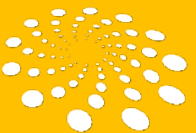


# FLFE and Plant Vitality Research Phase I and II Experiments<sup>1</sup>



<sup>1</sup>Prepared by Gary E. Schwartz with Maria Colomy  
and the FLFE Research Team  
Lewis Humphreys, Jeff Stegman, and Paule Bellwood



# Dedicated to Miles Stegman

(1990 – 2022)

Miles was a lover of nature and animals all his life. He was a forever student of horticulture and loved to research, propagate, and grow new plants.

Miles had an incredible ear and impeccable taste in music. He played guitar and was exploratory and experimental in music listening and creation.

Miles has many loving friends who would often refer to him as a “gentle giant” or “Baby Smiles”.

Miles’ spirit will live on through all the people who adored him, including his colleagues in the FLFE research team, as well as through the plants and animals of this earth.



# Overview of Presentation

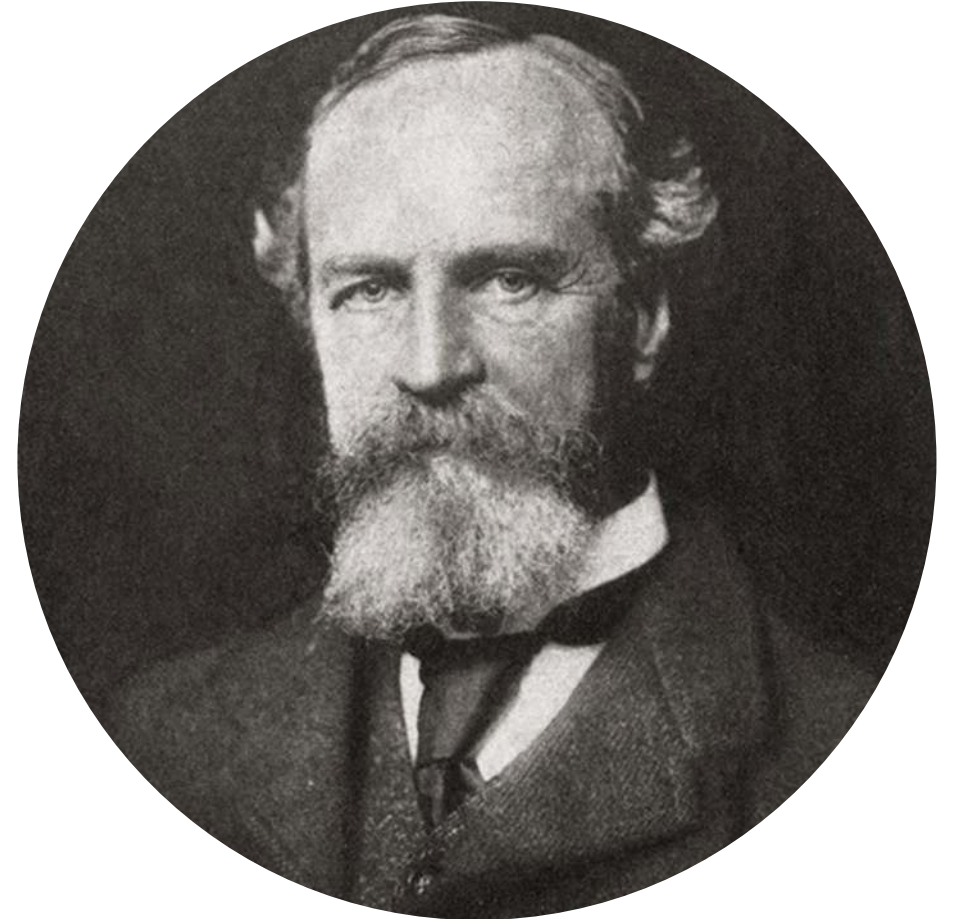
- Part I: Brief introduction to FLFE Gold Standard of Research
- Part II: Brief background on plant research
- Part III: Customer reports regarding FLFE and plant vitality
- Part IV: 2 Phase I, small sample FLFE plant experiments
- Part V: 2 Phase II, follow-up FLFE plant experiments
- Part VI: Summary and future FLFE plant research



# Part I: FLFE Gold Standard of Research

Professor William James from Harvard University, concept of “Radical Empiricism.”

Following the data wherever it leads and being prepared for surprises.



# Part I: FLFE Gold Standard of Research<sup>1</sup>

**Phase I Research:** Exploratory research, typically small scale, addressing the question “Does carefully collected user evidence suggest that a given service works?” If positive findings are obtained, then

**Phase II Research:** Confirmatory (and parametric) research, typically also small scale, addressing the question “Do laboratory and controlled experiments replicate the Phase I experiments and also verify safety?” If positive findings are obtained, then

**Phase III Research:** Multi-centered research, typically large scale, addressing the question “Do controlled multi-center, multi-blinded, randomized controlled trials replicate the Phase II experiments in terms of efficacy and safety?” If positive findings are obtained, then

**Phase IV Research:** Real-life validation research, typically large scale, addressing the question “Are the positive findings observed in the Phase III Research replicated in large scale usage in real life?”

<sup>1</sup>Adapted from <https://www.nih.gov/health-information/nih-clinical-research-trials-you/basics>



# Part II: Brief Background on Plant Research

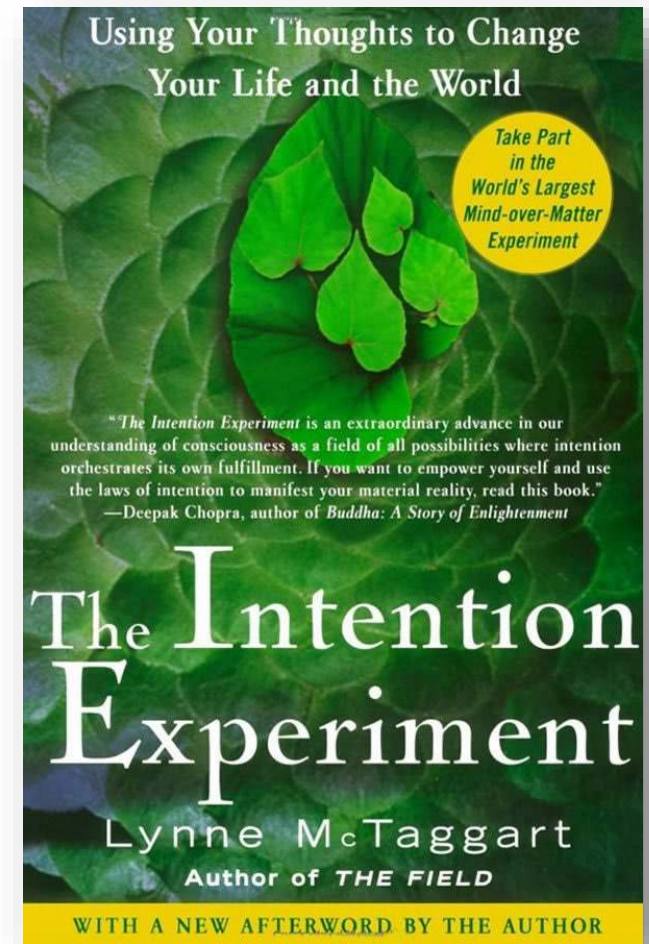
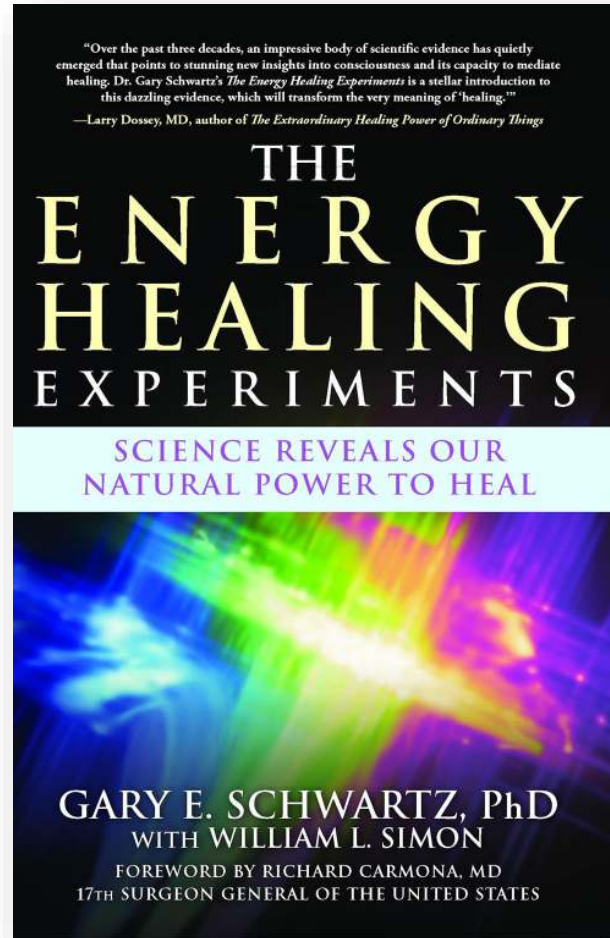
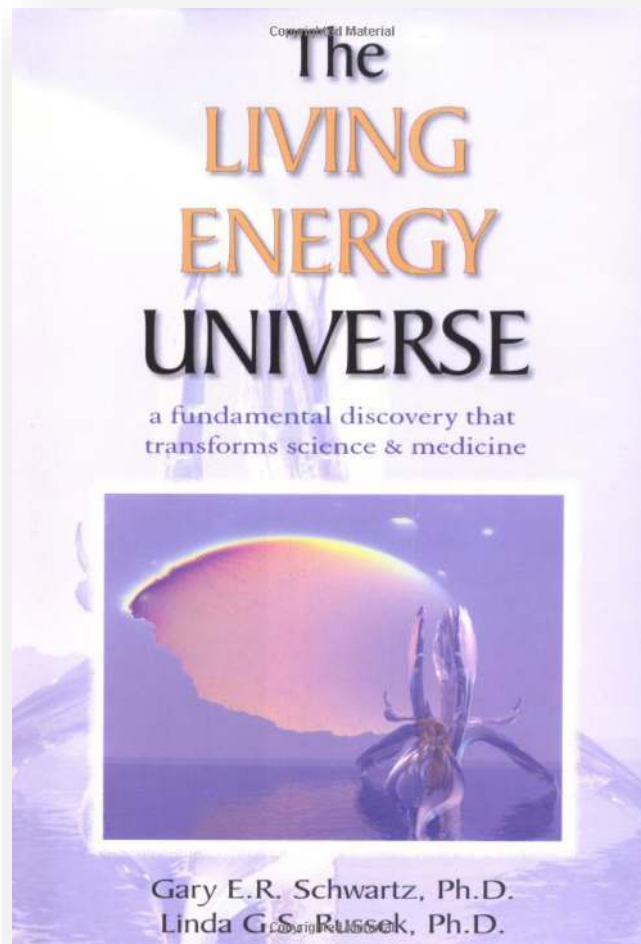
Factors that influence seed germination and plant vitality

