

**Back to Eden Gardening? Part TWO (Rock Powder)**  
***Hell, I Just Want to Grow the Best Organic Veggies . . .***  
**With the *Least* Amount of Work!**  
**November 25, 2022**

*When the Sun rises, I go to work  
When the Sun goes down, I take my rest  
I dig the well from which I drink  
I farm the soil that yields my food  
I share creation  
Kings can do no more.*

~ Ancient Chinese Proverb 2,500 BC

This ancient Chinese proverb is well over 4,500 years old. There is more practical knowledge in this proverb than in all the self-help books in the world combined. Ok, I am exaggerating a bit, but such is the wisdom of ancient China.

For more than forty centuries (4,000 years), Chinese, Korean and Japanese farmers farmed “the same fields repeatedly without sapping the land’s fertility and without applying artificial fertilizer!” This was the conclusion reached by Franklin H. King, a former U.S. Department of Agriculture official who travelled to China, Korea and Japan in the early 1900s to witness and document their traditional agricultural practices. Mr. King wrote about this “fascinating study of waste-free methods of cultivation” in his seminal book, “Farmers of Forty Centuries: Organic Farming in China, Korea, and Japan”.

In this article, we are going to take a close look at one method derived from Mother Nature that continuously replenishes the fertility of the soil, adding all the nutrients and minerals, including trace minerals, that are much needed by the soil used for agriculture and for the Earth. Let’s start by taking a closer look at the historical background of . . . *rock powder*.

### **Amazing Fertility Along the Nile**

*The Nile is a major north-flowing river in northeastern Africa. It flows into the Mediterranean Sea. The Nile is the longest river in Africa . . .*

*The Nile has two major tributaries – the White Nile and the Blue Nile. The White Nile [which begins at Lake Victoria and is shared by Uganda, Kenya and Tanzania] is traditionally considered to be the headwaters stream. However, the Blue Nile [which begins at Lake Tana in Ethiopia] is the source of most of the water of the Nile downstream, containing 80% of the water and silt . . .*

~ Wikipedia

It was the annual flooding of the Nile River that provided the *extreme fertility* of the soil for the narrow sliver of land on both sides of the river and the Nile Delta where the river empties into the Mediterranean Sea. When the waters receded, the desert land of Egypt is transformed into one of the world’s most fertile farmlands and lush gardens, allowing the farmers to grow tomatoes, potatoes, sugar cane, rice, and the most economically important cotton. Egyptian cotton, anyone?

This amazing fertility is due to the “large silt deposits the Nile leaves behind as it flows into the sea”. What is silt [bolded emphasis is mine]?

*Silt is granular material of a size between sand and clay and **composed mostly of broken grains of quartz**. Silt may occur as a soil (often mixed with sand or clay) or as sediment mixed in suspension with water. Silt usually has a floury feel when dry, and lacks plasticity when wet . . .*

*Silt is a common material, making up 45% of average modern mud. It is found in many river deltas and as wind-deposited accumulations . . .*

*Loess is soil rich in silt which makes up some of the most fertile agricultural land on Earth . . .*

~ Wikipedia

Since the construction of the Aswan High Dam in the 1960s and early 1970s near Aswan, Egypt, however, the annual flooding of the Nile River has ended, and, more significantly, so has ended the amazing fertility that the annual flooding brought. This is because the millions of tons of silt sediments now drop out where the Nile enters the Aswan High Dam reservoir.

Today, modern Egypt, like every other nation, uses the modern chemical agricultural practices . . . and suffers the increasingly dire consequences there of.

But the Egypt that we all dream about and yearn for . . . her secret lies in the amazing fertile Nile:

<https://www.youtube.com/watch?v=oE2YZZgZWdE> (The Amazing Fertility of the Nile)

### **Amazing Longevity of the Hunzas**

Theirs is almost a fairy tale story, but their fairy tale story is actually true.

There is a tribe called the Hunza people who live in the Himalayas near Pakistan. Before the modern world intruded into their isolated world with highways and junk food, the Hunzas could live 100 to 130 years, averaging 100 years. What is the key to their secret longevity?

They use the nearby glacial ice melts to fertilize their farmlands and they even drink this milky liquid.

The Hunzas used this milky liquid to fertilize their soil, making it extremely fertile. As the direct result of this organic farming practice, the Hunzas grew and ate *nutrient-dense* vegetables, grains and fruits, such as dried apricots and almonds, especially the apricot seeds which has anti-cancer properties. It was the quality of their home-grown food, fresh air and clean water that led to their amazing longevity.

