California Organic Fertilizers' BioSecure™

As more and more consumers demand safe and pathogen-free food products and the government imposes strict regulations to meet that demand, major changes are taking place in the way food is grown, harvested, processed and packaged. As the food industry focuses on methods to reduce or eliminate the risk of food tainted by pathogens, such as E. coli and salmonella, every aspect of the production process is scrutinized.

Organic fertilizer inputs, which are applied to many food sources directly and indirectly, reside at the very beginning of that production process and are now subject to these regulations. Some of the new requirements include HACCP Programs (Hazard Analysis & Critical Control Points), laboratory testing, lot number tracking, etc.

In general, organic fertilizers are made from natural materials such as manure, food waste, organic industrial waste, rendered proteins, and other biologically active materials which may harbor pathogens. Most organic fertilizer products will also serve as a growth substrate for pathogenic microbes. As such, organic fertilizer products carry a significant risk of pathogen contamination.



Fertilizers are an integral part of soil preparation; therefore, they have a more significant impact on the events that follow. The pyramid above illustrates this point. Not only is fertilizer important to the growth of the crop, but it also affects the risk level in regards to food safety.

Organic fertilizers produced today, and used on everything from lettuce to berries, may be free of pathogens immediately following manufacture, but few are capable of killing organisms that come in contact with the fertilizer during storage and at various points along the transportation pipeline. So, although these fertilizers may be pathogen-free following production, the risk of contamination is only reduced; it's not eliminated.



COFI is proud to offer BioSecure™, a new class of organic fertilizer that is *pathogenocidal*. This means that the fertilizer is free of pathogens when made and it will never serve as a carrier or growth medium for pathogens. Pathogens coming into contact with BioSecure™ fertilizers simply die.

With California Organic Fertilizers' BioSecure™ fertilizers, growers are now able to minimize their food safety risk by completely eliminating any risk associated with the application of organic fertilizers.