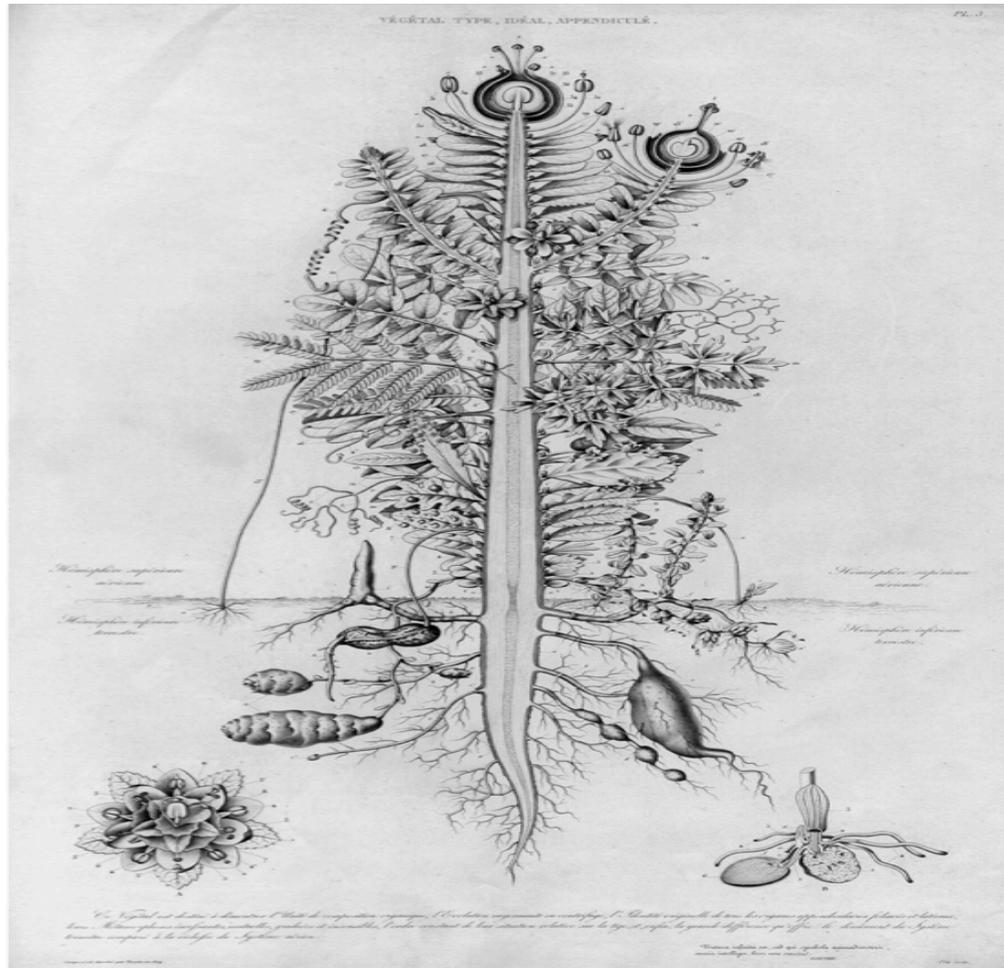


The Bach Biodynamic Planting and Research Calendar



2019

Introduction

Welcome to the 2019 edition of the Bach Biodynamic Research and Planting Calendar. The planting indications given in this calendar are based on indications given by Rudolf Steiner in 1924 in a course of lectures now available online and in book form, and on research that I have conducted over the last five years, which support Steiner's indications¹. From previous research conducted in this calendar the following times have emerged as favourable for planting both above and below ground crops:

- Two days before a full moon (also an indication given by Rudolf Steiner)
- Perigee, when the moon is closest to the earth (research by H. Speiss also supports planting at perigee²)
- Ascending phases of the inner planets Mercury and Venus (also based on indications given by Rudolf Steiner)

There are also several times when sowing should be avoided, if possible. Most important of these times is during a lunar eclipse, where research I have conducted has shown significant reduction in germination and in plant growth when seeds are sown at this time. Weaker sowing times also occur when seeds are sown during new moon phases and at apogee, when the moon is furthest from the earth. Therefore, planting during a waxing phase when perigee and either Mercury or Venus is in an ascending phase is an ideal time to sow seeds. All of these dates and ideal planting times are specifically indicated on the dates when they occur in this year's calendar. Best planting dates are indicated as exceptional, very good, good, and fair, depending on the combination of the above mentioned factors.