The Hunzas not only lived long, but they had good teeth and low rates of cancer. Both of these attributes, though, have declined in recent years.

Now, I know we are going to get the skeptics who doubt that the Hunzas lived over 100 years because of some misinformation they find online and elsewhere, so here is a book called “The Healthy Hunza” written by J.I. Rondale, the editor of Organic Gardening, and published by the esteemed Rondale Press in 1949:

[https://pdfhost.io/v/Kto3hxZ~F\\_The\\_Healthy\\_Hunza](https://pdfhost.io/v/Kto3hxZ~F_The_Healthy_Hunza) (1 MB PDF)

Here are two old videos on the life of the Hunzas from the 1930s:

<https://www.youtube.com/watch?v=B9RV6xCtH0M> (Hunza During 1930's)

<https://www.youtube.com/watch?v=yRCJMppzMvc> (Life in Hunza 1937)

### **Battle of German Titans**

In the 1890s, there was a pivotal and monumental battle between the agricultural philosophies of two German agricultural chemists, Dr. Julius Hensel and Dr. Justus von Liebig. The outcome of that “agricultural war” resulted in today’s overwhelming use of chemical fertilizers, toxic pesticides and herbicides, and other toxic products of modern chemical and genetic agriculture, including the latest GMO blight.

Dr. Justus von Liebig is the father of the modern chemical fertilizer industry. He was the one who first put forth the phosphorus-potash-nitrogen theory for agricultural fertilizers. This philosophy later became the foundational basis of the NPK chemical fertilizer industry: Nitrogen, Phosphorus and Potassium.

Dr. Julius Hensel is the forgotten father of the modern organic farming movement. He accidentally discovered a natural and organic source of fertilizer in pulverized rocks, such as granite, gravel, basalt, rhyolites, limestone, etc. This “rock powder” organic fertilizer can contain not only Nitrogen, Phosphorus and Potassium, but a complete spectrum of minerals and, equally importantly, trace minerals that all plants, vegetables, grains, and trees require.

The story goes that one day Dr. Hensel was milling grain . . .

*[He] noticed that some stones were mixed with it and ground into a meal. He sprinkled this stone meal over the soil of his garden and was surprised to note how the vegetables took on a new, more vigorous growth. This led him to repeat the experiment by grinding more stones and applying the stone meal to fruit trees. Much to his surprise, apple trees that formerly bore wormy, imperfect fruit now produced fine quality fruit free from worms. Also vegetables fertilized by stone meal were free from insect pests and diseases. It seemed to be a complete plant food, which produced fine vegetables even in the poorest soil.*

~ “Bread from Stones”

This amazing story of Dr. Julius Hensel and his “rock meal” is told in an old book called “Bread from Stones”, translated from German and published in 1894:

<http://library.lol/main/C00F2E065C86E2453F807AF64A5ADAB8> (2 MB PDF)

Unfortunately for humanity and the environment, Dr. Julius Hensel lost that pivotal agricultural war and Dr. Justus von Liebig won.

Isn't it interesting that the last name of Dr. Justus von Liebig is spelled "LIE BIG"?!?

## American Prophet

In 1982, an American engineer, ecologist, agronomist, and science writer named John D. Hamaker co-wrote a book with Donald A. Weaver called, "The Survival of Civilization", about the urgent need to "restoring ecological balance" to the Earth before climate change, whether it be global warming or a new mini ice age or both simultaneously happening at different regions on Earth, overwhelms humanity and the environment.

Here is what Peter Tompkins, co-author of "The Secret Life of Plants" and "Secrets of the Soil", had to say about Hamaker's seminal book:

*"I write the 'Annual Review of the Environment' for the Encyclopedia Britannica, and I have written several environmental studies textbooks. John Hamaker has developed a beautiful and comprehensive theory of climate change, every element of which is supported by scientific evidence. His theory has been sitting under the noses of many other scientists, but they have largely overlooked it. In my judgment, John Hamaker's theory is a major contribution to humanity."*

Basically, what Hamaker was urging governments and their citizens to do is to address three major problems facing humanity currently and imminently. The following is taken from his book [italized and bolded emphasis is mine]:

The increase of carbon dioxide in the atmosphere is man's most urgent problem . . . because crop losses due to the **carbon dioxide-induced severity of weather conditions** are creating a world that has virtually no food surplus for customers who can pay, let alone for those who are hungry and those who are now starving to death . . .

