

SEEDS

1976 gave Germany a summer as long and hot as it was for those of us who were in The U.K. For the German grain growers it was a disaster. There wasn't enough water to irrigate the fields of wheat, rye, and barley and the grains grew to about thirty centimetres before turning brown and giving up the ghost. That was except for one field of rye. It continued doing rather well, grew to a slightly below normal height, set its seed and was harvested

Naturally, this got quite some attention from the authorities who came out to see what was happening. Several times they came with their briefcases and shirt sleeves rolled up to see how the farmer had managed to irrigate his crops. The husbandry had been no different from other fields on the farm, and apart from the bio-dynamic treatment of the soil, was no different from the neighbours' own brown and dusty fields.

The farmer, himself somewhat mystified, could only offer some weak explanation about the unusual seed that he had used for the field. Perhaps he had gone to market and sold the family's last cow in return for a handful of beans from a man.

The seedsman from whom the seed had originated was no fairy tale character but the story is as enigmatic and interesting to me as any of the stories of the Grimms or Anderson. It begins with the father of the seedsman, Martin Schmidt. He had been working for some time for the Natural Science section of the Goetheanum based in Dornach, Switzerland. There the problem of deteriorating viability and vitality of food crops was being talked at a time (1920's) when the problems that are even more acute now were in their infancy. The methods were childishly simple seen from one aspect. The usual organic husbandry was used, enhanced with the outlook and preparations, of the new bio-dynamic school. What was different was that Martin was taking a head of rye, taking the seeds out one by one into a tray which was designed to allow one to store the seeds until sowing so that one would know where on the head of rye each seed had come from. The daughter generation was then checked to see if there was any difference in the characteristics of the plant. The best plants were then subjected to the same meticulous sorting and the experimentation continued.

These experiments continued through the seasons and across Europe as the National Socialists became uncomfortable, and then violent neighbours to Anthroposophists.

Martin's son Georg, joined in the work and gradually the patterns began to emerge. Their starting point was to choose what characteristics they were wishing to encourage and their first choice was morphological; the shape of the head. It had been noticed that the deterioration in the rye had been accompanied by the head being concertina-ed, the seeds being closer to each other on the head, and less seed stages were on the plant. So they chose to grow on from plants that had longer heads with

more seeds with greater spacing between them. Further more they chose ones that had a larger distance from the flag-leaf node to the first grain, providing that the first grain was indeed full and viable. They noticed that the greatest proportion of seeds that grew the sort of plants they wanted came from the 6th and 7th stage from the base of the head of the mother plant.

Georg Wilhelm Schmidt comes to Sussex most years and teaches those who are interested in the refinements of the bio-dynamic work in the fields of agriculture and horticulture. He showed a plastic tube with a head of rye that was about one foot long and has, from memory, I would say twenty stages.

One could break up his lectures (given in German and translated by those present who can speak German into English for the rest of us) into two distinct parts as I have to for my own mind. The first part is the stories and specimens he brings. Stories of the 1976 rye and the blinkered officials, of the meticulous and painstaking experiments that have been undertaken with less spectacular results but steady grinding progress.

The other aspect covered in the sessions are the explanations of the changes that lie outside the confines of orthodoxy of breeding, indeed of genetics. I shall try to summarise that because it is the more fruitful I think.

For our minds we need to be clear what it is that we want to get from our food crops. I said a few issues ago that we can choose four major parameters; germination rate, disease resistance, food value and yield. Ideally we would like a plant that can shrug off pests and diseases, give us the sort of nourishment that puts creativity in our every action and love in our hearts, whose seeds will all germinate and produce plants that are as huge and wholesome as the mother crop. It would seem that all we need to do is find out the language that nature speaks and then we would be able to work with her best in our goal of feeding ourselves and not ruining the planet. We are in a time when the geneticists are making the most noisy claims to have heard and understood the creative word. Schmidt thinks that the geneticist should listen a bit more. His working hypothesis is that we live within a polarity of life-bringing forces. From the soil come the solid and liquid requirements for life. From above come the light and the warmth. That's not so difficult to swallow. But we are only aware of these four qualities through our physical, senses, and these qualities are really not the creative forces themselves. Behind the physical qualities are what are termed the etheric forces of earth, water, air, and fire. Perhaps the nomenclature is unfortunate since to recognise the creative qualities of light or water without our thoughts being bounded by the air and the water we can experience with our 5 senses is quite a task. Well it isn't easy, and I have had to live with it for some time to feel any where near close to some comprehension.

If one allows that thesis then one can come to the next stage which is to hypothesize that the ethers are constantly flowing through the earth and that there are rhythms in this flow, rhythms of the different intensities of these etheric forces. The planets are the visible markers for these rhythms. This means that we can come to know when there is an intense influx, for instance, of warmth ether. Furthermore we can

use this information if we know what the implications are of doing something at a time of etheric warmth.

Well, this was the hypotheses under which the Schmidts worked. They came to realize that using the ancient denominations of which planets corresponded to each ether there were readily understandable implications for sowing the seeds at times when various ethers were paramount. Generally speaking, warmth times bring in the nutritional quality, light brings disease resistance to the crops, earth gives a yield increase, and water helps the germination rate. By working in harmony with these natural rhythms, gained through observation of Nature, the Schmidts have brought about something quite remarkable. They have managed to repair strains of plants that are lacking in one or more of these aspects. The work continues to this day; 70 years of experience!

Georg Wilhelm Schmidt was the man who provided the seed which lasted through the drought of 1976. The mother crop had been planted at a very unusual time. Between December 24th at midnight and the same hour of January 6th are what is known as the quiet or holy nights. Traditionally it is a time when animals don't eat each other and if a man ventures into the woods he may learn the language of the animals. The solar year consists of twelve full moons and these 'wild' days. In the holy nights, the earth is subject to unrestrained influences and if ones being is down (say pissed or watching Wizard Of Oz again) then it is prey to further negative influences, so communities should and did put on the mystery plays together to keep the mind on the glories of life. Schmidt thought it would be interesting to see if the seeds would reveal anything in these quaint old traditions so he found a time within the holy nights when the other starry rhythms were favourable and he laid the seed on the frozen soil. It didn't germinate until the spring but that was the mother of the drought-proof rye.

The work has had other interesting sequelae with vegetables and trees. Stephan is Georg's son who has taken on the work with trees. He has a commercial nursery which sells the trees at a high price because the trees take and survive where the nitrogen-drunk products of the normal nurseries are very chancy if cheap (price of knackered soil not included is it?). Stephan told Gavin Tilstone and myself that when people meet him, they are disappointed not to see trees growing like they do in Asterix And The Mansions Of The Gods. And that is a question I have had to deal with when writing this article for you. I haven't answered it so I will pass it on to you. Should I emphasise the magic, the incredible possibilities, the wonder of such work and send the orthodox agro-scientists laughing to their offices and trial plots? Should I emphasize the incredible hard work, diligence, and application of the generations of Schmidts and send those of us only recently empowered by Permaculture back indoors thinking that we really do know nothing and never should have started? I guess that it's publish and be damned and if it seems like hippy shit or mystification let it be so. I was excited and heartened to find that at least someone is doing this work. When looking at the arid materialistically determined horizon for some hope in our troubled times it's great to see that no one needs to start from scratch if they wish to bridge the gap between the ungrounded dreamers and the sod-bound scientists.