

Title Effect of potassium sorbate on microbial decontamination and shelf life of fresh cut cabbage
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Abstract

Among of many fresh vegetables, cabbage (*Brassica oleraceae* L. var *capitata*) is world wide consume as the salad or fresh-cut cabbage. However, the good and safe sanitizing treatments during preparing fresh-cut cabbage are required for controlling microbial contamination and mantaining qualities. The objective of this study was to investigate the effect of potassium sorbate (PS) on postharvest microbial decontamination and qualities of fresh-cut cabbage. Fresh-cut cabbage were dipped into PS solutions at 5 and 10 g/L for 1 and 2 min, and the un-treated fresh-cut cabbage was served as the control. All treatments were packed in PET box and stored for 5 days at 4°C. The results revealed that the dipping of PS at 5 g/L for 2 min was the best treatment to reduce coliforms and total bacteria by 0.40 and 0.19 log CFU/g FW respectively. Moreover, this treatment also maintained the firmness of fresh cut cabbage although weight loss was not significant different with control, meanwhile the chlorophyll content and browning index were not significantly differences with other treatments. The dipping of 10 g/L PS for 2 min showed the reduction in total bacteria by 0.82 log CFU/g FW, but unexpected result showed that 10 g/L PS for 2 min had a less effect to reduce coliforms than 5 g/L PS for 2 min.