

Effects of temperatures on quality of Cat-tail Willow after harvest¹

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Abstract

In harvest processes of Cat-tail willow experiments, the results had shown that the injury grades and flower buds falling-off ratio of cut branches of Cat-tail willow were worse when treated with high temperature for long time. When cut branches of Cat-tail willow were treated with 35°C for 7 days and 11days, the injury grades were 3.0 and 4.8, respectively. High temperature caused inferior quality of cut branches, and storing over 30°C would accelerate the increase of injury grades. The results of storage experiment of Cat-tail willow showed that storing at 0°C and 5°C were better than at 10°C to keep cut branches fresh. When cut branches of Cat-tail willow treated with 10°C, 0°C and 5°C for 6 weeks, the injury grades was 4.1, 1.9 and 2.6, respectively, and there were significantly different among treatments. The quality of cut branches stored in low temperature for 8 weeks was bad and lost ornamental values after 4 weeks in vase. Therefore we should avoid putting cut branches in over 30°C environment in harvest processes. Storing at 5°C could keep cut branches fresh and save the sources of energy.

keywords : Cat-tail willow, temperature, quality

1. Research article No.214 of Hualien District Agricultural Research and Extension Station.

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