Hydrogen Infused Water: Romaine Lettuce Test Report

Romaine lettuce seeds were sown in 128 cell Styrofoam seedling trays using commercial Pro Mix peat-based growing media early November at Snook, Texas. The tray was placed in a greenhouse at 75 F and watered by hand every day with either city water (64 seedlings) or Hydrogenated water (64 seedlings). Germination was not noticeably different between the two treatments. After germination, soluble, complete fertilizer 20-20-20 (NPK) with micronutrients was included in the water at each irrigation. After 10 days the plants receiving hydrogenated water were noticeably larger and slightly darker green. Seedlings were grown for 30 days up to transplant size. At the end of 30 days leaf tissue was harvest from 5 plants in three replications for each treatment and immediately placed on a Mettler Toledo digital balance to record fresh weights. The data were subjected to Analysis of Variance to determine if the fresh weights were significantly different. The average leaf weight across 3 reps for the control lettuce plants was 1.29 g, while the average weight for the hydrogenated water irrigated plants was 2.65 g. Based on the F-test value of 22.4, the fresh weights were highly significantly different between the treatments, with a dramatic positive effect for the hydrogenated water.

HyGro Results (Left) vs. Control (Right)

Control at 30 days H-water at 30 days

This test was performed in the Fall of 2019 by:

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Hydrogen processing technology used in this test provided by HyFrontier Technologies, Inc.

More tests on vegetables are planned for 2020.