AMBASSADOR COLLEGE

BIG SANDY, TEXAS 75755

HERBERT W. ARMSTRONG, Chairman

AGRICULTURE DEPARTMENT

<u>COMPOST AND SOIL LIFE</u>

Composting is necessary to build and maintain fertility in the soil. Nature is continually rebuilding the soil through composting. It is a vital part in maintaining balance. If composting were not taking place, the entire earth would be covered with dead plants. In converting dead plants into available nutrients, this process (composting) makes humus, builds fertility and supplies the food for more plant growth.

Some may wonder, "If composting is so important, why isn't it mentioned in Scripture?" The answer: It is. Quite prominently. But it is easy to read over because of changes in the language. Psalm 83:10 and Jeremiah 8:2, just in passing, mention that dung is intended for fertilizer, that it is "for the earth." But the best-known scripture, Luke 13:8, specifies manure as the supreme fertilizer. If "digging and dunging" a particular tree does not make it bear fruit, you may as well get rid of the tree because nothing will make it productive.

But these scriptures do not by any means indicate that manure should always be used in the uncomposted state, although in some cases it can. Compost piles are prominently mentioned in the Bible, but under another name -- dunghills. Dunghills are always compost piles. Pile up dung and barnyard litter and you can't get anything out of it but a compost pile. The frequency of the mention of compost piles in Scripture -- and the manner in which they were mentioned -- show that a writer could mention composting and the reader knew both what it was and how it was made. Notice!

Isaiah 25:10 mentions the raw materials: "As straw is trodden down for the dunghill." This comparison is useful only in a society in which the reader understands the composting technique well enough to get the point. Luke 14:34-35 tells us that if salt hasn't lost its flavor -- if it hasn't had any of its ten-to-fourteen minerals "refined" or leached out -- it is good for the compost pile. The same three basic ingredients -- manure, vegetation, minerals, including salt -- are still used today in making compost. Natural, unrefined salt has been used ever since ancient times both in compost heaps and as a fertilizer in its own right.

Mr. Turner says in his book, Fertility Farming: "... when compost is spread on the surface of the soil, and not ploughed in, it has the ability of increasing not only the nitrogen content of the soil, but also the phosphorus and calcium and potash. My knowledge of science is insufficient to explain why ... The fact is that they appear in abundance where surface organic matter is adequate ... " (pp. 34-35). On pages 39-40 he explains how: "Problems of so-called soil deficiencies --- certainly as far as the main elements are concerned -- have only arisen with the increasing failure to acknowledge and act upon this law" (that all which is removed from the soil must be returned to it) ... "Phosphate deficiency is one of the outstanding fallacies of science (in soil as distinct from certain types of solid rock). There is no such thing; or at least none that science can measure. All that the soil analyst can measure is availability. When the soil analyst tells us a field is suffering from phosphate deficiency he merely means that insufficient phosphate is available; in other words, that the soil does not contain enough organic matter to produce the necessary mineral-releasing acids in the soil. A soil only becomes 'deficient' when there is insufficient decaying organic matter upon it to release the mineral nutrients already present in an unavailable form....

"The solution therefore, to all apparent deficiencies, is adequate organic matter in the right place."

"Experience has shown me that the right place for organic matter is on or very near the surface of the soil."

From his conclusion: "We have had the audacity to assume that we know better than God. We have believed we could improve on the ways of nature and we find ourselves under the threat of famine, in spite of so-called scientific genius. God in His goodness has provided the means to abundance; we in our greed and arrogance have perverted and destroyed. The only way we can repair the harm we have done is to give nature a chance to work in her own way and, as far as we must interfere by way of farming and gardening, let it be in imitation of nature rather than in battle against nature" (pp. 248-249). Thus, we see the reason for Mr. Turner's wisdom and success. He realized God's way is best.

HOW TO MAKE COMPOST

One can obtain better results by decomposing an assortment of organic matter in a compost pile and then spreading the finished product in his fields. One who doesn't have enough livestock to supply all the manure he needs can usually scout around the countryside and find a few dairies and feed lots -- or poultry farmers -- with manure to sell inexpensively. Supermarkets usually allow one to haul off their vegetable trimmings at no cost. These two items -- manure and supermarket trimmings -- will form a pretty good basis for a compost pile even if you find little else. I have composted manure with just a little bit of garbage, leaves, and dirt in it. And even if these items should happen to be polluted with a little insecticide, that will not outweigh the advantages. The decomposition of the materials will generate many more microbes than the insecticide residues destroy. And the microbes will eventually break down and nullify most insecticides. Some insure best quality compost by growing cover crops to be mown and put in the pile.

Getting your next crop started off properly toward a good harvest depends largely upon getting a good supply of decaying organic matter--manure or preferably finished compost--into your soil before planting time. A compost pile is simple to work with, and <u>utterly fascinating</u> once you get started and see its results. It is as much fun as a new toy and as beneficial as a bank account. Even a beginner can make good compost.

The compost pile should be about five feet wide or more and built up in layers, like a cake--and can be either round or long and rectangular. For ideal results, the first layer should consist of about six inches of vegetation, preferably coarse, to let air in and excess water out. Next, put on a layer of manure, one or two inches thick, depending upon its type and richness. Dampen each layer of dry material as it is added to the pile. (Preferably with bacteria culture -- otherwise just water). On top of the manure put a very thin layer of topsoil -- a fraction of an inch -- and, if you have it, a few shovelfuls of compost from a previous pile. If you have none, use topsoil with decomposing vegetation in it -- such as is found in a forest floor or a littered barnyard corner. Next, put on a few handfuls of pulverized -- but otherwise untreated and unprocessed -natural rock fertilizer <u>if you have them</u> -- such as rock phosphate, potash, limestone, marine sediment, diatomaceous earth, or even common dirt. The minerals and old compost are the "salt and pepper" of a compost pile. Now repeat the layering process all over again as long as you have materials or until the pile is about four feet high. The proportions of the material can be varied considerably as long as there is a good variety, so there will be a balanced meal for microorganisms and plants.

For ventilation of the pile, drive a husky stake or two down into it and shake them occasionally to keep air holes open. Or, you could build a four-inch flue of narrow boards, drill holes in its sides, and put it in the middle of the pile for ventilation. Even with proper ventilation, however, the temperature of a healthy compost pile will rise to about 160-180° Fahrenheit. This heat together with the fermentation of the pile will destroy all disease organisms and parasites, even tapeworms cysts. After several weeks the temperature will drop and the compost on the inside of the pile will be decomposed. The pile should then be torn down and repiled, with the undecomposed inside material put on the outside. Or, the outside material can be used to start a new pile and the fully decomposed inside material can be used immediately for fertilizer. A skiploader is useful when large amounts of compost must be made. The whole process of decomposition takes from two to six months -- or if the bacteria culture is used it can be ready in two to four weeks.

By working compost and manure into the <u>top layer</u> of your soil, its natural fertility will literally skyrocket and your plants will become healthy and insect repellent the very first season. You should, if possible, apply these principles to <u>all</u> your land and incorporate <u>cover</u> <u>crops</u> which are <u>disked</u> into the top few inches of your soil when the proper stage of development is reached. Cover cropping in this way is known as sheet composting.

Instead of burning or discarding leaves, garbage, and other refuse put it to use -- compost it. Every soil can use and needs the organic material compost supplies.

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