ **Our revolutionary fertilizer is competitively priced.**
- ✓ **Our high yield increases are sustainable, something no other fertilizers can offer.**
- ✓ **Crop quality is greatly increased, allowing growers to sell their crops for premiums.**
- ✓ **Longer term crops (avocados, coffee, etc.) can be harvested in ½ the time (2 vs. 4 yrs.).**
- ✓ **Nu-Soil requires significantly less water & time to grow a crop - a real cost savings.**
- ✓ **Our process technology eliminates all crop pollution - a huge benefit!**

Let us now focus on **how our biotech fertilizer works**:

- ✓ **It is biologically very active**. This is the key factor in what makes our process unlike anything else in the world. We change farm animal wastes into a biologically different material at the molecular level. Also, we carefully blend in green wastes to produce a balanced C/N ratio for optimum crop yields with the ideal equilibrium of assimilable (plant useable) nitrogen, carbon, potassium, phosphorus, and numerous trace minerals **that are uniquely non-polluting** as they become stabilized and fixed. Our biotech does not allow releasing free molecules into the air, ground or water making the entire amount of nutrient or mineral available to the plants' root ball.

- ✓ **Nu-Soil Organic Fertilizer dramatically improves grower's yields.** Nu-Soil is far superior to animal manures, composts, and petrochemical fertilizers because it offers ***far superior results*** to growers. Growers can ***expect a 100% yield increase or more,*** using less water, in only 1- 4 crop cycles, ***and sustain these benefits thereafter***. No other fertilizers can do this.

- ✓ **A Crop Yield *Always Begins with the Soil*. Nu-Soil Organic Fertilizer creates and builds humus**, even in poor quality or depleted soils. Humus is essential for soil fertility, but ***without it, most nutrients and minerals remain unavailable to plants***. Higher humus content gives the soil long term or 'reserve' fertility, necessary for optimum yield under varied growing conditions, including drought. Humus helps supply the nutrients needed by the plants and organisms, and is vital to a continuing buildup of essential major and trace elements in the soil. Colloidal humus particles are always present around a healthy plant's root ball and are always ***negatively charged***. ***They attract positive elements*** such as potassium, calcium, iron, and magnesium as well as trace minerals. **Test results show that Nu-Soil has a humus content of approximately one third (1/3) by volume.** Using ***Nu-Soil actually restores humus in depleted and compacted soils***. **Nothing else can. Other fertilizers, including petrochemicals, cannot create humus.** The importance of humus cannot be overstated for crop health, growth, and

quality. It might seem that other fertilizers could add to humus by supplying more nutrients, thus, allowing for existing soil humus to expand. A quick web search can provide numerous studies showing this is **not** the case.

- ✓ **Nu-Soil *directly* aids in more root absorption of nutrients.** Our microbes, like the positively charged ions, are also attracted to the negatively charged root ball. While remaining there, ***our microbes actually convert all nutrients into a stabilized and much more plant acceptable form***. The result is **fixed** and **stabilized nutrients and nitrogen** that our microbes supply to the roots. Nitrogen is also modified by our microbes, ***creating a full 'burn free' supply to the roots while eliminating pollution***. These nutrients and various mineral ions are taken up by the roots slowly when plant growth begins. Then, during the growth period, our microbes become even more active, moving about 0.5 M (19") around the root ball, supplying more nutrients as wanted. Petrochemical suppliers have tried to duplicate this effect with time release fertilizers with only limited success and the cost is usually prohibitive. **Nu-Soil's result is much faster growth, markedly better plant health, crop quality, and much higher yields.**

- ✓ **Nu-Soil Organic Fertilizer is safe, non-toxic, and odor free.** We effectively eliminate weed seeds in our fertilizer, and toxins, pathogens, and E. coli. in the soil after application, all huge potential health threats, and something nothing else can do. Our fertilizer is always safe and requires no special precautions, handling or training, unlike petrochemicals which can be very hazardous to handle and use.

OUR TECHNOLOGY's ADVANTAGES:

Just how good is it *and how does it compare* in the real world to everything else**?**

The key comparisons for fertilizers are 'N\P\K values'. In the 1830's a German scientist developed the theory that nitrogen, phosphorous, and potassium levels are the basis for determining healthy plant growth. N\P\K represent nutrients; **N**itrogen, **P**hosphorous, and **K** for potash (useable potassium). The three numbers listed today on fertilizer labels correspond to the percentage of these nutrients in the fertilizer. **Nitrogen** helps plant foliage to grow strong, **phosphorous** helps root growth, and **potassium (potash)** is important for overall plant health. **High nitrogen fertilizers will make for quick growth, but weaker plants, more susceptible to attacks by diseases and pests.** The higher the N\P\K number, the more concentrated the nutrient. For example, a fertilizer listed as 20\5\5 has four times more nitrogen in it than phosphorous and potassium. A 20\20\20 fertilizer has twice the concentration of 10\10\10. The N\P\K numbers can be used to calculate how much needs to be applied to equal 1 pound of the nutrient to add to the soil. If the numbers were 20\20\20, divide 100 by 20 and it takes 5 pounds of fertilizer to add 1 pound of nutrient. Highly concentrated, expensive fertilizers have values over 100.

