

Plant Research Project: The effects of energy and thoughts on the growth of plants.

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July to October, 2007

This plant project was to explore the effects of energy and thoughts on plants. Over the course of ten weeks, daily treatments on the plants involved transmissions of energy and thoughts, and watering the plants with solutions of baking soda and valerian. The results indicated a slight correlation between the treatments and growth of the plant and growth of the number of leaves.

INTRODUCTION

This research project with plants was to answer the question: Does specific energy and thoughts have an effect on the growth of the plants? The purpose of this experiment was to learn how to send specific energy and thoughts to plants, and to see if there would be a noticeable result to the growth of the plants.

The project began on July 20, 2007 and ended on October 30, 2007. The results are based on data collected from August 23, 2007 to October 30, 2007.

The following is a description of the project, the experimental details of the procedure used in the experiment, the results, and conclusions and discussion, with possible implications for further research.

Description of project:

1. For this project we selected a plant to use in the experiment. Then we worked directly with energy/thought treatments with three of the plants daily, and had three control plants for comparison. We sent indifference toward the first of the three plants; the second plant we sent good will; and the third plant we sent the will for destruction. The control plants did not receive this energy/thought treatment.
2. The experiment involved keeping track of temperature, humidity, the light conditions and growth of the plants. Specific solutions were fed to the plants, as well as measured amounts of water. The plants were measured at specific intervals to determine growth.
3. On July 20, 2007, we went to Annie's Garden Gifts in Amherst, MA, and purchased 12 Impatiens plants, which we repotted with "Moo Mix" planting soil. After working with these plants for two weeks, we determined that we needed to start the experiment over for the following reasons: Olga repotted her plants after a storm knocked them over; the plants were getting too much water and getting water-logged and the kind of soil held too much moisture; we changed the amounts of water we were giving the plants; Susan's plants got mold-like spots; we weren't using the same light meters; and we weren't measuring plants in the same way.

EXPERIMENTAL DETAILS or METHODS

1. On August 16, 2007 went to Hadley Garden Center, in Hadley, MA and bought 6 identical plants, with 6 stalks in each pot: Wandering Jew (Tradescantia). We cut each stalk to a 6 inch height. We then separated and replanted them, 3 stalks to each 4" pot, total 12 pots, with "Complete Planting Mix--Professional Quality Fafard" planting soil. We each had six pots.

2. We made two solutions:

Morning solution: 1 teaspoon Arm and Hammer baking soda dissolved in 1 cup water.

Evening solution: 32 drops of Herb Pharm valerian dissolved in 1 cup water.

3. We selected three different rooms for the plants we would treat with energy, solutions, and water. We selected a fourth room for the control plants, which only received solution and water. We took temperature, humidity and light readings in these rooms to try to find spots that had similar conditions.

4. We followed these steps in the morning at 6:30AM and in the evening at sunset:

a. We recorded the time of each step, starting on August 23, 2007 and ending on October 30, 2007:

b. Every morning at 6:30 am (changed to 7:00 AM on 9/15/07 due to later sunrise) we gave each plant (all six plants) 1 teaspoon of the morning solution.

c. At sunset we gave each plant (all six plants) 1 teaspoon of the evening solution.

d. Then we took the light meter reading as close to each plant as possible: (all six plants)
The light was measured, twice daily, using an Extech 401027 FootCandle Light Meter which measures up to 2,000 FC.

e. Next we sat with each of the three plants that we were treating. The treatment will be described below in #5.

f. At the end of each treatment, we recorded the temperature and humidity of the three plants we treated (referred to as A, B, C). Then we recorded the temperature and humidity of the three control plants (referred to as Control 1, Control 2, Control 3).

5. Treatment consisted of increasing and decreasing the time and intensity of the energy over a period of 14 days, according to the following chart:

Plant "A" was treated with indifference, plant "B" was treated with good will, and plant "C" was treated with the will for destruction.

