

NAT Structured Water Units and the World of Agriculture

Introduction

What if one day all the foods we ate were truly nutritious and energizing? Well, news flash: That day has come to the world of agriculture.

At Natural Action Technologies, Inc. they have a slogan. "What if changing one thing could change everything?" For agriculture, It is simple. That one thing is called Structured Water.

When water is run through an NAT Structuring Unit, structured water is produced. What is the difference between this and other agricultural waters?

Unlike waters being used in many agricultural applications, structured water:

- 1) Contains no energetic toxins
- 2) Brings forward high oxygenation states
- 3) Increases the energy
- 4) Regulates and balances the soil minerals

These characteristics of structured water bring forth some truly amazing results in the world of agriculture.

Brix Levels

What does Structured Water brings to food crops?

For many years, there has been the understanding of what is known in agriculture as the Brix Level. This was brought forth in 1800s when German chemist Adolf Brix saw the need for a way to tell when grapes were sweet enough for the picking.

What resulted was an instrument, the refractometer, to measure exactly where the sugar content of the grape stood on any given day.

Even beyond sugar content, the Brix Level is now known to be an indicator of nutrient content.

A refractometer, the device pictured here, measures units called Brix. Degrees Brix (symbol °Bx) is a unit representative of the sugar content of an aqueous solution. One degree Brix corresponds to 1 gram of sucrose in 100 grams of solution and thus represents the strength of the solution as a percentage by weight/mass.



True Brix measures a combination of sugar, amino acids, oils, proteins, flavonoids, and minerals. A drop of the liquid from the plant juice is placed on the prism of a refractometer. Then the cover plate is closed so the liquid will spread out on the glass. As you look through the viewing end of the instrument, you see an etched scale calibrated in 0-30 or 0-32 degrees Brix.

Plant Changes (Vitality and Lack of Disease)

A crop such as a strawberry then can be graded in terms of Brix with numbers in 4 categories: Poor, Average, Good, Excellent. It is interesting to note that most supermarket Brix ratings are in the Poor to Average range. Enter Structured Water. Through the use of Structured Water, crops now consistently rate in the Good to Excellent range or beyond!

In terms of plant immune resistance, correlations to the Brix rating can be made. Just as a pencil appears bent when placed in a beaker of water, the light passing through the

Refractive Index of Crop Juices -- Calibrated In % Sucrose Or °Brix				
	Poor	Average	Good	Excellent
FRUITS				
Apples	6	10	14	18
Avocados	4	6	8	10
Bananas	8	10	12	14
Blueberries	8	12	14	18
Cantaloupe	8	12	14	16
Casaba	8	10	12	14
Cherries	6	8	14	16
Coconut	8	10	12	14
Grapes	8	12	16	20
Grapefruit	6	10	14	18
Honeydew	8	10	12	14
Kumquat	4	6	8	10
Lemons	4	6	8	12
Limes	4	6	10	12
Mangos	4	6	10	14
Oranges	6	10	16	20
Papayas	6	10	18	22
Peaches	6	10	14	18
Pears	6	10	12	14
Pineapple	12	14	20	22
Raisins	60	70	75	80
Raspberries	6	8	12	14
Strawberries	6	8	12	14
Tomatoes	4	6	8	12
Watermelons	8	12	14	16
GRASSES				
Alfalfa	4	8	16	22
Grains	6	10	14	18
Sorghum	6	10	22	30
VEGETABLES				
Asparagus	2	4	6	8
Beets	6	8	10	12
Bell Peppers	4	6	8	12
Broccoli	6	8	10	12
Cabbage	6	8	10	12
Carrots	4	6	12	18
Cauliflower	4	6	8	10
Celery	4	6	10	12
Corn Stalks	4	8	14	20
Corn (Young)	6	10	18	24
Cow Peas	4	6	10	12
Cucumbers	4	6	8	12
Endives	4	6	8	10
English Peas	8	10	12	14
Escarole	4	6	8	10
Field Peas	4	6	10	12
Garlic, Cured	28	32	36	40
Green Beans	4	6	8	10
Hot Peppers	4	6	8	10
Kale	8	10	12	16
Kohlrabi	6	8	10	12
Lettuce	4	6	8	10
Onions	4	6	8	10
Parsley	4	6	8	10
Peanuts	4	6	8	10
Potatoes	3	5	7	8
Potatoes, Sweet	6	8	10	14
Romaine	4	6	8	10
Rutabagas	4	6	10	12
Squash	6	8	12	14
Sweet Corn	6	10	18	24
Turnips	4	6	8	10