To evaluate just how good our technology is, the actual N\P\K values of both manure and natural fertilizers should be reviewed. On the following chart, it is apparent that ***animal and human based fertilizers simply do not offer any beneficial N\P\K values***, ***are usually deemed worthless by growers, and do not produce any measurable results*** as measured by higher yields. These types are the most

difficult to market. The only reason there is so much of this type available worldwide is the fact that these fertilizers are from huge quantities of polluting wastes that must be disposed of. Many university **studies show farmers would actually be better off using nothing than using these types!**

NPK Values of Animal Manures

	N Nitrogen %	P Phosphorus %	K Potassium (Potash) %
Cow Manure	0.6	0.4	0.5
Horse Manure	0.7	0.3	0.6
Pig Manure	0.8	0.7	0.5
Chicken Manure	1.1	0.8	0.5
Sheep Manure	0.7	0.3	0.9
Rabbit Manure	2.4	1.4	0.6

The numbers do not lie. Web sites like http://en.wikipedia.org/wiki/NPKrating and http://www.allotment.org.uk/fertilizer/npk-manures-compost.php offer ample information.

NPK Levels in Natural Fertilizers

	N Nitrogen %	P Phosphorus %	K Potassium (Potash) %
Bloodmeal	12	0	0
Bonemeal	3.5	18	0
Hoof and Horn	12	0	0
Fish Waste, Blood & Bone	6	6	6
Chicken Manure Pellets	4	2.5	2.3

It is clear that both manure based and natural fertilizers offer no or very little marketable benefits and ***are at the bottom of the price range for good reason***.

Now study the table below. ***It shows one of the highest N\P\K rated and, most expensive, premium petrochemical fertilizers available as directly compared to Nu-Soil Organic Fertilizer.*** **Note the Total N\P\K rating and the actual amount that is useable (assimilable) from each:**

Analysis of Available Root Nutrients:

Nutrient:	N		P		K	
	Rated	Assimilable	Rated	Assimilable	Rated	Assimilable
Best Petrochemical	96.00	14.40 (-81.6)	120.00	18.00 (-102)	240.00	36.00 (-204)
vs. Nu-Soil	22.94	22.94	81.96	81.96	84.95	84.95
Nu-Soil Advantage:		+159%		+455%		+235%

Analysis from Techtrade Management International Corp., Dr. Eliseo Ruiz, University of Missouri.

The best premium petrochemical fertilizers have a very high N\P\K value in the range of 96\120\240 (vs. manures at only 0.6\0.4\0.5). Such a highly rated fertilizer will carry an equally high cost (over 3,300 RMB/MT, or over 550 USD/MT, or €400 EU/MT in 2012). **Note carefully what this analysis is showing**. ***With the highest N\P\K rating of the very best petrochemical fertilizer***, ***most of the nutrients are lost!*** The nutrients are not 'fixed' or stabilized in any way, and this is true of all fertilizers, ***except Nu-Soil!*** **Lab tests prove that Nu-Soil binds or fixes 100% of all nutrients, and that the *useable Nu-Soil N\P\K values are 159-455% higher than the very best petrochemical fertilizers*.**

This proves that Nu-Soil is by far the best fertilizer in the world also explains why our technology gets the fantastic crop results that it does!

CROP RESULTS

Results are always the ultimate test. Here are some of our typical results from around the world:

Two coffee fields at the Pent Plantation in Costa Rica, planted at the same time. Left top shows the use of 'composted' manure. Right top is with Nu-Soil. At left are the same coffee plants in a test bed. Coffee on the left was planted without fertilizer; the center was planted with fertilizer made from dried manure as used in the fields, and the one on the right with Nu-Soil. The top photos were taken at 90 days, the test bed photo at only 30 days. Testing in Costa Rica lasted just over two years. Coffee grown with Nu-Soil bore higher quality beans in only 2 years, instead of the normal 4 years, and the yield increase was 100% higher. Profitability from Nu-Soil actually increased more than 100%, due both to the doubled yield and higher quality beans, which sold for a premium of 30% more.

3 test beds outside Shanghai, China shows the same crop planted on the same day. Bed at far left was planted with a chemical fertilizer, the center bed with local dried manure based compost and at right with Nu-Soil. Photo was taken at only 24 days. Look closely to see a meter stick showing relative height. This is another good demonstration of the early growth acceleration as provided by Nu-Soil's advanced biotech.

