

## **Fertilizer**

*"Fertilizer does no good in a heap, but a little spread around works miracles all over."*

*Richard Brinsley Sheridan*

Only water soluble fertilizers are allowed at the gardens. This is because "salts" from granular, long lasting fertilizers, can build up in the soil and cause unhealthy growing conditions. Inorganic fertilizers such as Miracle Grow, or organic fertilizers such as fish emulsion, are fine to use, and do not accumulate in the soil.

Fertilizers can be the most confusing and complicated topic in gardening. Here is some basic information.

One of the most common, all-purpose types of fertilizer, is 10/10/10. But what does that mean? Well, those three numbers which describe all types of fertilizers, represent the three most important plant nutrients, nitrogen, potassium, and phosphorus respectively.

So 10/10/10 is a well balanced fertilizer with the "big three" nutrients represented equally, (though different plants utilize different ratios of nutrients). A 100 lb. bag of it contains 10% nitrogen, 10% potassium, and 10% phosphorus, adding up to 30%. So what is the remaining 70%? Fillers. Yep, 70% of such a bag does not contain any nutrients.

Before you think that the fertilizer companies are selling you something you don't need, understand that the fillers make it easier to spread the right amount of fertilizer. Without them, it would be too easy to apply too much or too little fertilizer.

However many fertilizer manufacturers do recommend applying many more applications of fertilizer than is necessary or beneficial to plants. More is not better in this case. Actually, too much fertilizer, mulch, and even compost can be very harmful to plants.

Other nutrients needed by plants? In most instances, these trace elements are readily available from the soil. As a matter of fact, fertilizing is commonly not needed at all because even the big three are already in the soil. Ever wonder why native plants get by without any fertilizing?

Here is the big difference:

When plants are harvested from the garden, they are not returning the plant matter or nutrients they contain back to the soil. The soil becomes depleted after time, and nutrients need to be replaced by fertilizing, planting cover crops, or both. When the soil is lacking, adding amendments become necessary to make up the deficit.

What might your soil need? A soil test is a great idea, and inexpensive. (More about how to get one coming soon!)

Without knowing what your soil needs, how do you know what to add?

Again, if you have any questions or comments, please let me know!

Dave Lewis