

## NAME IN MICRONUTRIENTS... WATERMELON TRIAL



## Introduction:

"Watermelon is a scrambling and trailing vine in the flowering plant family Cucurbitaceae. The species originated in southern Africa, and there is evidence of its cultivation in Ancient Egypt. It is grown in tropical and sub-tropical areas worldwide for its large edible fruit, also known as a watermelon, which is a special kind of berry



with a hard rind and no internal division, botanically called a pepo. The sweet, juicy flesh is usually deep red to pink, with many black seeds. The fruit can be eaten raw or pickled and the rind is edible after cooking." (https://en.m.wikipedia.org/wiki/Water-melon, July 28, 2017.) Scott G. Williams, LLC , a 41-year old Georgia manufacturing company, sought to conduct trials using a variety of nutrition plans to determine an optimal yield protocol. As a Georgia company, SGW has an interest in watermelons since... "watermelon is one of the larger commodities in Georgia, estimated as a nearly \$100 million industry with roughly 25,000 acres of watermelons planted throughout the state." (www.farmflavor.com/georgia/georgia-ag-products/wild-georgia-watermelon/July 28, 2017.)

## **Trial Parameters:**

Trials began on May 26th, 2017. *Sugar Baby* variety watermelon plants were purchase at Gwinnett Technical College. The 4-inch seedlings were planted in six rows with four plants per row. The six treatments employed during this trial were 10-10-10 alone, an oxidic NPK coating powder with 10-10-10, SGW's chelated NPK coating powder *Wildfire* Stem applied on 10-10-10, SGW's liquid coating *Jack & Stalk* (without 10-10-10), SGW's NPE 442 (also without 10-10-10), and a *Wildfire* Manganese F Spray planted with 10-10-10.

# **2017 Watermelon Trials**

## **The Following Procedure was Followed:**



- **Row 1.** One teaspoon of 10-10-10 was applied per plant at time of planting.
- Row 2. The root ball was dipped in Jack and Stalk coating liquid before planting in ground.
- Row 3. One teaspoon of 10-10-10 coated with 10# of Competitor's oxidic coating powder per ton.
- **Row 4.** One teaspoon of 10-10-10 coated with 10# of SGW's chelated **Wildfire Stem** coating powder per ton.
- **Row 5.** <sup>1</sup>/<sub>2</sub> cup of **NPE 442** was applied at planting and followed by 3 weekly applications (no 10-10-10 was used)
- **Row 6.** One teaspoon of 10-10-10 was added at time of planting then sprayed with liquid composed of 12 ounces of *Wildfire* MN-F into 2 ½ gallons of water three times a week (spray until drench when the water rolls off the leaves)

The six rows, as described above, were planted outside in Conyers, GA in the SGW trial investigation center. Watering was by spray, natural rain, or sprinkler, with an attempt to saturate the ground 3 times a week. Apart from rows 5 and 6, no further nutrition was added.

## **Observations of Plant Development:**

#### 6/27/2017 Fruit description and melon count

- Row 1 1 small, 2 very small
- Row 2 4 medium, 3 very small
- Row 3 1 small, 1 medium
- Row 4 3 small
- **Row 5** 4 medium \*\*
- Row 6 1 medium \*\*

\*\* The plants in row five and six were significantly larger than the rest. The vines in row three are the smallest and one has died.

#### 7/6/2017 Fruit description and melon count

- Row 1 2 very small
- Row 2 9 of various sizes
- Row 3 3 medium
- Row 4 5 small
- Row 5 6 large \*\*
- Row 6 4 large \*\*

\*\*Rows five and six have the largest plants and melons.







Competitor's oxidic coating powder



Jack Stalk



10-10-10

only

Watermelon

From Row 1

Count

SGW's NPE 442 only



WildFire MN-F spray

The Jack & Stalk treated watermelon plants produced a greater amount of watermelons than the other treatments. Not only did the Jack & Stalk treatment produce more fruit, it had large watermelons as well.



## Data:

The chart below compares each treatment based on number of watermelons produced, how many vines each plant grew, and the length of the vines.

	<b>10-10-10</b> only	with Jack & Stalk	with Competitor	with <b>WF Stem</b>	with <b>NPE 442</b>	with MN-F Spray
Total Number of Vines:	4	8	5	7	6	7
Total Vine Feet:	78.5	134.5	65	163.00	132.5	168.25
Total Watermelon Count:	2	28	3	7	8	5

Once the watermelons were cut open, there was a noticeable difference between the watermelons grown with 10-10-10, the competitor's watermelons, and the SGW watermelons. The **Jack & Stalk** and **NPE 442** watermelons had a noticeably riper, darker red, color compared to the other two. The **Wildfire** Mn-F Spray also had some reddening but had a larger watermelon size compared to the others. The **Jack & Stalk** treatments produced the largest yield.



## **Conclusion:**

The watermelon is enjoyed throughout the world. Many cultures appreciate their red, fleshy appearance and taste. It is a popular crop throughout the world.

While oxidic and sulfate secondary and micronutrients are used to cultivate this crop in many parts of the world, the SGW trials indicate a better method for optimal growth and yield. The **Jack & Stalk** coating liquid gave the best results among the 6 trials. The plants were healthy, the vines and leaves were well formed, and the amount of fruit produced greatly outpaced any of the other treatments given that the only nutrition given to the plants, during the entire growing period, was indeed the coating received at planting. The only other expense in growing a plant this way is water.



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Our products are used to create best-in-class growth rates matched with outstanding quality. Above, six year old Jose Muñoz holds on to a 25 pound zucchini squash.

#### **Philosophy of Scott G Williams LLC:**

Philosophy teaches, from very early on, that there are three major divisions in living things: plants, animals, and rational beings. All three levels of life contain a type of soul. The characteristics of the plant soul include growth reproduction and the ability to take in nutrition. The animal soul builds on the characteristics of the plant soul by adding characteristics such as locomotion, communication, and additional sensory functions such as sight. Humans then add on to the characteristics of the animal soul by having a rational thought process that allows for all living things to work together harmoniously.

Interestingly enough, all life appears to require a similar type of nutrition. Plants offer fuel for animals and humans in the form of food. Animals require the basic building blocks of nutrition but also require a series of micronutrients and secondary elements that are added in their feed in the form of mineral or trace packages. Again, humans achieve their nutritional requirements through the consumption of plants and animals. However, sometimes humans don't get the full range of nutrients that they require. For this reason, humans have taken the approach of augmenting their diets with fortified foods or with mineral and trace elements vitamin pills.

The elements required to fulfill the range of secondary and micronutrient elements are not always found in the soil used in growing plants. These vital elements are combined and added to our products, which help plants reach their maximum potential. When plants reach their maximum potential, this affects the animals that eat these plants, thus affecting humans as well. The products produced in Scott G. Williams L.L.C. help create a chain reaction of better health and better living for all living things.