

## AGRICULTURAL CONFERENCE AT KING'S LANGLEY

7th--9th March, 1936

Saturday, March 7. Circle Meeting.

Herr Pfeiffer brought greetings from Dr. Wachsmuth and the Goetheanum. He then spoke of the situation in Germany in connection with our work. The Agricultural Work has not been molested. The members of the Government are not united against us. The secret police are against us. The books published by the Philosophisch-Anthroposophischer Verlag are forbidden. The Agriculture Circle has been obliged to change its name because of the title "anthroposophical." Herr Pfeiffer had conversed with the head who is against us, who said that everything connected with the name "Anthroposophy" must be destroyed. Therefore we have had to change the name of the Circle from "The Experimental Circle of Anthroposophical Farmers and Gardeners" to "The Experimental Circle of Biological Farmers and Gardeners," -- omitting the word "anthroposophical." The outer organ of the Circle in Germany is the "Reichsverband." This still exists but we do not know how long it will last. The Medical Circle is also untouched so far. If we wish to help Germany in any way we must avoid the word "Anthroposophy."

At the Conference of Farmers at Dornach in January there were only five farmers from Germany. At the other Conference there were present only fifty members instead of five hundred. Therefore we must strengthen the work in other countries to balance this. The work in England is one of the keys for the work in the whole world in the interest of bio-dynamic farming and gardening.

In France the chief interest is in the products--not in the bio-dynamic method itself. Herr Pfeiffer had been engaged in a dispute with a Frenchman. Victory was easy because in seventeen lines written by the Frenchman there were seven mis quotations, which could be proved.

In Holland there is great interest in our products. There we have to demonstrate by means of figures that our products are better than others. Ninety percent of the consumers declare them to be better in taste and quality. They are also found to be more healthy. Experiments with human beings show that for the first fourteen days they eat more of our products, then only two thirds as much. This is an important physiological fact. The whole system of the human being is changed. At first the doctors were against us, but the patients show the doctors that they are better in health. Now our products are recommended by the doctors themselves.

One problem is: the question of potatoes. The quality of potatoes is deteriorating. This shows itself in the quality of the seed and in keeping qualities - especially in the last two years. There is a crisis in the potato world.

I. We can demonstrate that the bio-dynamic method yields better potatoes. This would make a

good theme.

2. Treatment of wheat with the seed-bath before sowing.
3. 3. How to increase the quality of our products.

There is a slight increase of our work in Belgium. It is being carried on there by Mrs. Brown, an American, and Mrs. Gault. They have two gardens in connection with farms, and are interested in compost-making. They have also had good results from the preparations against pests.

There are two farms also in France near Bordeaux, one led by a Frenchman and one by a Swiss. There the experiences are not yet satisfactory. They work willingly but the results are not yet good. A French banker has given a farm as a demonstration farm. We do not want French farmers yet as owners of properties. A Society has been formed for the introduction of the bio-dynamic methods. The work of this Society is on a farm 15 to 20 miles from Paris. Fields have been set apart from 40 acres, as a gift, and the money to develop it for nine years. (Monsieur Udean.) At the head of the undertaking is a young man who worked for two years at Pannehoeve under Herr Pfeiffer. Herr Pfeiffer proposes to make there a model farm, with cattle, and a market garden. He does not propose to grow grain. There would not be sufficient to bake bread for the whole year. This farm was acquired last year.

There is also another farm in France which is now being run by one who for a time was at Loverendale.

Interest has also developed for our work in Alsace. About 40 farmers in the neighbourhood of Müllhausen are practicing the methods. Some of them were at Dornach for the January Conference.

In Switzerland the number of those practising the biodynamic methods is also increasing. About 80 farmers and gardeners use the methods. They are mostly small places and use their products themselves. There are only about six real farms. In Switzerland there is special interest in the work of gardeners. A Society composed of educated women is also interested. When we heard that our German friends could not come we arranged for two open days and three closed days to discuss our problems, namely, the treatment of pasture-land and cattle feeding. We changed this programme and used the three closed days for reports from other countries: England, Switzerland and especially Poland. There were present about 100 peasant farmers from Switzerland. The work is increasing; there is more than Herr Pfeiffer himself can do. But we have had help.