Day:	1	2	3	4	5	6	7
Time: (in minutes)	2	2 ½	3	3 ½	4	4 ½	5
Intensity:	1	1.5	2	2	2.5	2.5	3

Then this was reversed for the next seven days:

Day:	8	9	10	11	12	13	14
Time:	5	4 ½	4	3 ½	3	2 ½	2
Intensity:	3	2.5	2.5	2	2	1.5	1

The experimenters spent time at the beginning of the project defining what was meant by indifference, good will and the will for destruction. Indifference meant giving neither negative or positive attention, ignoring, just sitting with the plant; good will meant sending love to the plant; the will for destruction meant willing the plant to die.

6. The plants were measured at the beginning of the experiment and then again every 14 days: we recorded

- The height of each stalk,
- The length of the longest branch from the base of the stalk to the highest leaf, and
- The number of leaves on each stalk.

7. Photos of the plants were taken at the beginning of the project and every 14 days, after the plants were measured.

8. Each week the plants were watered with ½ cup of spring water.

RESULTS

The following charts show the results of the measurements of plant growth on six different dates over the course of the project; and the growth in the number of leaves on each plant for the same dates.

Susan's results show that

- Plant BS (Plant "B" Susan treated with good will) had more final growth of leaves, and
- Plant AS (Plant "A" Susan treated with indifference) and Plant BS (Plant "B" Susan treated with good will) had almost the same final growth of the plant.
- Plant CS (Plant "C" Susan treated with the will for destruction) and the Control plants showed less growth of plant and leaves.

