

# Soil Fertility and the Preparations *By Uli Johannes König*

**The biodynamic preparations were given a central position by Rudolf Steiner in the Agriculture Course. They were prepared for in a very systematic way. In the last lecture we find a formulation which is perhaps surprising: ‘When you have done all this you will see that the farm individuality actually becomes an individuality’. What does ‘all this’ refer to? Right at the beginning we learnt that the forces of nature have been in decline for what is now 120 years and that mankind has the task of creating something new. This is the issue that I would like to address today in relation to the preparations.**

We have heard many different aspects during this conference. We learnt about the diaphragm, that amazing rhythmic organ which both human beings and the earth possess. Let us bring the enormity of this image to mind. The soil of the earth, this diaphragm is spread out across the whole world. It is one huge living organ that breathes rhythmically between earth and cosmos! We also explored the microcosmic details of soil formation and the wondrous thought of the 38 cattle units of soil microbes in the soil that have to be fed. On the one hand the whole vulnerable earth and on the other an almost unimaginable power of abundance and life. With this in mind let us make sure that we take care of and develop this organ in the right way.

## THE EFFECT OF THE PREPARATIONS

How do we bring this organ of the soil to life? What part do the preparations play in this process?

In the book written by Pierre Masson we often find the statement: ‘Create the right conditions and you will see that the preparations work’. Ever since the 1920s the dark coloration of the soil has been taken as a significant visible and measurable effect of the preparations. Our scientific long-term trial in Darmstadt also shows that biodynamic soil has a darker colour (diagram 1). There is no difference between the organic and conventional plots in this regard. The darker colour must therefore be connected with the preparations and not the cow manure with which the organic variant was also treated. This is a very clear effect of the preparations – and other trials confirm this!

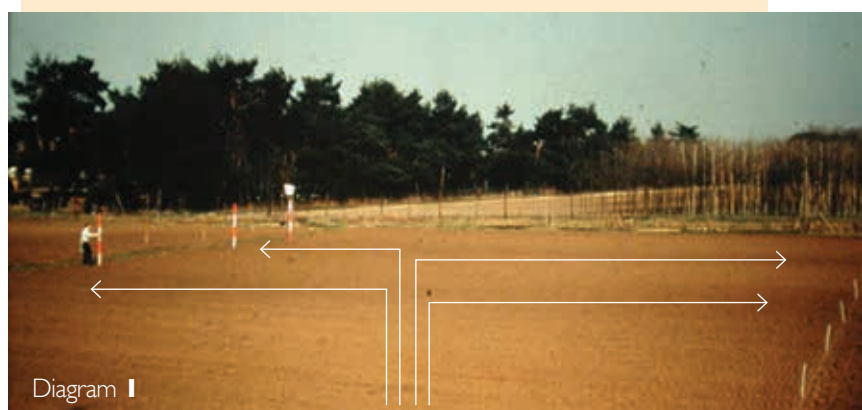


Diagram 1

**Sequence of the fertilizer strips:** Mineral Organic Biodynamic Mineral Organic Biodynamic

The application of the bio-dynamic preparations leads to a clear darkening of the soil (see arrows) for the same amount of organic fertilization.

There is no visual difference between mineral and organic fertilization.