These photos show Red Peppers grown in Jakarta, Indonesia. Planted on the same day, the plants on the left were planted with local 'composted' manure. Plants on the right were planted with Nu-Soil. Photos were taken at 21 days. The first crop yield as grown with Nu-Soil was over 100% higher, and harvested in only about half the usual growing time, which allowed for a second crop.

Potato crop was planted in 2 days in rural South Africa. Note that the backgrounds in our photos show that we always use adjoining fields for our comparisons. Photo on the left is with locally ‘composted’

or dried out farm manure, while the photo on the right is this same planting with Nu-Soil. Photos were taken at only 21 days from planting. Crop yield increase exceeded 100% on the first harvest, in only half the usual growing time, allowing for a second crop in the same growing season. This is especially noteworthy because potatoes devour almost all the nutrients in the soil and require the greatest amount of soil preparation for each crop.

ADVANTAGES OVER OTHER PRODUCTS

Customized petrochemical fertilizers *promise* the grower the maximum possible yield. Other than Nu-Soil, this is the most beneficial fertilizer any farmer can obtain as it will provide the biggest crops and account for some soil deficiencies. Because it is a customized premium fertilizer, it is also the most expensive and unaffordable for most crops. **With conventional fertilizers, the rule is that the more you use, the more water you need. This is especially true with petrochemical fertilizers and a 'hidden' cost of their use**. ***Also, more petrochemical fertilizer is required with each crop cycle to try and maintain the yield increase. This factor is called* 'The Diminishing Yield Curve' *and has been well documented***. The soil compaction and depletion damage caused by petrochemical fertilizers is another hidden cost. These custom blends work by maximizing the nitrogen content to achieve the yield increase. The blend is biased toward a nitrogen rich mix so the grower will see results by faster growth. However, note that a higher nitrogen mix will make for quick growth but weaker plants more susceptible to attacks by diseases and pests. **Pest and disease control are another common hidden cost of petrochemical fertilizers**.

Traditional farming in the past relied on the planting of diversified crops (crop rotation) that attracted a range of insects, some of which are natural enemies of insect pests. **Eliminating crop diversity in favor of monoculture crops left the fields without the beneficial insects, and crops became more vulnerable to insect pests, requiring a steady rise in the use of pesticides**. Much of the sprayed pesticide runs off into the groundwater and becomes a major source of water pollution in every agricultural region of the world.

Pesticides also destroy good soil. The soil contains millions of microscopic bacteria, fungi, algae, and protozoa, as well as worms and anthropods. These organisms maintain the fertility and structure of the soil. **Pesticides destroy these organisms** and their complex habitats, **hastening the process of soil depletion and erosion.** American farms lose more than four billion tons of topsoil annually, much of it because of the high-tech farming practices introduced over the past half century. By the 1970s, the U.S. had lost more than one-third of its agricultural topsoil. **The depletion and erosion, in turn, have required the use of ever-increasing amounts of petrochemical fertilizers to maintain agricultural output**. **Marginal returns have set in**. More and more inputs are required to produce smaller gains in net crop yield, moreover, high energy agriculture is now a major contributor to global warming. Reliance on petrochemical fertilizers has increased the release of nitrous oxide, a potent global warming gas. (Petrochemical fertilizers and pesticides destroying farmlands, http://encognitive.com/node/2189, retrieved on 2012-4-20).

Nu-Soil offers more advantages than custom petrochemical fertilizers without the pollution or risk of burning. Yields increase each crop cycle such that ***farmers realize at least a 100% yield increase and maintain that increase indefinitely without soil damage or requiring ever more fertilizer.*** Also, as Nu-Soil Organic Fertilizer contains transformed nutrients like nitrogen that is fixed and stabilized, ***plants grow quickly and healthier, not usually needing any chemical disease or pest control***.

All our advantages; big crop yield increases, no "burning" risk, increased soil humus, fixing soil problems, farm land reclamation, farm pollution remediation, shorter growing seasons, certifiably 100% organic for premium crop prices and greater soil water retention benefits can be easily duplicated by our technology virtually anywhere in the world crops can be grown. And, even in some places crops cannot be grown currently.

Our main advantage is our unique technology. No other company or product can offer anything that competes with us. Only Nu-Soil can double yields, and so dramatically increase growers' profits, restore exhausted land, improve all soil types, and remediate most farm pollution. The benefits we offer are almost unbelievable, but have been verified over and over again, and can be demonstrated quickly to potential customers.

There are two ways to take advantage of what we offer:

1. Become a customer. Ask for a trial and discover our difference for yourself.
2. Become a supplier. Most regions are still available for exclusive licensing for what is a very profitable business opportunity.

Simply contact us by email and we will have our most appropriate person respond to your inquiry.