An ascending planet in this calendar is one that is in a phase that is moving north towards mid-heaven in the Northern Hemisphere, and south towards mid-heaven in the Southern Hemisphere. With this definition, all planets will be in an ascending phase in one hemisphere, and a descending phase in the other. This definition is based on Rudolf Steiner's comment in the Agricultural Course:

“Saturn goes slowly round, in thirty years... Sometimes it shines directly on to a given spot of the Earth. But it can also work *through* the Earth upon this portion of the Earth's surface. In either case the intensity with which the Saturn-forces are able to approach the plant life of the Earth is dependent on the warmth-conditions of the air. When the air is cold, they cannot approach; when the air is warm they can...if you wish to plant a coniferous forest, where the Saturn forces play so great a part, the result will be different if you plant the forest in a so-called ascending period of Saturn, or in some other Saturn period....Assume for instance that we take, as firewood, wood that is derived from trees which were planted in the Earth without understanding of the cosmic rhythms. It will not provide the same heart-giving warmth as firewood from trees that were planted intelligently (p.27).

¹ 1 Steiner, R. (2004). Agricultural Course, The Birth of the Biodynamic Method. Eight Lectures given in Koberwitz, Silesia, between 7 and 16 June 1924. Rudolf Steiner Press. Also available online for free at: https://wn.rsarchive.org/Lectures/GA327/English/RSPC1938/Ag1938_index.html

² http://www.biodynamic-research.net/pdf/pdf_lda1/spbd00.pdf

January

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Saturn ascending Jan 1-Apr 28 (NH)	Venus ascending Jan 1- Feb 10 (SH) Jupiter ascending Jan 1-Apr 11(SH)	1 Mercury Ascending (SH) Jan 1-Jan 11 Mars ascending Jan 1 -May 17 (NH)	2	3	4	5 New Moon 17:29
6	7	8 apogee- 20:28	9	10	11 Mercury ascending phase ends (SH)	12 Mercury Ascending (NH) Jan 12-Mar 8
13	14	15	16 Fair planting days Jan 16-17	17 Ash creatures with bone marrow (rodents)	18 No plant days Jan 18-21	19
20 Total Lunar eclipse Jan 20-21 Full Moon- 21:17	21 perigee- 11:59	22	23	24	25	26
27	28	29	30	31		

NOTES:

Based on these indications, the planets Mercury, Venus, Mars, Jupiter and Saturn will be either in an ascending or descending phase in the Northern or Southern hemisphere. The ascending phases of these planets are indicated in the calendar, and the hemisphere in which the planet is ascending is indicated in the Northern Hemisphere by the letters **NH** and in the Southern Hemisphere by the letters **SH**. The outer planets (Mars, Jupiter and Saturn) affect the growth of plants while in an ascending phase and where warmth is present (presumably summer would be the best time to plant, but artificial warmth may also be of benefit). Plants affected by the outer planets are described by Steiner in the Agricultural Course as those that are long lived and have bark or rind. Steiner specifically indicated that oak trees are affected by the planet Mars, and, as described above, coniferous trees are affected beneficially by the ascending phase of Saturn.

Where the outer planets affect the growth of longer-lived plants (trees), the inner planets affect the growth of shorter-lived plants, like annuals, bi-annuals and perennials. This includes, of course, virtually all vegetables, and many berries and fruits. Steiner does not give an indication as to what weather conditions affect the efficacy of the forces of these inner planets upon the growth of shorter-lived plants, but I assume that moisture and warmth allow these forces to work most effectively. Steiner does indicate that moisture is an important factor in the forces that affect plant growth that emanate from the moon during its waxing phase. Annual and bi-annual vegetables, being the shortest lived of plants, must therefore be strongly affected in particular by the ascending phase of Mercury. I assume that berries and shrubs, which can live up to 10 years, would be more affected by the growth of Venus, and fruit trees by the forces of both Venus and Mars. This is an area where more research needs to be conducted.

There are only two lunar eclipses this year (January 6th and July 16th) and these are times where sowing of seeds should be avoided. These dates are also indicated in the calendar. There are also several exceptional planting dates in this year's calendar, one occurring in the Southern Hemisphere and three in the Northern Hemisphere. With these dates, the three indicators for good sowing all occur: they are during a waxing phase of the moon, perigee also occurs at this time, and Mercury or Venus is ascending. These dates are as follows:

Northern Hemisphere:

February 16-18

March 17-19

April 15-17

Southern Hemisphere:

March 17-19

February

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4 New Moon-13:04	5 Apogee-01:28	6	7	8	9
10 Venus ascending phase ends (SH)	11 Venus ascending Feb 11-Jul 8 (NH)	12	13	14	15	16 Feb 16-19 exceptional planting days (NH) see notes
17	18	19 Full Moon-07:53 Perigee 01:03	20	21	22	23
24	25	26	27	28		

NOTES: Both Venus and Mercury are ascending in the northern hemisphere, making Feb 16-17 exceptional planting days in the northern hemisphere. These days are also very good planting days in the southern hemisphere, as perigee occurs on the full moon

All of these planting dates should be considered as exceptional in the Northern Hemisphere, as either Mars or Venus is ascending. By the time spring occurs in the Southern Hemisphere (September), perigee occurs around the new moon phase, weakening the strong influence of the waxing phase that occurred in the Northern Hemisphere in the spring.