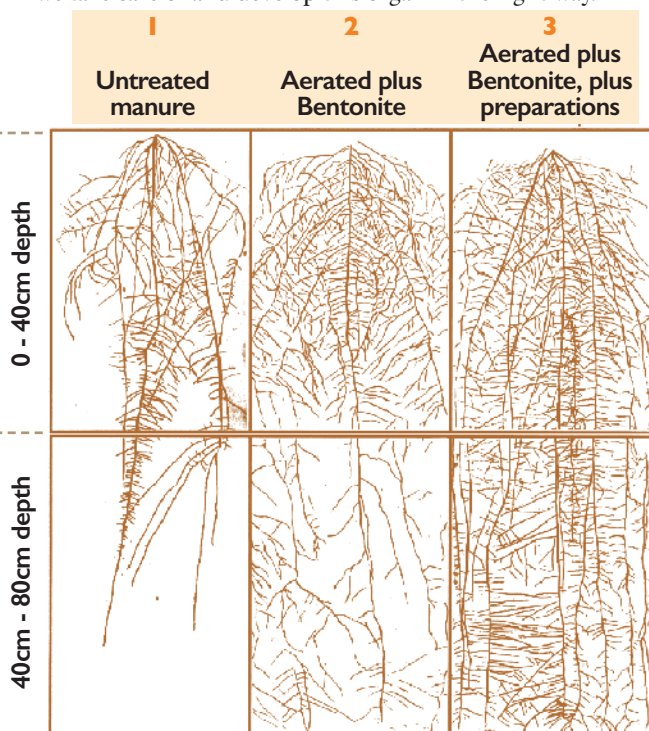


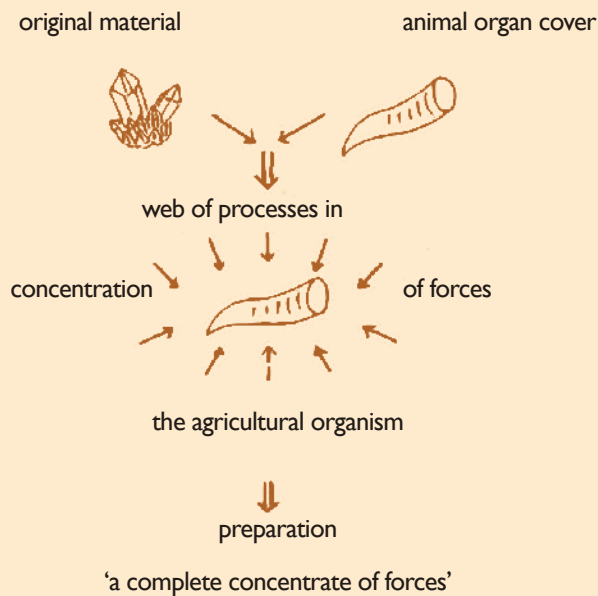
Diagram 2 Root growth in French beans with the biodynamic preparations

Source: Abele (1978): Ertragssteigerung durch Fl. ssigmistbehandlung. KTBL-Schrift 224 Bearbeitung: König, Forschungsring e.V., Darmstadt 1999

## THE INTEREST OF PLANT ROOTS IN THE SOIL

Another phenomenon: If I imagine the root as being the plant’s head, what inner activity is reflected by the roots in diagram 2? Visible sensory activity can be seen in the root on the right (treated with the preparations). The root is very finely ramified and its interest in the soil can be readily experienced! It is what underlies Edwin Scheller’s concept of ‘active nutrient mobilisation’. But it is solely an effect of the preparations. Now just imagine how it would be if instead of a clover monoculture, our grasslands were stocked with a diverse range of species, each with a different interest in the soil and intensively treated with the preparations.

Diagram 3  
**Production principle of preparations**



### INTEREST AS THE KEY TO EXPERIENCING THE PREPARATIONS

What prevents me from enthusiastically applying the preparations? Is it perhaps due to the (subconscious) inner doubt with which I approach the world on a daily basis? Try out the following exercise: Look at a tree and see what changes when you look at it sceptically or with interest. The difference can be huge! If you approach the preparations with interest you will find that the distance you feel towards them becomes smaller. Many things important to our work will then be revealed to us by the being of the preparations. Having once become aware how the earth and cosmos are connected by the preparations, how they draw closer to one another, how the enormous agricultural individuality that extends out as far as Saturn and the fixed stars, how all this comes together and forms a whole and gains a boundary skin; it will no longer be possible to doubt the effectiveness of the preparations.

Filled with enthusiasm I will then use the different preparations more frequently and in more differentiated ways – soil cultivation and green manuring require the inner organising qualities of the compost preparations (barrel preparation or CPP included). Complementing this, the horn manure's open gesture towards the cosmos helps the plant find its place within the earth-cosmos polarity. Then there is the winter dormant period followed by the explosion of growth in spring time. Do we find the right moment for spraying horn manure or do we miss it? Or the horn silica preparation which introduces more order and steadiness. The importance of this preparation should not be underestimated especially with perennial crops (not just for the ripening of carrots) that need a period of winter dormancy.

### START OF A NEW EVOLUTIONARY PROCESS

There is a further question regarding the future evolution of nature. The key to renewal is connected with the mystery of protein, not only in the soil but for the earth as a whole and for mankind. Steiner spoke of individualisation as being necessary right down into the world of substance. The human being has emancipated himself from nature and can therefore act out of freedom. When we make the preparations there are two aspects – the substances (flowers, manure etc.) and the organs (sheaths; diag. 3). Both come from nature, both are the end products of evolution and we bring them together. They are then subjected to the seasonal forces of our agricultural organism. At the end of this process we have the preparation that we can work with in an entirely free way. These new substances are to a certain degree free of the old ways of nature and can contribute towards the individualisation of the farm organism. But it is also important that our food mediates individualising forces to human beings. The natural protein in our food must be individualised and become human protein so that we can develop consciously and become free. This is where the preparation process culminates – in the human being freely taking hold of evolution at the point where it has come to an end and bringing it into an artistic-natural-organic process. The preparation substance that will in its turn lead to the individualising, freedom-supporting forces in nature comes into being in order to create a new future for both mankind and the earth. The new evolution is part of the mystery of protein.

Our biodynamic preparations bring up lots of questions, even after 90 years. That is what is so fascinating about them! May I wish you all lots of questions in the coming year and for the further development of your farm individuality as well!



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