

Effects of the FLFE Service on the Growth Rate of Spinach: Exploratory Phase 2 Study

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Keywords

Plant Vitality · Plant Growth · Spinach · Focused Life-Force Energy · FLFE · Food · Sustainability

Abstract

Healthy food production is facing challenges across the world. Finding innovative solutions to support growing organic and healthy foods is vital to our existence. Focused Life-Force Energy (FLFE) has developed a consciousness-raising service that focuses on enhancing the environment in which humans, plants, and animals can thrive. This Phase 2 study explored the effects of the Standard FLFE Service on the growth rate of spinach. A 100 percent increase in the germination rate of the seeds, a 122 percent increase in the number of spinach leaves, and a 28.7 percent increase in the length of spinach leaves were observed in the FLFE environment.

Introduction

Agriculture significantly impacts the environment due to three key factors: the requirement of large amounts of fresh water, greenhouse emissions, and land use that often results in a loss of natural habitat [1]. Finding new ways and methods or rediscovering old ways and methods of growing food efficiently and organically, is crucial as humanity is facing ever increasing food prices, inflation, and potential food shortages [2-3].

Focused Life-Force Energy (FLFE) has developed a consciousness-raising service that, among many effects, is aimed at enhancing the environment in which humans, plants, and animals can thrive (<https://www.flfe.net/>). Its effects and mechanisms of action are not yet fully understood. This research study aims to provide evidence in a commercial farm setting of the benefit of FLFE's high-consciousness field for plant growth and vitality.

Background

The success of a plant depends on multiple factors that can affect seed germination, plant growth, and overall plant vitality.

Factors that affect seed germination [4] may include specific seed traits [5] and seed dormancy [6]. Environment also plays a major role on seed germination, and factors such as soil texture [7], soil moisture [8], soil pH [9], soil salinity [10], oxygen [11] as well as light, temperature, pathogens, and quality of water can have substantial effects [4]. Primary factors that affect plant growth and vitality include water, temperature, light, humidity, and nutrients by influencing growth hormones in the plant [12-13].

There are other factors that may influence the growth and vitality of plants: sound waves [14-15], electrical grounding (i.e., electroculture) [16-17], and human intention [18-19]. While these factors may not be considered 'mainstream', evidence suggests that they can have a positive effect on plants.

Many countries are facing rising prices of food among those of other necessities [2-3]. Finding creative and affordable solutions for increasing the production of healthy, organic, whole foods will be essential.

FLFE is a Canadian company offering a consciousness-raising subscription-based service for a property or around an object. The FLFE system is designed to focus available life-force energy and to activate a high consciousness field at a specified location (i.e., legal address or geographic coordinates) or around a personal object (i.e., mobile phone). The higher-level consciousness field, in combination with other enhancements, is intended to increase the

Note: The Introduction and Background sections across all white papers on the topic of FLFE's effects on plant growth and vitality are very similar. This was done to ensure that all relevant information is included in each white paper and that each white paper acts as a standalone publication when read individually.

beneficial nature of the local environment for everyone and everything in that environment, including humans, animals, and plants. Specifically, the Standard FLFE service is intended to create an environment where life force can be harnessed by the plants, thus increasing plant vitality.

One of the main effects of the FLFE service, spontaneously reported by FLFE's customers, is increased vitality and overall health changes of their plants (<https://www.flfe.net/ces-results/>).

The FLFE service claims are extraordinary [20] in terms of mainstream science and a number of experiments, such as the one detailed in this paper, have been conducted to explore the effects of the purported beneficial environmental changes and their effects on human, animal, and plant life. FLFE's experimental philosophy is to first explore the effects (i.e., *'Is something happening?'*) and then, when possible and practical, explore the mechanisms of action (i.e., *'How is it happening?'*). Please refer to the FLFE Gold Standard of research for more information (see the FLFE Gold Standard of Research here: <https://www.flfe.net/research>).

Methods

Two identical hydroponic growth systems, Environment A and Environment B, were set up. Continuous water supply to peat plugs that hold the seeds was provided. There were 4 plugs per growth system. Each plug had a center hole for seed placement. Equal amounts of water were present in each system, filled to mark inside each system. 2 teaspoons of Root Farm Base Nutrient supplement and 2 teaspoons of Root Farm Tomato and Veggie Nutrient supplement were added to each growth system container. Both LED Growth lights were on the same timer with 16 hours of light per day. Spinach Burpee Salad Sensation Hybrid seeds were used. 12 seeds were placed in each hydroponic growth system, 3 seeds per plug for 4 plugs. Amount of time from placement of seeds to when photos and measurements were taken was 3 weeks.

Environment A (Control, no additional FLFE support): one hydroponic growth system with no active FLFE field. The baseline Level of Consciousness (LOC) in the United States at the time of this experiment, over the previous 30 days

was approximately 420 based on the theory and method created by Dr. David Hawkins [21].

Environment B: one hydroponic growth system with active FLFE Field, including the EMF Mitigation program. The LOC of the field around the system for Experiment B was 560+ based on the theory and method created by Dr. David Hawkins [21].

