

## ORGANIC VS. INORGANIC FERTILIZERS

Are vegetables grown with organic fertilizers more nutritious? Not really. Unless, of course, the person using organic fertilizers is just a better gardener. Plants take up fertilizer elements in the same chemical form regardless of whether the elements came from a bag of 12-24-12 or a bag of sterilized sheep manure. There are differences, however, and each type of fertilizer has advantages and disadvantages.

Organic fertilizers are more slowly available and thus less likely to burn than are most inorganic fertilizers. If, by mistake, you spill a handful of blood meal next to a young tomato plant no harm will be done. A similar accident with ammonium nitrate would kill the plant if the material were not immediately removed.

Some fertilizers approved by organic gardening advocates are not organic at all. Rock phosphate, for instance, is a relatively insoluble mineral which does not contain carbon, as in one definition of organic, nor is it derived from phosphate treated with acids to make it more soluble.

Organic fertilizers do add a small amount of humus to the soil. Humus is a relatively stable liquid fraction of organic matter which promotes granulation of soil particles and therefore, increases aeration. It also acts as a storehouse for tremendous quantities of essential elements in forms readily available to plants.

The one major disadvantage in using organic fertilizers is their cost per unit of fertilizer element. A 6-4-0 organic fertilizer has six percent nitrogen, four percent phosphate and no potassium. Most soils are not deficient in potassium so this fertilizer is adequate.

A locally available fertilizer with this analysis costs \$3.20 per 50 lb. ga. The price per unit of fertilizer then is 32 cents. We can also buy the same size bag of ammonium phosphate with an analysis of 11 percent nitrogen and 48 percent phosphate for \$3.50 per 50 lb. bag. This gives us a unit price of approximately \$.06, which is five times less expensive.

Inorganic fertilizers, in addition to being generally less expensive, are a more efficient and readily available source of nutrients. Even if you're afraid to use them directly around your plants there is no reason why they can't be added to the compost pile. This will greatly speed up decomposition of materials low in nitrogen such as straw.

Even some of the advantages of organic fertilizers are being claimed by in-organics which like slow-release urea formaldehyde. This is a relatively insoluble fertilizer which will reportedly feed the lawn for several months. It has an added advantage over organics in that it has a high analysis, 38 percent nitrogen.