

JOHN'S CORNER:

NEWS FROM THE WONDERFUL WORLD OF SOIL AND PLANTS

by John Ferguson

In issue #125 I referenced a research paper on catnip where they listed catmint and catnip as the same species. Several of our readers pointed out that they are actually different species. That had been my understanding also, but I am not a botanist, hence I accepted the journal reference. Perhaps what the authors meant was that the active communication chemical is a terpene called nepetalactone and common to both. I did not save the article, so I cannot be sure.

Susan W. shared the following: "...catnip and catmint are 2 totally different herbs. This is a common mistake, just like when people refer to lemongrass by using 2 words: lemon grass. He quoted the correct botanical name for catnip, but catmint is most often *Nepeta mussinii*, or could be *N. faassenii* or *N. racemosa*. There are several reasons I call it totally different.

1. Catmint is generally grown north of here. It has beautiful blue flowers that are spectacular when you see it in full bloom. Leaves are smaller than catnip. Google images is good for to see the plant covered in blooms & used as a stunning ornamental herb.
2. Catnip grows well here, except it doesn't like hot, humid summers. Blooms with a much smaller white flower spike in late spring.
3. I experimented with growing both catmint & catnip in my garden. Grew only catmint in the front yard -- cats that found it there were happy. Grew both catnip and catmint in



www.natureswayresources.com

the backyard - cats that found it there all preferred catnip and wouldn't waste their time on catmint.

So, there you have it. Again, love LG&F! Keep 'em coming!"

Several times we have reported that fires benefit the total ecology of an ecosystem, whether a forest or a prairie, and are essential for their health. A paper in the journal Environmental Entomology (2019) from North Carolina State University found that burned Pine forests have over double (2.3X) of total pollinators than forests that have not been burned. This was especially true for bees and bee species. "For many forests, fire is as essential as rainfall."

A paper by Stanford University in the journal Nature Sustainability (January 2020) outlines the importance of fire in maintaining ecosystems. The massive wildfires in California were caused by mis-management by government programs to prevent forest fire for decades.

As a result, there have been massive accumulations of wood and other fuels, which now lead to catastrophic wildfires as we see on the news. In nature God uses a lot of small wildfires to maintain the health of the forest or prairies.

For example - The Texas Forest Service at Jones Forest on FM 1488 has done a good job of using small controlled burns to maintain the forest.

Whether sliced with a little sea salt or in guacamole salad I love avocados. They are one of the healthiest foods we can eat as they are high in good fat, fiber, magnesium (Mg), potassium (K), B vitamins, vitamin K, vitamin E, carotenoids and chemicals that have anti-cancer properties.



www.natureswayresources.com

However, there is an environmental issue with growing avocados; each avocado requires almost 19 gallons of water! For comparison an orange only requires a little less than 6 gallons or a tomato only 5 gallons.

One way to address this issue is to grow avocados in our yard as we have many varieties that do well in our area.

I have two in my yard that are now about 20 feet tall each growing well in our black gumbo clay soil. This year each tree had dozens of avocados and last week were almost fully mature and ready for picking. I was getting excited and looking forward to tree ripened avocados. I went outside a couple days ago and they were all gone! It seems I was visited by tree rats (squirrels) that ate them and stripped the tree clean (the seeds were laying all over the ground). I was hoping there were enough avocados for both of us. It seems that I will have to activate a squirrel management program next year.

Randy Lemon of GardenLine fame, in his book "Texas Tough Gardening" (p. 104-107) had a very nice summary of the varieties that work best in our area and their characteristics.

I have often talked about the issues with chemicals in common tap water hurting our plants as well as hurting our health. The journal Environmental Health Perspectives (January 2020) had an article where the researchers discovered that the cocktail of fungicide residues found in our drinking water, at the level allowed by law, increased all the pathological markers linked to Alzheimer's in the animal studies.



www.natureswayresources.com

Common sense tells us that using toxic chemical fungicides in our gardens only increases our exposure rates. This is another reason to only use the modern organic methods.

I was reading a paper by researchers at the University of Alabama in Huntsville on electrical signaling of tomatoes. They found that healthy soil is alive with electrical signals being sent from one plant to another. It appears that mycorrhizal fungi act as the circuitry.

Note: Using fungicides removes this network or using artificial fertilizers which dissolves in water as they are salts, shorts out the communication system.

They believe that a tomato can communicate with an oak tree or other species this way. They also believe that electrical signals can propagate through the root network also.

The next area of study is to find out what they are telling each other. In physics it is well known that when we have an electrical signal or current, it generates electromagnetic waves in the air, which may also be part of the communication system.

In nature many organisms have antenna (e.g. microarthropods whom live in the soil). For me, it raises the question: Why? The entomologist Dr. Phillip Callahan in many of his books and papers believed that insects use this energy in some form or fashion.



www.natureswayresources.com

The journal Environmental Pollution (January 2020) did a study and the researchers found that over 11% of infants and young children had glyphosate in their urine! For infants it rose to 30% of them.

Dozens of health problems have been linked to this dangerous and toxic chemical. Many researchers now believe this chemical is linked to chronic kidney disease. They also believe glyphosate helps transport arsenic and cadmium (both very toxic heavy metals) into the kidneys.

GMO crops have the highest level of these residues on them. More and more reason to buy organic or better yet raise one's own food or at least buy from local farmers markets.

It often comes up in conversation that many folks are they getting sick when they did not years ago. One of the reasons is many crops are fertilized with sewage sludge. There are over 352 pollutants in sewage sludge (Biosolids) plus a lot of micro plastics that we have no idea of how it effects our health. [The Doctor Mercola](#) website has a nice summary of the issues.

Note: Several companies in the Houston area use sewage sludge in their compost and soil products, and most likely they do not tell you.

As I have stated many times there are more and more reason to buy organic or better yet raise one's own food or at least buy from local farmers markets.

If you would like more information, the book below is about the dangers of sewage sludge and the government cover up by the whistle blower David Lewis, PhD.

Science For Sale: How the US Government Uses Powerful Corporations and Leading Universities to Support Government Policies, Silence Top Scientists, Jeopardize Our Health, and Protect Corporate Profits, by David Lewis, PhD., Skyhorse Publishing, 2014, ISBN: 978-1-62636-071-6

Note: All proceeds from this book go to the National Whistle Blower's Center (www.whistleblowers.org)

