

Soil Evaluation by Observation

Observation is our most important tool for understanding what is happening in our planting areas. Many books have been written about growing, but very few really give you what you need to grow a healthy crop. And of course some books really stand out as very good references. I list a couple here.

Weeds and Why They Grow (1994) by Jay L. McCaman is a great book and I use it continuously. Someday I may even read the first part of the book; charts of the nutrient values in a given soil that allow plants to grow.

For example, maybe you have dandelions in your lawn. Nutrient values are Ca VL, K2O VH. Maybe you have quackgrass... Ca L, P205 H, K2O H, Mg VH, SO4 H. Most plants and values are listed in charts like these examples.

Another book that I use in a similar way is *Anatomy of Life & Energy in Agriculture (1989)* by Arden B. Andersen D.O. PhD. Again, this is a very well written and informative book. Of course, you guessed it, there are charts in this book; charts that will help you understand why you are having problems with insects or diseases.

Starting on page 70, we find the sequential nutrient deficiencies associated with insects. For example, if you have aphids on your celery, you have deficiencies in calcium, phosphorus and copper. If you have the dreaded Colorado Potato Beetle, you then have deficiencies in calcium, phosphorus, vitamin C, copper and manganese.

Now, I know I have given you just a very few examples, but do you notice a trend here? Notice that each begins with a calcium deficiency. This is important because calcium governs the uptake of all nutrients in a biological system and all nutrients are taken up in phosphate form, meaning, as a compound. This is why we need to do observations, especially in organic growing because if you do your microbes correctly (with diversity), then the nutrients that you will need to grow a crop will mostly be in the bodies of the microbes. They won't show on a nutrient test, and yet the crop is great!

Soil is a system that cannot be explained with conventional logic. Convention does not allow us to see how the very complex processes happen. Because much of the soil system can not be answered in conventional science, it is either set aside as just the way it is, or God did it. Science today holds reality as physical or material. Consciousness is part of physical activity of the brain. God exists only in the human brain. We seem to have forgotten that we live on an electrical planet in an electrical universe. All living things on this planet are biological/chemical/electrical generators and there is an energy that exists in and around everything. This invisible energy is what controls the visible. You know that there is electricity in the receptacle when the fan starts up, but you do not see that electricity and you trust that it is there. The same is true for everything else and it is all measurable. Many measurements can be made with simple multimeters, some by ph, EC testers, radionics, etc.

When observed properly, weeds may not be all bad. They tell us something if we look. Farmers have said that redroot pigweed (*Amaranthus retroflexus*) has increased their yields. Weeds are Mother Nature's authentic soil regenerators. They break up compacted soil and allow in oxygen, which releases excess carbon dioxide. This action reduces fermentation and increases normal decay processes.

Dandelion has a special ability to move or release locked up minerals. Grass-type weeds usually indicate low calcium and high magnesium. Excess weeds may be caused by tillage or compaction. Always avoid dolomite lime; the magnesium is too high for our soils and it releases nitrogen unit for unit. If the mineral balances in the soil change to reduce weed pressure then the quality of the crop will change also.

As usual, there is much more to say, but this should be enough to get you started thinking like a plant!

GROW IN PEACE

Maury Streiff