

JOHN'S CORNER:

NEWS FROM THE WONDERFUL WORLD OF SOIL AND PLANTS

by John Ferguson

One of the most desired oaks in the world is *Quercus crispula* known as Mizunara that take 200-500 years to reach maturity. This oak grows on the Northernmost Island of Japan and struggles to survive.

In recent years Japanese whiskies have been winning awards all over the world in taste tests. These whiskies were aged in barrels made from this oak as it imparts many very distinctive flavors and aromas to the whiskey like sandalwood and spice.

An article in Whiskey Advocate magazine stated that barrels made from Mizunara Oak wood are selling for \$3,055 each.

During this heat and humidity, I am inclined to do less gardening and more inclined to have a refreshing cold drink, especially on hot afternoons.

I read an article the other day titled "A walk in The Weeds", that found another use for some common plants like weeds (by Matthew Biancaniello), that he collects by foraging. The first is a cocktail made from stinging nettle. This is something I will have to try.

The recipe is:

2 oz. stinging nettle infused bourbon (info below)

3/4 oz. fresh lime juice



3/4 oz. Agave syrup (1:1 agave nectar to water)

1 oz. fresh blood orange or pomegranate juice

Sting Nettle-infused bourbon:

Collect fresh stinging nettle leaves and stems

750 ml of high -proof straight bourbon (a little less than a quart)

Fill a large quart size glass or bottle three quarters full with stems and leaves. Pour in enough bourbon to fill the jar and cover. Let it sit for 7-10 days. Strain and refrigerate for up to 6 weeks.

For those interested there are several other recipes using weeds to make cocktails in the spring issue (2021) of Whiskey Advocate.

Along the same lines, a few years ago, I reviewed a very interesting book,

The DRUNKEN BOTANIST- The Plants That Create the World's Great Drinks,

By Amy Stewart, Algonquin Books of Chapel Hill, 2013, ISBN: 978-1-61620-046-6

This book is about all the plants, trees, herbs fruits and flowers used to make alcoholic beverages and their history. The book is broken into three sections.

Section 1 is on the alchemical processes of fermentation and distillation from which we get our wines, beer, and spirits. It includes obscure sources of alcohol from around the world including many strange brews.



Section 2 is on the herbs, spices, flowers, trees, fruits, nuts, seeds, and grains that are used to make the wonderful beverages and the methods used.

Section 3 covers the array of botanical mixes and garnishes that are used in the final stages of preparation to create our wonderful cocktails.

We as gardeners need to rethink the plants, we call weeds. In some states they are now called "lawn herbs" and the state is paying homeowners hundreds of dollars to remove one's grass and plant these lawn herbs and wildflowers.

I was asked for an example of why minerals (actually trace elements) are important in growing plants. From our study of all 79 elements in the human body a few years ago, we know that the molecule we know as vitamin B-12 is built around an atom of cobalt.

Hence, if we want B-12 in the fruits and vegetables we grow, it (cobalt) has to be in the soil. For decades we have known that vitamin B-12 (methylcobalamin form) which is one of the two active forms, and is required for our body to regulate our immune system.

A new study has found the other active form of B-12 (adenosylcobalamin) has properties the other form does not. This form of B-12 protects neurons in our brains and prevents a decline of the neurotransmitter dopamine, hence helps prevent mental decline as we age. Life Extension (May 2021).

This is why these trace elements are so important to our health and as gardeners we need to re-mineralize our soils with these essential elements. B-12 starts with the element cobalt in the minerals we add to our soil. The microbes break the mineral down and use the cobalt to produce the B-12.



Plants grown on mineral rich soils tend to grow faster and larger and with less disease or pest issues. Additionally, they are more heat, drought, flood and freeze tolerant.

Another person asked that we reprint the link to a lecture on soil, minerals and health. Below is a link to a talk that we mentioned a few years ago, that started researchers to study the link between elements (minerals) in the soil, plants and human health which was given by Dr. Joel Wallach in 1994. Everything he mentioned in this talk has been confirmed numerous times by other researchers. This talk is now available on YouTube for free. The talk is not only informative but at times funny with his country boy humor to make a point.

"Dead Doctor's Don't Lie", by Joel Wallach, DVM, DO - nominee for a Nobel Prize

Over the last few years there has been a lot of new research on the benefits of all these trace elements for plants, animals, and humans which has emerged as more and more scientists study them. I plan to go through all of the 79 elements again with all the new information in the future.

Mulches are not equal. When as gardeners use vermicompost from earthworms as a soil amendment, it prevents many plants from absorbing toxic heavy metals like cadmium (Cd), chromium (Cr), lead (Pb), etc.

So, for all you gardeners out there, "Which type mulch is best to encourage and feed lots of earthworms"?

The answer is an aged (partially composted) Native Mulch made from recycled branches and limbs.



Why not use the whole tree? It is the smaller branches and limbs that are nutrient rich (minerals, protein, vitamins, energy, etc.). This is why animals like deer, beavers, squirrels, etc. eat them as a food source. The whole tree is like using sawdust or ground up old pallets which is what dyed mulches use.

Mulch made from smaller branches and limbs are also food for microbes including the microbes that break apart heavy clay and turn it into rich loam. The earthworms actually feed on the microbes living in the mulch, hence they grow numerous, large and fat.

This increases their ability to aerate the soil, create drainage channels for water, and produce chemicals that are powerful plant growth hormones like auxins, and produce lots of vermicompost directly in one's flowerbeds where it can do the most good.