There is a great problem at present in Switzerland. It is becoming more and more impossible to make the famous Emmenthal cheese. A Commission had been appointed to investigate into the matter. The fault lies in the system of manuring. Too much liquid manure, artificial fertilizers and potassium has been used. We have made contact with the Swiss Government on this matter. At

our meeting with the directors of the Milk and Cheese Experimental Station they said quite openly: "We are at the end of our production of milk and cheese. The scientific societies do not help us any longer." Dr. Eckstein, Herr Pfeiffer and Frau Sabarth were present at that meeting. Behind the scenes there is one man especially who is working against us. We got wind of this through a friend of our school-days. He is practically our only enemy who writes against us in scientific publications, namely, Professor Neubauer. He is famous as a Potassium Adviser and authority on phosphoric acid in the atmosphere. He is the inventor of the Neubauer test. He is no longer working at Dresden but travels about Europe and lectures and writes on potassium. He went to Bern, to France and Italy, everywhere speaking against us. He opposed our meeting with the Swiss Government. He speaks of our preparations as imaginary substances coming from the stars, with no real basis.

The chief chemical industries are represented by the "I. G. Farben" in Germany and the "I. C. I. in England. Professor Neubauer's articles are given out in thousands of copies. He says we use no manure, and he gives an entirely wrong picture of our work. He speaks of the preparations as manure. He has damaged us very much in Holland, France, Switzerland and Italy. He set the Dutch universities against us. At the Congress in Amsterdam, when English visitors were present, they were turned against us by this man; so he is already beginning to produce an effect in England.

The chemical industry is divided into two parts: the I.C.I. and the Potassium industries. The I.C.I. deals with nitrogen fertilizers. The scientists already know that too much nitrogen fertilizer brings harm to both land and crops. They do not now advertise the nitrogen fertilizers too much; they have changed their factories and adapted them particularly for war supplies. For this reason the I.C.I. and I.G. Farben in Germany are no longer so much against us. The articles written against us are no longer paid for by the I.G. but by the potassium industry. There is an agreement between them in different countries...

In Italy we only have a small experimental station in Trentino. The President of the Fascist Organisation has wakened interest for the bio-dynamic method in Italy. All has been stopped except his report. Signor Chimelli and other friends have had great discussions with him. Monte Cattini is against us. There are heaps of cuttings concerning our work. But all this is not what we want. We ask for little publicity but we want demonstrations. A Commission of four men came from Trentino to Germany and Switzerland. We have no one to send them.

In Austria sixteen farmers are working, but there is not a strong contact with them. Only two of them are in touch with Dornach.

A former President in Hungary is very interested; but we have no one to send there.

In Checho-Slovakia two farms are working on our methods and these could be a good

demonstration for us. Publicity there is bad. Articles are written against us--almost all on an occult basis. The worst article against us last year was published in Prague. (Professor Nikleewki Poznań.) Dr. Wachsmuth and Herr Pfeiffer are going there after Easter.

In Poland there is one farm of 6,000 acres practising the methods. It is owned and directed by a prominent Pole in the political world.

There is interest in Norway and Sweden. A farmer in Sweden has written to us regularly for the last four years.

In Denmark, five years ago there were twelve farmers; now only five or six. We do not know what has happened there.

in Norway there are between 20 and 25 farmers and gardeners. Herr Pfeiffer is going to Denmark, Norway and Sweden after Easter.

There is not much to relate of other countries. There are a few in the United States of America. A few in Africa; we have not heard from them for three years, nor from South America for two years.

There are active groups in New Zealand. They write often and in detail. At present two of their number are in Dornach, acquiring a good supply of literature--in case anything happens at Dornach, too!

Our greatest trouble is: the potassium industry. They are planning a great advertisement campaign for the next few years. The I.C.I. gives 50% of its credits to the Government. The sales of artificial fertilizers have gone back 40%. They say 10% of their decrease is due to the bio-dynamic methods. This is not true - Herr Pf. wished it were. They have an exhibition boat in Holland. The same is planned for England. We shall have a struggle for the next two or three years.

After Herr Pfeiffer had finished speaking Mr. Binnie said he had visited Oaklands in Hertfordshire.

Pamphlets on Agriculture recommended by Herr Pfeiffer: The Cornell Reading-Courses. Published by the New York State College of Agriculture at Cornell University. Vol III, No.50. The Soil Series, No.3.

"The Nature, Effects, and maintenance of Humus in the Soil Organic Matter in the Soil." Oct. 1923. Extension Bulletin 68.

"The Management of Manure, by J. A. Slipper. Bulletin 131. Agricultural College Extension Service. The Ohio State University, Columbus, Ohio.

Organic Manures, by Jenkins. The Imperial Bureau of Soil Science, Rothampstead. Published by the Imperial Bureau of Soil Science, Harpenden, England.

