Title Induction of chilling tolerance in pineapple (Ananas comosus cv. Josapine) by

preconditioning for storage at suboptimal temperature

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Abstract

Pineapple cv. 'Josapine' at breaker stage were preconditioned by step-wise temperature reduction at 15 and/or 10 °C for 24 - 48 hours before storage at sub-optimal temperature of 5 °C. Fruits were removed weekly from the cold room and held further for up to 6 days at ambient temperature (25 °C). Development of chilling injury was observed in fruit on removal and during subsequent days at ambient temperature together with observations on other quality parameters. Step-wise temperature reduction allowed the fruits to be stored at 5 °C for up to 7 weeks with less symptoms of chilling injury compared to the control. This study would allow Josapine pineapple to be stored for a longer period than currently achievable commercially and can be used in sea shipment for export to far distance markets.