

## Why Should I Use Organic Fertilizers: Back to Basics

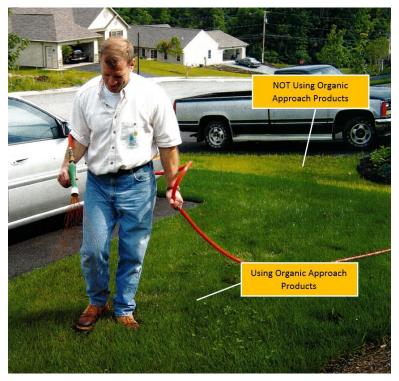
To put it simply, the soil we grow our plants in is much more than lifeless "dirt", it is a dynamic network of living organisms. Just a handful of healthy soil can have billions of microorganisms living within it. It is this microscopic life that determines the overall health of the soil and therefore, the health of all the plants we grow. However, like everything that is living, soil requires a constant source of food to keep it alive and healthy. For soil, one primary microbial food source is organic matter.

In a forest, the yearly cycle of fallen leaves and needles provides the necessary organic matter to sustain the soil life, but in developed and cultivated soils, the natural sources of organic matter are vastly eliminated. This reduces the soil's natural food supply, which in turn limits the amount of biological life the soil can sustain. As the soil life is decreased, the availability of many nutritional materials needed by plants is decreased as well. Unfortunately, this is a debilitating cycle that creates a need for us to supplement our plants and soils with materials to help them realize healthy growth.

In an effort to create fertilizers and amendments that will help to promote healthy plants, we study individually unique plants and identify the major nutrients they require to be healthy. Then, we produce a fertilizer that supplies those nutrients. Hence, the many different varieties of fertilizers for lawns, roses, vegetables, flowers and shrubs that we find on our store shelves. While it would seem that this would be the total solution to our plant growth problems, the dynamics of plant growth and health aren't so simple...

Take, for example, a typical chemical lawn fertilizer. After a chemical lawn fertilizer is applied, the grass will green up and grow nicely. To the eye, it will seem like we have solved our problem and produced a healthy lawn. However, there is a lot more happening that we do not see. The salt content of chemical fertilizers is actually toxic to the tiny biological microbes in the soil. It is just like pouring salt on a slug and watching it dehydrate and die, only it is occurring on a much smaller scale in the soil. As we continually apply chemical fertilizers, the life in the soil becomes more and more salted and depleted and many subsequent problems begin to appear. In a lawn's case, the most commonly noticed problems are soil compaction and thatch build-up. In turn, these problems cause both direct and indirect stress on the lawn that fertilizers simply cannot cure. So, the next step is to try to implement additional products and services to fix those problems. This is the start of a never-ending cycle of fixing one problem with materials that lead to yet another problem. This cycle occurs because the original problem of poor soil life was never addressed, it was merely covered up.

If we think about it, nature does not produce compacted soil or heavy thatch, man does. If you go to an open field that has been untouched by man, the soil is never compacted and there is never heavy thatch. When the soil life is allowed to flourish, microbes will tunnel through the soil aerating it and decomposing any thatch as one of its microbial organic food sources. Microbial life will aerate and dethatch more deeply and more uniformly than any machine ever will, and the microbes will not charge



you for their services. Lawns with a biologically healthy soil will never build up thatch and will remain naturally aerated forever.

The examples of the hidden side effects of lifeless soil can be found in every aspect of your landscape as well. Sometimes the side effects are subtle (such as fewer blooms than desired) and sometimes they are severe (such as eventual death of a plant). Very often they are things that go unnoticed to the casual eye. Regardless of the severity, the point is the same; plants need healthy, living soil to truly be healthy. Unfortunately, achieving healthy living soil is not something that can be accomplished instantly. Depending on its condition, it can sometimes take years to bring soil back to life. But no matter how far gone the soil is, the path to healthy soil is always the same.

The repetitive use of organic materials will feed the soil life and stimulate the biological activity needed to develop a healthy soil. This is simply an enhancement of nature's normal process. In nature, plants take most of the materials they need from the soil. Chemical fertilizers, on the other hand, feed the plants somewhat directly, and that is where nature's normal cycle becomes disrupted. To put it in human terms, the process of feeding plants chemically is very similar to feeding ourselves through an IV instead of eating food.

Organic fertilizers usually consist of naturally occurring materials (such as soybean meal or rock minerals) that contain the same nutrients we put into our chemical fertilizers, except, the organic nutrients are in a natural form. When we put down organic materials, nature readily recognizes them and starts to decompose them; just as it does leaves in a forest. This encourages a wealth of life in the soil. As the soil life decomposes the natural materials, it releases the nutrients from the natural materials to the plants. In the end we get the same visual results as with a chemical fertilizer, but we also get the multitude of benefits that come with building a healthy, vital, energetic, biologically-active, living soil.

In fact, when we use products derived from nature, we often find that we get additional benefits we never anticipated. Benefits like reduced disease activity, enhanced and prolonged blooming of plants. And better tasting fruits and vegetables to name just a few. Looking to understand why we get these benefits, experts have recently discovered that plants actually utilize a wealth of natural bacteria, fungi, protozoa, yeasts, enzymes, etc., that can only be found in healthy soil. It is believed that the extra benefits we are seeing stem from the reintroduction of these vital microbes into the soil ecosystem. Simply put, chemical fertilizers bypass the life of the soil, and the "living-soil" benefits are lost.

This is why the use of organic fertilizers has become so important. The use of organic fertilizers enhances the life in the soil, which in turn produces plants that are healthier and more productive. It has taken time, but we have learned that the key to improving our plants lies within nature itself. The more we try to overpower nature's normal functions, the more problems we create. Instead, our efforts are shifting to enhancing the normal cycles of nature. By doing so, we are finally beginning to achieve our goals of healthier plants and a healthier environment.