Pest Control Using Ashing

In lecture six of the Agricultural Course, Rudolf Steiner gave practical information on the biodynamic approach to dealing with pest control. This is done through the process of ashing, where the pest that needs to be controlled is burned in a small wood fire. These ashes are then spread over the ground in a process Steiner called peppering. Only small amounts need to be used, and can be spread over a wide area. Steiner spoke of how life forces live in the watery element, and the counter forces to these life forces live in the element of fire. Hence, when we burn a seed, insect or rodent, we create anti-life or anti-reproductive forces in the burned substance. These forces are then spread out over the garden or field when peppering takes place. These forces can be further magnified in a process called potentization, where one part of ashed substance is added to nine parts water, and the mixture is stirred rhythmically for ten minutes. Rhythmical stirring involves stirring vigorously in one direction to create a vortex (15-30 seconds in one direction is sufficient), and then stirring in the opposite direction for the same amount of time, again creating a vortex. In the transition from stirring from one direction to another, stirring should again be vigorous, so as to create a period of what Steiner refers to as 'chaos'. The creation of the vortex draws the necessary cosmic forces into the water/pepper mixture, and the chaos period infuses these forces into the mixture. After the first ten-minute stirring takes place, the first potentization has occurred (called D1). After this first stirring has been completed, one part of this D1 mixture is added to nine parts water, and the process is again completed to create the second potentization, D2. I then spray the nine parts of the D1 on the field or garden in the areas where pest control is needed. A backpack sprayer can be used for larger areas, and a simple cedar or fir branch can be dipped into a bucket, and then used to whisk the potentized substance onto the soil for smaller areas. This process is then repeated. I recommend stirring up to a D14. In her book *Agriculture of Tomorrow* (I believe to be the most important Agricultural book in the world) Lili Kolisko spoke of how the first seven potentizations work in the physical realm, the seven after that on the etheric realm, and the seven after that on the astral realm. For ashing of pests, it should not be necessary to work further than the ether (or life) body of an organism to create the desired conditions where these pests will not want to inhabit the peppered or potentized area. This occurs from D1-14 in the potentization process. It is, however, of paramount importance that the pest in question be burned at the correct time. In the case of insects, the timing of this correlates to the sun's passage through the constellations.

Weeds should be ashed two-days before a new moon. The chart below shows the progression given by Rudolf Steiner, where winged insects are ashed in the constellation of Aquarius, those with bone marrow in their abdomen (beetles) in Taurus, and larvae (I include slugs and snails in this category) are ashed in Cancer. The ashing takes place when the sun is in the mid-point of the constellation in question. The ashing for creatures with a bony system, with a spine and skeleton, is somewhat different. Here the creature should be ashed when Venus is in the sign of Scorpio. All of these dates are achieved by using a sidereal zodiac, which shows the true position

March

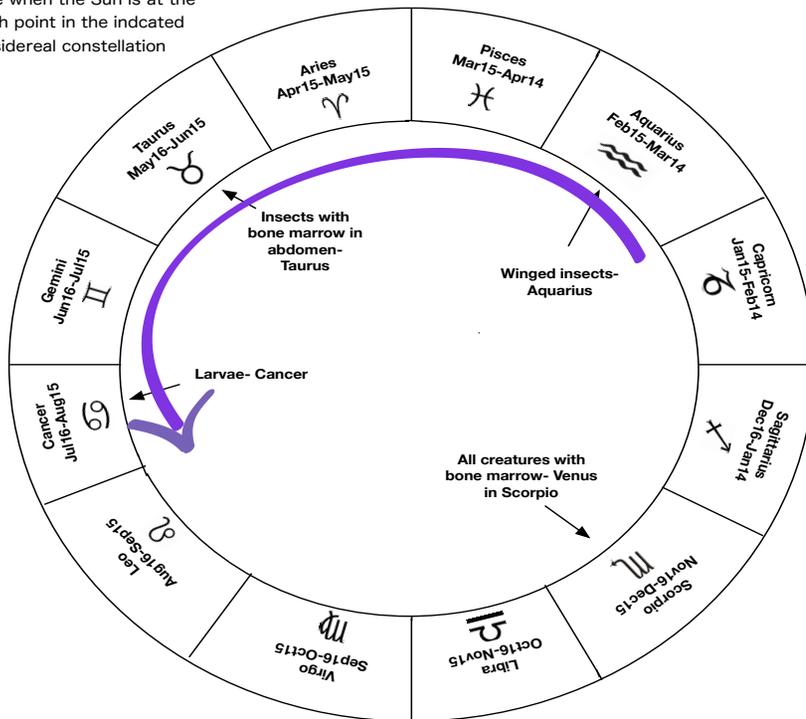
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Ash winged insects	2
3	4 Apogee-03:26	5	6 New Moon-08:05	7	8 Mercury ascending phase ends (NH)	9 Mercury ascending (SH) Mar 9-Apr 3
10	11	12	13	14	15	16
17 Very Good/Exceptional planting days Mar-17-19 See notes	18	19 Perigee-11:47	20 Full Moon-18:43	21	22	23
24	25	26	27	28	29	30
31 Apogee-16:14						