- Light
- Air temperature
- Air Humidity
- Water
- Soil
- Nutrients
- Genetics
- Sound\*
- Electrical grounding\*
- Human intention\*





# Part II: Brief Background on Plant Research







# Part II: Brief Background on Plant Research

Effects of electrical grounding on the longevity of sun flowers (Schwartz)

Day 0



Day 3



Day 6



Day 7



# Part II: Brief Background on Plant Research

Effects of electrical grounding on the longevity of sun flowers (Schwartz)

Electrically  
Grounded



Not  
Grounded



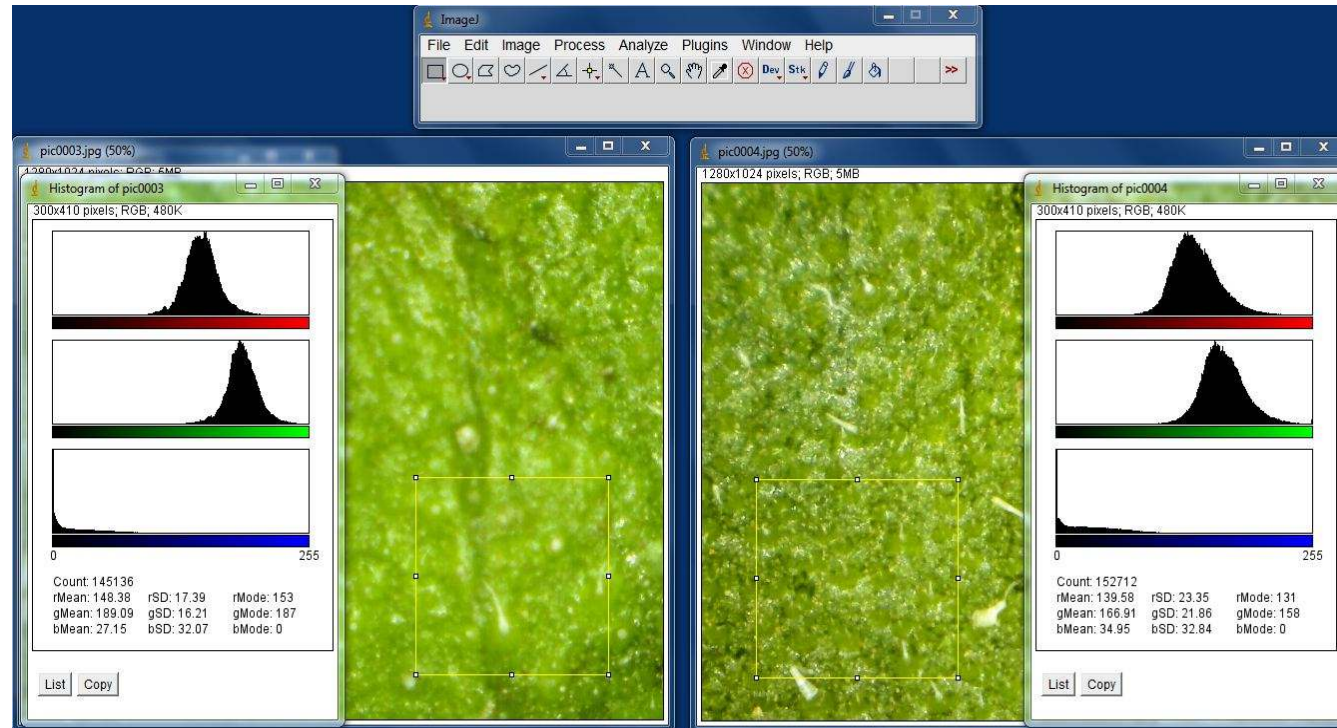
# Part II: Brief Background on Plant Research

Effects of electrical grounding on the longevity of sun flowers (Schwartz)

Electrically Grounded

Not Grounded

189.09



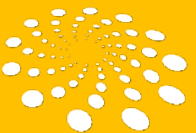
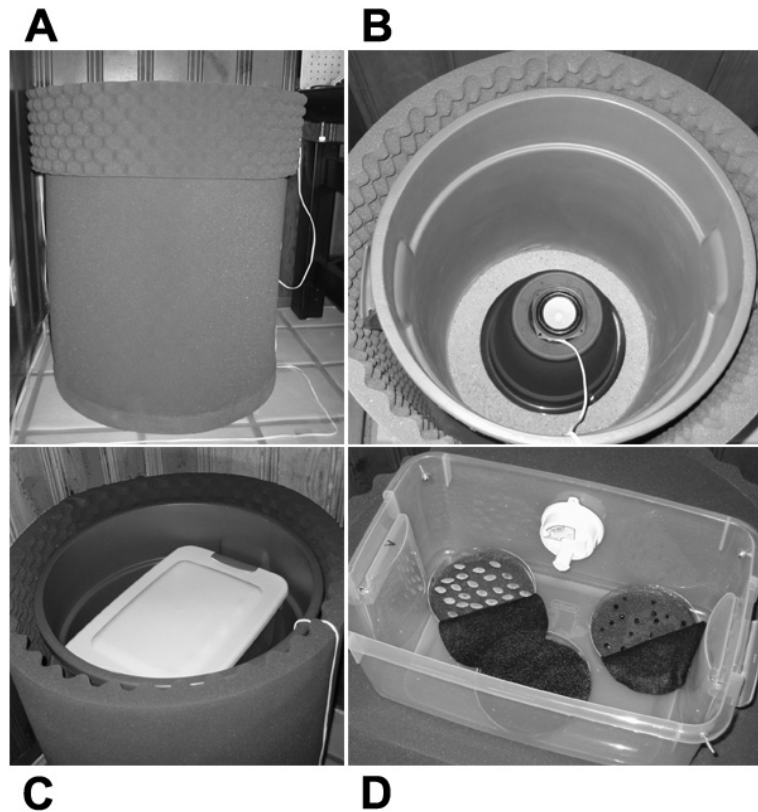
166.91





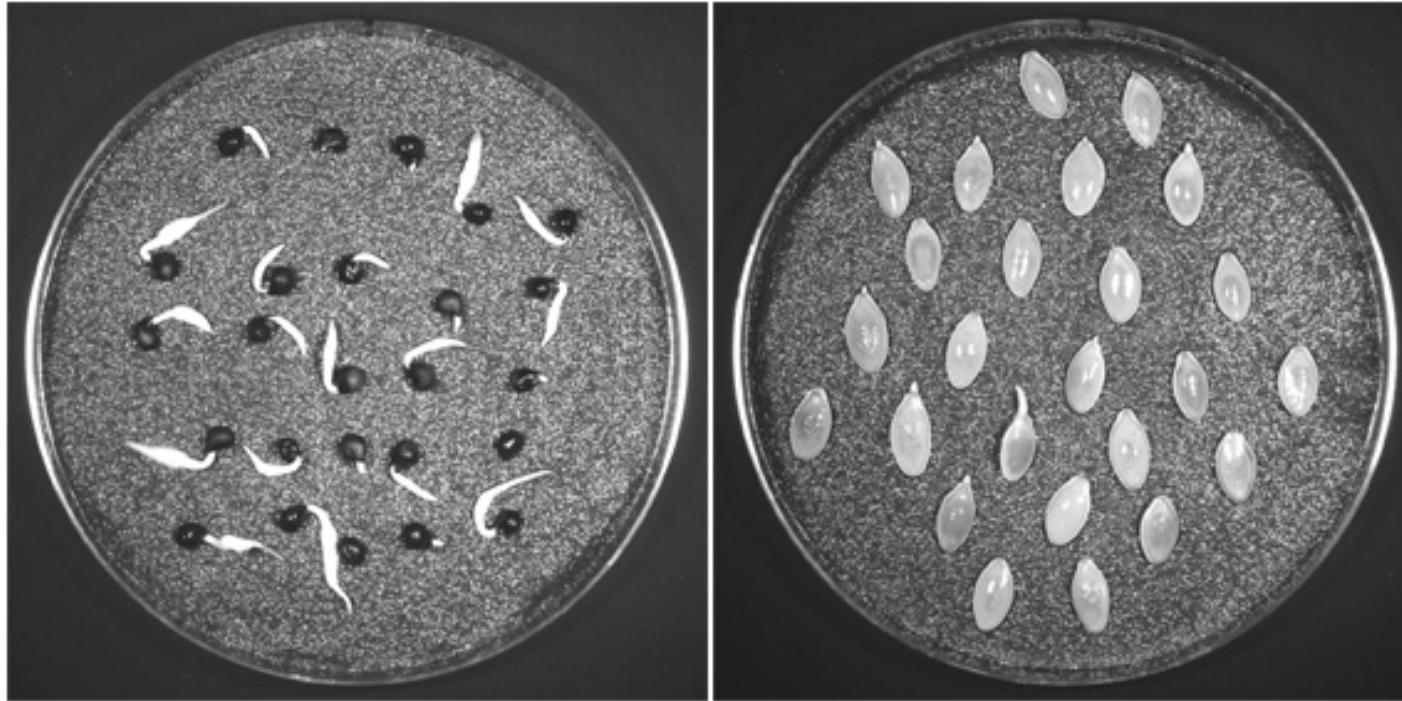
# Part II: Brief Background on Plant Research

