



BioGro Inc. - Field Trial Research

RhizoPro on Bell Pepper

Objective To evaluate the effect of RhizoPro as a product that enhances soil health. To establish a timeline for soil health regeneration post-fumigation.

Conclusions:

Prior to treatment, Block 2 showed significant difference in soil health in comparison to Block 3. Singular treatment of RhizoPro in Block 2 significantly increased the micrograms of microbial carbon, pulling it slightly above that of the untreated Block 3 in the first 7-days. While a leveling-off of both blocks was observed for the remainder of the evaluation, the variation in soil health was reduced between the originally weak field (Block 2) and the strong field (Block 3). The data suggests that RhizoPro could be an efficient in-season tool for boosting microbial activity and eliminating soil health variation between fields.

Reasoning: Soil health has been documented to have wide ranging impacts on cultivated plants. Increasing evidence points to certain agricultural practices (particularly fumigation, tillage, use of synthetic soil-applied chemistries, and use of soluble acid-based fertilizers) as being potentially detriments to the organic cycling processes. While some of these certain practices are difficult to circumvent in commercial agriculture, there are certain options arising out of the bio-stimulants field (i.e. carbon deposition, inoculation, etc.) that can be extremely valuable production tools.

RhizoPro is a combination of plant extracts that have synergistic associations with Plant Growth Promoting Rhizobacteria (PGPR). PGPR is a classification of rhizosphere bacteria that have have a wide range of potential roles ranging from plant hormone production, to nutrient acquisition, to pathogenic defenses.

The connectivity between soil health and year over year production differences has gained increasing interest in recent years. Evaluating ways to build soil health has the potential to eliminate soil-based variability between fields. Production consistency and economic sustainability go hand in hand.



Cooperator(s): Utopia Farms

Location: Myakka, FL

Date: 11/06/19 – 12/04/19

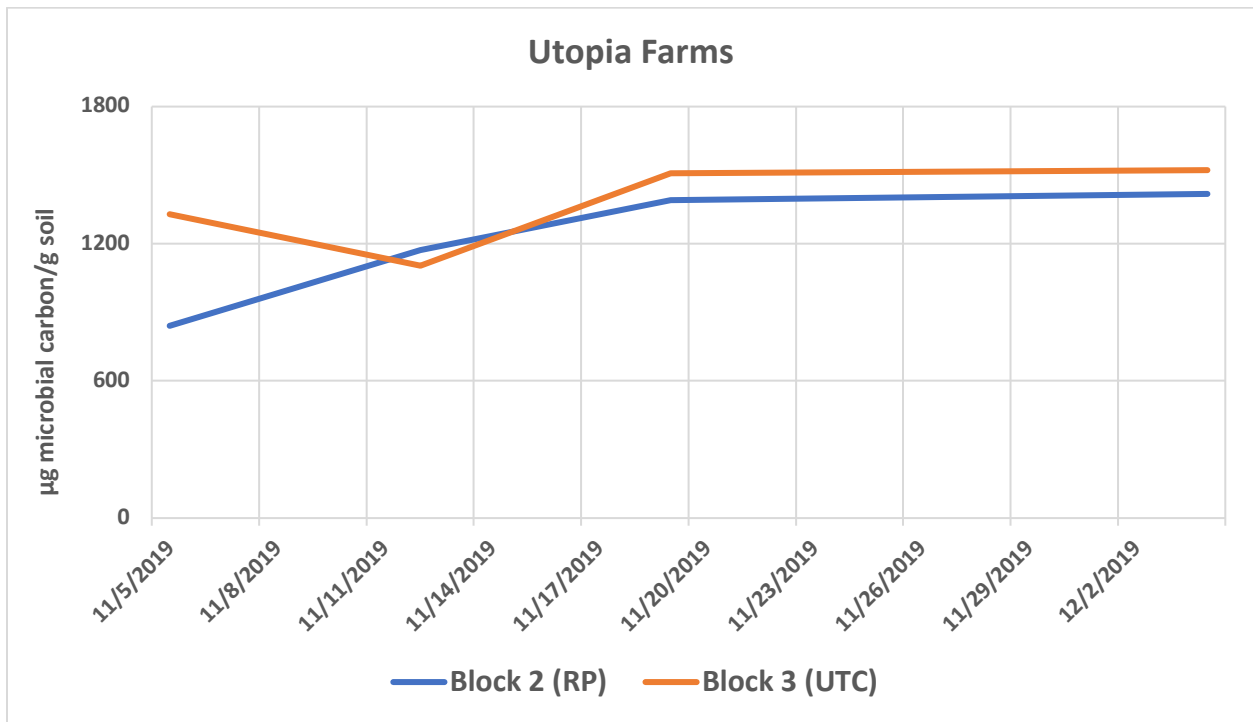
Test Crop: Bell Pepper

Treatments:

1. UTC – Untreated Control
2. One application of RhizoPro @ 7gpa on 11/06/19

Trial Layout/ Explanation of Test Method: Evaluated metric for soil health is a measurement of micrograms of microbial carbon per gram of soil and will be tested using the MicroBiometer system. MicroBiometer samples were pulled total of four times.

Results:



	Pre-Treatment	7-Day	14-Day	30-Day
Block 2 (RP)	841	1172	1392	1418
Block 3 (UTC)	1330	1104	1509	1522
Difference	-37%	+6%	-8%	-7%