NOTES: March 17-19 are very good planting days in the northern hemisphere as Venus is ascending and perigee is one day before full moon. These dates are exceptional in the southern hemisphere as Mercury is ascending

of the sun as it passes through the zodiac. I have included all the dates of the sun's high point through the zodiac in the table below. It may be necessary to capture creatures before an ashing date occurs, and then to freeze them until the date in question. For example, this year I am in the process of conducting ashing and potentization experiments using slugs (see below). Slugs are not readily available at the beginning of August when conditions are too hot and dry for them to be active. I instead captured slugs in the spring and put them in the freezer in a zip lock bag until the August ashing date came about. The slugs had been dead for several months, but the ashing process activated the forces contained in their bodies. I then saved the ashes and used them in the fall, when slugs were again active.

Insect and Animal Ashing Chart (sidereal)

All Ashing for insects is done when the Sun is at the high point in the indicated sidereal constellation



- Aquarius March 1 - winged insects
- Pisces March 31-
- Aries April 30
- Taurus May 31 Insects with bone marrow in abdomen (beetles)
- Gemini July 2-
- Cancer August 2 (larvae)
- Venus is in the high sign of Scorpio on the Jan 17th (all creatures with bone marrow)

April

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3 Mercury ascending ends (SH)	4 Mercury ascending (NH) Apr 4-Jun 6	5 New Moon-01:52	6
7	8	9	10	11 Jupiter ascending ends (SH)	12 Jupiter ascending Apr 12-Aug 3(NH)	13
14	15 Exceptional planting days - Apr 15-17 (NH) see notes	16 Perigee-14:05	17	18	19 Full Moon-04:12	20
21	22	23	24	25	26	27
28 Apogee- 10:20 Saturn ascending ends (NH)	29 Saturn ascending Apr 29-Oct 1 (SH)	30				

NOTES: April 15-17 are exceptional planting days (best of the year) in the northern hemisphere as both Mercury and Venus are ascending, and perigee occurs close to the full moon. These are good planting days in the Southern hemisphere as perigee occurs close to the full moon.

2018 RESEARCH

Experiment 1

This year I have conducted research in two areas. The first experiment was in regards to the biodynamic preparations 500 and 501. I wanted to replicate a simple experiment conducted by Ehrenfried Pfeiffer described in his book *Soil Fertility*³. In this experiment, Pfeiffer soaked seeds in either water or BD 500 preparation. These seeds were then planted out. One of the groups of seeds soaked in BD 500 was then sprayed with BD 501 silica preparation after seven days (the plants had germinated and had developed leaves). After 10 days all plants were weighed and measured. Pfeiffer's experiments resulted in the largest plants occurring with the plants soaked in BD 500 and then sprayed with 501. The plants soaked in BD 500 were somewhat smaller, but were larger than the control group that was soaked in water and sprayed with water.

In my experiment I used radish seeds (West Coast Seeds RD696). The experiment took place from November 20th-December 10th, 2019. The plants were in a temperature-controlled solarium and received 12 hours of artificial light per day, in addition to natural window light. Both the BD500 and 501 solutions were stirred for one hour, (500 on the evening of November 20, 501 on the morning of December 2nd). On November 20 a total of 30 seeds were soaked for a period of 24 hours, as follows:

Group 1 (control): soaked in rainwater for 24 hours

Group 2 (BD 500 seed soak only): soaked in BD 500 solution for 24 hours

Group 3 (BD 500 seed soak and BD 501 spray): soaked in BD solution for 24 hours

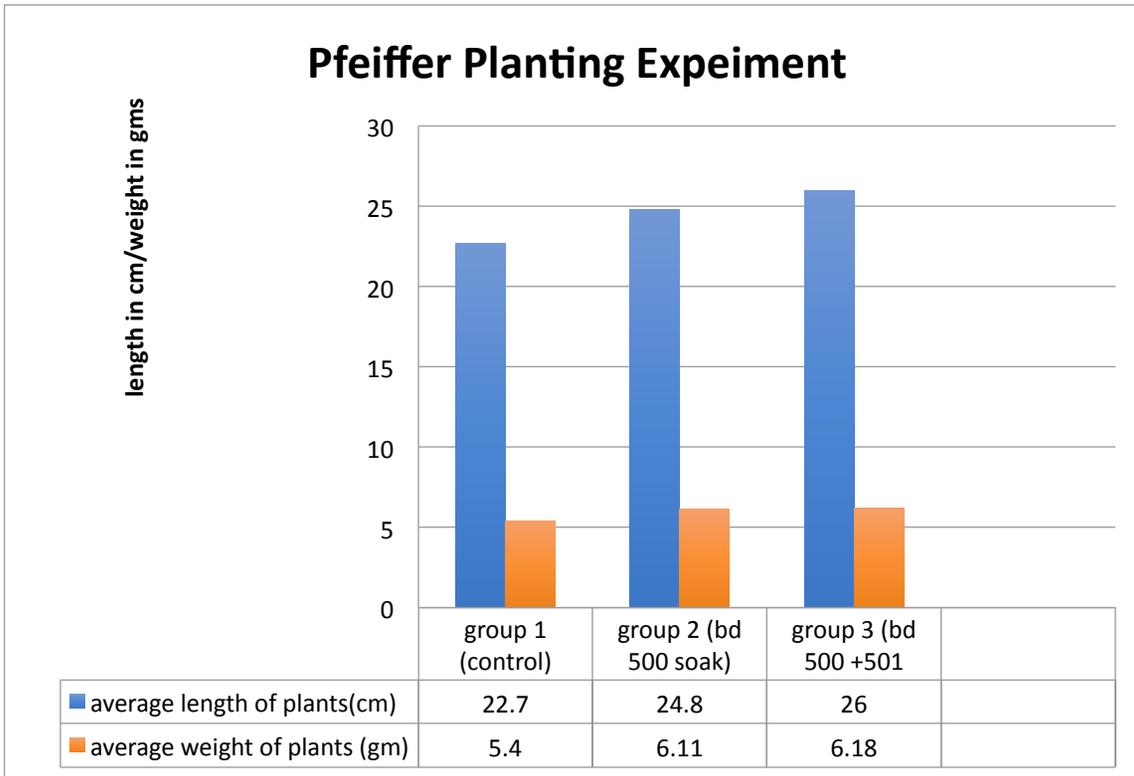
Each of the groups of 10 seeds were then planted out in store bought planting soil, and placed in the solarium. The three pots containing the seeds were then watered regularly as needed, at the same time, and with the same amount of measured rainwater. On December 2nd, group three received a spray of BD 501 silica preparation. The other two groups were also sprayed with the same amount of rainwater. The plants were harvested, measured and weighed on Dec 10th. The results of the experiment are as follows:

³ Soil Fertility, Renewal and Preservation. Ehrenfried Pfeiffer (chapter 12), The Lanthorn Press. First published in 1949 (second edition 2004).

May

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4 New Moon-15:47
5	6	7	8	9	10	11
12 Very good planting days NH Good planting days SH	13 Perigee-13:53	14	15 Very good planting days NH Good planting days SH	16	17 Mars ascending phase ends (NH)	18 Full Moon-14:11 Mars ascending May 18-end of year (SH)
19	20	21	22	23	24	25
26 Apogee-05:27	27	28	29	30	31 Ash creatures with bone marrow in abdomen (beetles)	

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Group 1 (control):

Germination 8/10

Length of plants (cm):

21.5,19.5,27,21,27,27.5,20.5,17.5

Average length per plant: 22.7 cm Total weight: 43.2 grams

Average weight/plant: 5.4 grams

Group 2 (BD 500 seed soak):

Germination: 9/10

Length of plants:

29.5,23.5,28,20.5,29,29,26.5,13.5,23.5

Average length per plant: 24.8 cm Total weight: 55.0 grams

Average weight per plant: 6.11 grams

Group 3 (BD 501 seed soak, BD 501 spray):

Germination: 10/10

Length of plants:

26.5,25.5,25.5,28,28.5,28,29.5,25.5,20,23

Average length per plant: 26.0 Total weight: 61.8 grams

Average weight per plant: 6.18 grams

In this experiment, results of Pfeiffer's original experiment with the BD preps 500 and 501 were replicated. Even though the experiment was small, the results were very similar to those achieved by Pfeiffer. One of the most important aspects of scientific research is that a scientific finding can only be verified through the process of the replication of research results by others. Germination was slightly higher for the 500 and 501 groups, and plant lengths and weights also increased with the use of the BD preparations. Best results were achieved with soaking seeds in BD 500, and then later spraying them with BD501, after the emergence of true leaves (not cotyledons). I will conduct this experiment next year to confirm the validity of previous results. It is also a very simple experiment that can be conducted by anyone wanting to test the efficacy of the biodynamic preparations. Steiner's indications were to apply BD500 to the soil, and then to spray the plants with BD501 after they have emerged from the soil. He also recommended spraying fruit trees with 501 just after fruit set. From this experiment, seed soaking with 500 can also be recommended. From a practical standpoint, seed soaking should be done at a time when the BD500 spraying would take place. In this year's calendar,

there are very good planting days in March and April. I plan to plant seeds on these planting days, and so would spray 500 in the evening, and then soak seeds with a small amount taken from the stirring. These seeds could then be planted in trays or directly into the soil on the following day. 501 should be sprayed in warm conditions, where possible (for example, if there is a three or four day window in which you wish to stir and apply 501, chose the warmest forecast morning). See photos below of harvested plants.



June

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 New Moon-03:02	4	5	6 Mercury ascending phase ends (NH) Good planting days NH and SH	7 Perigee-15:15 Mercury ascending Jun 7-Jul 17 (SH)	8
9	10	11	12	13	14 Good planting days NH. Very good planting days SH	15
16	17 Full Moon-01:31	18	19	20	21	22 Apogee-23:50
23	24	25	26	27	28	29
30						

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Experiment 2

The second experiment that I conducted in 2018 had to do with the efficacy of using ashing and potentizing to control pests. This method is the ultimate in organic pest control, as there is no use of any chemicals or biological agents, and the treatment is pest specific with no risk to other species, or the farmer or gardener carrying out the application. Many organic pest control agents use chemicals that can be hazardous to human health and leave residues in the soil. For example, the active ingredient in Suffoil, approved for organic use to control many insects, is petroleum oil with sulphur content removed. AzaGuard, another common organic pesticide is derived from the Neem tree. It is however, toxic to aquatic organisms, should not be inhaled, and direct contact with skin is to be avoided. These treatments are better than the harsh pesticides that are used in non-organic agriculture, but are still designed to eliminate pests on contact, and are non-species specific. Because of this, if these products come in contact with non-targeted organisms (birds, frogs, ladybugs, dragonflies, pollinators, etc.) they can kill these species and damage ecosystems.

Potentization also has the benefit of being zero cost- the pests themselves are gathered from the field, and, their bodies are ashed and spread over the area where management is required. I have included instructions on how to ash and potentize pests in this calendar for the last two years, and this year wanted to put theory into practise and see if ashing/potentization is effective. In the experiment I conducted I used slugs as the target pest to be controlled. I assume that the ashing time for slugs is the same as it would be for larvae, as slugs seem to me to be creatures that develop up to the larval stage. The ashing time for slugs is therefore when the sun is at its highest point in the constellation of Cancer. This occurs at the beginning of August (August 3 in 2018). In my region of British Columbia slugs are not active in the hot and dry conditions of August, but in April and May I have lost entire rows of lettuce, beans and spinach in a single night from slug damage. In the spring of this year, I collected slugs (about 10 small slugs) and put them in a zip lock bag and put them in the freezer. When the August 3rd ashing date came about, I lit a small fire using dry sticks and branches in a concrete pestle that I have, and put the frozen slugs in the fire. They were then burned to the point where they were completely dried out and would crumble. I allowed the fire to burn out and collected the ashes. These ashes were then stored in a tupperware container. In the fall (November 15th) when the weather became cooler and damp 24 small slugs were collected from my garden. These were then divided into two groups of 12 slugs each and placed into 2 identical terrariums (see photo below). The total weight of each group of slugs was approximately 5 grams. Each terrarium was given an equal number of leaves and sticks, and 30 grams of garden soil to provide a habitat for the slugs. Each group of slugs was fed the same amount of lettuce (15-20 grams each feeding) two times per week. The old lettuce was removed, and the leaves were replaced weekly for the first month of the trial. One group of slugs was given 8.5 grams of the ashed slugs material, and the control group received 8.5 grams of wood ash from the wood stove that I use to heat my garage. After that, a spraying of either rainwater or potentized material was sprayed in each terrarium, approximately every other day (sometimes I sprayed every day, depending on what was convenient for my work schedule). This began with 1 part ash with 9 parts rainwater, stirred for 10 minutes, as recommended by Lily Kolisko in her book *Agriculture of Tomorrow*. This was then sprayed (five

