FLOWERING PLUMERIA STUDY #2

Using Scott G. Williams’ Jack & Stalk and NPE 442

INTRODUCTION

This second study on plumerias is a follow up from the Spring 2016 study which indicated the optimal performance using a treatment of NPE 442 complete fertilizer and biological liquid on plumeria cuttings or stakes. A customer commented that the initial study did not include competing treatments for comparison so this second study was commenced in late Spring 2017. Trial was initiated Tuesday April 4th with first set of treatments.

NPE 442

NPE 442 (New Phase Elements Formula 442) was developed by SGW after 65 years of agricultural product formulation experience. NPE 442 is a unique, complete liquid nutrient which combines all of the NPK, macronutrients, all the secondary nutrients, and all the micronutrients along with organic carbon contributed from humic and fulvic acids. NPE 442 contains sea plant extract, at least 6 different beneficial bacteria strains, beneficial micro-fungi, 16 different amino acids, as well as 5 different natural growth enhancers.

ABOUT NPE 442

The secondary and micronutrients are chelated using the patented SGW Ultra Chelation™ technology.

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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 these 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 food 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 in 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.
THE STUDY PARAMETERS

1. Plants and growing media:
   - 10 plumeria or frangipani cuttings were purchased from an ABC store in Honolulu Hawaii, as was done for last year’s study. The 30 stakes were divided into three groups at random and soil or growing media was prepared:
     - 3 ft³ of sand and 3 cups of 10-10-10 all-purpose fertilizer
     - 24 quarts of Burpee natural and organic Garden sustainable and renewable soil amendment made with STEM. Left to dry a few hours
     - 3 ft³ of Lambert Petmar’s Peat Moss
     - 8 ft³ of Timberline brand topsoil
   - Then they were taken outside. Plants remained inside until May 15th.

2. Plant treatments:
   - 3 sets of ten stakes were planted on April 4th.
     - (A) 10 coated in clay-colored pots (Ten plants were dipped in Jack & Stalk tomato coating which is made with STEM. Left to dry a few hours)
     - (C) Dipped in NPE 442
   - After planting, the stakes were given water and left structures appearing.

   1st Reporting Period
   - Six weeks into the trial (May 16th)

   Treatments consisted in the following:
   - (A) for stakes planted with just 10-10-10 treated with one cup of water
   - (B) for stakes dipped in Jack & Stalk coating before planting in the soil
   - (C) for stakes dipped in NPE 442 liquid and planted with 10-10-10

   The stakes coated with Jack & Stalk and planted with 10-10-10 had two full crowned plants that one could clearly see flowers and leave structures appearing.

   The stakes coated in clay-colored pots (Ten plants were dipped in Jack & Stalk tomato coating which is made with STEM. Left to dry a few hours) seem to force flowering and resulted in the best yield from the three groups of plant treatments tested.

   Finally, this year’s trial reinforces the results from last year’s work: NPE 442 delivered the best treatment performance. The number of leaves was high, the tallest average of plants from the three groups, and a performance of flowering that was more than double the result from even the coating group. Fertilizer is added to crops to try to guarantee a minimum field performance and is an attempt by the grower to optimize or maximize the yield of the crop. The two plumeria trials (year one and year two) demonstrate that a traditional approach of merely applying NPK fertilizer alone doesn’t generate the best response possible. A regular treatment with NPE 442 will greatly enhance the growth and performance of the plants. As seen with the plumerias, a regimented (thrice weekly) application of a small dose (1/2 cup NPE 442 and 1/2 cup of water) seems to force flowering and resulted in the best yield out of the three groups of plant treatments tested.

   **CONCLUSION**

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