Effects of sound and healing energy on seed germination (Creath and Schwartz)



# Part II: Brief Background on Plant Research

Effects of sound and healing energy on seed germination (Creath and Schwartz)



**A**

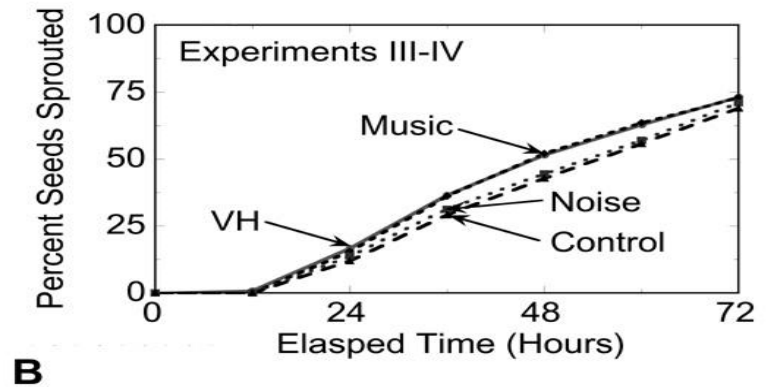
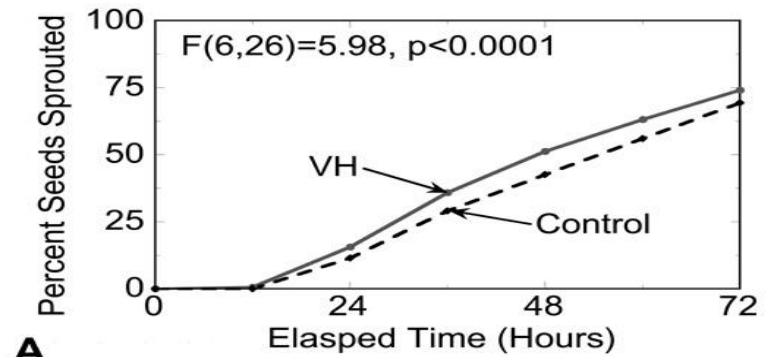
**B**





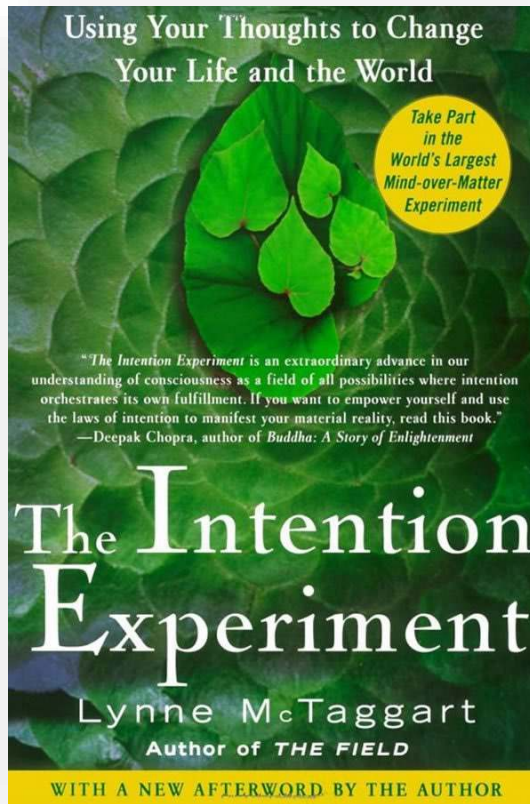
# Part II: Brief Background on Plant Research

Effects of sound and healing energy on seed germination (Creath and Schwartz)



# Part II: Brief Background on Plant Research

Effects of distant intentions on the germination of seeds  
(Schwartz, Boccuzzi, McTaggart, and Conner)



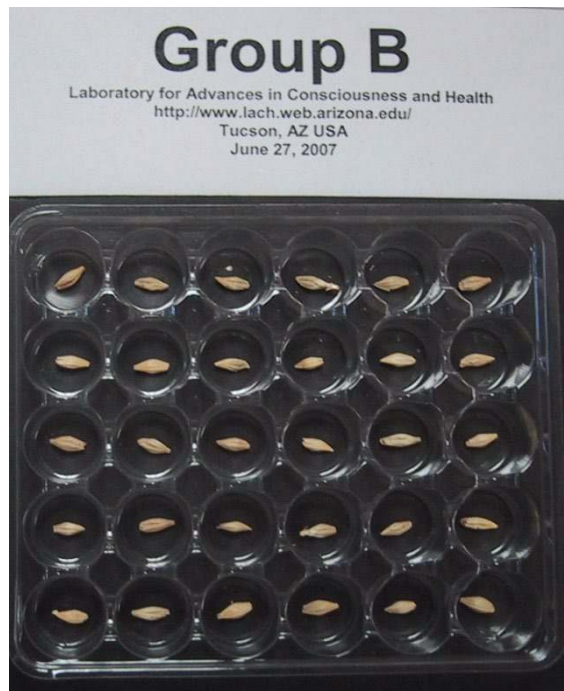
## EACH EXPERIMENT (n=6)

- 120 seeds in a blinded distant group intention session
- 120 seeds in a matched control (non-intention) session
- For each session (distant group intention and control), seeds divided into four sets (n=30 per group) labeled A, B, C and D.
- One of the four sets randomly selected as the intention targeted seeds (n=30 seeds), the other three sets became non-targeted controls (n=90 seeds). The matched control session used the same targeted and non-target control sets.



# Part II: Brief Background on Plant Research

Effects of distant intentions on the germination of seeds  
(Schwartz, Boccuzzi, McTaggart, and Conner)



# Part II: Brief Background on Plant Research

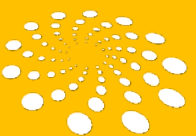
Effects of distant intentions on the germination of seeds  
(Schwartz, Boccuzzi, McTaggart, and Conner)

## SIX EXPERIMENTS

LOCATION	GROUP SIZE	TARGET	TYPE
• Sydney, Australia	600	A	Lay
• On-Line, London	500	C	Lay
• Rhinebeck, NY	100	D	Lay
• Palm Springs, CA	130	A	Lay
• Austin, TX	110	A	Lay
• Hilton Head, SC	500	A	HTI*

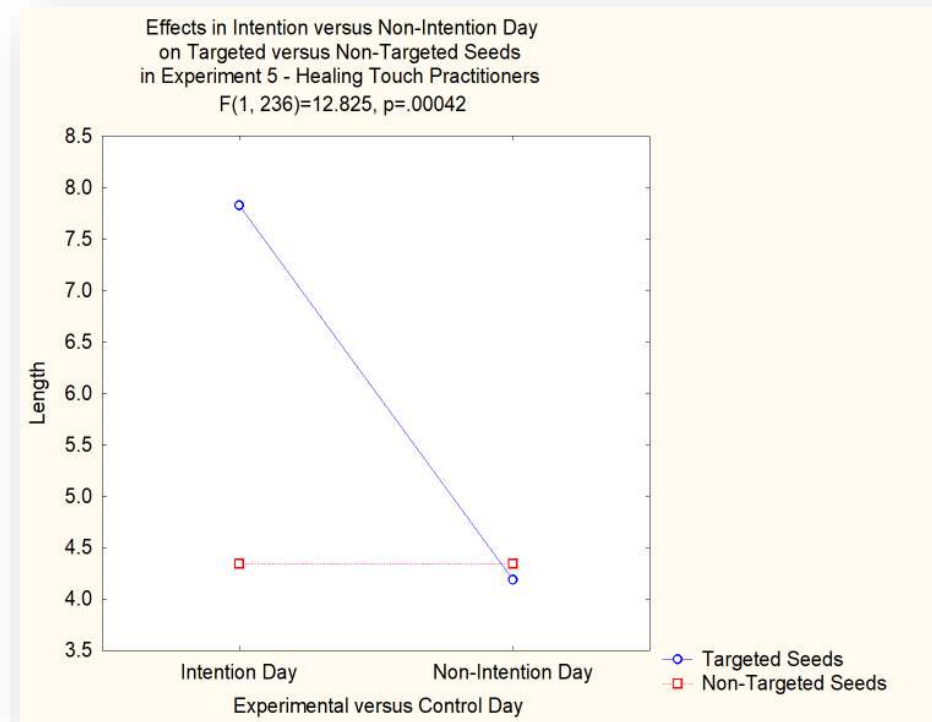
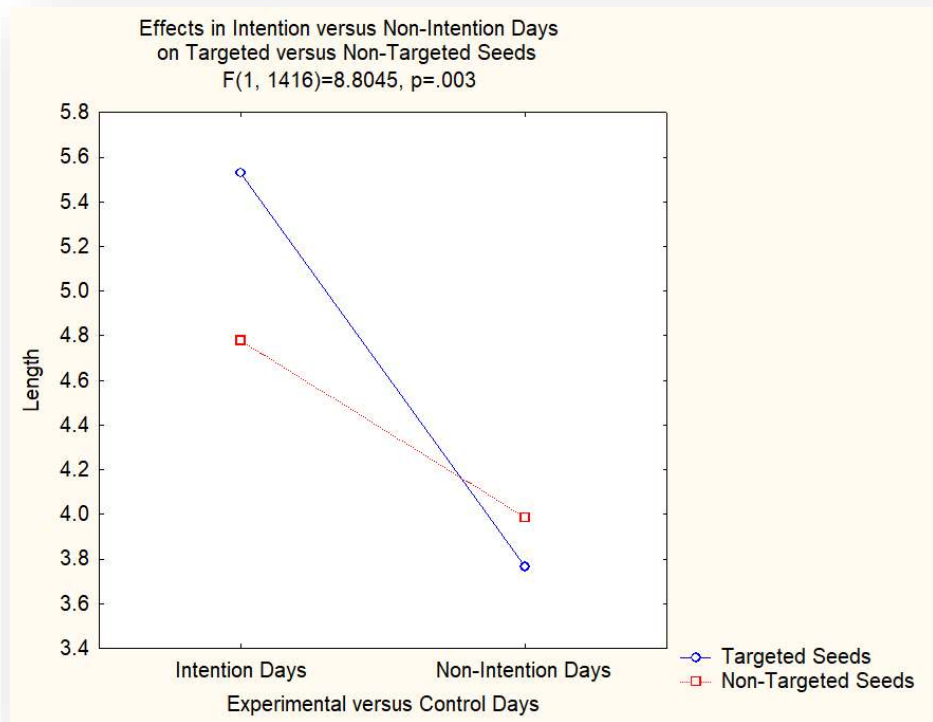
\*Healing Touch International

For Six Experiments, the total seeds = 1440.



