ABSTRACT

For reducing bacterial contamination, electrolyzed oxidizing water (EO water) has been used to reduce microbial population on seafood and platform of fish retailer. The specimens of tilapia were inoculated with Escherichia coli and Vibrio parahaemolyticus, and then soaked into EO water for up to 10 min. EO water achieved additional 0.7logCFU/cm² reduction than tap water on E. coli after 1 min treatment and additional treatment time did not achieve additional reduction. EO water treatment also reduced V. parahaemolyticus, by 1.5logCFU/cm² after 5 min treatment and achieved 2.6logCFU/cm² reduction after 10 min. The pathogenic bacteria were not detected in EO water after soaking treatment. In addition, EO water could effectively disinfect the platform of fish retailer in traditional markets and fish markets.