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SOME EFFECTS OF ORGANIC AGRICULTURE

Anyone who decides to farm his land 'NATURALLY' -- rather than 'CHEMICALLY' -- will find he is swimming against the current of 'modern' agricultural thinking, teaching and practice! Most of present-day Agriculture is orientated towards a powerful Science-backed technology -- but THAT WAY IS WRONG!!

The mass of propaganda on modern scientific farming fogs many farmers. On the other hand, some who would think of farming their land without chemical fertilizers and poisons are put off because of an apparent lack of information.

A surprising amount has been written on various aspects of 'natural' farming, but it does take a little searching out. This doesn't mean one is to gullibly swallow everything that comes from 'organic' advocates. Most of these authors disagree on many minor points and the diligent reader will find lots of them are prepared to compromise with the chemical industry somewhere along the line.

'Natural' farming methods are in most respects exactly OPPOSITE to the ways of 'chemical' farming. Today, natural methods are regarded by the vast majority as either -- 'old fashioned', 'impractical' or just plain 'uneconomical'. The following quotes from various authors will show not only that these views are untrue, but that PRESENT FARMING METHODS DISREGARD THE BIOLOGICAL FACTS OF LIFE!

I. RELEASE OF ORGANIC AND INORGANIC MINERALS

"Microbial decomposition of organic matter releases not only its carbon and nitrogen, but the many other contained minerals as well. The mineralization of organic phosphorus in some prairie soils during the growing season supplies much of the phosphorus taken up by the crop. Microbes also effect the availability of various minerals in their inorganic combinations. Iron, manganese, and sulphur are transformed from unavailable to available forms by microbial oxidations and reductions." (From Biochemic Review, Vol. 31, 1961).

"We might say . . . that the nutritional aspects of soil fertility depend on the activities of living micro-organisms and on the electrical properties of its non-living, colloidal components." (Feed the Soil, by F. Lyle Wynd, page 224).

II. LIFE IN THE SOIL PROMOTED

"Soil has been defined as 'that region on the earth's surface where geology and biology meet'. As we have already pointed out, the complex organic materials deposited on or in the earth's surface are degraded by micro-organisms. A product of this degradation is humus, a dark-coloured, amorphous substance. Humus serves many important functions in soil, including the following:

1. It serves as a source of nutrients for plant growth and for the growth of micro-organisms.

2. It effects desirable alteration in the texture of the soil.
3. It contributes to the buffering capacity of the soil.
4. It improves the water-holding capacity of the soil.
5. It increases the availability of minerals.

"The end products of some degradation reactions effected by microbes are acidic in nature -- these acids serve to dissolve minerals, which then become available as plant nutrients. Micro-organisms also dispose of chemicals in the soil which are poisonous to plants. Thus we must ascribe to micro-organisms the role of turning raw materials into soil. The complexity of the over-all chemical change which the micro-organisms bring about, plus the interactions between the micro-organisms, can be sensed even by the uninitiated ..." (From Microbiology by Pelczar, page 478).

"The biochemical changes presented here, dealing with changes in nitrogen, carbon dioxide, sulphur, and their compounds, are only a small sampling of the microbial activity that takes place in the soil. However, these should serve to make it eminently clear that life on earth as we know it is dependent on the role played by these micro-organisms." (Ibid., pages 488-489)

III. CONTROL OF DISEASE

"Dr. Young is no wild-eyed fanatic. He is on the staff of the Ohio Agriculture Experiment Station, and, as reported in Sugar for June, 1944, he was called in by the sugar growers to tell them what was the matter with their beet fields. Dr. Young found them so infested with blackroot disease that yields had dropped from 18 tons per acre to 5, and some of the land was being abandoned as unworkable. What did he do? Did he spray the beets? Did he treat the seed with antiseptics? Did he fumigate the soil? No; he fed the soil organic manures. Did it work? It did. The yield of beets rose from 5 tons per acre to (in some cases) over 20 tons, and Dr. Young reported that the control of blackroot disease is now possible with the use of ample manure or other organic matter to plough under." (Make Friends With Your Land, by Wickenden, pp. 20)

AGRICULTURE DEPARTMENT