Within a given species of plant, the crop with the higher refractive index will have a higher sugar content, higher mineral content, higher protein content and a greater specific gravity or density. This adds up to a sweeter tasting, more minerally nutritious food with lower nitrate and water content, lower freezing point, and better storage attributes.

plant
juice droplet is bent so that a clear line is shown against the scaled background of the refractometer. The amount of bending is directly related to the Brix is a measure of energy.

A high-Brix plant emits a far superior energetic electromagnetic spectrum than a low-Brix specimen. Insects “see” in this range and they “attack” plants with the weakest emanations. If the grower were to understand that all that talk about how healthy plants “resist” insects is really another way of saying that the strongest plants don’t attract insects, then, they are on the road to understanding master soil scientist Dr. Carey A. Reams’ agricultural methods.

A Brix reading is merely a way for us to see by proxy what insects see with their eyes. When a plant is out of nutritional balance, internal pressures cause some cellular components like simple sugars or incomplete proteins to seep out to the surface of the leaves and stems. Then, what do you have? Free lunch for pests!



Plants are just as susceptible to systemic nutritional imbalances as humans are. Structured Water brings the plant back into the balance of nature.

Farm Water Usage

The advent of Structured Water to the farm has left more than one farmer scratching their head wondering why they didn't have to use as much water as they did in the past.



NAT Structured Unit designer, Clayton Nolte, explains, "It's all about energy...and energy in structured water lends itself to improved hydration. What's more, structured water offers such an increase in hydration factor, that plants don't need the "accustomed" water levels familiar to "normal" water farmers. They are out there standing in fields of mud surprised because with structured water the plant doesn't need as much."

Experiences of Flavor and Plant Productivity

Tangerines

We remember the first experience foods grown with structured water. "It was an awakening. We had no idea what foods should really taste like until one magical day. A structured water distributor and orange / tangerine grower delivered some tangerines to NAT headquarters.

We made juice out of the tangerines and it was like nectar from the heavens. "Wow, so this is what juice is supposed to taste like!" was the expression on everyone's faces. Even more, there was something in the juice that made your heart and face smile. It was an unforgettable experience to know what we all could truly be enjoying for taste and health.

For the first time, real nutrition was a reality. We tested the Brix level of the juice and it checked in at a high 17.8. This is good to excellent on the Brix Scale...Man, was it ever!

Lemons

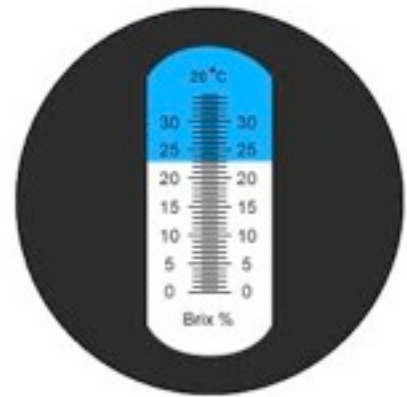
Oh my God! Can you really bite right into a lemon and have it taste this sweet? That's exactly what the experience was like when we first tried structured lemons! We were biting right into them as if they were apples. The normal strong tartness was replaced with a uniquely pleasant and sweet lemon semi-bitter flavor.

Grapes

Grape farmers in Mexico have been amazed when their crops were brought to harvest 2 weeks earlier than ever in the history of their farm. The normal fungal growths that appeared normally on the grapes never materialized once the vines were fed structured water.

But new levels of Brix for grapes were also seen. The normal Brix reading for an excellent grape would hit the 20 mark on a refractometer. These grapes were now checking in at 24!!! Structured water literally blew the lid off the normal Brix scale.

Another understanding came from Soil profiles under the grapes changing as well (see Soil Health below).



