
Abstract
Strawberries and broccoli were treated for 5 min with 4C tap water, chlorinated water or electrolyzed oxidizing water (55 and 100 mg/L chlorine, respectively) with or without ultrasonication. Several quality parameters (weight loss, shear force, color, pH, titratable acidity, soluble solids and decay) were evaluated to estimate the effect of treatments on consumer acceptability during storage at 4C. Strawberries were examined on the initial day of experiments and at 3, 6, 9 and 13 days of storage, and broccoli on the initial day as well as at 5, 10, 14 and 21 days of storage. On each day of analysis, weight loss, decay and color (L*a*b* values, chroma, hue angle, total color difference) were evaluated. On the last day of storage, texture was measured as force (Newton) needed to shear each sample. For strawberry, samples were also tested for pH, titratable acidity (%) and soluble solids content. No significant differences in quality were detected among strawberries and broccoli subjected to different treatments, and between treated samples and control at any of the sampling times. However, quality of strawberries treated with chlorinated water was significantly affected with respect to weight loss and decay, whereas only decay was significantly affected when broccoli was treated with chlorinated water.