July

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2 New Moon-12:17	3 Fair planting days NH. Good planting days SH	4 Perigee-21:00	5	6
7	8 Venus ascending ends (NH)	9 Venus ascending Jul 9-Nov 29 (SH)	10	11	12	13 Fair planting days NH and SH.
14	15	16 Full Moon-14:39 Partial lunar eclipse No plant days Jul 15-17	17 Mercury ascending ends (SH)	18 Mercury ascending Jul18-Aug 12 (NH)	19	20 Apogee-15:58
21	22	23	24	25	26	27
28	29	30	31 New Moon-20:12			

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sprays from a sprayer bottle that was only used for potentized material) into the potentized terrarium, while the control terrarium received 5 sprays of rainwater (from a sprayer bottle that was only used for rainwater). This process was continued until the potentized terrarium received spraying up to a D14. The last spraying occurred on December 8th.



Results

The results of this experiment have not so far showed that potentization is an effective control for pest management. I do not believe that this is because potentization is ineffective, but rather that potentization is a process that needs a full life cycle of the pest in question to be effective. Ashing and potentization is meant to create an environment where the pest in question does not want to reproduce. In the case of the ashing of mice (Venus in Scorpio), Steiner says the following: And there remains in what is destroyed by the fire, the corresponding negative force as against the reproductive power of the field mouse...Henceforth your mice should avoid the field (Agricultural Course, lecture 6, page 113). Steiner said the following

regarding the ashing of insects: “In this case, you do not take part of the insect as you do with the mouse. You must take the entire insect. ...In effect the insect world is connected with the forces that evolve when the Sun is passing through Aquarius, Pisces, Aries and Gemini, and onto Cancer... It is while passing through these regions that the Sun rays out the forces which relate to the insect world (Agricultural Course, lecture 6, page 115). Steiner gives a specific example ashing of a nematode that has a four year life cycle and damages potatoes. The effect of the peppering occurs gradually over the four year life cycle of the nematode, and that after the completion of one full four year life cycle, suppression of the pest reached its greatest effect.

August

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Perigee-23:11 Fair planting day NH and SH	2 Ash larvae	3 Jupiter ascending ends (NH)
4 Jupiter ascending Aug 4-end of year (SH)	5	6	7	8	9	10
11	12 Mercury ascending phase ends (NH) Good planting days NH and SH	13 Mercury ascending phase begins Aug 13-Oct 29 (SH)	14	15 Full Moon-05:31	16	17 Apogee-02:49
18	19	20	21	22	23	24
25	26	27	28	29	30 Perigee-07:53 New Moon-03:38 Fair planting day	31

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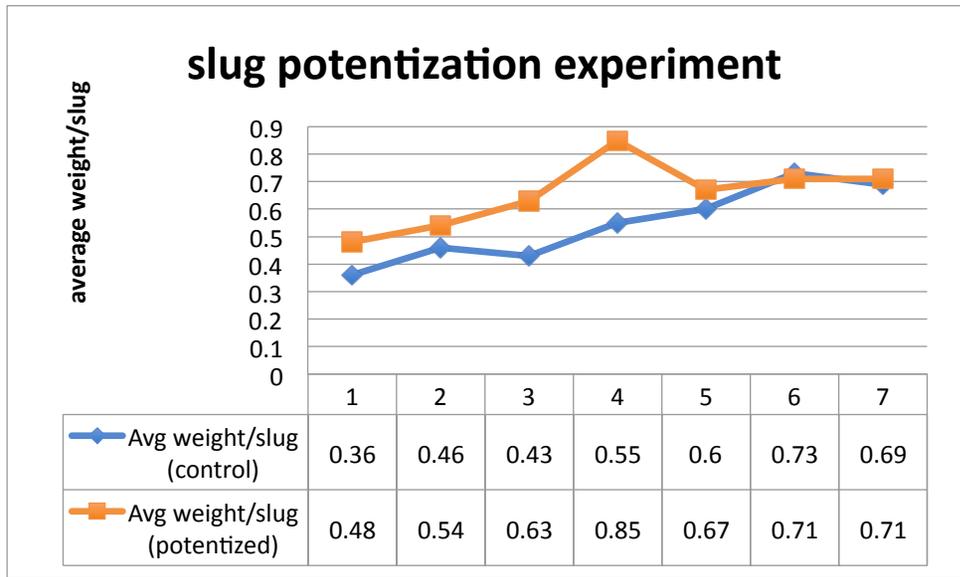
The life cycle of a slug is one year- slugs reproduce usually each fall. With this said, I assume that potentization and ashing will take a full year for full effects to take place. Also, I have lost slugs from both groups. My garage is cool (I heat it to 5 degrees Celsius in the winter) which slugs prefer, but they are kept in captivity and this has negatively affected their survivability. I plan on keeping this experiment going until mid March, and will report on any changes that occur during that time. This experiment was a preliminary exploration into trying to conduct research into the effectiveness of ashing and potentizing, and through this there are several changes that I would like to make in future research into this important aspect of biodynamic agriculture. The first change that I would make in future research is to try to conduct the experiment in a more natural outdoors environment. I may construct two larger boxes using a screen to over the top of each box. These boxes would be kept outside and in separate parts of my garden. Slugs would be added, and the process of ashing and potentizing would be the same as for this current experiment. I would also try to conduct this experiment over a longer period of time- ideally a full calendar year. Finally, I assumed that the ashing of slugs should take place at the high sign of Cancer, as they look to me like larvae. But Steiner recommends ashing of nematodes when the Sun is in the middle of Taurus. Nematodes also seem to me to be more larval in nature, but the indication is to ash in Taurus. Steiner also indicates that the strongest forces that influence insects and their reproduction occurs in the sign of Taurus. Theses forces are weak as the Sun enters Aquarius and reach their greatest strength in Taurus, and then again weaken as the Sun moves into Cancer. The rest of the zodiac (Leo through Capricorn) is not a period when forces affect the reproduction of insects. The results of this experiment are summarised in the table below:

