

Trial Results From Mexico Show Higher Yields, Higher Profits For Cucumber Growers

(Culiacan, Sinaloa, Mexico) Following on his successful trials with tomatoes in the winter of 2005-2006, Carlos Soto of Bio-Safe is continuing to press the limits of Mexican agriculture by utilizing new technologies. This season his focus has been on four replicated trials of cucumbers grown in a .9 hectare greenhouse. For Soto, and for the distributors of Monty's Liquid Fertilizer – Monty's Mexico, the latest trials have been just as successful. By the time harvest was complete plants treated with the Monty's Fertility program were 19% more productive than the traditionally grown check, or 'witness' plots.

In accordance with Monty's protocol, the soil received Monty's Liquid Carbon prior to planting, the seeds were treated with Monty's Seed Starter, and the plants received three applications of Monty's 8-16-8 Growth Formula during the season. Monty's Liquid Carbon and Monty's Liquid Fertilizer both represent new technologies for Mexican Agriculture. The products are based on proprietary humic technology which not only re-balances nutrients, improves water holding capacity, and reduces hard-pans within the soil profile when applied to the soil, as is the case with Liquid Carbon. The specially processed humic molecule also allows foliar applied nutrients, in smaller quantities than ever before possible, to be moved into the plant and produce results similar or better than larger amounts of granular fertilizer applied to the soil. Soto had witnessed the results previously on tomato trials in his facilities at Culiacan where he noted not only higher production levels, but also better quality plants, higher brix levels, and reduced insect pressure compared with untreated check plots. Monty's formula is a naturally sourced product, cannot burn crops, and works to enhance natural process while reducing the negative impacts of heavy usage of traditional chemical fertilizer compounds.

The cucumbers were planted in March and harvested throughout the month of May. The fruit from five treated rows was compared with fruit from five untreated rows. The totals for the season resulted in just over 500 more cucumbers from the treated plants v. those which did not receive the liquid fertilizer. Soto projects that harvest out to 1 Hectare where the results would increase by 332 boxes of fruit, or 7479 Kg. Interesting to note is that the difference in yield totals increased throughout the season with Monty's out-producing the untreated check by less than 4% early in the season and by almost 30% in later harvests.

By reducing inputs compared with traditional practices, by increasing harvest amounts, and by improving the quality and resistance of crops common to Sinaloa, Monty's, Monty's Mexico, and BioSafe hope to continue to improve the profitability of the farmers in the region.

The full results of the trial can be found below.



Monty's Liquid Carbon + Seed Starter

Only Monty's Liquid Carbon

Monty's Mexico Program Trials on Cucumber

March 21, 2006 – Monty's Mexico Liquid Carbon was applied to a surface of 00-90-00 hectares via drip irrigation with an application rate of 4.5 liters.

March 29, 2006 – the Alanis (Rijkswan) variety of cucumber was treated by immersion in a solution of Monty's Mexico Seed Starter 4-15-12. (0.770 liters in 44 liters of water)

March 30, 2006 – the started cucumber plants were transplanted to 21 rows of 50 meters in a double line (240 plants per row).

April 7, 2006 0.337 liters of 8-16-8 in 35 liters of water was applied to the 21 rows.

April 23, 2006 – 0.337 liters of 8-16-8 in 100 liters of water was applied to the 21 rows (it was applied with a sprayer with a larger water capacity)

May 5, 2006 – 0.337 liters of 2-15-15 in 80 liters of water was applied to the 21 rows.



21 days after transplanting



Treated

Witness



To evaluate the harvest he collected the fruit of 5 treated rows and the fruit of 5 witness rows:

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Cutting Date	Monty's Mexico Treated	Witness
May 5, 2006	48	46
May 15, 2006	18	12
May 20, 2006	43	41
May 24, 2006	59	43
TOTAL	168	142

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Projected results at 01-00-00 hectares

Cutting Date	Monty's Mexico Treated	Witness
May 5, 2006	998.4	956.8
May 15, 2006	374.4	249.6
May 20, 2006	894.4	852.8
May 24, 2006	1,227.2	894.4
TOTAL	3,494.4	2,953.6

Considering that 1.5 to 1.750 buckets fills a packaging box and that these have a weight between 20 and 25 Kg. we conclude that an average of 1.625 buckets fills a box and has a weight of 22.5 Kg.

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Trial	Buckets	Boxes	Kg.
Monty's	3,494.4	2150	48,375
Witness	2,953.6	1817.6	40,896
Difference	540.8	332.4	7479

Projected at 01-00-00 hectares

They had 4 harvests in (table 1) the 5 rows of 50 meters each one with 240 plants each. The trials having the following results:

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Trial	Buckets	Boxes	Kg.
Monty's	168	103.3	2,324.25
Witness	142	87.3	1,964.25
Difference	26	16	360

Results of the Trial

