

### **Abstract**

The fresh-cut industry uses large volumes of water, both in post harvesting and processing of the fresh-cut fruit and vegetable products. Because of economic considerations regarding the quantity of water used and in many locations in the United States, legal regulations for discharge into ground water or municipal water systems, recycled water is a common practice. Water re-circulation can increase the potential spread or inoculation of plant and human pathogen from one localized source to an entire harvest or fresh-cut product. The presentation will discuss the efficacy of wash water disinfectants; the ideal disinfectant; chlorine chemistry; the advantages and disadvantages of chlorine as well as other oxidizers used in fresh-cut processing. An additional consideration besides the product is the process. Some factors that influence the choice of sanitizers include: type of processing equipment or the processing surface; water hardness; sanitizing equipment; effectiveness against specific microorganism and cost versus benefit. Finally, one needs to consider thermal versus chemical sanitizing. Remember that wash water sanitation is only as good as the daily sanitation program for the entire plant process. The cleaning and sanitation programs will reduce and hopefully eliminate the microorganism in the facility. Only then will wash water sanitation be effective in controlling the organism attached to the whole fresh fruit or vegetables.