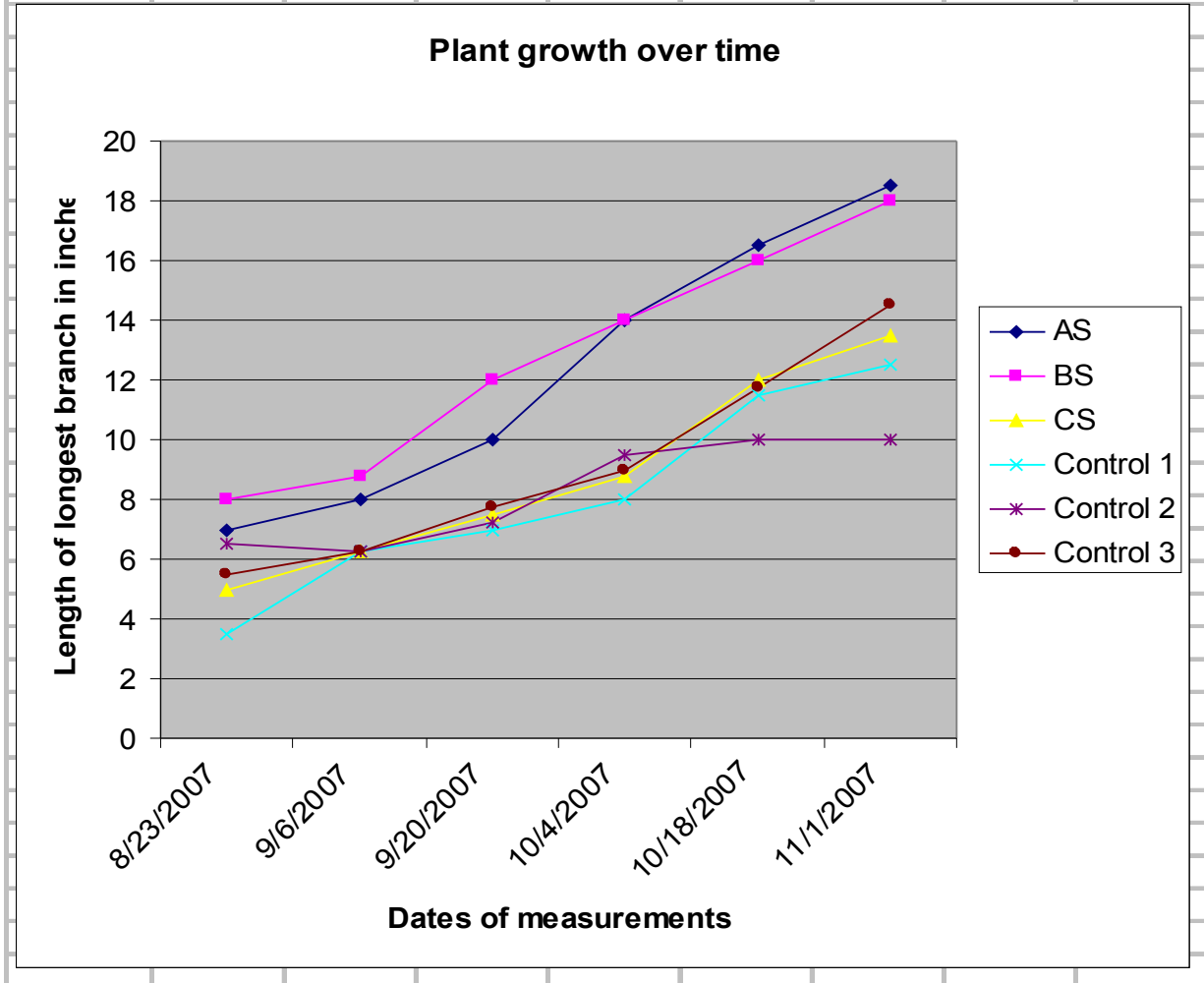
Olga's results show that

- Plant BO (Plant "B" Olga treated with good will) had more final growth of leaves, and
- Plants AO (Plant "A" Olga treated with indifference) and CO (Plant "C" Olga treated with the will for destruction) had the same final growth of leaves.
- Plant AO (Plant "A" Olga treated with indifference) had more final growth of the plant, with BO (Plant "B" Olga treated with good will) next highest.
- The control plants showed less growth of plant and fewer number of leaves than the other plants.

RESULTS

Susan's Plant Project Results:						
Date	AS	BS	CS	Control 1	Control 2	Control 3
8/23/2007	7	8	5	3.5	6.5	5.5
9/6/2007	8	8.75	6.25	6.25	6.25	6.25
9/20/2007	10	12	7.5	7	7.25	7.75
10/4/2007	14	14	8.75	8	9.5	9
10/18/2007	16.5	16	12	11.5	10	11.75
11/1/2007	18.5	18	13.5	12.5	10	14.5

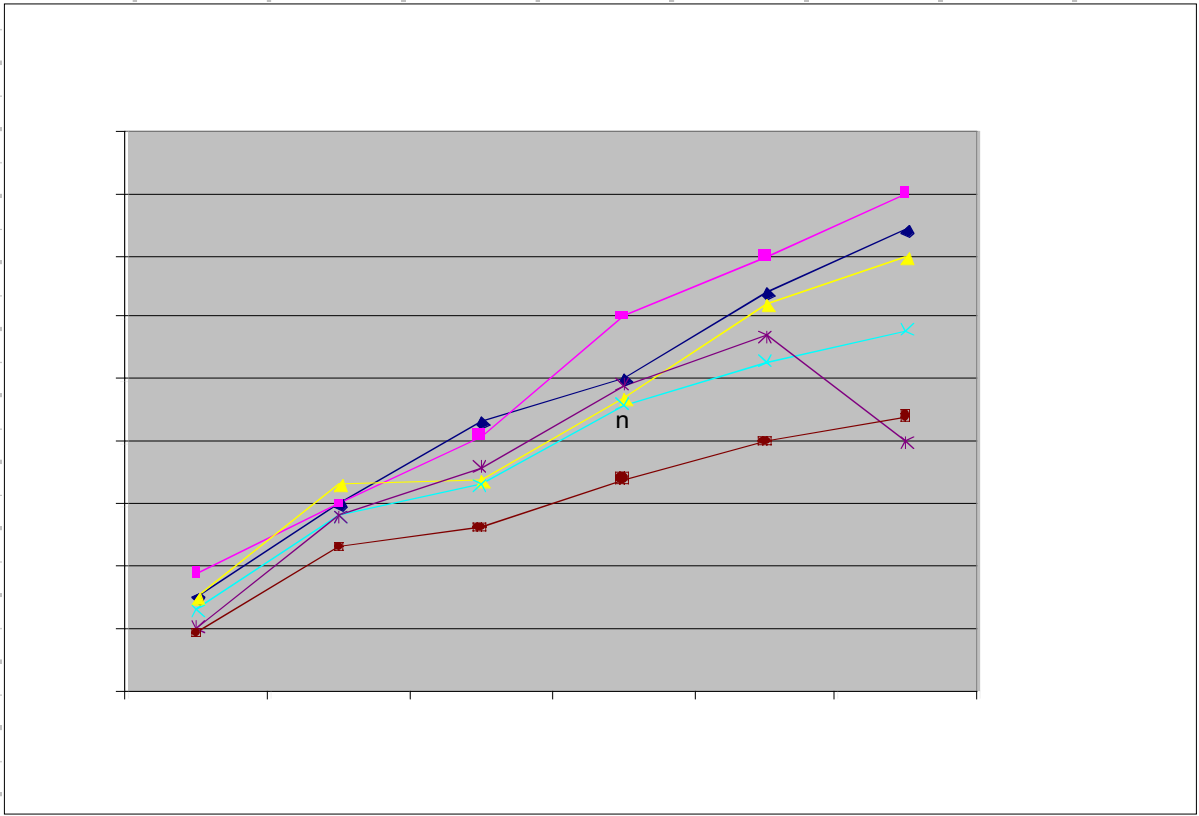
AS = Plant "A" Susan treated with indifference
 BS = Plant "B" Susan treated with good will
 CS = Plant "C" Susan treated with the will for destruction



