

TOM'S GARDEN

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FOLIAR FEEDING

I receive a catalog every year from a company called "Spray-N-Grow." They claim miraculous results from spraying nutrients on the plant leaves where they are readily absorbed. Let me go to the root of this process and give you the facts from University Extension services.

Foliar feeding of plants involves the practice of applying water-soluble fertilizer to their leaves. The assumption is that leaves of plants are more efficient at taking up nutrients than the roots. This idea all started in the 1950s with a study by Michigan State University.

The truth is that the purpose of roots is to anchor the plant and take up nutrients to feed the entire plant. The purpose of leaves is to convert solar energy into sugars. The stomata of leaves, (on the underside) open at night to release oxygen and take in carbon dioxide.

Recent research has demonstrated that plants vary greatly in their ability to take up nutrients through their leaves due to cuticle thickness and number of stomata. Spraying would have to be done on the underside of the leaves to be effective. Spray-n-Grow never tells you that. Leaf burn can also be a serious problem, especially when applying the macro-nutrients, NPK.

Here are some things to consider;

*Foliar feeding is only 15- 20 percent effective.

*Foliar feeding can only be used for feeding micro-nutrients and correcting deficiencies. Again, it must be sprayed on the underside of the leaves.

*Focus should be on good soil health.

Macro nutrients can only be fed through the roots. Foliar feed should not be a substitute for good soil fertility.

*Foliar feeding should be done when the air is cool, around 70 degrees. This would mean early morning or late evening in summer.

*It is better to apply weaker solutions more often than stronger solutions less frequently.

*Foliar feeding is more expensive and time-consuming.

Foliar feeding is not the most cost-effective way to feed plants, but it can be a good method of treating certain nutrient deficiencies and boosting plant growth in times of stress.

If you think it will help your situation the do it on a trial basis to start with.

[Another New Season Coming](#)

One good thing about living in Northeast Ohio is, with our four distinct seasons, we get to start fresh each spring and learn from our mistakes of the past. With that promise we can move into another growing season.

Many gardeners choose plants based on looks rather than growing conditions.

Planting sun-loving plants in the shade or in spring under a leafless tree is a mistake many gardeners make. Planting shade-loving plants such as hosta in an open area is a recipe for failure. The plants look good at first in the spring but then get sunscald and by July look brown and lifeless. Do a little research by reading plant labels or look up information on websites.

Another mistake gardeners make is planting too close together. Plants appear properly spaced at first but may end up being crowded as they mature. That results in competition for water, sun, nutrients and reduces air circulation. Air circulation is important to prevent mildew and disease. Give them plenty of room to grow and you can always fill in later if needed.

Soil health is the secret to gardening success.

PH level, mineral balance, density, and aeration are all important factors. County Cooperative Extension offices offer soil testing services for a minimum fee. Since I have so many planting areas and raised beds, I rely on adding compost and manure to the beds and mixing it into the top few inches of soil. This aerates the soil and improves water and nutrient absorption. I don't till. Springtime is usually wet, but you can speed up drying by opening up the soil with a fork or spade and letting the sun do its work.

Rototilling destroys natural soil structure along with anything else in its path.

Soils are more than just a medium for growing plants: they are complex ecosystems having beneficial bacteria, fungi, insects, nematodes, earthworms, and lots of other things. Try using hand tools and digging only where you intend to place seeds or plants. Use mulch over exposed soil to keep weeds down.

Epsom Salts

Epsom salts are another name for magnesium sulfate, an inorganic fertilizer.

The Claim

Epsom salts increase seed germination, improve nutrient uptake, and enhance overall growth.

How plants respond

Epsom salts are used to treat magnesium deficiency in fruits and timber species. This deficiency commonly occurs in large agricultural production.

Most home garden soils contain plenty of magnesium—sometimes too much—and adding more just makes things worse. Excessive application of magnesium and potassium can interfere with a plants ability to take up nutrients which make it appear that the soil has a deficiency. Too high or too low PH has the same effect.

Again, have your soil tested or go with natural organic compost and aged manure. Slow-release organic fertilizer is also effective.

National Cherry Blossom Festival

This is a spring celebration in Washington D.C., commemorating the March 27th, 1912 gift from the mayor of Tokyo to the city. Ozaki, the mayor of Tokyo, gave the trees to enhance the growing friendship between the U.S. and Japan and celebrate the continued close relationship between the two nations. Large and colorful helium balloons, floats, and marching bands from across the country are parts of the festival's parade and other events. This year the festival goes on from March 20th through April 14th.

A Little History

This effort started in 1885 but didn't come to fruition until later.

In 1906, David Fairchild, a prominent botanist of the time, imported 1,000 cherry trees from the Yokohama Nursery Company in Japan and planted them on his own property.

In 1907 the Japanese cherry trees were suggested for planting around avenues in the D.C. area. In 1908 Fairchild donated cherry saplings to every D.C. school to plant on school grounds for the Arbor Day observance.

In 1909 the embassy of Japan in Washington D.C. informed the U.S. State Department that the city of Tokyo intended to donate 2,000 cherry trees to the United States to be planted along the Potomac River. These trees arrived in 1910.

However, the inspection team from the Department of Agriculture found that the trees were infested with insects and nematodes, concluding that the trees had to be destroyed to protect local growers. President Taft gave the order to burn all the trees.

A lot of things happened between then and 1912, I could write a book on the subject!



In a ceremony on March 27, 1912, the first two trees of 3,020 total were planted in West Potomac Park. These two trees still stand today, marked by a large plaque.

Fast forwarding ahead; The first "Cherry Blossom Festival" was held in 1934 and in 1935 became a national event.

In 1937 the Garden Club of America commemorated the 25th anniversary of the Japanese gift of cherry blossom trees to the U.S. by giving 5,000 flowering trees and plants to Japan.

The festival was put on hold during World War II years between 1941 and 1946.

The festival resumed in 1947 and has been going on ever since.

There is much more to this story, too much for me to include in a blog. For more info go to

www.wikipedia.org/wiki/national_cherry_bl

ossom_festival.