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NEWS FROM THE WONDERFUL WORLD OF SOIL AND PLANTS

By John Ferguson

Back in January I joined several Facebook groups related to gardening. After reading numerous posts over the last few months, a very distinct pattern emerged. Most of the problems people were experiencing were self-inflicted.

Hence this article is on “Easy ways to have lots of problems in one’s garden” OR “How to turn valuable humus and nutrient rich topsoil into worthless dirt.”

The first step is to over water one’s soil in our gardens and lawns driving out the oxygen plants roots and beneficial microbes need to live. Many plant pathogens thrive in the low oxygen conditions. The toxic chemicals like chlorine, chloramine, and fluoride in public water systems are going to kill additional soil life, hence to kill as many of the good microbes as possible one needs to water frequently and never let the soil recover.

Healthy fertile soil has a carbon to nitrogen ratio of 30:1 hence we must use products that disrupt this healthy balance. One of the best ways to do this is use dyed mulches. These cheap low-quality mulches have a C:N ratio of over 500:1 and are almost guaranteed to cause microbes to pull nutrients away from your plants which stresses them. Stressed plants attract insects and disease which creates additional problems.

Have you ever put your hand on a black car in the afternoon during the summer? Black dyed mulches are very effective at absorbing sunlight and converting it into heat just

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like the black car. This extra heat cooks the plant adding additional stress. Now the plant requires more watering to keep itself cool, hence we kill more beneficial soil life.

It is not as common as it used to be, but some suppliers still use coal ash with its extremely high alkalinity and toxic chemicals to chemically burn mulch black especially with pine bark products (these are known as ashen mulches).

Most of us live on the gulf coast where many of our soils often have high salt levels. Most gardeners know that salt kills plants. Salt was even advertised and used as an herbicide at one time.

Hence using high salt products (cow manure, poultry manure, spent mushroom substrate, etc.) is a great way to put our soil into salt toxicity which stresses our plants. It also causes plants to require more watering to dilute the salt ensuring more of the good microbes are killed.

Speaking of salt, one of the biggest sources of chemical salts is artificial fertilizers. Using these products several times per year ensures that the good bacteria that prevents soils diseases like "Brown Patch, Take-All, St Augustine decline, etc.) are killed so we have lots of disease. We now need to treat our soil with fungicides to kill off the good fungi that break down thatch. The thatch layer makes a good home for chinch bugs and those little flies we all love so much.

Another benefit of using artificial fertilizers, since they are often water soluble, they will leach into our storm sewars where they trigger a bloom of organisms that use up all the oxygen in the water, hence the minnows, cray fish, etc. that eat mosquito eggs and larva

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die. This guarantees we will have more mosquito issues as a bonus to annoy us and spread diseases.

Of course we do not want to forget the added benefit of these nutrients washing downstream into the ocean creating dead zones and killing millions of fish each year.

Also, these salts kill earthworms and other soil life that aerate the soil. This ensures that hardpan and other forms of compaction will occur. This prevents rainwater from entering the soil assuring we will need to water more.

We do not want to forget, that thanks to the above, it is now time to have an expensive core aeration done.

Lastly, to increase the amount of problems in our landscape we should never apply trace and micronutrients (re-mineralization). Trace elements are kind of like vitamins to animals and humans. We do not need much but without them we are not as healthy.

For example, if we do not have lithium (Li) in the soil, it does not get into our food supply. Without lithium our minds do not function properly and it leads to irrational violent behavior.

If you want to have lots of gardening problems and waste lots of money follow the above rules.

God tells us that we are to be stewards and take care of his creation, the above guidelines prevent that from happening.

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