

## JOHN'S CORNER:

### NEWS FROM THE WONDERFUL WORLD OF SOIL AND PLANTS

*by John Ferguson*

A study in the Journal HortTechnology (April 2018) found that dogs could find and identify trees infected with the laurel wilt disease ( *Raffaelea lauricola* ) with a 99.4% accuracy even before visible symptoms are apparent. This disease also attacks avocados ( *Persea americana* ).

A study in the Journal HortTechnology (April 2018) found that a mycorrhizal like fungus ( *Piriformospora indica* ) when inoculated into sterilized bags of perlite and then mixed into a standard growing mix, and improved root growth on all six species tested.

A study published in the journal Nature (2017), they found that the highest carbon sequestering occurred in areas where the diversity of animals were the highest. Previous studies have found that the highest carbon sequestering in fields occurs when cover crops also have a high diversity of species. Nature (God) is telling us that the natural systems are designed to function best when there is a lot of diversity. The same principle has proven true in our lawns and gardens which have a lot of different species planted. There is less disease, less insect pests, less weeds, less maintenance required, etc. Nature does not like a mono culture.

Most gardeners already know this, working in our gardens makes us smarter. A new study published in the Journal Cell (April 2018), has found that exposure to sunshine can boost brain power and improve mood. Ultra violet light increases the production of the brain chemical called glutamate which heightens the ability to learn and remember. When our skin is exposed to moderate UV exposure it produces a chemical called urocanic acid and causes the neurons to produce more glutamate.

The USDA Forest Service used aerial imagery to study the changes in tree cover in U.S. cities over a 5 year period from 2009-2014. They found that urban areas lost *36 million* trees! A single large tree can remove the amount of carbon dioxide produced by driving a car 25,000 miles. Trees remove pollution from the air and they cool the air (in some areas by as much as nine degrees). Trees have a secondary effect as the cooler air means we do not have to run the air conditioners as much which saves energy



[www.natureswayresources.com](http://www.natureswayresources.com)

and carbon dioxide pollution from power plants used to produce the energy. The study did not include health benefits from breathing cleaner air.

Another study found that urban areas will continue to grow and predicts that urban land will increase another 163 million acres by 2060. Currently the 5.5 billion trees in urban areas that contain 127 million acres of leaf area and 44 million tons of dry weight leaf biomass. These trees provide over \$18 billion in air pollution removal, \$5.4 billion in reduced building energy usage, and \$4.8 billion worth of carbon sequestration every year!

Have you ever asked yourself why so many of our pets are getting cancer? I mentioned one article in issue #46. This short video explains the link to gardening:

<https://www.facebook.com/animaltalesbywaggle/videos/236377337110930/>