

JOHN'S CORNER: NEWS FROM THE WONDERFUL WORLD OF SOIL AND PLANTS

by John Ferguson

A new report from the Crowther research center in Switzerland has calculated that 223 million acres of global tree reforestation (about one trillion trees) would store enough carbon (205 billion tons) to stop climate change. This is about two thirds of the carbon emitted since the start of the Industrial Revolution.

As part of the study they found that trees planted with basalt rock dusts had an 8-fold increase in biomass, 2.17 increase in tree height, and four times increase in survivability over a five-year time frame. Trees planted on local soil without the rock dusts did not survive.

Other studies have found that using rock dusts with compost or biochar also sequesters carbon more effectively that without rock dusts. This is why the NWR "Re-mineralizer" product is a mix of basalt sand, granite sand and greensand as it helps all plant grow better by restoring true fertility to the soil.

The organization "Bionutrient Food Association (BFA)", has found that nutrient levels varied greatly in the same crops grown under different conditions in their first report on carrots and spinach. The variation in minerals was from 400 to 1,800 percent depending on the mineral assayed. This means that depending on how a carrot or a leaf of spinach was raised, it could have 4-18 times more nutrients that one that is poorly raised.



When they analyzed health giving compounds such as antioxidants and polyphenols, they found extreme variations up to 200 to one throughout the samples! Translated this means that the best carrots had 200 times more beneficial health-giving stuff than the worst carrots.

In physics we have known for years that different levels of nutrients and minerals change how different frequencies of light are reflected. The association is developing a hand-held meter that uses this principle to help consumers test the food a grocery stores so they can only purchase healthy nutrient dense food. Many foods that are sold at grocery stores are visually appealing but nutritionally worthless.

Below is the link to a press release:

Survey Says: Nutrient Levels Vary Greatly In Bionutrient's First Annual Report

A new discussion has started in horticultural circles "Do Plants Have a Brain?" Recent research on plants have demonstrated that they do many things: they defend themselves against predators, they attract desirable visitors, they communicate with each other through their root systems and chemicals in the air, they listen, count, remember, recognize their kinfolks, and can feel emotions like pain.

We have known for years that some plants make sounds, they listen (grow much better with classical music than rock), and respond to human voices especially kind loving and encouraging words.

Obviously, they do not have an animal like brain but electrical and chemical signaling systems exist which are similar to neurotransmitters found in humans like glutamate, serotonin, or dopamine.



Some researchers now believe the intelligence of plants is more like distributed processing computers or group intelligence as seen in bird colonies, groups of insects or schools of fish where each individual contributes to the whole as a part of the "brain".

There is a new joint study by several universities in Europe that was performed over several years on a population of 20,000 people that was recently released. It found just spending as little as two hours a week in nature (greenspace) significantly increased the health and well being of the individuals. The reasons to be a gardener continue to multiply. The Scientist October 2019.