# Part II: Brief Background on Plant Research

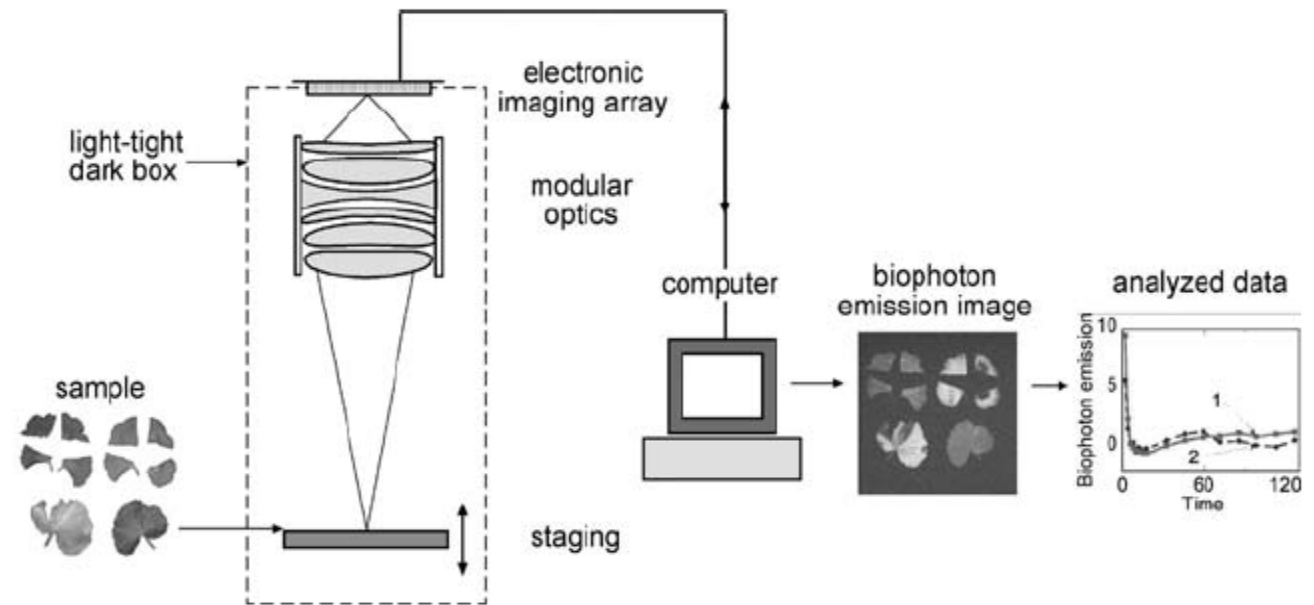
Effects of distant intentions on the germination of seeds  
(Schwartz, Boccuzzi, McTaggart, and Conner)





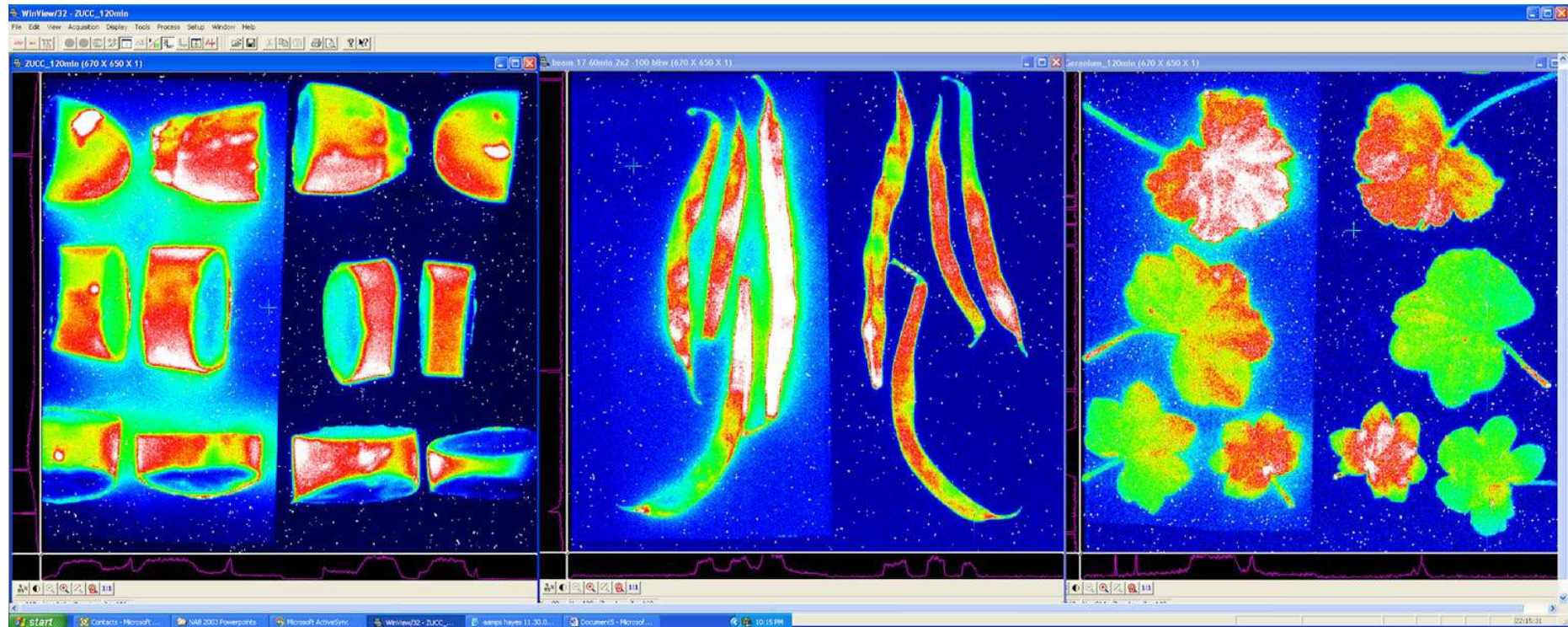
# Part II: Brief Background on Plant Research

Biophoton Imaging of plants and hands of healers  
(Creath and Schwartz)



# Part II: Brief Background on Plant Research

Biophoton Imaging of plants and hands of healers  
(Creath and Schwartz)



# Part II: Brief Background on Plant Research

Biophoton Imaging of plants and hands of healers  
(Creath and Schwartz)

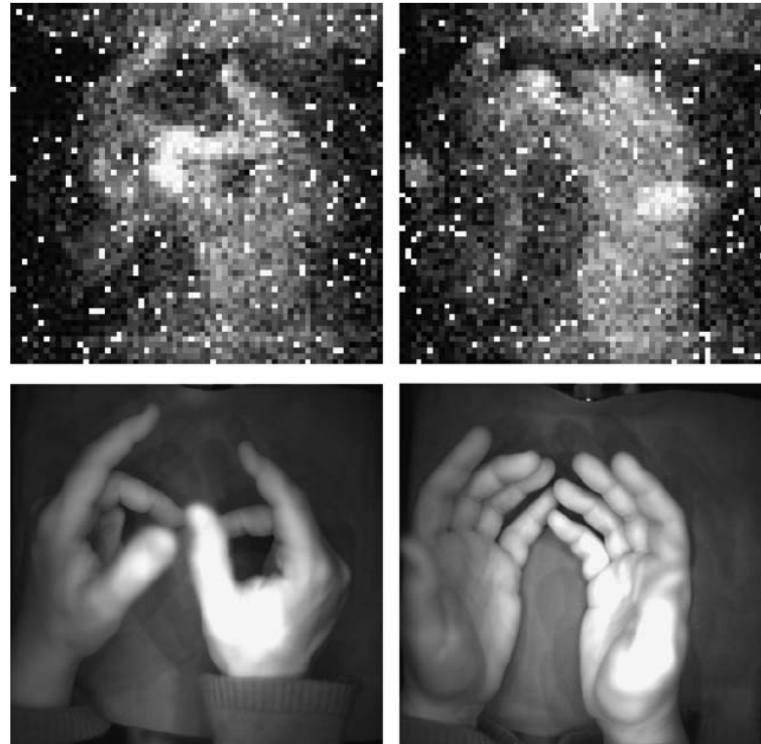


Fig. 10. Top images are 10-minute exposures taken in total darkness using  $20 \times 20$  binning with a Princeton Instruments VersArray 1300B camera cooled to  $-100^{\circ}\text{C}$ . Bottom images are 10 ms exposures taken with white-light illumination.



# Part II: Brief Summary of Plant Research

1. Being **electrically connected to the earth** increases plant vitality
  - A. Longevity of sun flowers in vases
  - B. Green color (related to drying out and dying)
2. Being exposed to **Native American flute music and energy healing** increases plant vitality
  - A. Germination of zucchini and okra seeds
3. Distant **intentions** of groups of interested seekers and energy healers increase plant vitality
  - A. Germination of wheat seeds
4. Biophoton imaging can measure how **physical proximity** increases energy fields of plants
5. Biophoton imaging can measure the **energy of healers' hands** as they send energy to distant plants



# Part III: Customer Reports about FLFE and Plants

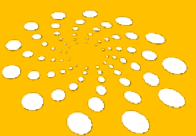
Follow the evidence where it leads, and be prepared for surprises 😊

Posted on Facebook by K.S.

