Superior Organic Solutions

Organic/eco-safe fertilizers & soil amendments

Some Statistics

- Currently about 1 % of arable land is certified organic
- Organic sales account for 4 % of the total US food sales
- Demand is now higher than supply
- The Organic Trade Association (OTA) concedes that because of incomplete data, competition for land in some areas, and the three years it takes to earn certification as an organic farm, it's difficult to know how many new acres of organic crops will come into production.

- Brix is used in the food industry for measuring the approximate amount of sugars in fruits, vegetables, juices, wine, soft drinks and in the starch and sugar manufacturing industry

- The largest study to date to examine the nutrient content of organic food has found that it is generally more nutritious and mineral rich than conventionally grown produce.

- Organic fruits and vegetables contained as much as 40 percent higher levels of antioxidants

Pesticides/herbicides

- At Pesticide Action Network (PAN), we believe that pesticides are a public health problem requiring public engagement to solve.
- Metabolism - Is the set of life-sustaining chemical transformations within the cells of living organisms.
- All chemical pesticides act to block metabolism

Pesticides/herbicides

- Insects, bacteria, fungus and plant disease are natures garbage collectors.
- Indicates something is wrong with the system
- Usually nutrient deficiency or metabolic disorder

Glyphosate

Herbicide commonly used on GMO and other crops.

Glyphosate blocks essential amino acids causing metabolic disorders

- Tryptophan
- Phenylalanine
- Tyrosine

Symptoms of inhibition of essential amino acids

- **Failure to produce lesions for pathogen containment**
- Chlorosis
- Retards morphology

A lesion is made of lignin (wood) and phytolaxins (antibiotics)

Chlorosis is a condition in which leaves produce insufficient chlorophyll. As chlorophyll is responsible for the green color of leaves, chlorotic leaves are pale, yellow, or yellow-white.

Hypothesis

- Crops had resistance to disease they now can not control
- There's increased rate of pesticide applications
- Accumulation of pesticide residue in soil
- Pesticides suppress compounds critical to plant health & plant defense system

<iframe width="560" height="315" src="https://www.youtube.com/embed/ZoTI52pOipg" frameborder="0" allowfullscreen></iframe>

Lawn turf covers more than 40 million acres of land—more than any commercial crop. To keep those lawns bright green and bug free, Americans use 90 million pounds of fertilizer and 78 million pounds of pesticides each year. Of the most commonly used lawn pesticides, many are linked with cancer or carcinogenicity, birth defects, reproductive effects, liver or kidney damage, neurotoxicity, and disruption of the endocrine system.

In one study, approximately 25% of lawn owners want a safer lawn for their pets & kids and the environment but only 5% are actually using organic or natural inputs or having a service provider apply.