

About BioWash

By Dr. Leon Hesser, P.H.D.

BioWash is a remarkable plant tonic that greatly increases crop production by enhancing plant root growth and nourishment in young plants. It does this by stimulating the deep and rapid penetration of roots into the soil. **BioWash**, which is non-toxic and non-hazardous to humans, animals or plant life, heralds a new era in agriculture.

Characteristics

As a bio-based product **BioWash** falls within a new category of Plant Growth Stimulator for which no governmental rules or regulations are yet in place in the USA. **BioWash** is neither a petroleum-based fertilizer nor a chemical pesticide. Because it is not a chemical pesticide, it does not require registration or approval by the U.S. Environmental Protection Agency (EPA).

Because **BioWash** has less than 5% NPK, it does not meet criteria for registration as a fertilizer by some State governments in the USA.

BioWash is manufactured in a sub-atomic process. It requires no special training, care or equipment for those applying it and it requires no special protective clothing.

When sprayed with **BioWash**, young plants grow more rapidly. The sub-atomic particles of the spray quickly penetrate the leaves to spark more-efficient photosynthesis and higher **BRIX** (plant sugar) levels. This makes the plants stronger, healthier and better able to resist diseases and harmful insects, while attracting honeybees. Plants have earlier and higher rates of germination, quicker flowering and increased overall crop yields.

General Benefits

Increased Yields: Farmers report yield increases ranging from 10% to more than 40% on a series of grain, hay and horticultural crops.

Higher Quality Production: Higher grain test weights, better quality fruits and vegetables, fewer rejections of fruits and vegetables.

Pest Control: **BioWash** is **NOT** a pesticide. However, farmers report that it does keep many harmful insects off plants. It is believed this effect is created because many insects cannot effectively digest the increased sugar content of the plants and they simply go elsewhere. This is in contrast to traditional chemical pesticides, which are directed at the pests' neurological systems. Pests often develop resistance to such chemicals.

Shorter Growing Period: Most crops treated with **BioWash** mature about two weeks earlier, which facilitates double cropping, such as soybeans following wheat.

Drought Resistance: The deeper roots improve resistance to drought and facilitate better stands, which minimizes re-planting.

Stronger Plants: Deeper rooting makes the plants stronger, which reduces lodging and makes the plants more wind-resistant.

Blending Process

BioWash is blended from farm-grown commodities (tree oils, sugar, corn, etc) in a proprietary process that embodies the latest advances in environmental science: quantum electro-mechanical physics and colloidal chemistry. In the manufacturing process actions happen at the sub-atomic level which causes the materials to take on surprising new properties. Micelles are created in which the extracts of natural plants are blended at specific time intervals, temperatures and sequences which cause them to become transformed into new particles designated as colloidal micelles.

Treatment & Benefits for Specific Crops (as reported by users). Following is a small sample of benefits, as reported by growers throughout the USA:

Soybeans: **BioWash** increases yields as much 40%. It also increases the test weight of the harvested beans, which increases the market price of the beans and reduces the need for chemical pesticides.

Wheat: Farmers in North Carolina report that yields of winter wheat that was sprayed when it came out of dormancy in the spring had 35% increase in yields plus significant increase in test weight.

Tomatoes: Spraying the plants soon after transplanting causes the roots to grow more deeply. The increased **BRIX** in plants that are sprayed with BioWash causes larger and sweeter tasting tomato crops.

Alfalfa: **BioWash** stimulates rapid and robust growth of both pasture and hay crops. It discourages insect attacks due to the increased BRIX content. It is best to apply the product within a week after each cutting of hay. It is more beneficial on newly planted crops.

Sweet Corn: Spray at the 2 to 4 leaf stage. The tassels will be extraordinarily large and full; the spray increases the sweetness of the corn, increases the number of rows of grain, and causes the grains to fill the cob completely.

Butternut Squash: A grower reports that treated vines produced 12 squash with 2/3 of them being larger than he had ever experienced. Untreated vines produced 2 squash.

Red Raspberry: A grower sprayed a 10-foot row of red raspberries in the spring with a small amount of the mixture. He stated: "When the bushes started to bloom, honey bees were in abundance. I had hardly seen bees in the garden for years. There were no Japanese beetles. The bushes set an abundance of fruit; we picked 1/2 to 1 pint every other day for six weeks; picked the last berries the night before the first frost in late October."

Double-cropping: A Michigan farmer tried double-cropping soybeans after wheat. A month before the beans were ready for harvest, the area experienced 15 hours of freezing weather. He sprayed the beans with a **BioWash** solution (complemented by 3 lbs of sugar per ounce of **BioWash**). The beans survived the freeze. A month later he harvested 10-bushel per acre of soybeans (which was unheard of with double-cropped beans in Michigan).

Greenhouse Use: Several operators of greenhouses in the State of Florida in the USA report a remarkable positive response on a variety of fruit and vegetable plants in their greenhouses.

A picture says a thousand words. Following are pictorial success stories These are results as reported by real growers. Come join their ranks!



NOTICE: BioWash is made from natural, processed plant chemicals and can be diluted in water or any other agricultural liquid. It contains no toxins or any cancer-causing agents, is 100% biodegradable, requires no special equipment for application and is safer for humans, animals

BIOWASH SUCCESS STORIES

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Bountiful Yields

Farmers are reporting spectacular results with BioWash. Growers are glowing with excitement about vastly increased yields of field and row crops, fruits and vegetables, often doubling and quadrupling profits!

Growers are excitedly telling each other about awesome results and benefits enjoyed after BioWash ing beans, corn, hay, soy, vegetables, etc.

Astonishing increases in various fruits and vegetables are reported nearly daily.



Florida vegetable growers normally do not attempt to raise vegetable during the hot summer heat but Mike Wallace, owner of Island Botanicals at Bokeelia, FL, raises a variety of vegetables by applying BioWash.



A North Carolina wheat grower increased production by 14 bushels of rich, beautiful golden wheat per acre. Numerous reports of 25 to 50 additional bushels per acre are being reported.



A Wyoming cattle rancher raised abundant pasture grass, even during a drought! Don LeClerc, Florida reported astounding results on rye hay planted in poor soil.

Dr Enrique Rico of Poly Tech University tested BioWash on a late season field of corn. He reported increased income from \$100 per acre to \$400.

TEXAS OAT CROP SUCCESS STORY

Texas grower Alan Holt applied **BioWash** to 90 acres of his oats in late 2010. In 2011 Texas went through the worst drought conditions in several decades. Many farmers lost their entire crop of oats.

The top picture to the right depicts a field belonging to one of Alan Holt's neighbors. The oats were very sparse and produced negligible grain. Many farmers opened up their decimated crops to serve as food for their cattle rather than trying to market the hay.

The second picture is one of Alan's oat fields. Note color, size and size of oat grains.

Grower Holt indicated his crop yield was up to about 1500 lbs/acre and he was able to harvest three hundred (300) 5x5 rolls of hay from his 90 acres.

Even more exciting was that his oat protein content after **BioWashing** was reported to be 24% (the average is said to be 18%)



The only difference in Alan Holt's results and those of his neighbors was the application of **BioWash. The value of **BioWash** action in improving efficiency of uptake of moisture and nutrients into plants is clear. One can only imagine what the results might have been in *non-drought* conditions!**

HOW IT HAPPENED

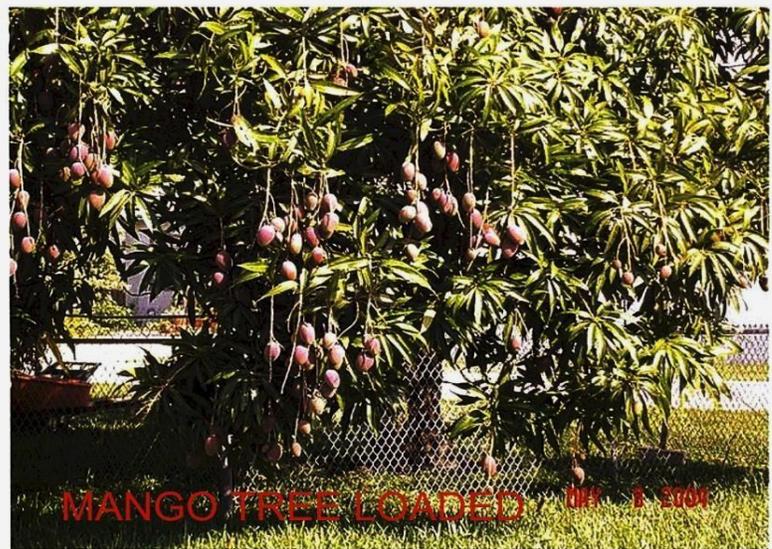
In 2004, Mike Vaughan's mango tree yielded about 50 unhealthy mangos.

