HYDROPONIC TOMATOES

In a Florida farm growing tomatoes hydroponically (in water alone, no soil) well water is employed. Prior to ozone being employed to destroy hydrogen sulfide in the well water, the tomatoes developed blossom end rot that resulted in a 40% rejection rate. Ozonation of this well water has resulted in complete removal of hydrogen sulfide, reduction in pH from 7.8 to 7.04 (by oxidizing some organics and converting H2S to sulfate ion), and raising the ORP reading from minus 177 to 225 mV.

The results of this improved water quality are that first harvest of tomatoes increased by 28 days, total yield increased by 300%, crop rejection due to blossom end rot was reduced from 40% to less than 3%, and reduced fertilizer yield by approximately 25% (due to the reduction in pH level).