Soil Fertility Losses under Missouri Conditions," by Hans Jenny. Soil University of Missouri, College of Agriculture, Agricultural Experiment Station, Bulletin 384. Columbia, Missouri, May 1933.

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Saturday afternoon, 3 pm. Herr Pfeiffer on Treatment of Seed." Some varieties of wheat ("siglender," for example) do well when treated bio-dynamically; others do not. The same applies to potatoes, barley, legumes etc. We have to discover this. We must collect more observations. Carry out experiments.

- a. Potatoes. 2 to 5 rows
- b. Legumes. 2 to 5 rows
- c. wheat. 2 to 5 rows
- d. Barley. 2 to 5 rows

Germination may be bad as the result of exhausted seeds. Germination must be more than 92% to meet the requirements of The Seed Grower's Society. The speed of germination must also be observed.

Seed-baths. The seed is not put directly into the ground, but it is first treated in a special way. The effect is generally that the young plants are more resistant to drought, long periods of rain, and other abnormal conditions. Secondly, we obtain a more sure and increased crop.

With the ordinary bio-dynamic methods we improve the soil and also the quality of the crop.

We give 500 before sowing; also before transplanting. When transplanting we also place the roots of our young plants for 20 minutes in a high dilution of 500.

The Seed-bath. Immerse the seeds in the bath for an hour; then dry carefully before sowing.

Varying results have been obtained, according to the position of the moon, and for other reasons. Some plants thrive better with 500; some with 502--507. These experiments have been carried out on four different stations. More observations are necessary. The seed-bath with 500 may be applied in two ways. First: for wheat also, take one portion (one horn) of 500 with four gallons of water. Stir for one hour. Immerse the seed in this solution for one hour. 2. A 0.005% solution of 500 is used. (About 9/10 oz. to one gall.) Place the seeds in a linen bag. Immerse for one hour. Dry. They must dry gradually, in the shade. Sow as soon as possible after the bath.

II. 502--507. A tiny portion of each on the point of penknife and only a few drops of 507 in two to three gallons of water. Stir for one hour. Immerse each kind of seed for one hour. Then dry and sow.

111. A combination of the two baths: I and II. different reaction is observed. The following are some res experiments:--

Tomatoes yield best when treated with 500 and treated with 500 and 502—507. Stirred for one hour; seeds immersed for one hour; dried (500 alone is very bad for tomatoes--a small crop results. Always Sow dry seeds.

- Kohl rabi: 500 before waning and waxing moon.
- Mangolds: 500 before waning and waxing moon.
- Spinach: 500 before waning and waxing moon.
- French beans: 500 before waning and waxing moon.

Broad beans and Horse beans: 502-507, in the waxing moon.

Carrots: a seed-bath of ordinary rain water in the waxing moon, and 500 in the waning moon.

Cucumbers: 502-507 in the waxing moon; or a seed-bath of luke-warm rain water only in both moon periods. Do not use 501 as spray, --only 500. Keep a special heap of earth for cucumbers, made of turf compost. Give 500 twice--as usual. If half-totted willow mould (taken from the inside of old willow trees) is mixed with the soil for cucumbers, this brings them to their highest perfection, both under glass and out of doors.

Peas: A seed-bath of 500 in the waxing moon; 502-507 in the waning moon. It is better to sow peas in the waning moon; more fruits are then obtained. If sown in the waxing moon more foliage is produced.

Potatoes: Seed-bath of 500 in the waxing moon.

Radishes: Seed-bath of 500 in the waxing moon.

Celery and celeriac: need more clay than sand. The soil must be rich in humus. Pig-manure which has been through the compost heap is specially good for these. When transplanting also place a spoonful in each hole.

The ninth to the sixth day before the full moon--as well as the second day before--are good for sowing. When the moon is in Cancer (her own house) seeds germinate badly. Never sow when the moon is in Cancer.

Read the article published in "The Field," 13th Aug. 1932, by R. Reynell Bellamy, on "Does the moon affect our Crops?"

In Australia and New Zealand the natives reckon with the moon. They say the sap goes up in the waxing moon. The South African Government contracts with their wood-cutters to cut down the trees in the waning moon.

There is a daily, a monthly, and an annual rhythm. Russian biologists have investigated this. When a plant is gathered for its alkaloidal contents or its essential oil it is necessary to make a note of

the day and the time. For instance, the nicotine content of tobacco is highest between two and four o'clock in the morning.

Gather Valerian at midday, or in the evening, --all other plants in the morning. The maximum of growing energy is at 4 a.m.