Roses

When we first started out with a rose bush at NAT headquarters, it was putting forth 6 foot high flowers. These were fairly healthy to begin with. After adding powerful Structured Water from multiple inline structuring units, the rose garden soon began to look like a fantasy rose forest. The roses produced such incredibly fragrant flowers, sturdy stems, and rich dense leaves that it was an amazing kaleidoscope of colors.



Neighboring roses paled by comparison. It was clear that when the shooting leaders were all reaching for the sky at 11 to 13 feet that there was something very real, if not magical, about structured water! Now, the rose flowers themselves reach above our outstretched hands at 103 inches, or roughly 8 and a 1/2 feet. Along with the structured water, organic fertilizers from Earthheart Naturals were employed for greater gains. A significant aspect of structured water is to bring quicker uptake and assimilation of good nutrients to the plant or animal.

Sprouts

Sprouters have also seen the amazing growth results in their sprouts from structured water. The longevity of sprouts goes on and on in the refrigerator. This never-seen-before lasting power has people talking for days, shaking their heads, and saying, “How can these perishables stay fresh for so long?!” But they do!



Redwoods



It makes us ponder what would happen if the Redwoods were given Structured Water?

The same question applies, for that matter, to all forests of nations globally.

With an imminent threat to our weakened forests from so many sources, is it time our forestry departments considered the use of Structured Water to improve and prosper our forests back to the magnificently healthy stands they once were?

Soil Health (Calcium Glaze)

There are other realizations for farmers to experience in the world of Structured Water. Perhaps the richest is the effect of the water on the soil. Soil scientists have studied mineral depleted soils for years.

Very few have studied how structured water immediately frees up calcium and makes it available to the plant from the soil. Instead of poorer waters creating a “calcium glaze” on the soil, farmers now experience a soil healthy and balanced providing the minerals in the soil to the plant.



Quantum Energetics and the Field Effect

There are other curious effects of structured water deserving of fascination and study. For example, early in the observation of strawberry field growth, it was noted that structured water had the ability to increase strawberry plant growth even though



neighboring plants received **no** water. Was there some message that structured water gave to the other “dry” plants off of the plants that were being watered? Or was it that structured water emits such a real energetic field that the “dry” plants increased in growth just by a quantum field effect of proximity?

These are intriguing questions to be observed and answered with further study.

ANIMAL HEALTH

Plants are not the only ones experiencing improved growth responses in agriculture. Improvements to animal health and production have been seen as well.

As we enter into the world of animal husbandry and ranching, this same Quantum Field Effect pertains to all animal studies with Structured Water as well.

Why is it that whole colonies of bees have been observed to repeatedly and daily fly away from their hive and over a large yard just to arrive and drink as much of a neighboring structured water supply as possible? Are they that knowing of how the health of structured water makes them a far stronger, harmonious, and more productive colony? They must, because closer water sources, although available, are overlooked by the same bees!



We even conjecture that as beekeepers become informed of the natural power of structured water has on bees, the dreaded colony collapse disorder may be seen to become a thing of the past or at least significantly reduced by Structured Water’s protective presence.

Dairy

Dairy herds in Chandler, AZ were seen to improve their production of butterfat. The cows even began behaving differently, more cohesively.



When the cow's drinking water was in question from the state as to bacterial levels, an NAT Structuring unit was placed between the source and the drinking troughs. Within two weeks, the water was cleared of this problem and the dairy was allowed to remain open.

Chickens

Chicken farms have found greater overall growth and increase in weight than birds drinking unstructured water.

Another big insight from using structured water was the lowering of overall mortality rates by 50%. The mortality declined from 4,000 birds per house to 2,000 birds per house in one recent study.



All Animals



All animals are attracted to structured water...birds, horses, and pets.

When given the choice, dogs naturally choose structured water over chlorinated tap water. Structured Water is leading the way in the world of veterinary health.

Farm Machinery

An interesting thing about Structured Water is that its effects are not just with the animals and plants.

Even farm machinery operates more efficiently.

Engine power and mileage have been shown to increase with the use of structured water in the motors.



We no longer really have to study the fact that structured water is bringing forth crops of superior value. All we have to do now is apply the water, stand back, and enjoy the results!