I have to give an update--- I have 3 days left to my 2-week trial---- I've noticed a calm demeanor to myself, and my husband is easy to snap out of negative talk and return back to a more positive demeanor----HUGE for him!!

I've noticed that a leaf 🌿 I pulled off my indoor bedroom plant has remained alive for almost one week/--and our front lawn --- that we have not had for a couple of years---- is starting to come back ---- bizarre!!!!

I was contemplating if I should continue with FLFE, and this is when I was shown my front lawn --- thru my inner guide 🙌





# Part III: Customer Reports about FLFE and Plants

Follow the evidence where it leads, and be prepared for surprises 😊

Posted on Facebook by A.J.

I am the only one in my neighborhood who has leaves on their trees. I know they are maples but the maples across the street have lost their leaves.

I didn't include it but even my bushes are hanging onto their leaves.

Just wondering the thoughts on this.



# Part III: Customer Reports about FLFE and Plants

Follow the evidence where it leads, and be prepared for surprises 😊

Posted on Facebook by D.M.

My Christmas tree has been taking in gallons of water this year and unlike other years has hardly dropped any needles at all. We haven't even swept underneath!

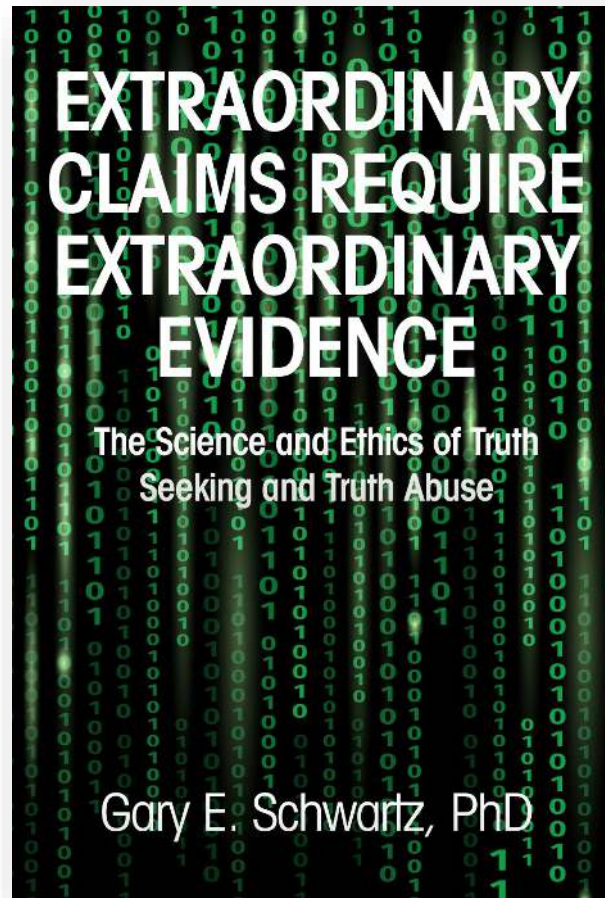
Wouldn't be surprised if I saw roots again when I took it out. Just another small confirmation for me about FLFE.

Anyone else experienced this?



# Part III: Customer Reports about FLFE and Plants

Follow the evidence where it leads, and be prepared for surprises 😊



# Part IV: 2 Phase I, Small Sample Experiments

Experimenters	Jeffrey Stegman	Shannon Petree
Design	Experiment 1	Experiment 2
Groups	FLFE Flagship vs Control	FLFE Flagship vs Control
Plant	Spinach	Wheatgrass
Number Seeds per Group	12	20
Blinded	No	Yes
Growth System	Hydroponic	Hydroponic
Light	LED	LED
Continuous Water	Yes	Yes
Supplements	Yes	Yes
5G Router in Room	No	Yes
Days before Measurement	21	12

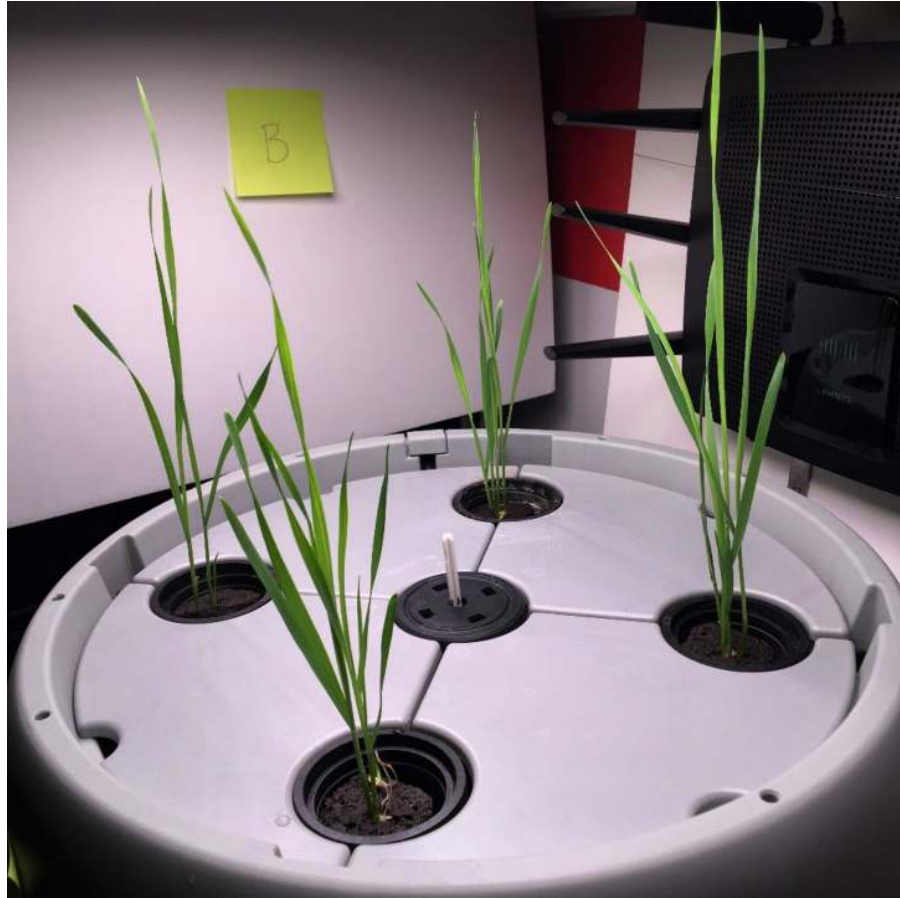


# Part IV: 2 Phase I, Small Sample Experiments



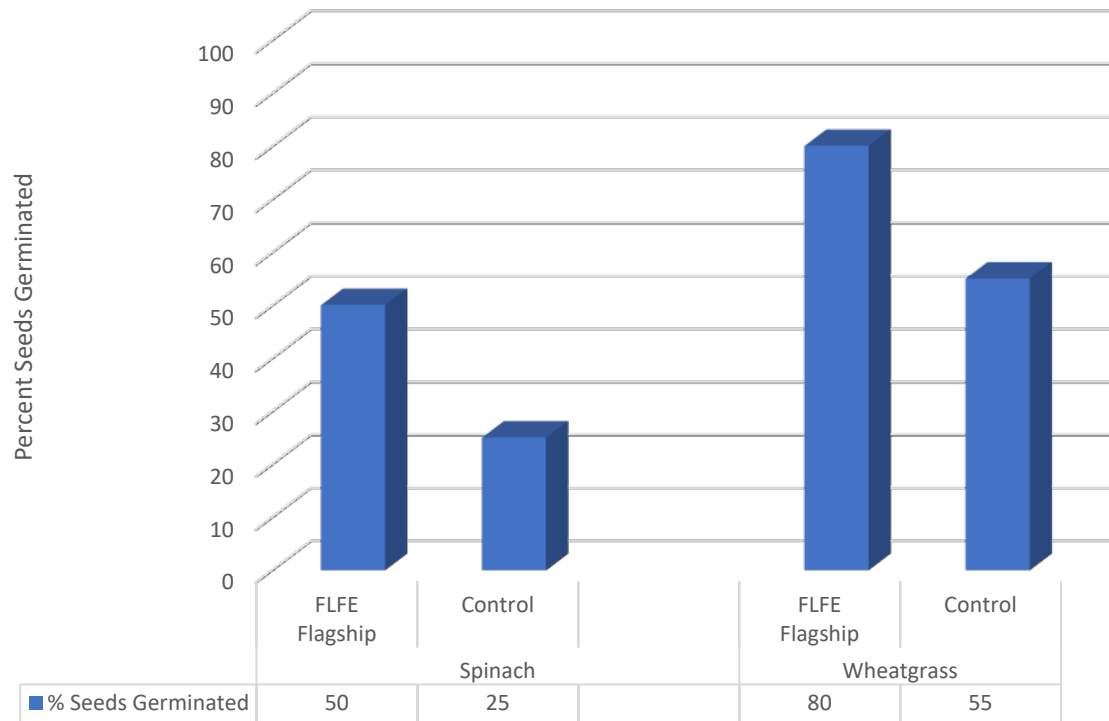


# Part IV: 2 Phase I, Small Sample Experiments



# Part IV: 2 Phase I, Small Sample Experiments

Seeds Germination: FLFE Flagship versus Control  
Experiment 1 Spinach / Experiment 2 Wheatgrass