Susan's Plant Project Results:

Date	AS	BS	CS	Control 1	Control 2	Control 3
08/23/07	15	19	15	13	10	9
09/06/07	30	30	33	28	28	23
09/20/07	43	41	34	33	36	26
10/04/07	50	60	47	46	49	34
10/18/07	64	70	62	53	57	40
11/01/07	74	80	70	58	40	44

AS = Plant "A" Susan treated with indifference
 BS = Plant "B" Susan treated with good will
 CS = Plant "C" Susan treated with the will for destruction



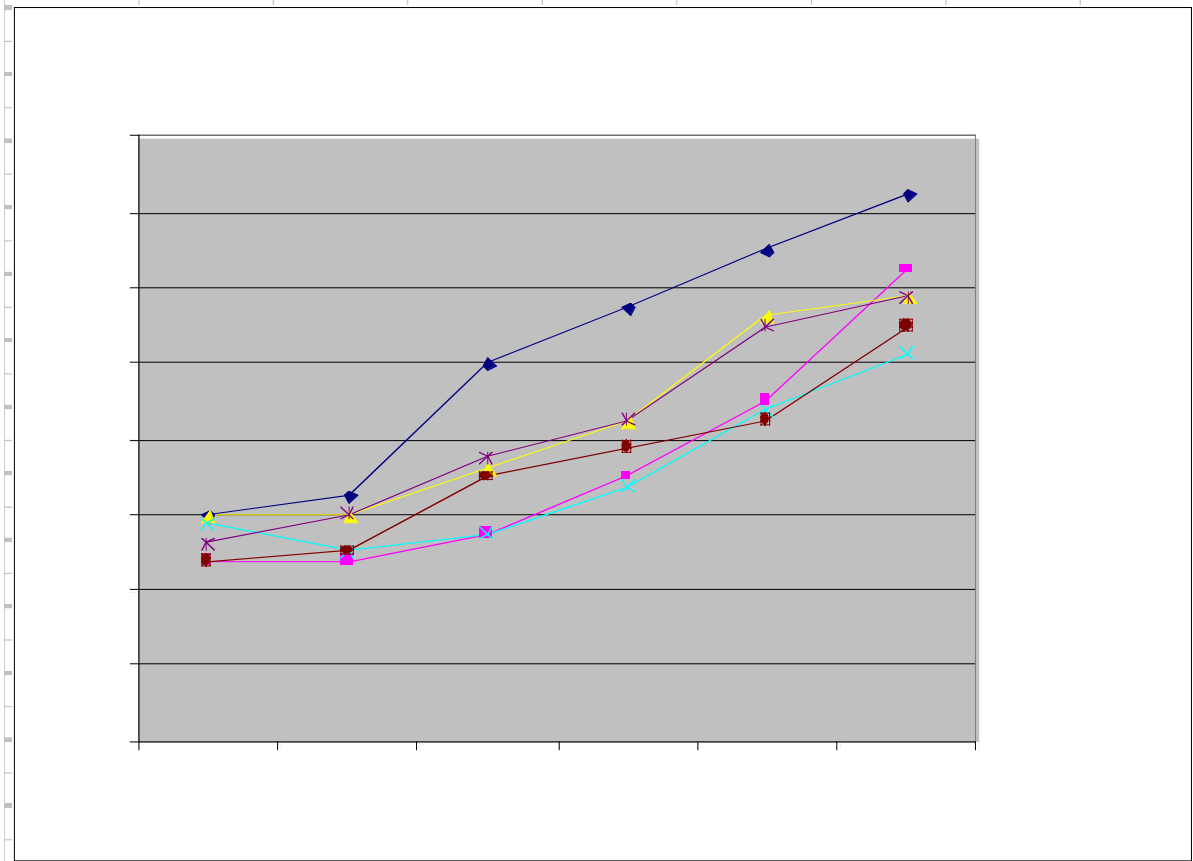
Olga's Plant Project Results:

