



Fertilgold® 3-2-4 and Micros I Liquid Fertilizers Increase Organic Cantaloupe Yield 120%

Conducted by Helena Agri-Enterprises at The University of Arizona Yuma Agricultural Center

Summary

In this study of Fertilgold® Organics macronutrient (Fertilgold® 3-2-4) and micronutrient (Fertilgold® Micros I) liquid products compared with a grower's standard treatment on organic cantaloupes applied under field conditions in Arizona, the Fertilgold® Organics treatment powered by a proprietary Micro Carbon Technology® resulted in a 120% yield increase with a 3-to-1 return on investment (ROI).

Objective

The objective of this study was to evaluate the yield and net gain of cantaloupe crop production using organic fertilizers under field conditions.

Materials and Methods

The study was conducted by Helena Agri-Enterprises at The University of Arizona Yuma Agricultural Center, in Yuma, Arizona, which has Holtville clay soil. The trial was conducted as a randomized complete block design with five replications. Each replication consisted of 30 feet long by 80 inches wide beds. Treatments were applied to cantaloupe (*Cucumis melo cantaloupensis*) cultivar 'Caribbean gold' that was planted on August 17 and harvested at two different dates of November 6 and 12. The plants were watered by furrow irrigation method. Table 1 outlines the grower standard and the organic Fertilgold® fertilizers from Bio Huma Netics (BHN).

Table 1. Treatment Description for Organic Production of Cantaloupe

Treatment	Products	Amount	Rate Unit	Timing	Placement
1	Grower Standard Macro Nutrition- H2H 3-2-1	10	gal/A	Early in season	Soil
	Grower Standard -Liquid Onyx 0-0-1	2	gal/A	Early in season	Soil
	Grower Standard -Liquid Westbridge Biolink 3-3-3 Plus Micronutrients	1	qt/A	5-6 True leaves	Foliar
	Grower Standard Macro Nutrition- H2H 3-2-1	20	gal/A	At Flowering	Soil
	Grower Standard Macro Nutrition- H2H 3-2-1	20	gal/A	Fruit set	Soil
	Grower Standard -Liquid Westbridge Biolink 3-3-3 Plus Micronutrients	1	qt/A	Mid bulking	Foliar
	Grower Standard -Liquid Westbridge Biolink Cal-N 5%	1	qt/A	Mid bulking	Foliar
	Grower Standard -Liquid Westbridge Biolink 0-0-6	1	qt/A	Mid bulking	Foliar
	Grower Standard -Liquid Westbridge Biolink Cal-N 5%	2	qt/A	Late bulking	Foliar
2	Grower Standard Macro Nutrition- H2H 3-2-1	10	gal/A	Early in season	Soil
	Grower Standard -Liquid Onyx 0-0-1	2	gal/A	Early in season	Soil
	FertilGold® 3-2-4	2.5	gal/A	5-6 True leaves	Foliar
	FertilGold® Micros I	1	qt/A	5-6 True leaves	Foliar
	Grower Standard Macro Nutrition- H2H 3-2-1	20	gal/A	At Flowering	Soil
	Grower Standard Macro Nutrition- H2H 3-2-1	20	gal/A	Fruit set	Soil
	FertilGold® 3-2-4	2.5	gal/A	Mid bulking	Foliar
	FertilGold® Micros I	1	qt/A	Mid bulking	Foliar
	FertilGold® 3-2-4	2.5	gal/A	Late bulking	Foliar
FertilGold® Micros I	1	qt/A	Late bulking	Foliar	

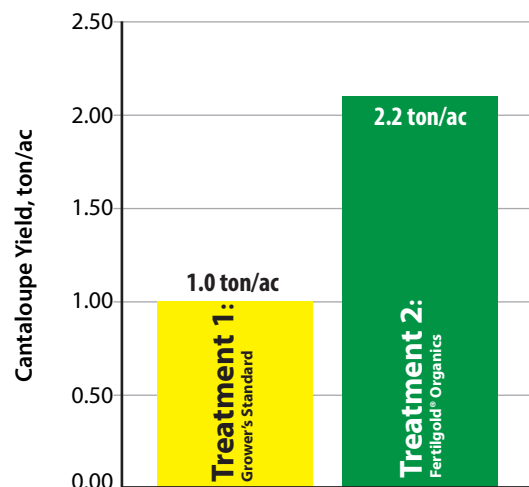


Figure 1. Cantaloupe Marketable Yield, Grower's Standard vs. Fertilgold® Organics

Results

Fertilgold® Organics fertilizers increased cantaloupe yield from 1 ton/acre to 2.2 ton/acre when compared with the grower's standard program (Figure 1). This yield result reflects combined November 6 and 9 harvests. The first harvest for the grower's standard was at 0.9 ton/acre, while the first harvest for the Fertilgold® Organics treatment yielded 1.8 ton/acre. The melon sizes for both treatments at both harvests were 9 and 12. The Brix values did not differ between these two treatments, which averaged at about 10.

Conclusions

The yield difference was much higher for the Fertilgold® Organics treatment, by about 120%. The return on investment was at 3 to 1 (input costs for Fertilgold® Organics were about 6% higher than the Grower's Standard).

Organic cantaloupe growers can rely on Fertilgold® Organics fertilizers for a large net gain in production.