Title Effect of storage temperature and relative humidity on the quality of Japanese taro

Author Newman, S., Lazar, E., Ekman, J., Vong Nguyen, Westcott, A. and Harris, D.

Citation Australian postharvest horticulture conference, Brisbane, Australia, 1-3 October, 2003; 127-128

Abstract

A study was to determine the acceptability of Australian grown Japanese taro (*Colocasia esculenta* var. *antiquorum*) to Japanese consumers and to develop appropriate shipping and storage recommendations. A taste panel, with a focus group of local Japanese ladies, was presented with samples from a diverse range of growing areas ranging from Darwin in the Northern Territory, to Gatton in southern Queensland and Gosford in central New South Wales (NSW), Australia. Overall, their preference was for corms with a light colour and attractive appearance that exhibited the typical sticky and nutty characteristics. Whilst there was a considerable difference in the quality of the product from each of the eight growing regions, most of the samples were considered to be of acceptable quality for the Japanese market. In one supply chain management experiment conducted, taros produced in northern NSW were stored at 7, 12 and 20 deg C for 4, 8 and 12 weeks. Within each temperature, corms were stored at 70% or 90-95% RH. In another supply chain management experiment, the effect of curing temperature and duration was investigated. Taro quality was acceptable after 4 and 8 weeks storage at either 7 or 12 deg C. However, storage at 20 deg C, particularly under conditions of high humidity, resulted in excessive sprouting. Disease incidence increased dramatically between 4 and 8 weeks at higher temperatures. After 8 weeks of storage at 7 and 20 deg C, 5 and 23% of the corms were infected, respectively.