Date	AO	BO	CO	Control 1	Control 2	Control 3
08/23/07	6	4.75	6	5.75	5.25	4.75
09/07/07	6.5	4.75	6	5	6	5
09/20/07	10	5.5	7.25	5.5	7.5	7
10/05/07	11.5	7	8.5	6.75	8.5	7.75
10/20/07	13	9	11.25	8.75	11	8.5
11/03/07	14.5	12.5	11.75	10.25	11.75	11

AO = Plant "A" Olga treated with indifference

BO = Plant "B" Olga treated with good will

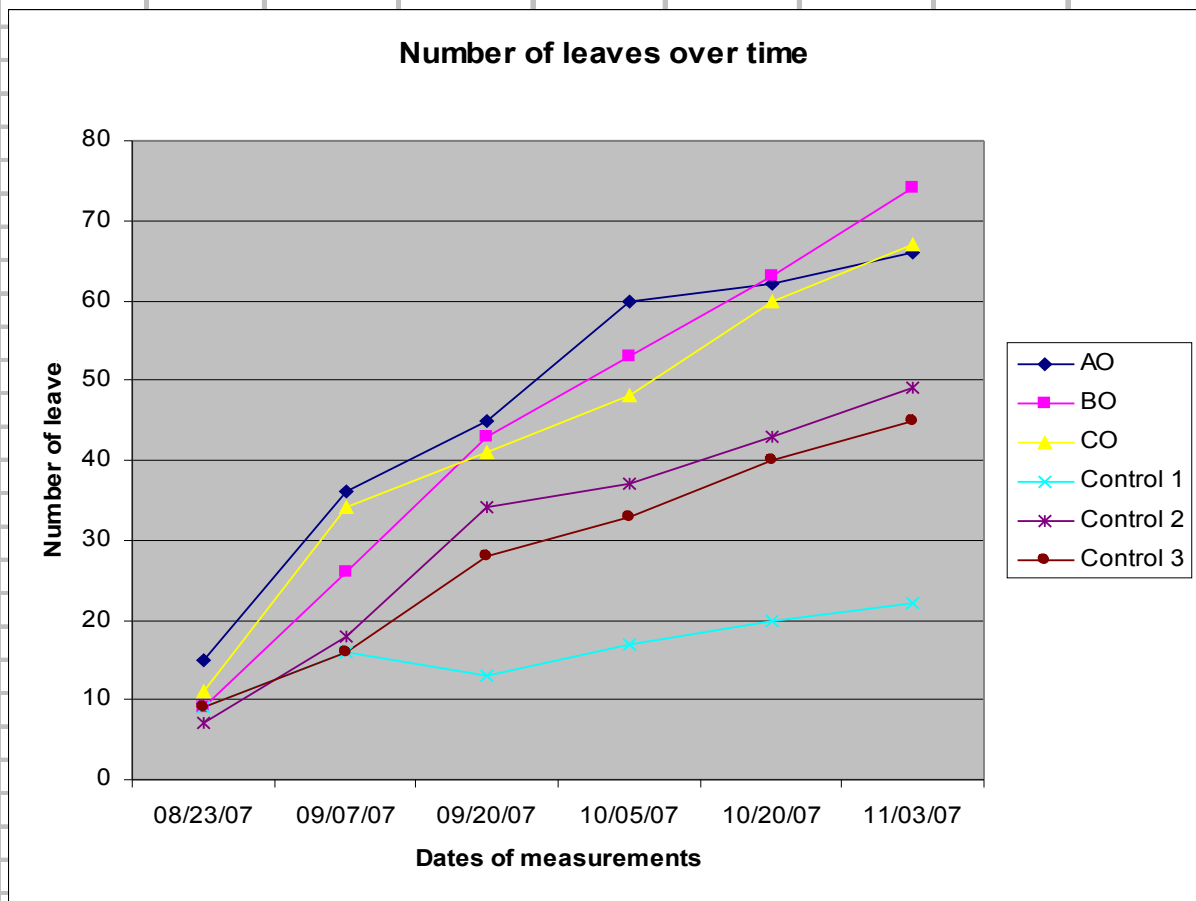
CO = Plant "C" Olga treated with the will for destruction



