

What is Biodynamics?

In the early 1920's a group of practicing farmers, concerned with the decline of the soil, sought the advice of Dr. Rudolf Steiner, founder of anthroposophy, who had spent all his life researching and investigating the forces that regulate life and growth. From a series of lectures and conversations held at Koberwitz, Germany, in June 1924, there emerged the fundamental principles of biodynamic farming and gardening, a unified approach to agriculture that relates the ecology of the earth-organism to that of the entire cosmos. This approach has been under development in many parts of the world ever since. Dr. Ehrenfried Pfeiffer, who worked with Dr. Steiner during the formative period, brought biodynamic concepts to the United States in the 1930s. It was during this period that the Biodynamic Farming and Gardening Association was founded in 1938.

If the results of the Biodynamic approach may be found in the quality of produce, the health of land and livestock, and the freedom from environmental problems increasingly generated by many modern farming methods, what of the approach itself? What distinguishes it from other agricultural attitudes and techniques?

Essentially, biodynamic farming and gardening looks upon the soil and the farm as living organisms. It regards maintenance and furtherance of soil life as a basic necessity if the soil is to be preserved for generations, and it regards the farm as being true to its essential nature if it can be conceived of as a kind of individual entity in itself — a self-contained individuality. It begins with the ideal concept of the necessary self-containedness of the farm and works with furthering the life of the soil as a primary means by which a farm can become a kind of individuality that progresses and evolves.

The maintenance of soil life is vital also in order to protect the soil from erosion and to create, improve, and augment the humus content. The result will be a fine, crumbly structure containing the necessary organic colloids. This leads to the production of high-quality crops, which in turn means better feed for livestock and better food for human beings.

Soil improvement is obtained by proper humus management — e.g., by the application of sufficient organic manure and compost in the best possible state of fermentation; by proper crop rotation; by proper working of the soil; by protective measures such as wind protection; cover crops, green manure, and diversified crops rather than monocultures; and by mixed cropping so that plants can aid and support each other.

Farm manure and compost are the most valuable fertilizers. They contain organic matter on which the soil bacteria and earthworms can feed and then revitalize the soil. They contain colloids, which absorb moisture and mineral solutions in the ground, form a crumbly structure, and eliminate the danger of erosion. The careful storage of manure in heaps covered with earth, as taught by the biodynamic method, avoids nitrogen loss to a great degree.

Raw organic matter has not yet reached the state of neutral colloidal humus. Complicated fermentation processes must first take place in the manure heap. The biodynamic method produces the right fermentation. Certain biodynamic preparations are inserted into the heaps in order to speed and direct fermentation and preserve the original manure values. The same principles apply to compost materials. Everything that is apt to decompose can be used. These materials are piled up in alternate layers, and the finished pile is treated with biodynamic preparations.

The biodynamic compost preparations play a significant role in this unified approach to agriculture. They are made of certain medicinal herbs that have undergone a long process of fermentation in order to enrich them in growth-stimulating substances. They react like yeast in dough — i.e. they speed and direct fermentation toward the desired neutral colloidal humus. The preparations themselves are, for practical reasons, numbered 500-508. Numbers 502-507 are

applied to the manure and compost piles in very small quantities. They have no manuring effect, their sole purpose being to direct the fermentation of any kind of organic matter toward humus.

Two of the preparations, 500 and 501, are used as field sprays. They are diluted in water, stirred for one hour, and sprayed directly on the soil or plants respectively. Preparation 500 stimulates humus formation in the ground and the growth of roots. It is applied to the land mainly in the fall and the spring, before clearing or after plowing and sowing. Preparation 501 is applied in June or later to the green leaves.

Proper crop rotation is also necessary in order to preserve the fertility of the soil. The general rule is that soil-exhausting crops such as corn and potatoes in the fields, and cabbage, cauliflower, etc., in the garden, should alternate with soil-restoring crops such as members of the leguminous family (peas, beans, clover, etc.). Furthermore, deep-rooting crops should alternate with shallow-rooting ones, and crops that require manure should alternate with those that can do without.

Proper working of the soil consists mainly in knowing the right time and the right depth for plowing, harrowing, discing, etc. Skill and experience are needed. Only thoughtful experience, combined with such investigations as the taking of soil profiles, can produce maximum efficiency in soil treatment.

Biodynamic agriculture is a way of living, working and relating to nature and the vocations of agriculture based on good common-sense practices, a consciousness of the uniqueness of each landscape, and the inner development of each and every practitioner.

Common-sense practices include striving to be self-sufficient in energy, fertilizers, plants, and animals; structuring our activities based on working with nature's rhythms; using diversity in plant, fertilizers, and animals as building blocks of a healthy operation; being professional in our approach to reliability, cleanliness, order, focus on observation, and attention to detail; and being prompt and up-to-date in doing one's job.

The concern with the uniqueness of a particular landscape includes developing an understanding of the geology, soils, climate, plant, and animal life; human ecology; and economy of one's bioregion.

Rudolf Steiner presents a notion of science that says we can know things that go beyond what we can weigh, measure, and calculate. Science is the practice of observing phenomena and relating them in a way that correctly represents the phenomena's reality. Agricultural judgments about health, what to do where, and when to do what, best succeed when we begin to rely on a certain wisdom gained through observation and experience and when we perceive consciously and concretely the phenomena that induce life itself.

Biodynamic farming and gardening combines common-sense agriculture, an understanding of ecology, and the specific environment of a given place with a new spiritual scientific approach to the concepts, principles, and practices of agriculture.

From The Biodynamic Association of America
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