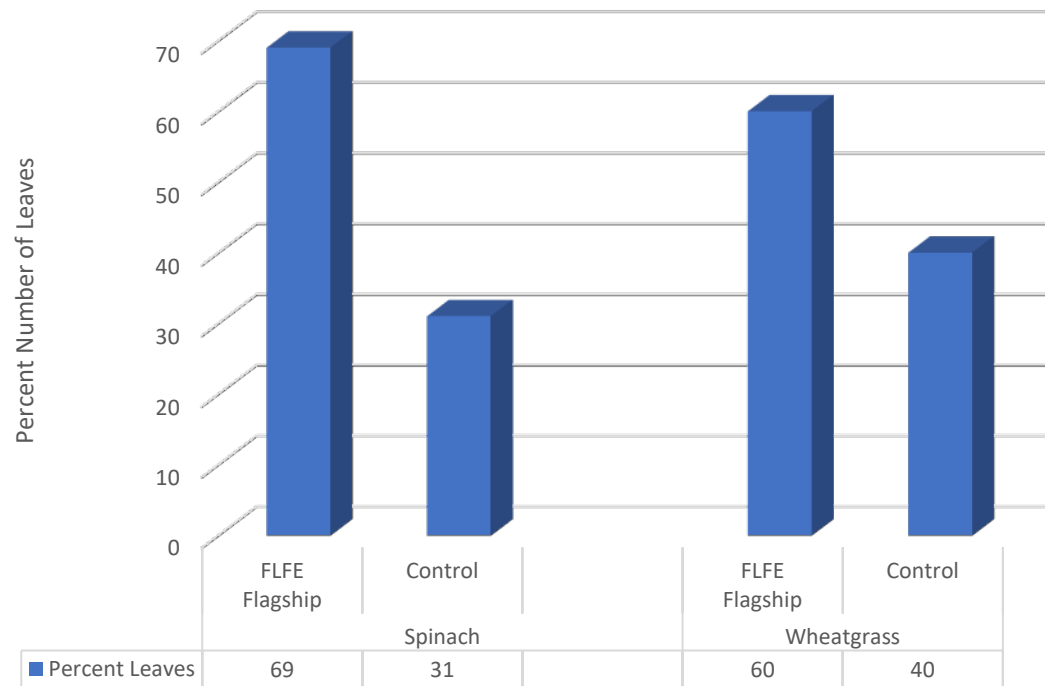
Spinach plus Wheatgrass  
FLFE Flagship versus Control  
Chi-square = 4.06  
 $p = .0438$

	FLFE Flagship	Control	
	Column 1	Column 2	Row Totals
Frequencies, row 1	22	10	32
Percent of total	34.375%	15.625%	50.000%
Frequencies, row 2	14	18	32
Percent of total	21.875%	28.125%	50.000%
Column totals	36	28	64
Percent of total	56.250%	43.750%	
Chi-square (df=1)	4.06	p= .0438	



# Part IV: 2 Phase I, Small Sample Experiments

Percent Leaves: FLFE Flagship versus Control  
Experiment 1 Spinach / Experiment 2 Wheatgrass



Spinach plus Wheatgrass  
FLFE Flagship versus Control  
Chi-square = 5.08  
p = .0242

	FLFE Flagship Column 1	Control Column 2	Row Totals
Frequencies, row 1	67	36	103
Percent of total	32.524%	17.476%	50.000%
Frequencies, row 2	51	52	103
Percent of total	24.757%	25.243%	50.000%
Column totals	118	88	206
Percent of total	57.282%	42.718%	
Chi-square (df=1)	5.08	p= .0242	



# Part V: 2 Follow-Up, Phase II Experiments

Experimenter

Miles Stegman

**Design**

**Experiment 3**

Groups

Exp. FLFE Plant vs FLFE Flagship vs Control

Plant

Spinach

Number Seeds per Group

161, 184, 187

Blinded

Yes

Growth System

Plant Tent

Light

Dark

Spray Watering

Every 2 days

Supplements

No

5G Router in Room

No

Days before Measurement

10



# Description of The Testing Environments

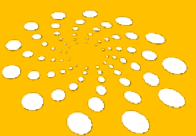
The FLFE plant studies compare plant growth and vitality in different environments.

The environments are:

**FLFE Flagship.** This is the full FLFE service environment at the level of consciousness (LOC) of 560 on the Hawkins Map.

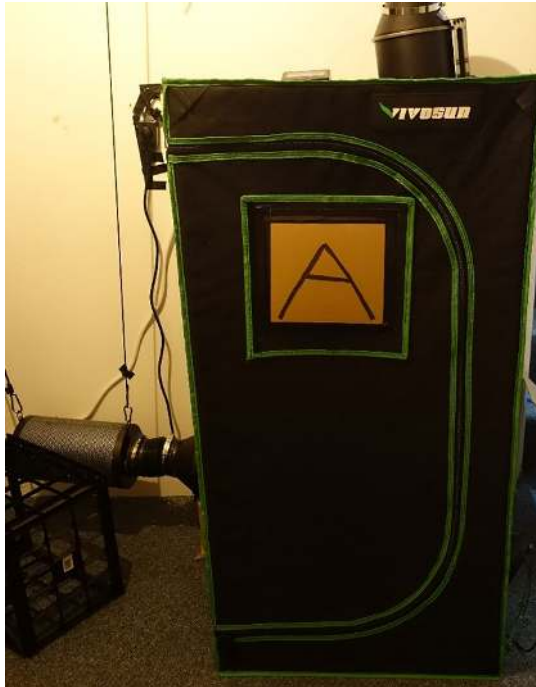
**Exp. FLFE Plant.** This experimental FLFE environment is designed to specifically support plant growth and vitality. Targeted high-consciousness fields of up to 850 on the Hawkins Map are applied and additional support for the soil bio-diversity is provided.

**Control: No FLFE Field.** For the Phase I spinach and wheatgrass experiments, the level of consciousness of the control was 420 on the Hawkins Map, which was the previous 30-day LOC average for the area. For the Phase II spinach germination experiment, the level of consciousness of the control was 350 on the Hawkins Map, which was the previous 30-day LOC average for the area. The level of consciousness of the control was specified in these experiments as they occurred simultaneously in the same room and care was taken to have the control LOC be at these levels. In the farm experiment, since the area was much larger, the control acres were at whatever level of consciousness they would naturally be at.



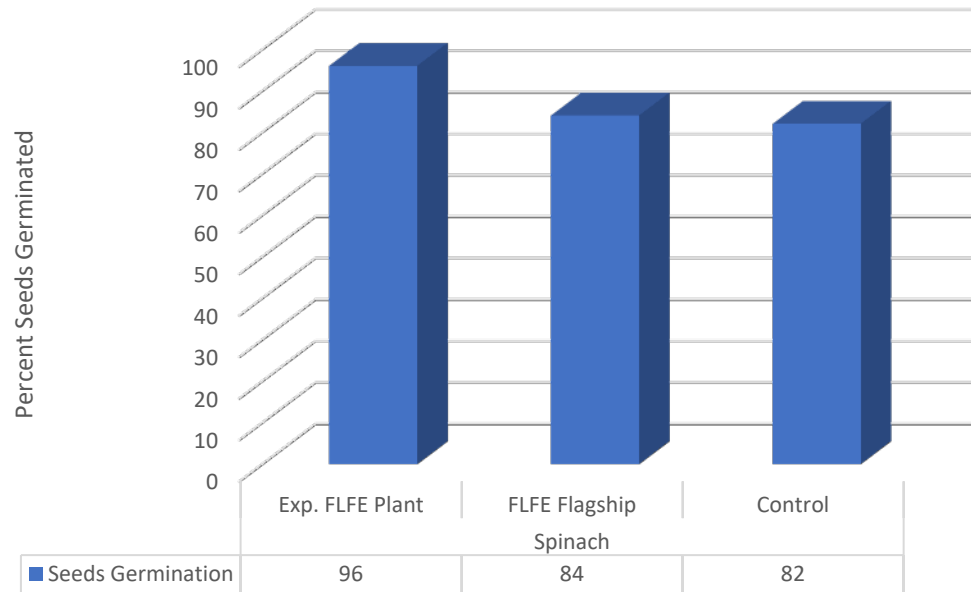


# Part V: 2 Follow-Up, Phase II Experiments



# Part V: 2 Follow-Up, Phase II Experiments

Seed Germination: Exp. FLFE Plant, FLFE  
Flagship, Control  
Experiment 3 Spinach



