**Title** Effects of heat treatment on the quality of fresh-cut taro

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## **Abstract**

It is known that heat treatments may have positive effects on fruits and vegetables quality such as extending storability and marketing by inhibiting browning. However, little is known about the effects of heat treatment on the quality of fresh-cut taro. This study investigated the changes in quality of fresh-cut taro treated with hot water. Taro was cultivated in horticultural farms of Duksung Women's University in Seoul, Korea. After harvesting, the taro was washed, peeled and dipped for 1 min in water at 50 °C. After air-dried at room temperature, the samples were packaged with polyethylene films (PE) and vacuum (V). Then they were stored at 40 °C for 9 days. Changes in the weight loss rate, color, and sensory characteristics were measured. In general, the weight loss rate had increased slightly in hot water treated taro. Application of heat treatment at 50 °C hot water delayed browning of taro. The L value of taro treated hot water was higher than that of the others and the color differences value (ΔE) was lower than those stored in untreated hot water. The organoleptic quality of taro treated hot water at 50 °C was the best by sensory evaluation. The use of heat treated taro for fresh-cut processing may have improved the quality by inhibition of browning and extending the shelf life for the products.