Environments A and B were located close to each other in the same room. A single window was covered to prevent light entry. Temperature and humidity were consistent throughout the room. The room was heavily insulated as it was a freezer in a meat-packing facility in the past.

Figure 1 shows a picture of the spinach leaves in control conditions after 3 weeks, while Figure 2 shows a picture of the spinach leaves in the FLFE environment after 3 weeks.



Figure 1. Spinach leaves: Control.



Figure 2. Spinach leaves: active FLFE field.

Both the seed germination (by counting spinach seedlings) and spinach leaves were counted visually by physically counting the seedlings and the leaves. The length of each spinach leaf was

measured with a ruler (from the tip of the leaf to the stalk).

Results

Six of the twelve spinach seeds in the FLFE environment germinated compared to the three seeds out of twelve in the control environment, resulting in a 100% increase in the germination rate of the seeds in the FLFE environment (Figure 3).

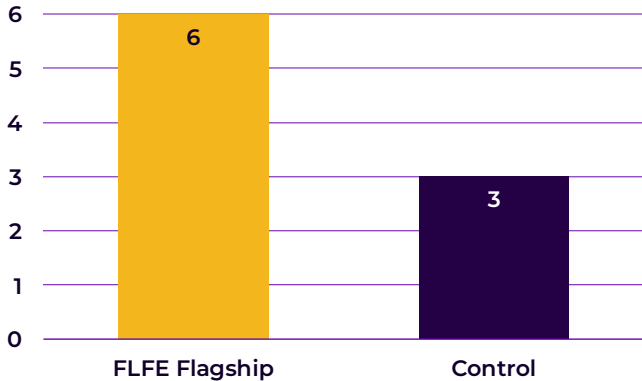


Figure 3. Spinach seed germination rates (FLFE Flagship environment Vs. control).

Figure 4 shows spinach growth in the FLFE environment and the control environment together in one photo after three weeks.



Figure 4. Spinach growth after four weeks in the FLFE environment (left) and in the control environment (right).

Number of spinach leaves in the FLFE environment was 40 compared to 18 leaves in the control environment, resulting in a 122% increase in the number of spinach leaves in the FLFE environment (Figure 5).

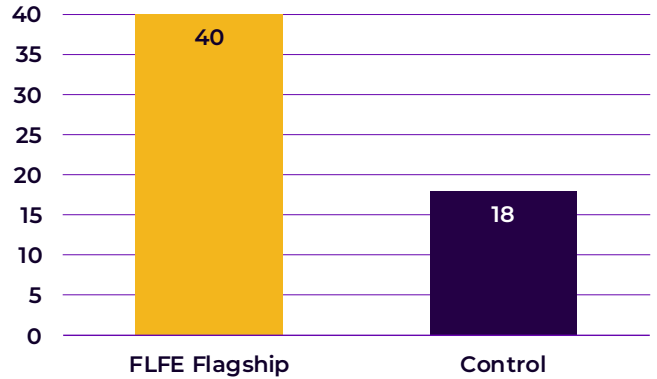


Figure 5. Number of spinach leaves in the FLFE environment compared to the control environment.

The average length of the leaves in the FLFE environment was 4.75 inches while the average length of the leaves in the control environment was 3.69 inches, resulting in a 28.73% increase in the length of the spinach leaves in the FLFE environment (Figure 6).

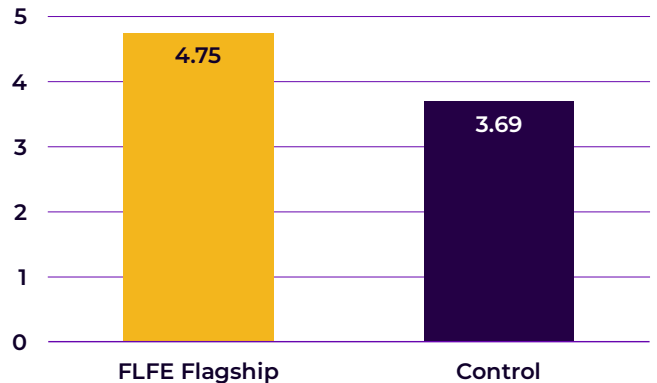


Figure 6. Spinach leaf length comparison in the FLFE Vs. control environments.

Limitations

A low number of spinach seeds in both the FLFE activated environment as well as control environment may have contributed to the percentage of differences observed between the seed germination rates and leaf counts in both environments. A larger number of seeds in both conditions may result in smaller or larger differences in the seed germination and growth rates and would allow for a more detailed comparison among the two conditions (FLFE Flagship Vs. Control).

This was an exploratory study with a small n; therefore, no statistical analyses were completed.

Conclusion and Future Directions

Given the promising results of this and previous studies on the effect of FLFE on plants, the idea that the FLFE service could be used to increase food production seed germination, and, possibly, the vitality of the plants, would be an important contribution to humanity and the planet itself.

Future studies on this topic may include not only replication and extension studies that would have larger numbers of FLFE-activated conditions, but also exploring the effects of FLFE on plants and food in terms of the nutrients available in the food as well as the ability of humans to absorb those nutrients more effectively and efficiently.

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