Wheatgrass - Water & Chlorophyll Study Conducted by Troy Case & Brian David Andersen Hippocrates Health Institute - January - February - 2012

Hippocrates Health Institute (HHI) normally uses untreated tap water to grow wheatgrass. Four trays of wheatgrass were used in a first ever experiment conducted in the greenhouse of HHI and each tray was hydrated by a different kind of water.

Tray One - Untreated tap water from a well and normally used to grow wheatgrass in HHI greenhouse

Tray Two - Untreated degassed distilled water from a plastic bottle.

Tray Three - Tap water from a well treated by the Tri-Vortex Technology Disc.

Tray Four - Degassed distilled water from a plastic bottle treated by the Tri-Vortex Technology Disc for five minutes.

Hypothesis

After seven days of growth

Tray One - Third lowest amount of Chlorophyll present in stem

Tray Two - Fourth lowest amount of Chlorophyll present in stem.

Tray Three - Second highest amount of Chlorophyll present in stem

Tray Four - Highest amount of Chlorophyll present in stem

On the seventh day ten stems of each tray were bunched and placed into the sensor slot of an *At Leaf* Chlorophyll meter http://www.atleaf.com that measures the *Optical Density Difference* (ODD) at two wavelengths between 660mm and 940mm. Chlorophyll amounts are important because Hemoglobin in the blood and Chlorophyll in a plant have similar structures. A plant with a higher amount of Chlorophyll will provide greater benefit to the Hemoglobin in your blood thus your body will experience numerous health benefits. The higher the difference in the wavelengths in the meter readings indicate a higher level of Chlorophyll is present in the plant. The stems were still attached to the roots held in the testing tray. The sensor was placed just above the center points of each stem bunch and ten separate and successive readings were taken on each stem bunch and the lowest and highest readings were discarded.

Results

Tray One - Untreated Tap - Average 34 ODD

Tray Two - Untreated Distilled - Average 54 ODD

Tray Three - Treated Tap - Average 39 ODD

Tray Four - Treated Distilled - Average 58 ODD

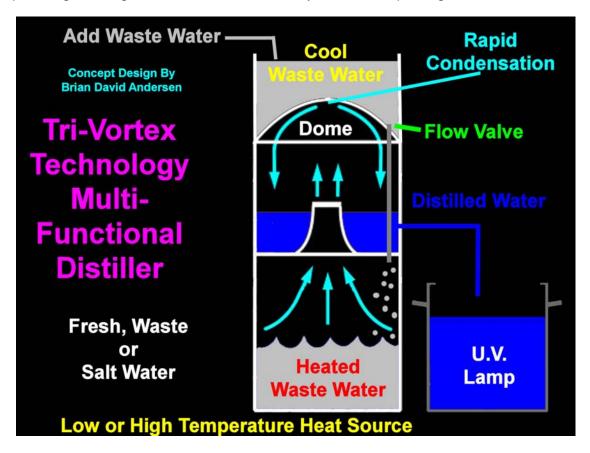


Over the next five days Chlorophyll readings were taken at approximately two thirds up the stems of the wheatgrass. See chart gage three. On the day of harvesting the wheatgrass watered by the treated distilled water had a darker and greener color than all other wheatgrass samples. Nine individuals smelled and tasted the wheatgrass juice made from the untreated tap water and the treated distilled water in a double blind manner. Without prompting or asking, some of the individuals noticed that the

wheatgrass watered with the treated distilled water was darker and greener in color than the wheatgrass watered with the untreated tap water. All participants of the smell and taste test declared the wheatgrass watered by the treated distilled water had a far more smoother, silkier and richer smell and taste than the wheatgrass watered by the untreated tap water. The best smell and taste means the Chlorophyll in the treated distilled sample begins absorption the moment the liquid touches the tongue and is completely absorbed with minimal wasted material needed to be excreted by the kidneys.

Untreated distilled water generating a higher Chlorophyll amount in the wheatgrass compared to any kind of tap water was a pleasant surprise. The treated distilled water generating the highest rate of Chlorophyll is another confirmed scientific proof for the value and meaning of nurturing all biological cells with distilled water treated by any kind of Tri-Vortex Technology product. Your body deserves the very best benefits of hydration and nutrition provided by distilled water treated by any kind of Tri-Vortex Technology product. Live and nurture on the cutting edge of excellence with Tri-Vortex Technology.

Now the task begins to create a truly functional low temperature distiller for the home and workplace such as greenhouses. Graphic below is a prototype that can be assembled for both home and commercial use. Distiller can be small enough to fit on kitchen countertop or large enough to fulfill the needs of any size or shape of greenhouse.



Chlorophyll Measurements of Wheatgrass Grown With Different Waters

			first day after		fifth day after
		on tray before harvest	harvest	second day after harvest	harvest
		measured 1/2 way up	measured 1/3 down	measured 1/3 down	measured 1/3 down
TD	1	58.2	68.5	55.6	49
treated	2	58.3	69.1	54.9	49.1
distilled	3	58.1	67.2	54.4	49.2
	4	58.3	66	54.3	49.5
	5	58.5	65.3	54.1	49.6
	6	58.5	63.9	53.2	49.8
	7	58.5	61	52.7	50.1
	8	58.5	56.8	52.3	50.2
	Average	58.3625	64.725	53.9375	49.5625
	56.64688				

TT	1	39.2	40	39.5	40.1
treated	2	39.4	40	39.2	38.4
tap	3	39.4	41.2	38.9	38.1
	4	39.5	40.8	39.6	38.1
	5	39.5	40.4	39.3	37.8
	6	39	39.8	39.5	37.6
	7	39	39.2	39.2	37.4
	8	39.1	42.3	39	37.3
	Average	39.2625	40.4625	39.275	38.1
	39.275				

UD	1	54.5	38.5	42.6	44.3
untreated	2	54.4	51.9	42.6	44.3
distilled	3	54.4	50	42.6	44.3
	4	54.6	43.7	42.4	44.5
	5	54.8	42.1	42.3	45.1
	6	54.9	37.2	42.1	46.1
	7	55.1	36	42.1	47.8
	8	55	36.5	42	48
	Average	54.7125	41.9875	42.3375	45.55
	46.14688				

UT	1	34.8	42	36.8	40.4
untreated	2	34.7	47	36.5	40.7
tap	3	34.5	43.9	36.3	40.7
	4	34.5	45.3	36.1	40.3
	5	35.4	42.4	36	39
	6	36.9	42	36	39.3
	7	37.8	43	35.8	39.1
	8	38	47.2	35.7	38.7
	Average	35.825	44.1	36.15	39.775
	38.9625				