

# High Brix Project/ Nutrient Dense Project Fruit and Vegetable Nutrient Comparisons

April 8, 2011

Location: Hawaii USA

Testing Laboratory: LoganLabs.com

Test: Fruit Analysis

Test Date: April 4, 2011

Crop tested: Beets "Cylindra" (red, long type, open pollinated OP) from seeds packed by Ferry Morse seed company.)

Brix of Crop: 10 (12 is excellent)

<b>Nutrient (or other)</b>	<b>USDA Avg</b>	<b>This Sample</b>	<b>Difference</b>	<b>Difference</b>
	<b>A</b>	<b>B</b>	<b>B – A=</b>	<b>%</b>
Protein grams (N x 6.25)	1.61g	3.28g	+1.67g	+104
Water (moisture %)	87.58%	87.70%	-0.12%	+0.14
	<b>mg/100g</b>	<b>mg/100g</b>	<b>mg/100g</b>	
Calcium Ca	16	30	+14	+87
Iron Fe	0.80	1.45	+0.65	+81
Magnesium Mg	23	37	+14	+61
Phosphorus P	40	46	+6	+15
Potassium K	325	333	+8	+2
Sodium Na	78	25	-53	-68
Zinc Zn	0.35	2.21	+1.86	+531
Copper Cu	0.075	0.2	+0.12	+160
Manganese Mn	0.329	1.67	+1.34	+407
Boron	n/a	0.22		

Notes from Michael Astera: New garden converted from existing lawn.

The June 2010 soil test showed 6ppm Fe and 150ppm Mn before amendments, so the Fe:Mn ratio came into much better balance than would otherwise have likely been the case on this crop.

Beets love Sodium; it would be interesting to see what difference bringing the Sodium up to 3% or so of CEC would make in the overall mineral balance.

Every mineral on this test is 125% or more of the USDA average (our proposed minimum standard) except K and P. I see no advantage to having K any higher but it would be good to see P=Ca I think.