The next season Mike **BioWashed** his tree. He started before the buds appeared. When the blooms appeared, everyone knew that something special was happening. His tree was loaded with blooms like he had never seen before.

Note the neighbor's tree in the background; it had no blooms.

By May Mike's tree yielded an amazing 1000+ mangos!

Mangoes are a very prolific and popular fruit in Florida. **BioWash** has rapidly become a favorite adjunct to mango growers' planting schedule.



THE NEWS SPREAD QUICKLY!

A Florida woman had a five year old mango tree that never yielded more than four mangoes. After she **BioWashed** the tree it produced 62 mangoes.



A Mexican college professor tested **BioWash** on corn. His yield soared so dramatically that his income soared from the normal \$100 per acre to \$400/acre.



Soy Farmers were overjoyed with their **BioWashing** results



STORIES, STORIES, STORIES.....

Wheat growers began to report spectacular increases in wheat yields after using *BioWash*.



Citrus yields exploded! After being *BioWashed* the yield on this tree (right) soared from an estimated 400 small, tart tangerines to over 2000 large, sweet and juicy tangerines that the neighbors loved.



A Mexican lime grower's income soared from \$18,000 to \$100,000+ after *BioWashing*,



It pays to use *BioWash*!

THERE ARE MORE STORIES.....

Antonio is very impressed by his increased papaya yield with **BioWash**.



Antonio was so impressed with BioWash, he BioWashed his papayas. His trees produced between 60 and 100 papayas per tree.

Antonio's 25 acre papaya grove produced an estimated \$1,000,000.00 for him.

Antonio estaba tan impresionado con BioWash, que BioWashed sus papayas. Sus árboles producen entre 60 y 100 por árbol de papaya.

Antonio de 25 hectáreas de papaya O Grove producido un estimado de \$1,000,000.00 para él.

This papaya grower expressed amazement at the difference between his **BioWashed** and non-**BioWashed** plants (12 feet vs. 4 feet)



BioWash is **NOT** a fertilizer! In fact, lab analysis reveals it has less nitrogen content than ordinary water.

The difference is in the roots! Note the difference in size of the roots (right) of the two trees being held above.



BENEFITS, BENEFITS, BENEFITS!

BioWash is a “cation exchange exciter.”

It increases the efficiency of the electro-magnetic action that attracts water and nutrients into the plant.

Improved absorption of water and nutrients naturally increases growth and nutritional content.

BioWash also increases the photosynthesis activity of plants. The combination of improved nutrient absorption and increased plant sugar content improves market appeal and profits.

Many insects avoid plant sugar. This benefit can reduce the amount and cost of toxic insecticides.

Higher sugar content improves plant resistance to freeze damage. Such resistance can be the difference between a good harvest and loss of an entire season’s income.



In 2004 a late autumn freeze devastated 70% of the California citrus harvest. Approximately ten days before the freeze, Jim Little **BioWashed** his 4400 orange trees. Jim did not lose a single orange due to the freeze.



Jim’s neighbor did not **BioWash** his citrus trees. He lost his entire crop of oranges and his full season’s income.

MORE FREEZE STORIES

A test plot for potatoes was started by a grower LaMar Reeder in WA State. He quartered one potato into 4 pieces. The two plants on the left were **BioWashed**. The two on the right were not (the 4th plant is barely visible).



The area suffered a late season freeze. The **BioWashed** plants survived well; the plants that were not **BioWashed** froze (right).



The difference was in the root system (see picture – plant on left is the small potato plant that froze, above). Stronger root structures make plants more resilient to attacks from outside influences.



What is Cationic Exchange?

Cationic Exchange (CE) is a process that stimulates the electromagnetic exchange between the root and nutrient ions of the soil. CEC visibly increases the root size, allowing greater absorption of nutrients. By increasing **BRIX** (sugar content) in the plant, **BioWash** also helps enhance the photosynthesis effect of the sun's rays. The result is faster growth, sturdier plants, increased yields, earlier marketability, improved flavor, better freeze and frost resistance and extended growing and yield seasons.

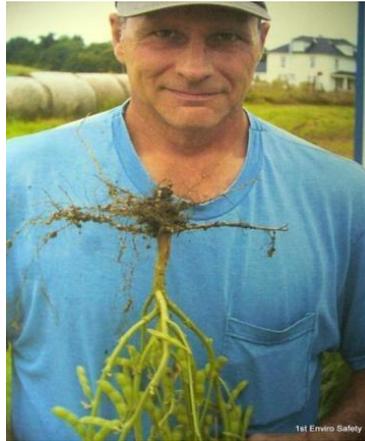
Tree House Nursery at Bokeelia Florida **BioWashed** 100 mango plants and used another 100 plants as a control group.