Olga's Plant Project Results:

Date	AO	BO	CO	Control 1	Control 2	Control 3
08/23/07	15	9	11	9	7	9
09/07/07	36	26	34	16	18	16
09/20/07	45	43	41	13	34	28
10/05/07	60	53	48	17	37	33
10/20/07	62	63	60	20	43	40
11/03/07	66	74	67	22	49	45

AO = Plant "A" Olga treated with indifference
 BO = Plant "B" Olga treated with good will
 CO = Plant "C" Olga treated with the will for destruction



CONCLUSIONS AND DISCUSSION

While the charts show that there was a difference in the growth and number of leaves in the treated plants, the results are inconclusive for the following reason:

- The lighting conditions, temperature and humidity were not strictly controlled.
- The plants were in rooms where other people and activities occurred, so could have been influenced by those energies.

The Plant labeled A, which received indifference, was intended to be a control plant, but did much better than the Control plants. We suspect that Plant A was actually effected by the energy of the experimenter sitting next to it.

We would like to repeat this experiment, carefully controlling all the conditions of light, temperature and humidity, in order to more specifically isolate the effect of the energy/thought of the experimenter on the plant. We would also use only three plants: Plant A would be the control plant and not be treated; Plant B would be treated with good will; and Plant C would be treated with the will for destruction.

It would be valuable to make an anecdotal record of the feelings and reactions of the experimenter during the treatments.

We also questioned whether there could be a way to measure the atmospheric influence on the plants, such as storms or static electricity in the air. This led us also to the question of whether there would be a difference in the plant before, during and after treatment, by energy/thought, that could be measured. We would like to start the next plant project from seeds.

ACKNOWLEDGMENTS

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REFERENCES

Agni Yoga, passage 387 pages 245-246, Agni Yoga Society, NY, NY, 1997.
Tompkins, Peter. *The Secret Life of Plants*. Harper Perennial, Harper Collins Publishers, NY, NY, reprinted 2002.
www.sunrisesunset.com

NOTES

Equipment resources:

Extech 401027 FootCandle Light Meter which measures up to 2,000 FC.
Available from Tequipment, phone number 1-877-742-8378 or Connecticut Valley Biological, in South Hampton, MA; phone number: 1-800-628-7748

Other materials:

Valerian by Herb Pharm, fresh root drops, purchased at Whole Foods, Hadley, MA.

Baking Soda, Arm and Hammer brand, purchased at Whole Foods, Hadley, MA.