Exp. FLFE Plant versus Control  
Chi-square = 15.94  
 $p = .0001$

Exp. FLFE Plant versus FLFE Flagship  
Chi-square = 13.64  
 $p = .0002$

FLFE Flagship versus Control  
Chi-square = 0.12  
 $p = .7255, n.s.$

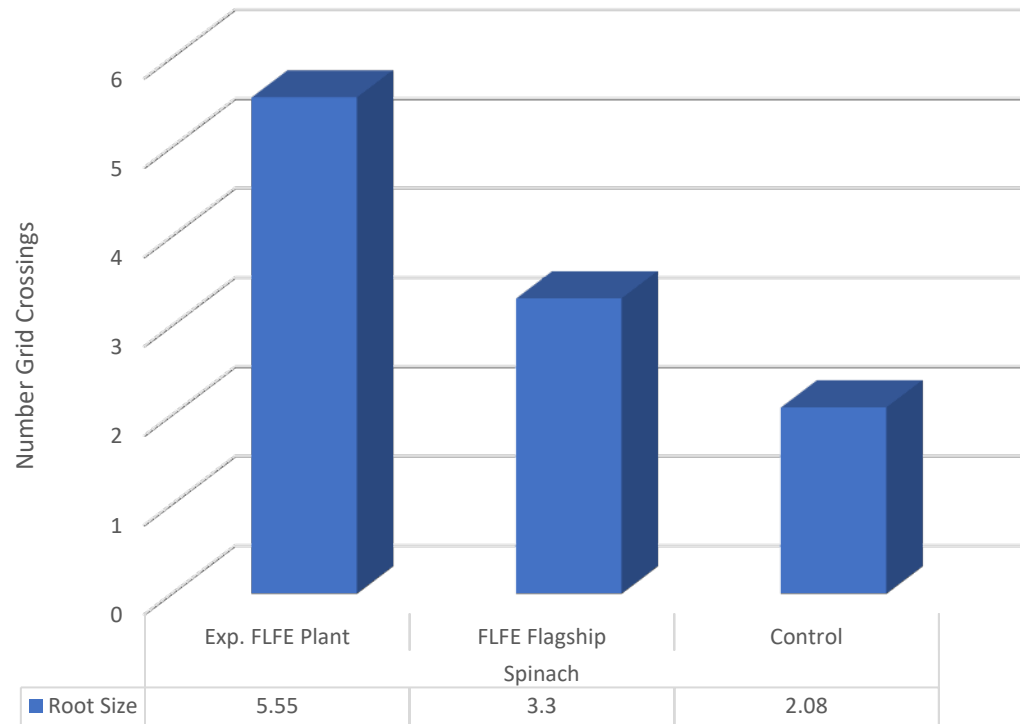


# Part V: 2 Follow-Up, Phase II Experiments



# Part V: 2 Follow-Up, Phase II Experiments

Root Size: Exp. FLFE Plant, FLFE Flagship, Control  
Experiment 3 Spinach



Exp. FLFE Plant versus Control  
 $t(308) = 17.22$   
 $p < .0000001$

Exp. FLFE Plant versus FLFE Flagship  
 $t(308) = 9.60$   
 $p < .0000001$

FLFE Flagship versus Control  
 $t(308) = 7.07$   
 $p < .0000001$

Mean 1	Mean 3	t-value	df	p	Valid N 1	Valid N 3	Std.Dev. 1	Std.Dev. 3	F-ratio Variances	p Variances
5.548387	2.077419	17.22314	308	0.00	155	155	2.259737	1.090308	4.295531	0.000000

Mean 1	Mean 2	t-value	df	p	Valid N 1	Valid N 2	Std.Dev. 1	Std.Dev. 2	F-ratio Variances	p Variances
5.548387	3.296774	9.601328	308	0.000000	155	155	2.259737	1.848742	1.494043	0.01318

Mean 2	Mean 3	t-value	df	p	Valid N 2	Valid N 3	Std.Dev. 2	Std.Dev. 3	F-ratio Variances	p Variances
3.296774	2.077419	7.073019	308	0.000000	155	155	1.848742	1.090308	2.875106	0.000000

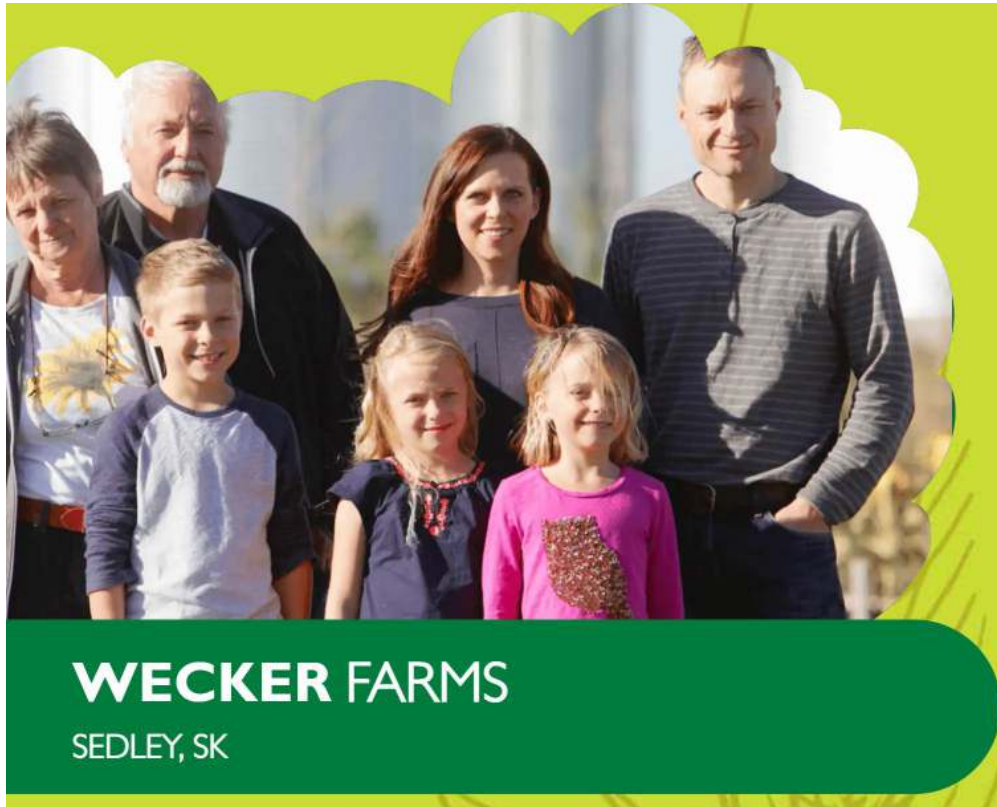




# Part V: 2 Follow-Up, Phase II Experiments

Experimenter

Jeffrey Stegman





# Part V: 2 Follow-Up, Phase II Experiments

Experimenter: Jeffrey Stegmann

## **Wecker Farms I, 2021 Data Enhancement**

5/9/2022

FLFE farm experiment with Wecker Farms in 2021

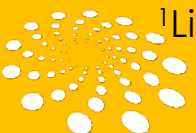
Purpose: Subdividing the single control block of acres into smaller subdivisions like the FLFE subdivisions, for the purpose of more detailed analysis of the FLFE-Wecker Farms experiment.

How it was done:

1. Wecker Farms invited FLFE to be a partner in myjohndeere.com and shared the data so that we could subdivide the total control acres similar to procedure used to subdivide the FLFE<sup>1</sup> acres.
2. Subdivisions were created using the tool on the website. The first control subdivision, C1, was adjacent to and immediately below the lowest FLFE subdivision FLFE6.
3. C2 is adjacent to and below C1 and so forth for all 26 control subdivisions.
4. Each subdivided section, as well as the FLFE sections, approximates the width of the field.

The entire field image is below. The markers at the top are the boundaries of the FLFE areas. The FLFE subdivisions are inward from the top edge of the field. The final control subdivision at the bottom, section C26, was also positioned in from the bottom edge of the field.

<sup>1</sup>Like Experiment 3, there were two FLFE conditions (FLFE Flagship and Exp. FLFE Plant). However, the number of subdivisions was too small (3 per FLFE condition) to analyze by themselves. Combining them (n=6) permitted statistical comparison to controls (n=26).



# Part V: 2 Follow-Up, Phase II Experiments

**JOHN DEERE** Operations Center  
Jeffrey Stegman

Map Setup Plan Analyze More

2021 Wheat (Hard Red Spring): Harvest  
Yield

Compare Overlay Share/Export Connected Tools

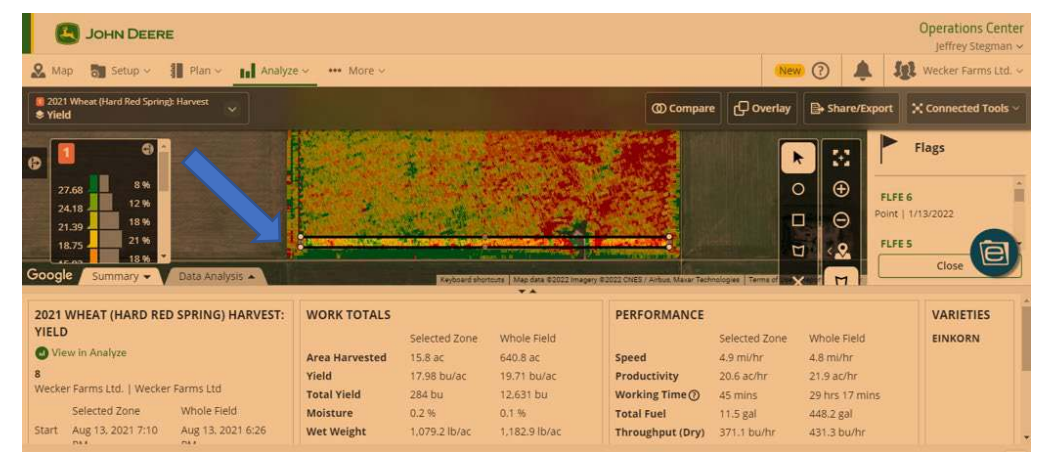
FLFE 6  
Flag Type: Point  
Created Date: 1/13/2022  
Latitude: 50.14489194

Back Close

2021 WHEAT (HARD RED SPRING) HARVEST: YIELD	WORK TOTALS	PERFORMANCE	VARIETIES	EQUIPMENT
<ul style="list-style-type: none"> <li>27.68 8 %</li> <li>24.18 12 %</li> <li>21.39 18 %</li> <li>18.75 21 %</li> <li>15.00 18 %</li> </ul> <p>8 Wecker Farms Ltd.   Wecker Farms Ltd</p> <p>Start Aug 13, 2021 6:26 PM End Aug 14, 2021 11:41 PM</p>	<p>Area Harvested 640.8 ac</p> <p>Yield 19.71 bu/ac</p> <p>Total Yield 12,631 bu</p> <p>Moisture 0.1 %</p> <p>Wet Weight 1,182.9 lb/ac</p> <p>Total Wet Weight 757,989 lb</p>	<p>Speed 4.8 mi/hr</p> <p>Productivity 21.9 ac/hr</p> <p>Working Time 29 hrs 17 mins</p> <p>Total Fuel 448.2 gal</p> <p>Throughput (Dry) 431.3 bu/hr</p> <p>Fuel Efficiency 28.2 bu/gal</p>	<p>EINKORN</p>	<p>S790 805356 1H05790STKT805356</p> <p>S790 805358 1H05790SKKT805358</p>

