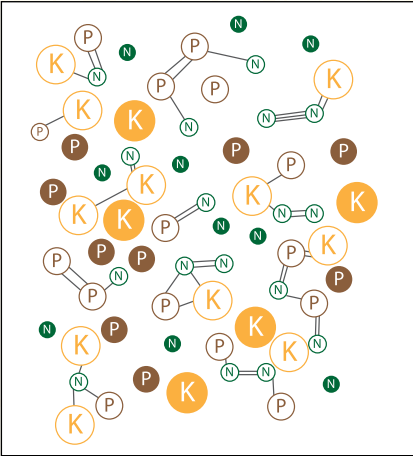


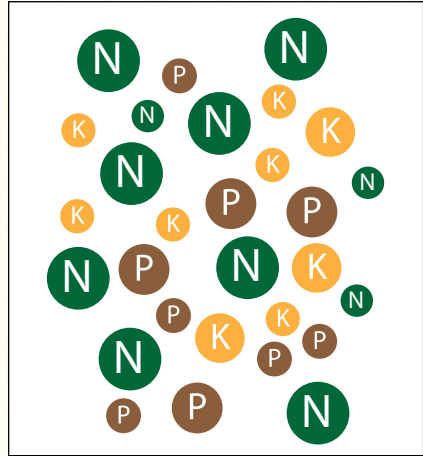
**Understanding fertilizer labeling law is key** to understanding *WHY Natural Organic fertilizers show a lower NPK Guaranteed Analysis than most comparable synthetic chemical fertilizers.* In most cases (pound for pound) the Natural Organic fertilizer actually has a greater percent nutrient content value.

Current law only allows for unbonded, independent NPK molecules to be expressed in a Guaranteed Analysis in volume percent value. For example, a chemical fertilizer such as a 25-10-10 would be identified as 25% N, 10% P, and 10% K. The remainder of the formula aggregate would be made up of non-nutrient carriers and inert fill ingredients. The chemistry of a Natural Organic fertilizer is “naturally complexed” - meaning that NPK molecular structures are predominantly connected through shared molecular bonds. The illustration below shows how the chemical fertilizer has more independent, unbonded NPK modules. However, the **naturally complexed nutrients** associated with **Natural Organic Fertilizer** actually have more nutrient value, even with a lower NPK Guaranteed Analysis. Because of this, a Natural Organic 5-3-1 fertilizer blend can easily have as much or more nutrient value in the same sized package as a 25-10-10 synthetic chemical fertilizer. Not to mention the “natural slow release” characteristics that “natural complexing” affords to all natural organic fertilizers.

### Natural Organic Fertilizer HUMATES - No SALT & CHLORIDES



### Chemical Fertilizer High SALTS & CHLORIDES



### FERTILIZER SALTS & CHLORIDE RESIDUES– Needless Limitations for Plants, Roots and Soils.

By their very “nature”, total Natural Organic fertilizers have little to NO soluble salt or synthetic chloride footprint. Conventional, chemical fertilizers are loaded with salts and chlorides. Agronomically, this is very important on two levels. First, soluble salts usually inhibit the translocation and mobilization of nutrients and moisture to root systems. Second, the chlorides kill off or deplete bad bacterium, and unfortunately, many beneficial soil bacterium cultures as well. Probiotic soil cultures, contained in the soil rhizospheres, form the foundation of how well plants grow, thrive, and survive in a given set of soil conditions. In conclusion, soluble residual salt and chloride contaminants dramatically affect the overall health and vigor of plants. This becomes particularly important in stressful environmental extremes such as drought and high heat.

**SUMMARY:** Understanding the simple regulatory facts regarding fertilizer labeling law, and the undesirable impact and limitations salt and chloride residues have on plants and soils, is key to differentiating between **Synthetic** and **Natural Organic** Fertilizers. Armed with these facts, it is easy to understand why ‘**Green Industry**’ professionals are choosing to utilize safer, more effective **natural organic** nutrients for their horticultural projects.