THREE BULLET POINTS FOR Sulfur-CARB

Sulfur-CARB is a unique blend containing ACS (filtered molasses) and very fine suspended elemental sulfur. The small particle size of the Sulfur material ranges between 1 – 7 microns. This is equivalent to a mesh size average of ~ 1,750 mesh. The very small size helps with the application strategy and allows the mixture to be directly sprayed onto the soil or injected into irrigation systems for delivery with water. The addition of the ACS carrier provides immediate energy for soil microbes that have a requirement for energy. Most microbes have a 40% carbon content in their body.

Sulfur-CARB use can be adjusted to address incoming bicarbonate/carbonate loads in irrigation water and also to address resident soil high pH issues. Calculators are available to predict the amount of material to use with the irrigation or soil application strategies. The small particle size insures a quick oxidation of the elemental sulfur when applied to the soil. The reaction (oxidation of sulfur) occurs in the soil solution and not in the irrigation system. Elemental Sulfur has an acidity equivalent to 3 times the amount of pure sulfuric acid. The acidity of sulfuric acid yields 2 hydrogens for pH reduction and the acidity of Sulfur as it is oxidized in the soil solution produces three times more hydrogen ions needed to reduce alkalinity.

Sulfur-CARB is safe and can be applied over the surface of many crops without issue. Elemental Sulfur must migrate into the soil solution for the oxidation of the sulfur to produce sulfuric acid for pH reduction. Water moves the Sulfur down andThiobacillus sp. complete the oxidation process. Sulfur-CARB can be applied to soil surfaces when incorporation is not possible (no till), and the small particle size will move with irrigation water. Larger granular or prilled sulfur will oxidize in the soil but incorporation is a must. The larger particles of granular or prilled elemental sulfur when spread onto the soil have zones of high sulfur concentration and broad areas between the prills with no sulfur. Dispersing the very small elemental sulfur particles throughout the soil is readily achieved with Sulfur-CARB.