Our second problem is the money crisis. We can't function to accomplish the solution to the first problem with a dollar that is rapidly becoming worthless . . . Financial crisis will occur in this decade. **We cannot avoid the strong measures and the economic reform necessary to establish a sound economy and a social order which makes peace instead of war.**

The third problem [human survival] has become critical because world population has outstripped world resources. At the present rate of increase, population will double in about 30 years. It will not happen—in fact, **population will decrease drastically by 1990 due to famine.**

Whether we agree with Hamaker's conclusions and timelines or not, I think we can all agree that our world today is facing some very serious problems that Hamaker wrote back in 1982.

What Hamaker proposed in his book, to basically solve all three dire problems simultaneously, is to immediately and massively remineralize the depleted soil of the Earth with rock powder on a planetary scale but done locally with inexpensive machines.

To help realize this remineralization revolution, Hamaker patented a small rock grinding machine in 1971. He also made a prototype of his invention to prove that it worked in turning small rocks into rock powder. Mr. Hamaker died 1994 and the patent on his rock grinder has since expired.

Existing cement mills, mining mills and other existing rock crushers are only 10% to 15% efficient. They wear out quicker, as they use steel metal to impact the rocks.

Hamaker's invention is at least 85% efficient, or at least 6 times more efficient than existing rock grinding machines! His machine utilizes two-axes of rotations and thereby uses rocks to crush against rocks. His machine is not only much more efficient but it can last much longer in terms of machine durability. So far, no one has duplicated Hamaker's invention or prototype.

A copy of the book "The Survival of Civilization" can be found here:

<http://library.lol/main/65FDAD24E75B8CB9DF56403074B32BE8> (2 MB PDF)

### **What *is* Rock Powder?**

Rock powder is basically a mixture of various rock types grounded into a fine powder, whether by Mother Nature (moving glaciers), human beings (good old hammer or steel mallet) or machines (various rock grinding machines). The efficacy of rock powder for soil fertilization depends on what exactly are the various rock types in the mixture.

According to John Hamaker, glacial gravel has a full variety of rock types and, hence, glacial gravel powder can provide a full spectrum of minerals and trace minerals to fertilize the soil. This is one method of how Mother Nature fertilizes the soil.

Next in efficacy are river gravel and seashore gravel. When they are grounded into a fine powder, the resultant rock powder is almost equal to that of glacial gravel powder in fertilization efficacy.

Lastly, a mixture of single rock types found anywhere on Earth can also provide an almost complete full spectrum of minerals and trace minerals for the soil.

What are the various rock types?

They include granite, gravel, basalt, rhyolites, limestone, etc.

If we don't live near a moving glacier, and most of us don't, then the most important key is to start with a complete mixture of various rock types.

How can we tell if a rock powder, that say we get from a gravel pit or rock quarry, is beneficial and effective for soil remineralization and fertilization?

We can do what's called the "Pot Test", taken from [remineralize.org](http://remineralize.org)'s "Rock Dust Primer" document:

*As John Hamaker writes: "Doing a pot test is the most convincing argument I know of. Anybody can do it. There are testing laboratory grinders everywhere. There is no lag time. In 6 hours you can get a microorganism population*

*explosion. Taking some 6" clay pots, I filled them with a 50-50 mixture of earth and peat and 3 heaped tablespoons of dust. The results were astonishing!"*

John Hamaker also wrote the following in his book [bolded emphasis is mine]:

*"An even simpler test is to grind a little gravel, mix it with an organic soil, and grow some radishes to compare with those grown on untreated soil. They should show a major difference in size, taste quality, and texture. **Any mixture that will give good growth and is found locally is what we must use.**"*

There are two other tests that we may perform to determine the efficacy of rock powder called the "Separate Layer Test" and the "Moisture Test" which can be found in the document "Rock Dust Primer":

[https://pdfhost.io/v/ZMPAXv0Oa\\_Rock\\_Dust\\_Primer](https://pdfhost.io/v/ZMPAXv0Oa_Rock_Dust_Primer) (330 KB PDF)

### **What are the Benefits of Rock Powder?**

Organic foods (vegetables, fruits, nuts, and grains) grown using rock powder contains a full spectrum of minerals and trace minerals. They are healthier, tastier, more vitaminized, and more mineralized.

They are *nutrient-dense* organic foods.

Organic foods grown using rock powder are more immune to insect infestation, fungi and plant diseases. Therefore, the use of toxic pesticides, fungicides and herbicides can be decreased significantly, if not eliminated completely.

