Title Effects of modified atmosphere packing and honey dip treatments on quality maintenance of minimally processed grape *cv*. Razaki (*V. vinifera* L.) during cold storage

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Citation Journal of Food Science and Technology, 48, Number 3, 312-318, 2011

Keywords *Vitis*; Table grape; Postharvest management; Fresh-cut; Quality maintenance; Edible coating; Weight loss; Berry decay

Abstract

Increasing pressure in food conservation sector to replace chemical applications has urged researchers to focus on studying new strategies of extending the postharvest life of produces. In such efforts, numerous materials have been tested for their effectiveness as well as suitability in organic consumption. In this study, effects of modified atmosphere packing (MAP) and honey solution dip on maintenance of quality of minimally processed table grape *cv*. Razaki were investigated. During the storage at 0 °C with relative humidity of 90%, MAP, honey dip, and their combined applications significantly retarded the weight loss of berries that retained about 2 mm of cap stem. Soluble solid contents of all berries slightly increased, while their acid amounts decreased, resulting in consecutive rises of maturity index. With respect to the sensory score, calculated as mean of ten panelists, honey treatment alone was ranked the highest while control berries had significantly lower value. Overall, MAP, honey solution dip or their combination significantly maintained the general quality of minimally processed grape by delaying quality loss and berry decay. Therefore, honey solution dip yielded promising results to use as an edible organic coating barrier to moisture and resist to water vapor diffusion during the cold storage, offering a good adherence to berry surface.

http://www.springerlink.com/content/h125p93h55845653/fulltext.pdf