Effects of Simulated Transport Methods and Slight Drought Stress on Post-storage Performance of *Philodendron* 'Imperial Green'[1]

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Summary

Summer-grown young plants(10 – 15 cm in width) of *Philodendron* 'Imperial Green' were stored in 15℃ or 30℃ for 1, 2 and 4 weeks. When stored shorter than 2 weeks, all treated plants had good postproduction performance except the bare-root plants stored in 30℃. In the experiment on winter-grown young plants, the simulated transport added the 10℃ storage temperature to test the chilling sensitivity in storage. After 4 weeks in storage, the bare-root plants exhibited chlorotic leaves with no commercial value, while potted plants held in 15℃ remained in good quality. The plants received 10℃ low temperature did not loss quality and performed as well as those stored at 15℃. The winter-grown young plants pre-conditioning with slight drought stress did not reduce quality index after storage, as the plants might have been hardened. Thus, no apparent benefit was obtained from slight water stress. According to the fresh weight loss and leaf water potential of plants in storage, the water deficit greatly reduced the quality and storage life of plants. The respiration rate of plants during storage was shown to relate to the post-storage quality.

(Key words: Philodendron, Simulated transport, Post-storage performance)

1. Research article No.186 of Hualien District Agricultural Research and Extension Station.This paper is a part of MS thesis of the first author.

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