Rock powder increases the storage and shipping quality of organic produce, such that they keep a longer time than those grown with chemical fertilizers or even animal manures.

<https://www.youtube.com/watch?v=uOJ9vBdHZGM> (Remineralization in England)

Rock powder will help growing plants to resist drought and frost.

Rock powder will produce larger vegetables and a greater abundance of crops, especially when used in conjunction with wood chips, the subject of Part ONE:

<https://www.youtube.com/watch?v=MEkFFRjDkvs> (SuperSize Your Vegetables)

Rock powder will help trees to grow faster and bigger. This benefit is extremely useful for areas where reforestation is occurring.

<https://www.remineralize.org/2007/12/men-of-the-trees-in-western-australia/>

<https://www.remineralize.org/2007/12/the-effects-of-basalt-rock-dust-emissions-on-spruce-trees-at-the-basalt-quarry-albert-in-the-huhnerb/>

Using rock powder as the dominate organic agricultural practice will eventually eliminate the use of ALL chemical fertilizers and ALL of its associated toxic chemicals, the toxic

herbicides, insecticides, fungicides, pesticides, etc. The detrimental effects of using chemical fertilizers is explained by this video:

<https://www.youtube.com/watch?v=A8qTRBc8Bws&t=160s> (The Trouble with Fertilizer)

Using rock powder as the dominate agricultural practice will eventually eliminate the use of ALL GMO seeds and ALL of its associated toxic chemicals such as glyphosate which is the extremely toxic chemical used in the herbicide Roundup. If there is a company literally from Hell, America's Monsanto is it:

[https://www.youtube.com/watch?v=9\\_Cltx7SlyQ](https://www.youtube.com/watch?v=9_Cltx7SlyQ) (Monsanto Documentary MONSATAN)

### **Where to Obtain Rock Powder?**

Until John Hamaker's invention is prototyped by someone and turned into a manufactured machine, the only current and readily available sources of rock powder are what can be purchased commercially which can be somewhat expensive and what can be found at your local gravel pit or rock quarry, hopefully, for minimum cost.

There are companies in the USA, the UK, Brazil, and elsewhere that sell rock powder under their trademark brands. The following companies and their products are not necessarily my recommendations, as I have not used their products personally.

In the USA, there is Axomite Mineral Products ([azomite.com](http://azomite.com)). In the UK, there is Remin Volcanic Rock Dust ([www.reminscotland.com](http://www.reminscotland.com)). And in Brazil, there is Rockall Fertilizantes Naturals ([www.rockall.com.br](http://www.rockall.com.br)).

To locate *local* sources of less expensive rock powder—remember that weight will be the key cost factor in transporting rock powder—quoting from the "Rock Dust Primer":

*To find gravel-grinding operations in your area, call your local gravel pit (look in the Yellow Pages under "Cement-Wholesale", or "Sand and Gravel") and ask if they have crushed gravel screenings made from mixed rocks, the kind that comes out of river beds - crushed and passed through a 1/4 inch [6 mm] or finer screen. The gravel dust will probably cost from \$1-\$8.00 per ton plus the cost of transportation if the gravel pit delivers it to your garden. As most of the cost is in transporting the rock dust, having a truck or access to one is an advantage. A cooperative initiative with friends and neighbors would also cut costs down . . .*

*The more finely ground the rock, the more readily microorganisms will have access to the minerals. John Hamaker uses the term "gravel dust" to mean a dust "90% of which will pass through a 200-mesh screen" . . .*

*[In the industry, rock powder] is referred to as pond settlings, rock dust, rock flour, classifier tailings, and minus #200 mesh. You should ask for minus #200 Mesh (-75 micron) material, pond settling, material that has gone over the weirs of a sand screw or the weir of a sand classification tank, or material obtained from the dust collection system. You should not use concrete sand, abrasive sand, filter sand, mason sand, blow sand (loess) screenings as they are too coarse.*

In the worse case scenario during survival situations, you can gather a mixture of various rock types—granite, gravel, basalt, rhyolites, limestone, etc.—and pound them into powder using an ordinary hammer or a 3-kg steel mallet. I have done this many times but it is not easy considering how much rock powder is needed even for a small garden.

### How to Use Rock Powder?

There are several ways to apply rock powder to the soil, depending on the size of your garden or farm.

