



## Could Structured Water™ in agriculture change the face of farming?

Centuries of wine making and working with other fruits and vegetables have shown a direct relationship between higher Brix readings and higher quality produce (meaning increased nutritive value, longer shelf life, and superior taste). Until now, it was not unusual for it to take several years to build soil up to a healthy, sustainable level with a good soil-building program. With better soil, plants were more resistant to pests, weeds, and disease. In this way crop growers were able to obtain the higher Brix readings.

Farmers and gardeners are learning that any crop with a 12 or higher Brix reading will in many cases eliminate most, if not all, insect problems in the garden and on farms.

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## So what is Brix and how does it work?

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A refractometer, the device pictured above, 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, minerals and other goodies. Sugar is merely one of the components of Brix. 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.

Just as a pencil appears bent when placed in a beaker of water, the light passing through the 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.

## Hydration using Structured Water™ products

It is commonly known that the health of a plant depends on hydration. Peter C. Agre, an American medical doctor, professor, and molecular biologist won the 2003 Nobel Prize in Chemistry for his 'serendipitous' discovery of aquaporins, the water-channel proteins that move water molecules through cell membranes.

Plant cellular aquaporins are micro channels that transport water and nutrients through cell walls, letting (H-) good water in and keep (H+) bad water out. When the molecule is positively charged and clumped, the aquaporin rejects it, and stops it from passing through the cellular membrane. This results in water molecules competing for remaining electrons and clumping together.

Hydration at cellular levels can only receive one water molecule at a time thru the aquaporine channel. That one molecule of water cannot carry with it anything physical or electrical. All it carries is the energy or vibration and the things that are good for life.

Unlike regular tap water, which is in clusters of water molecules, the water structuring products like those being produced by Natural Action Technologies, break the water clusters down to one molecule, allowing for super hydration of plants, animals and humans. By restructuring water at a molecular level, the Structured Water™ product revitalizes water by restoring the beneficial NEGATIVE hydrogen ions (H-), making the water readily acceptable for maximum absorption by plants and animals.