

# Organic Agriculture - a new look at the Earth

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In the modern world, there are several main types of agriculture. The most common is the intensive type, which involves increasing inputs of industrial chemical agents into the soil, developing new techniques, new technologies, etc. The land is viewed as a means to achieve maximally high yields in a specific agricultural activity. In recent decades, intensification has led to negative consequences. Due to the excessive use of synthetic agents (pesticides, mineral fertilizers, growth regulators), pollution of our environment is becoming increasingly noticeable. In addition to deteriorating living conditions, this leads to a significant increase in health problems and nature rehabilitation measures. Recently, on a global scale, the inappropriateness of excessive chemicalization is increasingly recognized. It is particularly concerning that 1/3 of pollution comes from agriculture. Therefore, in recent years, great attention has been paid to

organic agriculture, and in the EU, it occupies 4.3%, while in the Czech Republic, Austria, Estonia, and Latvia, it reaches up to 15.5%. Albert Howard (1873–1948) is considered its founder. Organic agriculture (biological agriculture, natural agriculture, precision agriculture) is a type of agriculture that excludes the use of pesticides, chemical fertilizers, various growth regulators, as well as genetically modified seeds.

The main principle is the study and maintenance of ecological systems, maintaining the health of the soil and plants as a whole. Organic agriculture relies to the maximum extent on crop rotations incorporating leguminous crops, the utilization of farm plant residues and green manure, biological and agrotechnical pest control (weeds, diseases, and enemies), appropriate soil cultivation and plant nutrition with organic fertilizers, the maintenance and improvement of the natural fertility of the soil, the biological diversity of species, and the ecological balance of the environment. The next higher step is biodynamic agriculture. It has existed for more than 80 years and is quite widespread in almost all countries around the world. It emerged as a philosophy and theory based on the course of lectures by Dr. Rudolf Steiner, which he delivered in 1924 at the agricultural estate of the Koberwitz Counts Kaiserlick, present-day Poland. Later, they were published under the title "Spiritual-Scientific Foundations for the Prosperity of Agriculture." The lectures and answers to questions during the course were exceptionally rich in content and scope, covering all aspects related to agricultural work. This course marked the birth of the biodynamic agricultural method and, with it, ecological agriculture. From its very beginning, the method included the creation of a comprehensive ecology, which later significantly developed after the wars and dealing with their consequences.

Above all, Steiner criticized the then-prominent materialistic worldview. He worked precisely on expanding it, drawing in his lectures a grand arc over humans, animals, plants, minerals, up to the Cosmos with its solar, lunar, and planetary rhythms. Central to them is the idea of considering the agricultural farm, including all these elements, as a natural organism, as an agricultural individuality. It represents a self-contained organism in which processes occur, and it connects with the world like any other living organism on Earth. It should produce almost all its necessary agricultural products. This also includes appropriate animal husbandry. Hans Heinze, one of the founders of the research circle for biodynamic agriculture, writes about this: "A central aspect of agricultural and horticultural work is the linking of all activities in crop cultivation in such a way that they contribute to the building of the soil, to the maintenance and development of the earth element." However, it also includes care for the species diversity of plants through crop rotation, maintenance of windbreaks and living boundaries, and landscape design. Balancing processes, including the activity of earthworms, bees, and birds, as well as the application of composted biodynamic manure from farm animals, are of significant importance. Rudolf Steiner shows how a deep understanding of the interconnections known to old traditional agriculture, such as composting, green manuring, and meadow maintenance, can be used, but also provides other aids to activate constructive and regulatory processes.