For very small gardens, I just use a garden trowel to put the rock powder directly on the soil or on top or under the cover of wood chips. If on top of wood chips, the rock powder will dissolve into the soil beneath when it rains.

For medium to large gardens, quoting again from the “Rock Dust Primer”:

*It can be spread by hand out of a wheelbarrow using a shovel, or roto-tilled and disked in. You can use a wet agricultural lime spreader. If equipment is available that contains an agitator (to maintain particles in a suspended state), a wet spray can be used.*

*Organic farmer John Sundquist in Oregon applies it with a manure spreader, bander or an "E-Z Flow" type fertilizer applicator.*

For large farms, rock powder can also be spread using existing farming machinery, taken from “A Rock Dust Primer by Thomas Vanacore ([https://rockdustlocal.com/uploads/3/4/3/4/34349856/a\\_rock\\_dust\\_primer.pdf](https://rockdustlocal.com/uploads/3/4/3/4/34349856/a_rock_dust_primer.pdf)):

*Pulverized rock powders can be spread in traditional drop spreaders with large openings in the trough. Any damp lime spreader wagon or truck mounted sand and salt spreader will spread any gradation of rock dust except the dry stone flours. The grits-to-dust gradations can be spread like lime, in live floor lime spreaders and augur driven applicators.*

When John Hamaker’s invention is finally perfected and mass produced, rock powder produced on a farm can “be handled wet or damp . . . until it is distributed and ploughed into the land . . .” using a small horsepower rubber-lined pump and a mud pump hose, or one lined with a synthetic rubber inner tube that offers resistance against abrasion.

The following chart gives the approximate fertilization effectiveness in years for various application rates of rock powder, depending on the quality and size of the rock powder:

Single Application Rate				Single Application Effectiveness
7.5 tons / hectare	750 kg / 1,000 square meter	75 kg / 100 square meter	750 grams / 1 square meter	3 years
25 tons / hectare	2.5 tons / 1,000 square meter	250 kg / 100 square meter	2.5 kg / 1 square meter	10 years
50 tons / hectare	5.0 tons / 1,000 square meter	500 kg / 100 square meter	5.0 kg / 1 square meter	20 years

## The Super Rock Grinder aka the Hamaker

In honor of and in the spirit of Dr. Julius Hensel and John D. Hamaker, and their Great Wish to see humanity survive the *Shitstorm* that is coming, I am releasing all the pertinent information that I have gathered over the years for anyone who has the necessary mechanical skills to duplicate and, hopefully, mass manufacture inexpensively what I have called the *Super Rock Grinder* or “the Hamaker”.

With the Hamaker machine, farmers and gardeners everywhere can use it to make rock powder *locally* where they are to remineralize and fertilize their soil:

[https://pdfhost.io/v/Bi0BR4XiM\\_Hamaker\\_PDF1](https://pdfhost.io/v/Bi0BR4XiM_Hamaker_PDF1) (10.2 MB PDF)

## Closing Remarks

Someone once said, I think it was the Venezuelan journalist Eva Morales, that a leader like President Hugo Chavez comes along once in 500 years. If that is the case, then a Leader like President Xi Jinping comes along once in 5,000 years!

When President Xi Jinping is done in his selfless and magnanimous service for China with National Rejuvenation and the Unification of China, and for the world via the multitude of BRI (the Belt and Road Initiative) infrastructure projects, he will outshine Lao Tzu, Confucius, and even Chairman Mao Zedong who is responsible for the birth of New China.

So far, President Xi Jinping and the Communist Party of China have lifted almost 100 million Chinese out of extreme poverty since 2012, a herculean feat that has never been accomplished anywhere before in history.

If you want to be *great*, serve the people with all your heart, mind and soul. Don't be just another footnote in the history books the likes of Elon Musk, Mark Zuckerberg, Jeff Bezos, et al. who feign selflessness and magnanimity when their sole objective and purpose in life is money, more money and ever more money. Not to mention fame and public adulation.

If, however, you want to be *truly great*, the likes of Nicolas Tesla, Dr. Royal Raymond Rife, Dr. Julius Hansel, and John D. Hamaker, serve mankind and womankind . . . by giving away *your greatness* freely.

Whatever it may be.

Wherever you are.

Whoever you are.

~ ~ ~

*When the sun rises, I get up to work  
When the sun sets, I take my rest  
I carry buckets of water from a mountain creek  
I cover the bare soil with wood chips and rock powder  
I share creation with Mother Earth and her children  
Buddhas cannot do more, I shall do no less*