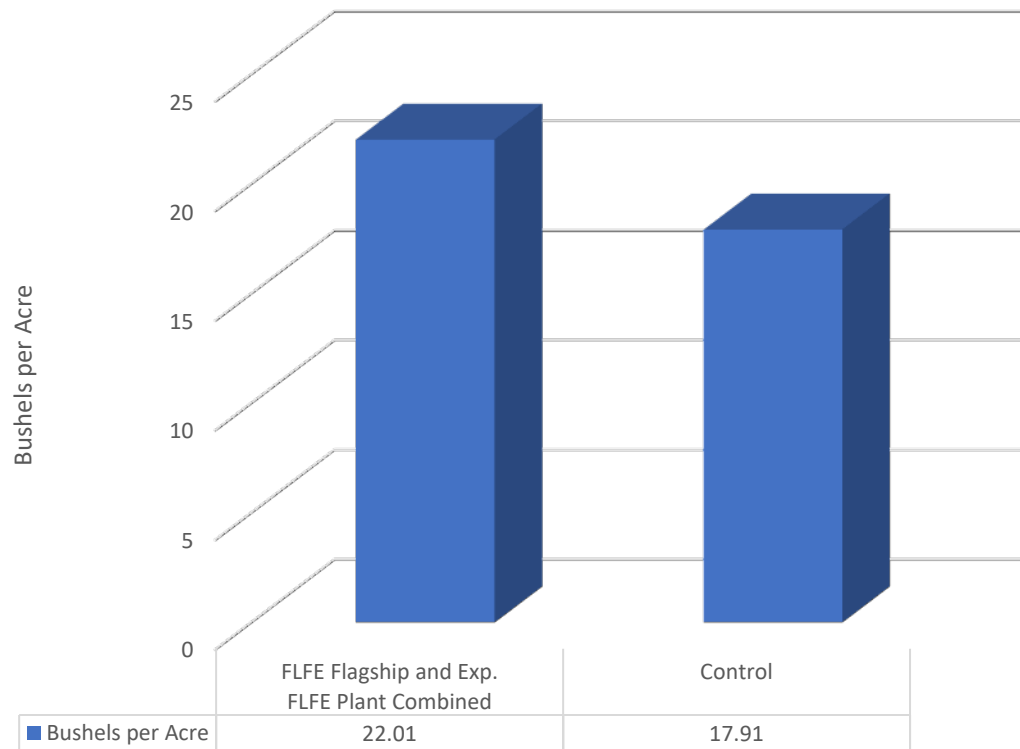


# Part V: 2 Follow-Up, Phase II Experiments



# Part V: 2 Follow-Up, Phase II Experiments

Bushels per Acre: FLFE Flagship and Exp. FLFE Plant  
Combined versus Control  
Experiment 4 Wheat



FLFE Flagship and Exp. FLFE  
Plant Combined<sup>1</sup> versus Control

$$t(30) = 7.70$$

$$p < .0000001$$

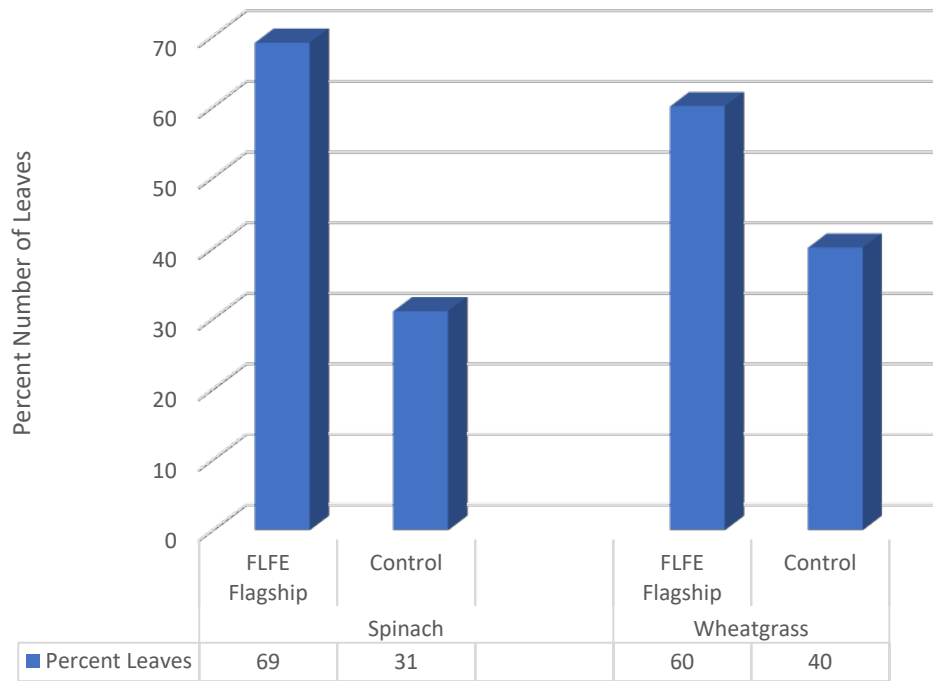
22.88%  
increased yield

Mean 1	Mean 2	t-value	df	p	Valid N 1	Valid N 2	Std.Dev. 1	Std.Dev. 2	F-ratio Variances	p Variances
22.01333	17.91423	7.697783	30	0.000000	6	26	0.979503	1.211175	1.52898	0.677516



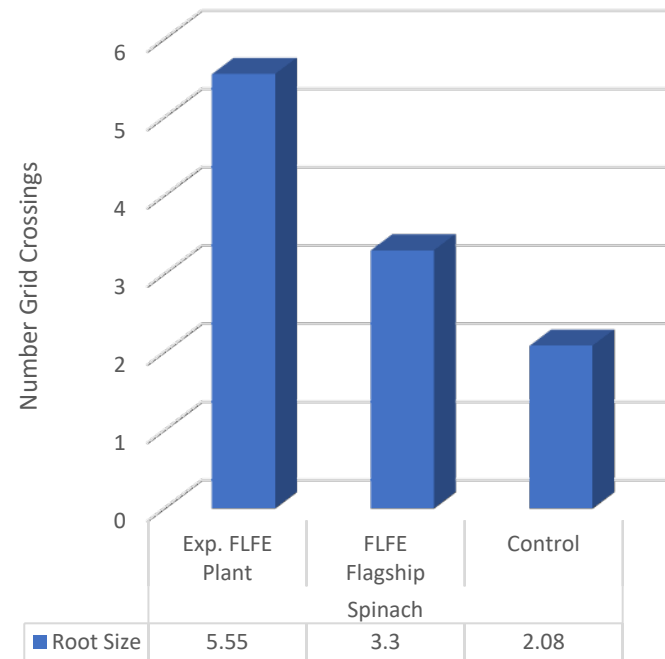
# Part VI: Summary and Future FLFE Research

Percent Leaves: FLFE Flagship vs. Control  
Experiment 1 Spinach / Experiment 2 Wheatgrass



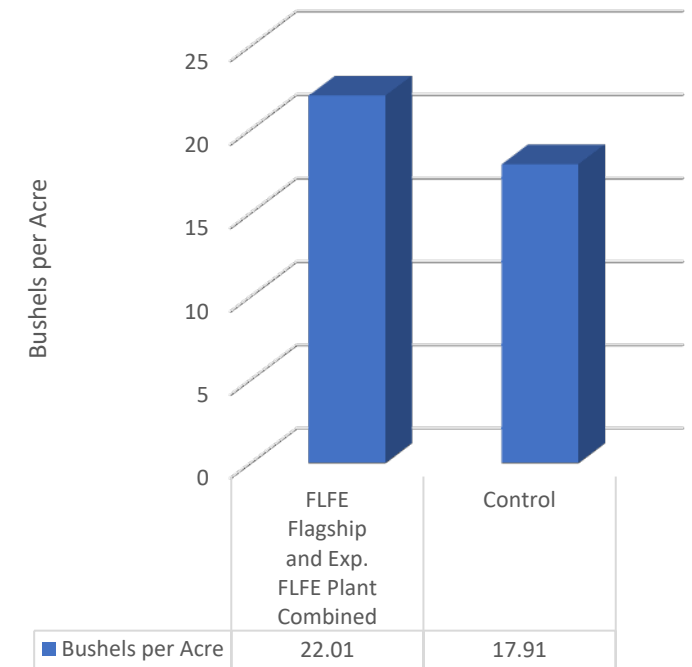
$p < .03$

Root Size: Exp. FLFE Plant, FLFE  
Flagship, Control  
Experiment 3 Spinach



$p < .0000001$

Bushels per Acre: FLFE Flagship and  
Exp. FLFE Plant Combined vs. Control  
Experiment 4 Wheat



$p < .0000001$





# Part VI: Summary and Future FLFE Research

## Summary Conclusions

1. The data from the **four experiments** reveal **replicated, statistically significant, and relatively large positive effects** on plant vitality in the FLFE environment.
2. These positive effects **confirm and extend FLFE customers' observations** of increased health and growth of plants in their homes and around their properties.
3. These positive effects **cannot be attributed to placebo and expectancy in the plants**, since Experiments 2, 3 and 4 were blinded to the plants and the experimenters.
4. The Wecker Farm findings (Experiment 4) suggest that FLFE **may have practical applications to improving crop yields** as well as the vitality of the crops produced.



# Part VI: Summary and Future FLFE Research

## Future FLFE Plant Research

1. Replication and extension of **Phase II seed germination, root growth, and leaf growth experiments** conducted under controlled laboratory as well as field (customer experimenter) conditions.
2. **Phase II yeast growth and resilience studies** conducted under controlled laboratory conditions.
3. Follow-up **Phase II farm studies** with possible soil and protein analyses, and other plant nutrient comparisons.
4. **Phase II biophoton imaging of plants growing in the FLFE environment** with the goal of providing clues as to **mechanisms of how FLFE works**.



# Part VI: Summary and Future FLFE Research

Biophoton Imaging of plants, humans and the environment

*Laboratory for Advances in Consciousness and Health  
The University of Arizona*



# Part VI: Summary and Future FLFE Research



**Celebrating Miles**

**Miles in Australia wine  
country**

***The Journey Continues...***