Date	# of slugs (control)	# of slugs (potentized)	Total weight (control)	Total weight (potentized)		
November 19	12	12	4.3 grams	5.7 grams		
November 28	8*	11	3.7	5.9		
December 8	10	11	4.3	6.9		
December 16	8	8*	4.4	6.2		
December 22	8	10	4.8	6.7		
December 30	7	8	5.1	5.7		
January 5	7	8	4.8	5.7		
*Two slugs must have been hiding in the soil and I did not see them						

September

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10 Fair planting days NH. Good planting days SH	11	12	13 Apogee-05:32 Full Moon-21:35	14
15	16	17	18	19	20	21
22	23	24	25	26	27 Perigee-18:24	28 New Moon-11:27
29	30					

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From this graph it can be seen that the potentized group in red is showing a slower progression in growth than the control group, although in week six (Jan 5th) a slight decline occurred in the average weight of the control group. It will be interesting to see if this trend continues over the next couple of months, which would indicate that there was a weakening of the potentized group when compared to the control group. This experiment has demonstrated that it is difficult to keep slugs healthy in a captive environment. Both groups started with 12 slugs and after 7 weeks of captivity the control group has lost 5 slugs while the potentized group has lost 4 slugs. I assume that these mortality rates are higher than would be in a natural setting. This high mortality rate decreases the value of data collected. As stated above, the next time

that I conduct his experiment I will try to have the slug enclosure in an outdoor environment. I will update this experiment in early March.

Future Directions

Over the last two years I have spent most of my summer time building a house on farmland that my wife and I purchased a few years ago. This has limited the time spent doing planting trials during the summer months. Most construction of the house should be finished by mid-spring. This will allow me to do more planting trials in the spring and summer. I plan on conducting much larger planting trials than I have in the past, which will continue to compare the efficacy of Thun theory versus indications given by Rudolf Steiner. I hope to also conduct more research in the area potentization and hope to replicate some of the experiments conducted by Lili Kolisko in her book *Agriculture of Tomorrow*.

If you have any questions regarding this calendar or would like to contact me, I can be reached at jbbach363@gmail.com.

Thank-you,
John Bach

October

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2 Saturn ascending Oct 2-end of year (NH)	3	4	5
6	7	8	9	10 Apogee-10:29 Fair planting days NH. Good planting days SH		12
13 Full Moon-14:10	14	15	16	17	18	19
20	21	22	23	24	25 Fair planting days NH and SH	26 Perigee-02:39
27 New Moon-20:40	28	29 Mercury ascending phase ends (SH)	30 Mercury ascending phase Oct 30-Nov 22 (NH)	31		

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November

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7 Apogee-00:36	8	9 Good planting days NH. Fair planting days SH
10	11	12 Full Moon-05:37	13	14	15	16
17	18	19	20	21	22 Perigee-23:41 Mercury ascending phase ends (NH) Fair planting day NH an SH	23 Mercury ascending Nov 23- end of year (SH)
24	25	26 New Moon-07:07	27	28 Venus ascending ends (SH)	29 Venus ascending Nov 30- end of year (NH)	30

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December

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4 Apogee-20:08	5	6	7
8 Good planting days NH. Very good planting days SH	9	10	11 Full Moon-21:14	12	13	14
15	16	17	18 Perigee-12:25 Good planting day NH and SH	19	20	21
22	23	24	25 New Moon-21:15	26	27	28
29	30	31				

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