The non **BioWashed** plants grew approximately 6 inches in six weeks (right).

The **BioWashed** plants **DOUBLED** in size in the same time period to 12"!

Some of the **BioWashed** mango plants at Tree House Nursery grew to 30" tall in that same 6 week period!

CATION EXCHANGE CAPACITY – THE STORY



Improved Cationic Exchange produced outstanding soy bean yields (left).



Improved Cationic Exchange tripled the nitrogen nodules in these soy plants (left)



Bob & Vivian Murray of Tree House Nursery listed 16 benefits from using BioWash at their nursery..... from plant yields exceeding 300% over previous seasons to an estimated 95% reduction in costs of fertilizers and insecticides after using BioWash.



INCREASED CATIONIC EXCHANGE CAPACITY

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Many of our **BioWash** clients are particularly enthused by how BioWash works on tomatoes. They rave about the size, flavor and yields of this popular veggie (fruit) after using **BioWash**.

Farmers advise that when they **BioWash** at 3-week intervals, tomatoes continue producing. That's a good thing!

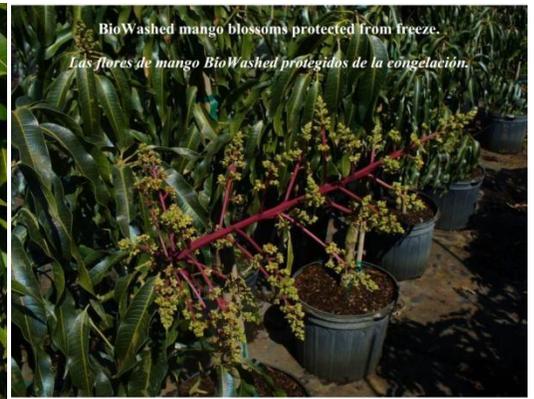
Because **BioWash** increases BRIX (plant sugar) in plants, they are more naturally able to withstand cold temperatures. **BioWash** has been found to protect plants down to 27° F.

Bob Murray, owner of Tree House Nursery at Bokeelia saved an entire mango grove with a few dollars worth of **BioWash**.

Bob's neighbor lost all but six mangoes on this tree.



“Give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime”
...Chinese Proverb



It pays to use **BioWash**.....

STORIES, STORIES AND MORE STORIES!

Tracy Piper BioWashed her tangerine tree just before her area was hit with an unexpected cold snap. The temperature dropped to 19° F and her trees and fruit froze. (BioWash is effective in resisting freeze only down to 27° F)

Tracy was able to salvage much of her tangerine crop because her son immediately sprayed the tree the morning after the freeze.

Agronomists have speculated that the freeze probably didn't completely kill the tissue of the fruit and that the BioWash helped in revitalizing that tissue.



*"I'm not sure why my 15 year old son thought to apply **BioWash** after the tree froze, but he did. Many of the leaves actually recovered!" Tracy Piper*

LAWNS LOVE BIOWASH

Grass responds well to **BioWash**, becoming rich and lush, resistant to disease and cold temperatures.

BEFORE **BIOWASH**



32 DAYS AFTER **BIOWASH**



MORE TOMATOES?

There may be disagreement as to whether tomatoes are a veggie or a fruit....but there is little disagreement that they are a wonderful addition to our diets...and tomatoes love **BioWash!**

TOMATOES BEFORE BIOWASH



SAME TOMATOES 2 WKS LATER



TURF'S UP!!!!

The reputation of golf courses can be made or broken on the quality of the fairways and greens on which golfers play. It's a continuing challenge for greens keepers to keep courses in top condition, especially during periods of reduced rainfall.



The pictures to the right are of 2 test areas on a Louisiana golf course that suffers from stinging nematodes and fungus issues. Note how the test areas responded to application of **BioWash**



BioWash is not an insecticide but it does increase BRIX (plant sugar) production in the roots of plants. Because some insects don't digest sugar well, they go elsewhere for a meal.

BioWash is also not a fertilizer..... but it boosts the efficiency with which plants absorb moisture and nutrients made available to them, strengthening roots and stalks. This builds the plant's natural resilience to disease and drought conditions.



*Golf Course Greens
Keepers continually
fight the battle with
nature and man to
keep courses looking
beauti*

**Fungus, Insects, Divots
The Battles Rage**

It pays to use *BioWash*

