

HumiSolve is a very inexpensive soil activator that increases cellular activities at all levels, increases availability of nutrients and converts raw organic matter faster. Humic acids are vital to healthy plant growth including pest resistance. HumiSolve provides a quick source of available humic extract of the right type to do the job in an economical manner. Average contents of acids contained in HumiSolve are 57% humic acid and 10-12% fulvic acid. Dependent on analytical methods these number can be much higher. We stand behind methods established by the International Humic Substance Society by way of column chromatography using DAX-8, adsorption resin (formerly XAD-8 trade name amberlite).



Pest and Disease Prevention:

Published scientific research has shown humic acids to be a first line of defense against plant disease. Plant virus and fungal diseases are getting worse every year, causing significant crop loss and a higher use of synthetic pesticides. Humic acids, in soluble form, stimulate all cellular activity thus increasing resistance to disease by deactivating or binding virus particles or fungal spores.

Toxic effects of sodium, aluminum and other metals effecting plant growth:

Humic acids are shown to detoxify the cell and in the root system they reduce the uptake of these elements. This is a major boost to irrigated soils with high levels of salts. HumiSolve can prevent the toxic effects of this and other metals on plant growth by binding aluminum and other toxic levels of heavy metals. The effect is also extended to the reduction of salt buildup that may otherwise be damaging if humic and fulvic acids were not present.

Lack of available phosphorus and micronutrients:

Humic acids buffer the soil with organic colloid biopolymers, preventing tie up caused primarily by chemical salts reacting in an inorganic form. Included in this action is a significant increase in solubility of bound phosphorus and chelation of micronutrients. Additionally, Nitrogen leaching is reduced, keeping it in the root zone longer and out of our water tables. Plants can grow within a larger pH range when humic acids are present because of it's ability to hinder precipitation of elements across the aforementioned range. Not only are elements made more available, but coupled with increased respiration and chlorophyll production, utilization and uptake of nutrients is catalyzed resulting in accelerated growth and health of the plant.

HumiSolve adds vital carbon/organic matter to depleted soil and improves water penetration and holding capacity:

Carbon is not only essential for balancing the carbon to nitrogen ratio, but is also invaluable for maintaining an optimum microbial community. It has been demonstrated that humic and fulvic acids in HumiSolve stimulate beneficial soil bacteria and fungal biomass and activity. Analysis done by Dr. Elaine Ingram at Soil FoodWeb (leading agricultural microbial and compost tea analytical lab) demonstrated astounding increases of both total and active counts of all beneficial microbes. Cation exchange capacity is improved and clay soils are converted to workable status.

Source, Handling and Delivery:

There has been a worldwide demand for humates because they can greatly increase yields, fertilizer efficacy and reduce nitrogen loss in soil. Liquids humic acids are heavy making them difficult to ship and their shelf life is somewhat limited (not true for pure fulvic acid, though). Most of these products are exposed to high heats which denature many of the valuable constituents of the source material. Also, many humates are being misrepresented as quality humate and are actually Leonardite, oxidized lignite and/or sometimes even coal! Such factors have hindered the sale of humate material around the world. However, there is increasing interest in humic substances due to a worldwide need to increase food production on soils depleted in organic matter. The solution is to start with a good source and then use the high tech revolutionary processing and low heat capacity drying concept developed by BioAg. This process resolves many problems associated with humate quality and delivery. The product is shipped dry and very concentrated in terms of bio-stimulation effect. It can be very effective as a soil application at only 2-10 pounds per acre or in an irrigation solution at 0.5 – 1 gram per gallon. HumiSolve is a fractionated, soluble product that is not only highly concentrated but also easy to use as a liquid in foliar applications (please note that 10-15% is insoluble and may need to be settled out) in irrigation water, liquid fertilizer blends, or sprayed directly on the ground. The dry form can also be directly mixed with dry commercial fertilizers.

Also in the HumiSolve line of products:

