



Case Study Power Z Grow

Fruit growers among other agriculture growers across the world are looking to surmount the challenge of increasing crop production with a dramatic reduction of synthetic agrochemical use and a reduction of environmental nutrient leaching in ground water and surface water sources.

Many growers are pursuing ways to integrate more sustainable agriculture practices that will simultaneously enhance crop production yields and antioxidant properties while reducing irrigation water requirements and soil leaching contamination.

The active ingredients in Power Z Grow liquid growth enhancer have shown growth and yield stimulating effects together with effectiveness against disease. This bio-organic liquid solution is non toxic to humans, can be used in conventional and organic farming, and is considered safe to be applied at all stages of plant growth.

Power Z Grow works when it is sprayed on plants or soil in the following ways:

- It binds with cell membranes and evokes a defense response through the manifestation of a pathogenesis response.
- Accumulation of specific chemicals and the formation of reactive oxygen series.

These particular processes have been identified in several studies to both promote plant growth and development as well as increase the plants ability to combat disease.

A recent study using the active ingredients in Power Z Grow liquid spray on field grown strawberry plant leaves at low concentrations at the prebloom stage dramatically enhanced yield and growth rates. Concurrently, these studies indicated an increase in the beneficial antioxidant properties of the treated strawberries versus the control samples.

This was an interesting finding that is thought to have similar beneficial effects on fruits, vegetables and other crops as determined by this study and similar studies in a dose dependent manner compared to these control samples.

The results listed below from the growing of the strawberry plants in the chart below indicate that the bio-organic Power Z growth enhancing spray can be a cost efficient, beneficial solution for the production of high quality healthy strawberries.



Treatment	Root Length (inches)	Plant Height (inches)	Total fruit weight/ plant (pounds)	Total phenolic content	Total anthocyanins content	Total antioxidant activity
Control	7.67	7.58	0.54	311.1	81.2	251.8
150	8.00	8.33	0.70	357.5	83.2	253.6
300	8.6	8.94	0.72	318.3	94.8	359.6
600	9.88	9.61	0.78	363.7	184.5	375.4
1200+	9.80	9.53	0.75	371.3	164.5	416.1

Based on the results in the table above, we can see that similar advantages can be extrapolated in similar applications for trees, plants, grasses, vegetables and fruit crops such as plant yield, height, root length, nutrient quality, antioxidant activity, and natural prevention of disease.

The Power Z Grow liquid growth enhancer can work in synergy with Power Z granular soil conditioner to provide combined advantages including the reduction of irrigation water required by up to 45%, enhanced nutrient efficiency at the plant root zone which enhances plant growth while also minimizing soil nutrient eutrophication in ground and surface water sources.